An Analysis of EMAC Capabilities for Private Sector and Volunteer Resource Coordination
Acknowledgements

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Executive Summary

In 2011, the U.S. President through Presidential Policy Directive 8: National Preparedness (PPD-8), encouraged the use of private sector (PS) resources and non-governmental organizations (NGO) during disaster response and recovery efforts. These resources range from infrastructure systems engineers to finance specialists to medical equipment and medical technicians. These vast, but seldom used resources, are available for a multitude of disaster management activities. The National Emergency Management Association (NEMA) recognized that the Emergency Management Assistance Compact (EMAC) program has very few private sector and NGO resources at its ready and commissioned this study to pinpoint the roadblocks to this type of deployment and identify best practices. All U.S. states and territories utilizing the EMAC were asked to participate in a 45-question survey to ascertain if they have either deployed or received private sector or NGO resources during a declared disaster.

After thorough review of the surveys, staff from the Stephenson Disaster Management Institute (SDMI) at Louisiana State University conducted telephone interviews with emergency management personnel, primarily EMAC coordinators, from 16 states. The interview questions varied depending on the state’s individual survey responses, but collecting detailed information about that state’s involvement with private sector and/or NGO resource deployment was the primary purpose of the conversations.

This report focuses on capturing the experiences that state emergency management agencies have had when utilizing EMAC to assist other states during emergencies. While an overview of EMAC deployments was captured as part of this report; the primary emphasis of the survey focused on gaining insight into the experiences of states that have used the EMAC process to deploy private sector and volunteer resources to states with specific needs requested through EMAC. These states provided a wealth of information regarding their experiences, capabilities and concerns in the deploying private sector and volunteer resources through EMAC. This report summarizes the responses received from 43 states and the U.S. Virgin Islands. A summary of participating states can be seen in the table below.
This report is divided into six different areas. The first section of the report captures the survey results that were used to determine the number of EMAC deployments each state has participated in since 2006. The year 2006 was selected due to the large number of states that participated in the EMAC process to provide assistance to the affected States along the Gulf Coast following the aftermath of Hurricanes Katrina and Rita in 2005. Hurricanes Katrina and Rita essentially serve as an outlier for states participating in EMAC. The purpose of reviewing the current status of traditional EMAC deployments is to put the number of deployments with private sector and volunteer resources into perspective.

The second section of the report summarizes the parts of the survey that focused on identifying states that have experience in deploying private sector, volunteer and non-public medical resources through EMAC beginning in 2003. Due to the limited nature of states deploying private sector and/or volunteer resources, the response to Hurricanes Katrina and Rita were used to ensure that all potential deployments integrating these resources could be identified. The year 2003 was selected as a starting point because it was determined that it was unlikely any state would have records that extended beyond ten years. The intent of the second section is to identify states with existing memorandum of agreements or statutes in place that allow the states to legally deploy non-state resources through the EMAC process. This part of the survey was also used to ask states to identify specific resources that they would like to see

---

**States and Territories Participating in the EMAC Private Sector/Volunteer Survey**

<table>
<thead>
<tr>
<th>Alabama</th>
<th>Kentucky</th>
<th>Oklahoma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>Louisiana</td>
<td>Oregon</td>
</tr>
<tr>
<td>Arkansas</td>
<td>Maine</td>
<td>Pennsylvania</td>
</tr>
<tr>
<td>California</td>
<td>Maryland</td>
<td>Rhode Island</td>
</tr>
<tr>
<td>Colorado</td>
<td>Massachusetts</td>
<td>South Carolina</td>
</tr>
<tr>
<td>Connecticut</td>
<td>Michigan</td>
<td>South Dakota</td>
</tr>
<tr>
<td>Delaware</td>
<td>Minnesota</td>
<td>Tennessee</td>
</tr>
<tr>
<td>Florida</td>
<td>Mississippi</td>
<td>Utah</td>
</tr>
<tr>
<td>Georgia</td>
<td>Missouri</td>
<td>Vermont</td>
</tr>
<tr>
<td>Hawaii</td>
<td>Montana</td>
<td>Virginia</td>
</tr>
<tr>
<td>Idaho</td>
<td>New Jersey</td>
<td>Washington</td>
</tr>
<tr>
<td>Illinois</td>
<td>New Mexico</td>
<td>Wisconsin</td>
</tr>
<tr>
<td>Indiana</td>
<td>North Carolina</td>
<td>Wisconsin</td>
</tr>
<tr>
<td>Iowa</td>
<td>North Dakota</td>
<td>U.S. Virgin Islands</td>
</tr>
<tr>
<td>Kansas</td>
<td>Ohio</td>
<td></td>
</tr>
</tbody>
</table>

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available that might only be acquired through the private sector and/or volunteer resources. In addition, the second part of the survey was designed to identify states that provide a research opportunity to determine best practices or ideal models for other states to follow.

The third section of the report captures concerns or issues states may face in regards to using EMAC to deploy private sector and volunteer resources as identified in responses to the survey instrument. In some instances, potential fixes to these concerns are addressed based on actions currently being taken by various states that have experiences in this area.

Sections IV and V of this report address many of the processes states have put in place that have allowed them to be successful in deploying private sector and volunteer resources. Detailed experiences from deployments that involve private sector and volunteer resources for actual events are included and intended to provide guidance to other states that desire to include these types of resources in their planning and execution processes. Experiences captured through traditional EMAC deployments are also included, as they have a direct bearing on some of the issues and concerns identified by states or can significantly improve the planning process. The final part of this section provides a case study describing how North Carolina brought together staff from private hospitals and state agencies to build a substantial mobile hospital capability that has already experienced multiple successful deployments.

The final section of the report identifies a clear way forward for states that desire to integrate the ability to deploy private and volunteer resources through EMAC. States that wish to move forward with this capability must first address any legal constraints and then must develop a process to make private sector and volunteer individuals an agent of the state. For those states that want to render assistance but do not necessarily wish to deploy private sector or volunteer resources, an alternative solution is provided that does not require any statutory amendments or include the state sending these resources through the EMAC process.
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Part I – EMAC Deployments since 2006.

The first part of the survey asked states whether or not they deployed and/or received assistance from other states through EMAC since 2006. The survey also asked respondents to identify the events where EMAC resources were deployed and/or received. The most important information collected from this part of the survey is clearly illustrates the importance of EMAC and the regularity in which states provide assistance to other states through the EMAC process. Of the 43 respondents who filled out the survey, all but three of the respondents indicated that they have provided assistance to other states during declared disasters. The table below provides an overall summary of the total deployments by year. A more detailed analysis of the results is provided in Appendix A. Since 2006, there have been over 58 instances when states have provided assistance to other states during disasters. Assistance was provided for a variety of events, including hurricanes, floods, severe weather, blizzards, ice storms and special events such as the President’s Inauguration in 2008 and the Boy Scout National Jamboree. This information is more impressive when taking into consideration that the survey only asked for events deployed to and not the number of resources provided during these events.

The data clearly demonstrates that a state is far more likely to serve as an Assisting State under EMAC than to serve as a Requesting State. Therefore, it’s equally important to prepare to be an Assisting State as it is to prepare to be a Requesting State.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Events Supported by EMAC</th>
<th>Number of States Participating</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>2007</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2008</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>2009</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>2010</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>2011</td>
<td>11</td>
<td>26</td>
</tr>
<tr>
<td>2012</td>
<td>4</td>
<td>34</td>
</tr>
<tr>
<td>2013</td>
<td>8</td>
<td>22</td>
</tr>
</tbody>
</table>
States were also asked to categorize the type of events that they have supported through the EMAC process. Results indicate that the two most common forms of disasters supported through the EMAC process are hurricanes and floods. Hurricanes ranked as the most common with 84.4% of the states having supported hurricane related disasters through the EMAC process. This was closely followed by major flood events, with over 73% having supported other states during flooding events. Tornadoes came in third, with 36% of states having sent support through EMAC since 2006. A full listing of the types of hazards are listed below.

The survey also asked states to indicate whether or not they received outside state assistance through EMAC. While over 86% of the respondents indicated they had deployed resources to assist other states, only 62% of the states said they had actually received resources through EMAC. An overview of the states receiving EMAC resources since 2006 is captured in the table below and a more comprehensive summary can be found in Appendix B. States that requested resources were also asked to identify the type of hazard they were responding to that required them to request assistance through EMAC. The single greatest hazard that caused the most number of states to request assistance was flooding with over 43% of the respondents stating that floods were the main hazard that required additional state support.
An Analysis of EMAC Capabilities for Private Sector and Volunteer Resource Coordination

<table>
<thead>
<tr>
<th>Total Number of Events a State has Received EMAC Resources Since 2006</th>
<th>Number of States Receiving Resources for Specific Number of Events</th>
<th>States Receiving Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>1</td>
<td>MA</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>CT, VA</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>CO, KS, LA</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>IA, ID, MN, MO, ND</td>
</tr>
<tr>
<td>1</td>
<td>16</td>
<td>AL, AZ, AR, DE, FL, GA, KY, MD, NM, NJ, OK, PA, SC, SD, TN, VT</td>
</tr>
</tbody>
</table>

Flooding was followed by Tropical Systems and Severe weather with 32% and 25%, respectively. A complete summary of the hazard that triggered EMAC assistance is listed below.

<table>
<thead>
<tr>
<th>Type of Hazards States Have Requested Support through EMAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Hazards that Required EMAC Support</td>
</tr>
<tr>
<td>Flood</td>
</tr>
<tr>
<td>43%</td>
</tr>
</tbody>
</table>
Part II – Deployment of Private Sector and Volunteer Resources through EMAC since 2003

The second part of the survey focused on identifying which states have experience in either receiving or deploying private sector and/or volunteer resources through EMAC. One of the objectives of the survey was to determine which states had the legal ability to deploy private sector and/or volunteer resources through EMAC. There are several legal mechanisms in which states can deploy these non-traditional resources, including memorandums of agreement, legislation and intergovernmental agreements. States were also asked if they had specific plans and/or policies in which they use to assist in the deployment of these types of resources. One of the major roadblocks for states to be able to deploy private sector and/or volunteer resources is that they do not have the legal capabilities that explicitly permit them to deploy through EMAC. In addition, based on a few survey responses and direct discussions with some of the states, not all of them wish to deploy private sector resources through EMAC and would rather implement direct contracting for products and services. States also had differing opinions on volunteer resources. One state commented that volunteer resources “should be managed through organizations that already manage volunteers”. While there was no universal approval of the concept of deploying private sector and volunteer resources through EMAC, most states that have experiences in deploying one or the other are making efforts to enable theirs states to include these resources, or are interested in finding more information about how states are successfully deploying private sector and/or volunteer resources.

If a state has access to a resource (private sector or volunteer) that may be needed by another state during a disaster, EMAC is a functional alternative. Efforts should be made to be able to share all necessary resources, particularly in multi-state or catastrophic disasters when government resources alone won’t be sufficient to respond and recover. The map below provides a geographical overview of states that have successfully deployed private sector and/or volunteer resources.
Current Mechanisms in Place to Support Private Sector and Volunteer Deployments

When states were asked if they had any mechanisms in place to assist in the deployment of private sector and/or volunteer resources, the overwhelming response was “no” with 22 of the 39 respondents answering in the negative. States that currently do not have the legal authority to deploy resources make up 56% of those that responded to the question. Fifteen percent, or 6 of the 39 respondents, indicated their states currently have legislation in place which allows them to deploy private sector and/or volunteer resources. Four to six states also indicated they had either a memorandum of understanding, memorandum of agreements, plans, or policies in place that permit the deployment of private sector
resources. A complete breakdown of states with mechanisms in place to assist in the deployment of private sector and/or volunteer resources is provided below.

![States that Currently Have Mechanisms in Place to Deploy Private Sector and/or Volunteer Resources](chart.png)

**Private Sector Resource Deployments**

One of the primary objectives of this study was to identify states that have had successful deployments of private sector resources through the EMAC process and capture the procedures and guidelines that are in place that allow them to leverage this capability to assist other states. Of the 43 states and territories that participated in the survey, five states, or 12% of the respondents, indicated that they have deployed private sector resources through EMAC. During the course of this study, one of the states that had the most comprehensive program and process in place for EMAC is Minnesota. Minnesota recognized that local and private sector entities held the majority of deployable assets for the State of Minnesota. Minnesota has deployed private sector resources to assist in the North Dakota Floods in 2009, Hurricane Irene in 2011 and Hurricane Sandy in 2012. To facilitate the deployment of private sector personnel and equipment, the state implemented the requirement that non-state and private sector personnel being dispatched through the EMAC system to an out of state assignment must complete an “Intergovernmental Agreement / Non-Governmental Organization Agreement”. Under this agreement, personnel remain the responsibility of their employer (county, local, Non-Governmental Organization, or private sector) for pay, workers compensation, benefits and deployment logistics. As a designee and an
“agent of the requesting state,”1 personnel are covered under the requesting state for tort liability and immunity purposes, and are not liable on account of any act in good faith while so engaged in connection therewith to the mission. It must also be noted that “good faith” in this context does not include willful misconduct, gross negligence, or recklessness. A full copy of Minnesota’s Intergovernmental Agreement; Non-Governmental Organization Agreement; Tribal Agreement is provided as an example and best practice in Appendix C of this document.

South Dakota utilizes a similar strategy for its non-state resources deploying out of state under EMAC. The state requires the completion of a “Joint Power Agreement” to designate those deployed as part of the state’s resources. Personnel deployed on joint action under this agreement shall be considered an employee of the state of South Dakota. Each employer retains responsibility for its personnel while they are deployed in joint action under this agreement and includes wages, unemployment benefits, benefits, liability coverage and indemnity except as otherwise specifically provided in the agreement. Through the agreement, South Dakota will reimburse the employer according to the terms outlined in the EMAC request. The agreement also calls for workers compensation coverage to be provided under the agreement consistent with personnel being state employees. The Joint Power Agreement was successfully used in 2009 when South Dakota provide North Dakota with a private sector resource to assist in mass care for a major flood event.

Non Public Sector Medical Resource Deployments

One non-public sector entity that affects both the private sector and volunteer resources is the medical community. Today, many jurisdictions are serviced by for-profit ambulatory companies. There is a growing trend towards this model as jurisdictions look for cost-saving measures that the for-profit ambulatory companies meet due to the fact they typically charge fees for services back to the individual or the individual’s insurance company. In addition, many of the mission ready packages that have been established across the country rely on non-public hospitals to staff these teams either on agreed upon rates or voluntary basis through the Medical Reserve Corps.

1 An agent of the state is a person who has been granted authority by the state to carry out the work of the state or a portion of the work of the state and who is obligated by contract to do so.
One of the major concerns during any disaster is ensuring there are sufficient medical resources available to provide the necessary level of healthcare to those affected as a result of the disaster. This is particularly of concern to coastal states which may be required to issue large scale evacuations due to the anticipated effects of storm surge, severe weather, straight line winds and tornadoes. For example, during Hurricane Gustav, Louisiana had to evacuate their entire coast due to the anticipated landfall of the storm in the center of the state’s coastal region. During this evacuation, the Louisiana State Police estimated over 1.5 million people evacuated. One of the scarcest resources available during these large scale evacuations is ambulances; required to move patients from evacuating hospitals, medical facilities, and nursing homes.

The survey asked respondents if they had any experience in deploying non-public health resources in support of EMAC requests to other states. Six states indicated that they have experiences with deploying non-public sector medical assets through EMAC. Five of the six states deployed ambulances through EMAC, while three of the six also deployed teams of various clinical composition. Nearly all medical assets were deployed in support of hurricanes. Two states provided medical support during Hurricane Katrina, one state provided support during Hurricane Ike, while two states provided medical support to Hurricane Sandy. The lone exception was medical support provided to North Dakota during the 2009 floods.

One of the concerns in deploying both public and private sector medical personnel is whether or not states have reciprocity guidelines in place for out of state medical personnel deployed in direct support of a requesting state. Reciprocity guidelines allow licensed medical professionals in one state to practice in another state. Surprisingly, only 15 states indicated they had reciprocity guidelines, while 19 stated they did not and 14 were unsure. Due to the high number of unknowns, it is possible that some of the respondents who answered in the negative may not be familiar with reciprocity guidelines and inadvertently answered incorrectly. Direct conversations between states can help to clarify reciprocity guidelines prior to EMAC deployments.

**Volunteer Resource Deployments**

The final aspect of the survey was centered on the deployment of volunteer resources. The survey asked respondents if they deployed volunteer resources through EMAC since 2003. Eleven states
indicated they had deployed volunteer resources through EMAC while 37 stated they had not. Four states deployed volunteer resources to the Gulf Coast in response to Hurricane Katrina in 2005 while six states provided volunteer based resources during Hurricane Sandy in 2012. Other events supported with volunteer resources include the Kentucky Ice Storms of 2008, the Alabama severe weather event and Tuscaloosa tornado, Missouri’s severe weather and Joplin tornado, Hurricane Irene, and flooding in Mississippi which all took place in 2011.

States provided a wide range of volunteer resources through EMAC. States supporting Mississippi and Louisiana during Hurricane Katrina provided volunteer coordinators, stress-debriefing teams, dog teams, and Fire & EMS support. Other volunteer resources deployed include HAM radio operators, marine rescue, volunteer liaisons, volunteer fire and mental health teams. The sheer diversity in the type of resources deployed during disasters illustrates how critical volunteer resources are in filling unique needs of states.

Based on the number of states that have deployed volunteer resources in comparison to private sector resources, more states have embraced this concept than deploying private sector resources through EMAC. Deploying volunteer resources is facilitated through the mechanisms states have established that allow them to initiate such deployments. As an example Connecticut and Hawaii have processes in place to deploy volunteer resources, but nothing that will allow them to deploy private sector resources. The ability to make volunteer resources “agents of the state” is critical in facilitating the deployment of these non-traditional resources. Connecticut has a process that allowed them to deploy a communications volunteer to assist New York during Hurricane Sandy in 2012. The State of North Carolina addressed this issue through its Emergency Management Act of 1977, which identifies “volunteers” as part of their definition of “Emergency Management Worker”. It also extends this definition to those in the health care industry that are part of a “hospital-based or county-based State Medical Assistance Team designated by the North Carolina Office of Emergency Medical Services and any person performing emergency health care services.” Through legislation, North Carolina has extended the same immunity and exemptions to members of the health care community and volunteers supporting disaster response and recovery operations as those afforded to their state employees. This is a model approach that could be implemented in other states.

The final area in which states were surveyed involved identifying what type of resources from the private sector and/or volunteer communities they would like to see available through the EMAC process. States identified over nineteen different resources they believed would be valuable through EMAC. The
most often sited resources were private ambulances that provide basic life support, which was identified by six states. The second most identified resource was field hospitals, with four states saying this resource would be ideal in deploying through EMAC. Three states identified medivac helicopters, while two states identified generators, DEMORT teams, doctors and nurses, medical logistics specialist and communications equipment. A full listing of all resources identified is provided below. These are areas in which states could build or expand regional mutual aid capabilities without depleting existing capabilities in any given community.

### Specific Private Sector / Volunteer Resources States Would Like to See available through EMAC

<table>
<thead>
<tr>
<th>Resource</th>
<th>Number of States who Listed Specific Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Stress De-Briefing Teams</td>
<td>3</td>
</tr>
<tr>
<td>Donations Manager</td>
<td>4</td>
</tr>
<tr>
<td>Pet Sheltering</td>
<td>2</td>
</tr>
<tr>
<td>Utility Reconstitution</td>
<td>1</td>
</tr>
<tr>
<td>Communications Equipment</td>
<td>2</td>
</tr>
<tr>
<td>Long Term Recovery Specialist</td>
<td>3</td>
</tr>
<tr>
<td>Food and Water Supplies</td>
<td>5</td>
</tr>
<tr>
<td>Generators</td>
<td>2</td>
</tr>
<tr>
<td>Shelter Management Teams</td>
<td>3</td>
</tr>
<tr>
<td>Veterinary Teams</td>
<td>1</td>
</tr>
<tr>
<td>DEMORT Teams</td>
<td>4</td>
</tr>
<tr>
<td>Medical IM Teams</td>
<td>3</td>
</tr>
<tr>
<td>Ambulances</td>
<td>6</td>
</tr>
<tr>
<td>Geriatric Specialist</td>
<td>2</td>
</tr>
<tr>
<td>Doctors / Nurses</td>
<td>3</td>
</tr>
<tr>
<td>Medical Logistics Specialist</td>
<td>2</td>
</tr>
<tr>
<td>Laboratory Services</td>
<td>2</td>
</tr>
<tr>
<td>Medivac Helicopters</td>
<td>4</td>
</tr>
<tr>
<td>Medical Field Hospitals</td>
<td>5</td>
</tr>
</tbody>
</table>

Number of States who Listed Specific Resource
An Analysis of EMAC Capabilities for Private Sector and Volunteer Resource Coordination

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Part III – Challenges Experienced with Volunteer/Private Sector Deployments

One of the main objectives of the survey was to determine which challenges states were faced with, or concerned about, in regards to integrating private sector and/or volunteer resources as part of their capabilities that could be utilized to provide support through EMAC. States identified legal issues and reimbursement issues as their primary concern, with 33 states answering that these two areas offered challenges that may prevent them from deploying private sector and/or volunteer resources. Lack of legislation was identified as a concern by 24 states, while 23 states also identified concerns on whether their existing contracts with vendors allowed them to deploy these assets across state lines. As demonstrated in this report, there are legislative and policy solutions that exist in other states that serve as models for those wishing to deploy volunteer or private sector resources.

Lack of Legal Authority to Deploy Private Sector/Volunteer Resources

States were also given an opportunity to identify other issues that presented challenges to deploying these types of resources. One of the limitations identified by the EMAC coordinator from the State of Missouri was that EMAC legislation approved by Congress, and used by many states to model their own interstate mutual aid enabling legislation, does not offer any clarity when it comes to deploying volunteer and/or private sector resources. The original legislation was designed for states to share state resources, and for this reason the concept of deploying volunteers and/or private sector resources is not addressed. Because the enabling legislation does not address this, questions about liability issues and responsibilities for workers compensation are left unanswered. Missouri’s contracts usually contain language specifying that private sector vendors agree that, by accepting the contract, their personnel are not permitted to represent themselves as agents of the state. This language is added to their contracts as a mechanism to provide liability protection and to ensure that contract employees do not try to claim state employee status and benefits. This language essentially prohibits Missouri from deploying private sector resources. Some states have also added language within their contracts that allow other access for other states. Mississippi has language in place that allows other states to use their contracts at their negotiated rate, which is identified as another model practice.
Reimbursement Challenges

One area identified as a challenge by a large majority of states is that of reimbursement issues. Many states in the survey, as well as those who responded via email or phone calls, expressed concern about reimbursement issues. In addition, states that deployed private sector or volunteer resources were specifically asked if they experienced any issues with reimbursement. While many of the issues raised about reimbursement would be common even to a state-owned resource being deployed, other concerns were directly related to the deployment of volunteers and private sector resources.

Reimbursement concerns ranged from non-payment of toll costs to deployed personnel utilizing per diem or producing receipts for costs. During the reimbursement process, a receiving state can process hundreds of reimbursement packages from different jurisdictions that have distinct travel and deployment policies. Package processors and auditors have to verify that the documentation is complete based on the deploying jurisdiction’s policies and procedures. Often these policies vary drastically from jurisdiction to jurisdiction. It is important to note that reimbursement issues are not unique to private sector or volunteer deployments - these issues need to be addressed by all EMAC members.

Some states have implemented policies that include requiring a team deploying through EMAC is to follow state travel guidelines or a blanket travel policy, as opposed to the individual jurisdiction’s guidelines. This reduces confusion and streamlines the reimbursement process for the receiving state. NEMA encourages the development and use of internal reimbursement guidelines and is developing an online training program to verse each state’s finance and auditing teams on the best practices of EMAC reimbursement, estimated to be available in the fall of 2014.

Another area of concern identified by states is the rate of payment for volunteer personnel who are while deployed. One state identified a volunteer fire fighter team who was part of a large fire and EMS deployment that was entitled to receive the pay of their regular government jobs for the county; however, the volunteers never received pay for the deployment because it was not supported by its township. This issue could have been clarified prior to the deployment with additional coordination between the deploying volunteer, the state and the county. The fact that volunteers are typically unpaid to begin with also raises an issue because there is no set rate of pay. Other issues raised concerning payment involves rate configuring when using a large taskforce of different personnel, including volunteers coming from different pay scales and different organizations. This issue was clarified and
resolved by New Jersey when they deployed a law enforcement task force for Louisiana in response to Hurricane Katrina. New Jersey simplified the process by paying the New Jersey State Police rate for everyone on the task force, which simplified and sped up the reimbursement process. Additional specifics regarding this deployment with the volunteer department is expanded further in Part IV of this report.

Issues regarding payment and reimbursement are not unique to volunteers. Several states identified pay and liability issues with private sector personnel as well. One state commented that self-employed individuals provide a unique challenge, as many do not have a defined salary or an hourly wage that can be documented. This is an issue that can be addressed through the EMAC Request for Assistance (REQ-A) process. If a requesting state is in need of a particular resource, they will agree to pay the specified rate.

Reimbursement for deployment of services has proven to be a cumbersome task for many of the states that participated in the survey, especially when private sector resources are involved. A proven best practice to lessen the burden of reimbursement issues is to have states establish contractual agreement with public and private agencies prior to a disaster. Not only do pre-determined contracts speed up the actual reimbursement process, but could actually assist in addressing any potential issues in advance. In Vermont, the state is in the process of establishing an EMAC working group that will include logistical, operational, financial, and other experts that are involved in EMAC processes in the state. This working group will have goals specifically in place to address issues ahead of the disaster as well as have resolutions in place for them.

Other issues identified by states include potentially not being able to validate the training and qualifications of private sector personnel. States also raised concerns about the potential of deploying private sector resources presenting conflicts with procurement practices or requirements. One state also identified liability concerns as a barrier to deploying private sector resources. Finally, one of the respondents stated that they do not have a mechanism in place to make the initial payment for private sector resources deployed to another state, but would be responsible for assuming the cost of the contract if the resource was deployed as part of an EMAC package through the state. If deployed, the state would assume all the risk for ensuring the contract was paid.
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Part IV – Best Practices and Lessons Learned

The EMAC system has provided our nation with an unparalleled mutual aid system to respond to and recover from large disasters. While most missions are deemed successful, improvements are guaranteed as a necessity in advance of the next deployment or receipt of assets. With each event, states are finding additional ways to enhance response as well as help others through EMAC. Throughout this study, evidence of innovative thinking, collaboration with private sector resources and personnel, or process improvement for the next event were identified in almost every state that agreed to discuss their experiences further. Below is a small portion of those state experiences, lessons learned and/or best practices that stood out from the initial survey. The areas identified below are categorized based on the five phases of EMAC. While some of the areas highlighted are based on state deployed resources, they are also notable practices that can be utilized by states wanting to deploy private sector and/or volunteer resources.

Pre-Event/Preparation – Inventorying Regional Medical Assets

Summary

Quickly being overwhelmed by four major hurricanes during the 2004 Hurricane Season, the State of Florida seized the opportunity to improve the way the state identified medical assets and personnel inventory that are available throughout the region prior to future hurricane seasons.

Description

Experiencing four major storms in one season quickly overwhelmed state resources in Florida. Receiving any asset to help back-up or replace existing medical assets was critical for continued medical services and operations. Without EMAC, Florida would have found it very difficult to manage that particular hurricane season with no outside assistance from other states.

The Florida Department of Health brought in over 200 medical personnel comprised of doctors, nurses, and specialists from Colorado, Alaska, Kentucky, and North Carolina. This was a massive undertaking for the state to manage under four different storms, and knowing what medical resources were needed storm after the storm proved to be a challenge.
Following the 2004 season, the state determined the need for a more efficient way to plan for the use of medical resources in the event of a multiple landfall hurricane season or other multiple disaster scenario. With this vision, the Region IV Unified Planning Coalition was formed. This coalition includes all states in FEMA Region IV, along with federal government agencies. The planning coalition has the ability to quickly research and provide states with annually updated resource inventory throughout the region.

Pre-Event/Preparation – Mission Ready Packages

Summary

Through experiences from multiple deployments providing assistance to other states, as well as receiving incoming EMAC support for their own disasters, the State of Colorado has established Mission Ready Packages to enable future support to other states.

Description

In 2007 the state of Colorado permanently adopted an EMAC process after determining their previously established MOU process was not effective because it did not encompass all hazards. Facilitated by the State of Colorado Division of Homeland Security and Emergency Management (COEM), Colorado has completed multiple EMAC deployments throughout the country, including the Gulf Coast, during hurricane season as well as other states during flooding and tornado events. Colorado is experienced in both sides of the EMAC process and has developed Mission Ready Packages (MRP) that are in place for defined events.

More recently the state of Colorado has deployed resources to California for wildfire fighting purposes, in which MRPs are utilized. The MRPs developed by the state of Colorado are used for deployments as well as receipt of resources from other states, specifically for fire-related events. Utilization of MRPs during a wildfire event speed up the process of selecting needed resources as well as providing a cost estimate up front. When Colorado is responding to a fire resource deployment, as stated by Colorado’s State EMAC Coordinator, an MRP can be sent through EMAC stating exactly the resources available from the state to determine what can be sent out.

Establishing pre-determined MRPs, as demonstrated by COEM, is a best practice that should be incorporated into every state’s EMAC procedures. Both the public and private sector benefit from this
capability, which ensures coordination and cooperation for resource sharing implemented during emergencies. NEMA encourages states to develop internal capability for their own resource inventory. Developing and understanding their internal inventory enables the state to serve to assist and be positioned to also know their needs as a requesting state.

Activation – Making Medical Personnel Agents of the State

Summary

The State of New Jersey has acquired a Mobile Satellite Emergency Department that is staffed with a combination of private hospital staff and state agency personnel. Despite being involved in responding to the effects of Hurricane Sandy in New Jersey, the state provided New York with a quick solution, leading to a successful deployment to a neighbor in need.

Description

During Hurricane Sandy in 2012, New Jersey was primarily a receiving state of EMAC resources; however, with a unique resource on hand and the capability for deployment quickly across borders, the state offered its full support in getting the asset on the ground and operational in a timely manner for the state of New York.

The New Jersey – Mobile Satellite Emergency Department (NJ-MSED) vehicles are one of only a few mobile medical assets in the country, funded through the U.S. Department of Defense and the Urban Areas Security Initiative (UASI). The core of the NJ-MSED complex exists in the form of two 43-foot trailers and a 48-foot
trailer with expandable sides. Each mobile unit is staffed by Hackensack UMC emergency physicians, nurses and operations personnel, and includes the following capabilities\(^2\):

- Seven critical care beds with monitor-defibrillator capability
- Digital X-ray and sonography systems
- Telemedicine capabilities
  - Portable field laboratory
  - A pharmaceutical cache
  - Overhead medical procedure lighting
  - Oxygen generators and
  - Technology to seamlessly connect the operations of the two units.

The NJ-MSED also has multiple support vehicles designed and constructed to provide on-scene advanced communications to link back to Hackensack University Medical Center as well as the New Jersey Health Command Center, Office of Emergency Management and the Medical Coordination Centers. Supplies and equipment are transported with additional support vehicles.

Following Sandy, New Jersey deployed this unique asset to Long Beach Hospital in Nassau County, NY where the local hospital was completely devastated by the storm. The deployment team was made up of personnel from Hackensack University Medical Center, the New Jersey Emergency Medical Services Task Force (EMS TF), and the New Jersey State Department of Health. Both the Hackensack and EMS TF personnel were private sector personnel, which immediately needed to be addressed in order for the package to deploy without issues.

Facing their own response and recovery efforts, New Jersey scrambled to deploy the asset and its staff. The resource had not yet been fully "resource typed" or made ready as a mission ready package; therefore, staff needed to quickly determine exactly who was going to deploy. Since all EMAC deployed personnel must be "agents of the state" from the state they deploy, the Hackensack and EMS TF personnel would not be eligible or legally covered to deploy. The staff identified from the Health Department were not problematic because they were already state employees. New Jersey employees worked with the

\(^2\) http://www.hackensackumc.org/msed/
State Attorney Generals’ Office to come up with a solution on how to designate the Hackensack Hospital and EMS TF personnel as agents of the state for this situation as well as future EMAC deployments. During a conference call with the Attorney Generals’ Office, it was determined that all private sector personnel deploying in support of the NJ-MSED would be registered in the New Jersey Medical Reserve Corps database, a state sponsored database and program, which would sufficiently designate them as agents of New Jersey.

The state knew what needed to be addressed in order to deploy the asset to support New York, and understood what needed to be addressed in order to facilitate and complete a without issue deployment. Collaborating with the appropriate agencies immediately upon recognition of the issue led to no real delay in the mobilization or deployment. The asset and its support staff were mobilized and deployed in a timely manner.

Reimbursement – Ineligible Expenses

Summary

Public/Private sector medical asset deployment from North Carolina resulted in the receiving state being unable to reimburse private hospital fees.

Description

In response to a request, North Carolina deployed a smaller version of their mobile field hospital and staff to support an incapacitated hospital in the affected area. The hospital was anticipated to be closed for some time. The cost estimate, reviews and approvals were maintained while the medical asset and personnel deployed and returned successfully.

Following the deployment, it was revealed during the reimbursement process that there was a hospital administrative fee included in the cost estimate. The reimbursement request was processed, and because the fee was approved in the cost estimate, it was an officially approved expense. Months later when North Carolina submitted its reimbursement request to the receiving state, upon review by the fiscal staff, the issue of the administrative fee was raised. Conference calls and e-mails were exchanged

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3 New Jersey Department of Emergency Management
by senior management and legal counsel of both states before a resolution was made. This issue was a game-changer in deploying this asset and staff in the future, and resulted in increased scrutiny when reviewing the cost-estimate for inappropriate charges prior to future deployments.

Reimbursement – Establishing Fixed Labor Rates

Summary

In response to Hurricane Katrina, the state of New Jersey deployed a multi-jurisdictional law enforcement task force to assist in providing security to the City of New Orleans. The outcome of the Katrina deployment led to changes in the thought process for New Jersey’s deployments of these types of assets/support for future disasters, resulting in the simplification of the reimbursement process.

Description

In 2005 many states, including New Jersey, offered their support in countless ways to the Gulf Coast Region in the aftermath of Hurricane Katrina. In response to an overwhelmed region in need of assistance, New Jersey State Police sent help by way of staffing, equipment, logistical and technical assets. These assets were deployed with a systematic approach grounded in complete self-sufficiency.

The law enforcement task force consisted of approximately 600 state troopers and local and county police officers from over 110 New Jersey law enforcement agencies, accompanied by fire service and emergency medical technicians. Hundreds of troopers and local police officers mobilized and deployed to New Orleans as part of the task force and spent weeks in the city. The Task Force was responsible for searching residences, rescuing stranded residents, recovering bodies, rescuing animals, and delivering food and water to thousands of residents who did not evacuate for the storm. They also assisted with decontamination operations of emergency workers and vehicles. The thousands of hours spent on these missions could have potentially become major reimbursement challenges upon return without action by New Jersey to mitigate the issue.
With over 100 different agencies involved, each responder fell under different agency policies, including labor contracts or other legal doctrines in place for extra benefits to which their personnel would be entitled for unusual assignments. Some of these contracts or policies provided extra money for meals, expenses, or “Hazardous Duty Pay” as defined by the military. Additional fringe benefits were also a challenge. Seeing the enormous problem occurring with the reimbursement of dozens of different unauthorized expenses, the state notified everyone in advance of parameters being set for deployment as agents of the state. All deployed personnel had advanced knowledge of and agreed to the terms of the deployment established - fixed rates which were the same for everyone. Had this agreement not been in place, the state would be dealing with paperwork issues for years to come. New Jersey mitigated the large, recurring EMAC issue of reimbursement of allowable expenses, by setting firm parameters and giving those deploying the information prior to deployment, resulting in no additional expectations.

Reimbursement – Pre-deployment Briefs and Reimbursement Tracking Software

Summary

Tennessee integrated lessons learned following a deployment of medical personnel in 2004 to provide support during multiple hurricane landfalls in Florida. A significant improvement in reimbursement was a direct result of this deployment and included the creation of a new tracking system and training package to streamline future deployment.

Description

After a 2004 nurse deployment to the hurricane-struck area in Orlando, FL, Tennessee developed a customized package to quickly train responders preparing for deployment. A reimbursement tracking system for the budget officers was also improved as a result of this particular deployment.

Following After Action challenges after the 2004 deployment, the Tennessee Emergency Management Agency Budget Officer took the initiative to develop a training package. With each corrective action in mind, a training course was developed to eliminate the same issues from transpiring during future deployments. Now the new EMAC software package will be integrated into briefings, which will help streamline the process. The training consists of an eight hour session held at the State Emergency Operations Center prior to deployment departure. Availability of this training provided the Tennessee
Emergency Management staff the opportunity to work closely with those deploying as well as better define the process and expectations of each deployment. With better communication and collaboration on expectations throughout the process from the beginning, issues during and after each deployment can be mitigated. The agency also assigned and trained ten new personnel capable of operating the EMAC software. These personnel recently tested the software as an A-team to an EMAC exercise in Georgia for a Hurricane TTX this summer.

Reimbursement – Requesting State Paying Cost for Deployed Volunteers Directly

Summary

Following the 2004 Hurricane season, the state of Florida initiated a policy in which the state will directly pay the travel costs for deploying volunteers, saving both time and money for the deploying state as well as for Florida.

Description

After multiple Hurricanes in the 2004 season, Florida relied on and appreciated the massive volunteer efforts. As a state that has been on both the receiving and deploying end of resource sharing Florida has learned it is critical, when requesting volunteer resources, to list out all details and facts needed for deployment of that resource. Providing a complete description of all the areas for possible assignments, as well as stipulating the assignment with the job that best fits specific abilities, should continue to be a best practice.

When dealing with volunteer resources, Florida has found that negotiating the requesting state to pay directly for lodging and direct travel costs (airfare, car rental, etc.) can save time and money for both states. This also eliminates the burden on the requesting state to have to endure the lengthy reimbursement process.

Additionally, it is critical there are no misunderstandings for the traveler in regards to their state’s per-diem policy, to ensure a smooth deployment and timely reimbursement process. Lodging costs range greatly across different areas of the country, which results in the need for higher per-diem amounts than other states normally allow. This discrepancy causes numerous problems with travel costs associated with
deployments. Unfortunately when most communities are impacted by a disaster, money is one of the first things exhausted and funds are often not available until receipt of FEMA reimbursements.

Reimbursement – Volunteers Denied Payment for Services

Summary

Following a multi-department deployment of volunteer and paid firefighters, New Jersey now assesses deployment of volunteer units and manages expectations of these personnel prior to deploying.

Description

Volunteers contribute so much to the response and recovery process when disaster strikes. Their use within EMAC; however, can be challenging if states are not aware of what issues may come up or do not have sufficient policies and procedures in place to deal with volunteers.

New Jersey provided extensive support to the Gulf Coast region in many ways following Katrina, one of which was sending multiple decontamination (DECON) teams that consisted of both salaried fire department personnel and volunteer fire department personnel. When deployed through EMAC, all volunteers may be reimbursed for travel, meals and accommodations. Issues developed for one particular DECON team coming from a volunteer fire company included township administrator refusal to pay a fair wage for hours deployed; therefore, New Jersey / EMAC could not reimburse these personnel for any salary type costs. Members of the other DECON teams (salaried fire department personnel) on the deployment were paid, except the volunteer fire personnel, because of this decision. This proved to be an unfortunate experience for volunteer firefighters who anticipated being paid for hours worked. Following this experience, New Jersey determined the state would be more diligent in the future on who is assigned deployments, especially volunteers who are expecting payment.
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Part V – Case Study: North Carolina Mobile Hospital

Capability Overview

- Eight mobile hospitals with immediate deployment capabilities, including medical staff
- Unique collaborative partnership between government and private sector that has been tested and verified through training, exercise, and real world deployments
- Successful deployments for Hurricane Katrina and May 2014 Mississippi tornadoes

Description

Having extensive experience in response and recovery efforts to major hurricanes along the North Carolina coast with Hurricanes Hugo (1993), Dennis and Floyd (1999), and Irene in 2011, North Carolina is no stranger to seeking assistance and outside resources from other states. Since 1996, EMAC has provided states with the mechanism to share resources during disasters. Following the nationwide response for the events on September 11th, 2001, past experience with major hurricanes, and appreciating the mutual aid received from other states through EMAC enabled the North Carolina Office of Emergency Management to build capabilities to facilitate better response and recovery efforts for their own citizens as well as have the ability to help other states in need during disasters. Utilizing federal grant money, the state purchased eight completely outfitted mobile hospital units. The units were developed with standardization in mind so each piece was independent, yet fit together as a bigger unit. The mobile units enable North Carolina to provide a medical contingency care capability asset that can be deployed anywhere in the nation to augment or temporarily replace a fixed/field medical facility that has been damaged or destroyed.
Following the purchase of the mobile units, the state entered into agreements with eight of the North Carolina trauma hospitals to provide medical staffing for each unit in the event of a deployment. These agreements enable the state to use their own government assets in collaboration with private sector medical personnel to deploy in one package to any requesting state, and legally cover the hospital staff as state assets during a deployment. The units each have a 50-bed capacity (400-bed capacity if linked together) and require a small team of logistical support to maintain/operate each unit, along with the designated medical staff needed while deployed. The units are transported on tractor trailers to the selected site and are set up with a goal of being fully operational within 48 - 72 hours of arrival. The intent is to have the teams provided by North Carolina initially operate the mobile unit, while at the same time train local hospital staff to eventually take over and run the mobile unit with their own medical personnel. North Carolina regularly trains and exercises their hospital staff to ensure each team is prepared and familiar with the mobile units.

FEMA took immediate notice of the capability North Carolina was building. Seeing the value in the private/public partnership and incorporating it into a deployable resource, FEMA purchased an additional mobile unit (MDH) and assigned the asset to North Carolina Office of Emergency Medical Services (NCOEMS). The MDH is unique in that it relies on federal agencies, state agencies and private organizations working together in response to critical medical needs during a disaster. The MDH can deploy with or without medical staff leveraging the existing MOU’s the North Carolina Office of Emergency Management has in place with their hospitals and their mobile units. Both FEMA’s MDH and one of North Carolina’s Mobile Hospital Units have been deployed to real world events.

North Carolina first deployed the capability in August 2005 during the aftermath of Hurricane Katrina, to Waveland, Mississippi. The mobile hospital was a brand new asset for North Carolina at that time and had never been used for a disaster situation before Katrina. Originally slated to deploy to New Orleans, members from the North Carolina state medical assessment team and Carolina health care centers detoured their deployment caravan to Waveland. Using impromptu resources, including security and fencing, the deployment team was able to set up a twenty-four hour on-site medical treatment and triage facility. Logistical challenges included facilities, communication, electricity, biomed waste, and water purification; however, the team came up with solutions and provided staff housing, tents, portable electricity, and waste separation procedures. The overall eight week deployment and set up of the Waveland temporary medical facility included 500 total personnel from North Carolina who cared for 7,500 patients from minor urgent care to life threatening illnesses.
This EMAC deployment tested all aspects of this asset in ways that it could never have been accomplished via exercise or training. The initial deployment of the unit for Katrina provided North Carolina with the opportunity to make changes in advance of future deployments, the most noteworthy being the attachment of Logistics and Finance units to the hospital for procurement and record-keeping requirements. During this deployment, lessons were learned and best practices were identified that have now been incorporated as national standards for EMAC interstate deployment initiatives.

Following Katrina, consideration was also given to planning and coordinating with the other states in FEMA Region IV to purchase and build compatible units, allowing a regional team to deploy seamlessly to a large-scale disaster. This concept was identified as a best practice at Katrina After Action Conferences.4

Most recently, the FEMA MDH deployed to Winston County in Mississippi after an EF-4 tornado destroyed and damaged dozens of businesses and homes, including the Louisville, MS hospital. The hospital includes a 21-bed emergency department featuring an X-ray unit, a pharmacy, a clinical lab, a medical supply unit and a logistical support unit. Staffed by Louisville, MS physicians, nurses and support personnel, a 12-bed intensive care unit functions with three operating rooms (one with a C-arm and operating microscope), a six-bed post-op recovery room and a rapid response unit. Mississippi currently has three mobile hospitals previously used after Hurricane Katrina; however, these hospitals are tents which are impractical for long term use. The North Carolina mobile unit has a hardened outer shell more suited for long-term deployments.

As a result of North Carolina’s commitment to building their own capacity and capability to be prepared for immediate augmentation of medical facilities in the event of a disaster, a best practice has been identified. The collaboration between the public and private sector, the flexibility in the scale of deployment (one unit, or all eight to increase surge capacity), and the integration of trained private sector medical personnel is a model for other states.

Recommendations

The North Carolina Office of Emergency Management indicated that, because of a lack in local disasters, they were able to focus on capacity and capability building. Being a hurricane-prone state with

4 Former EMAC Coordinator, North Carolina Office of Emergency Management
four nuclear power plants adds to the readiness posture as well as the assets. Not having to focus on active response and recovery efforts enabled them over time to commit money, time and resources to building capabilities. Along with the Mobile Hospital Units, North Carolina has also worked at enhancing swift water search and rescue resources which were most recently deployed during Hurricane Sandy.

Over the years, North Carolina has incorporated state and local emergency management and mutual aid partners into exercises, projects, training, and deployments which will continue through EMAC to other states in need. States should identify what resources are needed and commit to long term planning, training and exercise to enhance their own state capabilities. By doing this, the current mutual aid system will be continuously enhanced.
Part VI – Conclusion and a Way Forward for States to Integrate Private Sector and Volunteer Resources into Deployable Assets

EMAC has repeatedly demonstrated its criticality for states to quickly and efficiently provide resources to one another during disasters. In an effort to continue to improve this capability, many states have integrated private sector and volunteer resources into their inventory of deployable assets. States that have used this route, as demonstrated by the best practices included in this report, are significantly more comfortable with deploying volunteer resources, including those from the private sector. The majority of the private sector deployments gathered in this study included private sector medical personnel that were made agents of the state through the Medical Reserve Corps; thus, allowing states to include them in deployments and receive reimbursement for time and effort. Experience with existing state contracts with vendors is still lacking; however, the EMAC process is used to deploy that asset in support of another state.

While there is limited experience in deploying volunteer and private sector resources, there is still a requirement by states to rely on private sector and volunteers during disasters. States that are continuously looking to improve their capabilities to support one another should consider adding this asset to processes in place that are designed to aid their own citizens and other states. Ambulances are a repeatedly requested resource, and states with a large contingent of for-profit ambulances may want to consider coordinating this resource to support other states. Having this capability in place could potentially provide a mechanism to render critical aid during an unforeseen disaster.

For states desiring to add this capability, the first step is to determine whether or not they can legally include private sector and/or volunteer resources in their support package. The language included in the original EMAC bill approved by Congress does not address the private sector or volunteer resources. However, the language does not prohibit these resources from being included as a support package from one state to another. Some states have based the inclusion of private sector and volunteer resources on the NEMA model intrastate legislation, which defines an emergency responder as anyone in the public or private sector. This model legislation has been used by multiple states and is adopted as a means to share resources within the state.

For states that are not prohibited from including private sector and volunteer resources into their support packages, the next step would include the integration of an intergovernmental agreement similar
to what Minnesota has developed. The purpose of this agreement is to ensure that everyone understands who will be assuming responsibilities for workers compensation, liability, benefits and deployment logistics. Minnesota assigns these responsibilities to the employer and once in place, the individual becomes an agent of the state. States wanting to deploy volunteers also need to develop a process that allows the volunteers to become agents of the state. For the medical community the most efficient way is to register with the state’s Medical Reserve Corps. Once the legal authority and the ability to deploy is in place, states need to integrate these individuals into their normal EMAC procedures. There are several best practices identified in Part IV of this report that, if adopted, will alleviate and address reimbursement concerns.

Other states do not believe it is necessary, or do not have the legal capability to include these resources as part of their support capabilities. For the states that do not have the capability to deploy these resources, there are still ways for them to include private sector and volunteer resources within their states. Many states are now in the process of creating a Business Emergency Operations Center (BEOC), which integrates the private and public sector during disasters. While BEOCs are primarily designed to respond to events affecting the host state, some states are looking at how BEOCs can be used for regional and national disasters. Missouri is a prime example of a state with the capabilities of a BEOC.

To reduce the impact of emergencies on their communities, the Missouri Public Private Partnership (MOP3) Committee was established to pledge resources and offer support services during disaster events. Creating such a group has enabled the state of Missouri to better identify best practices in resource sharing from the private sector, promote public-private partnerships, and foster communication within the private sector to enhance the state’s emergency management initiatives.

Multiple factors contribute to the overall mission of Missouri Public Private Partnership plan, including the establishment of the Missouri Emergency Resource Registry (MERR) and the Business Emergency Operations Cell (BEOC) located within the state Emergency Operations Center (EOC). The initial cell later was expanded to three cells to be more inclusive of private sector interests. Through the availability of these resources and others, a proactive partnership between public emergency responders and the private sector has been generated and could serve as a flexible standard mechanism in place for other states’ emergency response initiatives.

Missouri’s BEOC is made up of businesses and associations which are committed to a public-private partnership with the state and focused on assisting the state to plan, prepare for, and respond to
An Analysis of EMAC Capabilities for Private Sector and Volunteer Resource Coordination

Disasters. Through this means of operations, the private sector within Missouri has the opportunity to inform the public sector of industry needs and resources. In some cases, the use of private sector resources may offer a useful response augmentation. As stated in the Missouri State Partnership Plan, the private sector has significant capability and is willing to assist the government through helpful two-way information exchanges or by speeding the identification of vendors that can supply needed resources. This process enhances and increases competition for emergency purchases and may be accomplished more efficiently through the coordination of a BEOC. In addition, Missouri BEOC members also may provide private sector expertise and helpful views to a local business community or the federal government. For example, in the aftermath of the Joplin tornado, two representatives from the Missouri BEOC travelled during the response to the FEMA Region VII Office in Kansas City, MO to provide private sector perspective for various issues. While these private sector representatives were not deployed through the EMAC system, they were readily available through use of the Missouri BEOC.

Involvement of the private sector in a disaster response setting such as the Missouri BEOC allows collaboration and prioritization of issues to be addressed. Missouri uses existing contracts as often as possible; however, members of the BEOC include a number of associations, which may help during times of disaster when previously established contracts do not exist. The EOC enables representatives to find resources available from association members, connect them with the state and at times track shipments. Participation in the Missouri BEOC is in no way a requirement for doing business with the state. Likewise, participation does not place a vendor on a vendor list or give any preferential treatment. Representatives from critical infrastructure, including transportation, communications, energy (power and fuel), and water industries are also able to sit within the BEOC. These representatives are able to highlight disaster issues and jointly determine damage assessment, priorities for repair, outage information, technical expertise, exchange information, and other information as necessary.

States that send out requests [for resources] that may only be available through the private sector can potentially be linked up by states with BEOCs that have a business that can meet a specific requirement. Once the linkage has been provided, the requesting state can proceed into emergency contractual procedures to secure the resource. All states should be seeking ways to increase their disaster response inventory and this is one example of how that might be accomplished.
Appendixes:

Appendix A: Disasters States Have Deployed EMAC Resources

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<th>Event Name</th>
<th>FEMA Disaster Number</th>
<th>Number of States Responding</th>
<th>Responding States</th>
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<td>Hurricane Katrina</td>
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<td>California Forest Fires</td>
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<td>WY</td>
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<td>New Mexico Flooding</td>
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<td>Tropical Storm Ernesto</td>
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<td>Kansas Severe Storms, Tornadoes, and Floods</td>
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<td>South Dakota Floods</td>
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| 2012 | Hurricane Sandy | DR-4097-95/4093-89/4087-85 | 32 | AZ, AR, CO, CT, DE, FL, GA, HI, IL, IA, KS, LA, }
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### Appendix B: Disasters States Have Requested EMAC Resources to Assist in Responding

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Appendix C: Minnesota Intergovernmental Agreement

INTERGOVERNMENTAL AGREEMENT (IGA)
NON-GOVERNMENTAL ORGANIZATION AGREEMENT (NGOA)
TRIBAL AGREEMENT (TA)

Between

MN Department of Public Safety
County/City
Homeland Security and
Emergency Management
445 Cedar Street, Suite 223
St. Paul, MN 55101-6223

and

____________________________
Organization or Provider

Contact Person: ____________________________  Contact Person: ____________________________
Phone: ____________________________  Phone: ____________________________
E-mail: ____________________________  E-mail: ____________________________

INTRODUCTION:

The Minnesota Department of Public Safety, Homeland Security & Emergency Management [HSEM], pursuant to Minnesota Statutes, Sections 12.27, subd. 2, and 192.89, the “Interstate Emergency Management Assistance Compact” (EMAC), coordinates emergency management and interstate mutual aid for the State of Minnesota. EMAC is the interstate mutual aid agreement to which all states belong that allows states to assist each other in times of disaster. When any member state’s Governor declares a disaster or when a disaster is imminent, other member states may agree to provide assistance in response to requests from the impacted state(s). The assistance from other member states may be in the form of personnel and/or other resources.

EMAC has been implemented to assist the State(s) to respond to ________________.

In response to pending EMAC requests, HSEM through the Minnesota Emergency Management Assistance Compact (MN-EMAC) has identified experienced and qualified public/private/tribal employees that are available to deploy and have agreed to assist with the response and recovery missions in ________________.

Work conditions may be sub-standard with extended hours during the week, weekends, and holidays. The customary work hours under this agreement are for 12 hour shifts or as approved by MN-EMAC. In some instances, responders must be prepared to be self-sustained for several days. For each individual county/city/ngo/tribe participating in the EMAC response effort, the following intergovernmental agreement, non-governmental and tribal agreement must be executed.

TERMS AND CONDITIONS:

Authority: Pursuant to Minnesota Statutes, Sections 12.27, subd. 2, and 192.89, HSEM through MN-EMAC and County/City/NGO/Tribal ________________

establish this intergovernmental/ngo/tribal agreement for utilization of personnel and/or resources.
An Analysis of EMAC Capabilities for Private Sector and Volunteer Resource Coordination

_____________________, who is currently employed as a

_____________________, by ____________________________, County/City/NGO/Tribe, Minnesota, has agreed to assist HSEM through MN-EMAC with the EMAC mission described above. The period of deployment will commence on __________________, and end on or before __________________.

No extensions of time will be granted without written approval.

**Employee status:** During the period of deployment, __________________________ shall remain an employee of __________________________, on detail as an employee(s) of the sending county/city/ngo/tribe for purposes of the EMAC deployment as assigned by HSEM under MN-EMAC. The county/city/ngo/tribal employee(s) will continue to be paid by his/her county/city/ngo/tribal employer, and will continue to receive the same benefits as if working at his/her home station, and will carry with him/her all workers compensation and employee benefits as if working at his/her home station. HSEM assumes no responsibility for this county/city/ngo/tribal employee(s) other than the obligation to coordinate activities through MN-EMAC and to process expense reports through the EMAC reimbursement process. The employer or employee(s), in consultation with HSEM through MN-EMAC, shall make and incur costs for all necessary logistical arrangements, including airline, lodging, per diem expenses and other necessary miscellaneous expenses.

**Liability:** Officers or employees of a party state, local jurisdiction, non-governmental organization, or tribal officers or employees deemed to be employees of a party state, local jurisdiction, non-governmental organization, or tribe rendering aid in another state pursuant to this compact shall be considered agents of the requesting state for tort liability and immunity purposes; and no party state or its officers or employees, non-governmental organization, and tribes rendering aid in another state pursuant to this compact shall be liable on account of any act or omission in good faith on the part of such forces while so engaged or on account of the maintenance or use of any equipment or supplies in connection therewith. "Good faith" in this subdivision does not include willful misconduct, gross negligence, or recklessness.

**Logistics:** The employee(s) will report to the __________________________ upon arrival and perform duties as assigned. The deployed Task Force leader, Strike Team leader, or Team leader will provide emergency contact information and status reports for the employee to MN-EMAC operations on a designated time schedule. MN-EMAC will provide to the county/city/ngo/tribe contact information and accountability reports throughout the period of deployment.

**Equipment:** Limited resources are available in the affected area. EMAC assistance requests assume that personnel deployed under MN-EMAC will provide the necessary personal equipment needed to perform the assigned task(s). All MN-EMAC A-Teams will be deployed with provided Go-Kits containing essential equipment to perform the set duties of an A-Team.

**Reimbursement:** Estimated amount -- $________________________. The amount provided above is to be used as an estimate only. The final amount could be higher or lower depending on actual costs. All wages shall be calculated at a **12 hour work day**. Consisting of 8 hours of regular pay
and 4 hours of overtime pay. The pay calculations will start at zero hours at the beginning of the deployment.

Within 20 days of the termination of this deployment, ________________ County/City/NGO/Tribe shall complete and submit to MN-HSEM an EMAC Form R-2, a copy of which is attached to this agreement. Reimbursement may be requested for actual costs incurred for this deployment, including compensation (including overtime pay), benefits, travel, lodging, and expenses (subject to any limitations applicable to the employee under the county/city/ngo/tribal existing policies); government vehicle cost(s); and equipment cost(s), (including any loss, damage to, or expense incurred in the operation of the equipment).

HSEM through MN-EMAC shall be responsible for requesting reimbursement for eligible expenses from the requesting state. Upon receipt of reimbursement from the requesting state, HSEM will provide reimbursement to the county/city/ngo/tribe in a final amount for the authorized expenses claimed on the Form R-2, within 30 days of receiving the reimbursement from the requesting state.

RELEASE OF INFORMATION RELATING TO EMAC OPERATIONS

All information, directly or indirectly, associated with Minnesota Emergency Management Assistance Compact (MN-EMAC) deployments is the property of the state of Minnesota and falls under the control of MN-EMAC. Any person(s), directly or indirectly, involved in any MN-EMAC operation can not release information, documents or direct statements to the public or news media unless authorized. All information SHALL be vetted and approved for release by a designated MN-EMAC Authorized Representative, Designated Contact, (as outlined in MN statute 192.89) or designated Public Information Officer from the Minnesota Department of Public Safety.

ALTERATIONS AND AMENDMENTS

This Agreement may only be amended by mutual agreement of the parties. Amendments shall not be binding unless they are in writing and signed by personnel authorized to bind each of the parties.

TERMINATION

Either party may terminate this Agreement upon 30 days prior written notification to the other party.

If this Agreement is so terminated, the parties shall be liable only for performance rendered or costs incurred in accordance with the terms of this Agreement prior to the effective date of termination.

IN WITNESS THEREOF, the parties hereto have executed this agreement on the day and year last specified below. This Agreement contains all the terms and conditions agreed upon by the parties. No other understandings, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or to bind any of the parties hereto.
Appendix D: EMAC Survey Instrument

NEMA EMAC Research Survey

Deployment and receipt of Private Sector and Volunteer Resources Utilizing the EMAC Process

NEMA recognizes private sector and volunteer capabilities are integral components during disaster response and recovery. To further strengthen collaboration between the Public and Private Sector, the Stephenson Disaster Management Institute (SDMI) at Louisiana State University will be assisting NEMA in identifying the issues, challenges, best practices and recommendations for states to deploy and receive private sector and volunteer resources through the EMAC process. Through this survey, we will target the following areas:

- An analysis of existing Emergency Management Assistance Compact (EMAC) programs utilizing private sector and volunteer resources.
- Identification of states with current MOAs or statutes in place allowing the deployment of private sector resources through EMAC. This will provide a research opportunity and determine best practices or ideal models for other states to follow.
- Identification of issues, lessons learned and liability concerns for integrating private sector and volunteer assets into the EMAC process.

General EMAC Questions

1) Since 2006, has your state deployed resources through EMAC in support of another state during a declared emergency?

   - Yes
   - No

   *If yes, proceed to question 1a – 1d. If no, proceed to question 2*

1a) For how many declared emergencies have you deployed resources through EMAC?
1b) List the event name for which resources were deployed through EMAC since 2006. Please list event name and year.

1c) What types of declared emergencies have you deployed resources through EMAC?

- Flood
- Tropical System
- Hurricane
- Winter Weather
- Tornado
- Severe Weather
- Terrorism
- Pandemic Flu
- HAZMAT, Transportation
- Environmental Emergency
- OTHER

2) Since 2006, has your state received resources through EMAC for a declared emergency?

- Yes
- No

*If yes, proceed to question 2a – 2c. If no, proceed to question 3*

2a) How many declared emergencies have you received resources through EMAC?

2b) Please list the events for which resources were received through EMAC since 2006. Please list event name and year.

2c) What types of declared emergencies have you received resources through EMAC? Please select all that apply:

- Flood
- Tropical System
- Hurricane
- Winter Weather
- Tornado
- Severe Weather
- Terrorism
- Pandemic Flu
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- HAZMAT, Transportation
- Environmental Emergency
- OTHER

3) Does your state currently have any mechanisms in place to assist in the deployment or receiving of Private Sector and/or Volunteer resources through EMAC?

- No, we do not have anything in place
- Legislation
- MOU’s
- MOAs
- Plans
- Policies
- I do not know
- Other

Private Sector Specific Questions

4) Has your state received Private Sector Resources for a declared emergency that were deployed through EMAC since 2006?

- Yes
- No
- I do not know

*If yes, proceed to question 4a – 4d. If no, proceed to question 5*

4a) How many times during disasters have private sector resources been received through EMAC by your state?

4b) What category of emergency resources were received?

- ESF 1 Resources - Transportation
- ESF 2 Resources - Communications
- ESF 3 Resources – Public Works/Engineering
- ESF 4 Resources - Fire
- ESF 5 Resources – Emergency Management
- ESF 6 Resources – Mass Care, Emergency Assistance, and Human Services
- ESF 7 Resources – Logistics Management and Resource Support
- ESF 8 Resources – Public Health and Medical Services
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- ESF 9 Resources – Search and Rescue
- ESF 10 Resources – Oil and Hazardous Materials Response
- ESF 11 Resources – Agriculture and Natural Resources
- ESF 12 Resources - Energy
- ESF 13 Resources – Public Safety and Security
- ESF 14 Resources – Long Term Community Recovery
- ESF 15 Resources – External Affairs

Other ________

4c) For what event(s) were private sector resources received? Please list event name and year.

4d) What challenges did you encounter in receiving Private Sector Resources through EMAC?

5) Has your state deployed Private Sector Resources for a declared emergency through EMAC since 2006?

- Yes
- No

*If yes, proceed to question 5a – 5d. If no, proceed to question 6*

5a) How many times has your state deployed private sector resources through EMAC?

5b) What category of emergency resources were deployed through EMAC?

- ESF 1 resources - Transportation
- ESF 2 resources - Communications
- ESF 3 resources – Public Works/Engineering
- ESF 4 resources - Fire
- ESF 5 resources – Emergency Management
- ESF 6 resources – Mass Care, Emergency Assistance, and Human Services
- ESF 7 resources – Logistics Management and Resource Support
- ESF 8 resources – Public Health and Medical Services
- ESF 9 resources – Search and Rescue
- ESF 10 resources – Oil and Hazardous Materials Response
- ESF 11 resources – Agriculture and Natural Resources
- ESF 12 resources - Energy
- ESF 13 resources – Public Safety and Security
- ESF 14 resources – Long Term Community Recovery
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- ESF 15 resources – External Affairs
- Other__________

5c) For what event(s) were private sector resources deployed through EMAC by your state? Please list event name and year.

5d) What challenges did you encounter in deploying Private Sector Resources? For example: Reimbursement, contractual, legislation, legal, policies...)

Medical Specific Questions

**Medical resources are identified as ambulances, clinical providers such as EMTs, nurses, physicians to assist with triage, ambulance transport, or treatment for definitive care.**

6) Has your state received medical resources for a declared emergency that were deployed through EMAC since 2006?

- Yes
- No

*If yes, proceed to question 6a – 6e. If no, proceed to question 7*

6a) How many times has your state received non-public sector medical resources through EMAC since 2006?

6b) What medical resources were received through EMAC?

- Ambulances
- Team(s) of various clinical composition
- Semi-hardened structure(s) or tentage with first aid capabilities
- Semi-hardened structure(s) or tentage with urgent care capabilities (treat & street capabilities)
- Semi-hardened structure(s) or tentage with Emergency room to trauma level capabilities (ie. DMAT type capabilities)
- Other
- If other, please describe: __________________________

6c) Were the Medical Resources required/received Pre-event or Post-event?
• Pre-event
• Mid-event (If extended event such as a flood or wildfire)
• Post-event/Recovery period

6d) For what event(s) were medical resources received through EMAC? Please list event name and year.

6e) What challenges did you encounter in receiving the medical resources?

7) Has your state deployed non-public sector medical resources for a declared emergency through EMAC since 2003?

• Yes
• No

*If yes, proceed to question 7a – 7d. If no, proceed to question 8*

7a) How many times has your state deployed non-public sector medical resources through EMAC since 2008?

7b) What non-public sector medical resources were deployed through EMAC?
Drop down:

• Ambulances
• Team(s) of various clinical composition
• Semi-hardened structure(s) or tentage with first aid capabilities
• Semi-hardened structure(s) or tentage with urgent care capabilities (treat & street capabilities)
• Semi-hardened structure(s) or tentage with Emergency room to trauma level capabilities (ie. DMAT type capabilities)
• Other
  • If other, please describe: __________________________

7c) For what event(s) were non-public sector medical resources deployed? Please list event name and year.

7d) (if yes) what challenges did you encounter in deploying medical resources?
8) Does your state have reciprocity guidelines for sending/deploying medical teams to another state?

- Yes
- No
- Not sure
- Other

9) What other medical resources would be helpful if they were available through EMAC?

**Volunteer Specific Questions**

**For the purpose of this survey, volunteer resources are those that are unique to the state or local government and are not part of a national non-governmental organization that is already built into the National Response Plan such as Red Cross or The Salvation Army.**

10) Has your state received volunteer resources for a declared emergency that were deployed through EMAC since 2006?

- Yes
- No

*If yes, proceed to question 10a – 10d. If no, proceed to question 11*

10a) How many times has your state received volunteer resources through EMAC?

10b) What volunteer emergency resources were received through EMAC since 2003 by your state?

10c) What type of declared emergency were volunteer resources received through EMAC by your state? Please list event name and year.

10d) What challenges did you encounter in receiving volunteer resources through EMAC?

11) Has your state deployed volunteer resources for a declared emergency though EMAC since 2006?
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- Yes
- No

*If yes, proceed to question 11a – 11d. If no, proceed to question 11*

11a) How many times have you deployed volunteer resources through EMAC since 2003?

11b) What volunteer emergency resources were activated through EMAC since 2003? Leave comment section (name of resource)

11c) For what event(s) were volunteer resources deployed? Please list event name and year.

11d) What challenges did you encounter in deploying volunteer emergency resources through EMAC?

Additional EMAC Questions

12) What reimbursement challenges do you encounter in deploying or receiving volunteer and/or private sector resources through EMAC?

13) What resources would you like to see available through EMAC from the private sector or non-governmental volunteer groups?

14) What challenges do you see in the deployment or receiving of private sector and volunteer resources through EMAC?

- Legislation
- Existing contracts
- Legal issues
- Reimbursement issues
- *Please explain* - leave space for explanation

15) What State are you representing?

15a) Please provide your contact information and list who the EMAC POC is for your state.
16) Are you willing to participate in one-on-one interviews to add further experiences and information to this research?

- Yes
- No

Thank you for your time and consideration in the completion of this survey!

The SDMI Team