

Using Established Systems on Evolving Hazards and Facing a New Political Climate

By Rachel Mouser

In the world of state emergency management and homeland security, 2017 has been a year of new faces, continuous threats and opportunities for innovation. Much like 2016, 2017 is on track to equal or perhaps surpass the challenges it may pose to state emergency management professionals. It began with the Trump administration tapping a retired military general for the top job at the U.S. Department of Homeland Security, and a former State Emergency Management Director to head the Federal Emergency Management Agency, not to mention 2017 has already had 25 presidential and emergency disaster declarations. State emergency management professionals used virtual disaster assistance and training, introducing a new wave of technology to combat the increasing challenges of disaster management. The challenge in 2018 will be to protect investments and still move forward with creative problem solving while state and federal budgets continue to become tighter and tighter.

Looking Back

Professionals in emergency management often talk about two factors when judging a year: the number of disasters that occurred in the year and the amount of devastation and destruction caused by the disasters. By those metrics, 2016 was one for the record books.

There were 45 presidential and emergency disaster declarations, the most since 2013. In addition to the federally declared events, 47,778 events occurred at the state and local levels but did not reach the level of a major declaration.¹ It started off with a massive winter storm, named Winter Storm Jonas, that left the northeast United States covered in extensive snowfall. From Jan. 23-24, 2016, Jonas broke records for snowfall in places along the East Coast, with some areas recording as much as 29 inches.

The year also brought several devastating wildfires that overwhelmed many states, including California, which lost more than half a million acres to the fires, many of which came as a result of the state's lingering drought. Wildfires also spread to Gatlinburg, Tennessee, causing the deaths of 14 people, damaging 1,684 structures, and forcing approximately 14,000 residents to evacuate.

In 2016, 19 significant floods took place, the most in one single year since records began in 1980. Louisiana, Texas, West Virginia and numerous other states were impacted by flooding and storm surge bringing the fourth-highest payout of the National Flood Insurance Program, or NFIP, which totaled \$4 billion. Louisiana saw tremendous downpours

in August, with some regions receiving more than 20 inches of rain over a 72-hour span.

Following the peak of hurricane season, the United States felt the full force of Hurricane Matthew as it impacted the shores of several states across the East Coast. Matthew impacted Florida, Georgia, North Carolina, South Carolina and Virginia with high-speed winds, storm surges and extreme rainfall. As the strongest storm seen in the Atlantic since Hurricane Felix in 2007, Hurricane Matthew caused more than 44 estimated deaths.

Overall, 2016 represented a range of hazards that required an unprecedented amount of emergency management professionalism and preparedness. With the new year and new administration underway, emergency management has seen increasing pressure to reduce disaster costs at a time when disasters are more frequent. The proposed reduction of state and local grant funding in the president's preliminary 2018 budget proposal will undoubtedly have harsh impacts on the emergency management system. In times of economic uncertainty, innovative ideas are always needed to assure the emergency management community is always moving forward and incorporating new strategies that best serve communities around the country.

The Critical Role of Emergency Management

Regardless of whether a disaster is natural or manmade, state emergency management acts as the central coordination point for all resources and assistance provided during the event. When a

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disaster strikes, emergency management remains one of the most crucial functions of state government. It also has the overarching responsibility of saving lives, protecting property, and helping people recover once a disaster has occurred. Emergency management comes to the forefront once an event has taken place, but much of the work takes place before a disaster has occurred—in the form of disaster drills and exercises, plans and programs, public warning tests, and preparedness education.

Emergency management includes four main parts, referred to as the Four Pillars:

Mitigation—Activities that reduce or eliminate the degree of risk to human life and property;

Preparedness—Activities that take place before a disaster to develop and maintain a capability to respond rapidly and effectively to emergencies and disasters;

Response—Activities to assess and contain the immediate effects of disasters, provide life support to victims and deliver emergency services; and

Recovery—Activities to restore damaged facilities and equipment, and support the economic and social revitalization of affected areas to their pre-emergency status.

On the state level, these four elements encompass many different aspects, from planning and implementation to training and exercises. A state emergency manager will interact with all sectors of the population, including other state agencies, elected officials, local jurisdictions, all public safety personnel, the private sector, volunteer organizations, and the public.

State Emergency Management Organizational Structure, Budgets and Staff

States use a variety of structures when it comes to the emergency management function. In 16 states, the emergency management office is located within the state military department under the auspices of the adjutant general. Fifteen states have emergency management in the public safety department. In eight states, it is housed in the governor's office and in eight states emergency management is in a combined emergency management/homeland security agency. In two states, the office is located within the state police department. The remaining states use other organizational structures. Regardless of how an agency's daily operations are organized, most governors make the final decision on who serves as the state emergency management director. The

governor appoints the state emergency management director in 31 states.

The majority of states—30 to be exact—combine their emergency management and homeland security full-time equivalent positions. The total number of full-time equivalents for these states is 3,756 and averages 125 staff per state. For those states that have a stand-alone emergency management office, full-time equivalent positions total 2,295, averaging about 104 per state. Agency operating budgets for the 2016 fiscal year range up to \$174 million, with the average state agency budget at approximately \$11 million, while the median is about \$3 million.

State Homeland Security Funding and Responsibilities

The Homeland Security Grant Program is a central federal source that supports and sustains state and local government homeland security capabilities. Thirteen states rely solely on those federal grants to fund their homeland security offices. This represents a decrease from 2016, when 15 states depended totally on federal grants. Twenty-seven states receive at least 60 percent of their funding for their state homeland security office from federal sources, down from 39 percent in 2016. On average, states rely on 76.1 percent federal funding, 21.3 percent state appropriations, and 3.9 percent from other sources to pay for their homeland security function.

When it comes to the state homeland security offices, responsibilities and organizational structures vary from state to state. In some cases, state homeland security directors manage grants and budgets; in others, they have very limited roles. In 13 states, a combined emergency management/homeland security office oversees daily operations of the homeland security function. Fourteen states keep the homeland security function in their public safety department and eight states have it in the adjutant general/military affairs department. Nine states run homeland security out of the governor's office. The rest of the states have other organizational structures for their homeland security function.

EMAC—Sustaining a Nationwide Capability

Since 1996, the Emergency Management Assistance Compact, or EMAC, has served as the leading state-to-state mutual aid agreement, providing well-established mechanisms for states

Table A: State Emergency Management: Agency Structure, Budget and Staffing

State or other jurisdiction	Position appointed	Appointed/selected by	Organizational structure	Agency operating budget FY 2016 (excluding federal funds)	Full-time employee positions
Alabama.....	★	G	Stand Alone Agency/Department	\$3,388,102	83
Alaska.....	★	G	Adjutant General/Military Affairs	\$2,400,000	60 (a)
Arizona.....	★	ADJ	Adjutant General/Military Affairs	\$2,903,596	51
Arkansas.....	★	G	Combined Homeland Security/Emerg. Mgt.	\$5,090,886	100 (a)
California.....	★	G	Combined Homeland Security/Emerg. Mgt.	\$174,044,000	1002 (a)
Colorado.....	...	DHSEM	Public Safety	\$1,752,872	102 (a)
Connecticut.....	...	PSS	Dept. of Emerg. Services and Public Protection	\$4,277,434	67 (a)
Delaware.....	★	PSS	Public Safety	\$2,038,000	34
Florida.....	★	G	Governor's Office	\$116,700,000	250
Georgia.....	★	G	Governor's Office	\$3,207,396	116 (a)
Hawaii.....	★	G	Adjutant General/Military Affairs	\$2,500,000	75
Idaho.....	★	ADJ	Adjutant General/Military Affairs	\$1,929,700	42 (a)
Illinois.....	★	G	Governor's Office	\$43,040,000	204 (a)
Indiana.....	★	G	Public Safety	\$19,200,450	268 (a)
Iowa.....	★	G	Governor's Office	\$3,500,000	76 (a)
Kansas.....	★	G	Adjutant General/Military Affairs	\$1,743,743	43
Kentucky.....	★	G	Adjutant General/Military Affairs	\$2,500,000	85
Louisiana.....	★	G	Combined Homeland Security/Emerg. Mgt.	\$6,245,000	52 (a)
Maine.....	★	G	Adjutant General/Military Affairs	\$952,343	29 (a)
Maryland.....	★	G	Adjutant General/Military Affairs	\$2,144,805	60
Massachusetts.....	★	G	Public Safety	\$3,027,000	85
Michigan.....	★	G	State Police	\$6,978,000	70 (a)
Minnesota.....	★	PSS	Combined Homeland Security/Emerg. Mgt.	\$4,750,000	70 (a)
Mississippi.....	★	G	Governor's Office	\$4,200,000	155
Missouri.....	★	PSS	Public Safety	\$15,620,000	93
Montana.....	...	ADJ	Adjutant General/Military Affairs	\$1,300,000	23
Nebraska.....	★	ADJ	Adjutant General/Military Affairs	\$1,300,000	41 (a)
Nevada.....	★	PSS	Public Safety	\$1,195,200	33 (a)
New Hampshire.....	★	G	Public Safety	\$3,514,706	43 (a)
New Jersey.....	★	G	State Police	\$1,930,000	414
New Mexico.....	★	G	Combined Homeland Security/Emerg. Mgt.	\$3,010,800	64 (a)
New York.....	★	G	Combined Homeland Security/Emerg. Mgt.	\$54,480,090	450 (a)
North Carolina.....	★	PSS	Public Safety	\$11,719,321	184 (a)
North Dakota.....	★	ADJ	Adjutant General/Military Affairs	\$3,108,662	79 (a)
Ohio.....	★	PSS	Public Safety	\$6,349,727	92
Oklahoma.....	★	G	Governor's Office	\$530,150	32
Oregon.....	★	ADJ	Adjutant General/Military Affairs	\$2,083,904	43 (a)
Pennsylvania.....	★	G	Independent Cabinet Agency	\$15,962,000	173
Rhode Island.....	★	G	Governor's Office	\$1,900,000	32
South Carolina.....	★	ADJ	Adjutant General/Military Affairs	\$3,023,807	60
South Dakota.....	★	PSS	Public Safety	\$763,222	20
Tennessee.....	★	G	Adjutant General/Military Affairs	\$3,622,400	105
Texas.....	★	PSS	Public Safety	\$5,313,750	321
Utah.....	★	PSS	Public Safety	\$1,300,000	69 (a)
Vermont.....	★	PSS	Public Safety	\$900,000	20 (a)
Virginia.....	★	G	Public Safety	\$8,160,080	158 (a)
Washington.....	★	ADJ	Adjutant General/Military Affairs	\$1,971,598	71 (a)
West Virginia.....	★	G	Public Safety	\$2,952,938	53 (a)
Wisconsin.....	★	G	Adjutant General/Military Affairs	\$3,342,887	60 (a)
Wyoming.....	★	G	Governor's Office	\$2,007,183	21 (a)
Dist. of Columbia.....	...	M	Combined Homeland Security/Emerg. Mgt.	\$4,552,000	106 (a)
Guam.....	...	G	Combined Homeland Security/Emerg. Mgt.	\$0	12

Source: The National Emergency Management Association, January 2017

Key:

★ — Yes

... — No

G — Governor

ADJ — Adjutant General

DHSEM — Director of the Division of Homeland Security and Emergency Management

M — Mayor

PSS — Public Safety Secretary/Commissioner/Director

(a) Includes homeland security and emergency management positions.

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to help each other when a disaster occurs. State-to-state mutual aid often allows for more timely and cost effective disaster response than the use of federal resources. Further, EMAC is evolving to include virtual missions that can be carried out by personnel working in their home states rather than deploying into the disaster area. Examples of virtual EMAC missions include GIS and cyber and social media monitoring. Virtual mutual aid reduces mission costs and provides additional training for personnel without leaving their offices.

With the current political climate and the uncertainties of future federal budgets, more states will continue to use EMAC as a vehicle to leverage regional resources. As EMAC continues to evolve, state emergency management will continue to identify additional areas where states can fill the gap in federal resources.

Building Capacity with EMPG

In addition to leveraging EMAC for resources during disaster response, states and locals also build capacity and enhance their capability to respond to disasters when they use the Emergency Management Performance Grants, or EMPG. EMPG is essential for the building and sustainment of critical capabilities for disaster preparedness, response, recovery and mitigation across the country. The program is the only source of federal funding directed to state and local governments for planning, training, exercises, and key professional expertise for all-hazard emergency preparedness.

Recipients of this grant continue demonstrating a strong commitment; for every dollar of federal funds invested, at least that much is matched by both grantees and sub-grantees. Through this program, state and local governments maintain the personnel and capabilities necessary to build and sustain an effective emergency management system. Capabilities such as conducting risk and hazard assessments, supporting emergency operations centers—which are the coordination hubs for all disaster response—continuing public education and outreach, and enhancing interoperable communications capabilities are a few of the many uses of the program.

Critical Investments and Reforms in Mitigation

The best way to reduce the cost of disasters and, more importantly, build resiliency is to design and harden the built environment to match the threat environment. The ideal approach places a more

robust mitigation program at the beginning, before a disaster takes place, to reduce the loss of life and property by lessening the impact of the disaster.

Effective mitigation requires an understanding of risk and investment in long-term community well-being. One of the many programs administered by the Federal Emergency Management Agency's, or FEMA's Federal Insurance and Mitigation Administration is the National Flood Insurance Program, or NFIP.

Congress established the NFIP with the passage of the National Flood Insurance Act of 1968. Property owners in participating communities purchase insurance as a protection against flood losses in exchange for state and community floodplain management regulations. For years, however, policy costs have not reflected true actuarial rates. Worsening the situation, FEMA has updated flood maps to provide a more accurate picture, but some of these have been redrawn because of political pressures. Additionally, enrollment in the program has declined by nearly 10 percent over the last several years as rate changes designed to shore up the program have resulted in policy holders dropping their coverage. The program is over \$23 billion in debt, making debt settlement even more unlikely. The NFIP is slated for reauthorization by Congress this year and the program's insolvency must be addressed to ensure the program can meet the flood recovery needs of the country.

Emerging Hazards and Evolving Threats

Cybersecurity

Cybersecurity and cyber response capabilities continually rate very low in FEMA's annual National Preparedness Report and often identifying the capability gaps and needs is a difficult task for state and local government. The skill, speed and adaptability of these threats test the nation's defense in new and challenging ways. As society makes unprecedented advancements in innovation, it becomes more and more reliant on information technology and increasingly vulnerable to devices that are developed and distributed with minimal security requirements.

As the ranges of threat actors, methods of attack, and targeted systems expand, the biggest challenge from an emergency management perspective is addressing the physical damage to infrastructure or to a community from a major cyberattack. Management of the response and recovery phases, types of federal assistance available to states, and

Table B: Homeland Security Structures

<i>State or other jurisdiction</i>	<i>State homeland security advisor</i>		<i>Homeland security organizations</i>	
	<i>Designated homeland security advisor</i>		<i>Day-to-day operations under</i>	<i>Full-time employee positions</i>
Alabama	Public Safety Secretary/Commissioner		Public Safety	5
Alaska	Dual Title-Emerg. Mgt./Homeland Security Director		Adjutant General/Military Affairs	60 (a)
Arizona	Homeland Security Director		Governor's Office	14
Arkansas	Dual Title-Emerg. Mgt./Homeland Security Director		Combined Emerg. Mgt./Homeland Security Office	100 (a)
California	Dual Title-Emerg. Mgt./Homeland Security Director		Combined Emerg. Mgt./Homeland Security Office	1002 (a)
Colorado	Dual Title-Emerg. Mgt./Homeland Security Director		Public Safety	102 (a)
Connecticut	Emerg. Services/Public Protection Commissioner		Dept. of Emerg. Services and Public Protection	67 (a)
Delaware	Homeland Security Director		Public Safety	1
Florida	Florida Dept. of Law Enforcement Commissioner		State Police	5
Georgia	Dual Title-Emerg. Mgt./Homeland Security Director		Governor's Office	116 (a)
Hawaii	Adjutant General		Adjutant General/Military Affairs	6
Idaho	Dual Title-Emerg. Mgt./Homeland Security Director		Adjutant General/Military Affairs	42 (a)
Illinois	Public Safety Secretary/Commissioner		Governor's Office	204 (a)
Indiana	Public Safety Secretary/Commissioner		Public Safety	268 (a)
Iowa	Emergency Management Director		Governor's Office	76 (a)
Kansas	Adjutant General		Adjutant General/Military Affairs	1
Kentucky	Homeland Security Director		Governor's Office	16
Louisiana	Dual Title-Emerg. Mgt./Homeland Security Director		Combined Emerg. Mgt./Homeland Security Office	52 (a)
Maine	Adjutant General		Combined Emerg. Mgt./Homeland Security Office	29 (a)
Maryland	Homeland Security Director		Governor's Office	2
Massachusetts	Undersecretary for Homeland Security		Public Safety	9
Michigan	State Police Superintendent/Director/Commander		State Police	70 (a)
Minnesota	Public Safety Secretary/Commissioner		Combined Emerg. Mgt./Homeland Security Office	70 (a)
Mississippi	Homeland Security Director		Public Safety	20
Missouri	Public Safety Secretary/Commissioner		Public Safety	10
Montana	Adjutant General		Combined Emerg. Mgt./Homeland Security Office	23 (a)
Nebraska	Lieutenant Governor		Combined Emerg. Mgt./Homeland Security Office	41 (a)
Nevada	Emergency Management Director		Combined Emerg. Mgt./Homeland Security Office	33 (a)
New Hampshire	Emergency Management Director		Combined Emerg. Mgt./Homeland Security Office	43 (a)
New Jersey	Homeland Security Director		Homeland Security (stand-alone office)	15
New Mexico	Dual Title-Emerg. Mgt./Homeland Security Director		Combined Emerg. Mgt./Homeland Security Office	64 (a)
New York	Homeland Security Director		Combined Emerg. Mgt./Homeland Security Office	450 (a)
North Carolina	Public Safety Secretary/Commissioner		Combined Emerg. Mgt./Homeland Security Office	184 (a)
North Dakota	Homeland Security Director		Adjutant General/Military Affairs	79 (a)
Ohio	Director of Public Safety		Public Safety	24
Oklahoma	Homeland Security Director		Homeland Security (stand-alone office)	20
Oregon	Adjutant General		Adjutant General/Military Affairs	43 (a)
Pennsylvania	Homeland Security Director		Governor's Office	6
Rhode Island	State Police Superintendent/Director/Commander		State Police	0
South Carolina	State Police Superintendent/Director/Commander		State Police	19
South Dakota	Homeland Security Director		Public Safety	3
Tennessee	Public Safety Secretary/Commissioner		Public Safety	25
Texas	Homeland Security Director		Public Safety	4
Utah	Public Safety Secretary/Commissioner		Public Safety	69 (a)
Vermont	Homeland Security Director		Public Safety	6
Virginia	Public Safety Secretary/Commissioner		Combined Emerg. Mgt./Homeland Security Office	158 (a)
Washington	Adjutant General		Adjutant General/Military Affairs	71 (a)
West Virginia	Dual Title-Emerg. Mgt./Homeland Security Director		Public Safety	53 (a)
Wisconsin	Adjutant General		Adjutant General/Military Affairs	60 (a)
Wyoming	Homeland Security Director		Governor's Office	21 (a)
Dist. of Columbia	Dual Title-Emerg. Mgt./Homeland Security Director		Combined Emerg. Mgt./Homeland Security Office	106 (a)
Guam	Special Assistant to the Governor		Governor's Office	1

Source: The National Emergency Management Association, January 2017.

Key:

(a) Includes homeland security and emergency management positions.

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jurisdictional challenges are important issues that must be addressed if emergency management is to be an active and fully engaged partner.

Aging Infrastructure

There is a growing sense of urgency and concern for the fragility of critical infrastructure in the face of the rising number of catastrophic events, both natural and human-made. The ever-changing range of threats, along with the infrastructures' interconnected reliability, adds to the complexity of making informed decisions that reduce risk within an environment where limited resources are subject to multiple demands and priorities. Aging infrastructure that leaves communities vulnerable and has the potential to disrupt timely emergency response and add significant costs to long-term disaster recovery must be addressed. Understanding the complex interdependencies of the national systems and the need for a resilient infrastructure is paramount, particularly for the movement of goods, services and people.

Non-Stafford Act Events

The Robert T. Stafford Disaster Relief and Emergency Assistance Act was signed into law Nov. 23, 1988. This law was designed to bring a systemic means of federal disaster assistance, especially as it pertains to FEMA, for state and local governments in carrying out their responsibilities to aid citizens.

The disasters or emergencies that strike communities and do not rise to the level of, or receive a, Presidential Stafford Act declaration are often referred to as “non-Stafford Act” events. These events are not rare. As mentioned before, in 2016 alone, state and local emergency management professionals managed 47,778 events that did reach the level of a major or emergency declaration. Examples of these events include severe droughts, wildfires, Zika outbreaks, oil and chemical spills, mass shootings, and water emergencies. These events are increasing in frequency and require states to be prepared and have a strategic plan for disasters that are not covered by the Stafford Act. As uncertainty in future budgets grows, emergency managers will continue to rely on state-to-state mutual aid, through EMAC, to provide the necessary resources to manage non-Stafford Act events.

Notes

¹ National Emergency Management Association, “2017 Edition - Emergency Management Performance Grants Providing Returns on a Nation’s Investment. Joint Report Presented by the National Emergency Management Association and the U.S. Council of International Association of Emergency Managers”

About the Author

Rachel Mouser is the senior policy analyst for the National Emergency Management Association, an affiliate of The Council of State Governments. In her position, she coordinates and conducts research, interacts with the states on changing federal policy, and serves as an information clearinghouse for emergency management and homeland security issues.