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MONTEREY, CALIFORNIA

THESIS

**ALIGNING THE NATIONAL PREPAREDNESS GOAL
AND FEMA'S NATIONAL PREPAREDNESS GRANTS**

by

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March 2020

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NATIONAL PREPAREDNESS GRANTS**

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ABSTRACT

The majority of Federal Emergency Management Agency's (FEMA's) preparedness grants were created in the wake of 9/11 through the Department of Homeland Security Act of 2002 (Act). These grants, as required by the Act, are predicated on addressing terrorism preparedness. The National Preparedness Goal (the Goal) was introduced in 2011 to provide an all-hazards capability-based system to measure the nation's level of preparedness. The purpose of this thesis is to determine if FEMA's preparedness grants are allowing the Goal to be achieved and examine if the grant programs can be adjusted to better align with the strategic intent of the Goal. This research examined homeland security capabilities and federal grant programs to determine if a nexus to terrorism has created any limitations. The results of the national preparedness reports from 2014 to 2018 are also examined to determine if the nation is moving in the right direction regarding preparedness. Several preliminary ideas are offered to improve alignment of grant programs with the Goal. A recommendation is also made for FEMA to develop a process to understand better how grant funds are impacting capabilities.

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LIST OF ACRONYMS AND ABBREVIATIONS

DHS	Department of Homeland Security
EMPG	Emergency Management Performance Grant
FEMA	Federal Emergency Management Agency
FY	fiscal year
GHSAC	Governors Homeland Security Advisors Council
HSGP	Homeland Security Grant Program
IBSGP	Intercity Bus Security Grant Program
IPR	Intercity Passenger Rail
LETPA	law enforcement terrorism prevention activities
NEMA	National Emergency Management Association
NHSC	National Homeland Security Consortium
NPAD	National Preparedness Assessment Division
NPGP	National Preparedness Grant Program
NPR	National Preparedness Report
NPS	National Preparedness System
NSGP	Nonprofit Security Grant Program
OSG	Operation Stonegarden
PSGP	Port Security Grant Program
PKEMRA	Post-Katrina Emergency Management Reform Act
PPD8	Presidential Preparedness Directive 8
RCPGP	Regional Catastrophic Preparedness Grant Program
SPR	Stakeholder Preparedness Reviews
SHSP	State Homeland Security Program
THIRA	Threat/Hazard Identification and Risk Assessment
TSGP	Transit Security Grant Program
THSGP	Tribal Homeland Security Grant Program
UASI	Urban Area Security Initiative

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EXECUTIVE SUMMARY

The majority of Federal Emergency Management Agency's (FEMA's) preparedness grant programs were formed in the wake of the terror attacks on 9/11. The focus of these programs was to prepare the nation not only to prevent, but respond to, and recover from another terror incident. The *National Preparedness Goal* (the Goal) was rolled out in 2011. The Goal provides the nation a way to measure national preparedness for all hazards through the lens of the 32 core capabilities. Despite the Goal being in existence for nearly 10 years, and the absence of another major terror attack, FEMA's preparedness grants remain predicated on terrorism preparedness. The purpose of this research is to determine how FEMA's preparedness grant programs can be adjusted to align better with the strategic intent of the Goal.

A. METHOD

This research consists of four parts. In the first part, the 32 core capabilities that comprise the Goal are analyzed to determine if the nexus to terrorism required by most FEMA preparedness grants place limitations on building the individual capabilities. Next, the results of the *National Preparedness Report* (NPR) are examined to see which capabilities have advanced and which areas can be improved. The NPR provides an annual snapshot of the nation's progress toward achieving the Goal. With a better understanding of the capabilities and progress made toward achieving the Goal, a historical analysis of the legislation, congressional authorizations and appropriations is performed to discover what, if any adjustments have been made to align these programs better with the strategic intent of the Goal. Additionally, the return on investment of the respective grant programs is examined. The final part of the analysis examines FEMA's failed attempt to align the preparedness grant programs with the strategic intent of the Goal. This research provides insight into what FEMA envisioned the program to accomplish, with why it failed, and what can be gleaned from the process to inform future recommendations.

B. FINDINGS

The analysis for this thesis finds that FEMA's national preparedness grants are allowing the nation to make slow but steady progress toward achieving the Goal of a secure and resilient nation. The following is a summary of the main findings from each of the four analysis chapters of this thesis.

Chapter III provides an analysis of the 32 capabilities outlined in the Goal to determine if the nexus to terrorism associated with most of FEMA's national preparedness grant programs impact the strategic intent of the Goal. The main takeaway from this analysis is that the nexus to terrorism required by most of the preparedness grant programs has minimal limitations on where grant recipients may want to invest their funds toward the achievement of the Goal. This limitation is primarily due to the majority of capabilities applying to all-hazards to include terrorism.

Chapter IV examines the results of the NPR to determine how far the nation had progressed toward achieving the strategic intent of the Goal. An analysis of the NPRs from 2014 to 2018 indicated that most of the core capabilities have had modest increases or are centralizing to Medium. Figure 1 displays the percentage of states that rated themselves high, medium or low for 2014 and 2018. However, this progress cannot be positively correlated with funding investments in capability, as some capabilities, such as operational communications, are centralized despite large investments. Capabilities associated with terrorism, have seen modest improvements but funding data from 2017 and 2018 indicate that FEMA's preparedness funding is being heavily invested in areas that address all-hazards.

Change in Percentage of States Rating Themselves High, Medium or Low by Capability Between 2014 and 2018



Figure 1. Change in Percentage of States Rating themselves a 1–2, 3 or 4–5 by Capability between 2014 and 2018.¹

Chapter V examines FEMA’s preparedness grants and how they could be adjusted to align better with the strategic intent of the Goal. The primary concerns highlighted in

¹ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report* (Washington, DC: Department of Homeland Security, 2014), 10; Federal Emergency Management Agency, *2018 National Preparedness Report* (Washington, DC: Department of Homeland Security, 2018), 11.

this chapter are the risks associated with declining appropriations and the limitations that the nexus to terrorism has on the ability of grant recipients to address all risks. Cuts in the annual amount of funding allocated to the programs are having many cascading effects including the loss or foreseeable loss of capability, increased spending in the Law Enforcement Terrorism Prevention Activity (LETPA) area to maintain earlier funding levels, and inability to maintain expensive equipment purchased when the appropriation level was much higher. Another finding is that the language in the statute authorizing these programs creates some limitations in how the required nexus to terrorism can be applied when justifying grant funding investments.

Chapter VI analyzes the proposed National Preparedness Grant Program (NPGP). FEMA made this attempt to reorganize and consolidate its preparedness grant programs to align with the strategic intent of the Goal upon its inception. The primary takeaway from this chapter is that FEMA envisioned that the best way to adjust the programs to achieve the Goal is the elimination of the nexus to terrorism and the consolidation of the programs to align better with the all-hazards focused Goal. Despite the intent, the NPGP ultimately failed due to the uncertainty expressed by Urban Area Security Initiative (UASI) recipients regarding the loss of funding and the potential risks to the programs posed by the disassociation to terrorism.

In sum, the culmination of this research reveals that the relationship between the national preparedness grant programs and the achievement of the Goal are for the most part, in alignment, but can be improved.

C. RECOMMENDATION: CHANGE THE NEXUS FROM TERRORISM TO HOMELAND SECURITY OR SECURITY

The language in the Homeland Security Act of 2002 (the Act) as Amended, is the reason programs, such as State Homeland Security Program (SHSP) and UASI, have a nexus to terrorism. However, the Act also establishes the mission of the agency, which extends beyond terrorism into areas, such as all-hazards planning, economic security, civil

rights and liberties, and drug trafficking.² This recommendation proposes that the language in the Act and subsequent program guidance be changed to reflect a nexus to security or homeland security. The concept of security can be represented in sectors, as proposed by Malec, or through the lens of lifelines as utilized by FEMA. The language can also be amended to address a nexus to homeland security, which can be aligned under the definition proposed by Bellavita as it relates to FEMA’s 2018–2022 strategic plan. In either case, the amended language coincides with the spirit of the Act while eliminating the required nexus to a specific hazard. In turn, this adjustment will allow grant recipients the flexibility needed to ensure that their limited funding can be freely applied to their areas of greatest risk. This adjustment includes addressing the impacts of the opioid crisis, which are noted in Chapter V as being an area of risk that cannot be addressed through a nexus to terrorism. When considering the sectors of security, there is not one that the opioid crisis does not impact.

This change may still require some legislative adjustments but not to the same extent if the programs were changed to address all-hazards, which can risk future appropriations as discussed earlier. Also, concerns have been raised that moving the focus of the programs from terrorism to security may impact investments being made in terrorism. However, the data in Chapter IV clearly indicates that most of the funding is already being directed toward capabilities not solely terrorism focused. Some risk is inherent in asking Congress to consider this change. Legislative changes require discussion, which can sometimes bring additional scrutiny and unpredictable results. However, the proposed changes do not take away from the focus on homeland security and the increased flexibility to align the grant programs with the achievement of the Goal outweigh any risks posed by the legislative process.

² United States Congress, “Homeland Security Act of 2002 (as Amended),” January 2013, 10.

D. CONCLUSION

The primary takeaway from the research for this thesis is that the FEMA's preparedness grant programs and the Goal are mostly aligned. Nearly all the core capabilities outlined in the Goal apply to all-hazards, which allow the Goal to conform to the diversity of programs designed to address the risks faced by the state, local, tribal, and territorial jurisdictions that make up the nation. This flexibility has allowed grant recipients to increase their all-hazards preparedness even with investments requiring a nexus to terrorism.

The advancements in capability have been slow but steady. Analysis in this thesis finds that most capabilities have increased or centralized (meaning that middle ratings are growing) between 2014 and 2018. More than half of the grant funds between 2017 and 2018 were invested in the capabilities of planning, operational coordination, and operational communications.

Congressional appropriations for FEMA grant programs predicated on preparedness have decreased. It is possible that capability will be lost if these appropriations decline further. However, an increase in the appropriations is unlikely unless FEMA can do a better job of showing Congress the eventual outcome of these investments and their impact on capability, which is beyond simply indicating the capabilities where investments are being made. A new system of measurement along with the loosening the required nexus to terrorism can allow grant recipients to align their investments better with risks and provide Congress with the justification needed to maintain or possibly increase the annual appropriations to FEMA's preparedness grants. This mixture of funding and flexibility will ultimately lead to the achievement of the Goal.

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Finally, I would like to dedicate this work to my grandson, Dawson Porter Odell. May this work be a reminder to you that all things are possible if you dream big, pray hard, and trust God.

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I. INTRODUCTION

Since its inception in 1979, the Federal Emergency Management Agency (FEMA) has been responsible for assisting state and local jurisdictions in mitigating, preparing for, responding to, and recovering from disasters. This assistance comes primarily in the form of grants. In the wake of the attacks on September 11, 2001, Congress authorized the creation of the Homeland Security Grant Program (HSGP) that was predicated on terrorism preparedness. In 2019, the HSGP has remained mostly unchanged and is still the highest funded of FEMA's preparedness grant programs.

In 2019, FEMA spent over three times the amount on the HSGP grants (\$1.365 billion) to prevent and respond to terrorism than the all-hazards Emergency Management Performance Grant (EMPG) (\$350 million). When comparing the impacts of other hazards with those of terrorism, the United States spends much more responding to and recovering from other hazards. Since 1970, the cost of recovering from terrorism in the United States has been \$224 billion, which includes the nearly \$200 billion spent to recover from 9/11.¹ In 2017 alone, the cost to recovery from natural disasters was \$306.2 billion.² Emergency management specialists have argued that when too much attention is paid to terrorism, it can impact preparedness efforts tailored toward other hazards.³ The failures of Hurricane Katrina have also fed the narrative that too large a focus on terrorism can erode the preparedness level for natural disasters.⁴

In his book, *Beyond the Storms*, Dane Egli suggests that the United States should take an all-hazards approach to homeland security that crosses all threat and geographic domains to ensure a wide-ranging approach to the planning and execution of national

¹ John E. Mueller, *Chasing Ghosts: The Policing of Terrorism* (Oxford: Oxford University Press, 2016).

² Adam B. Smith, "2017 U.S. Billion-Dollar Weather and Climate Disasters: A Historic Year in Context," National Oceanic and Atmospheric Administration, January 8, 2018, <https://www.climate.gov/news-features/blogs/beyond-data/2017-us-billion-dollar-weather-and-climate-disasters-historic-year>.

³ Christopher Bellavita, "Changing Homeland Security: What Is Homeland Security?" *Homeland Security Affairs* IV, no. 2 (June 2008), <https://www.hsaj.org/articles/118>.

⁴ Bellavita.

strategies.⁵ Such an approach, Egli explains, strengthens homeland security and emergency management, as well as promotes resilience to any hazard. The prioritization of preparedness efforts to address the hazards of greatest concern will position a jurisdiction to handle events less likely to occur.⁶ In 2011, the Department of Homeland Security (DHS), along with FEMA did just that through the introduction of the *National Preparedness Goal* (the Goal). The Goal marked a break from a solely terrorism focus in the wake of the September 11, 2001 by implementing legislative requirements from both the Post-Katrina Emergency Management Reform Act (PKEMRA) and *Presidential Policy Directive 8* (PPD8).⁷

The strategic intent of the Goal is to establish a “secure and resilient Nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk.”⁸ In June 2018, FEMA established the Office of Resilience as an umbrella organization for FEMA missions including mitigation, insurance, preparedness, grants, and continuity. The 2017 *National Security Strategy* defines resilience as “the ability to withstand and recover rapidly from deliberate attacks, accidents, natural disasters, as well as unconventional stresses, shocks, and threats to our economy and democratic system.”⁹ When communities achieve resiliency, the impact of a disaster on life, property, and the environment is significantly minimized. Resiliency shortens the time needed to recover from disasters because individuals, businesses, and essential services are restored more quickly.¹⁰ The

⁵ Dane S. Egli, *Beyond the Storms: Strengthening Homeland Security and Disaster Management to Achieve Resilience* (Armonk, NY: ME Sharpe, 2014).

⁶ Bellavita, 8.

⁷ Federal Emergency Management Agency, *2018 National Preparedness Report* (Washington, DC: Department of Homeland Security, 2018), 1.

⁸ Federal Emergency Management Agency, *National Preparedness Goal*, 2nd. ed. (Washington, DC: Department of Homeland Security, 2015), 1.

⁹ Donald J. Trump, *National Security Strategy* (Washington, DC: White House, 2017), 1, <https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf>.

¹⁰ “What Is Community Resilience?,” Community & Regional Resilience Institute, accessed July 6, 2019, <http://www.resilientus.org/>.

catastrophic disasters of 2017 and 2018 highlighted the need for states and local communities to be more resilient to facilitate faster infrastructure and economic recovery.

A 2011 report from the Homeland Security Advisory Committee Community Resilience Task Force presents findings and recommendations for how the agency can better promote community resilience. In the report, the council asserts that if the grants that make up the HSGP are centered more on resilience, local communities can then better refine their efforts toward preparedness, which in turn, allows resilience to be more measurable at the national level.¹¹ Given that this system of measurement has been implemented through the 32 core capabilities outlined in the Goal, FEMA should also look for ways that the HSGP can be better aligned with the strategic intent of the Goal. As of 2019, FEMA's preparedness programs remain predominantly focused on terrorism.

The primary objective of this research is to discover how the FEMA national preparedness grant programs can be improved to facilitate the strategic intent of the Goal better. It examines progress on the 32 capabilities that comprise the Goal, how the nexus to terrorism required by most FEMA preparedness grants may be influencing progress on these capabilities, and which capabilities have recently received the most funding. It also examines legislation, congressional authorizations, and appropriations to understand adjustments have been made to align these programs better with the strategic intent of the Goal. FEMA's failed attempt to change legislation is also considered in developing future recommendations.

A. LITERATURE REVIEW

The literature review is intended to examine materials regarding the strategic intent of the Goal in establishing a secure and resilient nation. The Goal and its 32 core capabilities provide the nation a means to measure preparedness levels in the endeavor towards improving security and resilience. The first section looks at why resilience is necessary, how resilience is achieved at the community level, and how resilience and security interrelate. The second section reviews security specifically and the various sectors

¹¹ Homeland Security Advisory Committee, *Homeland Security Advisory Committee-Community Resilience Task Force Recommendations* (Washington, DC: Department of Homeland Security, 2011), 28.

that fall within its purview. The third section examines the umbrella of homeland security and the definition of this term. The final section covers the difficulties associated with measuring preparedness, and compares and contrasts preparedness for all-hazards and preparedness for terrorism. Additionally, the national impacts from natural disasters and terrorism are considered.

1. Establishing the Need for Resilience

President Trump's 2017 *National Security Strategy* called for the government to focus on helping Americans to continue to be resilient.¹² One aspect mentioned as part of this initiative is the use of risk-informed investments to reduce risk and build more resilient communities. The *National Security Strategy* defines resilience as "the ability to withstand and recover rapidly from deliberate attacks, accidents, natural disasters, as well as unconventional stresses, shocks, and threats to our economy and democratic system."¹³ When communities improve resiliency, the impact of a disaster on life, property, and the environment is significantly minimized. Resiliency shortens the time needed to recover from disasters because individuals, businesses, and essential services are restored more quickly. The sentiments established in this document regarding community resilience were validated by the 2017 hurricanes and fires that caused billions in damage from Puerto Rico to California. In a 2018 hearing before the House Subcommittee on Economic Development, Public Buildings and Emergency Management, FEMA Associate Administrator, Jeffrey Byard, testified on the state, local, tribal and territorial government's recovery from the catastrophic disasters that occurred in 2017. He stated, "If these governments are well resourced, well trained, and well organized, the effectiveness of FEMA's assistance is enhanced."¹⁴ In March 2018, FEMA administrator Brock Long introduced the *2018–2022 FEMA Strategic Plan*, which included the goal of "build[ing] a

¹² Trump, *National Security Strategy*, 16.

¹³ Trump, 14.

¹⁴ Lou Barletta, *Are We Ready? Recovering from 2017 Disasters and Preparing for the 2018 Hurricane Season* (Washington, DC: Government Printing Office, 2018), 3.

culture of preparedness.”¹⁵ The plan states, “Disaster resiliency is the backbone of emergency management and the foundation for the FEMA mission. The most successful way to achieve disaster resiliency is to create a culture of preparedness across America.”¹⁶

2. Resilience Begins at the Local Level

FEMA began its 2018 journey into the realm of resilience by asking each individual to join the organization in building a new culture of preparedness. This appeal is indicative of resilience as a bottom-up concept. A resilient nation cannot be achieved without first achieving disaster preparedness at the local community level. In the book, *Disaster Resilience: A National Imperative*, Susan Cutter et al. describe six components necessary to change the culture of national preparedness:

- Taking responsibility for disaster risk.
- Addressing the challenge of establishing the core value of resilience in communities, including the use of disaster loss data to foster long-term commitments to enhancing resilience.
- Developing and deploying tools or metrics for monitoring progress toward resilience.
- Building local, community capacity because decisions and the ultimate resilience of a community are driven from the bottom up.
- Understanding the landscape of government policies and practices to help communities increase resilience.
- Identifying and communicating the roles and responsibilities of communities and all levels of government in building resilience.¹⁷

¹⁵ Brock Long, *2018–2022 FEMA Strategic Plan* (Washington, DC: Federal Emergency Management Agency, 2018), 12.

¹⁶ Long, 12.

¹⁷ Susan L. Cutter et al., *Disaster Resilience: A National Imperative* (Washington, DC: National Academies Press, 2012), 2, <https://doi.org/10.17226/13457>.

These six components, designed to achieve resilience at the local level, are inherently preparedness related. No funding mechanism is currently available specifically designed around promoting preparedness or resilience at the local level. If it did exist, what would it look like? How would a community know when it has achieved resilience? Could resilience even be measured? All these questions would need answering before any funding mechanism for the aforementioned purpose could be considered. FEMA's preparedness grant programs were moved under the purview of resilience in 2018. The next section examines how concepts of resilience and security associated with the achievement of the Goal fit together.

3. What Is Security?

In a thesis from the Naval Postgraduate School titled "Security Perception within and beyond the Traditional Approach," Mieczyslaw Malec attempts to define the vast arena of security. To understand the realm of security better, Malec breaks security down into sectors. Malec suggests that categorizing security in sectors has three distinct advantages because it describes the security environment as a whole, organizes the threats, and leaves room to add emerging sectors.¹⁸ Malec groups security into eight sectors: political, military, economic, societal, environmental, human, technological, and terrorism.

Malec goes on to describe these sectors individually. All security threats have political underpinnings that may impact state sovereignty.¹⁹ Political security can be threatened both internally against the government legitimacy and externally from outside forces.²⁰ Military security has a direct impact on political security and involves the ability of governments to sustain themselves militarily both internally and externally but also against non-military threats.²¹ Economic security is the second pillar of political security and involves all aspects of a nation's economic structure.²² Societal security involves the

¹⁸ Mieczyslaw Malec, "Security Perception: Within and beyond the Traditional Approach" (master's thesis, Naval Postgraduate School, 2003), 31.

¹⁹ Malec, 32.

²⁰ Malec, 33.

²¹ Malec, 34.

²² Malec, 37.

stability of the state organizational structure, government, and ideology that work together to legitimacy and identity.²³ Environmental security is a broad area that covers issues ranging from scarcity of resources, degradation of natural resources, climate change, migration, and population growth.²⁴ The sector of human security is expansive and lacks a clear definition. This sector covers the whole gamut of the human experience from the standpoint of physical security to psychological wellness.²⁵ Technological security is an ever-changing environment that includes the threats associated with cybersecurity but also considers the impacts of emerging technologies.²⁶ Security from terrorism is given its own sector due to its asymmetric nature and the concepts surrounding the prevention of terrorism that separate it from other threats.²⁷

The briefly described aforementioned security sectors are all interrelated and represent the whole of the security environment. Given the vastness of the security environment, these sectors provide a process of identifying areas of focus. Dividing the environment allows a mechanism for assessing each sector to determine the health of the whole more easily. It also provides a means of identifying gaps for the direction of resources and funding.

In similar fashion, FEMA devised its Community Lifelines to break security into sectors to provide a means to identify gaps in the wake of a disaster and direct the flow of resources and funding. FEMA defines a lifeline as something that “enables the continuous operation of critical government and business functions and is essential to human health and safety or economic security.”²⁸ The seven lifelines consist of safety and security, food, water and shelter, health and medical, energy, communications, transportation, and

²³ Malec, 38.

²⁴ Malec, 42.

²⁵ Malec, 44.

²⁶ Malec, 46.

²⁷ Malec, 52.

²⁸ Federal Emergency Management Agency, *Community Lifelines Implementation Toolkit 2.0* (Washington, DC: Department of Homeland Security, 2019), 9.

hazardous materials.²⁹ As with the sectors delineated by Malec, these lifelines represent the whole of the security environment surrounding disasters regardless of hazard.

4. Homeland Security

Since the establishment of DHS in 2002, the nation has struggled to define the concept of homeland security. Although the agency was formed in the wake of 9/11, the umbrella of homeland security covers much more than terrorism. In a journal article for *Homeland Security Affairs*, Chris Bellavita addresses this problem. Bellavita asserts that homeland security has at least seven definitions.³⁰ In his paper, Bellavita considers homeland security in the context of these definitions. These definitions include homeland security as it relates to, “(1) terrorism, (2) all-hazards, (3) terrorism and catastrophes, (4) jurisdictional hazards, (5) meta hazards, (6) national security, and (7) government efforts to curtail civil liberties.”³¹ In a poll of homeland security practitioners, Bellavita’s article reveals that more than a third feel that homeland security is a mixed or undefined discipline, while another third see homeland security through the lens of all-hazards or terrorism.³² In the end, Bellavita finds that the definitions he discussed are constructed using a “coherence view of truth.”³³ Inevitably, what a particular person believes to be homeland security, given the lack of a solid definition, is the truth.

A review of FEMA’s strategic plan and the guidance documents for the preparedness grant programs lean toward the “terrorism and catastrophes” definition provided by Bellavita. The notice of funding opportunity for the 2019 HSGP states that the objective of the grant is to “provide funds to eligible entities to support state, local, tribal, and territorial efforts to prevent terrorism and other catastrophic events and to prepare the Nation for the threats and hazards that pose the greatest risk to the security of the United

²⁹ Federal Emergency Management Agency, 2.

³⁰ Bellavita, “Changing Homeland Security,” 1.

³¹ Bellavita, 2.

³² Bellavita, 21.

³³ Bellavita, 21.

States.”³⁴ Goal #2 in FEMA’s 2018–2022 Strategic Plan is to “ready the nation for catastrophic disasters.”³⁵ In this context, Bellavita suggests defining homeland security “what the Department of Homeland Security—supported by other federal agencies—does to prevent, respond to and recover from terrorist and catastrophic events that affect the security of the United States.”³⁶

5. Resilience and Security

The increase of resiliency at the local level will inherently increase security. Tim Prior and Florian Roth make this case in their article, “Disaster, Resilience and Security in Global Cities published in the *Journal of Strategic Security*.” They assert that the bottom-up structure associated with local resilience is useful for both managing disasters and maintaining security.³⁷ The Goal also suggests that these concepts are interrelated through the 32 core capabilities. It states, “We describe our security and resilience posture through the core capabilities that are necessary to deal with the risks we face and each community contributes to the Goal by individually preparing for the risks that are most relevant and urgent for them individually.”³⁸ Given the interrelation of resilience and security, it is imperative that FEMA preparedness funding allow for communities to address their specific risks whether they are posed from terrorism or natural disasters. The next issue is homeland security and its applicability to national preparedness through the lens of FEMA.

6. Measuring Preparedness

Much has been written about the difficulties associated with measuring preparedness at any level. Brian A. Jackson of the RAND Corporation wrote a paper in 2008 outlining the preparedness challenges facing the Obama administration regarding measuring preparedness. Jackson asserts that it has long been the national policy to

³⁴ Federal Emergency Management Agency, *Fiscal Year 2019 HSGP Notice of Funding Opportunity* (Washington, DC: Federal Emergency Management Agency, 2019), 2.

³⁵ Long, 2018–2022 FEMA Strategic Plan, 20.

³⁶ Bellavita, “Changing Homeland Security,” 5.

³⁷ Tim Prior and Florian Roth, “Disaster, Resilience and Security in Global Cities,” *Journal of Strategic Security*; *San Jose* 6, no. 2 (Summer 2013): 68, <http://dx.doi.org/10.5038/1944-0472.6.2.5>.

³⁸ Federal Emergency Management Agency, *National Preparedness Goal*, 2.

measure preparedness by reacting to the shortfalls of the last major response.³⁹ Jackson goes further to suggest that preparedness should be measured with a system of organizations, capabilities, and resources based on pre-established performance metrics.⁴⁰ The National Preparedness System (NPS) is supposed to operate in this manner. Along the same lines, Glen Woodbury penned an article in 2005 discussing the complexities of assessing the prevention of terrorism. Woodbury contends that as a nation, people cannot simply assume that terrorist attacks have been prevented due to intelligence victories or by the massive amounts of funding that have been thrown at the problem.⁴¹ Woodbury proposed the concept of establishing desired outcomes and outputs into capability targets.⁴² This concept, as was the case with the aforementioned Jackson, is a precursor to what is now a critical component of the NPS. With a preparedness measuring system in place, the discussion turns to where the nation faces its most prominent risk: terrorism or natural disasters.

7. Terrorism and Natural Disasters

Terrorism has become a household word in the United States since the attacks on September 11, 2001. According to the Global Terrorism Database, 2,900 terror attacks in the United States have occurred from 1970 through 2017.⁴³ Mueller and Stewart calculate the cost per attack as approximately \$10 million, excluding the attacks on 9/11.⁴⁴ Their calculations bring the total costs of terrorism in the United States since 1970 to \$29 billion. If the costs of 9/11 are added to this figure, the tally becomes \$224 billion.⁴⁵ This number

³⁹ Brian A. Jackson, *The Problem of Measuring Emergency Preparedness: The Need for Assessing "Response Reliability,"* as Part of Homeland Security Planning (Santa Monica, CA: RAND, 2008), vii.

⁴⁰ Jackson, viii.

⁴¹ Glen Woodbury, "Measuring Prevention," *Homeland Security Affairs; Monterey* 1, no. 1 (Summer 2005), Proquest.

⁴² Woodbury.

⁴³ "Global Terrorism Database," University of Maryland, December 2017, https://www.start.umd.edu/gtd/search/Results.aspx?chart=injuries&casualties_type=&casualties_max=&country=217&count=100.

⁴⁴ Mueller, *Chasing Ghosts*, 276.

⁴⁵ Mueller, 276.

is less than the cumulative costs from natural disasters of \$306.2 billion in just 2017.⁴⁶ For terrorism, this number equates to an average annual cost of \$5 billion per year (including the 9/11 statistics) or \$617 million per year (excluding 9/11). In the case of natural disasters, if just the disasters costing over \$1 billion since 1980 through 2018 are considered, the cost per year is \$42 billion.⁴⁷

Based on these numbers, it is clear that the costs of natural disasters far outweigh those of terrorism to the tune of eight to one even when including the anomaly of 9/11. This being the case, the question is why FEMA's non-disaster preparedness grant programs spend just over three to one on terrorism preparedness when comparing the terrorism related HSGP to the all-hazards EMPG. Despite the terrorism focus, FEMA's *2018 National Preparedness Report* (NPR) identifies five core capabilities that are of greatest concern regarding preparedness.⁴⁸ These capabilities include operational coordination, infrastructure systems, housing, economic recovery, and cybersecurity.⁴⁹ Of the five, only cybersecurity is a specifically human-caused threat. Otherwise, these capabilities are attributable to the response and recovery from all-hazards including terrorism.

8. All-Hazards Preparedness and Terrorism

One area of consistent contention is whether the hazard of terrorism exists within or outside the all-hazards environment. Zhuang and Bier pose that terrorism exists outside all-hazards because of the ability of attackers to adapt their tactics based on the implementation of protection mechanisms.⁵⁰ On the other hand, Bellavita asserts that it could be argued that many capabilities necessary to handle most hazards would also be

⁴⁶ Smith, "2017 U.S. Billion-Dollar Weather and Climate Disasters."

⁴⁷ "Billion-Dollar Weather and Climate Disasters: Summary Stats," National Oceanic and Atmospheric Administration, accessed June 28, 2019, <https://www.ncdc.noaa.gov/billions/summary-stats>.

⁴⁸ "Homeland Security Grant Program," Federal Emergency Management Agency, last updated February 14, 2020, <https://www.fema.gov/homeland-security-grant-program>. Calculations based on 2019 appropriations levels comparing HSGP to EMPG.

⁴⁹ Federal Emergency Management Agency, *2018 National Preparedness Report*, 2.

⁵⁰ Jun Zhuang and Vicki M. Bier, "Balancing Terrorism and Natural Disasters—Defensive Strategy with Endogenous Attacker Effort," *Operations Research* 55, no. 5 (October 2007): 976, <https://doi.org/10.1287/opre.1070.0434>.

needed for a response to a terrorist incident.⁵¹ Bellavita also notes that it is neither cost-effective nor realistic for communities to narrow their preparedness efforts specifically to terrorism.⁵²

According to Mark Sauter, “The U.S. government defines homeland security as the domestic effort to defend America from terrorists. In practice, homeland security efforts have also come to comprise general preparedness under the all-hazards doctrine.”⁵³ It is problematic to take too narrow an approach to the variety of risks faced as a nation. As Egli explains, “We must establish a more functional resilience approach that focuses more on how to prioritize hazard mitigation, respond to disasters and recover services than trying to prevent an irregular threat that is unavoidable and unpredictable.”⁵⁴ A plethora of natural disasters has occurred since 9/11.

9. Summary

This review establishes that resilience is achieved by providing local communities with the resources needed to prepare for the threats and hazards they face. It also asserts that security can be defined by its many interrelated sectors and that a direct relationship exists between resilience and security. Security in the context of homeland security has multiple definitions. However, a review of FEMA’s guidance documents provided a purview of what homeland security means in the context of delivering its programs. This meaning is essentially that homeland security is contingent on terrorism preparedness. It is very difficult to measure preparedness levels in relation to the perceived risks. The Goal provides a system that may not be perfect, but it does provide a uniform, all-hazards system that can be applied to measure each state’s preparedness levels despite inherent differences. A significant difference exists in the risks and impacts derived from natural hazards versus

⁵¹ Bellavita, “Changing Homeland Security,” 3.

⁵² Bellavita, 3.

⁵³ Mark Sauter, *Homeland Security: A Complete Guide to Understanding, Preventing, and Surviving Terrorism* (New York: McGraw-Hill, 2005).

⁵⁴ Egli, *Beyond the Storms*, 47.

the threat of terrorism. Yet, the majority of funds granted by FEMA towards national preparedness remain focused on the threat posed by terrorism.

B. RESEARCH QUESTION

How can the FEMA national preparedness grant programs be improved to facilitate the strategic intent of the Goal better?

C. RESEARCH DESIGN

The Goal was published in September 2011 as a system of measurement designed to gauge national preparedness as required by PPD8. The Goal is to establish “a secure and resilient Nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk.”⁵⁵ The Goal establishes the 32 core capabilities (see the Appendix) under the mission areas of prevention, protection, mitigation, response, and recovery intended to be built and/or sustained to reach the Goal.⁵⁶ Since 2011, one of the primary vehicles to accomplishing the Goal is preparedness grants administered through FEMA. It has been nearly 10 years since the inception of the Goal. These following sub-questions are designed to help determine if FEMA’s preparedness grants are optimally structured to facilitate the strategic intent of the Goal.

1. Sub-question 1

- How does the nexus to terrorism associated with most of FEMA’s national preparedness grant programs impact the strategic intent of the Goal?

The Goal provides a uniform process with which any jurisdictions can measure their level of capability to handle their specific hazards of concern. FEMA’s preparedness grants are intended to assist state and local communities to build or sustain their capabilities. However, most FEMA’s preparedness grants require that funded projects have a nexus to terrorism preparedness. For projects to be funded through these programs,

⁵⁵ Federal Emergency Management Agency, *National Preparedness Goal*, 1.

⁵⁶ Federal Emergency Management Agency, 1.

recipients must first demonstrate how the project supports terrorism preparedness and explain how the project will prevent a threatened or an actual act of terrorism.⁵⁷ The research for this first part involves an analysis of the 32 core capabilities that make up the Goal to determine what capabilities are specific to terrorism and those that can be attributed to all-hazards. The purpose of this analysis is to determine if the nexus to terrorism creates limitations on grant funds to address all 32 core capabilities. Part of this analysis considers the capabilities through the lens of terrorism preparedness and all-hazards preparedness to identify any gaps that lie between the two. The identification of potential gaps along with the analysis of the capabilities provides an overall assessment of the effectiveness of a nexus to terrorism on the nation's ability to achieve the Goal

2. Sub-question 2

- What do the results of the NPR indicate about achieving the strategic intent of the Goal?

The strategic intent of FEMA's national preparedness grants is based on the building or maintaining of the 32 capabilities outlined in the Goal.

The second step of the research analyzes the national preparedness reports from 2013 to present to determine if capability has increased, and if so, in what areas. This data should, in turn, be reflective of the impact funding investments have had over time. This report is the annual culmination of state submitted Stakeholder Preparedness Reviews (SPR) that provide a numeric measurement (on a scale of 1–5) on the state's preparedness level through the lens of the 32 core capabilities within the elements of planning, organization, equipment, training and exercises outlined in the Goal. These reports provide overarching findings that will indicate what capabilities have been built upon or sustained, where capability has been lost and what capabilities have remained weak. This research specifically examines the percentage of states that rate themselves a 1–2, 3 or 4–5 and how

⁵⁷ Federal Emergency Management Agency, Fiscal Year 2019 HSGP Notice of Funding Opportunity, 12.

this percentage has changed from the results of the 2013 NPR to the most current 2018 iteration.

3. Sub-question 3

- Can FEMA's preparedness grants be adjusted to align with the strategic intent of the Goal?

The introduction of the Goal in 2011 has changed the way the nation measures its level of preparedness. Most of FEMA's current preparedness grants were established after 9/11. For a grant to come into existence, the U.S. Congress has to create a law authorizing the program. These authorizations contain language that informs the subsequent guidance that tells recipients what the program is designed to accomplish and what activities are eligible. This research involves an examination of the language within the statutes that originally authorized the preparedness grants along with the original grant guidance. These original documents are then compared with subsequent authorizations and guidance to determine if Congress made any changes to these statutes that may allow the grant to be adjusted to align with the Goal.

In addition to the authorization that must be made to institute a grant program, Congress must also appropriate funds annually to finance the programs. These appropriations are indicative of the perceived value and prioritization of the programs in Congress. The next step for Question 3 is to analyze the appropriation levels since the inception of the Goal to ascertain how or if funding levels have changed over time. This aspect, coupled with findings from the NPR in Sub-Question 2, may establish a linkage between the level of appropriation and the progress made toward building capability since 2013. To understand the value of these grant programs fully, the return on investment must also be considered. The return on investment will indicate the benefits the nation is receiving in relation to the appropriations discussed previously. The process of calculating return on investment can simply be based on the value of cost share where a recipient of federal funds is required to match the federal amount with non-federal funds. More complex calculations also involve the value of the items purchased with the grant funds by the ongoing benefit they provide to the recipient, their regional partners, or the nation. The

research for these calculations involves locating documents that denote the return on investment for the respective grant program. This research, coupled with the history of congressional appropriations, provides an overall picture of the strengths and weaknesses of FEMA's preparedness grants as they relate to the achievement of the Goal.

4. Sub-question 4

- What can be learned from FEMA's attempt to consolidate the national preparedness grants with regard to achieving the strategic intent of the Goal?

Between 2012 and 2014, FEMA attempted to consolidate its national preparedness grants into one program call the National Preparedness Grant Program (NPGP). The intent of this consolidation was to align the preparedness grant programs better with the Goal.⁵⁸ Although Congress never enacted this proposed program, it does provide a historical record of FEMA's attempt to try to align the national preparedness grants to the Goal. The research for this section is centered on understanding the intent of the program and how the current grant recipients perceived that the program impacts their preparedness. This comprehension will provide an understanding of if and where the NPGP fell short and inform potential recommendations derived from the other three sub-questions described previously. This analysis includes the review of congressional hearings on the program and vision documents published by FEMA. These vision documents provide FEMA leadership's intent for the program and purposes for consolidation. This information is used to consider how one consolidated program may impact national preparedness. The congressional hearings provide an overview of how and if the FEMA leader's intent changed over the course of three years to facilitate the adoption of the policy. In addition, the congressional hearings also show arguments for and against the new policy. The analysis of these hearings provides a better understanding of what the arguments are for and against the new policy.

⁵⁸ Department of Homeland Security, *FY2013 National Preparedness Grant Program Vision Document* (Washington, DC: Department of Homeland Security, 2012), 3.

The outcome of this research is an overall analysis of FEMA's preparedness grant programs to determine if they are meeting the strategic intent of the Goal to deliver the 32 core capabilities and facilitate a more resilient nation.

D. THESIS ROADMAP

Chapter II provides background information on the two common denominators of the thesis, the Goal and the NPGPs. This background is designed to help the reader understand how the system works regarding measuring the nation's capability as it relates to the Goal. It also provides an overview of the grant programs centered on building the nation's preparedness capabilities.

Chapter III analyzes the 32 core capabilities, their definitions, and if the capability addresses just terrorism or all-hazards to include terrorism. This chapter also considers the benefits and limitations of a terrorism focused preparedness approach.

Chapter IV provides the reader an overview of the NPR, which is an annual publication that discusses where the nation is in the quest to reach the Goal. This chapter also analyzes the results of the NPR since the inception of the Goal to determine what progress has been made. Additionally, this chapter examines which capabilities are receiving the most grant funds to show how these investments relate to the progress that has been made toward achieving the Goal.

Chapter V provides a historical purview of the national preparedness grant programs. It looks at the evolution of the statutes that authorize the programs and how the programmatic guidance has changed since their inception. The chapter also examines how Congress has appropriated funds to the programs since their inception. These two issues are evaluated further to determine the impacts they have had on the effectiveness of the programs and their relationship to the achievement of the Goal. In addition, the return on investment is considered for the more prominent programs to determine the benefits received versus the funds appropriated to the programs over time.

Chapter VI examines FEMA's intent behind the proposed NPGP and how the proposed program may have impacted the achievement of the Goal. The chapter also

discusses the support and opposition to the legislation, why it ultimately failed, and how it may help formulate a way forward.

Chapter VII is a conclusion intended to summarize the findings in the previous chapters and provide a transition to the author's concluding thoughts and recommendations on how the NPGP may better align with the strategic intent of the Goal.

II. BACKGROUND

A. INTRODUCTION

The background chapter is intended to provide a brief overview of the Goal and an introduction to the grant programs FEMA provides to address preparedness. The discussion on the Goal explains the mission areas and capabilities that are the essence of the Goal. Additionally, this section exhibits how the states go about measuring their ability to achieve the Goal. The next section outlines FEMA's preparedness grants to include a brief description of their purpose and their current funding levels. The basic information provided allows the reader to have a base understanding of these two areas, which help synthesize the chapters to come.

B. NATIONAL PREPAREDNESS GOAL

The first edition of the Goal was released in September 2011 as the goal of the NPS required by PPD 8. The Goal states that its strategic intent is to establish a “secure and resilient Nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk.”⁵⁹ The Goal outlines the 32 core capabilities that must be addressed to achieve the goal. These capabilities are listed in Figure 1. The first edition had 31 core capabilities. When the 2nd edition was released, two capabilities were added, fire management and suppression, and logistics and supply chain management. The capabilities of public health and medical services, and public and private services and resources were combined into one capability under public health, healthcare, and emergency medical services. Through the 32 core capabilities, the Goal is accomplished by:

- Preventing, avoiding, or stopping a threatened or an actual act of terrorism.

⁵⁹ Federal Emergency Management Agency, *National Preparedness Goal*, 1.

- Protecting this nation’s citizens, residents, visitors, assets, systems, and networks against the greatest threats and hazards in a manner that allows U.S. interests, aspirations, and way of life to thrive.
- Mitigating the loss of life and property by lessening the impact of future disasters.
- Responding quickly to save lives, protect property, and the environment, and meet basic human needs in the aftermath of an incident.
- Recovering through a focus on the timely restoration, strengthening, and revitalization of infrastructure, housing, and the economy, as well as the health, social, cultural, historic, and environmental fabric of communities affected by an incident.⁶⁰

States are required to conduct an annual assessment of their capabilities. The assessment process shown in Figure 1 begins with the state completing the Threat/Hazard Identification and Risk Assessment (THIRA). Each state identifies threats and hazards of concern and then adds context to the hazards by developing a scenario depicting how each hazard may impact its jurisdiction.

⁶⁰ Federal Emergency Management Agency, 1.

Prevention	Protection	Mitigation	Response	Recovery
Planning				
Public Information and Warning				
Operational Coordination				
Forensics and Attribution Intelligence and Information Sharing Interdiction and Disruption Screening, Search, and Detection	Access Control and Identity Verification Cybersecurity Intelligence and Information Sharing Interdiction and Disruption Physical Protective Measures Risk Management for Protection Programs and Activities Screening, Search, and Detection Supply Chain Integrity and Security	Community Resilience Long-term Vulnerability Reduction Risk and Disaster Resilience Assessment Threats and Hazard Identification	Critical Transportation Environmental Response/Health and Safety Fatality Management Services Infrastructure Systems Mass Care Services Mass Search and Rescue Operations On-scene Security and Protection Operational Communications Public and Private Services and Resources Public Health and Medical Services Situational Assessment	Economic Recovery Health and Social Services Housing Infrastructure Systems Natural and Cultural Resources

Figure 1. Mission Areas and Core Capabilities.⁶¹

From these contextualized events, the state develops a list of impacts that each hazard may have through the lens of each relevant capability. The end result of the THIRA process (shown in Figure 2) is the development of capability targets for each of the 32 core capabilities.

⁶¹ Source: Federal Emergency Management Agency, 3.



Figure 2. THIRA Process.⁶²

These targets are established by taking the worst impact associated with each capability and coupling it with a timeframe metric. The capability target provides the state a benchmark for determining resource needs and identifying shortfalls. The THIRA process is designed around whole community involvement. The more involvement in the process, the less subjective the outcome is.

Armed with 32 targets for each of the core capabilities, the state uses these targets as the basis for the next part of the risk assessment or that of the SPR. The SPR process pictured in Figure 3 involves the state rating itself numerically from 1–5 based on the elements of planning, organization, equipment, training, and exercises as they relate to reaching the capability target for each of the 32 core capabilities. If the state rates the capability less than 5, it needs to identify resource gaps between its current rating and a fully matured capability. The state also designates whether the capability is low, medium, or high priority.

⁶² Source: Department of Homeland Security, *Comprehensive Preparedness Guide (CPG) 201*, 3rd ed. (Washington, DC: Department of Homeland Security, 2018), 11.

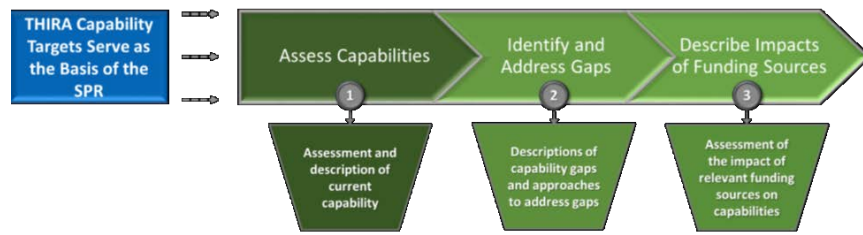


Figure 3. SPR Process.⁶³

The THIRA and SPR are submitted to FEMA annually. The data from these assessments is used for two purposes. The first is to develop the NPR, which is an aggregation of data from all the state submitted SPRs and provides an overall purview of preparedness at a national level. Second, the states submit applications for annual grant funding, which requires that the states tie their investment justifications to the building or sustainment of the specific core capabilities or addressing resource gaps identified in the SPR.

C. FEMA’S NON-DISASTER PREPAREDNESS GRANT PROGRAMS

The HSGP is the centerpiece of FEMA’s non-disaster preparedness grant programs. This program is appropriated annually by Congress and is always the highest funded of the preparedness grant programs. For federal fiscal year (FY) 2019, the HSGP was funded at nearly \$1.1 billion.⁶⁴ It consists of three programs: the State Homeland Security Program (SHSP), the Urban Area Security Initiative (UASI), and Operation Stonegarden (OSG). All three programs are tied directly to the nexus of terrorism preparedness. The SHSP is awarded annually to states and territories based on population.⁶⁵ The UASI is awarded annually to urban areas based on population and a risk assessment that is required as part of the application process.⁶⁶ The OSG is awarded to select border states for the use of terrorism preparedness pertaining to border crossings.⁶⁷ The SHSP and UASI also go to

⁶³ Source: Department of Homeland Security, 23.

⁶⁴ Federal Emergency Management Agency, “Homeland Security Grant Program.”

⁶⁵ Federal Emergency Management Agency, Fiscal Year 2019 HSGP Notice of Funding Opportunity.

⁶⁶ Federal Emergency Management Agency.

⁶⁷ Federal Emergency Management Agency.

fund state and regional intelligence fusion centers and law enforcement terrorism prevention activities (LETPA).⁶⁸ The SHSP requires that 80 percent of the funding be passed through to local units of government.

The next highest funded preparedness grant program in FY 2019 was the EMPG at \$350 million.⁶⁹ The EMPG is an all-hazards program awarded to states based on population to sustain their emergency management programs. One of the unique characteristics that distinguishes EMPG from the other preparedness programs is its authorizing statutes. The more well-known of these is the Stafford Act and the Post-Katrina Emergency Management Reform Act.⁷⁰ As opposed to HSGP and all its components administered by FEMA headquarters, the EMPG is administered by FEMA's 10 regional offices. The guidance for the EMPG provides significant flexibility to states to allow the program to meet their specific and variable needs. The program allows the states to sub-grant funds to their local jurisdictions to sustain emergency management capabilities at the county or local level.

The final six programs were collectively funded for FY 2019 at \$270 million. They are all centered on terrorism preparedness and tailored to a more focused group of recipients. These six programs include the Intercity Bus Security Grant, Intercity Passenger Rail Security Grant, Non-Profit Security Grant, Port Security Grant, Transit Security Grant, and Tribal Homeland Security Grant.⁷¹

The aforementioned programs listed make up the entirety of FEMA's non-disaster preparedness grant catalog. In sum, \$1.4 billion is tied directly to the nexus of terrorism and \$350 million to all-hazards preparedness through EMPG.⁷² The purpose of this thesis is to examine these programs to determine whether this configuration is facilitating the strategic intent of the Goal.

⁶⁸ Federal Emergency Management Agency.

⁶⁹ Federal Emergency Management Agency, *FY2019 EMPG Notice of Funding Opportunity* (Washington, DC: Department of Homeland Security, 2019).

⁷⁰ Federal Emergency Management Agency.

⁷¹ Federal Emergency Management Agency, "Homeland Security Grant Program."

⁷² Federal Emergency Management Agency.

III. TERRORISM PREPAREDNESS OR PREPAREDNESS FOR TERRORISM?

A. INTRODUCTION

One of the most common questions posed when the subject of the all-hazards approach is raised is how the threat of terrorism fits in. It is often claimed that preparing for any disaster encompasses preparedness for the hazards of terrorism.⁷³ However, others claim it works the other way around.⁷⁴ The premise behind the development of a NPS was to establish a measurable, balanced and prioritized approach to assessing risk and estimating resource requirements to prevent, respond to, and recover from the threats associated with terrorism and natural hazards.⁷⁵ The Goal is designed to address all-hazards, yet FEMA's preparedness grants are predominantly centered on preparing for terrorism. The concept of terrorism preparedness was part of FEMA's planning mission well before the attacks on 9/11.⁷⁶ The attacks on 9/11 and the advent of DHS changed the emphasis placed on that part of FEMA's mission. The prevalent occurrence of natural disasters coupled with the fact that another major terrorist attack has not occurred since 9/11, accentuates the importance of taking an all-hazards approach that includes but is not predominantly focused on the threat of terrorism.

This chapter examines the relationship between these programs and the Goal to determine if the nexus to terrorism preparedness impacts the nation's ability to achieve the Goal. This chapter begins with the analysis of the mission areas that make up the Goal. This analysis examines the mission areas and their relationship between all-hazards and terrorism, and their applicability before and after an incident. The next section assesses the 32 core capabilities outlined in the goal and whether they are applicable specifically to

⁷³ Glen Woodbury, *Emergency Management in Higher Education: Current Practices and Conversations* (Fairfax, VA: Public Entity Risk Institute, 2008), 45.

⁷⁴ Woodbury, 45.

⁷⁵ Department of Homeland Security, *National Preparedness System* (Washington, DC: Department of Homeland Security, 2011), 1.

⁷⁶ Egli, *Beyond the Storms*, 35.

terrorism or all-hazards. This research is executed by reviewing the capability definitions derived from the Goal to determine the applicability. The chapter concludes with an overall discussion on the findings from the previous sections to explain how or if the nexus to terrorism required by FEMA's preparedness grants impacts the nation's ability to achieve the Goal.

B. THE MISSION AREAS

Prior to addressing the capabilities, it must be understood how the mission areas fit within the context of national preparedness. Figure 4 provides a visualization of how these mission areas interrelate. This figure was adapted from an article written by Glen Woodbury that examined the gray area between emergency management and homeland security. The horizontal line in Figure 4 separates the pre-disaster mission areas from those applicable after an incident occurs. The vertical line in Figure 4 separates the mission areas specific to terrorism from those that address all-hazards.

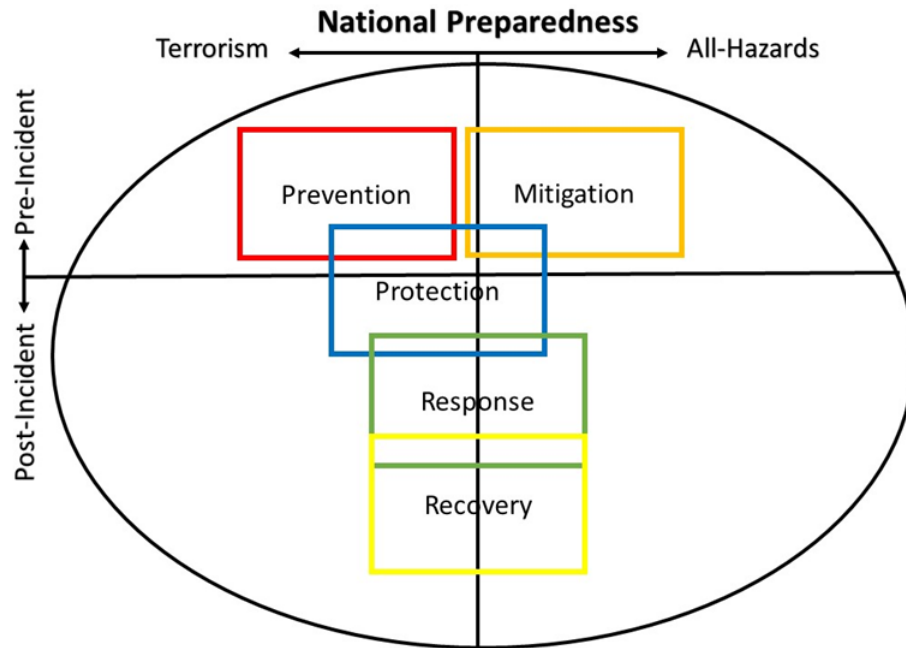


Figure 4. Interrelation of Mission Areas in National Preparedness.⁷⁷

1. Prevention

The mission area of prevention resides in a quadrant by itself in Figure 4. The Goal associates this mission area specifically with the prevention of an act of terror.⁷⁸ The very nature of prevention, which Webster's Dictionary defines as the act of preventing, a hindrance or obstruction lends itself to being an action that takes place prior to an incident.⁷⁹ Although prevention does not happen after an incident, it does intersect with the area of protection.

2. Protection

The mission area of protection is the only area that intersects with three other mission areas and resides in all four quadrants. The mission areas of prevention and

⁷⁷ Adapted from Woodbury, *Emergency Management in Higher Education*, 47. Figure adapted from Woodbury's graphic delineating the relationship between terrorism and all-hazards in the context of preparedness.

⁷⁸ Federal Emergency Management Agency, *National Preparedness Goal*, 1.

⁷⁹ Merriam-Webster, s.v. "prevention," accessed September 26, 2020, <https://www.merriam-webster.com/dictionary/prevention>.

protection share capabilities as they relate to protection from terrorism. Although protection does not share capabilities with mitigation or response, but it does have capabilities that relate to both areas. For example, access control and identity verification plays a role both before a disaster and during the response phase. In the case of mitigation, the capability of physical protective measures has some components of mitigation to it when considering its applicability to critical infrastructure.

3. Mitigation

In Figure 4, the mission area of mitigation is applicable prior to a disaster occurring. Although mitigation is mostly applicable to natural hazards, components, as discussed in the protection section, can be associated with terrorism. In many cases, the mitigation capabilities are applied in the wake of a disaster response, but these actions are taken to make the community more resilient to future events.

4. Response

The mission area of response comes in to play after a disaster has occurred that places it below the horizontal line in Figure 4. However, it resides on both sides of the vertical line delineating its applicability to all-hazards including terrorism. Although they do not share capabilities, a definite relationship to the protection capability exists, as described previously. It is said that recovery begins in conjunction with response. However, they only share one capability, or that of infrastructure systems.

5. Recovery

The recovery mission area falls well below the horizontal line in Figure 5 given that a disaster must occur before something occurs from which to recover. The relationship between recovery and response is discussed in the response section. It can be said that the recovery mission area also relates back to prevention and mitigation. This relationship would likely be determined by whether the recovery was from a terror attack or a natural disaster due to the cyclical nature of emergency management. In the next section, each mission area is revisited but with the emphasis on the capabilities within each area.

C. THE CORE CAPABILITIES

In the following sections, each capability is briefly analyzed to determine its applicability to terrorism specifically or to the full spectrum of hazards. This analysis is done primarily through the examination of the capability definitions outlined in the Goal and the context of the mission area within which that the capability resides. The following tables provide a snapshot of the capability definition. They also assess whether the capability definition lends itself to all-hazards or if it is specific to terrorism. A discussion of the capabilities and their relationship to all-hazards and/or terrorism follows each table.

1. Common Core Capabilities

The common core capabilities consist of planning, public information and warning and operational coordination. The definitions for these capabilities are explained in Table 1.⁸⁰

Table 1. Common Core Capability Definitions.⁸¹

Common Core Capability Definitions		
Planning	All-Hazards	Conduct a systematic process engaging the whole community as appropriate in the development of executable strategic, operational, and/or tactical-level approaches to meet defined objectives.
Public Information and Warning	All-Hazards	Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard, as well as the actions being taken and the assistance being made available, as appropriate.
Operational Coordination	All-Hazards	Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

The capabilities are referred to as common because they are associated with all five mission areas. These three capabilities are inherently linked to all five mission areas and are essential for the success of the rest of the capabilities.⁸² Given that these capabilities do span all mission areas, they must also address all-hazards including terrorism preparedness. All threats and hazards must be planned for, will require some level of information

⁸⁰ Federal Emergency Management Agency, 3.

⁸¹ Source: Federal Emergency Management Agency, 6.

⁸² Federal Emergency Management Agency, 4.

dissemination or warning, and demand a coordinated operation to address threats and hazards both before and after they occur.

2. Prevention and Protection

Some of the 32 core capabilities outlined in the Goal are only related to terrorism. The mission area of prevention is comprised of the first four capabilities listed in Table 2.

Table 2. Prevention and Protection Core Capability Definitions.⁸³

Prevention and Protection Core Capabilities		
Forensics and Attribution	Terrorism Specific	Conduct forensic analysis and attribute terrorist acts (including the means and methods of terrorism) to their source, to include forensic analysis as well as attribution for an attack and for the preparation for an attack in an effort to prevent initial or follow-on acts and/or swiftly develop counter-options.
Intelligence and Information Sharing	All-Hazards	Provide timely, accurate, and actionable information resulting from the planning, direction, collection, exploitation, processing, analysis, production, dissemination, evaluation, and feedback of available information concerning physical and cyber threats to the United States, its people, property, or interests; the development, proliferation, or use of WMDs; or any other matter bearing on U.S. national or homeland security by local, state, tribal, territorial, federal, and other stakeholders. Information sharing is the ability to exchange intelligence, information, data, or knowledge among government or private sector entities, as appropriate.
Interdiction and Disruption	Terrorism Specific	Delay, divert, intercept, halt, apprehend, or secure threats and/or hazards.
Screening, Search, and Detection	Terrorism Specific	Identify, discover, or locate threats and/or hazards through active and passive surveillance and search procedures. This may include the use of systematic examinations and assessments, bio surveillance, sensor technologies, or physical investigation and intelligence.
Access Control and Identity Verification	All-Hazards	Apply and support necessary physical, technological, and cyber measures to control admittance to critical locations and systems.
Cybersecurity	All-Hazards	Protect (and if needed, restore) electronic communications systems, information, and services from damage, unauthorized use, and exploitation.
Physical Protective Measures	All-Hazards	Implement and maintain risk-informed countermeasures, and policies protecting people, borders, structures, materials, products, and systems associated with key operational activities and critical infrastructure sectors.
Risk Management for Protection Programs and Activities	All-Hazards	Identify, assess, and prioritize risks to inform Protection activities, countermeasures, and investments.
Supply Chain Integrity and Security	All-Hazards	Strengthen the security and resilience of the supply chain.

The forensics and attribution capability is the only capability specific to the prevention mission area. The others, intelligence and information sharing, interdiction and disruption, and screening, search, and detection, are shared with the protection mission area. These two mission areas are considered together in this section due to this relationship. These four capabilities, as they relate to the prevention mission area, only

⁸³ Source: Federal Emergency Management Agency, 7–10.

address the hazard of terrorism. The prevention capabilities are, “necessary to avoid, prevent, or stop a threatened or actual act of terrorism. Unlike other mission areas, which are all-hazards by design, prevention core capabilities are focused specifically on imminent terrorist threats, including on-going attacks or stopping imminent follow-on attacks.”⁸⁴ It is important to note that the planning, organization, equipment, training, and exercises necessary for preventing an act of terrorism are different from those required with respect to natural hazards. The mission area of prevention stands alone primarily because terrorism, unlike natural threats, can be prevented.

Of the four capabilities associated with prevention discussed in the previous paragraph only intelligence and information sharing is attributable to all-hazards in the context of protection. The remaining two shared between protection and prevention are terrorism-specific due to their definition and relationship to human-caused incidents. The five remaining capabilities listed in Table 2 fall only within the protection area: access control and identity verification, cybersecurity, physical protective measures, risk management for protection programs and activities, and supply chain integrity and security are relatable to all-hazards including terrorism. Although the definitions associated with these capabilities have strong connotations to terrorism, they all play some role in protecting the public and infrastructure before and after a natural disaster.

3. Mitigation

Along the same lines, the mission area of mitigation is traditionally related to natural hazards, as seen in Table 3. The process of mitigation relies heavily on historical occurrences and the ability to predict the impact a hazard will have to implement actions to lessen the impacts.

⁸⁴ Federal Emergency Management Agency, 5.

Table 3. Mitigation Capability Definitions.⁸⁵

Mitigation Core Capabilities		
Community Resilience	All-Hazards	Enable the recognition, understanding, communication of, and planning for risk and empower individuals and communities to make informed risk management decisions necessary to adapt to, withstand, and quickly recover from future incidents.
Long-term Vulnerability Reduction	All-Hazards	Build and sustain resilient systems, communities, and critical infrastructure and key resources lifelines so as to reduce their vulnerability to natural, technological, and human-caused threats and hazards by lessening the likelihood, severity, and duration of the adverse consequences.
Risk and Disaster Resilience Assessment	All-Hazards	Assess risk and disaster resilience so that decision makers, responders, and community members can take informed action to reduce their entity's risk and increase their resilience.
Threats and Hazards Identification	All-Hazards	Identify the threats and hazards that occur in the geographic area; determine the frequency and magnitude; and incorporate this into analysis and planning processes so as to clearly understand the needs of a community or entity.

Where an earthquake will occur or what areas will flood can be predicted. The same can be said for predicting targets of terrorism. However, the human aspect that comes with terrorism allowing the perpetrator to adjust tactics or change targets is relatively unpredictable. Some capabilities fall within the protection mission area, such as physical protection measures that can be considered mitigation. An example is bollards placed around critical infrastructure to protect against a vehicle borne improvised explosive device. This capability is taken into consideration in Figure 4 in the earlier mission area discussion, where the mitigation exists slightly within the threat of terrorism and the mission area of protection.

FEMA has an entire suite of grant programs dedicated to mitigation. In most cases, mitigation type projects are not allowable under the FEMA preparedness grants given its relationship to natural hazards. Most of the projects that may have a nexus to terrorism that can be considered mitigation actually fall within the protection mission area.

When examined further, the capabilities that make up mitigation listed in Table 3 are specific to risk reduction, which involves identifying specific hazards, assessing the potential impact of these hazards, and applying this information to inform long-term vulnerability reduction. The end result of this process is more resilient communities. That said, nothing in the capability definitions tie them specifically to terrorism or natural hazards; therefore, they are applicable to all-hazards.

⁸⁵ Source: Federal Emergency Management Agency, 11–12.

4. Response

The mission area of response can be attributed to all-hazards including terrorism. This area focuses on managing the consequences of an incident and does not differ significantly whether the incident is the result of terrorism or a natural hazard. When examining the capabilities that make up the response mission area listed in Table 4, it is clear that not every capability is necessary to address every threat or hazard; but, it is equally clear that any of the capabilities can be needed depending on the incident whether from terrorism or natural causes.

Table 4. Response Capability Definitions.⁸⁶

Response Core Capabilities		
Critical Transportation	All-Hazards	Provide transportation (including infrastructure access and accessible transportation services) for response priority objectives, including the evacuation of people and animals, and the delivery of vital response personnel, equipment, and services into the affected areas.
Environmental Response/Health and Safety	All-Hazards	Conduct appropriate measures to ensure the protection of the health and safety of the public and workers, as well as the environment, from all-hazards in support of responder operations and the affected communities.
Fatality Management Services	All-Hazards	Provide fatality management services, including decedent remains recovery and victim identification, working with local, state, tribal, territorial, insular area, and federal authorities to provide mortuary processes, temporary storage or permanent internment solutions, sharing information with mass care services for the purpose of reunifying family members and caregivers with missing persons/remains, and providing counseling to the bereaved.
Fire Management and Suppression	All-Hazards	Provide structural, wildland, and specialized firefighting capabilities to manage and suppress fires of all types, kinds, and complexities while protecting the lives, property, and the environment in the affected area.
Infrastructure Systems	All-Hazards	Stabilize critical infrastructure functions, minimize health and safety threats, and efficiently restore and revitalize systems and services to support a viable, resilient community.
Logistics and Supply Chain Management	All-Hazards	Deliver essential commodities, equipment, and services in support of impacted communities and survivors, to include emergency power and fuel support, as well as the coordination of access to community staples. Synchronize logistics capabilities and enable the restoration of impacted supply chains.
Mass Care Services	All-Hazards	Provide life-sustaining and human services to the affected population, to include hydration, feeding, sheltering, temporary housing, evacuee support, reunification, and distribution of emergency supplies.
Mass Search and Rescue Operations	All-Hazards	Deliver traditional and atypical search and rescue capabilities, including personnel, services, animals, and assets to survivors in need, with the goal of saving the greatest number of endangered lives in the shortest time possible.
On-Scene Security, Protection, and Law Enforcement	All-Hazards	Ensure a safe and secure environment through law enforcement and related security and protection operations for people and communities located within affected areas and also for response personnel engaged in lifesaving and life-sustaining operations.
Operational Communications	All-Hazards	Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces.
Public Health, Healthcare, and Emergency Medical Services	All-Hazards	Provide lifesaving medical treatment via Emergency Medical Services and related operations and avoid additional disease and injury by providing targeted public health, medical, and behavioral health support, and products to all affected populations.
Situational Assessment	All-Hazards	Provide all decision makers with decision-relevant information regarding the nature and extent of the hazard, any cascading effects, and the status of the response.

⁸⁶ Source: Federal Emergency Management Agency, 13–17.

Critical transportation is equally important when clearing snow to allow first responders access, as it is to providing a means of evacuation for those affected by a terrorist attack. The same can be said for operational communications and the importance of being able to communicate with fellow responders and all levels of government regardless of what precipitated a disaster.

5. Recovery

Recovery is necessary following any disaster whether human-caused or natural. The capabilities associated with the recovery mission area are listed in Table 5.

Table 5. Recovery Capability Definitions.⁸⁷

Recovery Core Capabilities		
Economic Recovery	All-Hazards	Return economic and business activities (including food and agriculture) to a healthy state and develop new business and employment opportunities that result in an economically viable community.
Health and Social Services	All-Hazards	Restore and improve health and social services capabilities and networks to promote the resilience, independence, health (including behavioral health), and well-being of the whole community.
Housing	All-Hazards	Implement housing solutions that effectively support the needs of the whole community and contribute to its sustainability and resilience.
Natural and Cultural Resources	All-Hazards	Protect natural and cultural resources and historic properties through appropriate planning, mitigation, response, and recovery actions to preserve, conserve, rehabilitate, and restore them consistent with post-disaster community priorities and best practices and in compliance with applicable environmental and historic preservation laws and executive orders.

The economic recovery capability can be associated with any incident as a cost is associated with the response to and rebuilding from any incident. These costs can be attributable to individuals affected up to the federal government once the President declares a disaster. The same can be said of the housing capability and the need for short term-shelters while flood waters recede or a complete relocation from an exclusion zone following a terror attack involving an improvised nuclear device. The rest of the recovery capabilities are specific to certain incidents but can be needed as the result of a natural hazard or human-caused threat.

⁸⁷ Source: Federal Emergency Management Agency, 18–20.

6. Conclusion

Although the majority FEMA's national preparedness grants require a nexus to terrorism, this analysis indicates that despite the nexus, the funding from these grants likely provide benefits in the areas of protection, response, and recovery to natural and technological hazards as well. Of the 32 core capabilities, only three are identified as being terrorism specific. All others apply to all-hazards including terrorism. Therefore, a nexus to terrorism can be made through the lens of each of the capabilities. This relationship is reinforced within The DHS Strategic Framework for Countering Terrorism and Targeted Violence attributes its four goals in achieving its mission and their applicability to each of the core capabilities.⁸⁸ Even though this document is centered on countering terrorism, every capability is addressed in the DHS strategy including those residing within Mitigation.⁸⁹ Conversely, the lesser funded, all-hazards focused, Emergency Management Performance Grant also provides many of the same benefits in the areas of protection, response, and recovery to the threat of terrorism. That said, the primary issue is the grant recipients' ability to tie their funding requests to terrorism.

FEMA's Grants Program Directorate uses the definition of terrorism set forth in the Act given that it defines the purpose of the program. This definition of terrorism from the Act is:

any activity that involves an act that (A) is dangerous to human life or potentially destructive of critical infrastructure or key resources; and is a violation of the criminal laws of the United States or of any State or other subdivision of the United States; and (B) appears to be intended to intimidate or coerce a civilian population; to influence the policy of a government by intimidation or coercion; or to affect the conduct of a government by mass destruction, assassination, or kidnapping.⁹⁰

While no set criteria determine whether a nexus to terrorism exists, this definition is used as the primary guide when proposed projects are reviewed for funding. As

⁸⁸ Department of Homeland Security, *Department of Homeland Security Strategic Framework for Countering Terrorism and Targeted Violence* (Washington, DC: Department of Homeland Security, 2019), 8.

⁸⁹ Department of Homeland Security, 8.

⁹⁰ Homeland Security Act of 2002 (as Amended), Public Law 112-265 (2013): 10.

mentioned earlier, an expenditure may have a dual purpose and support a response to another type of disaster; however, the primary purpose must have a clear nexus to terrorism. Based solely on the capabilities examined in this chapter, this nexus does not seem to be a major limitation in addressing the needs of each capability.

The next chapter goes a step further to examine how progress toward achieving the Goal is measured and how the nation has progressed in this endeavor to date.

IV. THE NATIONAL PREPAREDNESS GOAL— WHAT PROGRESS HAS BEEN MADE?

A. INTRODUCTION

The Goal was introduced in September 2011 as the strategic guidance document of the NPS required by PPD 8. One of the requirements of PPD 8 was the establishment of an annual NPR.⁹¹ The NPR evaluates and measures progress made toward achieving the goal and where improvement is still needed.⁹² The NPR is compiled from data derived from the states' submitted SPRs to evaluate their ability annually to reach the capability targets identified in their THIRA. The SPR process involves identifying gaps in reaching the capability target through each of the elements of planning, organization, equipment, training, and exercises. The overall rating from 1–5 is calculated based on an average of the ratings for these five elements. The aggregated results of all the SPRs are compiled by FEMA's National Preparedness Assessment Division (NPAD) into the NPR. This chapter analyzes these reports from the first in 2013 to the most recent released in 2019 to quantify what the reports indicate regarding the progress has been made toward achieving the Goal.

B. METHODOLOGY

It has been nearly 10 years since the inception of the Goal. The first version of the NPR was released by FEMA in 2013 based on SPRs submitted by the states in 2012. This process of releasing the NPR the following year to summarize the previous year's data has been repeated annually through the current version released in 2018. A thorough analysis of the NPRs since 2014 revealed one annual dataset that could be used to deduce progress made toward achieving the Goal to date. This dataset is a chart showing the assessment of current capability included in every report from 2014 to 2018. The information in this recurring chart reflects the percentage of states that rated themselves at 1–2 (low),

⁹¹ Barak Obama, "Presidential Policy Directive 8: National Preparedness," Department of Homeland Security, July 7, 2008, <https://www.dhs.gov/presidential-policy-directive-8-national-preparedness>.

⁹² Federal Emergency Management Agency, *2019 National Preparedness Report* (Washington, DC: Federal Emergency Management Agency, 2019), <https://www.fema.gov/media-library/assets/documents/184950>.

3 (medium) or 4–5 (high) for each of the individual 32 core capabilities each respective year.

The analysis process is shown using the example of the public information and warning capability.

- The first piece of data necessary to begin the analysis is to determine the current capability rating. The current capability rating is derived from the assessment of current capability in the 2018 NPR. This rating is assigned based on the most frequent rating (or mode).⁹³ This same process is used to determine the prior rating from 2014. Figure 5 shows the mode from both 2014 and 2018 for public information and warning remaining high for both years.
- The next step in the analysis is to calculate and compare the percentage changes between the high, medium and low ratings from 2014–2018. This data is used to determine whether the current capability has increased, sustained, centralized, or been lost. The capability percentage change chart in Figure 5 indicates that the public information and warning capability has **centralized** because a similar loss of percentage has occurred from both the high and low ratings and a subsequent increase in medium. An **increasing** capability is represented by a loss in percentage from a lower rating with an increase in higher ratings. **Lost** capability is the exact opposite with percentages lost in higher ratings with increases in lower ones. **Sustained** capabilities are denoted when the percentage ratings have remained static.

The Appendix provides an in-depth snapshot of each capability including comparison charts, such as Figure 5 and a discussion specific to the respective capability.

⁹³ One capability had a bimodal distribution. The fatality management systems capability had 36% of the states' rating themselves in both low and high.

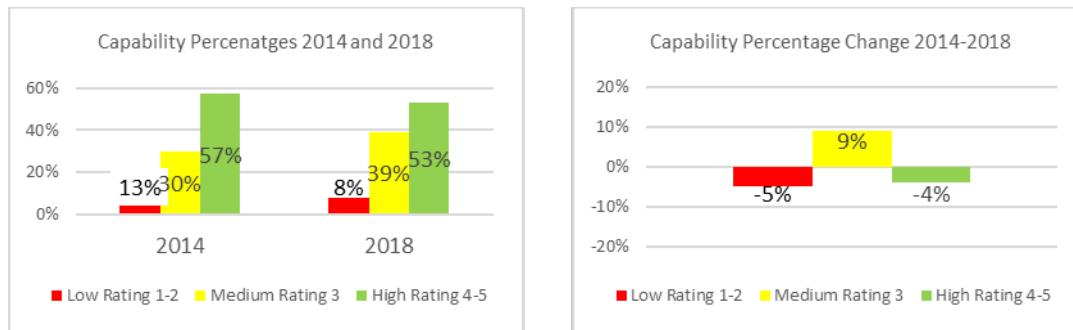


Figure 5. Public Information and Warning Percentages and Changes 2014 to 2018.⁹⁴

The results of the analysis are synthesized in Table 6 at the end of the chapter and broken out by whether capabilities have increased, centralized, sustained, or are lost.

Capabilities take time and resources to build; therefore, incremental increases year to year are to be expected.⁹⁵ Capabilities can experience a loss for several reasons. One consideration is the validation of capability through real-world exercises that may cause a state to reevaluate its rating in a specific area. Another possibility is that the target upon which the state has been rating itself is adjusted, which may impact the way the state views its ability to meet the target. The last possibility is the variability associated with the self-assessing nature of the SPR, which is discussed further later in this chapter.

C. CAPABILITY INCREASED

Of the 32 capabilities that make up the Goal, 15 were increased: planning; screening, search, and detection; access control and identity verification; cybersecurity; threats and hazards identification; risk and disaster resilience assessment; community resilience; long-term vulnerability reduction; public health, healthcare, and emergency medical services; fire management and suppression; mass search and rescue operations; fatality management services; mass care services; health and social services; and natural and cultural resources.

⁹⁴ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report* (Washington, DC: Department of Homeland Security, 2014), 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11

⁹⁵ Federal Emergency Management Agency, *2018 National Preparedness Report*, 10.

- All four of the capabilities in the mitigation mission area were increased.
- Six capabilities increased despite already having a high rating.
- One increased and still remained a medium.
- Three increased but maintained their low rating.
- Three of the capabilities were increased and were subsequently rated higher. One of these was health and social services that increased from a low to a high rating. The other two, long-term vulnerability reduction and mass care services went from a low to a medium.
- Fatality management services increased as well but was the only outlier in the use of mode to determine current capability. The mode for 2014 was 41% of states rating themselves low. However, a 4% increase in states rating themselves high resulted, coupled with a 5% decrease in low ratings when compared with 2018. Thus, the low rating percentage decreased to 36% and the high rating increased the same. The fatality management services capability is reflected as being bimodal due to the equal high and low ratings.

D. CAPABILITY CENTRALIZED

Over the period researched, 14 capabilities were centralized. A centralized capability is one that lost percentage in both high and low ratings with a subsequent increase in medium. These capabilities were: public information and warning; operational coordination; intelligence and information sharing; forensics and attribution; physical protective measures; risk management for protection programs and activities; on-scene security, protection, and law enforcement; operational communications; situational assessment; environmental response/health and safety; critical transportation; logistics and supply chain management; economic recovery; and housing.

- Eight were centralized but retained a high rating, one at a medium and two at low.

- Three of the capabilities dropped to a medium for a high as a result of the centralization. The economic recovery capability was one that was centralized but maintained a low rating. This result is concerning given the relationship that the economy has to resilience and security.

E. CAPABILITY LOST

Three capabilities were determined to have lost capability between 2014 and 2018. These capabilities are interdiction and disruption, supply chain integrity and security, and infrastructure systems.

- Interdiction and disruption lost capability but remained rated high.
- Infrastructure systems lost capability, which resulted in the rating also being lost from a high in 2014 to a current medium.
- The most concerning of the capabilities indicating a loss is supply chain integrity and security that were already rated low.

F. CAPABILITY SUSTAINED

No capabilities remained the same from 2014 to 2018.

G. CAPABILITIES AND NATIONAL PREPAREDNESS GRANT FUNDING

One aspect that must be considered in the context of this research is the relationship between the status of capabilities and the investments being made via FEMA grant funds. Figure 6 shows the percentage of FEMA funding invested in each core capability from FYs 2017 and 2018. Based on this data, nearly half of the annual funding is being invested in the common capabilities of planning and operational coordination. Both of these capabilities are currently rated high with planning continuing to increase and operational coordination being centralized. This finding highlights the importance of these capabilities within the preparedness but also the costs associated with maintaining capability in these areas.

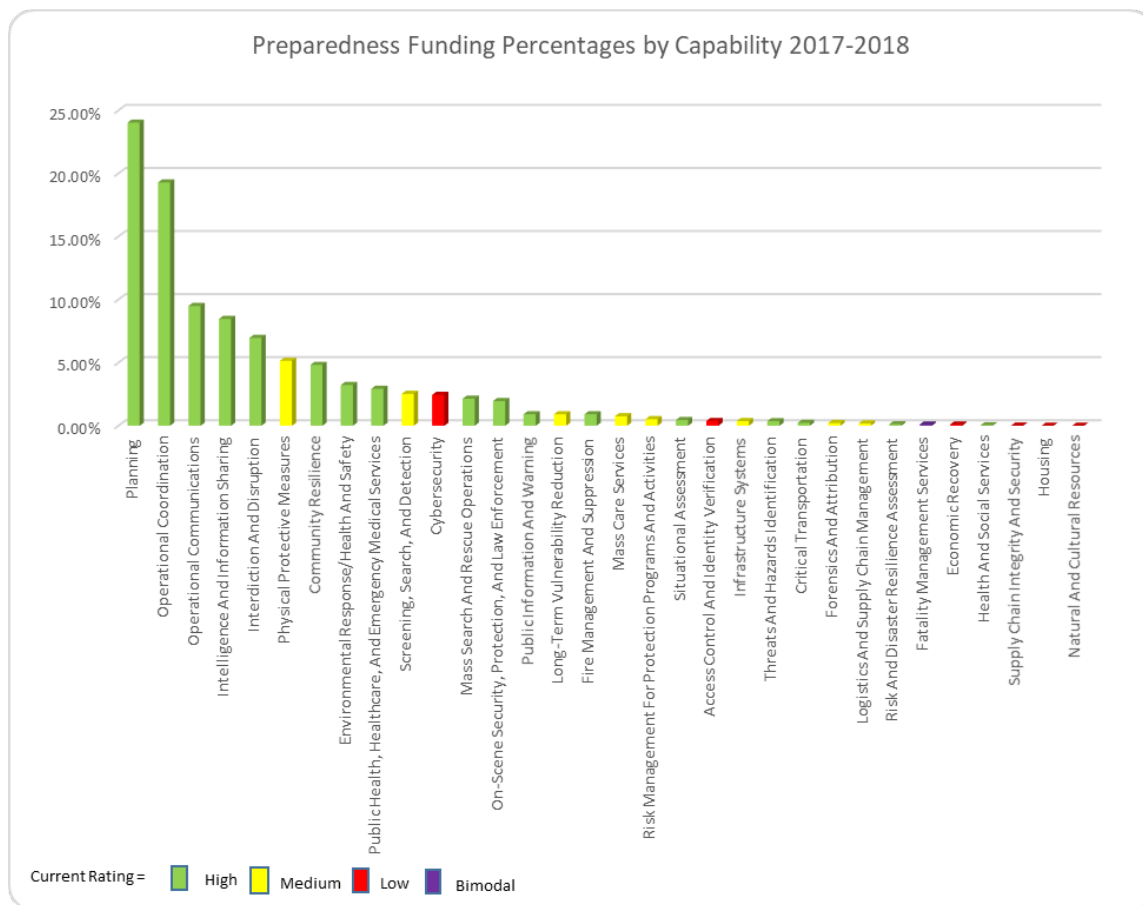


Figure 6. FEMA Preparedness Funding Percentages by Capability for FYs 2017 and 2018.⁹⁶

Areas of concern are the capabilities of operational communications and interdiction and disruption. The data from Figure 6 indicates that nearly 20% of annual funding is being invested in these high-rated capabilities. However, both capabilities have lost capability or were centralized from 2014 to 2018 despite the funds invested to maintain this high rating.

One important takeaway from Figure 6 is the lack of investment in the prevention and protection mission areas. This takeaway seems contradictory to grant programs with a nexus to terrorism. The only assumption that can be made is that states are using the nexus

⁹⁶ Adapted from Federal Emergency Management Agency, *2018 National Preparedness Report*, 9; Federal Emergency Management Agency, *2019 National Preparedness Report*, 9.

to terrorism to build capabilities applicable to all-hazards including terrorism. Of the nine capabilities associated with these mission areas, three have increased, four have been centralized, and two have lost capability. The capabilities in these areas receiving the highest investments are intelligence and information sharing, and interdiction and disruption. This finding seems to align with the requirements in SHSP and UASI to make annual investments in the sustainment of fusion centers and LETPA. These areas are discussed further in the next chapter.

The primary finding in the analysis of the relationship of funding to capabilities is that it is difficult to determine what impact these investments are having. Some cases where capability increases can be related back to investments; but, the converse is also true in that capability can be lost despite the funding it has received. In the future, it may be beneficial for FEMA to consider ways to make this correlation so that a return on investment can be calculated by capability to understand better the impact these investments are making toward achieving the Goal.

H. DATA SUMMARY TABLE

Table 6 summarizes the analysis of each capability broken out by mission area to provide an overall snapshot of findings. The prior rating column indicates the mode from the 2014 NPR that can be compared with the current rating column representing the mode from the 2018 NPR data. The capability status column indicates whether the capability was increased, centralized, lost, or sustained. As mentioned previously, no capabilities remained the same from 2014 to 2018, and therefore, no capabilities were sustained. The fact that nearly all the capabilities have either increased or centralized suggests that the capabilities are moving in the right direction. Capabilities that centralized lost some high ratings but also decreased in those rating themselves low.

Table 6. Chapter IV Summary Table

Core Capability	Prior Rating	Current Rating	Capability Status
Common Core Capabilities			
Planning	High	High	Increased
Public Information and Warning	High	High	Centralized
Operational Coordination	High	High	Centralized
Prevention/Protection Core Capabilities			
Intelligence and Information Sharing	High	High	Centralized
Interdiction and Disruption	High	High	Lost
Screening, Search, and Detection	Medium	Medium	Increased
Forensics and Attribution	High	Medium	Centralized
Physical Protective Measures	High	Medium	Centralized
Risk Management for Protection Programs and Activities	High	Medium	Centralized
Access Control and Identity Verification	Low	Low	Increased
Supply Chain Integrity and Security	Low	Low	Lost
Cybersecurity	Low	Low	Increased
Mitigation Core Capabilities			
Threats and Hazards Identification	High	High	Increased
Risk and Disaster Resilience Assessment	High	High	Increased
Community Resilience	High	High	Increased
Long-term Vulnerability Reduction	Low	Medium	Increased
Response Core Capabilities			
Public Health, Healthcare, and Emergency Medical Services	High	High	Increased
On-Scene Security, Protection, and Law Enforcement	High	High	Centralized
Operational Communications	High	High	Centralized
Situational Assessment	High	High	Centralized
Environmental Response/Health and Safety	High	High	Centralized
Fire Management and Suppression	High	High	Increased
Critical Transportation	High	High	Centralized
Mass Search and Rescue Operations	High	High	Increased
Fatality Management Services	Low	Bimodal ⁹⁷	Increased
Mass Care Services	Low	Medium	Increased
Logistics and Supply Chain Management	Medium	Medium	Centralized
Infrastructure Systems	High	Medium	Lost
Recovery Core Capabilities			
Economic Recovery	Low	Low	Centralized
Health and Social Services	Low	High	Increased
Housing	Low	Low	Centralized
Natural and Cultural Resources	Low	Low	Increased

⁹⁷ The percentage of states that rated themselves high and low was identical in the 2018 NPR. Given the mode methodology for assigning capability ratings, this rating was an outlier.

I. DATA RELIABILITY CONCERNS

Many questions also remain regarding the reliability of the data used to aggregate the NPR. The primary concern with the data provided by the NPR is that it is based on the SPR, which is a self-assessment completed annually by each state. These self-assessments may be based on comprehensive and consistent data, but no process exists for ensuring so.⁹⁸ This self-assessment process raises serious concerns over its ability to be objective, which also brings in to question its credibility.⁹⁹ The other aspect that may skew results from state to state is the THIRA process and the variability in developing capability targets. These capability targets are what the states use to rate themselves within the SPR. These targets can potentially be adjusted year to year as well. Given that each state may vary in its hazards of concern, desired outcomes and potential impact, substantial differences may likely occur between the goal that each state is trying to reach through the lens of each individual core capability.

J. CONCLUSION

On the surface, it appears that the system used to denote the nation's progress toward meeting the Goal is indicating that some progress has been made since 2014 in the form of capabilities being increased. However, it becomes concerning when considering that many of the capabilities being centralized or lost are also the capabilities receiving the most grant funding. The funding data is based on funding amounts attributed to each capability in the 2017 and 2018 NPRs. Missing from this research is any indication as to how the funding impacted the capability to which it was attributed because this data does not exist. Although concerns have been raised about the reliability of the NPR and the process used to aggregate this data, the system in place and the findings associated with it must be considered indicative of the progress the country has made in reaching the Goal. In the next chapter, the preparedness grants programs are examined further.

⁹⁸ Jerome H. Kahan, "Preparedness Revisited: W(h)ither PPD-8?," *Homeland Security Affairs* 10, art. 2 (February 2014): 6, <https://www.hsaj.org/articles/252>.

⁹⁹ Kahan, 6.

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V. NATIONAL PREPAREDNESS GRANTS AND THE STRATEGIC INTENT OF THE NATIONAL PREPAREDNESS GOAL

A. INTRODUCTION

The grant programs that comprise the HSGP were authorized by Congress with the passage of the Act. This Act created DHS and required the establishment of grant programs designed to assist with state, local, tribal and territorial efforts in combatting terrorism.¹⁰⁰ The additional programs afforded by the Act made FEMA the largest provider of preparedness funding.¹⁰¹ This Act was amended with the passage of the Homeland Security Grant Enhancement Act of 2003, which provided additional guidance on the administration of the grants.¹⁰² The grant programs associated with this Act have been consolidated or cancelled over the years as the program has evolved.

As of 2020, 10 programs make up FEMA's HSGP: the SHSP, the UASI, OSG, Tribal Homeland Security Grant Program (THSGP), Nonprofit Security Grant Program (NSGP), Transit Security Grant Program (TSGP), Intercity Bus Security Grant Program (IBSGP), Intercity Passenger Rail (IPR) Program—Amtrak, Port Security Grant Program (PSGP), and EMPG. All these, with the exception of the EMPG, require that proposed projects have a nexus to terrorism preparedness. This nexus is required due to the language in the authorizing statute, which is the Act. The purpose of this chapter is to examine all aspects of these programs to discover ways the programs can be adjusted to align better with the strategic intent of the Goal.

B. METHOD

The analysis for this chapter involves the examination of three areas. These areas include the authorization for the various programs, annual congressional appropriations,

¹⁰⁰ Department of Homeland Security Appropriations Bill, 2012, H.R. Report 112–91, 112th Cong., 1st sess. (2012), 57, <https://www.congress.gov/congressional-report/112th-congress/house-report/091>.

¹⁰¹ Federal Emergency Management Agency, *2019 National Preparedness Report*, 8.

¹⁰² Homeland Security Grant Enhancement Act of 2003, S. 1245, 108th Congr., 1st sess. (2004), 1, <https://www.congress.gov/bill/108th-congress/senate-bill/1245>.

and the return on investment realized after the grant has been awarded. For a grant to come into existence, Congress has to create a law authorizing the program. These authorizations contain language that informs the subsequent guidance that tells recipients what the program is designed to accomplish and what activities are eligible. This research involves an examination of the language within the statutes that originally authorized the preparedness grants along with the original grant guidance. These original documents are then compared with subsequent authorizations and guidance to determine if Congress made any changes to these statutes that may allow the grant to be adjusted to align with the Goal.

In addition to the authorization that must be made to institute a grant program, Congress must also appropriate funds annually to finance the programs. These appropriations are indicative of the perceived value and prioritization of the programs in Congress, which involves the analysis of the appropriation levels since the inception of the Goal to ascertain how or if funding levels have changed over time. This aspect, coupled with findings from the NPR in the previous chapter, can establish a linkage between the level of appropriation and the progress made toward building capability since 2013.

To understand the value of these grant programs fully, the return on investment must also be considered. The return on investment indicates the benefits the nation is receiving in relation to the appropriations discussed previously. The process of calculating return on investment can simply be based on the value of cost share where a recipient of federal funds is required to match the federal amount with non-federal funds. More complex calculations also involve the value of the items purchased with the grant funds by the ongoing benefit they provide to the recipient, their regional partners, or the nation. This research involves locating documents that denote the return on investment for the respective grant program. This research, coupled with the history of congressional appropriations, provides an overall picture of the strengths and weaknesses of FEMA's preparedness grants as they relate to the achievement of the Goal.

C. AUTHORIZATIONS

The introduction of the Goal in 2011 represented a new benchmark for preparedness grants to achieve. The Goal provides a process via the THIRA and the SPR

for each state to utilize in determining the areas of responsibility the grant funds address. This new concept was rolled out in the Fiscal Year 2012 guidance for the HSGP. Despite this new all-hazards approach, each project funded by HSGP is still required to be tied to the nexus of terrorism given that the authorizing statute, the Act, remained the same. FEMA's Grants Program Directorate uses the definition of terrorism set forth in the Act given that it defines the purpose of the program. This definition of terrorism from the Act is:

any activity that involves an act that (A) is dangerous to human life or potentially destructive of critical infrastructure or key resources; and is a violation of the criminal laws of the United States or of any State or other subdivision of the United States; and (B) appears to be intended to intimidate or coerce a civilian population; to influence the policy of a government by intimidation or coercion; or to affect the conduct of a government by mass destruction, assassination, or kidnapping.¹⁰³

While no set criteria for determining whether a nexus to terrorism exists, this definition is used as the primary guide when proposed projects are reviewed for funding. It is understood that an expenditure may have a dual purpose and support response to another type of disaster; however, the primary purpose must have a clear nexus to terrorism. Two instances have occurred since the introduction of the Goal where the HSGP guidance has referenced that capabilities associated with the response to catastrophic events can also be addressed with HSGP funding. This guidance was in the Fiscal Year 2013 Funding Opportunity Announcement and the Preparedness Grants Manual released in April 2019. The most recent iteration released in April 2019 states, "SHSP and UASI funding can be used to enhance preparedness for other catastrophic events e.g. hurricanes and wildfires, as long as such use of the funds has a nexus to preventing, preparing for, protecting against, and responding to terrorism."¹⁰⁴ Although this statement represents a movement to address other capabilities outside the areas of prevention and protection, the investment justification for the project must still be tied to terrorism preparedness.

Homeland Security Act of 2002 (as Amended), 9.

¹⁰⁴ FEMA Grant Programs Directorate, *FEMA Preparedness Grants Manual* (Washington, DC: Federal Emergency Management Agency, 2019), 6.

It is clear that some aspects of terrorism preparedness resonate outside the areas of prevention and protection. Most of the capabilities associated with mitigation, response, and recovery can be attributed to the response and recovery to a terror attack as much as the response and recovery to a natural hazard event. That said, some limitations exist with regard to the required nexus of terrorism and the state's ability to use preparedness grant funds to address all the core capabilities. Within each of the core capabilities, elements of planning, organization, equipment, training, and exercises are necessary to meet the capability target. The main limitation is simply the capacity for the state to attribute its needs to a terror-related incident based on one or more of these elements within the parameters of the definition outlined in the Act. An example of a grant investment tied to terrorism that may have benefits responding to other hazards is the Boston urban area purchased a patient tracking system to be used on mass-casualty incidents through the UASI program.¹⁰⁵ No question remains that a nexus to terrorism resides with this system; however, its use can be applied to mass casualty incidents stemming from any type of hazard event.

An example of where the nexus to terrorism requirement was limiting involves a request from a state to which the author was party.¹⁰⁶ In this instance, the state was requesting to use SHSP funds to purchase single use personal protective equipment kits to protect first responders from being exposed to fentanyl in response to the ever-growing opioid crisis gripping the entire nation. The request was denied on the basis that the state could not provide a nexus to terrorism. However, the same state had just experienced a major mass casualty incident where more than 70 people became ill or overdosed after being sold marijuana laced with fentanyl.¹⁰⁷ Despite the fact that it was not a terror attack, it would seem that a case could have been made that a terrorist could have perpetrated an

¹⁰⁵ Peter T. King, Yvette D. Clarke, and Brian Higgins, *Stakeholder Assessments of the Administration's National Preparedness Grant Program Proposal* (Washington, DC: Government Printing Office, 2014), 3.

¹⁰⁶ The author is a Lead Grants Management Specialist in FEMA Region One and was included in the request to FEMA HQ to use the SHSP funds for the purpose indicated.

¹⁰⁷ Scott Neuman, "Dozens Overdose in Connecticut Park on Tainted Synthetic Marijuana," NPR, August 16, 2018, <https://www.npr.org/2018/08/16/639133355/dozens-overdose-in-connecticut-park-on-tainted-synthetic-marijuana>.

attack using a similar method. In this case, the project met the criteria for Part A of the Act definition but did not meet Part B because it did not, “influence the policy of a government by intimidation or coercion; or to affect the conduct of a government by mass destruction, assassination, or kidnapping.”¹⁰⁸ This example is just one of how a nexus to terrorism requirement can be prohibitive to grant recipients using their funds to address their greatest risks.

Along similar lines, recipients of SHSP and UASI funds are required to tie annual investments to the development of fusion centers and LETPA. The 2019 HSGP Notice of Funding Opportunity states, “Per section 2006 of the Homeland Security Act of 2002, as amended, DHS/FEMA is required to ensure that at least 25 percent of grant funding appropriated for grants awarded under HSGP’s authorizing statute are used for LETPA.”¹⁰⁹ A requirement also exists that at least one project identified within the state or urban area’s annual application must be tied to the development or sustainment of their fusion centers.¹¹⁰ Unlike the requirement for LETPA funding, a percentage designated to fund fusion centers is not required. Fusion centers serve as the information-sharing hub within state and urban areas between federal, state, local, tribal, territorial and private sector stakeholders. The funding required for these areas can only be used within the mission areas of prevention and protection. The National Homeland Security Consortium (NHSC) conducted a return on investment study in 2018. The results of this study showed a major increase in the number of hazardous materials teams, incident management teams, and urban search and rescue teams had been established with HSGP funds.¹¹¹ The same study touts improvements to fusion centers and increased coordination through training and exercises.¹¹² Although these needs are critical, they are not specific to terrorism or law enforcement. In fact, nothing in this document referenced any significant returns in the area

¹⁰⁸ Homeland Security Act of 2002 (as Amended), 9.

¹⁰⁹ Federal Emergency Management Agency, Fiscal Year 2019 2019 HSGP Notice of Funding Opportunity, 7.

¹¹⁰ Federal Emergency Management Agency, 14.

¹¹¹ National Homeland Security Consortium, *Homeland Security Grant Return on Investment* (Lexington, KY: National Homeland Security Consortium, 2018), 5.

¹¹² National Homeland Security Consortium, 5.

of LETPA. Some may question if this restriction places limitations on recipients' ability to maximize funding with respect to the strategic intent of the Goal.

Several issues may be prohibitive to moving away from the nexus to terrorism described previously. The first issue is the opinion of the public as it pertains to terrorism. In the wake of 9/11, the percentage of Americans who believed that it was likely or very likely that another terrorist attack would occur resulting in a large number of American casualties was over 70 percent.¹¹³ Similar polls taken as recently as 2013 also indicate that this sentiment has not changed.¹¹⁴ Despite the absence of a major terrorist attack on American soil since 9/11, it is unlikely that Congress would change legislation in a way contrary to the view of over 70 percent of their constituents. The second concern is for the funding associated with these authorizations. If Congress changed the legislation to remove the nexus to terrorism, the question could be raised as to why investments continue to be made at their current levels that could result in subsequent reductions in future appropriations, which could have negative cascading effects on achieving the Goal.

D. APPROPRIATIONS

Another potential limitation is the level of funding currently being applied to the preparedness grant programs. Funding levels have gone from a high of \$3.53 billion in FY 2004 to a low of \$1.439 billion in FY 2013.¹¹⁵ The ebb and flow of funding from the inception of the program to FY 2016 is reflected in Figure 7.¹¹⁶ The funding levels continue to remain closer to the lower amount with the FY 2019 allocation totaling \$1.715 billion.¹¹⁷ It is worth noting that the decrease in funding levels began in relation to the adoption of the Goal.

¹¹³ Mueller, *Chasing Ghosts*, 55.

¹¹⁴ Mueller, 55.

¹¹⁵ Shawn Reese, *Department of Homeland Security Preparedness Grants: A Summary and Issues*, CRS Report No. R44669 (Washington, DC: Congressional Research Service, 2016), 14.

¹¹⁶ Reese, 14.

¹¹⁷ "DHS Announces Grant Allocations for Fiscal Year 2019 Preparedness Grants," Federal Emergency Management Agency, August 2, 2019, <https://www.fema.gov/news-release/2019/08/02/dhs-announces-grant-allocations-fiscal-year-2019-preparedness-grants>.

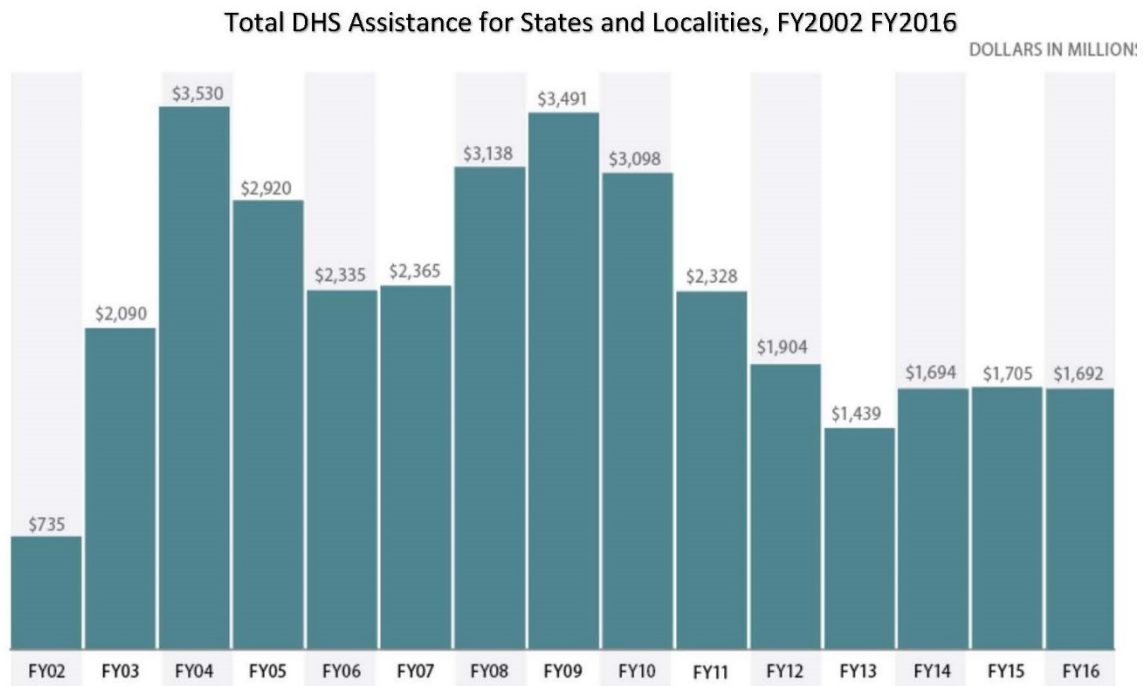


Figure 7. Total DHS Assistance for States and Localities, FY 2002–FY 2016.¹¹⁸

Various schools of thought discuss the reasons behind the drop in congressional appropriations for these programs. The first viewpoint is that after receiving a total of \$52 billion since 2002, the homeland security needs of the states and their jurisdictions would have been met.¹¹⁹ This belief could potentially mean the funding levels have dropped to a level allowing for capabilities to be sustained as opposed to being built. It was expected to take years to secure a nation as open and vast as the United States. It is possible that Congress simply saw the transition to the Goal as an indication that the nation was secure and no longer needed the same level of funding to address capabilities associated with terrorism.¹²⁰ Another explanation for the reduction in funding is the fact that a major terror attack has not occurred on American soil since 9/11. After the attacks on 9/11, the fear of another attack fueled the need to build intelligence and security capabilities, which

¹¹⁸ Source: Reese, Department of Homeland Security Preparedness Grants, 14.

¹¹⁹ Reese, 17.

¹²⁰ Mueller, *Chasing Ghosts*, 13.

resulted in the perpetuation of the homeland security enterprise.¹²¹ With the first major reduction in funding being 10 years post-9/11, it seems plausible that many of those fears may have waned with the absence of a follow-on major attack.

As suggested in Chapter IV, reductions in capability have occurred that can be correlated with the concurrent reduction in funding. In a 2018 survey conducted by the NHSC, states reported experiencing difficulty sustaining capability.¹²² The survey also notes that states are already sacrificing training and exercises to maintain the status quo and expect more substantial future loss as major equipment purchases made using grant funds need to be replaced.¹²³ This being the case, the concept of reducing funds to a level consistent with sustainment is not being realized. In fact, a case can be made that funding should be increased to ensure that state, local, tribal, and territorial entities have the resources necessary to achieve the strategic intent of the Goal.

The requirement for investments to be made in both fusion centers and LETPA is substantial for recipients of SHSP and UASI funding. With congressional appropriations for the programs significantly decreasing since FY 2013, less funding is spread around even though percentages are relative. Based on a 2016 report from DHS, between FYs 2008 and 2015, recipients of SHSP and UASI have expended more than \$4 billion on LETPA, which is more than 40% of the funds allocated.¹²⁴ This finding suggests that grant recipients are investing more than is required in this area, which is likely due to states maintaining funding levels to LETPA despite the significant decrease in overall funding. This number does not include the investments being made in fusion centers. It is conceivable that nearly 50% of funds being allocated through SHSP and UASI are being spent in the areas of prevention and protection, which leaves the remaining 50% of the funding to potentially be used in the areas of response and recovery. This percentage makes the loss of capability in the areas of prevention and protection indicated in the NPR's from

¹²¹ Mueller, 13.

¹²² National Homeland Security Consortium, *Homeland Security Grant Return on Investment*, 14.

¹²³ National Homeland Security Consortium, 14.

¹²⁴ Department of Homeland Security, *Fiscal Year 2008–2015 Law Enforcement Terrorism Prevention Activity Funding* (Washington, DC: Department of Homeland Security, 2016), 1.

Fiscal Year 2013–2018 even more difficult to fathom given the investments being made in these areas.

In contrast to other preparedness grants, the EMPG program is predicated around providing federal funds to states to assist state, local, territorial, and tribal governments in all-hazards preparedness to support the achievement of the Goal.¹²⁵ The primary authorizing statutes of the program, Section 662 of the PKEMRA, as amended, and the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, provide recipients of the EMPG substantial latitude in determining how their funding is to be invested. Similar to the SHSP and UASI, projects identified within annual applications have to be attributed to gaps or needs identified through the THIRA/SPR process.¹²⁶ However, these projects are not required to have a nexus to terrorism. A degree of ambiguity surrounds how the program guidance is applied that allows the program to conform to the state versus the state to the program. When considering the flocculation between the states with relation to the core capabilities and the elements needed to meet the strategic intent of the Goal, this flexibility is critical.

E. RETURN ON INVESTMENT

In August 2018, the NHSC released a study on the return on investment specific to the SHSP and UASI. The purpose of the report was to compare the funds spent since the inception of the programs to the capability built as a result of this spending. The study was conducted through a survey of 40 states. The results of the survey indicated that for every dollar spent, the median return was \$1.70.¹²⁷ Recipients of these programs do not have any cost share requirements. The report touts the development of specialized teams, the maturation of fusion centers, and the enhancement of multi-jurisdictional coordination as some of the main benefits of the spending within these programs.¹²⁸

¹²⁵ Federal Emergency Management Agency, *FY2019 EMPG Notice of Funding Opportunity*, 3.

¹²⁶ Federal Emergency Management Agency, 2.

¹²⁷ National Homeland Security Consortium, *Homeland Security Grant Return on Investment*, 4.

¹²⁸ National Homeland Security Consortium, 5.

Cost share is an element that differentiates the EMPG from its preparedness grant counterparts. Recipients of EMPG are required to contribute one dollar for every federal dollar spent through the program.¹²⁹ For FY 2019, EMPG was funded at \$350,100,000.¹³⁰ With the required cost share, this number equates to a total investment of \$700,200,000. Once this unique feature of EMPG is brought into the equation, it is the highest funded program of the grant programs that make up the HSGP. This being the case, it may be worth considering a cost share for some or all of the other programs in HSGP as a method of addressing the funding shortfalls in congressional appropriations since 2013.

No publicly published document has been produced to study the return on investment for EMPG. However, it can be assumed that a similar return results as described in the NHSC report. That said, these perceived returns, along with the cost share requirement proscribed for EMPG, means the overall return on investment may be quite high. Using the 2019 appropriation for HSGP of \$1,095,000,000, and applying the return on investment of \$1.70, the result is \$1,861,500,000 realized. For EMPG, using the 2019 appropriation of \$350,100,000, and adding the cost share, which doubles that amount to \$700,200,000, and then using a similar equation for return on investment, the final tally for EMPG is \$1,190,340,000, which is nearly a million dollars more than the HSGP appropriation with only a third of the federal funding spent.

F. CONCLUSION

In conclusion, it can be ascertained that some slight modifications to the legislative aspects and guidance language to help the HSGP better align with the Goal have been made to allow states desiring to utilize their grant funding in the areas of response and recovery to all-hazards but under the pretense of terrorism preparedness. Despite these apparent concessions and the prevalence of natural disasters, HSGP recipients are still heavily investing in the areas of prevention and protection. As mentioned in the last chapter, minimal gains have been made in the capabilities that make up these mission areas despite the heavy investments being made. Thus, it seems worth considering applying aspects of

¹²⁹ Federal Emergency Management Agency, *FY2019 EMPG Notice of Funding Opportunity*, 7.

¹³⁰ Federal Emergency Management Agency, 5.

the long-standing EMPG program to the HSGP. This application includes a holistic all-hazards approach to provide additional flexibility without the nexus to terrorism to allow recipients simply to use the funds to meet their needs without having to be creative with their investment justifications. The cost-share and ultimate return on investment associated with EMPG should also be considered for application within HSGP. Taking the \$1,095,000,000 awarded in 2019, and doubling that to \$2,190,000,000, and then applying the return on investment from the NHSC report, the \$3,723,000,000 can go a long way to filling the gap left by the reduction in congressional appropriations.

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VI. THE ATTEMPT AT CONSOLIDATION

In February 2002, DHS and the FEMA proposed the creation of the NPGP. This proposal suggested that 16 of the DHS preparedness grant programs be consolidated into one program. The purpose of the NPGP was to:

Focus on the development and sustainment of the core capabilities identified in the National Preparedness Goal; Utilize the capability estimation process employed by applicants and verified by DHS to determine capability and resource deficiencies to inform the competitive process and; Build a robust national preparedness capacity based on cross-jurisdictional and readily deployable state and local assets.¹³¹

The NPGP, as proposed, would be granted to and administered by the states and territories. These awards would be sub-granted by the states based upon needs and gaps identified in risk assessments conducted by the jurisdiction where a project would be implemented. In addition, the states would be required to establish a peer review process to prioritize awards based on how the project would build or sustain the current capabilities and address gaps identified. The state would also have to ensure that the result of the proposed project could be weighted as a national resource that would be beneficial to the community, the region, and the state.¹³² This chapter examines the proposed NPGP, the legislation, and subsequent congressional testimony to determine what can be gleaned toward achieving the strategic intent of the Goal.

In a prepared statement provided to Congress on June 25, 2013, FEMA Deputy Administrator, Tim Manning, stated, “creating this program would create a robust national network of capabilities, eliminate redundancies and make the most of our limited resources, while strengthening our ability to respond to evolving threats across America.”¹³³ In the same hearing, John Madden, the President of the National Emergency Management

¹³¹ Department of Homeland Security, FY2013 National Preparedness Grant Program Vision Document, 1.

¹³² Department of Homeland Security, 4.

¹³³ Mark Begich et al., *Are We Prepared? Measuring the Impact of Preparedness Grants since 9/11* (Washington, DC: Government Printing Office, 2013), 46.

Association (NEMA), submitted a statement on behalf of NEMA and the Governors Homeland Security Advisors Council (GHSAC) in support of the program concept but with reservations. Madden praised the progress that had been made through the homeland security grants to address shortfalls identified after September 11, 2001.¹³⁴ Madden also referenced recent events, such as Hurricane Sandy and the bombing of the Boston Marathon, remind the nation that the hazards that affect communities are always evolving.¹³⁵ Along with his endorsement for a consolidated program, Madden offered a set of guiding principles to assist FEMA as the concept of the NPGP evolves. These principles are to improve flexibility, expand accountability, develop performance metrics, support a skilled workforce, and reaffirm the alliance between stakeholders at all levels of government.¹³⁶

Later in the hearing, prepared statements from representatives from counties, municipalities, and private sector organizations were read in opposition to the NPGP. The majority of the representatives spoke to the impact the homeland security grants, in their current configuration, had on their level of preparedness that included discussions concerning how a consolidated grant program administered by the state could cause the capabilities built over the past 10 years to be eroded away. FEMA was not able to provide specifics on how the funding levels these jurisdictions had been receiving would be affected under the proposed program. It was this uncertainty that resonated with Congress, which resulted in the NPGP not being considered.

The NPGP was proposed again in 2014 to be included in the FY 2015 budget. A similar testimony was given on behalf of FEMA by Administrator Craig Fugate. Despite making changes to the legislation in response to local concerns from the prior year, the NPGP met with the same fate. One of the more compelling statements was made by Mayor Steven Fulop of Jersey City, NJ. He said:

The NPGP proposal rejects the pragmatic regionalist approach to disaster and emergency management in favor of a statewide managed individualized

¹³⁴ Begich et al., 76.

¹³⁵ Begich et al., 76.

¹³⁶ Begich et al., 76.

project-based approach like those characteristics of other block grant programs in which local governments compete for resources. The critical key to emergency management is cooperation, not competition, this proposal fosters the inverse of a desired governmental result.¹³⁷

Fulop went on to discuss some of the disaster response successes the city had realized as a result of the DHS preparedness funding they had received over the past 10 years, and how future responses could be impacted without federal funding.¹³⁸ Similar to the first iteration, the NPGP would never leave the committee.

The NPGP would never be realized. However, it does provide some insight into the concerns FEMA had with regard to the programs aligning with the Goal and reducing the redundancy associated with some of the preparedness grants. It also provides insight to the concerns UASI recipients had with consolidating the UASI program into one state-administered program. In a response to questions from the U.S. House of Representatives, Subcommittee on Emergency Preparedness, Response, and Communications, Committee on Homeland Security, FEMA stated that the NPGP would remove the terrorism nexus from the programs, which expanded their scope to allow recipients to meet the strategical intent of the NPGP better.¹³⁹ Recipients of the UASI funding were included. In addition, FEMA indicated redundancy would be reduced in the form of one guidance, decreased monitoring requirements while increasing monitoring efficiency, and the elimination of numerous and conflicting statutory requirements.¹⁴⁰ FEMA also planned to retain the 80% pass-through requirement to local units of government while eliminating the 25% set aside for LETPA.¹⁴¹ Ultimately, FEMA's vision for the NPGP was to provide the states with a program that would allow them the flexibility to allocate dollars to their unique areas of greatest risk.

¹³⁷ Steven Fulop, Statement by the Honorable Steven Fulop Mayor of Jersey City, NJ before the Subcommittee on Emergency Preparedness, Response and Communications Committee on Homeland Security U.S. House of Representatives (Washington, DC: U.S. House of Representatives, 2014), 2.

¹³⁸ Fulop, 3.

¹³⁹ King, Clarke, and Higgins, Stakeholder Assessments of the Administration's National Preparedness Grant Program Proposal, 3.

¹⁴⁰ King, Clarke, and Higgins, 4.

¹⁴¹ King, Clarke, and Higgins, 7.

In a prepared statement to the same committee, Kris Eide, Director of Homeland Security and Emergency Management for the State of Minnesota, argued on behalf of the NPGP. Eide stated that the NPGP would provide the flexibility necessary to address the changing hazard environment while improving the ability to sustain prior investments and ensuring they were made based on statewide and regional priorities.¹⁴² Eide argued that the preparedness grant programs in their current state did not support efforts to align state and local capability with national priorities.¹⁴³ In alignment with the FEMA stance, Eide said that the NPGP would improve program effectiveness, accountability, and transparency while reducing redundancy.¹⁴⁴

On the local side, mayors and public safety officials representing predominantly urban areas expressed their many concerns to the Committee. The primary concern was the uncertainty of the funding these urban areas would receive under a state administered program. David Riggs, the Director of the Department of Public Safety for the City of Indianapolis, Indiana expressed concern over the elimination of the 25% set aside for LETPA and the impact it would have on local jurisdictions' ability to implement prevention activities.¹⁴⁵ Chief William Metcalf of the North County Fire Protection District in California was representing the International Association of Fire Chiefs. Metcalf expressed concerns with the consistency of the THIRA process and the lack of local involvement. Given that investments under the NPGP would be made using the information derived from this process, the lack of local involvement could have a detrimental impact on local funding.¹⁴⁶ In addition, Metcalf suggested that consolidating the programs could affect the capabilities that had been built with UASI funding since the program's inception.¹⁴⁷

In sum, the failure of the proposed NPGP was not due to it being a bad concept. Its failure was primarily due to the uncertainty that existed in the infancy of the proposal that

¹⁴² King, Clarke, and Higgins, 22.

¹⁴³ King, Clarke, and Higgins, 23.

¹⁴⁴ King, Clarke, and Higgins, 23.

¹⁴⁵ King, Clarke, and Higgins, 38.

¹⁴⁶ King, Clarke, and Higgins, 39.

¹⁴⁷ King, Clarke, and Higgins, 39.

did not clearly articulate how UASI recipients would be affected by the consolidation. When proposing changes to a funding mechanism as significant as UASI, a solution has to be built into the guidance to ensure that some degree of funding remains in place to address these higher risk municipalities. The flexibility that would have been provided to the states to address their individual threats and hazards would have functioned much like the EMPG discussed earlier. The nexus to terrorism identified as a potential limitation would have no longer been an issue but states could still address the hazard of terrorism given the all-encompassing nature of the proposed NPGP to include the option to fund LETPA at a level consistent with the identified threat to each individual state. One consideration for the future of the HSGP programs would be simply to eliminate the nexus to terrorism. However, eliminating this nexus to terrorism could also place those same grant programs at risk as Congress could sunset these programs in favor of other all-hazards related programs, such as EMPG, but funded at much lower levels. The loss of this funding would leave substantial voids in the nation's ability to achieve the Goal, which makes the alleviation of the nexus not worth the risk.

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VII. CONCLUSION

In sum, the analysis for this thesis has shown that FEMA's national preparedness grants are allowing the nation to make slow but steady progress toward achieving the Goal of a secure and resilient nation, in spite of challenges, such as assigning a nexus to terrorism and the decline of congressional appropriation levels. The following paragraphs provide a summation of each analysis chapter.

Chapter III provided an analysis of the 32 capabilities outlined in the Goal to determine if the nexus to terrorism associated with most of FEMA's national preparedness grant programs impact the strategic intent of the Goal. **The main takeaway from this analysis is that the nexus to terrorism required by most of the preparedness grant programs has minimal limitations on where a grant recipient may want to invest their funds toward the achievement of the Goal.** This takeaway is primarily due to the majority of capabilities applying to all-hazards to include terrorism. However, between the HSGP Guidance that requires this nexus to a real or perceived threat of terrorism and the definition of terrorism set forth in the Act, some limiting factors can possibly impact where potential investments can be made.

Chapter IV examined the results of the NPR to determine how far the nation had progressed toward achieving the strategic intent of the Goal. **An analysis of the NPRs from 2014 to 2018 indicated that most of the core capabilities have had modest increases or are at least sustaining.** However, this progress could not be correlated with funding investments in capability as some capabilities, such as operational communications, were lost despite large investments. Capabilities associated with terrorism have seen modest improvements but funding data from 2017 and 2018 indicate that FEMA's preparedness funding is being heavily invested in areas that address all-hazards despite the required nexus to terrorism. The nation has realized a loss in the housing capability and difficulty sustaining the common area of operational coordination, which impacts every facet of homeland security and emergency management. This loss has resulted despite heavy investments, but the challenges associated with these examples also coincide with the unprecedented 2017-disaster season.

Chapter V looked at FEMA's preparedness grants and how they could be adjusted to align better with the strategic intent of the Goal. **The primary concerns highlighted in this chapter are the risks associated with declining appropriations and the limitations that the nexus to terrorism has on the ability of grant recipients to address all risks.** Many of programs were born from the attacks on 9/11. Nearly 20 years later, these programs remain largely unchanged despite the introduction of the Goal in 2011 and the absence of a major terror attack in the United States since their inception. It can be argued that the lack of terror attacks is attributable to the investments made in preventing them. However, the minimal investments being made in prevention capabilities as discussed in the previous chapter seem to contradict that school of thought. This absence of terror has also precipitated the decrease in congressional funding for these programs. These cuts in the annual amount of funding allocated to the programs is having many cascading effects including the loss or foreseeable loss of capability, increased spending in the LETPA area to maintain earlier funding levels, and the inability to maintain expensive equipment purchased when the appropriation level was much higher. Another finding was that the language in the statute authorizing these programs created some limitations in how the required nexus to terrorism could be applied. The example of the PPE to protect first responders from fentanyl exposure highlights how this limitation could prohibit a state or urban area from addressing a significant risk. The return on investment was also considered for these programs through the lens of cost share in the case of EMPG and in the benefits derived as they related to cost in the case of SHSP and UASI.

Chapter VI analyzed the proposed NPGP. This program was FEMA's attempt to reorganize and consolidate its preparedness grant programs to align with the strategic intent of the Goal upon its inception. This analysis was conducted to determine what could be gleaned from FEMA's vision for the program and the reasons it ultimately failed. Even though this initiative did fail, the intent provided some indications of how FEMA planned to change the structure of the programs. **The primary takeaway from this chapter is that FEMA's vision of the best way to adjust the programs to achieve the Goal is the elimination of the nexus to terrorism and the consolidation of the programs to align better with the all-hazards focused Goal.** Despite the intent, the NPGP ultimately failed

due to the uncertainty expressed by UASI recipients regarding the loss of funding and the potential risks to the programs posed by the disassociation to terrorism.

In sum, the culmination of this research reveals that the relationship between the national preparedness grant programs and the achievement of the Goal are for the most part in alignment but can be improved. The next sections provide a discussion regarding the process for deciding on the recommendations to include those recommendations considered but not put forth.

A. DISCUSSION

The purpose for this section is to discuss ideas related to the findings but which are more speculative in nature.

1. Consolidation of Programs

One of the primary considerations was the concept of consolidation. FEMA's proposed NPGP has significant merit, as well as its intended alignment with the Goal. One option considered by the author was to propose consolidating EMPG and SHSP into one program similar to that of the proposed NPGP along with a 50/50 cost share to provide an all-hazards based grant program focused on allowing the states to invest their funds in building the 32 core capabilities while addressing their greatest risks. The second part of this option was to keep the UASI as a separate program but remove the nexus to terrorism requirement in favor of an all-hazards focus but with the addition of a 25% cost share to allow FEMA to continue funding the urban areas using similar risk methodologies but provide the urban areas more flexibility in building capability and addressing risks in alignment with the Goal.

The primary reason why these concepts did not become recommendations revolves around the potential risk to the programs. The SHSP and UASI currently authorized by the Act likely need some major legislative changes to be changed to the degree suggested. One of the issues found when discussing appropriations in Chapter V was the significant drop in appropriation levels with the introduction of the all-hazards related Goal. Asking Congress to change programs centered on terrorism to address all-hazards as suggested

could create a similar situation and put the current funding levels in jeopardy. That said, the programs could be slightly adjusted in some ways to help them better align with the strategic intent of the Goal. Those ideas are discussed in the next section.

2. Applying a Cost Share to SHSP and UASI

Another concept to consider is to apply a cost share to the largest funded of the HSGP programs; SHSP and UASI currently do not require one. One of the major issues discussed in Chapter V was the diminishing appropriation levels for all the HSGP related programs. Applying these cost shares to these programs would bring the funding amounts to levels not seen since 2011. As with the prior recommendations made, this funding would go a long way toward bridging the funding gap created by decreased appropriation levels. In the case of SHSP, the recommendation is to apply a similar 50/50 cost share as required by EMPG. The 2019 appropriation for SHSP was \$415 million. If the cost share is applied, the total amount of funding applied to this area will be \$830 million. If the current return on investment \$1.70 is applied to the federal share, an additional \$290 million can be realized. For the American taxpayer, it means spending \$415 million but getting over \$700 million in return when the cost shares is added in. An issue associated with the new cost share requirement will be the potential strain on the state budgets. However, many aspects of the state budgets are not now being used as a match for EMPG. The combination of these two programs would allow a vaster application of the state's current general fund toward matching these federal investments.

Given that the resources of the urban areas are likely more limited than the states, a more attainable cost share of 25% is recommended for UASI. Based on the 2019 appropriation of \$590,000,000, a 25% cost share would increase the total investment to \$737,500,000. If the past return on investment of 1.70 is also applied, an additional \$413,000,000 can be added to bring the total to over \$1 billion annually.

The main reason the concept of a cost share is not a recommendation of this thesis is that it did not evaluate the potential negative impacts it could have on the budgets of the states or urban areas. Should this concept be considered in the future, it would require legislative changes, which in turn, would invite the opinions of these stakeholders on

whether the impact on their budgets would outweigh the return on investment a cost share would bring.

3. Establish a Process for Determining the Impact of Grant Funding on Capability

The research for this project has revealed that no conclusive data resulted to show the impact that FEMA's preparedness grant funds was having on the Goal. All of FEMA's preparedness grants require that the applicant tie investments to capability gaps identified through the THIRA/SPR process. Grant funding attributed to each capability was summarized in the NPR within the 2018 and 2019 NPRs and was discussed in Chapter IV. This data simply shows in which capabilities FEMA preparedness grant funds are being invested, but the correlation between grant funds and capability ends at this point. What it does not say is how the grant investments increased or sustained the capability. In Chapter IV, it was determined that most of capabilities are increasing or being centralized. However, it was also determined that it was not possible with the data provided to know how FEMA's grant funding contributed to the improvements, which leaves half of the story untold. A process needs to be created to determine if the investments made by the states to address capability gaps actually made a difference.

FEMA recently reincarnated the Regional Catastrophic Preparedness Grant Program (RCPGP). The program, funded at \$10 million, is focused on urban areas and specific to the core capabilities of Housing and Logistics and Supply Chain Management. Coincidentally, both of these capabilities were identified in Chapter IV as having been centralized. Logistics and housing have also been emphasized in the recent guidance for the EMPG. The fact that capability is being lost is an important measurement of which to be aware. Given this measurement, it makes sense that FEMA will place emphasis on these critical capabilities that need to be increased. However, without some process to gauge the outcome of these investments, how will FEMA know if this endeavor is working?

In Chapter V, a connection was made between declining appropriations and the potential loss in capability. Congress consistently asks for proof that these investments are making a difference in the nation's level of preparedness. Evidence in Chapter IV suggests

that the majority of capabilities are being increased but no means were available to relate this increase to the application of grant funds. Enacting a system to do so would bolster FEMA's ability to make its case to Congress and potentially argue for more funding. Simply stating that the nation is steadily working toward achieving the goal without concrete evidence to suggest that FEMA funding is a large part of the reason, can potentially have a negative impact on ensuing appropriations, which in turn, affects future capability levels.

A possible solution can be to ask grant applicants to add the current capability rating for the capabilities identified in their investment justifications along with an explanation of the expected outcome specific to the capability addressed. This process can be monitored by FEMA staff and reported on by the recipient throughout the lifespan of the award. The closeout report would include the capability rating at the conclusion of the grant along with the actual outcome to provide FEMA with rating data along with expected and actual outcomes to aid in the analysis of the impact the funding had on the capabilities addressed. The timing of closeouts can be a potential obstacle for mining this data, as not all awards are closed at the same time. The new RCPGP can be a good test case for this solution due to the narrow focus of the program and less awards to oversee.

The primary reason it is not a recommendation is the development of this process is an area where future research is needed. It is a complex problem, which is likely why it is not already implemented. FEMA is currently in the process of developing a grants management system called FEMA Grant Outcomes that will eventually be the system with which all its 41 grant programs will be managed. This new system could represent a possible clearinghouse where the data needed to facilitate this process could be mined. In the end, capturing this outcome data could be the catalyst for other solutions to align FEMA's preparedness grant programs better with the strategic intent of the Goal.

The concepts proposed as part of this discussion are intended to be considered as ways FEMA's preparedness grant programs can be better conformed to achieve the Goal. However, additional research and consideration into each of these topics need to be done to determine the potential negative effects associated with each scenario. These ideas, whether implemented on their own accord or in some combination, can have a significant

impact on the ability of states and urban areas to invest their grant funds flexibly to address any gap they may have in achieving the Goal. However, a simple change can be made in the language of the statutes that authorize the HSGP to provide this flexibility. This concept is the subject of the recommendation section as follows.

B. RECOMMENDATION

The following recommendation is based on the analysis of trends from the previous chapters.

The language in the Act as Amended, is the reason programs, such as SHSP and UASI, have a nexus to terrorism. However, the Act also establishes the mission of the agency, which extends beyond terrorism into areas, such as all-hazards planning, economic security, civil rights and liberties, and drug trafficking.¹⁴⁸ This recommendation proposes that the language in the Act and subsequent program guidance be changed to reflect a nexus to security or homeland security. The concept of security could be represented in sectors as proposed by Malec or through the lens of lifelines as utilized by FEMA. The language could also be amended to address a nexus to homeland security, which could be aligned under the definition proposed by Bellavita, as it relates to FEMA's 2018–2022 strategic plan. In either case, the amended language coincides with the spirit of the Act while eliminating the required nexus to a specific hazard. In turn, this adjustment will allow grant recipients the flexibility needed to ensure that their limited funding can be freely applied to their areas of greatest risk to include addressing the impacts of the opioid crisis, as noted in Chapter V, as being an area of risk that cannot be addressed through a nexus to terrorism. When considering the sectors of security, the opioid crisis impacts all these security sectors.

This change may still require some legislative adjustments but not to the same extent if the programs were changed to address all-hazards, which may risk future appropriations as discussed earlier. Some concerns have also been raised that moving the focus of the programs from terrorism to security may impact investments being made in terrorism. However, the data provided in Chapter IV clearly indicates that most of the

¹⁴⁸ Homeland Security Act of 2002 (as Amended), 10.

funding is already being directed toward capabilities not solely terrorism focused. Congress to consider this change is not without risk. Legislative changes require discussion that can sometimes bring additional scrutiny and unpredictable results. However, the proposed changes do not take away from the focus on homeland security and the increased flexibility to align the grant programs with the achievement of the Goal outweigh any risks posed by the legislative process.

C. CONCLUSION

The primary takeaway from the research for this thesis is that FEMA's preparedness grant programs and the Goal are mostly aligned. Nearly all the core capabilities outlined in the Goal apply to all-hazards, which allow the Goal to conform to the diversity of programs designed to address the risks faced by the state, local, tribal, and territorial jurisdictions that make up the nation. This flexibility has allowed grant recipients to increase their all-hazards preparedness even with investments requiring a nexus to terrorism.

The advancements in capability have been slow but steady. Analysis in this thesis found that most capabilities have increased or centralized (meaning that middle ratings are growing) between 2014 and 2018. More than half of the grant funds between 2017 and 2018 were invested in the capabilities of planning, operational coordination and operational communications.

Congressional appropriations for FEMA grant programs predicated on preparedness have decreased. It is possible that capability could be lost if these appropriations decline further. However, an increase in the appropriations is unlikely unless FEMA can do a better job of showing Congress the eventual outcome of these investments and their impact on capability, which is beyond simply indicating the capabilities where investments are being made. A new system of measurement, along with loosening the required nexus to terrorism would allow grant recipients to align their investments better with risks and provide Congress with the justification needed to maintain or possibly increase the annual appropriations to FEMA's preparedness grants. This mixture of funding and flexibility will ultimately lead to the achievement of the Goal.

APPENDIX. CORE CAPABILITY PERCENTAGE CHANGES 2014–2018

This appendix is intended to provide additional context to the capability analysis found in Chapter IV. Each section is broken out by mission area and each capability is addressed under the mission area with which it is associated. Under the heading of each capability, the current capability status, whether increased, centralized, or lost, along with the current rating is indicated. In addition, charts are provided showing the change in the percentage of states rating themselves high, medium or low and the change in percentage from 2014–2018. A discussion section also briefly addresses the data indicated by the charts.

A. COMMON CORE CAPABILITIES

1. Planning

Capability Status: Increased

Current Rating: High

Discussion:

The planning capability has experienced some slight improvement since the inception of the Goal as indicated in Figure 8. A four percent decrease has resulted in states reporting themselves low. This loss is reflected in the gain of those rating themselves a medium or high. The NPRs from 2017 and 2018 indicate significant investments were made in planning. Despite spending nearly \$700 million over the course of these two years, the capability has only seen modest gains.¹⁴⁹

¹⁴⁹ Federal Emergency Management Agency, *2019 National Preparedness Report*, 9.

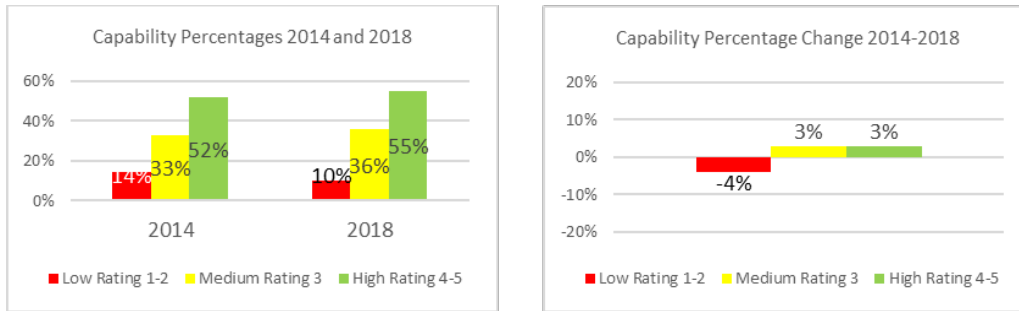


Figure 8. Planning Percentages and Changes 2014 to 2018.¹⁵⁰

2. Public Information and Warning

Capability Status: Centralized

Current Rating: High

Discussion:

The public information and warning capability shown in Figure 9 has experienced a significant gain in the states rating themselves as medium and a small decrease in high and low ratings. It is encouraging to see a capability increasing from low ratings despite a comparably low investment in this area over the past two years.

¹⁵⁰ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

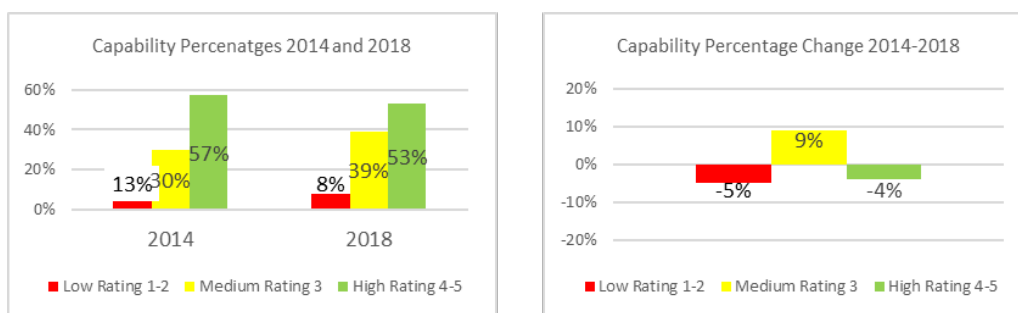


Figure 9. Public Information and Warning Percentages and Changes 2014 to 2018.¹⁵¹

3. Operational Coordination

Capability Status: Centralized

Current Rating: High

Discussion:

Despite its high rating, operational coordination was the most concerning of the three common core capabilities. The operational coordination capability was trending up until the 2017 and 2018 reports, as seen in Figure 10. It is difficult to assess why this high priority, cross-cutting capability would abruptly drop off. One possibility is that capability was lost in this area as a result of the major disasters in 2017 that affected many of the states making these assessments. Overall, the operational coordination capability has seen an increase in states rating their ability to meet their capability target at a medium, which indicates average proficiency. This capability has centralized from decreases in both high and low ratings. Despite the importance of this capability, and the nearly \$600 million in grant funds invested over the last two years, the operational coordination capability has not realized an increase.¹⁵²

¹⁵¹ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

¹⁵² Federal Emergency Management Agency, *2019 National Preparedness Report*, 9.

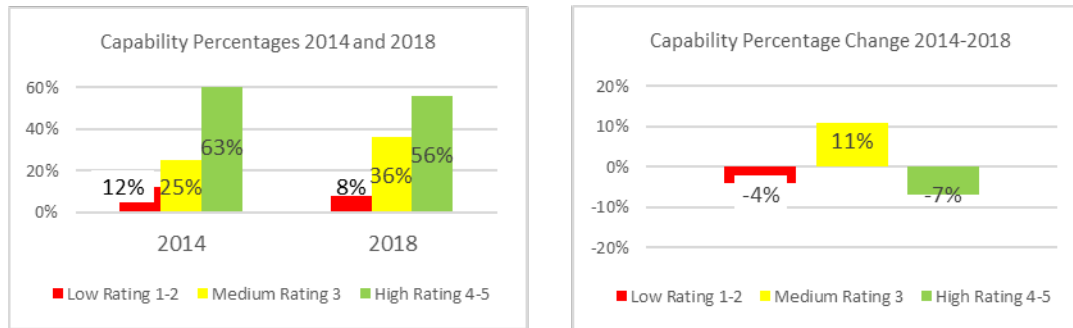


Figure 10. Operational Coordination Percentages and Changes 2014 to 2018.¹⁵³

B. PREVENTION/PROTECTION CORE CAPABILITIES

1. Intelligence and Information Sharing

Capability Status: Centralized

Current Rating: High

Discussion:

The intelligence and information sharing capability has experienced results similar to operational coordination, as demonstrated in Figure 11. Despite its current high rating, the capability has seen its gains in states rating themselves a medium. It has also seen a decrease in ratings for both low and high, which indicates the capability is centralizing. Of the capabilities that make up this mission area, intelligence and information sharing has seen the largest investment of grant funds at nearly \$250 million over 2017 and 2018.¹⁵⁴ However, it has not resulted in an increase of the capability.

¹⁵³ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

¹⁵⁴ Federal Emergency Management Agency, *2019 National Preparedness Report*, 9.

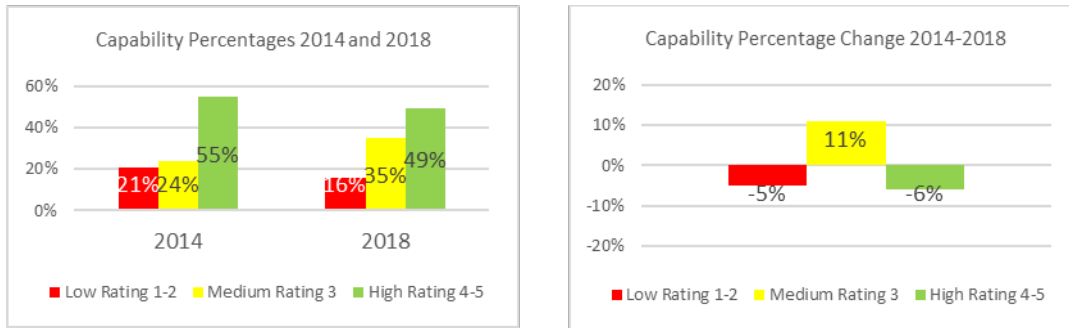


Figure 11. Intelligence and Information Sharing Percentages and Changes 2014 to 2018.¹⁵⁵

2. Interdiction and Disruption

Capability Status: Lost

Current Rating: High

Discussion:

The interdiction and disruption capability has experienced a loss in capability from 2014 to 2018, as shown in Figure 12. Even with the current rating of high, the data indicates that a four percent loss has occurred in states rating themselves high. The increase in medium ratings of medium reflects that capability lost from high has moved to a medium. This capability is the second highest funded at nearly \$200 million over the last two years.¹⁵⁶ The loss, despite the investment, makes it a capability in danger of decreasing to a lower rating.

¹⁵⁵ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

¹⁵⁶ Federal Emergency Management Agency, *2019 National Preparedness Report*, 9.

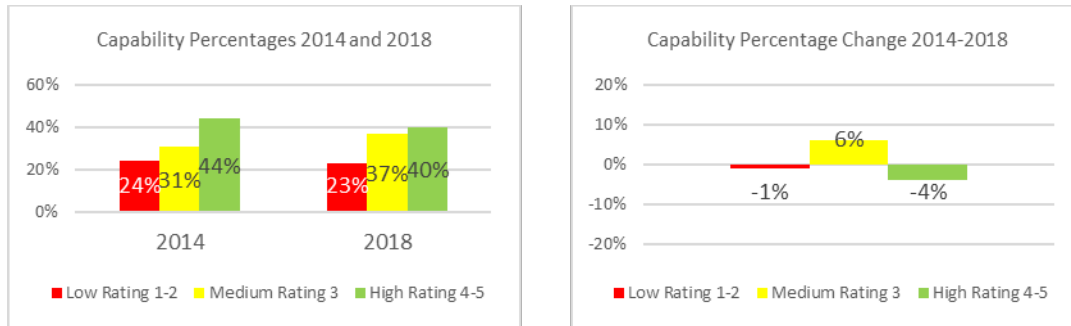


Figure 12. Interdiction and Disruption Percentages and Changes 2014 to 2018.¹⁵⁷

3. Screening, Search and Detection

Capability Status: Increased

Current Rating: Medium

Discussion:

The screening, search and detection capability has seen a significant increase in states rating themselves as a medium, as demonstrated in Figure 13. This increase, coupled with a decrease in ratings of low, is encouraging. A small decrease in ratings of high occurred, but in this context, it is much less concerning than capabilities where gains have been much less.

¹⁵⁷ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

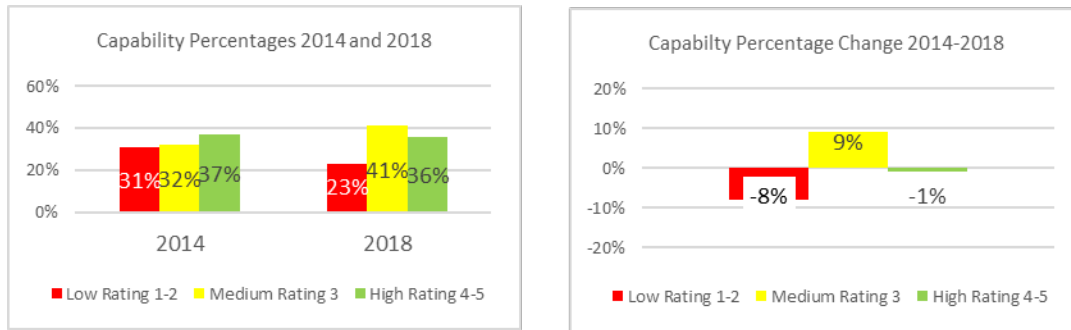


Figure 13. Screening Search and Detection Percentages and Changes 2014 to 2018.¹⁵⁸

4. Forensics and Attribution

Capability Status: Centralized

Current Rating: Medium

Discussion:

Unlike the screening, search and detection capability, forensics and attribution has seen a centralization from low and high ratings, as seen in Figure 14. This centralization has resulted in the capability moving from a high in 2014 to a current rating of medium.

¹⁵⁸ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

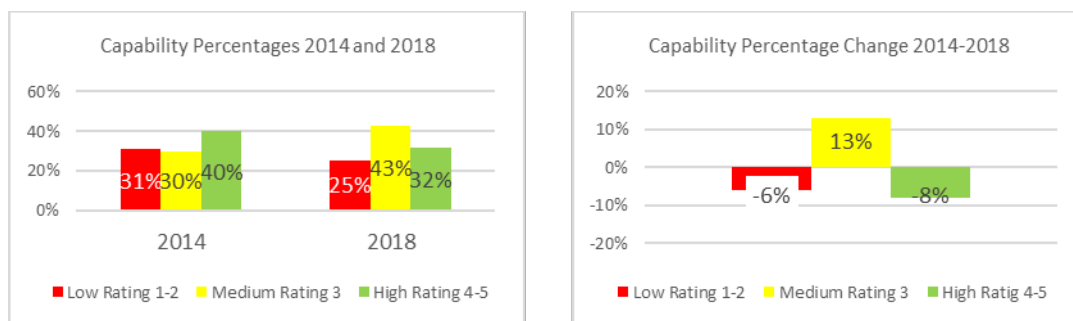


Figure 14. Forensics and Attribution Percentages and Changes 2014 to 2018.¹⁵⁹

5. Physical Protective Measures

Capability Status: Centralized

Current Rating: Medium

Discussion:

Physical protective measures have experienced an increase in states rating themselves a medium. This increase is offset by decreases in both low and high ratings centralizing to medium, as shown in Figure 15. Over the last couple of years, over \$100 million has been invested in this capability.¹⁶⁰ The hope is that these investments will eventually result in increased high ratings.

¹⁵⁹ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

¹⁶⁰ Federal Emergency Management Agency, *2019 National Preparedness Report*, 9.

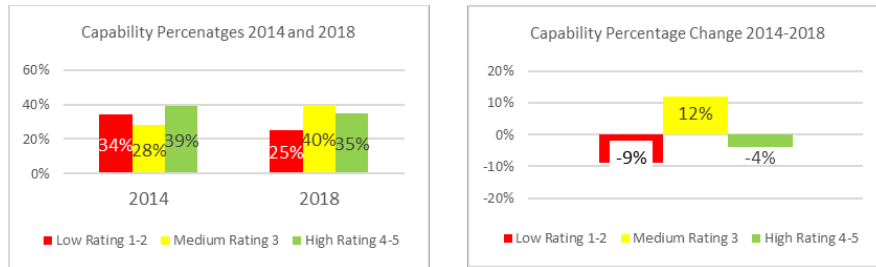


Figure 15. Physical Protective Measures Percentages and Changes 2014 to 2018.¹⁶¹

6. Risk Management for Protection Programs and Activities

Capability Status: Centralized

Current Rating: Medium

Discussion:

The risk management for protection programs and activities capability has seen a large increase in states rating themselves a medium, as indicated in Figure 16. This result is caused by capability centralizing from a loss in percentages from low and high ratings. The loss of the high rating and increase in medium has moved this capability from a high rating in 2014 to a current rating of medium.

¹⁶¹ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

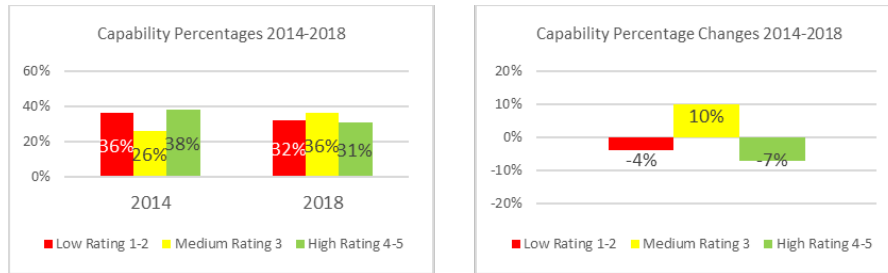


Figure 16. Risk Management for Protection Programs and Activities Percentages and Changes 2014 to 2018.¹⁶²

7. Access Control and Identity Verification

Capability Status: Increased

Current Rating: Low

Discussion:

Access control and identity verification is in a similar situation as risk management for protection programs and activities in that gains have been made in states rating themselves as Low, as shown in Figure 17. However, high ratings have also experienced an increase. Given the current low rating, it is encouraging to see the percentages decrease in this area.

¹⁶² Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

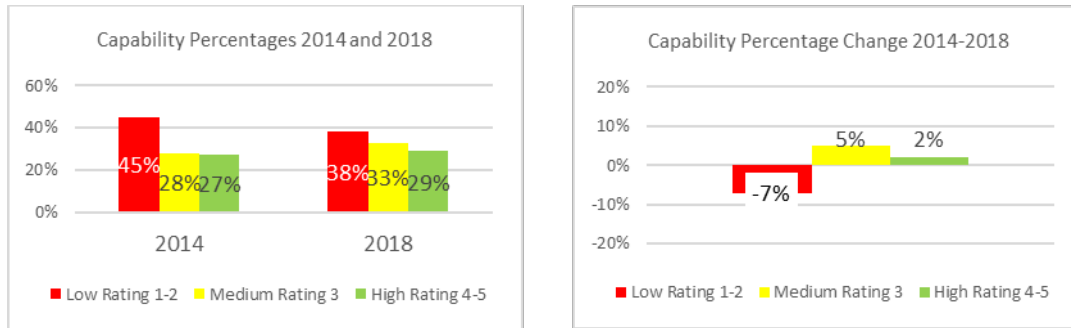


Figure 17. Access Control and Identity Verification Percentages and Changes 2014 to 2018.¹⁶³

8. Supply Chain Integrity and Security

Capability Status: Lost

Current Rating: Low

Discussion:

The supply chain integrity and security is one of the more concerning capabilities in the protection and prevention mission area. Decreases have occurred in states rating themselves high and with an increase in ratings of low, which is indicative of a capability in decline, as indicated in Figure 18. One reason can be the lack of funding focused in this area. Of all the capabilities in this mission area, supply chain integrity and security is the least funded at less than a half million a year.¹⁶⁴

¹⁶³ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

¹⁶⁴ Federal Emergency Management Agency, *2019 National Preparedness Report*, 9.

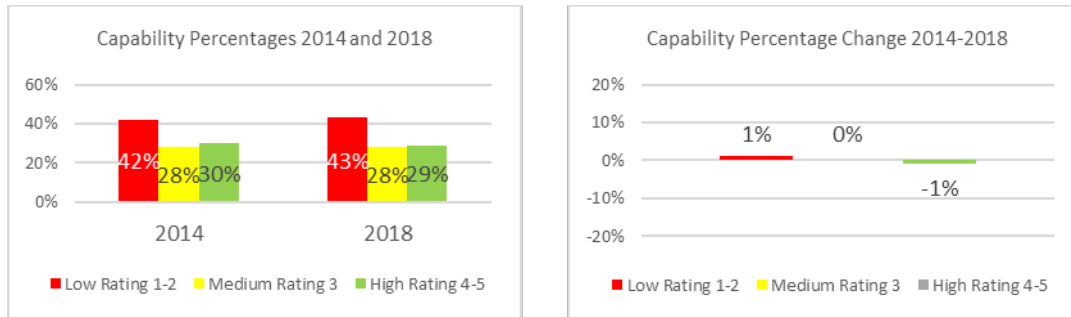


Figure 18. Supply Chain Integrity and Security Percentages and Changes 2014 to 2018.¹⁶⁵

9. Cybersecurity

Capability Status: Increased

Current Rating: Low

Discussion:

The cybersecurity capability has seen significant increases in states rating themselves medium, as seen in Figure 19. When considering that a nearly equal decrease has occurred in ratings of low, the capability has been increased overall despite its current low rating.

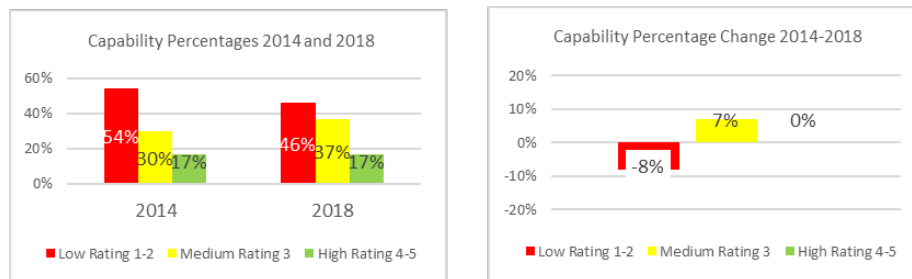


Figure 19. Cybersecurity Percentages and Changes 2014 to 2018.¹⁶⁶

¹⁶⁵ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

¹⁶⁶ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

C. MITIGATION CORE CAPABILITIES

1. Threats and Hazards Identification

Capability Status: Increased

Current Rating: High

Discussion:

The threats and hazards identification capability is rated at high and has experienced a large increase in capability over time, as shown in Figure 20. It is signified by a decrease in states rating themselves a low along with increases in both of the other rating levels.

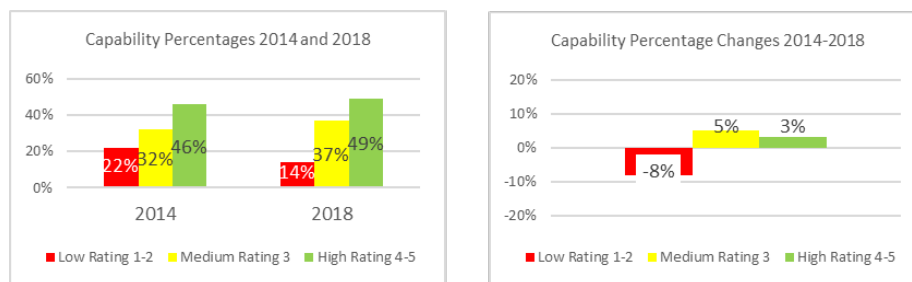


Figure 20. Threats and Hazards Identification Percentages and Changes 2014 to 2018.¹⁶⁷

2. Risk and Disaster Resilience Assessment

Capability Status: Increased

Current Rating: High

Discussion:

The risk and disaster resilience assessment shows decreases in states rating themselves a low or medium along with an increase in ratings of high, as demonstrated in

¹⁶⁷ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

Figure 21. Given this significant increase to offset the decrease in other areas, this capability is on the upswing.

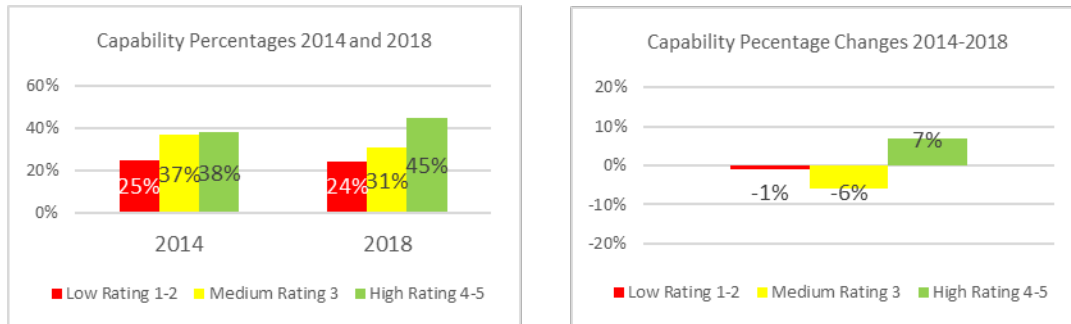


Figure 21. Risk and Disaster Resilience Assessment Percentages and Changes 2014 to 2018.¹⁶⁸

3. Community Resilience

Capability Status: Increased

Current Rating: High

Discussion:

Similar to other capabilities in the mitigation mission area, community resilience has seen a significant increase in capability. The decrease in ratings of low, coupled with increases in both corresponding areas, represents a capability that is moving upward, as indicated in Figure 22. This movement is likely due to the significant amount of funding provided to the states through the various FEMA grant opportunities offered for the area of mitigation. These opportunities include Section 406 mitigation offered through the Public Assistance program and the Hazard Mitigation Grant Program that is also related to major disaster declarations. FEMA has just instituted a new program called Building Resilient Infrastructure in Communities grant, which is in addition to the programs in the Hazard Mitigation Assistance program. Minimal amounts of preparedness funding are

¹⁶⁸ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

being used toward mitigation, which indicates the capabilities are being built utilizing investments from the other more mitigation specific funding mechanisms.

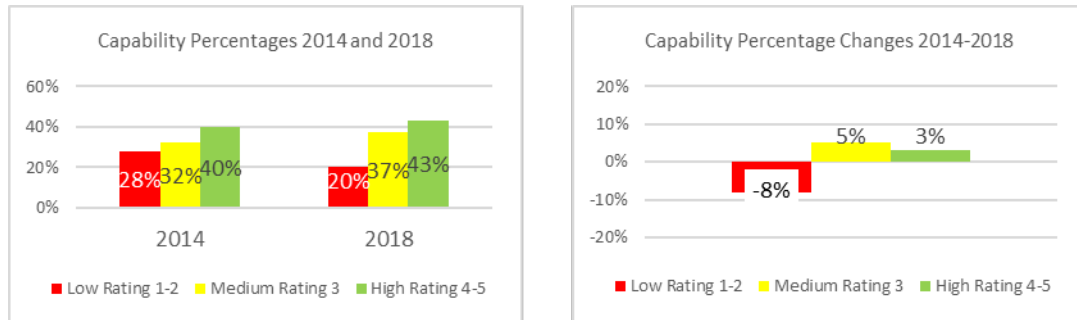


Figure 22. Community Resilience Percentages and Changes 2014 to 2018.¹⁶⁹

4. Long-Term Vulnerability Reduction

Capability Status: Increased

Current Rating: Medium

Discussion:

The long-term vulnerability reduction capability indicates a huge move from states rating themselves low up to medium, as shown in Figure 23. A slight increase has occurred in ratings of high, which indicates this capability is moving in the right direction.

¹⁶⁹ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

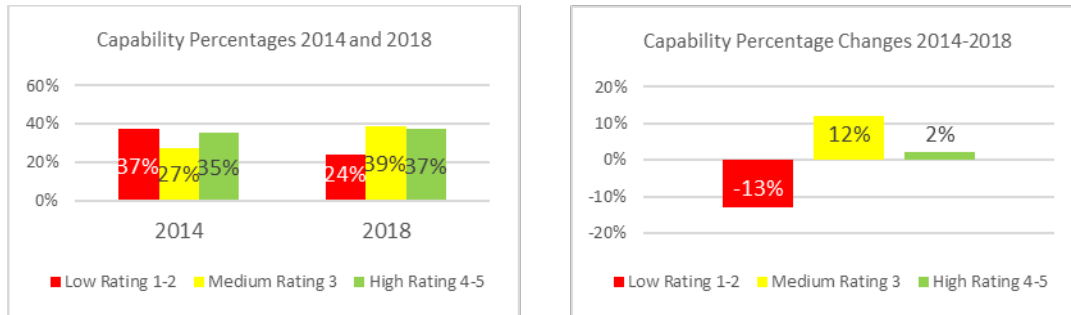


Figure 23. Long-Term Vulnerability Reduction Percentages and Changes 2014 to 2018.¹⁷⁰

D. RESPONSE CORE CAPABILITIES

1. Public Health, Healthcare, and Emergency Medical Services

Capability Status: Increased

Current Rating: High

Discussion:

Public health, healthcare, and emergency medical services were changed in the 2nd edition of the Goal from public health and medical services, as provided in Figure 24. Since then, it has made strides toward becoming a mature high rated capability. Data from 2014 to 2018 indicates that three percent of states have moved their ratings for this capability from a low to a high.

¹⁷⁰ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

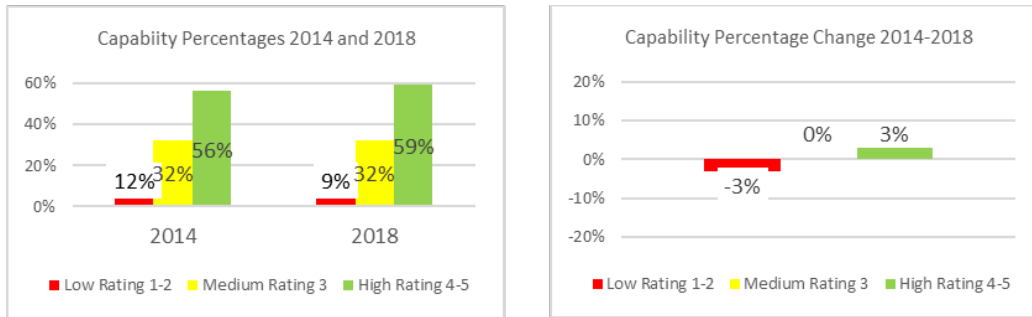


Figure 24. Public Health, Healthcare, and Emergency Medical Services Percentages and Changes 2014 to 2018.¹⁷¹

2. On-Scene Security, Protection, and Law Enforcement

Capability Status: Centralized

Current Rating: High

Discussion:

The on-scene security, protection, and law enforcement capability has seen modest gains in states rating themselves a medium and a small decrease in ratings of low or high, as seen in Figure 25. This capability is being centralized.

¹⁷¹ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

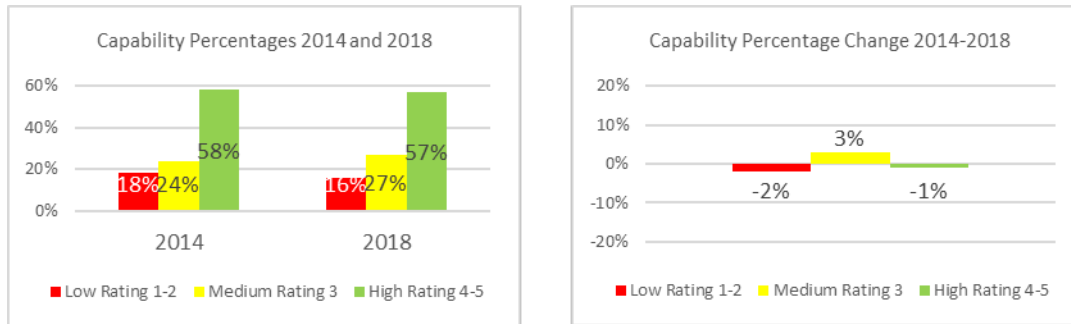


Figure 25. On-Scene Security, Protection, and Law Enforcement Percentages and Changes 2014 to 2018.¹⁷²

3. Operational Communications

Capability Status: Centralized

Current rating: High

Discussion:

The operational communications capability indicates an identical decrease in states rating themselves a low or high. This decrease, as shown in Figure 26, has resulted in an increase in the medium rating percentage. This movement from both high and low to medium is indicative of a centralizing capability. The loss of the high rating is even more concerning when considering nearly \$300 million has been invested in this area over the last two years.¹⁷³

¹⁷² Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

¹⁷³ Federal Emergency Management Agency, *2019 National Preparedness Report*, 9.

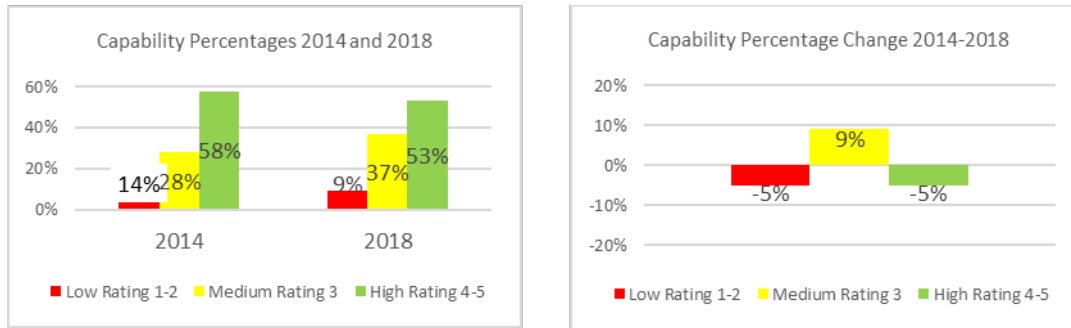


Figure 26. Operational Communications Percentages and Changes 2014 to 2018.¹⁷⁴

4. Situational Assessment

Capability Status: Centralized

Current Rating: High

Discussion:

The situational assessment capability is rated a 4–5. However, the data reflects decreases in states rating themselves a 1 or 2, or a 4 or 5, as seen in Figure 27. These decreases are reflected in a significant increase in ratings of three. Despite these gains, a slight loss of maturity has occurred in the capability denoting that this capability in being maintained as opposed to increased.

¹⁷⁴ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

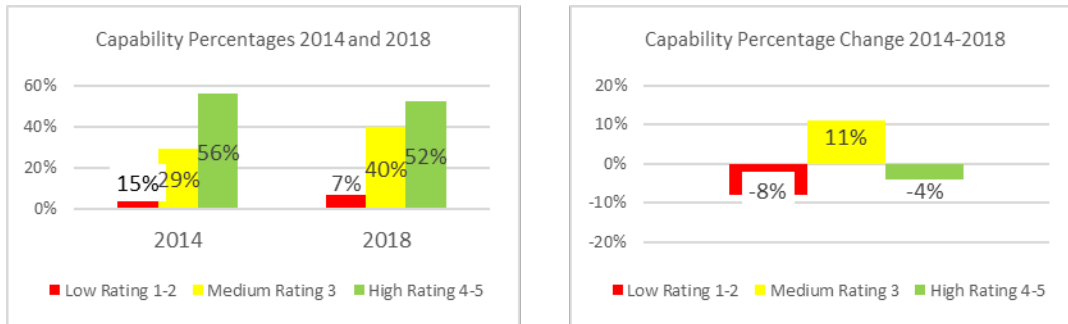


Figure 27. Situational Assessment Percentages and Changes 2014 to 2018.¹⁷⁵

5. Environmental Response/Health and Safety

Capability Status: Centralized

Current Rating: High

Discussion:

The environmental response/health and safety capability has experienced a significant increase in states rating themselves a medium coupled with a decrease in ratings of low or high, as shown in Figure 28. Given that this capability is showing slight losses in ratings of high, the increase in medium ratings is only indicative of a capability being centralized.

¹⁷⁵ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

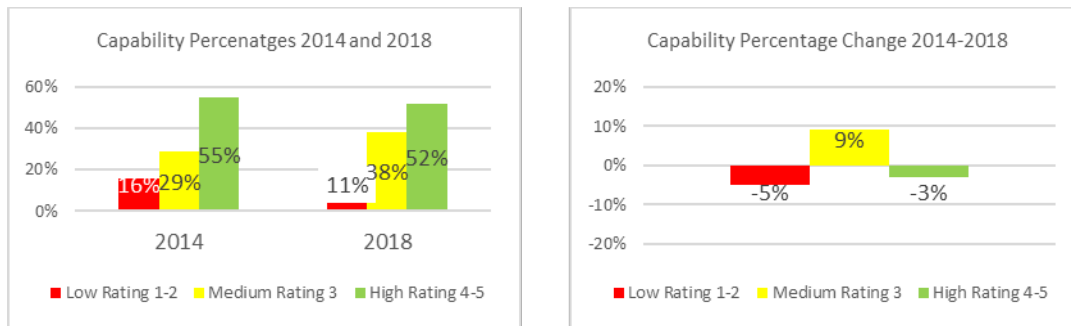


Figure 28. Environmental Response/Health and Safety Percentages and Changes 2014 to 2018.¹⁷⁶

6. Fire Management and Suppression

Capability Status: Increased

Current Rating: High

Discussion:

The fire management and suppression capability is one of the newest of the 32 capabilities and was rated fairly high from its inception, as presented in Figure 29. The limited data for this capability still indicates a net increase across the board from ratings of low to high. One possibility for this increase is the existence of grant programs specifically for the fire service. Despite this funding mechanism, this capability is far from the highest funded in the response mission area.

¹⁷⁶ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

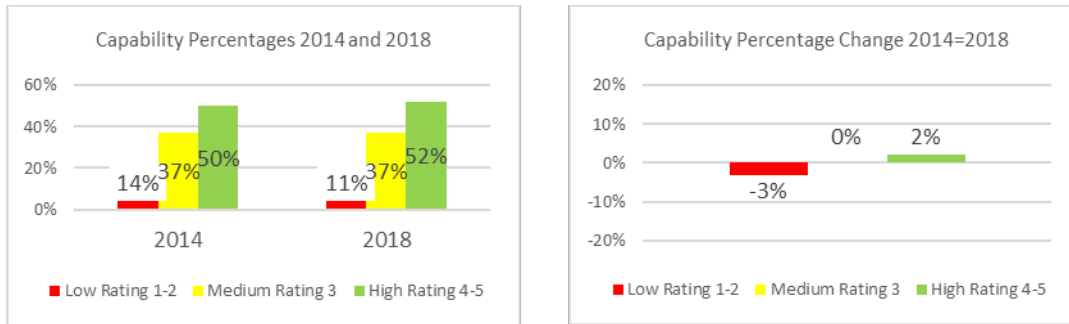


Figure 29. Fire Management and Suppression Percentages and Changes 2014 to 2018.¹⁷⁷

7. Critical Transportation

Capability Status: Centralized

Current Rating: High

Discussion:

The critical transportation capability, despite its current rating of high, has experienced a loss in the percentage of states rating themselves high, as demonstrated in Figure 30. Some modest gains have occurred from low up to medium. The percentage change indicates this capability is centralizing. Despite the critical nature of this capability, it has been one of the lowest funded capabilities over the past two years.¹⁷⁸

¹⁷⁷ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

¹⁷⁸ Federal Emergency Management Agency, *2019 National Preparedness Report*, 9.

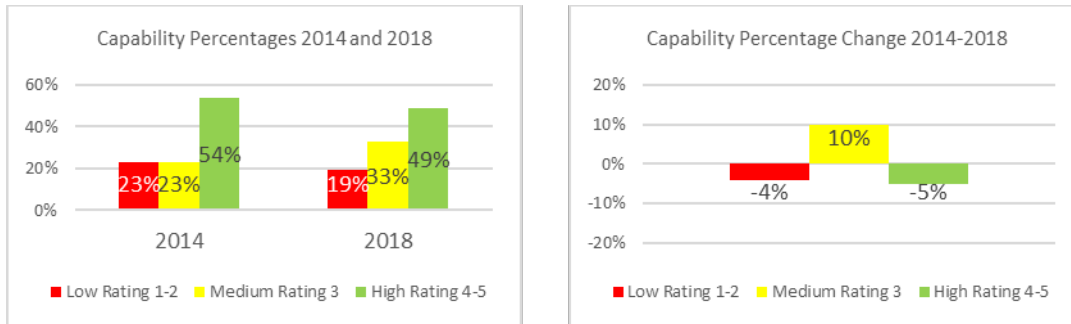


Figure 30. Critical Transportation Percentages and Changes 2014 to 2018.¹⁷⁹

8. Mass Search and Rescue Operations

Capability Status: Increased

Current Rating: High

Discussion:

The mass search and rescue operations capability, as seen in Figure 31, indicates a decrease in ratings from low to medium. The increases made to the capability are indicative of a capability being increased. The lack of increase in high ratings is in spite of large investments made nationwide to build urban search and rescue capabilities.¹⁸⁰

¹⁷⁹ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11

¹⁸⁰ National Homeland Security Consortium, *Homeland Security Grant Return on Investment*, 5.

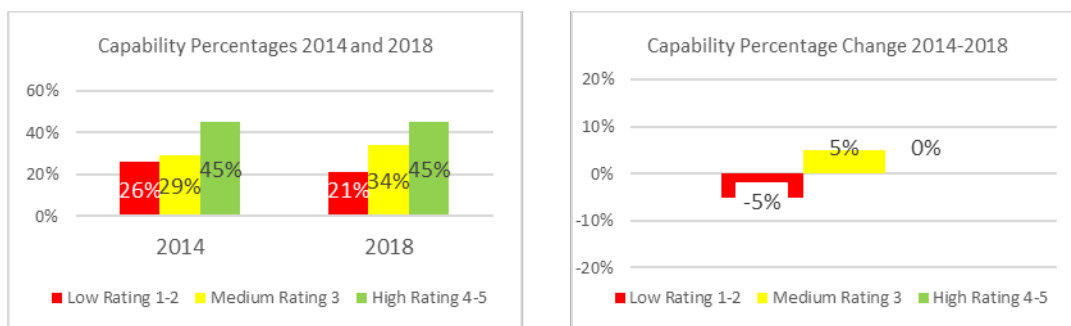


Figure 31. Mass Search and Rescue Operations Percentages and Changes 2014 to 2018.¹⁸¹

9. Fatality Management Services

Capability Status: Increased

Current Rating: Bimodal

Discussion:

The fatality management services capability has made some significant gains since 2014. The data indicates that a significant decrease has resulted in states rating themselves low and a slight increase in ratings of high, as shown in Figure 32. The 2018 NPR indicates that the same percentage of states rated themselves low or high. Those rating themselves a medium made up the lesser amount, but because the other ratings were identical, the current rating was determined to be bimodal. This capability was the only one for which a specific mode could not be determined. The gains made in this capability are in spite of it being one of the lowest funded capabilities in the mission area.

¹⁸¹ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

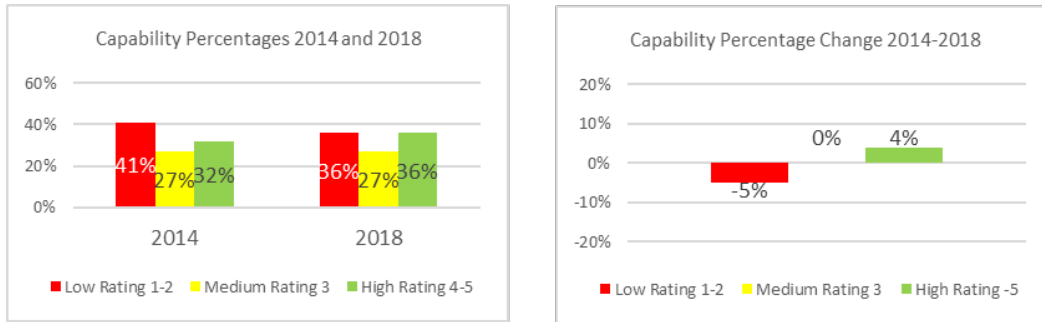


Figure 32. Fatality Management Services Percentages and Changes 2014 to 2018.¹⁸²

10. Mass Care Services

Capability Status: Increased

Current Rating: Medium

Discussion:

The mass care services capability, as with many being built, saw an increase in states rating themselves as a high or medium while experiencing decreases in ratings of low. See Figure 33.

¹⁸² Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

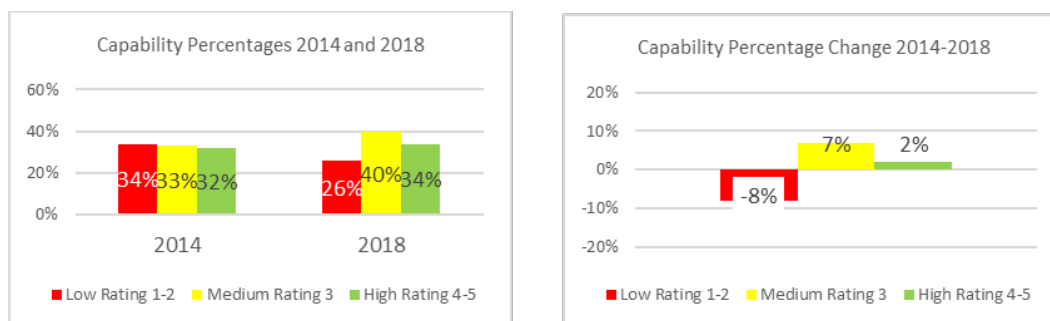


Figure 33. Mass Care Services Percentages and Changes 2014 to 2018.¹⁸³

11. Logistics and Supply Chain Management

Capability Status: Centralized

Current Rating: Medium

Discussion:

The logistics and supply chain management capability was originally known as public and private services and resources. This change was made with the release of the 2nd edition of the Goal. The capability has seen an increase in ratings of medium and an identical decrease in states rating themselves as low or high, as provided in Figure 34. The movement from both ends of the spectrum to the medium rating represents a capability that is centralizing.

¹⁸³ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

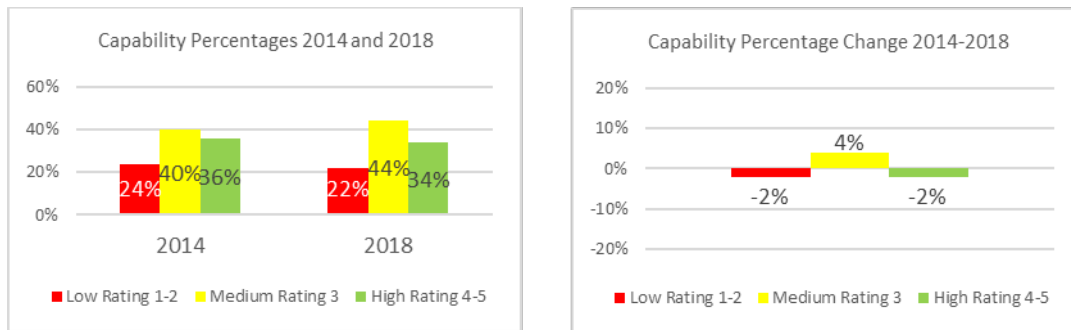


Figure 34. Logistics and Supply Chain Management Percentages and Changes 2014 to 2018.¹⁸⁴

12. Infrastructure Systems

Capability Status: Lost

Current Rating: Medium

Discussion:

The infrastructure systems capability is shared between the response and recovery mission areas. A significant increase in states rating themselves medium has occurred. However, low ratings have also seen an increase, as seen in Figure 35. Coupled with a negative movement in the high ratings, the capability is being lost. With the slip from high to medium, this capability is possibly in danger of declining further.

¹⁸⁴ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

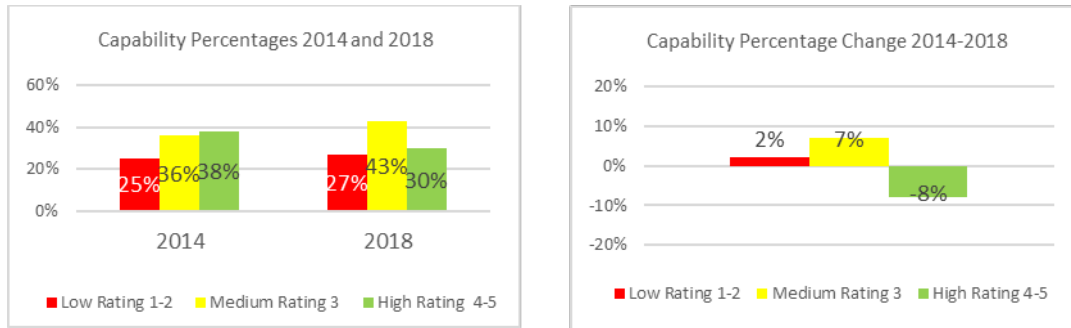


Figure 35. Infrastructure Systems Percentages and Changes 2014 to 2018.¹⁸⁵

E. RECOVERY CORE CAPABILITIES

1. Economic Recovery

Capability Status: Centralized

Current Rating: Low

Discussion:

The economic recovery capability, despite its current low rating, is experiencing a major upswing in states rating themselves a low to a medium. However, these positive increases have been offset by a decrease in high ratings that indicate that the capability is centralizing to medium. Refer to Figure 36.

¹⁸⁵ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

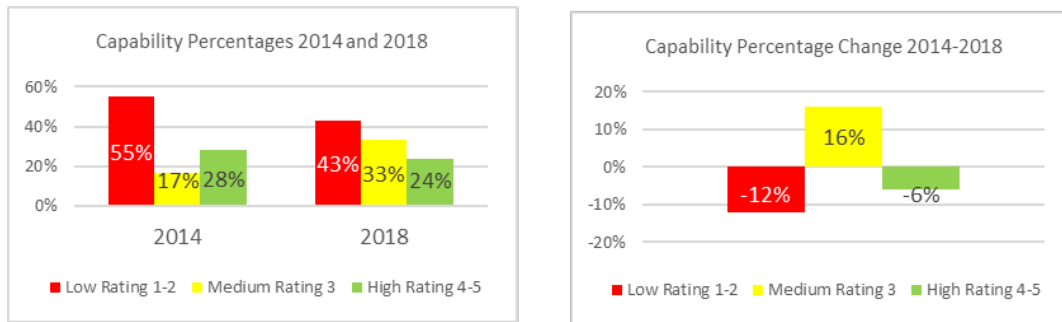


Figure 36. Economic Recovery Percentages and Changes 2014 to 2018.¹⁸⁶

2. Health and Social Services

Capability Status: Increased

Current Rating: High

Discussion:

The health and social services capability is moving in the correct direction. High ratings are increasing as are medium ratings. When considering the decrease of low ratings, this capability is on the rise. See Figure 37.

¹⁸⁶ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

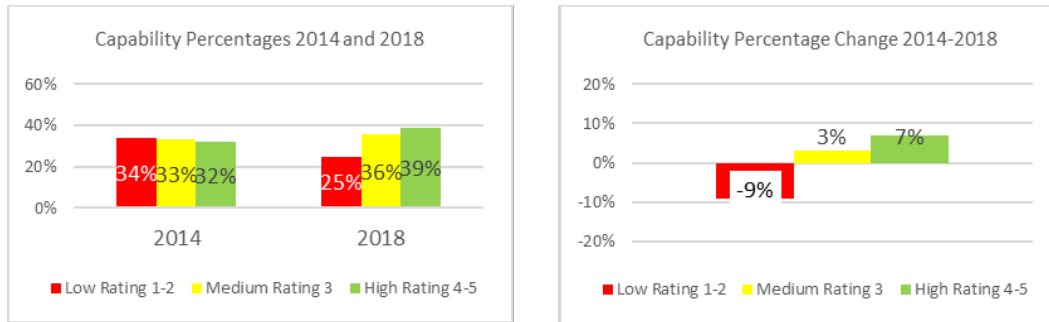


Figure 37. Health and Social Services Percentages and Changes 2014 to 2018.¹⁸⁷

3. Housing

Capability Status: Centralized

Current Rating: Low

Discussion:

The housing capability is indicating a significant loss in states rating themselves high. This reduction has resulted in an increase in ratings of medium, as given in Figure 38. Even though these show a decrease in low ratings, it does not eclipse the losses in the area of higher rating and retains its current rating. The housing capability, as in the case for operational coordination, may have been impacted by the recent disasters in 2017 and 2018, which resulted in challenges restoring long-term housing.¹⁸⁸

¹⁸⁷ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

¹⁸⁸ Federal Emergency Management Agency, *2019 National Preparedness Report*, 56.

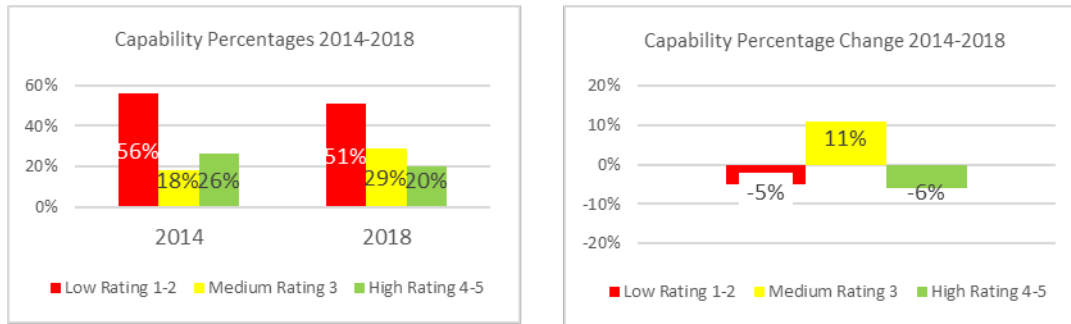


Figure 38. Housing Percentages and Changes 2014 to 2018.¹⁸⁹

4. Natural and Cultural Resources

Capability Status: Increased

Current Rating: Low

Discussion:

The natural and cultural resources capability shows significant movement from those states rating themselves a low to a medium in conjunction with a slight increase in ratings of high rating. However, this progress has not been enough to move it from its current low rating. Refer to Figure 39.

¹⁸⁹ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

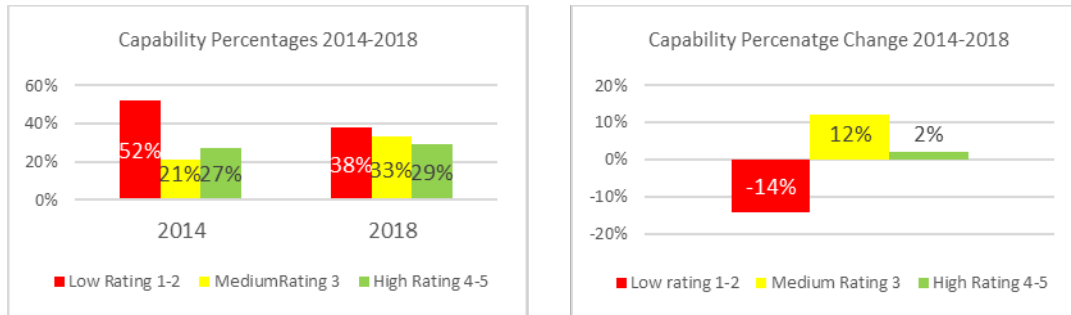


Figure 39. Natural and Cultural Resources Percentages and Changes 2014 to 2018.¹⁹⁰

¹⁹⁰ Adapted from Federal Emergency Management Agency, *2014 National Preparedness Report*, 10; Federal Emergency Management Agency, *2018 National Preparedness Report*, 11.

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