

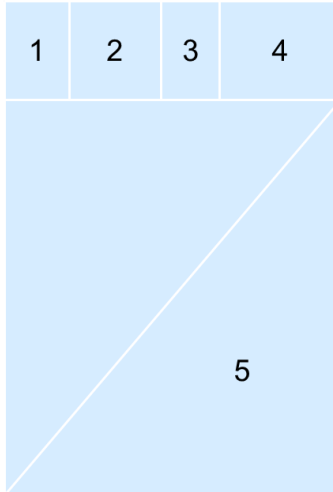


Homeland Security Grant

Return on Investment

August 2018





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EXECUTIVE SUMMARY

Capabilities to address terrorist threats have grown since September 11, 2001. Most individuals in the United States now have access to advanced capabilities within a few hours. One reason why has been federal support of state and local efforts to build and sustain these capabilities. In the aftermath of September 11, federal grant programs such as the State Homeland Security Program (SHSP) and the Urban Area Security Initiative (UASI) arose to ensure that jurisdictions had the resources they needed to help defend our country against terrorist threats.

Thankfully, since September 11, we have not experienced another terrorist attack of such magnitude on U.S. soil. As time passes, however, the federal commitment to bolstering terrorism preparedness capabilities across the country has been undermined by questions about whether the SHSP and UASI grants are an effective use of federal funds. To provide evidence of their effectiveness, the National Homeland Security Consortium, with the assistance of staff of the National Emergency Management Association (NEMA), conducted a nationwide study that examined how SHSP and UASI funds are providing a return on investment toward terrorism preparedness from states and localities. The report is the result of an online survey to all 50 states and to jurisdictions from 50 current and former urban areas eligible for UASI funds. Forty states and 19 urban areas responded. These responses provide a national picture of return on investment and to assess the repercussions of reductions in (or loss of) SHSP and UASI funds.

The study identified several findings in relation to two central research questions:

- *How much money has been invested by state and local government in pursuit of terrorism preparedness, and how is this spending affected by federal assistance?* Although states exhibited different spending approaches in pursuing terrorism preparedness activities, the majority of states are investing more dollars in terrorism preparedness than they are receiving through SHSP and UASI grants. The study shows that for every SHSP and UASI grant dollar invested, the median return was \$1.70 for state and emergency management and homeland security agencies. The return for local emergency management and homeland security agencies was \$0.92. Corresponding investments by other state and local agencies increase these returns even further. For example, while critical, SHSP and UASI grants are not the primary source of funding for most state fusion centers. Based on the median value, state fusion centers spent an additional \$2.39 of funding from other sources (e.g., state appropriations) for every dollar of SHSP and UASI funds spent. Even more impressive, survey responses from local fire and police departments had a median return of \$49 for every dollar. A principal reason why returns can be so high is that SHSP and UASI grants capitalize on existing human capital and basic responder capabilities.
- *What has preparedness funding bought since September 11, and what capability do we have now that we did not have then?* SHSP and UASI funds have facilitated a 124-percent increase in the number of advanced hazardous materials, incident management, and structure collapse/urban search and rescue teams since September 11. These are teams that can respond to unknown chemical releases or incidents involving chemical, biological, radiological, nuclear, or explosive weapons; have attained National Incident Management System Type I, II, or III status as an incident management team; or can perform at medium or heavy operational levels for structural collapse incidents. The

increase in specialized teams has increased the percentage of the U.S. population covered by these advanced capabilities. Among the 843 teams identified by the survey, 92 percent have received support from SHSP or UASI grants. In addition, state and local jurisdictions have used SHSP and UASI funds to improve operational coordination through exercises. Survey results indicate that exercises supported by SHSP and UASI grants heavily rely on these funds at both the state and UASI levels. For example, the 19 UASI jurisdictions responding to the survey reported that 92 percent of the 123 exercises that were supported by SHSP and UASI funds to some extent would not have taken place in the absence of these funds.

Analysis also looked to the past for clues as to what further reductions in (or loss of) SHSP and UASI funds would mean for state and local terrorism preparedness. In fiscal years 2011 and 2012, SHSP and UASI awards decreased by 65 percent and 41 percent, respectively. More than five years later, the survey reflects the true implications of these cuts.

Different states and urban areas were affected in different ways. Based on observations from the fiscal year 2011 and 2012 funding reductions, it is unlikely that many states will react to further cuts in funding by securing additional state funds for terrorism preparedness. The previous substantial decrease in SHSP and UASI funding did not prompt a corresponding increase in state spending to offset the federal funding gap, resulting in stagnation of capability development or even worse. Analysts developed a six-stage scale to categorize and rank the severity of the capability losses that jurisdictions experienced after the fiscal year 2011 and 2012 program cuts. Results indicate that many states are already sacrificing capability, foreshadowing even more severe consequences if program funds are cut in the future.

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INTRODUCTION

WHY DID THE NATIONAL HOMELAND SECURITY CONSORTIUM CONDUCT THIS STUDY?

The attacks of September 11, 2001, were defining moments in our attitudes toward terrorism. More than a decade and a half later, people can still recall when they initially heard about or saw footage of the Twin Towers' collapse.

In the wake of this tragedy, the federal government took numerous actions to better prepare our nation for future terrorist attacks. Among these actions were new legislation and appropriations that committed to using federal grants to bolster state and local capabilities in defense against terrorism threats and close those gaps in national preparedness not filled practically by the federal government. Two of the most critical grant programs were the State Homeland Security Program (SHSP) and the Urban Areas Security Initiative (UASI).

Almost 17 years later, both programs persist—a testament to their importance. Over time, however, the U.S. Congress has desired more precise quantification of the benefits from these grants, as well as a clearer demonstration of the links between grants and outcomes. Questions remain as to whether the grants are an effective means of assisting states and localities in meeting the National Preparedness Goal.¹ For the emergency management and homeland security communities, there are real consequences to leaving these desires and questions unaddressed. Congressional appropriations to the grant programs have diminished over time. Absent information on the return on investment, such as the corresponding contributions invested by states and local governments, these grants remain an easy target for funding cuts. For example, beginning in fiscal year 2011, SHSP and UASI grants were roughly halved over a two-year period. Without better information about the contributions of states and localities to increasing terrorism preparedness,² federal preparedness grants may face further reductions or elimination.

State Homeland Security Program (SHSP): The SHSP supports terrorism preparedness activities that address high-priority preparedness gaps within state, local, tribal, and territorial jurisdictions, as based on capability targets and gaps outlined in the Federal Emergency Management Agency's (FEMA's) Threat and Hazard Identification and Risk Assessment (THIRA) process and State Preparedness Report. All 56 states and territories are eligible to apply for SHSP funds. In fiscal year 2017, \$402 million was awarded for distribution among SHSP grant recipients.

Urban Area Security Initiative (UASI): UASI grants address the capabilities-based needs of specific, high-density urban areas based on the THIRA process and other relevant assessments. Historically, as many as 66 urban areas have been designated as eligible for the annually awarded grants. The program's overall goal is to enhance and sustain the integrated capacity and capabilities of urban areas to prepare for acts of terrorism. However, urban areas can also use grants to support other high-threat incidents (e.g., natural disasters). For fiscal year 2017, the U.S. Department of Homeland Security (DHS) designated 33 urban areas as eligible for funding, with the program awarding a total of \$580 million.

¹ The *National Preparedness Goal* identifies 32 core capabilities that preparedness stakeholders collectively need to build, sustain, and deliver to achieve a secure and resilient nation that can prevent, protect against, mitigate, respond to, and recover from the threats and hazards posing the greatest risk.

² For this study, terrorism preparedness pertains to those efforts to build, sustain, and deliver the capabilities necessary to prevent, protect against, mitigate, respond to, and recover from acts of terrorism. Relevant

What Do We Mean by “Return on Investment”?

For this study, our objective was to measure three specific types of returns obtained from SHSP and UASI grants:



Measuring corresponding investments in terrorism preparedness from state and major urban areas



Quantifying the establishment of advanced specialized teams over time



Mapping the increase in the portion of the U.S. population that can readily access the capabilities of these advanced specialized teams

In January 2018, the National Homeland Security Consortium, with the assistance of staff of the National Emergency Management Association (NEMA), embarked on an ambitious effort to examine the SHSP and UASI grant programs and how effectively they support terrorism preparedness nationwide. The effort began with a survey issued to all 50 states and to jurisdictions from 50 urban areas currently and formerly eligible for UASI funds³ to help answer long-standing questions such as

- How much money has been invested by state and local governments in pursuit of terrorism preparedness, and how is this spending affected by federal assistance?
- What has preparedness funding bought since September 11, and what capability do we have now that we did not have then?

This report represents responses from 40 states (80 percent response) and 19 urban areas (38 percent response).⁴ These responses present a national picture of the return on investment from SHSP and UASI grants and the repercussions of reductions in (or loss of) SHSP and UASI funding.

expenditures include those necessary to address threats posed by cyberattacks and attacks involving chemical, biological, radiological, nuclear, or explosive (CBRNE) weapons.

³ Analysts issued the survey to jurisdictions in the 33 urban areas that were eligible for UASI funding in fiscal year 2017, as well as selected jurisdictions (randomly sampled) from an additional 17 former UASI-eligible urban areas.

⁴ Please note, however, that not all states and UASI jurisdictions provided complete responses to the survey; the number of respondents to each section of the survey varied. Throughout the report, we provide the corresponding sample size (i.e., *n*) that served as the basis for the analysis.

SURVEY FINDINGS

Two versions of an online survey—one tailored to states and the other to local jurisdictions⁵—covered the following topics: (1) UASI and SHSP grant expenditures in fiscal year 2017; (2) state/local budget expenditures on terrorism preparedness; (3) return on investment outputs (e.g., plans, exercises,⁶ training); (4) specialized teams; (5) fusion centers; and (6) effects of reductions in SHSP and UASI program funds. The survey results led to the identification of 10 findings, which are highlighted in bold throughout the text. We organized these findings according to the two aforementioned questions, as well as a final section on the possible consequences of future reductions in SHSP and UASI program funds. Also included in the report are two case studies highlighting terrorism preparedness improvements, as well as a number of text boxes providing the perspectives of individual survey respondents in their own words.

HOW MUCH MONEY HAS BEEN INVESTED BY STATE AND LOCAL GOVERNMENTS IN PURSUIT OF TERRORISM PREPAREDNESS, AND HOW IS THIS SPENDING AFFECTED BY FEDERAL ASSISTANCE?

To arrive at estimates of relevant terrorism preparedness expenditures,⁷ the surveys focused on a few components of government agency budgets:⁸ (1) personnel (including salaries and benefits); (2) supplies, equipment, and capital expenditures; and (3) state-funded grants (for states only).

How Did We Estimate Terrorism Preparedness Expenditures on Personnel?

One challenge with estimating relevant expenditures for terrorism preparedness is to determine which personnel should be included. For many personnel, terrorism preparedness is a collateral responsibility. Different stakeholders have different views on what the threshold of involvement should be before personnel can be counted. As a result, we asked respondents to identify the number of personnel in their emergency management and homeland security agencies that satisfied different levels of requirements. Level categories included the following:

Broad: Include personnel in the organization who spend roughly 10 percent or more of their hours each year on terrorism preparedness. Also include personnel who: (1) would have consequence management responsibilities following a terrorist attack (e.g., state emergency operations center staff); (2) have salaries *partially or fully paid* through SHSP and UASI funds; or (3) serve as members of specialized teams with capabilities to respond to Chemical Biological Radiological Nuclear and Explosive (CBRNE) incidents.

Narrow: Include personnel in your organization whose positions are dedicated specifically to terrorism preparedness (i.e., they spend roughly 90 percent or more of their hours each year on terrorism preparedness activities). Also include personnel who: (1) have salaries *fully paid* through SHSP and UASI funds; or (2) serve as members of specialized teams with capabilities to respond to CBRNE incidents.

Unless otherwise noted, results are reported based on the broad definition for inclusion.

⁵ The state and local versions of the survey questionnaire contained 68 and 45 questions, respectively.

⁶ The state version of the survey included an additional section that addressed regional exercises.

⁷ In developing the survey, attempts to improve data quality came by addressing three principal challenges: (1) most state and local data management systems do not align their expenditure data in ways that can easily isolate expenses relevant to terrorism preparedness; (2) different opinions exist on what should or should not be counted as terrorism preparedness activities; and (3) there is the potential for data on terrorism preparedness expenditures to reside within multiple agencies within a jurisdiction.

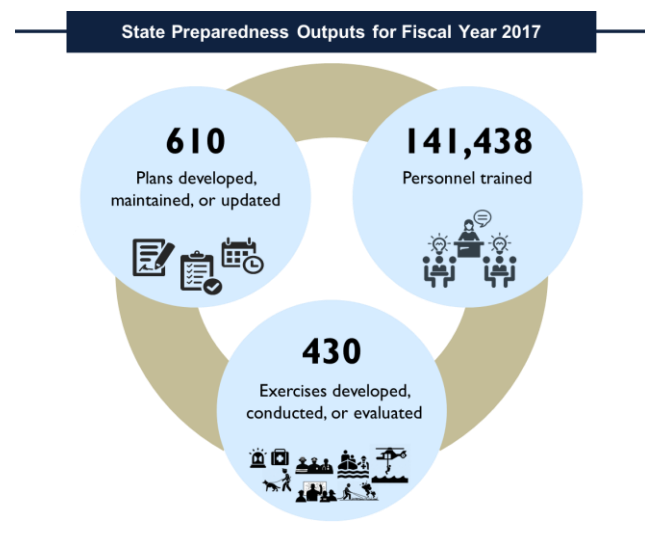
⁸ States were also asked to characterize any expenditures provided through state-provided grants for terrorism preparedness.

For every SHSP and UASI grant dollar invested, the median return was \$1.70 for responding state emergency management and homeland security agencies; for local emergency management and homeland security agencies, it was \$0.92. Corresponding investments from other jurisdictional agencies increase these returns even further.

Although states exhibited different spending approaches, data on fiscal year 2017 expenditures indicate that the majority of states invest more dollars in terrorism preparedness than what they receive through SHSP and UASI grants. Thirty states provided sufficient expenditure information to determine the fraction of expenditures associated with SHSP and UASI grants (versus other sources). In fiscal year 2017, the median amount of money supplementing every dollar of SHSP and UASI funding spent in state emergency management and homeland security agencies was \$1.70 (*interquartile range* = \$0.07–\$4.16).⁹ Approximately 57 percent of the responding states had returns that were more than \$1.00. Furthermore, returns on SHSP and UASI investments generally increased when considering the contributions of other state agencies.¹⁰ In particular, we observed two cases in which state law enforcement agencies provided substantial additional returns at the Broad category level (see the “How Did We Estimate Terrorism Preparedness Expenditures on Personnel?” box on the previous page). This benefit requires further examination, however, as many of the other state agencies did not submit a breakdown of their expenditures or provided only partial information.

Available data from UASI-jurisdiction responses was also limited, with only 13 jurisdictions (24 agencies total) providing detailed expenditure data. For local emergency management and homeland security agencies, the median return on SHSP and UASI investment was an additional \$0.92 ($n=8$, *interquartile range* = \$0.48–\$1.55). In comparison, additional investments by fire and police departments were higher, with a median return of \$49 for every dollar ($n=8$, *interquartile range* = \$4.75–\$146). When analyzing the individual returns associated with (1) personnel and (2) supplies, equipment, and capital, we determined that the larger returns were driven by relevant personnel expenditures.

Even under a more restrictive threshold for personnel inclusion (i.e., the Narrow category level), fire and police departments still provided more than a comparable investment, with a median return of \$2.19 (*interquartile range* = \$1.58–\$65). Additionally, one police department and three public health agencies reported relevant expenditures without any corresponding investment from SHSP and UASI funds. The



⁹ The *interquartile range* is the range associated with the middle 50 percent of results in a dataset.

¹⁰ Respondents listed those state agencies that (1) had significant expenditures toward terrorism preparedness and (2) in total, captured at least 90 percent of all state government expenditures toward terrorism preparedness. Fifteen states (out of 36) identified additional agencies with significant terrorism preparedness expenditures, with law enforcement (eight) and public health (five) agencies identified most frequently.

results highlight the additional return on investment captured by considering a broader set of agencies that have been incorporated into the homeland security enterprise.¹¹

WHAT HAS PREPAREDNESS FUNDING BOUGHT SINCE SEPTEMBER 11, AND WHAT CAPABILITY DO WE HAVE NOW THAT WE DID NOT HAVE THEN?

Investments in terrorism preparedness have resulted in tremendous gains in capability since September 11. To demonstrate this progress, the analysis focused on the role of SHSP and UASI funds in supporting three areas: (1) the development of advanced specialized teams; (2) the establishment and maturation of state fusion centers;¹² and (3) the use of exercises to enhance multi-jurisdictional and multi-level coordination.

Advanced Specialized Teams

This study focused on three specialized teams that could be deployed in the immediate aftermath of a terrorist attack and defined advanced capabilities for each team as satisfying the following:¹³

- Hazardous materials (HazMat) response teams trained and equipped to respond to unknown chemical releases or incidents involving CBRNE weapons¹⁴
- Incident Management Teams (IMTs) that have attained National Incident Management System (NIMS) Type I, II, or III status
- Structural collapse or urban search and rescue (USAR) teams that can perform at medium or heavy operational levels

SHSP and UASI funds have facilitated a 124-percent increase in the number of advanced HazMat, incident management, and structural collapse/USAR teams since September 11.

Survey respondents identified a total of 839 teams satisfying the aforementioned capability requirements. The increase in access to HazMat, incident management, or structural collapse/USAR capabilities nationwide has been dramatic. Comparing the number of advanced teams established after 2001 to what existed before, we observed the following:¹⁵

- 1.8 times the number of HazMat teams
- 18.5 times the number of IMTs
- 1.9 times the number of structural collapse/USAR teams

The vast majority (92 percent) of these teams have received support from SHSP and UASI grants ($n = 794$). Twenty-seven states (out of a possible 39) reported establishing a state-backed network of

¹¹ Only six jurisdictions provided a complete set of expenditure data for all agencies responsible for terrorism preparedness activities in the jurisdiction. Median values were \$1.29 and \$0.90 for the broad and narrow definitions, respectively (*interquartile range* = \$1.18–\$21, \$0.36–\$1.34, respectively).

¹² The National Network of Fusion Centers consists of 79 state and major urban area fusion centers. Please note that our analysis pertains only to the state centers and is based on survey responses from 35 states.

¹³ While essential for terrorism preparedness, bomb squads and SWAT teams were not addressed in the survey in deference to sensitivities that law enforcement agencies might have about divulging this type of information. However, we were extremely gratified by the responses from a number of jurisdictions that entrusted us with such information.

¹⁴ Analogous to a National Incident Management System (NIMS) Type I or II HazMat entry team, for example.

¹⁵ Ratios based on teams for which data on the year they achieved advanced capabilities is known.

specialized teams to provide localities with more advanced capabilities and support regional approaches to terrorism response. In contrast, other states have taken a bottom-up approach to identifying localities that require more advanced capabilities. Regardless, federal funds have helped ensure that specialized teams within select local jurisdictions have the advanced-level capability to prepare for and respond to an act of terrorism, as well as to serve as shared assets through mutual aid agreements. As noted by one state respondent, it can now handle many types of incidents without FEMA because of its state and local investments in preparedness.

Case Study: Los Angeles Police Department Hazardous Materials Unit

Today, it's hard to imagine that a major city like Los Angeles would not have this capability. But soon after the attacks of September 11, a surge in calls about letters containing "white powder" left the Los Angeles Police Department (LAPD) Hazardous Materials Unit frustrated with the limited equipment and technology available to first responders to resolve whether the letters contained biological agents.

Los Angeles is a prime example of the dramatic improvements since September 11 in expanding CBRNE response capabilities and improving coordination across all levels of government. Since 2001, the LAPD Hazardous Materials Unit used UASI grant funds to offset the costs of advanced equipment and receive advanced training to address CBRNE threats. As a result, the unit can now determine the potential for a biological threat on site by conducting operations within the contaminated area. This greatly reduces the time and resources necessary to address these calls, limiting their fiscal impact on the department and community. In addition, all members of the unit are certified to the Technician/Specialist level, the highest level of training offered for hazardous material emergency responders. Members completed extensive training to operate in CBRNE environments, including training with "live" chemical warfare nerve agents.



The LAPD Hazardous Materials Unit also built on the responses to the 2001 "white powder" letters, strengthening relationships with the Federal Bureau of Investigation and the United States Postal Service to enhance coordination in future incidents. More broadly, the region established a Joint Hazard Assessment Team, which includes the LAPD, the Los Angeles Fire Department, and the Los Angeles Department of Public Health, to facilitate a collaborative approach to incident response. This emphasis on relationship building has increased readiness and accelerated the city's ability to mitigate the impact of incidents.

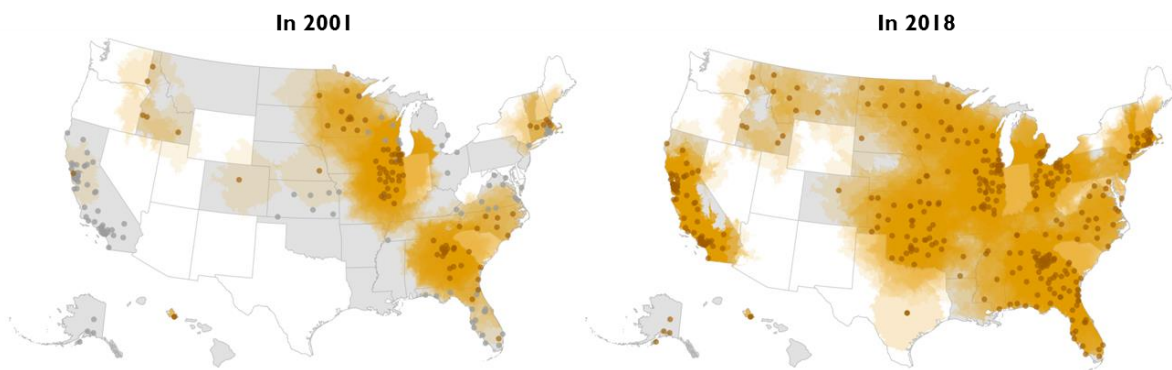
In Their Own Words: Insights from the Wisconsin Survey Response

Federal investment in homeland security and terrorism preparedness is critical because it elevates the state's ability to deal with larger, more complex incidents. Preparing for a large-scale, complex, multi-jurisdictional incident is not a priority for local agencies when compared to all the other needs they face. They train and equip themselves for their daily and most commonly occurring incidents. Federal grant funds provide an extra layer that allows local responders to participate in regional response teams and train and equip for the larger, more complex incidents. The funds provide an incentive and opportunity to be part of a larger structure that benefits everyone involved in preparedness and response.

The increase in specialized teams for HazMat, incident management, and structural collapse/USAR has increased the percentage of the U.S. population covered by these advanced capabilities to address terrorism events.

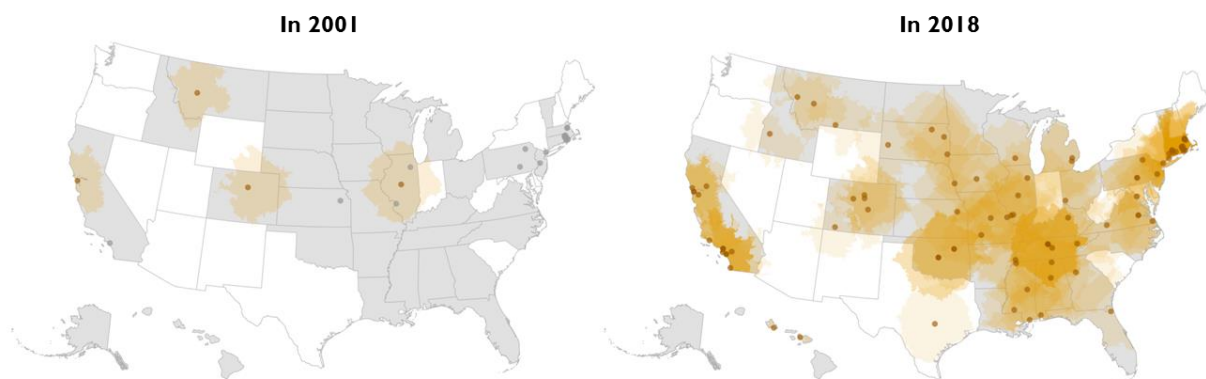
With the progress states and localities have made in developing advanced teams, a much larger portion of the U.S. population is now covered. Figures 1 through 3 map the locations of advanced HazMat, incident management, and structural collapse/USAR teams across the nation, comparing the number and distribution of teams in 2001 to the number and distribution in 2018 based on responses from 34 states (colored in gray on the maps) and additional UASI jurisdictions. For each team, we modeled the corresponding geographic area it covers based on the team's primary location, available road and highway networks, and drive-time constraints. These areas are indicated by the orange-shaded regions on the maps.

Figure 1. Areas accessible to an advanced HazMat response team within a four-hour drive



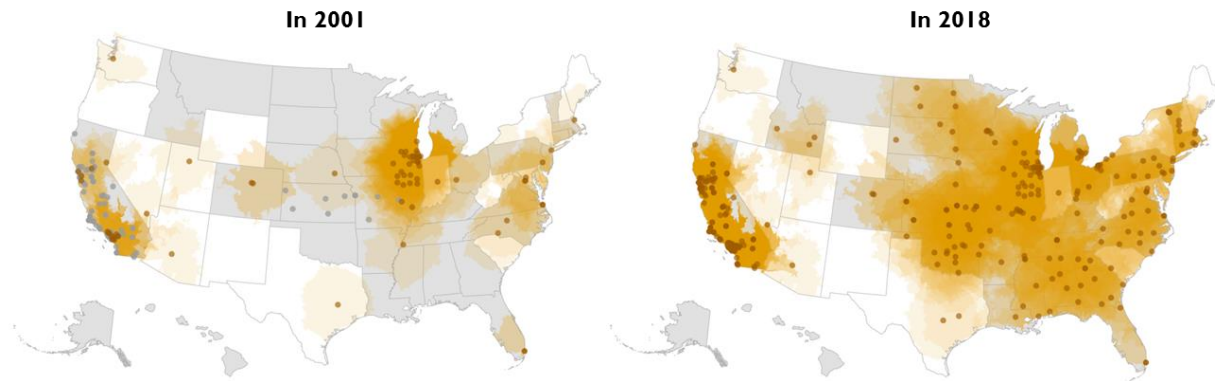
Note: Comparison showing the increase in coverage nationwide from HazMat teams with advanced capabilities based on responses from 34 states (in gray) and additional UASI jurisdictions. Orange-shaded regions indicate areas accessible within a four-hour drive of team locations. Darker shading indicates areas where overlapping coverage from multiple teams occurs. Dark grey dots (on the 2001 map) indicate team locations for which data on when they achieved advanced capabilities are unavailable.

Figure 2. Areas accessible to an advanced IMT within a four-hour drive



Note: Comparison showing the increase in coverage nationwide from IMTs with advanced capabilities based on responses from 34 states (in gray) and additional UASI jurisdictions. Orange-shaded regions indicate areas accessible within a four-hour drive of team locations. Darker shading indicates areas where overlapping coverage from multiple teams occurs. Dark grey dots (on the 2001 map) indicate team locations for which data on when they achieved advanced capabilities are unavailable.

Figure 3. Areas accessible to an advanced structural collapse/USAR team within a four-hour drive



Note: Comparison showing the increase in coverage nationwide from structural collapse/USAR teams with advanced capabilities based on responses from 34 states (in gray) and additional UASI jurisdictions. Orange-shaded regions indicate areas accessible within a four-hour drive of team locations. Darker shading indicates areas where overlapping coverage from multiple teams occurs. Dark grey dots (on the 2001 map) indicate team locations for which data on when they achieved advanced capabilities are unavailable.

Each of the three figures shows a growth and spread in coverage between 2001 and 2018. This translates into a risk buy-down for the populations that now have access to these teams. The benefits of this growth are enhanced with the location of these resources in more densely populated areas. Table 1 highlights the increase in the percentage of the population covered by these teams.¹⁶ As indicated by the broad ranges listed, however, the underlying datasets of when teams achieved their advanced capabilities requires further exploration, as this information remains unknown for numerous teams.

Table 1. Percentage of the U.S. population covered by advanced HazMat, incident management, and structural collapse/USAR teams, 2001 versus 2018

Team Type	Percentage of U.S. Population Covered, 2001^a	Percentage of U.S. Population Covered, 2018	Percentage Point Increase
HazMat	68.1–95.4	98.2	2.8–30.1
Incident Management	19.6–57.9	94.5	36.6–74.9
Structural Collapse/USAR	83.6–85.7	97.6	11.9–14.0

^a The value range accounts for two different assumptions. The lower-bound value assumes that all “unknown” teams—i.e., teams for which data are unavailable on when they achieved advanced capability—attained advanced capability only after 2001. Alternatively, the upper-bound value assumes these teams all attained advanced capability by 2001.

¹⁶ We adjusted our estimates of the percentage of the U.S. population to account for states that did not respond to the survey while acknowledging the benefits provided by teams in neighboring states and UASI jurisdictions within those states that did respond.

Case Study: Connecticut Incident Management Team Three

Two incidents drawing national attention highlight how Connecticut has benefited from rapid access to more advanced incident management capabilities, as well as the role of federal grants in maturing capabilities. On February 7, 2010, a massive explosion at the Kleen Energy power plant in Middletown, Connecticut, killed six workers and injured at least 40 others. Connecticut Incident Management Team Three (CT-IMT3) supported the Incident Commander in managing a complex response that involved more than 250 federal, state, local, and private-sector responders. The team helped develop Incident Action Plans and provided recommendations and technical assistance to support decisions and conduct operations under the Incident Command System. Local authorities commended the team for alleviating the stress of planning and resource management from the Incident Commander. Even so, an after-action review of the incident recommended additional equipment and training opportunities for the team. Through SHSP and UASI program funding, the team was able to address these needs. For example, the team used funds to send members to position-specific training, and to also support opportunities to shadow federal Incident Management Assistance Teams during several large, complex incidents. As a result, more than two years later, CT-IMT3 was better prepared to deploy and assist in another crisis—the Sandy Hook Elementary School shooting. Once again, CT-IMT3 supported local authorities, supplying the unified command with the incident planning expertise and capabilities to manage the largest grade-school mass shooting in U.S. history.

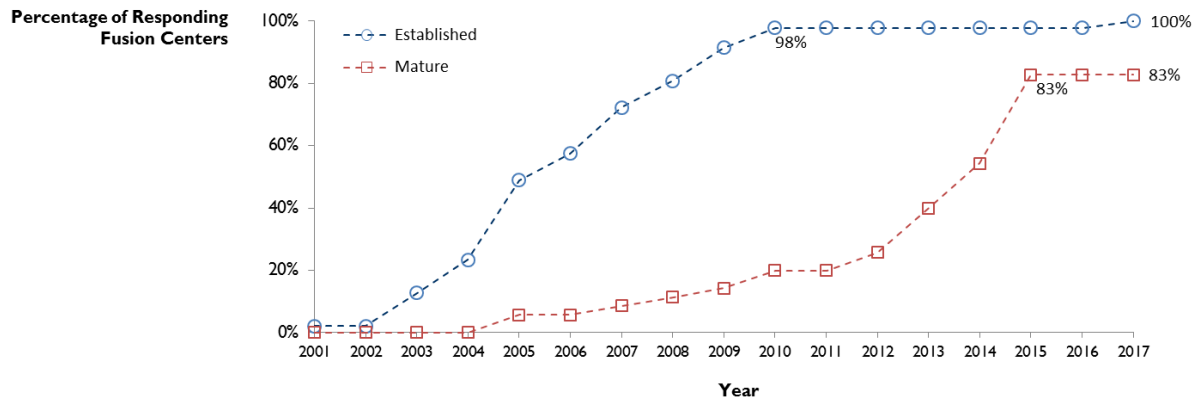


Fusion Centers

Fusion centers emerged as a potential solution to one of the harshest criticisms identified from September 11—the inability to share information and “connect the dots.” Fusion centers serve as the focal points within states and urban areas for the collection, analysis, and dissemination of threat-related information. They provide a new capability to help detect and prevent terrorism and other threats through a shared partnership across all levels of government.¹⁷ Today, each state has at least one fusion center. Figure 4 illustrates the inception of and growth in the number of state fusion centers over time since 2001 based on data from 47 states.

¹⁷ The National Network of Fusion Centers consists of 79 state and major urban area fusion centers. This report focuses on state fusion centers and the specific role of SHSP and UASI grants. For a more comprehensive discussion of the value of fusion centers, including performance measures of individual fusion centers and the network as a whole, please see the annual National Network of Fusion Centers assessment at <https://www.dhs.gov/annual-fusion-center-assessment-and-gap-mitigation-activities>.

Figure 4. Establishment and maturation of state fusion centers over time since September 11, 2001



Fusion centers use SHSP and UASI funds to assist in maturing their capabilities.¹⁸ Also shown in Figure 4 is a timeline of when the state fusion centers achieved the final “Mature” stage under the National Network of Fusion Centers maturity model.¹⁹ The sharp upturn beginning in 2011 likely reflects the formal release of the maturity model to evaluate progress and its use in reporting progress in the DHS Office of Intelligence and Analysis’s annual National Network of Fusion Centers assessment.²⁰ As of January 2018, however, six state fusion centers (17 percent of the 35 responses received) had yet to fulfill the requirements for reaching this stage.

SHSP and UASI program funds make up the majority of federal grant support for state fusion centers.²¹ However, **most state fusion centers did not rely on SHSP and UASI funds to support the majority of their cost of operations in fiscal year 2017** (see Figure 5).²² Among the 32 states that responded to this portion of the survey:

- Nearly half (14 state fusion centers) had fiscal year 2017 expenditures in which SHSP and UASI funds contributed to less than a quarter of their total fusion center expenditures; and
- Nearly three-quarters (23 state fusion centers) had fiscal year 2017 expenditures in which SHSP and UASI funds reflect less than half of total fusion center expenditures.

Notable exceptions exist. Five states indicated that 100 percent of their state fusion center expenditures in fiscal year 2017 were supplied through SHSP and UASI funding. But **based on the median value, for every \$1 of SHSP and UASI funds used, state fusion centers spent an additional \$2.39 of funding from other sources such as state appropriations.** We found no correlation between the

¹⁸ Federal support to fusion centers is not limited to DHS grants, but also may include support from the U.S. Department of Justice (e.g., the Bureau of Justice Assistance, the Office of Community Oriented Policing Services).

¹⁹ DHS developed a four-stage National Network Maturity Model that defines “Mature” as the stage in which the National Network of Fusion Centers has the full capability to leverage the collective resources among individual fusion centers and adjust to both the changing threat environment and evolving requirements.

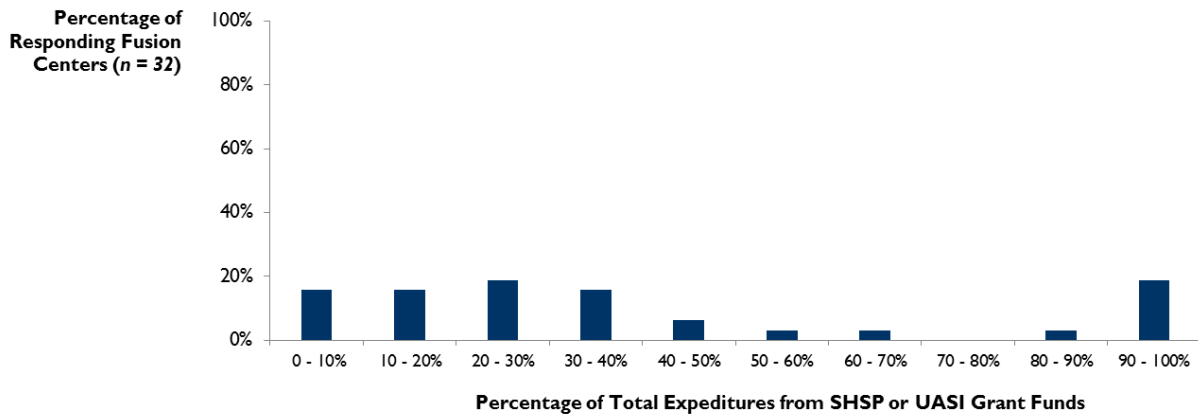
²⁰ The DHS Office of Intelligence and Analysis administers this report on behalf of, and in coordination with, the federal interagency.

²¹ Of the 35 states responding to this portion of the survey, 31 (89 percent) reported that UASI and SHSP funds make up more than three-quarters of all federal support they received for their state fusion center. For 23 states, UASI and SHSP funds are the only federal funds their state fusion center received.

²² Overall, the annual National Network of Fusion Centers assessment estimates that federal grants, most often SHSP and UASI, support approximately 20 percent of fusion center expenditures. Although SHSP and UASI grants are not the primary source of funding for most fusion centers, these grants remain critical for fusion center capabilities, as highlighted in the graphic “Consequences of Past Grant Reductions on Fusion Centers.”

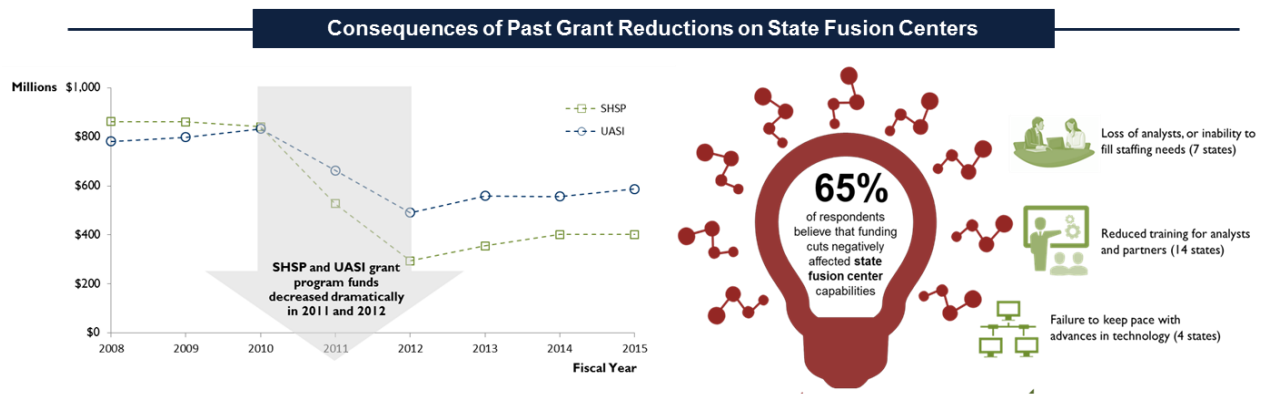
magnitude of the SHSP and UASI funds used and the resulting ratio of state and local expenditures to federal grant expenditures.

Figure 5. Percentage of total expenditures sourced from SHSP and UASI grant funds



In Their Own Words: Insights from the Virginia Survey Response

In years past, more SHSP and UASI funds were available to assist with critical training programs related to fulfillment of the Baseline Capabilities of Fusion Centers. These training programs provided foundational and advanced analytical training for Virginia Fusion Center staff to improve finished analytical products in support of the Intelligence Community. The inability to host training programs such as these diminishes the overall quality of analytical production over time as turnover continues.



Fusion centers provide a good example of how SHSP and UASI funds provide an additional layer of training to personnel that are paid for through other funding sources. In fiscal year 2017, 345 state fusion center analysts (based on 38 responding states) received training supported by SHSP or UASI funds or a SHSP- or UASI-funded trainer. The median number of analysts trained was six (*interquartile range* = 2–10.75). Only three state fusion centers indicated that none of their intelligence analysts received training supported by these grant programs. In contrast, the median number of state fusion center analysts supported through either an SHSP or UASI grant in fiscal year 2017 was 2.5 (*interquartile range* = 1–5), with seven states reporting that none of their intelligence analysts were paid for, either partially or entirely, through SHSP and UASI funds. For some responding states, ratios of analysts

trained versus paid for through SHSP and UASI funds were as high as 20 or 30 to 1. As noted by one state respondent, the grant-funded training facilitates information sharing across the National Network of Fusion Centers by instilling a uniform approach to investigative case support and vetting and submitting Suspicious Activity Reports.

Exercises

Lack of coordination among first responder agencies was one of the challenges identified in the *9/11 Commission Report*. Exercises are integral aspects to verifying competencies and developing readiness. Full-scale exercises, in particular, allow participants to mimic the complex coordination challenges they may encounter in the context of a real-world event.

Exercises supported by SHSP and UASI grants heavily rely on these funds at both the state and UASI levels.

For fiscal year 2017, responding states ($n = 36$) identified a total of 251 full-scale exercises that they supported (e.g., personnel participation, exercise design, funding) in which operational coordination was tested in a multi-agency, multi-jurisdictional context. Of these, roughly half (51 percent) received support from SHSP or UASI funding. For these 128 exercises, the reliance on SHSP and UASI funds for support was high. State respondents estimated that 76 percent (97 exercises) would not have taken place without SHSP and UASI funds. Moreover, six states indicated that only SHSP and UASI funds were used to support all of their full-scale exercises that tested operational coordination in a multi-agency, multi-jurisdictional context.

Reliance on SHSP and UASI funds was even greater for UASI jurisdictions. The 19 UASI jurisdictions responding to this section of the survey identified a total of 123 exercises that were designed, conducted, or evaluated using UASI and SHSP funds. Absent these funds, respondents indicated that 92 percent (113 exercises) would not have taken place. As shown in Figure 6, the loss of SHSP and UASI funding would have severe effects on the number of opportunities to coordinate among different preparedness stakeholders.

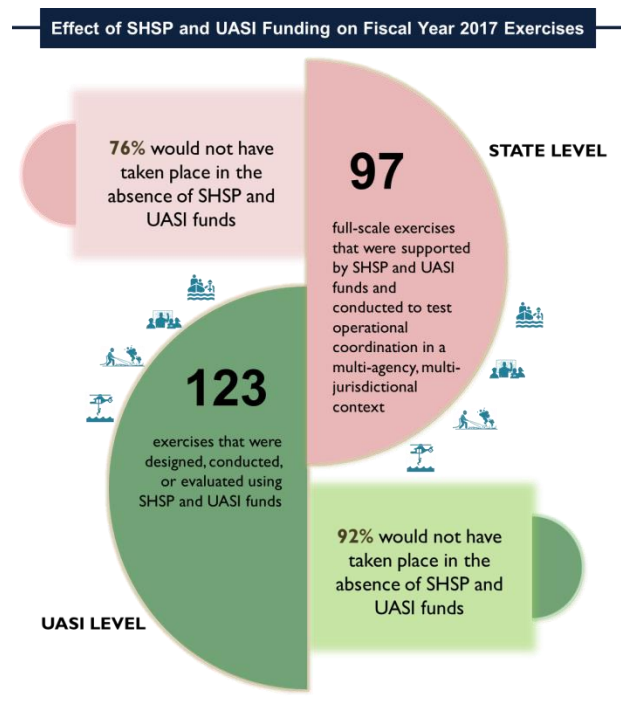


Figure 6. Preparedness stakeholder participation in UASI jurisdiction exercises



WHAT DOES THE PAST TEACH US?

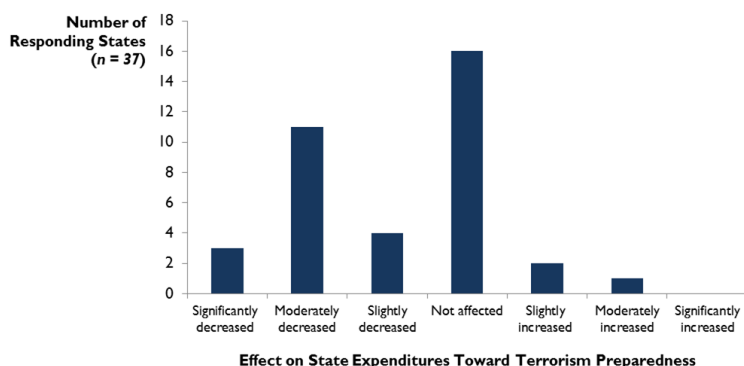
One way of examining the possible consequences of future reductions in preparedness grants is to simply look at the past, since SHSP and UASI grant programs have been subject to past reductions. The most recent cuts took place in fiscal years 2011 and 2012, when SHSP and UASI awards decreased by 65 percent and 41 percent, respectively. More than five years later, the survey reflects the true implications of these cuts.

In Their Own Words: Insights from the Oklahoma Survey Response

The Oklahoma Regional Response System (RRS) is a robust system made up of numerous public safety response disciplines strategically scattered across the state to provide efficient coverage during emergencies. The RRS was designed and built when Oklahoma received almost 10 times the amount of grant money we currently receive from DHS. However, due to an almost 90-percent decrease in SHSP and UASI funding, RRS is now in sustainment mode, which allows for only the most basic expenditures necessary to keep the system operational. Original equipment for the RRS units is reaching its end of life and will possibly be unsafe to use if not replaced. However, there is very little money available to make such replacements. The severe decrease in funding has made growth unsustainable and very much opens the door to possibly seeing a decrease in the current capability to save lives within the state.

It is unlikely that some states will react to further cuts by securing additional state funds for terrorism preparedness. At the time of the last decrease, nine states contributed little or no funding for terrorism preparedness activities. For these states, the substantial decrease in SHSP and UASI funding did not prompt a corresponding increase in state spending to offset this funding gap, and it is unlikely that further cuts would be any different. More broadly, of the 37 states responding to this portion of the survey, 14 reported that the decrease in SHSP and UASI funds led to a moderate or significant decrease (defined as more than 10 percent) in corresponding state spending toward terrorism preparedness. In comparison, only three states reported corresponding increases in state expenditures to offset the decrease in SHSP and UASI funds (see Figure 7).²³ Additionally, respondents from two states noted that their states had to pass the extra burden from the funding gap on to localities.

Figure 7. Impact of the decreased SHSP and UASI funds on state expenditures



For a number of states and UASI jurisdictions, the SHSP and UASI program reductions forced them to apply their remaining grant amounts toward sustaining and maintaining existing capabilities. The result has been stagnation in capability development. Because of the grant reductions, state agencies were forced into difficult decisions regarding their terrorism

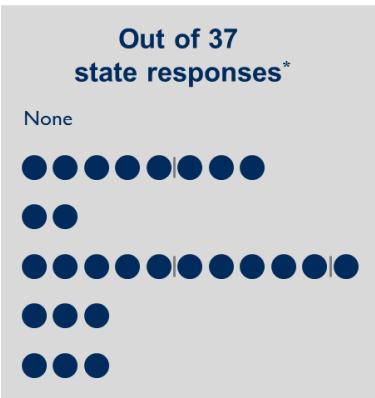
²³ Sixteen states did not link a causal connection between decreases in SHSP and UASI funds and state expenditures for terrorism preparedness. However, in five of these cases, the lack of any effect stemmed from the fact that the state had already zeroed out funding for terrorism preparedness.

preparedness activities. For many states responding to the survey, this meant focusing on sustaining and maintaining the capabilities they had already built. The effects varied in severity, however, as detailed in the “Loss of Capability Due to Prior Funding Cuts” infographic box below. Based on survey responses, **some states are already experiencing difficulty in sustaining existing capabilities** because of the previous funding cuts. For example, some jurisdictions have described having to proactively sacrifice training and exercises in order to shield their specialized teams from dismantling. Moreover, jurisdictions predict far more dramatic losses to capability in the future, as the equipment purchased with large capital expenditures eventually breaks down. Many of these equipment purchases occurred prior to the funding cuts, were heavily supported by SHSP and UASI grants, and meant to fill the national gap in preparedness. Any further reductions in SHSP and UASI program funds may push states and UASI jurisdictions to suffer more extreme losses than were felt in the fiscal year 2011 and 2012 cuts, and therefore severely handicap preparedness efforts already achieved.

Loss of Capability Due to Prior Funding Cuts

NEMA asked jurisdictions to describe how SHSP and UASI funding reductions in fiscal year 2011 and 2012 affected terrorism preparedness. Based on the severity of the losses experienced, we developed a continuum of stress. Results indicate that a number of jurisdictions are already sacrificing capability, foreshadowing severe implications for any additional funding cuts.

Stage 1: Minimal Stress	Reduction in stakeholder interdisciplinary engagements
2	Delay or elimination of new projects and initiatives to increase capability
3	Inability to sustain/maintain equipment
4	Decrease in training and exercise opportunities
5	Drop in NIMS typing level
Stage 6: Critical Stress	Loss/consolidation of personnel or assets (e.g., teams, equipment caches)



Only **two states** expressed that they were not under stress by the SHSP and UASI program reductions

*Two state responses mentioned nonspecific decreases in capability that could not be categorized, and an additional six states did not discuss whether they experienced losses.

In Their Own Words: Insights from the Illinois Survey Response

Until fiscal year 2017, decreases in funding did not affect specialized team capabilities because we closed other programs to prioritize the response capability of these teams. However, starting in fiscal year 2017, the decrease in funds has forced us to close down three Statewide Weapons of Mass Destruction Teams and merge some of their assets into other teams. At this point, the decrease in funding is limiting capital replacement. Many of our teams received their capital equipment (e.g., vehicles, CBRNE sensors, communications gear) between 2004 and 2007. That equipment is reaching 11 to 14 years of age. At some point in the near future when large capital equipment breaks, it will not be replaced, reducing our ability to respond.

FINAL THOUGHTS

Given the wide variety of threats and vulnerabilities that states and major urban areas face, it is not surprising that they have adopted different attitudes toward terrorism preparedness. Moreover, jurisdictions have had to formulate their approaches and make decisions even as our nation’s

understanding of what constitutes terrorism preparedness has continued to evolve, and in the face of corresponding shifts in federal priorities. For a few jurisdictions, terrorism preparedness is a federal responsibility, discharged through federal grants. Given limited operating budgets, perceived low probabilities of terrorist attacks, and more pressing daily needs, SHSP and UASI grants are the sole basis of any terrorism preparedness capability. Cuts in these grants simply prompt cuts in capability.

A far greater number of jurisdictions, however, have used federal preparedness grants to catalyze and substantiate their own investments in terrorism preparedness. Our results indicate that SHSP and UASI grants take advantage of existing human capital and basic responder capability that reside within jurisdictions to establish advanced capabilities, providing a substantial cost savings versus creating these capabilities from scratch. This return on investment is even greater when looking beyond the emergency management and homeland security communities to include other state and local agencies, many of which are engaging in terrorism preparedness efforts with little or no additional SHSP and UASI investment.

The capabilities to address terrorist threats have grown enormously since September 11, 2001. Most citizens of the United States now have access to advanced capabilities within a four-hour drive of their residence. But capability progress has been stifled in recent years, as jurisdictions are still dealing with the “new normal” imposed by the severe SHSP and UASI program cuts in fiscal years 2011 and 2012. These cuts have already slowed or stopped many jurisdictions from progress toward the National Preparedness Goal and have detrimental effects on the National Preparedness System. Although a few fortunate jurisdictions have been able to use their own funding to fill in the gap, our survey results indicate that most states and local jurisdictions are already sacrificing capability due to funding cuts. Ironically, one of the first activities lost are the interactions (e.g., working groups, stakeholder engagement) that allow the emergency management and homeland security communities to draw in and coordinate the broader participation in terrorism preparedness that is generating additional returns on investment.

Meanwhile, more than one jurisdiction ominously discussed being on “borrowed time,” with large-scale capital investments nearing the end of their lifespans. The funds available soon after the establishment of these grants for capital expenditures no longer exist, foreshadowing potentially more substantive losses of capability when equipment finally fails. Even after they’ve been initially established, trained, and equipped, specialized teams require future federal grant funds to maintain and replace their equipment and address training needs from staff turnover and refresher training. Moreover, simply maintaining the status quo is tantamount to falling behind, given the dynamic and expanding nature of terrorist threats. Without greater investment in terrorism preparedness, the nation may soon find itself in a new era in which capabilities are in decline.

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- California Governor's Office of Emergency Services
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- Connecticut Department of Emergency Services and Public Protection
- Delaware Emergency Management Agency
- Florida Division of Emergency Management
- Georgia Emergency Management and Homeland Security Agency
- Hawaii Department of Defense
- Idaho Office of Emergency Management
- Illinois Emergency Management Agency
- Iowa Department of Homeland Security and Emergency Management
- Kansas Highway Patrol
- Kentucky Division of Emergency Management
- Louisiana Governor's Office of Homeland Security and Emergency Preparedness
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- Nebraska Emergency Management Agency
- New Jersey Office of Emergency Management
- North Carolina Emergency Management
- North Dakota Department of Emergency Services
- Ohio Emergency Management Agency
- Oklahoma Office of Homeland Security
- Oregon Office of Emergency Management
- Pennsylvania Emergency Management Agency
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- Tennessee Emergency Management Agency
- Utah Department of Public Safety, Division of Emergency Management
- Vermont Department of Public Safety
- Virginia Department of Emergency Management
- Washington State Emergency Management Division
- Wisconsin Emergency Management
- Wyoming Office of Homeland Security

UASI JURISDICTIONS

- Albany County, New York
- Anaheim–Santa Ana, California
- Atlanta, Georgia
- Austin, Texas
- Baltimore City, Maryland
- Boston, Massachusetts
- Central Virginia Alliance, Virginia
- Columbus, Ohio
- Cuyahoga County, Ohio
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