DomPrep Journal

Building Resilience

Featured in This Issue

Pictured on the Cover: Source: Federal Emergency Management Agency (2019).

Building Resilience Into the Planning Process

By Catherine L. Feinman

Whether constructing a home, creating community programs, or developing multijurisdictional plans and procedures, it is not enough to just construct, create, or develop. A home that collapses, a program that is not sustainable, and plans and procedures that lack continuity are examples that should motivate emergency preparedness professionals to build resilience into every planning process.
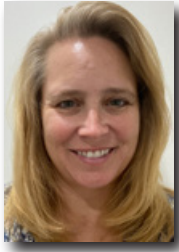
R esilience does not prevent bad things from happening, but it does lessen the cost, burden, and recovery time when these events do occur. Any community could face natural and human-caused disasters at any time. Preparedness is key, since it is not possible to know exactly what will happen or when it will occur. However, disaster planning with a focus on resilience is not a simple process.

Hurricanes and wildfires are just two types of natural disasters that regularly occur, but no two are identical. There are, though, certain standards that could mitigate the effects of these types of events. For example, building codes can be implemented for structures to withstand certain wind speeds or to be constructed using fire retardant materials. By collecting and utilizing reliable data, decision makers can identify potential risks and threats, then develop strategies and take actions toward reducing their impacts, which can vary significantly depending on the location of the event and the demographics of the affected area (e.g., children vs. adults).

Human-caused events with law enforcement or military engagement require another layer of planning. Unlike natural disasters, circumstances such as civil unrest or violent extremism involve motivation to do harm. Resilience for these threats involves a greater amount of situational awareness among all community stakeholders and interagency coordination at all levels within the intelligence community.

One potential consequence of any disaster that has been particularly noticeable during the COVID-19 response is scarcity of resources. Early in the pandemic, products such as toilet paper and hand sanitizer disappeared from store shelves. In the middle of the pandemic, mutual aid was not always available to manage hospital surge. Later in the pandemic, as businesses strive to return to pre-pandemic service levels, many "help wanted" advertisements still go unanswered. Despite experiencing firsthand how basic common expectations may no longer be realistic under certain circumstances, communities' demands for goods and services continue to outpace the resources necessary to meet these demands.

This October edition of the *DomPrep Journal* focuses on the need for resilience to be an integral part of the disaster planning process. Investing in resilience early will help minimize the number of lives lost and property damaged, facilitate more effective responses, lessen the amount of time needed to restore normal daily operations, and reduce the overall effect of any disaster.

It Is Time to Adopt & Implement Resilient Building Codes

By Craig Fugate, Pete Gaynor & Dominic Sims

As a result of the changing climate, natural hazards like hurricanes, tornadoes, and wildfires are expected to continue to increase in both intensity and frequency. Therefore, it is critical that communities around the globe prioritize increasing their overall resiliency.

Understanding this, the bipartisan infrastructure bill that recently cleared the U.S. Senate includes investments to make public works infrastructure, like highways and the electric grid, more resilient. The bill also addresses wildfire risk through traditional avenues, like forestry management and suppression. Yet, at a time when most people spend more than 90% of their time indoors, the bill does not meaningfully address resiliency in the built environment, as it relates to wildfires or other hazards.

The Federal Emergency Management Agency (FEMA) views the adoption and effective implementation of hazard resistant building codes as the most effective community mitigation measure against hazard risk. Building codes and standards establish requirements for new construction and renovations and fit within an ecosystem of building policies that support the health, safety, and economic welfare of the communities who adopt them. Governments and communities must do their part by committing the effort and resources to proactively adopt, implement, and enforce hazard resistant codes and standards to help reduce risk and increase community resilience. However, Congress can and should do more. As the House and Senate consider reconciliation legislation, it will be crucial that strong building codes are a focal point to enhance safety in communities and save lives.

The Economic and Distributive Costs of the Status Quo

According to FEMA, about two-thirds of communities facing hazard risk have not adopted hazard resistant codes. While in recent years, 30% of new construction has taken place in communities with either no codes or codes that have not been updated this century. Considering this variation, the National Institute of Building Sciences (NIBS) has found that adopting current codes provides $11 in mitigation benefits for every $1 invested. Plus, retrofitting homes in the wildland urban interface to wildland fire codes could provide a national benefit as high as $8 to $1.

These benefits would be felt most acutely by families on or below the poverty line. Research shows that disasters hit low- and moderate-income families the hardest because they are more likely to live in homes built in hazard-prone areas or homes with lower quality construction. Consequently, low- and middle-income families are at greater risk of damage to or loss of their homes and are at higher risk of being displaced by a disaster.

Governmental Assistance Is Vital to Promote More Resilient Construction

Over the next several weeks, Congress will be reconvening to shape and finalize reconciliation legislation. To meaningfully advance resiliency within communities, the following proposals should be considered:

- *Provide $300 million in dedicated funding to enable FEMA to support the adoption and implementation of hazard resistant building codes more effectively.* Lack of resources is one of the main reasons communities, particularly rural and smaller communities, do not update their building codes by adopting more recent editions, fully implement the codes they have, or modernize their efforts. These funds will help communities adopt hazard resistant codes tailored to area hazards and their built environment, fully implement the codes already in place, and allow local building departments to digitize their efforts, improving disaster response and speeding-up construction. While there are pre-existing programs that fund code activities, such as FEMA's Building Resilient Infrastructure and Communities (BRIC) and Hazard Mitigation Grant Program (HMGP), due to their structure, these programs have not addressed the outstanding need that such dedicated funding is necessary.

- *Ensure infrastructure investments, at minimum, adhere to current building codes.* Although the federal government requires current codes for its own portfolio, FEMA is the only federal entity that requires federally assisted projects to adhere to up-to-date building codes and standards. Without this requirement, federally assisted infrastructure – including major projects constituting more than $360 billion in grants and other assistance under President Joe Biden's American Jobs Plan – will be built to outdated codes and standards in many parts of the country.

  > *According to FEMA, about two-thirds of communities facing hazard risk have not adopted hazard resistant codes.*

- *Enact tax incentives like the Disaster Savings and Resilient Construction Act of 2021 or rebates like the Home Wildfire Risk Reduction Rebate Program of last Congress's Clean Economy Jobs and Innovation Act.* These efforts would incentivize wildfire resistant construction and retrofits and would complement communities' efforts to transition to stronger base codes.

The impact of natural hazards is increasing. To ensure the safety and welfare of communities, the path forward must include a focus on the adoption, implementation, and use of modern, hazard-resistant building codes and standards.

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"Moneyball" for the Wildland Fire System

By Matthew P. Thompson & Erin J. Belval

The wildfire management community has made great strides incorporating new decision support tools into how it plans for and responds to wildfire incidents. Despite improvements in risk assessment and management at the incident scale, increasing fire activity and critical resource shortages reveal a system under strain in need of strategies that more efficiently allocate scarce resources across incidents while promoting the well-being of the firefighting workforce upon which the system relies. A scaled-up infusion of data-driven analysis and decision-making could enhance the performance of the entire wildfire management system.

In recent years, the wildfire research and management communities have demonstrated great success in translating advanced analytics to wildfire management operations. With the objective of supporting safer and more effective response, scientists and analysts are using new tools to provide critical information on landscape and community risks, environmental hazards to fire personnel, and fire control opportunities. To date, use of these tools has supported incident response planning on dozens of landscapes throughout the western United States as well as response strategy development on more than 200 large, complex wildfires. This paradigm that seeks more and better data and that blends analytics with the expertise and intuition of fire managers is colloquially referred to as "Moneyball for fire," borrowing inspiration and insight from the sports analytics revolution.

Strategies, Resources, and System Strain

In addition to information on risks and opportunities, how managers arrive at and implement wildfire response strategies can be highly dependent on the availability of suppression resources. These resources are moved around the country by regional and national coordinating centers in response to demand and priority, often resulting in complex and extensive patterns of travel over long distances (Figure 1). Effective functioning of the wildfire system is largely premised on allocating these shared resources to meet the time-sensitive demands of local managers so they can implement their preferred (and ideally analytics-informed) strategies.

It is becoming more evident that this system is showing signs of strain. Increasing fire activity combined with challenges with workforce recruitment and retention, among other factors, have led to greater resource scarcity and greater workloads, which can result in unfilled resource requests and missed opportunities for achieving management objectives as well as fatigue and burnout. A changing climate and more people moving into fire-prone areas are likely to exacerbate this strain on the system.

Fig. 1. Historical movement of fire personnel and equipment during a portion of the 2017 fire year. The red end of each arc indicates the personnel destination. *Source:* Image made by Jude Bayham & Erin Belval (2021).

Analytics for the Fire System

These management challenges present a rich context for innovation and delivery of actionable analytics to help the wildfire system better protect landscapes, communities, and responders. Scaling up analytics to improve assignment and allocation of fire personnel and equipment to fires could help local managers better achieve desired fire outcomes. That is, the promise of "Moneyball" extends beyond the scale of the incident by informing problems such as: (1) prioritization at national and regional levels across incidents, (2) agile deployment of resources to incidents, and (3) balanced workload management. Importantly, some of these systemic problem areas have clear alignment and synergy with the incident-scale analytics. For instance, local information on control opportunities and probability of success can inform discussions of critical resource needs and prioritization. Developing a platform for systemic analytics can also enable greater objectivity and transparency, can break down information silos, and can facilitate a more forward-looking approach through analysis of leading rather than lagging indicators.

Prioritization. Every year there are periods with high levels of fire activity during which there simply are not enough trained personnel and equipment to go around. During these periods, regional and national managers must make hard decisions about which fires get resources and which do not. Examining the tradeoffs associated with these resource assignments is critically important. For example, resources may be sent to an emerging fire to rapidly contain it and reduce the future threat posed by that fire. However, in sending resources to the emerging fire, established fires imminently threatening communities could receive fewer resources.

Historically, the prioritization of fires' requests for personnel and equipment have been heavily dependent upon the data provided by the team managing each fire. As teams' priorities and strategies can differ substantially, this data is not consistent across fires. Analytics improved by consistency and coordinated nationally can provide managers with information on projected fire impacts and opportunities for containment in the coming days, using unbiased and objective methods that allow managers to directly compare across incidents. Thus, analytics that better characterize risks and opportunities are valuable because they allow for more robust and complete tradeoff analyses.

Agile deployment. Because there is a lag between when the personnel are ordered to the fire and when they arrive, basing deployment decisions on projected fire impacts and opportunities not only provides for more robust decisions, but it also allows personnel to arrive in the right place at the right time to capitalize on containment opportunities. Businesses have exploited analytical methods for delivery to enhance their supply chains, which has substantially decreased delivery time for customers. Reducing the lag between when resources are ordered to a fire and when they arrive can have substantial benefits, and fire analytics could help here by supporting more intelligent routing and prepositioning of resources as well as meeting time-sensitive surge capacity needs. Further, using analytics to "right size" deployments that best align strategic and tactical needs with resource capabilities can help improve likelihood of success while preserving capacity to meet other continuing or emerging needs.

Firefighter Crew at Mount Hough Road, Dixie Fire (California).
Source: U.S. Forest Service (29 July 2021).

Workload balance. All the wildfire management work that is accomplished on the ground depends upon a workforce comprised of highly qualified personnel. As fire activity has increased, so has the amount of time firefighters spend on assignment. These assignments

are physically dangerous and mentally taxing, and the effects of assignments over the course of a season can lead to physical and mental fatigue. Providing adequate opportunities for rest throughout the season is critical to ensuring firefighters' well-being. Fortunately, with analytics, enhanced dispatch practices can be optimized to reduce travel distances while balancing crew fatigue.

Future Directions

Resource deployment is a crucial piece of fire management and advanced analytics can help the system better address the growing challenges of wildfires. However, managers have long recognized that more efficient resource deployment alone is not a comprehensive solution to the problem of increasing damages from wildfire. Long-term solutions will necessarily include a much broader set of coordinated actions that promote resilient landscapes through controlled burning and other landscape management of fuels, fire adapted communities, and planning for wildland fires before they occur. Analytics can also help address these problems, and the Wildfire Risk Management Science Team is working with managers to continue to develop an analytics framework and facilitate its deployment within the USDA Forest Service and other fire management organizations.

Firefighters conduct strategic firing operation near Taylorsville on night of August 25, Dixie Fire (California). *Source:* U.S. Forest Service (26 July 2021).

Disclaimer: The findings and conclusions in this report are those of the author(s) and should not be construed to represent any official USDA or U.S. government determination or policy. This research was supported by the U.S. Department of Agriculture, Forest Service. Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. government.

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The Future of Emergency Management: Managing Scarcity

By Robert J. (Bob) Roller

The increasing frequency and severity of natural disasters coupled with the reemergence of military threats from peer and near-peer adversaries overseas will greatly reduce the ability of emergency managers to meet the needs of disaster survivors. This will necessitate a paradigm shift in the primary role of emergency management from the delivery of resources to managing the scarcity of resources and making better use of them.

The American public expects government at all levels to respond to disasters quickly and effectively. This expectation seems to grow each year. High on the list of responsibilities is the timely, efficient, and equitable delivery of sufficient resources to protect property and minimize suffering caused by disasters. However, providing this support while the number of disasters and the severity of these disasters increase each year due to climate change is not sustainable. The ability to meet these expectations is further threatened by the reemergence of peer and near-peer international competition for the first time since the early 1990s. This will likely reduce the ability of emergency managers to leverage military capabilities needed for both domestic disaster response and potential overseas warfighting. With no simple solution to this problem, it is important for emergency managers to recognize the need to manage scarce resources effectively and equitably and to work with their stakeholders to manage expectations and adjust to this new reality.

Background

Emergency managers trace the history of the profession to the founding of the nation and early efforts to reduce the suffering and economic impacts caused by natural disasters. These efforts accelerated through the 20th century as the American public demanded government at all levels provide increasing amounts of support following disasters and other emergencies – including well-known events such as hurricanes, floods, fires, and nuclear power plant accidents, and emerging events such as 9/11, other acts of terrorism, and the COVID-19 pandemic. With each year, emergency managers acquire more responsibility and are held to a high standard where any delay in the delivery of support exposes them and their elected leaders to the famous "Where in the hell is the cavalry on this one?" criticism levied after Hurricane Andrew by Kate Hale, Dade County's emergency management director.

Despite increasing severity and frequency of disasters caused by climate change and the inclusion of terrorism into the list of threats emergency managers must address following the attacks of 9/11, the nation benefited from a three-decade period of military and economic dominance. The warfighting considerations present during the Cold War were no longer necessary, and the domestic impacts of catastrophic attacks from peer or near-peer

adversaries were deemed so unlikely that consideration for them waned. This shift allowed Congress to reallocate millions of civil defense dollars into pre-disaster preparedness grants that helped offset the impact of natural disasters and better prepared communities for other emergencies through the 1990s and 2000s.

The Current Problem

The current emergency management paradigm provides increasing support and resources from local, state/tribal, and then the federal government as an incident expands in size and complexity. However, this paradigm assumes that there are sufficient resources available to deliver goods and services to an impacted area. That may not be the case if the impacted area suffers catastrophic consequences or if there are multiple impacted areas requiring similar levels of support. Existing national doctrine, exercises, and real-world incidents focus on disasters and human-caused emergencies that affect specific regions or one or two major cities. They exclude incidents that occur in multiple regions as well as any simultaneous domestic military threats that may stretch the military capabilities typically employed domestically for disaster response.

The paradigm was simply not designed to address multiple catastrophic incidents. There are no formal deconfliction mechanisms to assist in the allocation of scarce resources when demand outstrips supply. In situations where either natural disasters or military attacks, or perhaps both, threaten multiple regions, it might take weeks or months for unaffected jurisdictions to feel safe enough to release their own life-saving capabilities to assist the impacted areas. Some communities may be hesitant to deploy resources if they

> *The emergency preparedness paradigm was simply not designed to address multiple catastrophic incidents when demand for scarce resources outstrips supply.*

cannot guarantee to their own constituents that these same resources will not be needed to address further natural disasters or follow-on attacks in their previously unaffected communities. The current response model assumes a massive influx of resources will rush the affected area to assist with the response. However, it is uncertain if this commitment can be met.

The concern regarding resourcing shortfalls will be more acute if the military capabilities required for disaster response are needed overseas for contingency operations or domestically for homeland defense. The national preparedness system established by Presidential Policy Directive 8 – implemented through the National Response Framework and other doctrine – is underwritten by military capabilities that might not be available to the extent required for either a natural disaster or response to an attack on the United States if those same capabilities are needed for defense. The U.S. military prioritizes readiness over disaster response, which has not been an issue in recent years in the absence of a major threat from an adversarial foreign government. However, an attack against the United States or one of its allies would likely invite a U.S. military response that could be larger and more immediate than Operation Enduring Freedom in October 2001.

Military planning on this topic is understandably unavailable for public discussion, but there are several general assumptions:

- The top priority of the U.S. military during wartime will be to win the war as quickly as possible.

- The top priority of Congress will be to protect unaffected areas by eliminating the foreign adversary's ability to inflict further harm as the military seeks to swiftly resolve the conflict.

- The Department of Defense will employ its delegated Defense Production Act (DPA) authorities to assert military necessity for acquiring goods and services needed to prosecute the war – even if it causes critical shortages of items needed for the domestic response and recovery missions. Similarly, other federal departments will utilize their delegated DPA authorities to acquire goods and services, creating a federal competition that will require adjudication and resolution.

The Future

The century-long trend to simply deliver more resources more effectively and more equitably cannot be sustained indefinitely. This is not an indictment of emergency managers who have simultaneously addressed a global pandemic, hurricanes, floods, and a wildfire season that breaks new records of destruction each year. It is simply an admission that, at some point, there will not be any more resources to provide. It is time for expectations to change.

The emergency management community must more effectively communicate the constraints that will limit the federal and non-federal responses to catastrophic disasters and nation-state threats. Individuals, families, and local communities need to ensure they are ready to help themselves until outside help arrives. This includes encouraging individual preparedness efforts such as building disaster supply kits and enabling training and education (e.g., basic first aid) that allow neighbors to help each other. It also includes working with community leaders to ensure that the most vulnerable populations are not abandoned when resource shortages impact them. A prepared community is a resilient community, and the resilient communities will best manage the catastrophic effects of tomorrow's disasters. It will be hard to explain to the public that the federal "cavalry" will not initially arrive with everything the public currently expects. However, this is the truth, and the best time to communicate this reality is now.

Emergency managers also need to understand that managing resource scarcity and making tough choices regarding the efficient use of limited resources will be a much more prominent part of the emergency management mission. Recent experiences allocating scarce items during the COVID-19 pandemic – including examination gloves, surgical masks, etc. – are a forerunner of things to come. It is in everyone's best interest to design and test resource adjudication and allocation, and mobilization plans and processes before they are needed for a catastrophic emergency. This approach should likewise include using the best science available to make assumptions about future natural disasters that allow for more effective decision-making regarding the use of scarce resources.

The doctrinal issues can be addressed in part by updating recent emergency management and homeland security doctrine to the new/forgotten reality of international competition and planning assumptions relevant to this threat as well as scientific data regarding the impacts of climate change. The Cold War concept of "national mobilization" should return to the national preparedness dialog. The polices and legislation governing its application – many of which are still in effect – also should be examined, updated, and exercised before they are employed to address multiple simultaneous catastrophic disasters or a conflict with a foreign adversary. Most importantly, updated processes, plans, and procedures need to be exercised, employed, and updated to ensure that systems are in place to manage resource scarcity issues well before they are needed. This will be difficult to accomplish. It will be hard to divert time and money away from the crisis of today toward the threats of tomorrow. It will be similarly difficult to realign thinking and budgets to this new reality, but it is necessary to ensure preparedness.

Texas National Guard Members unload bottled water during Winter Storm Uri (Photo Courtesy: Marcus Clark, Texas Division of Emergency Management).

Conclusion

In the 30 years since the end of the Cold War, national preparedness efforts have focused on terrorism and localized natural disasters, largely ignoring threats from hostile foreign nations and increasing impacts of climate change. To address this problem, it is time for the United States to revisit Cold War preparedness assumptions and explore the best scientific data available to align policy and doctrine to the reemergence of these threats. The government then could develop the tools to best use limited resources while helping prepare citizens to care for themselves until an effective whole-of-government response can be implemented.

Robert J. (Bob) Roller serves as FEMA's National Planning Branch chief where he supervises the development, implementation and assessment of major federal government-wide planning efforts that address complex and catastrophic disasters. In addition to his steady state responsibilities, he is a qualified planning support section chief within the National Response Coordination Center, where he leads FEMA planning efforts for multiple disasters and supported response operations for the COVID-19 pandemic. He joined FEMA in 2017 after serving at the U.S. Department of Homeland Security (DHS) Headquarters, where he led the development of multiple DHS-wide planning efforts including pandemic workforce protection, land migration surge contingency planning, and the annual DHS Operational Planning Guidance. He also has 15 years of experience as a firefighter and Emergency Medical Services (EMS) provider in both wilderness and urban environments. He is currently a volunteer firefighter/paramedic/swiftwater rescue technician in Maryland and belongs to several mountain rescue teams including one he co-founded. The opinions printed here are his own.

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Afghanistan – A Haven for Violent Extremism

By Richard Schoeberl, Anthony (Tony) Mottola & Anthony L. Clark

The rapid collapse of Afghanistan creates uncertainty and fears around how swiftly the Islamic State (ISIS) and al-Qaida can rebuild, mobilize, and plan attacks on the West under a Taliban-led government. As conflict breeds instability, volatility will certainly follow the U.S. withdrawal from Afghanistan. There will likely be a reconstitution of al-Qaida and growth of ISIS as two movements compete for influence in the country. It calls to question whether the recent attacks in New Zealand, inspired by ISIS, were motivated by what most would consider a victory for Jihad as the Taliban's self-proclaimed victory seeks to inspire more terrorist movements. After 20 years of U.S. occupation, many are questioning whether Afghanistan will once again become a massive draw and haven for Islamic extremists.
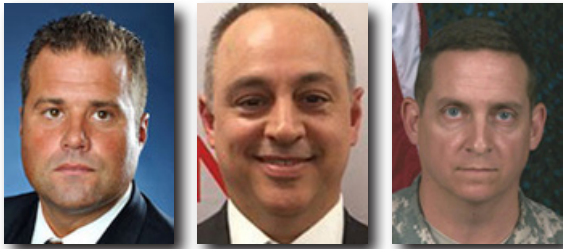
A Taliban-led Afghanistan will be a welcoming operating atmosphere for terrorists, insurgents, and foreign fighters alike. Al-Qaida has somewhat passionately waited in the wings and is now in the limelight following the recent Taliban victory. As proclaimed by al-Qaida, "This victory has demonstrated what the Islamic nation is capable of when it unites, takes up arms, and fights in the Way of Allah to defend its Religion. These events prove that the Way of Jihad is the only way that leads to victory and empowerment."

According to the United Nations, it is estimated that the current number of armed Taliban fighters ranges from approximately 58,000 to 100,000. Globally, over the past few years, Afghanistan has accounted for 41% of deaths from terrorism-related violence and the Taliban was accountable for 87% of these fatalities.

Law Enforcement Concerns

It will be difficult to get independent accounts on what is happening inside Afghanistan without human intelligence. However, the intelligence community can project what is likely to take place based on what is currently known and historical precedents. Organizations like ISIS and al-Qaida have continually proven their capabilities and intent to attack the U.S. and its interests. These organizations will continue to plot new attacks and seek impressionable people to commit acts of violence against the U.S. through direct involvement or inspired attacks.

An increase of homegrown violent extremist and domestic violent extremist attacks will become a focus of local and state policing. However, the international threat certainly has been heightened as the Department of Homeland Security released the National Terrorism Advisory System (NTAS) Bulletin stating, "These threats include those posed by domestic terrorists, individuals and groups engaged in grievance-based violence, and

those inspired or motivated by foreign terrorists and other malign foreign influences." Making information sharing between all levels of law enforcement and intelligence community paramount, intelligence gathering and sharing will have to occur at all levels in order to be successful.

According to the National Strategy for Counterterrorism (NSC), "These groups stoke and exploit weak governance, conflict, instability, and longstanding political and religious grievances to pursue their goal of eliminating Western influence in majority Muslim countries and reshaping Islamic society." According to the NSC, based on what is known about the organizations and what they seek to exploit, Afghanistan is perfectly aligned to become a jihadist refuge. According to the Global Terrorism Index, 95% of deaths from terrorist attacks over the past 17 years have occurred in countries that are in conflict, and "Afghanistan remains the country with the highest impact from terrorism." Most recently, U.S. chair of the Joint Chiefs of Staff, Gen. Mark Milley stated, "My military estimate is that the conditions are likely to develop to a civil war. I don't know if the Taliban are going to be able to consolidate power and establish governance."

Reuniting After U.S. Withdrawal

Since the attacks of 9/11, the U.S. interest in Afghanistan has primarily been focused on preventing future attacks. It has been 20 years since the U.S. led an invasion into Afghanistan in search of al-Qaida, which was embraced and protected by the Taliban. In fact, the Taliban's rejection to hand over top al-Qaida member Osama bin Laden is what ultimately led the U.S. military insurgency and ousting of the Taliban regime. In videos posted on social media, bin Laden's top aide, Amin ul-Haq, returned to his hometown of Nangarhar, Afghanistan, just hours after U.S. forces left Kandahar.

Ul-Haq was al-Qaida's top arms supplier, bin Laden's chief deputy, and has been on the U.S. list of Specially Designated Global Terrorists since 2001. This development is of great significance as reporting suggests ul-Haq is now a key figure working with the Taliban. Although the Taliban and al-Qaida have different ideologies, different goals, and different languages, they have shared a long history that dates back to the 1990s, a relationship that has been strengthened by a shared struggle against global forces in Afghanistan and one that remains closely aligned. To what extent these two organizations will remain aligned going forward is yet to be seen given that the common enemy is no longer occupying the country.

On 7 September 2021, the Taliban declared Afghanistan an Islamic Emirate and announced a new government. The militant group did not include any women in the new interim government and has been using violent measures against protests. Under the new Taliban-established government, Sirajuddin Haqqani was appointed the new interior minister for Afghanistan. Sirajuddin Haqqani is the son of the founder of the classified terrorist group the Haqqani Network, which the U.S. designated as a Foreign Terrorist Organization due to its involvement in the Afghan insurgency and links to al-Qaida. Haqqani is also on the FBI's most wanted list due to his involvement in suicide attacks and close ties with al-Qaida. The FBI believes Haqqani is connected to the 2008 hotel attack in Kabul that killed six people, as well as a U.S. citizen. It is also believed that Haqqani "coordinated and participated in

cross-border attacks against United States and coalition forces in Afghanistan." Additionally, Haqqani was involved in the planning of Afghan President Hamid Karzai assassination attempt in 2008.

Haqqani is not the only concern with the newly formed government. Mullah Mohammad Hassan Akhund, one of the Taliban's founders, was named prime minister. He is on a UN blacklist. Mullah Abdul Ghani Baradar, a Taliban co-founder, has been tapped as deputy prime minister. Four Taliban members released from Guantanamo Bay (GTMO) are part of the Taliban's new hardline government. In addition, a declassified 2020 Office of National Intelligence report indicated that a total of 104 of the 729 detainees released from GTMO have reengaged in terrorist activities, including conducting and planning attacks and recruiting and funding terrorists.

Establishing a Base of Operations

The Taliban is attempting to portray themselves as moderates, but their selections in the interim government leave many questions as to their true intent. In September 2021, Saudi Arabia's foreign minister Prince Faisal bin Farhan Al Saud said, "the resurgence of al-Qaeda, ISIS and the Taliban in Afghanistan is a matter of real concern."

Al-Qaida's existence in Afghanistan has been diminished since the U.S.-led invasion in 2001. However, with top leadership such as Amin ul-Haq returning, there is significant concern that the region could once again develop into a terrorist haven. A recently released United Nations report suggests that the substantial leadership of al-Qaida still resides in the Afghanistan and Pakistan border regions, making it logistically effortless for them to unite out of exile. The UN further reported that al-Qaida's presence exists in at least 15 Afghan provinces and is reported to have upward of 500 members. This number is likely to grow quickly given the circumstances within the region and the fact that the Taliban released many senior al-Qaida operatives when it captured Bagram Air Base in mid-August. Of great concern, the report suggests that the "Taliban and al-Qaida remain closely aligned and show no indication of breaking ties." As history has documented, the report only solidifies that al-Qaida's long-term strategy is "strategic patience for a period of time before it would seek to plan attacks against international targets again."

Refugees fleeing Afghanistan and surging migrants at the U.S.-Mexico border will become an intelligence and policing challenge for law enforcement in the U.S.

Examining documents found in bin Laden's Abbottabad hideout, even bin Laden stressed the importance of a haven in Afghanistan. Derived from the Arabic language meaning "the base," the term al-Qaida itself is critical. Afghanistan will likely remain the base from which al-Qaida will continue to operate.

Aside from the long historical allegiance of the Taliban and al-Qaida, an ISIS affiliate, known as ISIS Khorasan (ISIS-K) established itself in the Afghanistan/Pakistan region in 2015. The State Department designated ISIS-K as a foreign terrorist organization on 14 January 2016.

ISIS-K is a smaller and more obscure branch of the Islamic State of Iraq and Syria. Named for the historical region spanning the Middle East and Asia, ISIS-K was formed mainly from defectors of the Taliban and known terrorist movement Tehrik-e Taliban. According to the United Nations Security Council, ISIS-K has roughly 2,000 members. However, the group can attribute nearly 80 attacks to their name in just the first four months of 2021, including the suicide bomb that killed 75 Afghans and 12 U.S. service members days before U.S. troops pulled out of the region. Although the Taliban and ISIS-K are at odds over territory and indoctrination differences, many have supported a one-entity approach to unite under one caliphate.

Coordination & Collaboration Needed in Law Enforcement & Intelligence

The rapid rise in ISIS-K has forced the Biden administration to consider talks with the Taliban, to coordinate counterintelligence operations against ISIS-K. This decision could have longstanding implications for the future of intelligence gathering in Afghanistan. Still, the human intelligence (HUMINT) on the ground in the region has been fragmented with the abrupt withdrawal of U.S. troops and government officials. Rebuilding trust in the Afghan people after the U.S. withdrawal and creating an alliance with the Taliban can be problematic for U.S. intelligence officials. ISIS-K and the Taliban could create

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a haven for terrorists to train without U.S. intelligence officials' oversight from HUMINT on the ground reporting on operations. This inability to capture real-time intelligence could certainly lead to future attacks in the U.S. and Europe from would-be terrorists trained in these camps.

As refugees attempt to flee from the Taliban and ISIS-K rule, these terror groups could attempt to embed potential terrorists within fleeing refugees. In 2016, only five years ago, the U.S. House of Representatives Committee on Homeland Security had a hearing on the infiltration of terrorists into refugee and visa programs. The committee cited two ISIS-inspired Iraqis arrested by the FBI on terror-related charges that had entered the U.S. in the refugee program. U.S. Custom Border Protection (CBP) recently arrested two Yemeni men, one in January 2021 and one in March 2021, on the FBI's terrorist watchlist and no-fly list. The combination of refugees fleeing Afghanistan and the overwhelming surge of migrants at the U.S.-Mexican border will become an intelligence and policing challenge for federal, state, and local law enforcement agencies in the U.S.

On 13 August 2021, the Secretary of Homeland Security, Alejandro Mayorkas, issued a [new National Terrorism Advisory System (NTAS) Bulletin](#) warning of possible terrorist attacks due to the 20th anniversary of 9/11. The bulletin warns of domestic and foreign threats to the U.S. and the resurrection of al-Qaida in the Arabian Peninsula's (AQAP) English version of Inspire Magazine after a four-year hiatus. It is a magazine that has inspired terrorists such as the [Boston Bomber](#), Tamerlan Tsarnaev, to commit acts of terror.

To strengthen homeland security, federal, state, and local law enforcement officials must work together, and share information to protect the communities they police. Local law enforcement will feel the brunt of policing refugees and migrants entering the U.S. with limited resources and little to no training. Law enforcement agencies are already suffering from COVID-19 stressors and a lack of support with police-reform movements cutting law enforcement budgets. This creates a diverse array of threats against law enforcement that can fuel ISIS and al-Qaida leaders to strike at the U.S. with acts of violence. The combination of these red flags could lead to the possibility of future attacks.

Counterterrorism experts believe that al-Qaida is now in a position to rebuild itself in Afghanistan and in a better position to coordinate attacks against the U.S. "The current assessment probably, conservatively, is one to two years for al-Qaeda to build some capability to at least threaten the homeland," stated [Lieutenant General Scott Berrier](#), director of the Defense Intelligence Agency. The Taliban's governmental overthrow of Afghanistan generates significant obstacles for the U.S. to combat terrorism and terrorism financing particularly against ISIS-K and al-Qaida. The intelligence community must be proactive and collaborate to prevent attacks on U.S. soil. Particularly with a haven forming in Afghanistan.

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Space Aliens – Emergency Management
Roles & Responsibilities
By Michael Prasad

Planning for the emergency management needs of space aliens on Earth, in terms of their well-being before, during, and after disasters could be the plot of a science fiction movie script. The movie <u>District 9</u> has a similar premise: the aliens that arrived on Planet Earth were not warriors, but rather sentient beings totally reliant on help instead. The reality is there are beings like this in every community. They are called "children."

Like the aliens in movies, children eat different foods (and in different ways than adults), have different sleep patterns, and have more energy on average than most adults (but they generally lack the same level of strength). They also grow in physical size almost exponentially. They have a great need for education. They have an uncanny ability to communicate with each other very easily, especially with nonverbal cues and signals. Many times, adults have a difficult time communicating with them. Governments at all levels have already made the decisions and commitments to completely integrate children into society, helping them to learn skills and to educate them. Families are recognized (or are established) to help them fully fit into society with everyone else. Children are vastly different from adults: laws are made, as are procedures, facilities, systems, etc. to support them in their uniqueness – yet generally those differences between adults and children are ignored during disasters.

During past emergencies and disasters, children's issues sometimes would become a temporary priority to local and even state governments. However, during this worldwide pandemic, the specific disaster needs of all children – and their families – became a national concern. These types of disaster needs were and continue to be very different from those of adults. Emergency managers must consider the threats and hazards associated with children before, during, and after any disaster through the same planning, organization, equipping, training, and exercising – just as would be done for any other concern. These are some of the *specific* children-in-disaster related impacts, along the lines of the U.S. National Emergency Support Functions (ESF) and the Recovery Support Functions (RSF) – with a bit of Preparedness/Protection/Prevention and Mitigation aspects as well.

Emergency Support Functions

ESF#1 – Transportation. Specialized transportation vehicles are used for children. Transportation accidents involving these specialized vehicles are more complex than for other vehicles. There are also transportation regulations and laws related to the movement of children. For example, emergency managers may have to decide whether they would recommend the suspension of car seat and seat belt laws during an evacuation. Evacuation routes from schools and childcare facilities must be considered in reverse-lane planning – including the possibility of using those facilities as endpoint reception centers/shelters.

ESF#2 – Communications. Although there are currently no interoperability communications missions for responders to directly communicate with children (children under 18 are not generally thought of as emergency responders themselves – there are no interoperable communications concerns with children per se), one of the mass care missions is *Family Reunifications Services.* This can be used to reconnect children with their host families and requires dedicated communications channels to prioritize the message traffic for this mission.

ESF#3 – Public Works and Engineering. In many communities, the public-owned schools and other educational/childcare facilities are used for other non-disaster activities (e.g., voting, community meetings) and many have been designated (purpose-built, in many cases) for major disaster use since the cold-war days more than 50 years ago. K-12 schools and college/university facilities should be considered critical infrastructure/key resources (CI/KR) and designed in ways to support incident response and recovery. Public-private partnerships should be established to also utilize (and support) private schools for these same purposes. In many states, mitigation grants have already been utilized to build safer rooms within schools to protect the community from tornadoes and other weather hazards.

ESF#4 – Firefighting. Part of the skills taught to children includes fire prevention and protection. Firefighters also need training on the differences in size, cognitive skills, and language ability of children, which makes search and rescue aspects different from adults. Also, children may have a fear of firefighters and hide from rescue efforts.

> *They eat different foods, have different sleep patterns, have more energy, grow exponentially, require education, and communicate using nonverbal cues and signals.*

ESF#5 – Information and Planning. As described here, there are many informational and incident planning differences between adults and children. Several children-specific Essential Elements of Information are noted here. TEEX has a course (MGT-439) that covers many of the medical disaster response and emergency preparedness concerns for children. Also, FEMA currently is building a five-hour needs integration course.

ESF#6 – Mass Care. Sheltering for children and their families may require special services (e.g., beds/cots, dietary needs, consumer medical supplies, durable medical equipment, personal assistance). Extra supervision is needed to protect unaccompanied children. Feeding – including mobile feeding – will also have dietary concerns for children, but probably not too different from the variants adults would need (e.g., allergies, vegetarian, kosher/halal). Distribution of emergency supplies must include special items unique to children. Family reunification services, as noted under ESF#2 is critical, especially for unaccompanied children who have been separated from their host families.

ESF#7 – Logistics. As noted under ESF#3, childcare and educational facilities and their staff may be resources available for operations. For example, many of these facilities have food service capabilities that could be used for everyone. Also, getting resources to childcare

and educational facilities should be a mission priority (at the same level as restoring any other ESF or establishing a Recovery Support Function [RSF]) as the restoration of educational, health, and mental health services for children and young adults should be a federal Primary Mission Essential Function (it is not currently designated as such).

ESF#8 – Public Health. Although a child's physiology may appear like an adult's, it is not simply scaled by size. Medical treatments, consumable medical supplies, durable medical equipment, etc. are very different for children – and surge capacity issues during mass casualty incidents require extra/different planning, staff organization, equipment, and responder training as well as being exercised regularly. Children have physical, mental, cognitive, emotional, and other health issues that are more critical in their age bands than in adults. Operational sites such as points of distribution for mass prophylaxis and community reception centers for decontamination need to be configured for both unaccompanied children (who may need assistance from responders), as well as children with their host families.

ESF#9 – Search and Rescue. As noted under ESF#4, children may be reluctant to be rescued. They may hide or stay behind with pets. Special protective seating and carrying devices for transporting/evacuating children, are necessary for infants, toddlers, and smaller children.

ESF#10 – Oil and Hazardous Materials Response. Some high school, college, and university facilities have chemicals and other hazardous materials stored onsite for education and research purposes. Some college campuses have their own cogeneration electrical plants, others even have nuclear acceleration laboratories. Proper resource surveys need to be conducted as part of the CI/KR research and review. Grid-mapping of hazard areas, during the preparedness phase will help first responders at these facilities and complexes.

ESF#11 – Agriculture. As noted previously, the amounts and types of foods children eat can be very different from adults. Children have a strong connection with pets. There are no additional biohazard concerns for children related to the food supply, but some foodborne illnesses (e.g., listeria, salmonella) affect children more seriously.

ESF#12 – Energy. In general, there is no difference in energy usage by children. However, their facilities should be prioritized for utility restoration as any other CI/KR site. This will help continue children-in-disaster support missions, as well as provide logistics capabilities from childcare and educational facilities for other ESF use, if needed.

ESF#13 – Public Safety. The legal system treats most children under 18 years old with different laws and issues as to criminal activity. For example, during incidents, curfews may be established for children only. There are also special protection laws for children against harm or abuse, especially those who have been separated from their host families. Searching for missing children is a dedicated task force within operations and has multiple public-private partnerships involved during non-disaster times as well.

ESF#14 – Cross-Sector Business and Infrastructure. There are many people who work at childcare and educational facilities (both public and private) – many can be cross trained for disaster roles. There are also numerous support businesses associated with children.

Childcare and educational facilities (both public and private-owned) should be part of the Building Resilient infrastructure and Communities ([BRIC](#)) Mitigation Planning, as their cross-functional use for supporting other ESFs can be a community asset.

ESF#15 – External Affairs. How emergency management is supporting children, their host families, facilities, etc. is no different than any other ESF or RSF. It certainly requires leadership and subject-matter expertise (SMEs) for this specific field. Public information officers (PIOs) would be strongly encouraged to understand the basics of supporting children during disasters but should also have PIO support by childcare and educational SMEs at the ready (e.g., press conferences, joint information centers).

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Recovery Support Functions

Housing RSF. Children need to be considered in housing capacity, both as part of host-family sizing calculations and as collective units within any residential child support site(s) for children without host-families (e.g., group homes, orphanages). Children with disabilities also may need separate residential support sites.

Health & Social Services RSF. As a continuation beyond the response from ESFs# 6 and 8, the health and social service needs of children has been noted previously. The skills learning and education by children is a greater need than what this RSF currently is designed to support.

Community Planning and Capacity Building RSF. Childcare and educational facilities, when damaged or destroyed by a disaster – or are in insufficient quantities and capacities for post-recovery growth of a community – need to be included in the community planning process. The same is true for the support services needed, which are child-specific (e.g., medical/mental health treatment facilities, libraries).

Economic RSF. Prioritized restoration of childcare and educational facilities and support services provides three major economic benefits:

- Without these facilities, most host-families (and many emergency responders) may not be able to fully return to work since they must provide full-time care for their children.

- There are many jobs and financial support systems associated with these childcare and educational facilities. Restoring these facilities greatly supports the local economy.

- In the long run, properly educated and trained children contribute to society.

Infrastructure Systems RSF. As a continuation of ESF#3, the interagency and interjurisdictional support of both public and private childcare and educational facilities leverage innovative and green technologies and support renewed economic activity.

Natural and Cultural Resources RSF. Children and their host families benefit from restored natural and cultural resources as adults do. The significance and importance of these resources is something to share with children for long-term community well-being.

FEMA is already starting to recognize the complex aspects of supporting children in disasters. Also, the new IS-237 course introducing Deliberate Planning specifically notes that whole community planning needs to include restoring childcare and educational facilities as a community need. The points made about restoring those facilities alone, for first and emergency responders, should be a priority to sufficiently have the workforce needed to support the response and recovery from any disaster. The International Association of Emergency Managers – Children and Disasters Caucus is also working on a long-term project to amplify the disaster needs of infants, children, and young adults (from pre-K through college) to the same levels of Community Lifelines, Emergency Support Functions and/or Recovery Support Functions. Emergency managers need to consider their community's children as unique and vital in many ways.

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