Crisis Response and Disaster Resilience 2030:

Forging Strategic Action in an Age of Uncertainty

Summary of Key Insights of the
2010-2011 Strategic Foresight Initiative

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FEMA

Today's strategic environment is defined by, among other characteristics, borderless and unconventional threats, global challenges, and long-term trends. As the emergency management community[1] looks toward 2030, one thing is certain – the world will not look the same as it does today. To ensure our Nation's resilience to disasters, the emergency management community must be postured to manage the complexity, pace of change, and uncertainty of the future environment. To do this, the emergency management community needs to *establish and maintain a foresight capability* — to explore future drivers of change and trends that could shape the future, understand their strategic impacts, and develop actions to meet future needs to inform decision-making.

The Significance of SFI

Launched in 2010, the Strategic Foresight Initiative (SFI) is a transformative, community-wide effort to create an enduring foresight capability. It is intended to advance strategic planning and thinking about the future, to prepare the community both for emerging challenges and for the key opportunities presented by our changing environment. Its core focus is to understand the factors driving change in our world, and to analyze how they will impact the emergency management field in the United States over the next 20 years.

The SFI represents the most comprehensive analysis to date of the future outlook facing those in our community of practice. Based on the outputs of a robust and collaborative futures-planning process, the report provides a framework for understanding how the operating environment for emergency management is apt to change in the coming decades.

A Guidepost to Understanding our Future Landscape

The SFI explored forces of change (i.e., drivers), plausible future operating conditions, challenges, and opportunities, and was designed to identify what the emergency management community would need to be successful, regardless of what the future holds. The insights gained throughout the process provide high-level observations to inform and guide decision-makers in the more immediate term. These insights are a set of recurring themes or conditions that we should consider as we build actions to meet our future needs. They are not intended as predictions of how the future will unfold; rather, they are intended to serve as a lens through which to view our future landscape and the actions we as a community will need to take to be successful.

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[1] **Emergency Management**: The field of practice responsible for preparing for, preventing, protecting against, mitigating the effects of, responding to, and recovering from all threats and hazards.

Emergency Management Community: The broad community of practice involved in emergency management. This community includes, but is not limited to the following: traditional state, local, federal, and tribal emergency managers; those in public security, public health, and public safety agencies; first responders; public works; business partners; non-governmental organizations (NGOs); federal agencies with equities in emergency management; and academicians who have studied or published on the topic of emergency management.

- The emergency management community faces **increasing complexity and decreasing predictability in its operating environment**.
- Uncertainty surrounds the **evolving needs of at-risk populations**. It will be crucial to engage these communities as future challenges strain our resources and capabilities.
- **Future resource constraints are seemingly unavoidable** at least for the foreseeable future.
- **Individuals, families, neighborhoods, communities, and the private sector will likely play an increasingly active role** in meeting emergency management needs.
- **Disparities in fiscal resources and in access to advanced technology, to know-how, to skilled personnel, etc.** will have to be anticipated and effectively managed.
- There is **a large and growing body of global best practices** from which we can learn and benefit.
- **The importance of trust – between the public and government** – cannot be overstated, especially since belief in large institutions, including government, has been shifting to social networks and alternative sources of loyalty.

Drivers of Change

The future, while inherently unpredictable, is likely to be shaped by key forces of change, or "drivers," that have disproportionate influence on future events and possibilities. In the field of emergency management, nine major social and technological, environmental, and economic and political drivers are expected to have profound impacts on the future.

Social and technological trends that will have profound impacts on the future include: *Universal Access to and Use of Information*, *Technological Innovation and Dependency*, the *Changing Role of the Individual*, and *Shifting U.S. Demographics*. Rapid innovations in technology are transforming media and communication, altering how people interact with each other and relate to society and institutions. These changes are occurring in the context of an aging and increasingly diverse U.S. demographic profile.

Climate Change is the major environmental force confronting the emergency management community in the United States. The most visible impacts will likely result from an increase in the magnitude and frequency of natural disasters, which will affect the resilience of local communities and the operational demands placed on emergency management systems.

Four economic and political drivers—*Global Interdependencies/Globalization*, *Government Budgets*, *Critical Infrastructure*, and the *Evolving Terrorist Threat*—are likely to transform the environment in which we operate. Countervailing economic and political forces have come to define our strategic landscape: continuing globalization, increasing interdependencies in governance institutions and business, and limited economic growth in the industrialized world are constraining government budgets and creating resource limitations. Compounding these changing dynamics are increasingly interlinked global supply chains, deteriorating critical infrastructure in the U.S., shifts in the global

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balance of power toward "emerging markets," and terrorist organizations that continue to plot international attacks and radicalize small groups and individuals to target America and its interests.

Identifying Strategic Needs

It is important to appreciate that while each driver can be a catalyst for change by itself, much of its transformative impact on how we live and work will come from intersections with other drivers. Scenario planning offered the SFI the opportunity to play out varying driver conditions – and driver cross-impacts – in alternative operating "worlds," allowing for a range of driver effects and impacts to be explored. This in turn allowed for the identification of strategic needs – the capabilities, tools, partnerships, etc. the emergency management community would need to successfully fulfill its mission no matter how the future transpires. Strategic needs were identified in three areas crucial to the work of the emergency management community:

(1) **Essential Capabilities** the community will need to build or enhance in order to meet future challenges: Emergency managers will be faced with complex demographics shifts as the United States' population increases, ages, and becomes more culturally and linguistically diverse. These shifts call for new capabilities including multi-lingual proficiencies and close dialogue with community leaders to understand their needs. As information becomes more widely distributed from numerous sources, emergency managers will need to practice omni-directional knowledge sharing and use the power and influence of social networks to remain relevant in the complex media environment. In a resource-constrained environment, leveraging volunteer support will be crucial, and engaging schools and youth programs to infuse emergency management principles across the entire educational experience will be important in creating awareness of new and evolving threats. Additionally, building an emergency management culture that embraces forward thinking to anticipate emerging challenges will be in our best interest to face complex future challenges.

(2) **Innovative Models and Tools** emergency managers will need to optimize resources, anticipate events, or deal with complex and/or unprecedented problems: Foresight tells us that the future operating environment will be characterized by more frequent emergency and disaster events, with more far-reaching impacts. We will need to employ, and in some cases develop, new and improved models and tools to successfully meet our critical missions. Emergency managers will need advanced risk management tools and processes to replace currently outdated systems, and to assess and manage risks related to climate, power, transport, telecommunications, and water, among other domains. Chronic fiscal pressures will compel us to plan and coordinate around shared interests and interdependencies. This includes employing alternative surge models with greater volunteer, private sector, non-governmental organization, and armed forces support. And it means establishing flexible frameworks that optimize emergency management inter-operability across jurisdictional and technological boundaries. The importance of supply chains, both global and local, requires us to remediate vulnerabilities to critical supplies in light of risks associated with infrastructure degradation, interruptions in foreign trade, cyber attacks, and radical structural changes in

warehousing demand signaling and logistics. Finally, we will need to influence the development of emerging technologies that have emergency management applications. This will require dialogue with technologists and assurance of interoperability, especially as technology evolves.

(3) **Dynamic Partnerships** that will need to be formed or strengthened to meet surge requirements or to absorb critical new skills and capabilities: For this community, partnerships are not merely standard operating procedures – they are essential. In an environment of fiscal constraints and changing government roles and responsibilities, the partnership imperative will have to rise to a new level, involving new associations, broader and deeper interactions, and immense fluidity. Working with communities to understand their needs and where the emergency management community can empower and assist, is a necessary shift in approach. Businesses will continue to serve as a core member of the emergency management team, and they will be crucial to successful service delivery. We also will need to engage our international partners, in particular Canada and Mexico, around several shared interests, including border security, immigration, water management, and disease surveillance. And our partnership with the U.S. Armed Forces as we respond to and recover from complex disaster situations will benefit our collective efforts.

The SFI findings are intended to provide planners and managers with insights that can shape a range of critical decisions, starting *today*.   Such decisions—which can be made in advance of disasters—include improving prioritization of resources and investments, managing new and unfamiliar risks, forging new partnerships, and understanding emerging legal and regulatory hurdles.

Although we have begun addressing our future needs, our progress is not enough. We must do more. To build a more resilient, adaptive and proactive emergency management community, we must approach the future with urgency, and we must increase our pace of change. The hope is that the findings SFI has made to date foster the necessary conversations and ideas to do just that.

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To get involved in the SFI, send an email to FEMA-OPPA-SFI@fema.gov and request to be included in the SFI Community. You will receive access to updated newsletters and SFI events. You also will be informed about new materials and blog postings and are invited to respond and engage in the discussion.

Visit our Web site to learn about the SFI, read the driver research papers, and see our blog section if you are interested in commenting on our work - http://www.fema.gov/about/programs/oppa/strategic_foresight_initiative.shtm