

**Preparedness:**  
***A Principled Approach to***  
***Return on Investment***  
***Version 1.0***



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## Executive Summary

It's not always only a numbers game. While it is extremely important to measure the elements of preparedness to determine our return on investment, it is even more important to measure the *relevant* elements of preparedness. To this date, our endless lists of the numbers of things acquired with funding designed to increase our preparedness has presented a blurry and fractured picture of our overall preparedness. The US Council of the International Association of Emergency Managers (IAEM-USA) presents this document in an effort to meld the previously out of focus pieces and disjointed measurement of individual elements into a "bigger picture" designed to let us know the relationship of the things we do and the things we buy to our overall preparedness. We accomplish this through focusing on how to develop the "bigger picture" associated with return on investment for the Emergency Management Performance Grant (EMPG) program. The EMPG program is intended to be a 50-50 matching program between the Federal government and participating local, state, tribal, and territory jurisdictions designed to build capacity at all levels of government.

Previous efforts to find a meaningful way to measure preparedness have clustered around the use of inventories and other means to understand what has been done with preparedness funding. Essentially, we have been applying the philosophy of recognized management expert Peter Drucker, who said, "What gets measured gets managed." Beyond that, however, we have to make sure that the *relevant* things are measured. In order to understand what is relevant in this circumstance, we have to have a measurement process and preparedness outcomes grounded in the *Principles of Emergency Management (2007)*. This paper suggests it is possible to do what we have not previously—rely on principles of the field which, when applied and measured, indicate the relationship of our investments in EMPG to overall preparedness.

"What gets measured  
gets managed."

Peter Drucker

"..And that's okay as  
long as what you're  
measuring is  
relevant."

Randall C. Duncan, CEM®

In this presentation, you will find two very important – separate, but related – parts. First, we suggest a principle-based process to developing measures of return on investment for EMPG. In the second part of our presentation, we lay out a cohesive framework of outcomes illustrated with sample objectives and measures in Appendix A that will help us to paint a picture of preparedness – not only at the local level, but also state, tribal, territory and Federal levels of our government. Our framework also has the distinct advantage of utilizing many measures which are already collected from emergency managers by policy or statute. This system will not require that an entirely new set of measures be developed which would surely detract from the preparedness activities in which jurisdictions are engaged.



## **Part One: A Principled Approach to the Process**

The current economic environment is such that resources are scarce. Individuals and households around the country are huddling around their dinner tables trying to figure out how to make ends meet. And, tough economic conditions have forced Congress to make difficult decisions about what programs get funded; and, Congress is not alone.

Challenging economic conditions have meant that, in addition to the Federal government, local, state, tribal, and territory jurisdictions have also been carefully examining where they will invest their resources. Jurisdictions at every level across the country are asking “What are we getting for our money?”

All resource investments are being carefully evaluated including those related to emergency management. Specifically, local, state, tribal, and territory jurisdictions, and Congress want to know “How can we tell if we are getting a return on our investments in emergency management?”

The International Association of Emergency Managers, US Council (IAEM-USA) believes that these questions are important and that there is an urgent need to determine an approach to measuring return on investment for emergency management grant programs and a need to do so soon. Yet, we believe we need to be asking the right questions.

**The question we must answer is,  
“What is the extent to which our investments contribute to preparedness?”**

Jurisdictions at every level (i.e., city, county, state, tribe, territory, and Federal) are investing resources so that their jurisdiction is prepared to contend with hazard events. Therefore, we believe the essential question that needs to be answered when measuring the effectiveness of our investments in emergency management is, “What is the extent to which our investments in EMPG contribute to preparedness?”

One important effort is currently underway at the Federal level to examine important aspects of this question. The “Redundancy Elimination and Enhanced Performance for Preparedness Grants Act” (H.R. 3980), required the Federal Emergency Management Agency (FEMA) to enter into a cooperative agreement with the National Academy of Public Administration (NAPA) to develop quantifiable performance measures and metrics to assess the effectiveness of the Homeland Security grants. Measures related to one grant, the Emergency Management Performance Grant (EMPG) program, are not being developed as part of this effort and for good reason.

*The EMPG Program: A Local, State, Tribal, and Federal Government Partnership*

Since the 1950s, the Emergency Management Performance Grant (EMPG) program (previously referred to as State and Local Assistance) has been the backbone of our nation’s emergency management system. As stated in the EMPG Program Guidance and Application Kit (2011),

The purpose of the EMPG Program is to make grants to States to assist State, local, and Tribal governments in preparing for all hazards, as authorized by the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.). Title VI of the Stafford Act authorizes FEMA to make grants for the purpose of providing a system of emergency preparedness for the protection of life and property in the United States from hazards and to vest responsibility for emergency preparedness jointly in the Federal Government and the States and their political subdivisions (FEMA 2011, p. 5).

The EMPG program is intended to be a 50 percent federal and 50 percent state and local matching program, but in reality many jurisdictions consistently overmatch the federal government’s investment. This reality means that while Congress appropriated \$340 million dollars in EMPG for FY2010, participating local, state, tribal, and territory jurisdictions invested significantly more than this amount. The EMPG partnership has ensured that jurisdictions at all levels invest in emergency management; and, it has recognized that every level of government has an interest in being prepared to contend with hazard events. The required cost share alone is evidence that the EMPG program is not like any of the grants within the Homeland Security suite of grant programs; and, thus appropriately has not been a focus in the NAPA effort.

**Any process to develop measures for the EMPG program and the measures themselves must take into account the program’s unique nature.**

Moreover, because the EMPG represents a shared investment, its authorization is purposefully broad to allow participating jurisdictions to focus their attention on customizing preparedness capacity and capabilities for their jurisdiction. Thus, the EMPG funding is unique and provides the critical and flexible foundation upon which preparedness is built in participating jurisdictions. The EMPG program does not attempt to do what Homeland Security grants attempt to do nor does it attempt to achieve its goals in the same way. Therefore, any process to develop measures for the EMPG program and the measures themselves must take into account the program’s unique nature.

As the largest emergency management professional organization representing local government and tribal emergency managers in the United States, IAEM-USA has always maintained the value of the EMPG program and we have advocated for the Federal government to both continue and increase its support.

IAEM-USA has consistently prioritized the EMPG program because the shared investment made by jurisdictions at all levels in EMPG has been the single most important factor in ensuring that local, state, tribal, and territory jurisdictions have the opportunity to prepare—that we even have a national emergency management system. But, the EMPG program accomplishes more than simply “keeping the lights on” in emergency management programs. For decades, EMPG has provided jurisdictions at all levels and our nation as a whole with significant return on investment.

We believe that it is now time to demonstrate in a consistent, quantifiable, and meaningful way, how EMPG funding is contributing to preparedness throughout the Nation. We want to contribute to the dialogue about the process of developing measures for the EMPG program as well as the measures themselves.

IAEM-USA believes that in order to meaningfully assess our nation’s preparedness—and, hence, the return on investment for EMPG—principles must guide our efforts.

In our search for a relevant model to inform the approach to assessment, it became clear that the *Principles of Emergency Management* (2007) provide a highly relevant framework to guide the process of developing measures for EMPG as well as a cohesive approach to assessing the state of preparedness at each jurisdictional level.

### *The Principles of Emergency Management*

In 2007, a group of respected emergency management practitioners and academics were assembled to identify and define the core principles that underlie emergency management. The product of their efforts was eight principles that have been adopted by IAEM, the Federal Emergency Management Agency (FEMA), the National Emergency Management Association (NEMA), the Emergency Management Accreditation Program (EMAP), and the National Fire Protection Association (NFPA). The principles are backed by the buy-in of the emergency management community. The eight principles include the principles of professionalism, being risk-driven, integration, flexibility, collaboration, coordination, comprehensiveness, and progressiveness.

In the following pages, we present a path towards assessing our nation’s preparedness utilizing the *Principles of Emergency Management* (2007) which—if followed—would lead to a meaningful measurement system and the ability to understand more comprehensively the state of our nation’s preparedness as has been required by both Presidential Preparedness Directive 8

**For decades, EMPG has provided jurisdictions at all levels and our nation as a whole with significant return on investment which we must now demonstrate in a consistent, quantifiable, and meaningful way.**

(PPD-8) and the Post Katrina Emergency Management Reform Act (i.e., Title 6 U.S. Code, Chapter 2, Part A, Section 749).

*Principles as Apply to the Process of Developing Measures for Emergency Management Performance Grants (EMPG)*

**Principles must ground our approach to the measurement of preparedness—both the process of developing the measures and the measures themselves.**

IAEM-USA believes that the *Principles of Emergency Management* (2007) sensitize us to what the process of developing measures for EMPG must be like in order to produce meaningful measures of return on investment and preparedness. We trust that FEMA will ensure that the process of developing measures is conducted in keeping with the *Principles of Emergency Management*. It is of note that the principles as we have outlined them below are largely consistent with President Barack Obama’s vision for achieving preparedness throughout the nation as articulated in Presidential Preparedness Directive 8 (PPD-8). The Directive emphasizes using concrete performance measures to track progress in building and improving capabilities. Our proposal offers an effective means to

track progress *and* do so with a high degree of efficiency by using many measures that are already routinely collected or recommended.

**The Principle of Professionalism.** If guided by the principle of professionalism, we should pursue a measurement process that is informed by organizations with knowledge of the science underlying the measurement of preparedness as well as by organizations representing practicing emergency management professionals with training and experience from every jurisdictional level.

**The Principle of Being Risk-Driven.** The principle of being risk-driven suggests that the process of measuring preparedness must focus on ensuring that jurisdictions are preparing for the risks they face in their jurisdictions (i.e., city, county, state, tribal, territory, Federal).

**The Principle of Comprehensiveness.** A process grounded in the principle of comprehensiveness will result in a measurement system that assesses the preparedness of the jurisdiction to carry out tasks and activities related to mitigation, response, and recovery.

**The Principle of Progressiveness.** Adoption of the principle of progressiveness would require the creation of a measurement system that is applicable at local, state, tribal, territory, and Federal levels of government.

**The Principle of Flexibility.** The principle of flexibility should guide us to develop a measurement system that recognizes that not all jurisdictions will achieve the same overall level

of preparedness, achieve each preparedness objective, or meet each preparedness measure. Not only will jurisdictions be unable to achieve preparedness in each objective or measure, but we would argue they should not—one set of expectations does not fit all. As a result, the process of developing preparedness measures must take into account that preparedness itself will not be consistent across all jurisdictions.

**The Principle of Integration.** The principle of integration requires that the process and the measures are designed to capture the extent to which jurisdictions engage and synchronize with the “whole community” (i.e., individuals and households, nongovernmental organizations, businesses, and government entities within the jurisdiction) in preparedness efforts.

**The Principle of Collaboration.** The principle of collaboration should lead us to ensure that the process of developing measures is one that welcomes negotiation, includes the input of stakeholders at every level, is done in a way that engenders trust and buy-in, and provides opportunities for ongoing interactions both before and after a measurement system is adopted.

**The Principle of Coordination.** The process of developing measures should seek to ensure that any measurement system coordinates the measurement efforts of all local governments, states, tribes, and territories according to the principle of coordination.

During these challenging economic times, we have witnessed an increasing number of disasters and rapidly rising disaster costs. As this past year has demonstrated, disasters do not wait for when it is convenient for us to deal with them or when financing their consequences is easier to afford. In order for us to lessen the financial burden associated with disaster response and recovery efforts, we need to continue to invest in the preparedness of our nation by ensuring that it is supported by a strong national emergency management system.

EMPG funds make a difference in the preparedness of government jurisdictions across the nation. In fact, at the local and tribal levels EMPG funds represent the critical difference between having a person dedicated to emergency management activities and not, having a local emergency management program and not, and the difference between decreasing, maintaining, or increasing preparedness. The fact is that without EMPG we will not have a national emergency management system. Yet, despite this reality, IAEM-USA recognizes, values, and supports the need to measure our nation’s return on investment in EMPG.

**IAEM-USA recognizes, values, and supports the need to measure our nation’s return on investment in EMPG.**

We believe that the approach outlined by Dr. Jessica Jensen, from North Dakota State University’s Center for Disaster Studies and Emergency Management, in the second part of this report provides a principled and coherent framework against which to measure preparedness; and, thus, return on investment for EMPG. As she argues, and we agree, the old approach of

breaking down the so-called phases of emergency management (i.e., mitigation, response, recovery, and preparedness) into discrete pieces of equipment or systems, tasks and activities, procedures, and processes and then collecting data based on the numbers of equipment and systems purchased, tasks and activities completed, procedures implemented, and processes complied with in each of the phases of emergency management actually tells us little about the state of preparedness within a jurisdiction at any level. Pursuit of a numbers-focused approach without a context in which to interpret their meaning will not truly inform us about the state of our nation's preparedness.

**Pursuit of a numbers-focused approach without a context in which to interpret their will not truly inform us about the state of our nation's preparedness.**

We encourage Congress to review and FEMA to consider the framework presented by Dr. Jensen as a means to assess preparedness and return on investment for EMPG and derive appropriate objectives and meaningful measures. Should FEMA adopt this framework and conduct the process of developing measures in keeping with the principles outlined in this document, we believe that the measurement system will be relevant, simple, and valued.

The approach described is particularly well-suited to the measurement of return on investment as relates to the EMPG program; however, we would argue that the framework may also be well-suited to understanding the

return on investment for any local, state, tribal, territory, or Federal investment of resources intended to contribute to our nation's preparedness.

We look forward to working with Congress, FEMA, and other partners to ensure that we attain the best possible measurement system for EMPG that truly allows us to evaluate our progress toward preparedness.

## **Part Two: Measuring Preparedness**

The concern that the resources we are investing in our nation's preparedness provide significant return is shared by everyone. It concerns American citizens who want to know that their tax dollars are being put to good use and that government will be able to contend with issues in the aftermath of a hazard event. It concerns local, state, tribal, and territory jurisdictions who not only recognize the role they play in our nation's overall preparedness but also want to ensure that they are wisely utilizing their resources as well as those of the federal government. It concerns Congress which has responsibility for passing legislation concerning emergency management matters and carefully investing our nation's resources in order to prepare the nation. And, it concerns the Federal Emergency Management Agency (FEMA) which has the responsibility for implementing Presidential Preparedness Directive 8 (PPD-8), the Post-Katrina Emergency Management Reform Act (PKEMRA), managing Congressionally-funded grant programs, and supporting local, state, tribal, and territory preparedness, mitigation, response, and recovery efforts.

The goal of our investments in emergency management is to have a nation prepared to mitigate, respond to, and recover from hazard events. As important as it is to demonstrate the extent to which our investments are actually achieving this goal, it has been a challenge to determine how to go about meaningfully measuring preparedness, and, hence, return on investment (ROI).

Determination of how we should measure ROI for the Emergency Management Performance Grant (EMPG) program is a good place to begin a discussion of how to measure preparedness for two primary reasons. First, the EMPG program is unique because it is the only Federal preparedness grant program requiring a minimum of a 50-50 cost share with participating local, state, tribal, and territory jurisdictions; and, therefore ROI for EMPG is a concern shared by all levels of government that needs to be addressed.

Second, the purpose of the EMPG program is broad—to allow participating local, state, tribal, and territory jurisdictions to prepare. It follows then that the discussion of ROI and the overall preparedness of jurisdictions receiving EMPG funds are inextricably linked.

In an attempt to spur on discussion of how to measure ROI for the EMPG program, the pages to follow address four questions.

- How do we know when preparedness is achieved?
- What are salient preparedness outcomes toward which we should strive?

**Determination of how we should measure return on investment for the Emergency Management Performance Grant (EMPG) program is a good place to begin a discussion of how to measure preparedness.**

- How can, and should, preparedness outcomes drive our objectives and measures for ROI for EMPG?
- How can we measure ROI for EMPG in a way that ensures the measurement offers value?

### *The Challenges Associated with the Measurement of Preparedness*

In the best of circumstances, measuring preparedness is challenging. This statement is true regardless of whether return on investment (ROI) is at issue. Realities that complicate the measurement of this elusive concept include the following facts:

**In the best of circumstances, measuring preparedness is challenging.**

**Preparedness is a dynamic process.** Preparedness is best understood not as an end goal but as a never ending goal. Levels of preparedness fluctuate; the levels can increase rapidly and, based on any number of factors, can decrease rapidly. This dynamism makes it difficult to measure preparedness in such a way that the data we collect will be meaningful over time as opposed to at any one point in time.

**Preparedness varies.** The plain fact is that, for a variety of reasons, not all jurisdictions are able or willing to undertake the same quantity or types of actions related to preparedness. These reasons include the different risks they face, salience of risks, types and resources available to prepare, and levels of knowledge about how preparedness can be achieved among others.

**Preparedness is contingent on the actions of stakeholder groups other than government.** The overall preparedness of a jurisdiction is dependent on the extent to which individuals and households, nongovernmental organizations, and businesses adequately prepare themselves for the hazard events with which they contend. We can measure whatever we would like about what government does or buys related to preparedness, but the extent to which jurisdictions are actually prepared is also heavily determined by individuals and entities outside of government.

**Preparedness is most easily assessed in retrospect.** We can only be certain that we have adequately prepared when all of the actions we have taken with respect to preparedness for mitigation, response, and recovery have allowed us to efficiently and effectively deal with challenges in an event we have just experienced. Given this situation, assessing preparedness in advance of hazard events will always run the risk of not being accurate.

**Our measurement of preparedness depends on participation.** Data is only collected from the jurisdictions that participate in Federal grant programs. Grant programs are valuable as

mechanisms to collect data, but jurisdictions that do not receive funds are not compelled to participate in preparedness assessments. Thus, even with the ideal measurement system our assessments of preparedness at the national level (in particular) will always be incomplete.

We must recognize from the outset that some aspects of preparedness and the measurement thereof are beyond the scope and control of government at any one level; and, furthermore, that any attempt to measure preparedness will be constrained by these limitations. Despite these obstacles, we must find a way to meaningfully measure the extent to which EMPG facilitates the preparation of participating jurisdictions at each level of government.

**Our picture will be painted with the brush of an artist as opposed to captured through a photographer's lens.**

### *The Problem with the Traditional Approach to Measurement*

The traditional approach to measurement of return on investment (ROI) has been to utilize the concept of comprehensive emergency management (i.e., preparedness, mitigation, response, and recovery) as a heuristic device to identify equipment, supplies, and systems, tasks and activities, procedures, and processes that if purchased, carried out, implemented, or otherwise complied with would result in more efficiency and effectiveness. For instance, it is well understood that having interoperable communications equipment and systems would be of benefit in the response period following a hazard event. So, we have dutifully collected data regarding the numbers and types of interoperable communications equipment and systems we purchase using Federal grant program support. Or, as another example, it is commonly held in the emergency management community that having an emergency operations plan makes jurisdictions at every level more prepared. Thus, we have historically tracked the numbers of jurisdictions that have emergency operations plans. There are dozens of other examples of this measurement approach to preparedness and ROI being utilized.

The traditional measurement approach is tempting. It is relatively easy to gather data and the data collected can be presented in simple, impactful charts, graphs, tables, and maps. Yet, an over reliance on this type of measurement is inherently problematic. These data tell us what we have purchased, what we have done, and where but tell us little regarding the object of our investments—overall preparedness. It may be helpful to illustrate these problems using the examples provided above.

The available data on the numbers and types of interoperable communications equipment and systems we purchase does not allow us to draw conclusions about our preparedness because we do not have a context in which to interpret the data. If we had data to suggest that “Jurisdiction X” had purchased X number of communications equipment and X number of communication systems, we are left wanting answers to the following kinds of questions: If we invest less

resources in communications equipment and systems, what will be the impact on overall preparedness? Will more people die? Will more properties and structures be lost because responding entities did not have radios that could communicate with one another? If we invest more resources in these things, what will be the return other than the obvious answer—more equipment and more systems? How do these things we have purchased fit into our overall preparedness?

**The problem is that the numbers we collect related to preparedness have no meaning absent a framework against which to evaluate them.**

Returning to the second example offered above, the numbers of emergency operations plans, knowledge of the numbers of emergency operations plans in existence tells us very little. If a jurisdiction has a plan, does it necessarily mean it is a good plan? Why is it that having a plan is so important? Where do plans fit in terms of preparedness for response and how? To what outcomes does the plan lead?

Our tendency has been to simply collect numbers related to what we have done with the resources invested. This is true of the numbers we collect related to the EMPG program as well as other grant programs. The problem is that the numbers we collect have little meaning absent a framework and outcomes against which to evaluate them. This problem of relying on numbers alone has been long standing, but, the solution as it turns out might not be quite

as complex as that which we are trying to measure.

### *Envisioning Prepared Jurisdictions: Meaningful Outcomes Against Which to Measure*

It may be easiest to introduce what a meaningful framework against which to measure preparedness would entail if we first begin at the end with our vision of what a prepared jurisdiction (at any level) would be able to do in the aftermath of hazard events.

We know what we want. We want jurisdictions across the nation to be able to effectively mitigate, respond to, and recover from hazard events. We want to limit injuries and deaths, property and infrastructure loss, and environmental damage after a hazard event. We want jurisdictions to manage hazard events at the lowest possible level and with their own resources if possible. We want jurisdictions that can efficiently and effectively utilize their resources and the resources of supporting jurisdictions to get what they need, when they need it, where they need it. We want jurisdictions to be able to quickly get their jurisdictions back to normal and better than normal if possible. And, we want to know that this vision will be consistently achieved in the wake of hazard events. Making this vision a reality is the job of emergency management.

How emergency management makes this vision a reality is not simply through the number of things they purchase or the number of plans they produce. Numbers alone do not paint a picture of preparedness nor are the things the numbers represent what ultimately allow jurisdictions to achieve our vision.

Consider the following description of what a truly prepared community would look like.

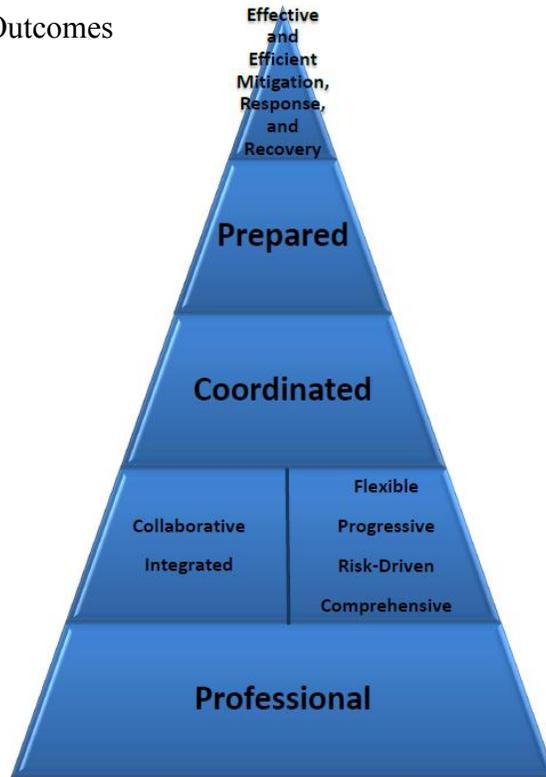
A prepared jurisdiction is one that engages in preparedness actions guided by professional emergency managers and professional emergency management programs. The jurisdiction's preparedness actions are driven by the risks that they face. The jurisdiction has comprehensively considered all known hazards, vulnerabilities, and possible impacts and actively engages in preparedness actions related to mitigation, response, and recovery. The jurisdiction is progressive by incorporating innovations, technologies, and best practices as they ready themselves for future hazard events. The jurisdiction's preparedness actions have provided a legitimate basis upon which to act in the wake of hazard events but are not so rigid as to lack the flexibility to respond to unanticipated issues. The stakeholders in the jurisdiction (e.g., fire, police, public works, elected officials) are integrated by their use of common technologies, systems, and management processes. The jurisdiction operates in a collaborative organizational environment wherein inclusiveness, relationships based on trust, ongoing interactions between stakeholders, open communication, and consensus-based decision making are the norm. And, finally, the prepared jurisdiction would be coordinated; the stakeholders within the jurisdiction would know and accept their roles, have identified the procedures necessary to fulfill their roles, and have practiced the fulfillment of their roles in conjunction with other stakeholders.

**To achieve our vision,  
we must first be  
prepared; and, to be  
prepared, jurisdictions  
must be able to deliver  
on a number of  
outcomes.**

The description of what constitutes a prepared jurisdiction presented here is not new. It is based on the *Principles of Emergency Management* (2007). The link between each of the principles, discussed here as the outcomes associated with a prepared community, and preparedness is supported by decades of hazards and disaster research and literature.

The primary outcome toward which we strive is effective and efficient mitigation, response, and recovery as described in the vision of what we want to see in the wake of hazard events. Yet, to achieve this primary outcome, we must first be prepared; and, to be prepared, jurisdictions at every level must be able to deliver on a number of other outcomes. Figure 1 depicts the hierarchy of outcomes associated with the achievement of our vision.

Figure 1. A Hierarchy of Outcomes



The injection of local, state, tribal, territory, and/or Federal resources fuel the efforts of jurisdictions to deliver these outcomes. For the purposes of this paper, consider the resources as those associated with the EMPG program. EMPG allows jurisdictions to develop the outcomes associated with preparedness as described above. The extent to which jurisdictions are able to achieve and maintain these outcomes at any given time is the extent to which we could consider them prepared to contend efficiently and effectively with the challenges they will confront in mitigation, response, and recovery in the wake of hazard events.

It is a prepared jurisdiction such as the one described that would be able to avoid the response problems noted in the *9/11 Commission Report* and the *Failure of Initiative* report penned by the House of Representatives Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina in 2006. The problems witnessed in those events can be alleviated only in part by the purchase of better communications equipment and resource management systems. The way to avoid these problems in the future is to invest in preparedness grant programs, such as the EMPG program, that are focused on achievement of the outcomes associated with the prepared jurisdiction.

**A prepared jurisdiction such as the one described is the goal of every emergency management practitioner and every emergency management program.**

A prepared jurisdiction is the goal of every emergency management practitioner and every emergency management program. Bringing about the description above is the reason emergency management exists. The EMPG program allows emergency management to work toward these outcomes; therefore, our objectives and measures associated with EMPG should be designed to measure progress towards these goals.

### *Outcome Driven Objectives and Measures*

At first glance, the outcomes associated with a prepared jurisdiction may seem at odds with our desire to quantitatively measure preparedness. Yet, the things we can count do contribute to the things we cannot.

The problem with measurement related to return on investment (ROI) is not that there is a problem with collecting numbers—the problem is our reliance solely on numbers to understand the significance of our investments. The issue is that we tend to collect numbers without a coherent cohesive framework (comprised of outcomes as depicted in Figure 1) in which to meaningfully interpret their meaning; and, thus we have had little understanding of the extent to which we are prepared.

**We can, should, and do collect numbers that are useful; and, the outlined outcomes allow us to evaluate why they are useful.**

We can, should, and do collect numbers that are useful; and, the outlined outcomes allow us to evaluate why they are useful. Allow us to return once again to the examples discussed previously. The numbers of interoperable communications equipment and systems are important to know because they are proxy measures for the integration within jurisdictions. The more integrated the jurisdiction, the more likely they are to achieve our vision. And, the numbers related to emergency operations plans are among the most important for several reasons. First, plan completion in keeping with current standards in the field indicates that the jurisdiction has comprehensively considered their hazards, vulnerabilities, and impacts.

Second, it has directed their plans toward the risks they are likely to face. Third, it has built in mechanisms for flexibility. Fourth, it has constructed their plan through a collaborative process. And fifth, it has ensured that stakeholders know, accept, and have exercised their roles. It is the process behind the plan's existence and the elements included in the plan that tell us the extent to which a jurisdiction is likely to achieve our vision. In fact, many of the numbers currently collected through reporting related to preparedness grants such as EMPG take on new significance when viewed against the preparedness outcomes presented here.

Please see Appendix A, "Samples of Outcome-Driven Objectives and Measures for the EMPG Program", for an illustration of how the outcomes associated with preparedness can be used both to drive objectives and measures as well as to understand the significance of the investments we

make in the EMPG program. Appendix A is not offered as *the* set of objectives and measures that ought to be used for the EMPG program; rather, it is intended as a starting point for a discussion of how we might go about developing a relevant and meaningful measurement tool that will be valued. There may be other additional or more suitable objectives and measures than those listed. And, to be used in a measurement tool more work would have to be done with the objectives and measures presented such as defining key terms and developing various lists that are recommended.

As the reader progresses through the presentation of samples of outcome driven objectives, and measures in Appendix A, please note that data related to many of the measures presented here is currently being collected through various grant programs and/or Federal guidelines and policy documents already exist recommending that jurisdictions undertake these measures. The NIMSCAST system that tracks compliance with the National Incident Management System (NIMS), Homeland Security Exercise and Evaluation Program Volumes I-V, Comprehensive Planning Guide (CPG) 101 Version 2.0, 44 CFR Sec. 201. 6, 42 U.S.C. Chap. 116, Sec. 11003, and 44 CFR Secs. 206.223(a) and 206.225(a) are examples of sources from which the measures were derived.

### *Ensuring Measurement that Offers Value*

Thus far, a schema for meaningfully measuring preparedness has been laid out and sample objectives and measures for the EMPG program have been provided. But, the suggested measurement system for EMPG return on investment (ROI) is only useful if it is used and to be used it has to be valued.

What remains to be articulated is how the outcomes and the objectives and measures we derive from them can be utilized to develop a measurement system that offers value to those who invest in the EMPG program.

**The measurement system for EMPG return on investment is only useful if it is used.**

**Value for local, state, tribal, and territory jurisdictions.** The local, state, tribal, and territory jurisdictions that participate in the EMPG program match the Federal government’s investment in their preparedness dollar-for-dollar (and in most cases local jurisdictions significantly overmatch the Federal government’s investment). These jurisdictions have an interest in knowing the ROI for EMPG. Should a measurement tool be designed to assess ROI using the outcomes presented, jurisdictions will be able to evaluate the status of their preparedness, set goals, and monitor progress toward those goals. Emergency managers within jurisdictions will also be able to better articulate their value within the jurisdiction.

A measurement tool designed to assess ROI using the outcomes presented will be of the most value to local, state, tribal, and territory jurisdictions if it is broad and addresses the eight

outcomes associated with preparedness while recognizing that not all jurisdictions will be able to achieve or maintain the same objectives and measures at the same time. This recommendation is made because of the challenges related to measuring preparedness discussed previously (p. 8) and because jurisdictions vary in the amount of EMPG funding they receive within each fiscal year and from fiscal year-to-fiscal year (e.g., \$300 in a fiscal year to more than \$1 million).

Thus, to be of the most value, the measurement tool developed should be viewed as a starting point for negotiations between FEMA and grantees (i.e., states and territories) and grantees and sub-grantees (i.e., tribes and local jurisdictions). The tool should be viewed as a menu from which jurisdictions, in cooperation with the appropriate partners, would identify the outcome(s), objective(s), and measure(s) toward which they will progress in any given fiscal year with the support of EMPG funds. A negotiated system such as the one recommended here was used successfully in the 1990s (Performance Partnership Agreements and Comprehensive Cooperative Agreements) by FEMA and was valued by those who participated.

**A cohesive framework has been articulated in this document that can be utilized by FEMA and EMPG funding recipients to show Congress that its investments in preparedness have produced results and that progress is being made toward preparedness.**

**Value for FEMA.** Because FEMA is charged with the responsibility of supporting preparedness efforts throughout the nation and administering grant programs, the organization has a vested interest in being able to measure preparedness in a meaningful way. Moreover, the recently released Presidential Preparedness Directive 8 (PPD-8) and Title 6 U.S. Code, Chapter 2, Part A, Section 749 require that FEMA develop a quantitative preparedness assessment system. It will be a challenge to meet this requirement in a meaningful and timely fashion; yet, the preparedness outcomes presented provide FEMA with a cohesive framework upon which to base such a system and a means to articulate the extent to which progress is being made toward preparedness.

Should FEMA decide to utilize the framework presented here to develop a measurement tool for EMPG (and perhaps other preparedness grant programs) and ask that EMPG grantees and sub-grantees use and report progress with the same measurement tool, FEMA will be able to sum the data it receives quickly and present a range of numbers within a

context that spells out their significance. In other words, use of these outcomes to ground a measurement tool will allow FEMA to more meaningfully assess our nation's preparedness.

**Value for Congress.** Tough economic conditions have forced Congress to make difficult choices regarding the funding of programs including those that fund preparedness efforts like the EMPG program. Yet, these challenging times have not stopped hazard events from occurring;

and, many Congressional districts have been hit by disasters in recent years. This situation has led many in Congress to want an accurate quantitative assessment of return for every dollar invested and to know that every dollar moves jurisdictions closer to being actually prepared. However, an accurate assessment is challenging for the reasons previously discussed (p. 8-9). As explained, preparedness is complex and even the most prepared of jurisdictions can stumble in the face of unique challenges in the wake of hazard events. We will never be able to predict with absolute certainty whether our nation is truly prepared.

With that said, we have to be able to demonstrate ROI. A cohesive framework has been articulated in this document that can be utilized by FEMA to show Congress that its investments in preparedness grant programs have produced results and that progress is being made toward preparedness. This framework was applied to the EMPG program and sample objectives and measures were offered to illustrate what a meaningful measurement tool might include. As seen in Appendix A, quantitative data can be collected through a measurement tool based on the framework discussed here—the difference between the tool that would be developed and those Congress has been presented with in the past is that the meaning of the data collected could be articulated clearly and consistently. In other words, a measurement system based on the framework presented, would allow FEMA to better explain ROI for preparedness grant programs, the extent to which our nation is prepared, and the extent to which efficient and effective mitigation, response, and recovery efforts in the wake of future hazard events is likely.

### *Conclusion*

The discussion in the preceding pages has been offered with the goal of moving our national dialogue about the measurement of return on investment (ROI) for the EMPG program significantly and substantively forward by addressing four issues: how we know when preparedness is achieved; the salient preparedness outcomes toward which we should strive; how preparedness outcomes could and should drive our objectives and measures for ROI for EMPG; and, how the measurement of ROI as articulated here can ensure value for participating jurisdictions, FEMA, and Congress.

We all desire to see the loss of life, properties, structures, and damage to the environment in the aftermath of hazard events has been limited; that jurisdictions have managed hazard events at their level and with their own resources and/or those of supporting jurisdictions to get what they needed, when they needed it, where they needed it; and, that the impacted jurisdiction was able to quickly get their jurisdictions back to normal—even better than normal if possible.

How we can know before hazard events whether this vision will be achieved is a question that has puzzled us for a long time. We have had a tendency to measure and invest resources in the things we can count. But, numbers of things purchased or actions undertaken do not alone separate the jurisdiction able to achieve our vision from those that do not. As has been described, the outcomes that facilitate bringing this vision about are professionalism, being risk-driven, comprehensiveness, progressiveness, flexibility, integration, collaboration, and coordination

within jurisdictions. The jurisdictions that achieve these outcomes within their jurisdictions are those that will be most likely to make the vision we all so desire a reality. Emergency managers and emergency management programs exist to assist their jurisdictions in this endeavor.

The things we can and do count are relevant. In some cases, the Federal government has already been collecting valuable data and/or recommending that important preparedness actions be taken through various guidelines. What we have lacked are outcomes that we can measure our data and actions against. This paper has attempted to provide a cohesive and cogent set of preparedness outcomes that can allow us to overcome this obstacle and in so doing better understand our preparedness at each jurisdictional level particularly preparedness resulting from investments made through the EMPG program.

The outcomes described are particularly well-suited to the measurement of ROI as relates to the EMPG program; however, we would argue that the outcomes may also be well-suited to evaluating the extent to which preparedness is achieved through investments in other grant programs.

## **Appendix A. Samples of Outcome-Driven Objectives and Measures for the Emergency Management Performance Grant (EMPG) Program**

### **Outcome: The jurisdiction engages in preparedness actions guided by professional emergency managers and professional emergency management programs.**

At any jurisdictional level, a state of preparedness is most effectively and efficiently achieved and maintained when the jurisdiction's preparedness activities are facilitated by a professional emergency manager and professional emergency management program. Professional emergency managers are those individuals who "value a science and knowledge-based approach; based on education, training, experience, ethical practice, public stewardship and continuous improvement" (Principles of Emergency Management Summary 2007, p. 1). And, professional emergency management programs are those that structure their programs to be in keeping with the nationally accepted standards contained in the Emergency Management Accreditation Program (EMAP) and/or the National Fire Protection Association (NFPA) 1600: Standard on Disaster/Emergency Management and Business Continuity.

Professional emergency managers and programs are better able to ensure that the activities of their jurisdictions result in the key components of preparedness (i.e., that they are risk-driven, comprehensive, progressive, flexible, integrated, collaborative, and coordinated). Thus, it is essential that emergency management programs be led by professional emergency managers in each jurisdiction and at every level and that jurisdictions are guided by programs that engage in activities related to achieving each component of preparedness.

#### Sample Objectives

1. *Local emergency managers are practicing professionals.*

#### Sample Measures

- a. The jurisdiction's emergency manager is a certified emergency manager (i.e., Certified Emergency Manager ®, Associate Emergency Manager, state certified emergency manager, and/or has completed FEMA's Emergency Management Foundational Academy).
- b. The jurisdiction's emergency manager holds an emergency management degree.
- c. The jurisdiction's emergency manager is a member of one or more emergency management professional organizations (i.e., State Associations of Emergency Management, US Council of the International Association of Emergency Managers, National Emergency Management Association).
- d. The number of general administration or management training courses completed each year by the jurisdiction's emergency manager.
- e. The number of emergency management specific training courses completed each year by the jurisdiction's emergency manager.

2. *The jurisdiction's emergency management program is administered in keeping with standards for the profession.*

#### Sample Measures

- a. The jurisdiction's emergency management program and financial audits are satisfactory based on the jurisdiction's audit standards.
- b. The jurisdiction has been Emergency Management Accreditation Program (EMAP) certified or the jurisdiction's progress toward achievement of the EMAP standard as measured through the EMAP self-assessment tool.
- c. The jurisdiction's progress toward achievement of the National Fire Protection Association (NFPA) 1600: Standard on Disaster/Emergency Management and Business Continuity as measured through a NFPA 1600 self-assessment tool (yet to be developed).

#### **Outcome: The jurisdiction is comprehensive in its coverage.**

Jurisdictions are threatened by a staggering array of hazards and potential impacts and are prone to those hazards and impacts due to vulnerabilities that exist within their jurisdiction (e.g., infrastructure, functional needs, and system interdependencies). It is recognized that jurisdictions cannot adequately prepare for every hazard and impact or address all existing vulnerabilities; yet, jurisdictions can ensure that they have carefully and purposefully considered all known hazards, possible impacts, and vulnerabilities. Consideration of the full range of hazards, impacts, and vulnerabilities is the foundation to a valid risk assessment and a critical first step toward preparedness.

Jurisdictions are also comprehensive when they undertake preparedness activities in three areas: mitigation, response, and recovery. There has been a history of directing preparedness efforts solely toward the goal of response readiness while largely excluding preparing for mitigation and recovery. Jurisdictions that have narrowly focused their preparedness efforts are not truly prepared for the challenges with which they will contend.

#### Sample Objectives

1. *The jurisdiction considered the full range of applicable hazards at the start of the planning process.*

#### Sample Measures

- a. The jurisdiction's mitigation plan clearly documents that a thorough and comprehensive identification of hazards was performed; including the fact that certain hazards were deemed not to be significant enough to warrant further study.
- b. The jurisdiction's emergency operations plan clearly documents that a thorough and comprehensive identification of hazards was performed; including the fact that certain hazards were deemed not to be significant enough to warrant further study.
- c. The jurisdiction's recovery plan clearly documents that a thorough and comprehensive identification of hazards was performed; including the fact that certain hazards were deemed not to be significant enough to warrant further study.

- d. The jurisdiction's mitigation plan includes descriptions of how the jurisdiction collected the information to identify these hazards, including the sources of information.
  - e. The jurisdiction's emergency operations plan includes descriptions of how the jurisdiction collected the information to identify these hazards, including the sources of information.
  - f. The jurisdiction's recovery plan includes descriptions of how the jurisdiction collected the information to identify these hazards, including the sources of information.
2. *The jurisdiction considered a range of potential vulnerabilities at the start of the planning process.*

#### Sample Measures

- a. The jurisdiction's mitigation plan clearly documents that a thorough and comprehensive identification of vulnerabilities was performed; including the fact that certain vulnerabilities were deemed not to be significant enough to warrant further study.
  - b. The jurisdiction's emergency operations plan clearly documents that a thorough and comprehensive identification of vulnerabilities was performed; including the fact that certain vulnerabilities were deemed not to be significant enough to warrant further study.
  - c. The jurisdiction's recovery plan clearly documents that a thorough and comprehensive identification of vulnerabilities was performed; including the fact that certain vulnerabilities were deemed not to be significant enough to warrant further study.
  - d. The jurisdiction's mitigation plan includes descriptions of how the jurisdiction collected the information to identify these vulnerabilities, including the sources of information.
  - e. The jurisdiction's emergency operations plan includes descriptions of how the jurisdiction collected the information to identify these vulnerabilities, including the sources of information.
  - f. The jurisdiction's emergency operations plan includes descriptions of how the jurisdiction collected the information to identify these vulnerabilities, including the sources of information.
3. *The jurisdiction considered the full range of possible impacts at the start of the planning process.*

#### Sample Measures

- a. The jurisdiction's mitigation plan clearly documents that a thorough and comprehensive identification of potential impacts was performed; including the fact that certain possible impacts were deemed not to be significant enough to warrant further study.
- b. The jurisdiction's emergency operations plan clearly documents that a thorough and comprehensive identification of potential impacts was performed; including the fact that certain possible impacts were deemed not to be significant enough to warrant further study.

- c. The jurisdiction's recovery plan clearly documents that a thorough and comprehensive identification of potential impacts was performed; including the fact that certain possible impacts were deemed not to be significant enough to warrant further study.
  - d. The jurisdiction's mitigation plan includes descriptions of how the jurisdiction collected the information to identify these potential impacts, including the sources of information.
  - e. The jurisdiction's emergency operations plan includes descriptions of how the jurisdiction collected the information to identify these potential impacts, including the sources of information.
  - f. The jurisdiction's recovery plan includes descriptions of how the jurisdiction collected the information to identify these potential impacts, including the sources of information.
4. *The jurisdiction's emergency management program is engaged in preparedness activities related to mitigation, response, and recovery.*

#### Sample Measures

- a. The jurisdiction has a current, jurisdictionally adopted emergency operations plan or an emergency operations plan is under development.
- b. The jurisdiction has a current, jurisdictionally adopted evacuation plan or an evacuation plan is currently under development.
- c. The jurisdiction has a current continuity of operations plan or a continuity of operations plan is under development.
- d. The jurisdiction has a current, jurisdictionally adopted hazard mitigation plan or a hazard mitigation plan is under development.
- e. The jurisdiction has a current, jurisdictionally adopted recovery plan or a recovery plan is under development.

#### **Outcome: The jurisdiction is risk-driven.**

As a nation, we face a wide variety of risks; yet, the primary risks faced vary from jurisdiction-to-jurisdiction. We are prepared nationally—not when the whole of the nation is prepared to respond to a single type of hazard event—but when jurisdictions undertake activities that are directed toward the primary risks they face at their level. It is this type of preparedness that allows local, state, tribal, and territory jurisdictions to meet the challenges associated with hazard events and lessen the need for vast influxes of Federal resources in the wake of hazard events.

#### Sample Objectives

- 1. *The jurisdiction has a current hazard assessment.*

#### Sample Measures

- a. The jurisdiction's emergency management program has completed a hazard assessment in keeping with federal guidelines.
- b. The number of years since hazard assessment was completed or updated.

2. *The jurisdiction has a current vulnerability analysis.*

Sample Measures

- a. The jurisdiction's emergency management program has completed a vulnerability assessment in keeping with federal guidelines.
- b. The number of years since vulnerability assessment was completed or updated.

3. *The jurisdiction has completed an impact assessment.*

Sample Measures

- a. The jurisdiction's emergency management program has completed an impact assessment in keeping with federal guidelines.
- b. The number of years since impact assessment was completed or updated.

4. *The jurisdiction has utilized completed hazard, vulnerability, and impact assessments to determine the primary risks faced in their jurisdiction.*

Sample Measure

- a. The primary risks reflected in the jurisdiction's risk assessment are the product of calculations based on the jurisdiction's completed hazard, vulnerability, and impact assessments.

5. *The preparedness activities of the jurisdiction are directed towards the primary risks faced by the jurisdiction.*

Sample Measures

- a. The jurisdiction's emergency operations plan acknowledges the primary risks faced by the jurisdiction as determined by the jurisdiction's risk assessment.
- b. Training opportunities facilitated by the jurisdiction's emergency management program are applicable to preparations for the jurisdiction's primary risks.
- c. Exercise scenarios address the primary risks faced by the jurisdiction.
- d. Public outreach materials produced by the jurisdiction inform the public about the primary risks faced by the jurisdiction.
- e. Public warning systems utilized by the jurisdiction are appropriate for the primary risks faced by the jurisdiction.

6. *The mitigation projects of the jurisdiction are directed towards the primary risks faced by the jurisdiction.*

Sample Measures

- a. The jurisdiction's hazard mitigation plan addresses the primary risks faced by the jurisdiction as determined by the jurisdiction's risk assessment.
- b. The jurisdiction's hazard mitigation plan outlines mitigation strategies and tactics that address the primary risks faced by the jurisdiction.

7. *Purchased resources can be utilized to respond to the hazard events the jurisdiction will most likely face.*

#### Sample Measure

- a. Equipment purchased by the jurisdiction can be utilized to respond to needs that are determined likely by the jurisdictions risk assessment.

#### **Outcome: The prepared jurisdiction is progressive.**

Progressiveness applies to preparedness in several ways including the nature of the jurisdiction's emergency management program, the location of the emergency management program within the organizational structure of the jurisdiction, and the roles played by the emergency manager in their jurisdiction.

Progressive jurisdictions continuously seek to improve their jurisdiction's emergency management program by incorporating emergency management relevant tools, technologies, and best practices into their activities. Jurisdictions that are consistently progressive in this way are better prepared to meet the challenges associated with hazard events.

Progressive jurisdictions ideally situate the emergency management program directly beneath the chief elected or appointed official. When a jurisdiction locates the emergency management program within the jurisdiction's organization at such a level, the jurisdiction displays a commitment to emergency management and recognition of the value of the emergency management program to the community. Jurisdictional support of this nature empowers emergency managers to exercise authority in carrying out their responsibilities. In situations where this organizational arrangement is not possible, progressive jurisdictions would pursue the acceptable alternative of ensuring that the emergency management program reports directly to the chief elected or appointed official during a hazard event.

Progressive jurisdictions rely on their emergency manager to fulfill a variety of roles. When emergency managers are able to do this they are able to more effectively operate and have an impact on their jurisdiction's preparedness.

#### Sample Objectives

1. *The jurisdiction incorporates innovations and best practices into their preparedness activities.*

#### Sample Measures

- a. Number of innovations or best practices the jurisdiction has incorporated into their preparedness activities (as identified from a yet to be developed, and annually updated list).
- b. Types of innovations or best practices the jurisdiction has incorporated into their preparedness activities (as identified from a yet to be developed, and annually updated list).

2. *The jurisdiction incorporates emergency management relevant tools and technologies into their emergency management programs.*

#### Sample Measures

- a. The jurisdiction incorporates at least one tool or technology in the following categories: incident management, public warning, public awareness and outreach (including social media), and Geographic Information Systems.
  - b. The number of tools and technologies the jurisdiction incorporates.
3. *The jurisdiction's emergency management program, and, hence, the emergency manager, reports directly to the chief elected or appointed official in the jurisdiction.*

#### Sample Measure

- a. The jurisdiction's organizational chart shows that the emergency management program/emergency manager reports directly to the chief elected or appointed official in the jurisdiction.
  - b. The jurisdiction's emergency management legislation or ordinance stipulates that the emergency management program/emergency manager reports directly to the chief elected or appointed official during a hazard event.
4. *The emergency manager is respected as a policy advisor, coordinator of various planning efforts, advocate, public outreach, and subject matter expert in the jurisdiction.*

#### Sample Measure

- a. Evaluation of the emergency manager's job description reveals that the emergency manager is relied on to fulfill a wide variety of roles in their jurisdiction.

### **Outcome: The jurisdiction has the flexibility to respond to unanticipated issues.**

Jurisdictional response and recovery plans are not able to completely predict and address the full scope of impacts, needs, and issues that the jurisdiction will contend with in the aftermath of a hazard event even when they have been comprehensive, risk-driven, and progressive in their approach to preparedness. Thus, in order for jurisdictions to be truly prepared they must build in mechanisms to allow flexibility in decision making and the execution of response and recovery tasks and activities.

#### Sample Objectives

1. *The jurisdiction's response and recovery plans allow flexibility in response and recovery operations.*

#### Sample Measures

- a. The jurisdiction's emergency operations plan includes language establishing that the procedures outlined in the plan are to be used as a guide and are subject to change as warranted by the situation the jurisdiction faces.

- b. The jurisdiction's recovery plan includes language establishing that the procedures outlined in the plan are to be used as a guide and are subject to change as warranted by the situation the jurisdiction faces.

2. *The jurisdiction regularly tests its flexibility in meeting new challenges related to the management of hazard events.*

#### Sample Measure

- a. The jurisdiction's exercise program is designed to test the jurisdiction's flexibility during response by using injects that require problem solving and novel solutions.

### **Outcome: The jurisdiction is one in which the stakeholders in the jurisdiction are integrated.**

Jurisdictions at every level are comprised of a myriad of individuals and households, nongovernmental organizations, businesses, and government departments. When stakeholders within these groups have adopted and implemented common approaches to preparedness, command and management, public information and management, resource management, and maintenance, the jurisdiction is more likely to mitigate, respond to, and recover from hazard events effectively and efficiently. The most prepared jurisdictions will have achieved a unity of effort across all of the stakeholders in their jurisdictions in these areas.

#### Sample Objective

1. *Stakeholders (i.e., individuals and households, nongovernmental organizations, businesses, and government agencies) within the jurisdiction are integrated.*

#### Sample Measures

- a. The jurisdiction has adopted NIMS for all Departments and Agencies through executive order, proclamation, resolution, or legislation as the jurisdiction's official all-hazards, incident response system.
- b. The jurisdiction's Emergency Operations Plans are consistent with the National Incident Management System and the National Response Framework.
- c. The jurisdiction implements standardized terminology and plain language for all multi-jurisdictional and/or multi-agency response activities.
- d. Responding organizations within the jurisdiction utilize the Incident Command System (ICS) on scene to manage incident response.
- e. The jurisdiction has developed a communications system to share accessible, consistent, and accurate information amongst stakeholders.
- f. The jurisdiction invests in its communication system by purchasing appropriate communication tools (as determined from a yet to be developed, annually updated list).
- g. The percentage of responding organizations within the jurisdiction that have access to interoperable communications.
- h. The jurisdiction periodically trains stakeholders in its communication system and the use of its communication tools.

**Outcome: The jurisdiction operates in a collaborative organizational environment.**

An organizational culture amongst stakeholder groups that is characterized by an emphasis on inclusiveness, the building of relationships based on trust, ongoing interactions, open communication, and consensus-based decision making is collaborative in nature. A collaborative organizational culture results in commitment to decisions and plans by participating stakeholder groups. The more collaborative the environment in which preparedness occurs, the more likely jurisdictions are to develop and use meaningful and realistic plans and procedures, arrive at decisions backed by buy-in, and effectively and efficiently mitigate against, respond to, and recover from hazard events.

Sample Objectives

1. *The preparedness process of the jurisdiction is inclusive.*

Sample Measures

- a. The number of stakeholder organizations involved in the jurisdiction's emergency operations planning.
- b. The number of stakeholders, or stakeholder organizations, representing individuals and households, nongovernmental organizations, and government agencies involved in the emergency operations planning process.
- c. The number of stakeholder organizations involved in the jurisdiction's hazard mitigation planning.
- d. The number of stakeholders, or stakeholder organizations, representing individuals and households, nongovernmental organizations, and government agencies involved in the hazard mitigation planning process.
- e. The number of stakeholder organizations involved in the jurisdiction's recovery planning.
- f. The number of stakeholders, or stakeholder organizations, representing individuals and households, nongovernmental organizations, and government agencies involved in recovery planning process.
- g. The number of stakeholder organizations involved in the development of the jurisdiction's exercises.
- h. The number of stakeholders, or stakeholder organizations, representing individuals and households, nongovernmental organizations, and government agencies involved in the development of the jurisdiction's exercises.
- i. The number of stakeholder organizations involved in the jurisdiction's preparedness training.
- j. The number of stakeholders, or stakeholder organizations, representing individuals and households, nongovernmental organizations, and government agencies involved in the jurisdiction's preparedness training.

2. *The jurisdiction fosters relationships amongst stakeholders that are based on trust.*

Sample Measures

- a. Randomly selected stakeholders identified from the jurisdiction's recovery plan confirm that that they perceive the existence of trust with other stakeholders upon a call from an independent third party.
- b. Randomly selected stakeholders identified from the jurisdiction's mitigation plan confirm that that they perceive the existence of trust with other stakeholders upon a call from an independent third party.
- c. Randomly selected stakeholders identified from the jurisdiction's response plan confirm that that they perceive the existence of trust with other stakeholders upon a call from an independent third party.

3. *The jurisdiction provides ongoing opportunities for interaction amongst stakeholders.*

Sample Measures

- a. The jurisdiction has a record of multiple meetings related to preparedness for response within each fiscal year.
- b. The jurisdiction has a record of multiple meetings related to mitigation within each fiscal year.
- c. The jurisdiction has a record of multiple meetings related to preparedness for recovery within each fiscal year.
- d. The jurisdiction a record of multiple public meetings related to emergency management relevant topics within each fiscal year.

4. *The jurisdiction encourages open communication amongst stakeholders.*

Sample Measures

- a. The jurisdiction utilizes available technologies to facilitate regular communications amongst stakeholders (as identified from a yet to be developed, annually updated list).
- b. The jurisdiction adopts ground rules for communication to guide preparedness activities (as evidenced by a document stating the ground rules that has been signed by participating stakeholders).

5. *The jurisdiction employs a consensus-based decision making process.*

Sample Measure

- a. The jurisdiction agrees to employ consensus-based decision making in all emergency management relevant activities (as evidenced by a document stating the adoption of consensus-based decision making that has been signed by participating stakeholders).

**Outcome: The jurisdiction is coordinated.**

When the many tasks and activities associated with mitigation, response, and recovery are addressed by stakeholders in a synchronized fashion, the process is coordinated. In order for tasks to be coordinated, stakeholders must know and accept their roles, have identified the procedures necessary to fulfill their roles, and have practiced the fulfillment of their roles in

conjunction with other stakeholders. Moreover, for coordination to be achieved jurisdictions must demonstrate the understanding and commitment of stakeholders to their roles in plans related to mitigation, response, and recovery. One of the primary goals of the preparedness process is to achieve coordination.

#### Sample Objectives

1. *The jurisdiction is prepared to complete the tasks and activities associated with response in a coordinated manner.*

#### Sample Measures

- a. The stakeholders in the jurisdiction acknowledge and commit to their response roles and agree upon guidelines for the fulfillment of their roles (as evidenced by either the signatures of appropriate stakeholder organizations in the emergency operations plan or other appropriate documentation such as letters of support, memorandums of understanding).
  - b. The jurisdiction has completed an emergency operations plan in keeping with applicable guidelines and standards.
  - c. The jurisdiction periodically assesses its preparedness for response through exercises.
  - d. The stakeholders in the jurisdiction periodically assess their preparedness to fulfill their response roles (as evidenced by the participation of the stakeholders identified in the jurisdiction's emergency operations plan in the jurisdiction's response exercises).
  - e. The jurisdiction completes improvement plans in keeping with applicable standards and guidelines following response exercises.
  - f. The jurisdiction has a designated Emergency Operations Center (EOC) to facilitate the coordination of response activities and resources.
  - g. The jurisdiction has adequately equipped an Emergency Operations Center (EOC) to facilitate the coordination of response activities and resources.
2. *The jurisdiction is prepared to complete the tasks associated with mitigation in a coordinated manner.*

#### Sample Measures

- a. The stakeholders in the jurisdiction acknowledge and commit to their mitigation roles and agree upon guidelines for the fulfillment of their roles (as evidenced by either the signatures of appropriate stakeholder organizations in the hazard mitigation plan or other appropriate documentation (e.g., letters of support, memorandums of understanding)).
- b. The jurisdiction has completed a hazard mitigation plan in keeping with applicable guidelines and standards.

3. *The jurisdiction is prepared to meet the tasks associated with recovery in a coordinated manner.*

#### Sample Measures

- a. The stakeholders in the jurisdiction acknowledge and accept their recovery roles and agree upon guidelines for the fulfillment of their roles (as evidenced by the signatures of appropriate stakeholder organizations in the recovery plan or other appropriate documentation (e.g., letters of support, memorandums of understanding)).
  - b. The jurisdiction has completed a recovery plan in keeping with applicable guidelines and standards.
  - c. The jurisdiction periodically assesses its preparedness for recovery through exercises.
  - d. The stakeholders in the jurisdiction periodically assess their preparedness to fulfill their recovery roles (as evidenced by the participation of the stakeholders identified in the jurisdiction's recovery plan in the jurisdiction's recovery exercises).
  - e. The jurisdiction completes improvement plans in keeping with applicable standards and guidelines following recovery exercises.
4. *The jurisdiction is prepared to meet resource shortfalls related to response and recovery in a coordinated manner in the wake of a hazard event.*

#### Sample Measures

- a. The jurisdiction secures agreements with appropriate businesses that define the process by which the businesses will coordinate with the jurisdiction to address resource shortfalls in the wake of a hazard event.
- b. The jurisdiction secures agreements with appropriate nongovernmental organizations that define the process by which the nongovernmental organizations will coordinate with the jurisdiction to address resource shortfalls in the wake of a hazard event.
- c. The jurisdiction secures agreements with other jurisdictions that define the process by which the other jurisdictions will coordinate with the impacted jurisdiction to address resource shortfalls in the wake of a hazard event.
- d. The jurisdiction periodically assesses its ability to activate existing agreements through response and recovery exercises.
- e. The jurisdiction modifies existing agreements and/or secures additional agreements based on the discovery of additional resource shortfalls through the exercise process.



*International Association of Emergency Managers, US Council*

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