

# Summary of Stakeholder Feedback

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Building Resilient Infrastructure and Communities (BRIC)

Prepared for:



**FEMA**

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## Executive Summary

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In October 2018, the Disaster Recovery Reform Act was signed into law. It introduced more than 50 provisions to improve disaster preparedness, mitigation, response, and recovery programs and outcomes. Section 1234 amended Section 203 of the Stafford Act to create a new funding mechanism that will set aside 6 percent of federal post-disaster grant funding in support of a new pre-disaster hazard mitigation grant program, Building Resilient Infrastructure and Communities (BRIC). This set-aside ensures funding is available every year, thus removing the uncertainty associated with the annual appropriations process that funded the Pre-Disaster Mitigation (PDM) grant program. For the BRIC program, the Federal Emergency Management Agency (FEMA) will provide a federal cost share of up to 75 percent for most funded projects, and to up to 90 percent per project for small impoverished communities. BRIC presents a unique opportunity for FEMA to invest money in states, local governments, tribes, and territories to mitigate risk and thereby reduce federal spending on disaster response and recovery operations. Moreover, BRIC will provide FEMA a platform through which to apply its lifelines concept to mitigation practices so that communities can build their resilience to the cascading impacts of disruptive events.

### Purpose of the Report

To support the development of the BRIC program, FEMA engaged in a comprehensive stakeholder engagement process to solicit feedback on the experience of Applicants and subapplicants with the existing PDM grant program. These engagements helped FEMA learn about challenges stakeholders face in building their capability to implement mitigation programs and projects and gather ideas and recommendations for how BRIC can be responsive to the complex resilience needs at all levels of government. This stakeholder report was compiled to provide an in-depth review of the comments received through the stakeholder engagement process and is presented in seven chapters:

1. Formal Letter Analysis
2. Capability and Capacity Building
3. Application Process and Requirements
4. Risk-Informed Decision-Making
5. Hazard Mitigation Planning and Plan and Project Implementation
6. Tribal-Specific Issues
7. Project Monitoring and Evaluation and Lesson Sharing

This report describes how this limited analysis of the stakeholder comments and input have informed FEMA's program leadership to help guide the design and implementation of this new program. This report is a summary of the pre-engagement strategy only and does not remove the program's responsibility to allow for a formal comment period on the official policy once it is completed. The program intends to provide the public additional comment opportunities through the Federal Register Notice process in Spring 2020.

## Overview of Stakeholder Engagement

During the summer of 2019, FEMA conducted a comprehensive stakeholder engagement effort to seek comments and ideas for the initial BRIC program design. Throughout the BRIC engagement effort, FEMA solicited comments from all levels of government and stakeholders, including citizens and officials from other federal agencies, states, territories, tribes, businesses, critical infrastructure sectors, non-profits, academic institutions, and philanthropic organizations.

Engagement methods ranged in format, duration, and level of effort to encourage participation from a wide breadth of stakeholders. Table ES-1 displays the event details for the primary BRIC engagement efforts.

**Table ES-1: Program Engagement Summary**

Format	Date	Title / Event	Location	Number of Comments
	6/6/19	Webinar 1: Infrastructure Mitigation Projects and Community Lifelines	Virtual	1,427
	6/13/19	Webinar 2: Hazard Mitigation Planning, Grant Application and Evaluation, and Risk Based Funding	Virtual	1,291
Webinar <sup>(1)</sup>	6/20/19	Webinar 3: Funding & Resource Management and Benefit-Cost Analysis	Virtual	653
	6/25/19	Webinar 4: Building Codes and Enforcement and Capacity and Capability	Virtual	541
	6/30/19	Tribal Stakeholder Input Session 1	Virtual	83
	7/1/19	Tribal Stakeholder Input Session 2	Virtual	67
IdeaScale <sup>(2)</sup>	5/20/19 – 7/15/19	IdeaScale	Virtual	166
In-person	6/18/19	Listening Session Denton Workshop	Denton, TX	420
listening session <sup>(3)</sup>	8/12/19	Tribal Stakeholder Listening Session	Cabazon, CA	80
	8/15/19	Tribal Stakeholder Listening Session	Blue Lake, CA	112

(1) Webinar questions are included in Appendix I. Recordings of webinars are posted on [www.fema.gov](http://www.fema.gov); however, comments are no longer being accepted.

(2) IdeaScale prompts are included in Appendix II.

(3) Listening session questions are included in Appendix III.

Beyond these formal events, BRIC comments were also solicited during various conferences and workshops and by using a dedicated email address ([BuildBRIC@fema.dhs.gov](mailto:BuildBRIC@fema.dhs.gov)) to capture general public comments. Through these channels and the engagement events listed above, FEMA received 5,017 comments, which were integrated in the stakeholder analysis summarized below.

FEMA also received 55 formal letters and 20 letter-format emails from stakeholders on the BRIC program design, which were analyzed separately (details included in *Methods* below).<sup>1</sup>

<sup>1</sup> Entities that submitted formal comment letters are listed in Appendix IV. “Formal letters” were those submitted via email as an attached PDF file on letterhead, whereas “letter-format emails” were those submitted via email as text in the body of an email (i.e., not on letterhead attached as a PDF file).

## Methods

As comments were received from stakeholders, they were catalogued electronically. Each comment was assigned an identification number and was classified for the source of the comment and the date the comment was received. The comments were then separated into three different categories, each of which contained its own analysis strategy. These categories and the corresponding analysis strategies are discussed in this report.

### *General Stakeholder Feedback Analysis*

Stakeholder comments from IdeaScale; BRIC webinars; [BuildBRIC@fema.dhs.gov](mailto:BuildBRIC@fema.dhs.gov); and non-tribal listening sessions, conferences, workshops, and meetings were jointly analyzed. All comments were analyzed using readily available Qualitative Analysis Software. To begin the data analysis process, FEMA developed a codebook based on emerging themes in the data and specific items of interest.

Each individual comment was read and assigned codes from the codebook. Each comment was assigned as many or as few codes as were relevant to the particular comment. After all comments were coded, an analysis was conducted to determine common themes.

### *Tribal Stakeholder Feedback Analysis*

Stakeholder comments from tribal stakeholders and those that concerned tribal-specific issues were analyzed independently from all other comments. This separate analysis ensured that tribal-specific themes and their application to tribal-specific program elements could be considered in the appropriate context, noting the unique needs and challenges of tribal communities. Moreover, because of the unique government-to-government relationship, tribal-specific comments warranted a separate analysis to identify emerging tribal-specific themes with greater precision and attention.

As in the general stakeholder feedback analysis, comments were analyzed using the Qualitative Data Analysis Software. FEMA developed a separate codebook for tribal stakeholder feedback and read and assigned relevant codes to each individual comment. Each comment was assigned as many or as few codes as were relevant to the particular comment. After all comments were coded, an analysis was conducted to determine common themes.

### *Formal Letter Analysis*

FEMA analyzed formal letters separately using different methods than the general and tribal stakeholder feedback. This was done for two reasons. First, because many letters came from stakeholders representing national organizations with which FEMA actively engages, it was critical that the content be summarized promptly so that their feedback could be integrated at the earliest possible stage of the program design. Second, given the scope and depth of feedback in letter format, it would be more meaningful to read and interpret stakeholder letters in their entirety, as opposed to the line-by-line approach using the coding strategy implemented for the general and tribal feedback.

To analyze these letters, FEMA read each letter in its entirety, making margin notes. Once the letter was read, a short summary of the entire letter was written and attached to the letter. Unique recommendations or issues were noted in the summary. After all letters were read, the individual letter summaries were reviewed for common themes.

## How to Interpret and Use the Report

The recruitment strategies used throughout the summer outreach and engagement events relied primarily on stakeholder self-selection, and the data collection methods were either open-ended or semi-structured qualitative methods. Because of the relatively unstructured format of collection methods, the feedback solicited from stakeholders provided useful insight into issues and opinions relevant to FEMA. Further, the flexibility associated with less structured qualitative methods created the opportunity for stakeholders to discuss themes that FEMA may not have initially considered.

However, because of the sampling and data collection methods employed, the results of the stakeholder outreach should not be interpreted as representative or exhaustive of stakeholder needs and opinions. For example, the format of the questions created some limitations to the feedback received, as the depth and topics of the responses varied significantly and had a role in framing the comments received (e.g., gaps in our understanding of stakeholder sentiment remain around critical program design components that were not asked about explicitly). Additionally, because the program was in the early stages of development at the time of extensive engagement efforts, many comments were vague because stakeholders lacked concrete information with which to react. Lastly, the open-ended nature of the research methodology does not lend itself to quantitative analysis.

Throughout the report, numbers are used liberally to provide high-level summaries of stakeholder responses and reactions; however, these numbers should not be interpreted as precise or fixed. Rather, they should be used to contextualize the large qualitative dataset.

The analysis as presented in the chapters that follow can be used as a tool for brainstorming and deliberation within FEMA to understand and integrate stakeholder feedback into BRIC program decisions, and to provide leadership or other interested stakeholders with insight into the rationale behind some program design decisions. Although the feedback does not provide consistent or specific answers about what stakeholders want BRIC to look like, the stakeholder feedback creates an avenue for diverse stakeholders to “have a seat at the table” as BRIC program components are being discussed.

## Report Organization

The formal letters and letter-format emails were analyzed separately from the general comments submitted by stakeholders. The analysis is presented in the formal letter chapter, which covers a broad range of topics and reflects the general findings from analysis of the general stakeholder comments.

In analyzing general comments submitted by stakeholders, six broad topics emerged as discussed in Chapters 2 through 7. These topics, paired with interests expressed by FEMA, were used to guide the remaining organization of the report. Each topic has a dedicated chapter, and within each chapter, analysis on related comments is presented alongside a list of recommendations and ideas under respective sub-topics.

This list is not intended to provide an all-inclusive list of what stakeholders shared, but rather should serve as an indicator of the most noteworthy ideas and recommendations for consideration for the new BRIC program.

### ***1. Formal Letter Analysis***

This chapter extracts and expounds upon key themes from the 75 formal comment letters submitted by stakeholders. Specifically, analysis indicated five primary themes:

- (1) General dissatisfaction with the stringency of Benefit-Cost Analysis methodology,
- (2) A desired emphasis on natural (green) infrastructure,
- (3) The importance of partnerships,
- (4) Desired support for small, impoverished, and rural communities' needs, and
- (5) Strong support for continued funding of hazard mitigation planning.

### ***2. Capability and Capacity Building***

Stakeholders discussed topics related to knowledge and knowledge management, partnerships, and technical expertise. This chapter discusses the gaps stakeholders mentioned in the ability of communities to pursue mitigation activities, ranging from inadequate training or resources to more systemic issues, such as limitations in data availability or barriers to collaboration. Furthermore, the chapter highlights the challenges faced in small, rural, impoverished, and other low-capacity communities.

### ***3. Application Process and Requirements***

Topics related to the application process as well as application requirements and eligibility are discussed in this chapter. The chapter outlines stakeholder comments regarding the existing application process and concerns related to complexity, a lack of flexibility, and FEMA's Benefit-Cost Analysis requirement, tool, and methodology. Lastly, the chapter highlights stakeholder comments regarding project scoping activities and projects that incorporated nature-based solutions, including the current limitations of both approaches.

### ***4. Risk-Informed Decision-Making***

This chapter focuses on stakeholder feedback regarding challenges with risk data, including data quality and access, and using risk to inform program funding decisions.

### ***5. Hazard Mitigation Planning and Plan and Project Implementation***

This chapter centers on stakeholder feedback related to hazard mitigation plans, the planning process, and project implementation. Stakeholder feedback included in this chapter discusses the role of planning in understanding risk and pursuing strategies to build resilience, as well as the issues with plan quality and the implications for identifying solutions, implementing projects, and encouraging meaningful stakeholder engagement and partner coordination. Additionally, the chapter identifies concerns over project Periods of Performance.

### ***6. Tribal-Specific Issues***

Tribal stakeholders addressed topics related to hazard mitigation, capability and capacity building, program design, and project development and application. Broadly speaking, this chapter emphasizes the unique challenges faced by tribes and the varying levels of capabilities and wide-ranging needs across tribal partners. The chapter also explores stakeholder sentiments related to the focus of BRIC on large infrastructure or lifelines projects given that these types of projects may not resonate with tribes or meet their needs.

## ***7. Project Monitoring and Evaluation and Lesson Sharing***

This final chapter discusses topics related to project monitoring and evaluation as well as lesson sharing. Notably, the chapter includes stakeholder feedback focusing on the importance of building a culture of information sharing and highlights the usefulness of sharing case studies, lessons learned, and best practices.

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## Acronyms and Abbreviations

BCA	Benefit-Cost Analysis
BCR	benefit-cost ratio
BRIC	Building Resilient Infrastructure and Communities
COE	Community Outreach and Education
EHP	Environmental Planning and Historic Preservation
EM	emergency management
EMA	Emergency Management Agency
EMI	Emergency Management Institute
FEMA	Federal Emergency Management Agency
GIS	geographic information system
HMA	Hazard Mitigation Assistance
HMGP	Hazard Mitigation Grant Program
HMP	hazard mitigation plan
HQ	headquarters
NFIP	National Flood Insurance Program
NGO	non-governmental organization
PDM	Pre-Disaster Mitigation
PNP	private nonprofit
RTL	Regional Tribal Liaisons

# 1. Formal Letter Analysis

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By the end of July 2019, the Federal Emergency Management Agency (FEMA) received 55 formal letters and 20 letter-format emails from stakeholders on the Building Resilient Infrastructure and Communities (BRIC) program design. Many of the letters received were in direct response to the topics on the BRIC Campaign Brief on IdeaScale. Many letters did not have a singular focus and covered a range of topics. Some of the letters from different stakeholders contained duplicate content, indicating stakeholders communicated with each other to convey a consistent message. The content of the letters was relatively consistent with the themes from the general stakeholder feedback, which is covered in the subsequent chapters.

This chapter provides a general overview of the main themes that emerged from stakeholder letters. Each section contains a key statement that reflects ones of those themes and is accompanied by a short description that summarizes the letter's content.

## 1.1 Lack of Flexibility Associated with the Benefit-Cost Analysis Methodology

Although stakeholders were pleased with improvements to the Benefit-Cost Analysis (BCA) tool, there was consistent dissatisfaction with perceived biases and lack of flexibility in the BCA methodology. Stakeholders acknowledged the requirement for projects to be cost-effective, but also contended that the BCA is just one of many strategies for determining cost-effectiveness. Stakeholders consider the current BCA methodology to limit innovation, natural infrastructure, and the participation of low-resourced (in particular “data poor”) communities.

Recommendations included:

- Expanding the range of benefits and costs included in the methodology,
- Mandating that coastal communities include sea-level rise in their BCAs,
- Allowing regional models of the BCA,
- Allowing the incorporation of environmental benefits for all BCAs (not just those with a starting benefit-cost ratio [BCR] of 0.75),
- Adjusting the 7 percent discount rate, and
- Accounting for social and environmental benefits in some other format.

## 1.2 Making Natural (Green) Infrastructure a Top Priority

A substantial number of stakeholders advocated for an increased emphasis on natural infrastructure (natural infrastructure, nature-based, and/or hybrid gray-green infrastructure). Most of these stakeholders highlighted research related to the effectiveness, cost-effectiveness, and direct and indirect benefits of natural infrastructure for mitigation efforts. Some stakeholders provided specific examples of natural infrastructure projects that they recommended be encouraged (e.g., living shorelines, forest management, wetlands restoration). Discussions of increased prioritization of natural infrastructure were often paired with an emphasis on improving the BCA, support for continuing to endorse non-structural mitigation, and opposition to gray infrastructure activities typically overseen and funded by other federal agencies and

structural flood control measures. Stakeholders also underscored the need to build capacity and capability of communities to design and implement these strategies.

### **1.3 Importance of Partnerships for Transformational Projects**

Stakeholders acknowledged that partnerships across jurisdictions and public-private partnerships will be important for developing the types of transformational projects FEMA envisions as part of BRIC. Stakeholders appeared to believe that most communities do not have the experience, capacity, or capability to effectively start, engage, or manage these partnerships and also that there are a variety of regulatory barriers to establishing effective partnerships in the context of a BRIC grant (e.g., only one Applicant per project). Stakeholders proposed that FEMA find solutions for addressing these issues. Recommended solutions included:

- Providing a variety of educational/training resources,
- Incentivizing cross-jurisdictional planning, engaging the private sector in the planning process, and
- Establishing a platform for co-applying and co-managing grants, resources for aligning common objectives among stakeholders, and data-sharing platforms.

### **1.4 Support for Disadvantaged Small, Impoverished, and Rural Communities**

Across the diverse range of topics the letters covered (risk, planning, scoping, building code enforcement, project and grant management, etc.), stakeholders consistently acknowledged the disadvantages small, impoverished, and rural communities could face in the context of the BRIC program. Multiple stakeholders suggested that even a 90/10 cost match available for communities under 3,000 is a burden for these communities and insufficient for motivating them to participate. Furthermore, some stakeholders noted that communities that may not qualify under the current criteria for “small impoverished” are similarly under-resourced and would not be competitive against communities with more experience, capacity, and capabilities. Stakeholders recommended making a wide variety of resources available to enhance the capacity and capability of small impoverished communities (both those that fit the current criteria and those that do not). Multiple stakeholders also recommended adjustments to the program structure to facilitate the participation of these communities, such as specific allocations for these communities, different “tiers” of projects, and incentives for cross-jurisdictional projects with under-resourced communities.

### **1.5 Strong Support for Continued Funding of Hazard Mitigation Planning**

Many stakeholders expressed concern over the potential for decreased funding of hazard mitigation planning. Stakeholders suggested that cutting funding for hazard mitigation planning will have a variety of negative consequences because hazard mitigation plans (HMPs) are critical to resilience and communities rely on FEMA funding for their maintenance. Stakeholders recognized the shortcomings associated with HMPs, in particular that plans frequently do not result in actionable (“shovel ready”) projects. Stakeholders across the 75 letters offered many recommendations. The letters (and stakeholder comments) conveyed a demand that HMPs continue to be funded, but stakeholders acknowledged and advocated for higher standards,

planning integration, and greater accountability of HMPs fulfilling their intended purpose (particularly if FEMA provides the funding). These recommendations were paired with requests for greater resources to build the capacity and capabilities of communities to effectively engage in higher-level planning activities.

## **1.6 Final Notes**

Overall, these letters contained well-developed arguments and recommendations. The summary provided above lists the most common and consistent themes raised across the letters and emails. These letters did raise issues that did not come up frequently, but that may warrant attention nonetheless. Likewise, they included many unique and creative solutions that did not represent the majority but may prove useful for BRIC development. Finally, additional themes that emerged in the letters are included below.

Stakeholders expressed support for:

- Consistency across pre-existing mitigation programs
- Recent (flexible) building code adoption and enforcement
- The expansion of pre-calculated benefits
- Increased funding for technical assistance and capacity-/capability-building activities
- Evaluation and monitoring performance of BRIC-funded projects
- Lesson sharing of successful projects at various scales
- Large and small mitigation activities
- Leveraging local stakeholder expertise for technical assistance needs
- Simplifying the process for making changes to budget, process, and work schedules that result in no changes to scope of work—especially necessary for large projects
- More comprehensive risk data (some divergence on source of data)
- Collaboration with other agencies and organizations to develop and support BRIC-related activities (administrative and on-the-ground)

## 2. Capability and Capacity Building

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The stakeholder comments revealed a variety of gaps in capability and capacity that affect the ability of communities to move mitigation projects forward. This chapter details those comments to provide insight into what these gaps are as well as some recommendations for addressing them. This chapter is organized into three categories that reflect literature-based research on dimensions of community capacity:

- (1) Knowledge and knowledge management,
- (2) Partnerships, and
- (3) Technical expertise.

Recommended activities included in this chapter emphasize not only the capability and capacity to apply for grants but also building capacity and capability to mitigate risks. Also, the recommendations include potential solutions suggested by stakeholders; others may exist but are not included here.

### 2.1 Knowledge and Knowledge Management

Stakeholders highlighted a variety of knowledge gaps that they perceived either to be currently hampering their ability to engage in mitigation activities or that will be necessary to accomplish FEMA's mitigation goals. These knowledge gaps are discussed in detail in the sections that follow.

#### 2.1.1 Risk Information

FEMA explicitly solicited feedback from stakeholders regarding their opinions about risk-informed funding. Many stakeholders perceived their current access to usable, relevant, accurate, comprehensive, and/or up-to-date risk data to be inadequate. Of all comments related to risk, 23 percent referred to data being incomplete, implying that a substantial number of stakeholders submitted comments about gaps in risk data, and in many cases explicitly advocated for assistance in this regard. For example:

*“Data assistance is the biggest obstacle we face now... the most up to date and accurate data is not always available. Making all data more available would be the best assistance.”*

Risk data, and corresponding knowledge about local risk, are critical components for effective mitigation planning and mitigation actions. Therefore, gaps in risk data present a fundamental problem for BRIC, and more generally, FEMA's mitigation goals. There appeared to be diverging opinions regarding “best” sources of risk data, with many individuals advocating for locally based risk data and some advocating for national datasets. One participant implied how integration of all data (at different scales) could be one solution for planning (and thus mitigation) deficiencies.

*“Hopefully there is a detailed risk assessment model that uses [a] variety of federal, state, and local data inputs. I have been doing [HMPs] since their inception and I have actually seen risk assessments going down in quality.”*

Regardless of the approach taken by FEMA, the feedback shows that stakeholders are requesting resources and technical assistance to supplement their community risk database. Resources or technical assistance that increases knowledge of local risks, regardless of format, will benefit not only a community's ability to apply for BRIC funds, but also its mitigation efforts, as understanding one's risks is a fundamental component of mitigating hazards.

Separate from resources and technical assistance, some stakeholders suggested that it is not a matter of limited risk data, but rather limitations of the risk data that can be used to fulfill FEMA application requirements. Solutions suggested include increasing the flexibility of allowable risk data that can be used for application requirements and providing training or resources for translating existing community data into a format acceptable for hazard mitigation planning and BRIC application requirements.

*“Communities don't need more information on risk, they need help turning existing information into fundable projects.”*

#### **Stakeholder recommendations for addressing risk data deficiencies through resources or technical assistance:**

- Integrate all available sources of risk data (e.g., local, state, and national level datasets)
- Provide an easy-to-access database with pertinent risk data and their sources
- Partner with agencies/universities that have existing resources to develop and collect risk data
- Increase the visibility of existing risk data at the local, state, and national level through better communications and outreach
- Offer education/training on how to collect different types of risk data
- Involve local jurisdictions in data collection and data maintenance
- Offer geographic information system (GIS) education/training

#### **2.1.2 Potential Solutions and Approaches to Increase Resilience**

The results of the stakeholder engagement analysis show that some communities may lack baseline knowledge about addressing certain risks and mitigating hazards, particularly within a lifeline framework. When discussing project types BRIC could fund, stakeholders explicitly suggested that FEMA provide resources that show examples/case studies/templates of project types to address certain hazards (i.e., a project inventory), and some suggested including corresponding timelines and resources needed to complete those projects.

*“From a planning perspective, it would be helpful to define how lifelines are related to projects. We need some examples... struggling to understand how mitigation projects apply to these categories.”*

*“Develop an online case study clearinghouse, where we can browse through lots of eligible project examples and success stories.”*

Stakeholders were very receptive to the examples FEMA provided during the first general webinar and during the tribal webinars. This positive reaction from stakeholders may suggest that project examples that include user-friendly detail could serve as a resource for a community

to brainstorm solutions to local hazards. Some stakeholders did highlight that they would have appreciated examples of smaller mitigation projects, as the examples provided by FEMA during the first general webinar were not applicable to their smaller community.

Another indication that stakeholders lack knowledge about potential solutions is the request from stakeholders for pre-calculated benefits. Although requests for pre-calculated benefits primarily reflect difficulty completing the BCA, they also indicate that stakeholders lack an understanding about project types that are cost-effective solutions to certain hazards. Communities (particularly those with low capacity) will often gravitate toward the simplest strategy. Simplifying certain project types by offering relevant pre-calculated benefits (or something similar to pre-calculated benefits) could present an opportunity for FEMA to encourage the types of projects it or its stakeholders would like to see implemented (e.g., nature-based infrastructure) while enhancing the capability of communities to mitigate hazards.

*“Pre-calculated benefits for natural and nature-based infrastructure projects based on completed projects would be extremely helpful.”*

**Stakeholder recommendations for addressing potential gaps in knowledge regarding effective solutions include:**

- Develop resources that show examples of projects that address specific hazards (including other information on timeline, cost, expertise, etc.)
- Represent more hazard types in pre-calculated benefits offerings and, in general, provide pre-calculated benefits for more project types
- Incentivize certain project types in competition evaluation criteria to create awareness of potential solutions
- Fund/facilitate opportunities for stakeholders facing similar hazards to jointly brainstorm solutions in person
- Fund a consultation service for stakeholders to use for scoping solutions
- Provide guidance on types of expertise needed to scope proper solutions

### **2.1.3 Potential Funding Sources**

Another knowledge gap that should be addressed is potential funding sources for mitigation projects. Stakeholder feedback reflected various iterations of this, such as a lack of awareness of different federal funding sources, potential private funding sources, or eligible in-kind services, and lack of knowledge regarding how to effectively align time-lines of disparate funding sources with respective requirements. FEMA may use this feedback as an opportunity to help stakeholders successfully seek out alternative funding sources to meet match requirements or fund projects that may not qualify under the BRIC program. Additionally, by facilitating access to alternative, non-federal funding sources, FEMA can simultaneously foster partnerships, reduce reliance on federal funding, and encourage mitigation project implementation.

**Stakeholder recommendations for identifying potential funding sources include:**

- Post a repository of funding sources that communities can reference
- Develop a platform through which individuals can share successful/creative ways they have met match requirements

- Offer training on how to effectively solicit funding from potential private partners (i.e., how to get them to “buy in” to mitigation)

#### 2.1.4 Building Code Regulations and Benefits

In relation to building codes, many stakeholders expressed support for building code adoption and enforcement; however, they also discussed perceived barriers to adoption and enforcement. While most stakeholders cited limited funding and staff as the primary barrier, other barriers were discussed that FEMA can address. Of all comments related to building code implementation challenges, 28 percent referred to some form of education, training, or knowledge deficiency as a barrier to adopting and enforcing building codes, and 16 percent of all building code-related comments discussed a desire for more/better training or education. Interestingly, stakeholders highlighted that training was a need for both builders and enforcement staff as well as the general public. In the case of builders and enforcement staff, stakeholders often cited training as a potential solution to current barriers. Also, some stakeholders suggested that small, impoverished, rural, and tribal communities have pronounced knowledge gaps regarding building codes.

*“A lot of contractors in small rural areas don’t even know the code—again, [we need] more training and good inspectors who are willing to enforce the code and have support.”*

In relation to the general public, stakeholders discussed issues such as “local resistance,” “public awareness,” and general community “buy-in” as barriers to implementation.

*“I had been shut down by locals after a huge tornado, and they weren’t interested in the additional 5% for code support. Sad.”*

Some stakeholders noted that even when individuals are supportive of local building code adoption and enforcement, they may lack the knowledge or resources to play their individual part in adoption and enforcement. One stakeholder offered the following recommendation to address this gap:

*“We need very accessible, 8th grade level fact-sheets with pictures showing the response to events at various levels of minimum codes and better scenarios... this will help combat developer narrative that it isn’t necessary and that buildings are already ‘safe.’”*

#### Stakeholder recommendations for addressing building code-related knowledge gaps include:

- Pursue educational campaigns tailored individually for staff, citizens, and elected officials
- Collaborate with local professional organizations, media outlets, and social channels to provide education and training
- Create a rating system based on code compliance visible to homebuyers or those leasing buildings
- Provide an “economic” case for why building code adoption and enforcement is beneficial

- Showcase examples of building code adoption being beneficial in real-life disaster contexts
- Develop simulations of potential damage to make potential impacts more tangible

### 2.1.5 Knowledge Management and Transfer

Stakeholder feedback received suggests that some communities experience issues with high turnover, which in turn affects their ability to move forward with mitigation projects because of the “loss of knowledge and familiarity.” Related comments suggest that it may be important to consider how knowledge is shared, gathered, or developed as a result of capability- and capacity-building activities, and how knowledge will be maintained, stored, and transferred to new staff (or new political leaders). While there were no detailed recommendations to address this issue, the feedback did suggest a need for better strategies and resources to maintain and transfer knowledge related to mitigation activities.

## 2.2 Partnerships

Overall, stakeholders noted that, in many contexts, partnerships will be important for their success in mitigation efforts (i.e., planning, scoping, and funding projects; applying for grants; implementing projects; and managing projects and grants). This is consistent with research findings that partnerships are an important ingredient for community capability. Most stakeholders discussed their need to develop partnerships or issues they had because of ineffective partnerships. Stakeholders emphasized that it would be important to include partnerships with both private- and public-sector entities, non-governmental organizations (NGO)/non-profits, neighboring jurisdictions, different levels of government, FEMA employees, other federal agencies, and universities/research centers. In the following sections, specific barriers to establishing effective partnerships and potential solutions are discussed based on stakeholder feedback. Because no specific feedback platforms explicitly solicited feedback regarding partnerships and barriers associated with partnerships, the feedback is less detailed than other feedback described in this chapter (e.g., risk as detailed in Section 2.1).

### 2.2.1 Barriers to Initiating and Sustaining Partnerships That Are Important for Mitigation

While stakeholders suggested that partnerships can help supplement missing capabilities in a community, some stakeholders expressed uncertainty as to how to approach a potential partner once one has been identified.

*“We’re working with a state agency who has some great projects to submit to [Pre-Disaster Mitigation]/BRIC. Do you have suggestions on how to approach a state emergency management agency with a good project? We haven’t been successful in the past.”*

*“Interested in exploring how we can motivate other agencies to come onboard and use the new legislation to our advantage”*

One barrier to forming partnerships that stakeholders identified is getting buy-in for mitigation projects. Specifically, stakeholders perceive that limited buy-in will be a significant barrier for planning, applying for, and implementing large infrastructure mitigation projects.

*“Regarding the role of the private sector... we are way overdue in creating financial investment incentives and benefits to businesses to invest in resiliency. Tax benefits, capitalization benefits, etc. should be explored. A gathering of these constituencies should assemble to get their ideas and suggestions.”*

Stakeholders raised concerns around issues that may ultimately affect their ability to foster and maintain effective and sustainable partnerships. This may be an issue, particularly when communities enter into agreements with new partners they have not worked with before.

*“Lifelines will probably mean that we need to work closely with the private sector. Many of the authorities for the infrastructure are not under control of the jurisdiction and are outside what a community can do. We need guidance on how to work with private ownership and companies.”*

According to stakeholders, some communities may face barriers in the form of limited resources to communicate effectively across different stakeholders/partners, leadership challenges, and project management deficiencies.

*“The biggest challenge we face is coordination of all needed parties and entities (i.e., division of water, FEMA, local engineering, and elected officials). We need a better system for formatting this communication.”*

**Stakeholder recommendations for addressing partnership barriers include:**

- Fund tabletop exercises to bring stakeholders together
- Provide better (and more specific) identification of necessary partnerships in hazard mitigation planning
- Incentivize or prioritize projects that involve multiple jurisdictions working together on a single project
- Develop a grant-related platform or system for communication

## **2.2.2 Administrative Issues Hindering Effective Partnerships**

Some stakeholders commented that the current grant application and procurement processes are barriers to effectively fostering and maintaining partnerships. In relation to the grant application process, some stakeholders expressed frustration with the inability for multiple subapplicants to jointly apply for a project and, if successful, access and manage funding. Specifically, they perceived this to hinder their ability to engage in cross-jurisdictional partnerships for larger projects. Additionally, non-profits expressed frustration with being unable to apply as a subapplicant; this presents another barrier to forming partnerships, specifically with organizations that are not eligible to be a grant subapplicant.

*“It would be great if there was a role for non-profit organizations to play in these projects, both as project initiators (with support and engagement of relevant local governing and permitting bodies of course) as well as in project implementation.”*

*“The biggest obstacle I see is that currently our private sector partners are not eligible for grant funding and they own 85% of the critical infrastructure.”*

The main recommendation in relation to the administrative barriers was for FEMA to expand who is eligible to apply for BRIC funds. While this recommendation may not be feasible because

of policy limitations, it demonstrates a more general request from stakeholders to provide more guidance on how best to partner with private entities given existing barriers and Applicant restrictions.

## 2.3 Technical Expertise

Throughout the engagement process, FEMA inquired about the types of technical assistance stakeholders would need to be able to apply for and implement mitigation projects. Direct responses to these questions often revealed that communities may be lacking the expertise to carry out these activities, and many stakeholder comments indicated an explicit expertise gap. While most of the comments generally referenced a lack of technical knowledge or technical expertise to plan projects or apply for or implement grants, some were more detailed. Of the subset of stakeholders who mentioned a specific gap in expertise, 75 mentioned gaps related to engineering, 58 mentioned gaps related to grant management, and 35 mentioned gaps related to project management. This distribution illustrates that, overall, stakeholders perceived their primary expertise gap to be related to engineering needs. Although some stakeholders noted that they have access to qualified engineers, many stakeholders shared that there is a lack in engineering expertise at the local and state levels.

*“We live in a small (30k) county with large mining, fire, and monsoon seasons, and need to mitigate risks from those systems. Our municipal and county governments care, but lack of engineering expertise in the types of disasters prevents most from knowing that there are even ways to mitigate.”*

*“One of the problems in implementing mitigation projects is the technical expertise required to get to the point of implementation. It is my understanding that FEMA has primarily been interested in funding shovel ready projects. It takes a lot of funding and technical expertise to get to that point, and small communities with limited capacity struggle to get to that phase.”*

As displayed by the second quote, stakeholder comments also illuminated that bridging expertise gaps will be especially important for small, impoverished, rural, and tribal communities. Furthermore, some stakeholders emphasized that it was not only a matter of not having the expertise, but also not knowing the type of expertise needed for particular projects. Many of the solutions stakeholders proposed included requests for more funding and staff to address the expertise gaps. Aside from these more general requests, stakeholders generally perceived that Advance Assistance could reduce the expertise-related barriers. The data indicate overall support for Advance Assistance, with almost no stakeholder comments opposing funds directed toward Advance Assistance.

## 3. Application Process and Requirements

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The comments obtained from stakeholder engagements revealed that stakeholders perceived the need for improvement to various components of the current application process and application requirements under existing Hazard Mitigation Assistance (HMA) programs (e.g., Pre-Disaster Mitigation [PDM] and Hazard Mitigation Grant Program [HMGP]). This chapter details challenges stakeholders experience with the current application process, struggles in relation to particular application requirements and eligibility requirements, and recommendations for changes. The chapter is organized into two main sections:

- (1) Application Process, and
- (2) Application Requirements and Eligibility.

The recommendations represent the potential solutions suggested by stakeholders; others may exist but are not included here.

### 3.1 Application Process

Across the various engagement forums and platforms used to gather stakeholder comments, there was substantial feedback about the application process and requirements. Specifically, stakeholders believed that the application process is too complex, lacks flexibility, and needs to be streamlined. Stakeholders provided feedback about the timeline of the application process and the transparency of the evaluation criteria for submitted applications. Lastly, a significant number of stakeholders requested technical assistance on issues directly tied to the application process itself. These themes are discussed in more detail in the following sections.

#### 3.1.1 Complexity

In relation to the grant application process, stakeholders expressed that it was too complex or that there was a perceived complexity associated with the application process. Some stakeholders highlighted that these perceptions alone sometimes dissuade potential Applicants from pursuing HMA grant funds.

*“My subgrantees often say it is too hard and not worth the time and effort to apply.”*

While most comments generally referred to the complexity associated with the application process or the need to simplify the application process, two specific components came up frequently: the BCA and the amount of documentation associated with the application process (recommendations for which are discussed in Section 3.2 of this chapter).

If BRIC seeks to reduce complexity in line with FEMA’s Strategic Goals, the stakeholder feedback suggests that simplifying the application process may be one critical way to do that.

#### Stakeholder recommendations for reducing the complexity of the application process include:

- Offer a more streamlined application process to address existing complexities
- Reduce requirements for common project types or lower budget projects
- Provide support for phased projects or Advance Assistance so that Applicants/subapplicants can work on project components incrementally

### 3.1.2 Lack of Flexibility

Out of 72 comments related to flexibility, 35 percent referred to the application process, indicating a sentiment that stakeholders want more flexibility and less rigidity in the application process and corresponding requirements. Stakeholder input about flexibility and the application process was commonly discussed not only in relation to a general lack of flexibility, but also a lack of flexibility with the BCA and allowable project types (both of which are discussed in Section 3.2).

*“The grant process is entirely too restrictive to allow local jurisdictions to complete realistic projects needed.”*

Comments suggesting a general lack of flexibility implied a potential “perception issue” of HMA being too restrictive. This is important because stakeholders may ultimately interpret the lack of flexibility as a barrier to innovation with mitigation projects. This sentiment has been expressed through formal stakeholder letters as well as through the general stakeholder comments. Based on stakeholder feedback, more flexibility may reduce perceived barriers to engaging in the application process and pursuing innovative project types.

**Stakeholder recommendations for addressing the lack of application process flexibility include:**

- Update the application system to accept “additional comments” (e.g., so that Applicants/subapplicants can note when a requirement either may not apply or should apply differently to their project to the extent regulations allow flexibility)
- Enable Applicants to view/access subapplicant applications prior to submission
- Permit more flexibility for leveraging Section 404 (HMGP) and/or Section 406 (Public Assistance) of the Robert T. Stafford Disaster Relief and Emergency Act with future pre-disaster mitigation funding for larger projects

### 3.1.3 Streamlining

Of the 128 stakeholder comments that discussed streamlining, 40 percent of those comments related to some component of the application process. Oftentimes, general statements supporting streamlining related to reducing the complexity associated with the application process. Further, in a handful of cases, calls for streamlining were expressed as a strategy for increasing accessibility of the grant program to small, impoverished, rural, and tribal communities:

*“I’ve been doing this for almost 20 years. We keep coming up with programs that require more instead of streamlining for the smaller, non-resourced communities.”*

*“The #1 thing I would suggest is to streamline the grant process of application, review, and funding to encourage more local governments to take on mitigation projects, especially small, rural government involvement.”*

Stakeholders offered a variety of recommendations on how to streamline the process. Most of the recommendations related to how the grant application portal should be improved.

**Stakeholder recommendations for streamlining the application process include:**

- Use a universal baseline grant application system for all programs and activities

- Reduce question redundancy
- Avoid duplication in requests for information
- Use conditional logic tools in grant system to provide appropriate questions based on Applicant response to previous questions
- Enable Applicants to view/access subapplicant applications prior to submission
- Incorporate lessons learned from the Public Assistance Grant Manager Portal

### 3.1.4 Timeline

Of the 222 comments regarding the timelines associated with the BRIC program, 38 comments were about the application period generally. In relation to more specific components of the application process, 17 comments were associated with the BCA timeline and 17 comments were associated with the Environmental Planning and Historic Preservation (EHP) review timeline. The remaining timeline-related comments concerned the Period of Performance; these comments are discussed further below in Section 5.2.

Overall, the primary message regarding the application timeline was that stakeholders want more time to complete the application and swifter review periods. Most of the comments provided few details that yield insight into the nuances associated with the need for extended application timelines and quicker project selection decisions. However, comments that did provide more detail indicated a concern that larger infrastructure projects require more time to develop a complete and thorough application. Regarding swifter review periods, some stakeholders suggested that the need for quicker FEMA decisions stems from the impact the decision lag has on the Period of Performance (i.e., the time between the start and end dates) as well as budget estimates.

Stakeholders stated that deviations in application open and close dates and delays in notification made it difficult to plan for mitigation projects and receive support from local government.

*“We want a consistent application system so we can start working on the application 2–3 years before we really want to apply.”*

Some stakeholders highlighted the constraints encountered when trying to perform work in areas that are susceptible to pronounced hazard seasons, which are exacerbated when reviews are not performed in a timely manner. These delays in turn may ultimately impede the ability of Applicants and subapplicants to complete application requirements within the required timeframe or move forward with the proposed mitigation project.

*“The timelines devastate local communities, because it takes so long to get approved. For example, with wildfire we only have a small timeframe to complete the project construction (i.e., summer months), and it doesn’t seem like the Region or HQ are considering these constraints.”*

#### Stakeholder recommendations for addressing timeline concerns include:

- Allow communities to upload baseline information to the portal before the Notice of Funding Opportunity is released
- Expedite decision-making for certain project types

- Allow flexibility in determining work schedule and cost estimates
- Remove, reduce, or streamline the role of the state in the application process
- Distribute application requirements across a longer timeframe or support multiple application stages
- Ensure more consistency and reliability in the application timeline
- Consider yearly timeframes around which application periods open, close, and when decisions are made

### 3.1.5 Transparency

Over 25 percent of stakeholder comments about transparency related to the application process. Primarily, stakeholders want increased transparency regarding how and why final project decisions are made. Some of the transparency comments stemmed from concerns that those who are evaluating project applications lack the necessary knowledge to properly evaluate projects. Further, stakeholder comments revealed frustrations with the current lack of feedback on applications that are not selected. However, one stakeholder comment indicated that there may be Regional inconsistencies related to transparency:

*“A different person said their region gives a lot of support for grant application[s] and provides the necessary review and comments on why an application wasn’t approved.”*

Overall, it appears that stakeholders were advocating for increased transparency with respect to both the status of applications and project selection decisions.

**Stakeholder recommendations for increasing transparency throughout the evaluation process include:**

- Provide a detailed application status update through the online portal
- Distribute information about project evaluators (e.g., affiliations, technical expertise, Regional understanding)
- Offer detailed feedback about why project applications were not successful

### 3.1.6 Technical Assistance

An overwhelming number of stakeholder comments (n=1,350) requested technical assistance. While many of the technical assistance requests were general, many referred to specific types of assistance, with 74 comments directly related to requests for application support. Further, a substantial number of comments requested support for necessary components of the application, such as BCA support (n=233), hazard mitigation planning (n=107), and EHP support (n=25). These results highlight that communities face many barriers to successfully completing mitigation funding applications.

## 3.2 Application Requirements and Eligibility

Alongside procedural issues, application-focused stakeholder feedback centered on application requirements that create barriers for effectively and successfully completing the grant

application, with BCA requirements identified as the largest barrier for stakeholders. Stakeholders also provided insight related to project type eligibility for the new BRIC program.

### 3.2.1 Benefit-Cost Analysis Requirements

The BCA was one of the most commonly discussed themes among stakeholders, with approximately 10 percent of all comments categorized as relating to the BCA. Further, BCA ranks as the 13th most used word in all of the stakeholder comments, behind words like mitigation (2nd) and BRIC (10th) and in front of words such as planning (18th) and lifelines (22nd). This highlights that the BCA is a critical area in which stakeholders want to see improvement in relation to the implementation of BRIC.

With respect to the BCA, there was overwhelming dissatisfaction with the requirements. Most stakeholder comments discussed the difficulty associated with the BCA, and many reported that it is a barrier to completing the application. Stakeholders mentioned a variety of reasons why the BCA is a barrier, with three main themes emerging: lack of resources (e.g., funding, staff), lack of training/understanding, and lack of data sources.

Separately, stakeholders frequently advocated for changes to the BCA model, typically advocating for the consideration of more variables or expanded impact areas. This was especially the case for nature-based or combined nature-based/gray infrastructure projects:

*“We are struggling in LA with watershed-type projects where benefits are received far outside of the immediate project area (construction). However, those benefits are not included in the BCA.”*

*“Encourage that the environmental benefits be allowed to carry more than 25% of the project. [... Consider] value of crops, aquaculture or fishing affected, soil stability, water retention.”*

Also, some stakeholders advocated for more flexibility in determining cost-effectiveness.

*“We use a state-developed BCA model to determine cost-effectiveness. It is not as rigorous as the BCA, but it is more practical for our smaller projects.”*

One stakeholder indicated that the issue may not be in relation to the BCA tool itself, but rather the documentation and data management required to complete the BCA:

*“Show local communities how to put together the damage spreadsheets for historical and expected damages. It’s not the tool, it’s how you document the information and set the spreadsheets up. There are millions of sources you have to pull from.”*

Stakeholder comments suggest that the issues related to the BCA disproportionately affect small, impoverished, rural, and tribal communities. Comments highlighted that the BCA requirement may (unintentionally) discourage these communities from applying for funding.

*“An assistance program for small entities who have little staffing and not much experience with pulling together all the data needed (especially the BCA) for a federal grant application. Texas did this after Harvey—if not for this, we wouldn’t have applied.”*

*“Would like more opportunities in BCA for transportation routes in rural areas. Access is critical, but population doesn’t get us there.”*

### Stakeholder recommendations for improving the BCA and supporting processes include:

- Increase BCA training and technical assistance
- Offer support for leveraging Advance Assistance to assist with the BCA process and cost-effectiveness determination
- Provide examples of successful BCAs for different project types
- Allow proposal design and engineering requirements to be preliminary in the application
- Change the discount rate for the current BCA model
- Develop a database in which Applicants/subapplicants can track/update damage costs for ease of reference in completing the BCA
- Increase the number of pre-calculated benefits
- Encourage greater consideration of environmental benefits
- Address issues related to availability or accessibility of data (e.g., risk data, historical damages)
- Fund long-term monitoring so benefit data can be captured and in turn used to inform baseline data for future BCAs (particularly for more innovative/less common project types like nature-based infrastructure)
- Develop more comprehensive and up-to-date FEMA data sources (e.g., risk models that incorporate a wider range of hazards, risk models that reflect scientific and technological advances)
- Increase flexibility in the data sources that are allowed as credible documentation

### 3.2.2 Eligible Project Types

A significant number of comments related to project types, ranging from “intangible” activities to traditional hard infrastructure projects. For example, stakeholders expressed that they want FEMA to fund education and outreach activities as part of a mitigation strategy, highlighting that outreach and education is critical for resilience and for a whole community approach to mitigation. Comments suggest that stakeholders believe that education and outreach activities can improve individual actions toward mitigation and promote buy-in for collective community actions.

*“FEMA should use Community Outreach and Education (COE) teams through BRIC to engage the whole community as a part of mitigation, not just post-disaster. An educated public is not limited by tax dollars. The educated public can also make plans and preparations on their own, even if they aren’t awarded money for projects. The long-standing problem has been that the public simply isn’t aware of basic mitigation measures that can and should be taken.”*

Many comments were stakeholders asking whether specific projects would be eligible under BRIC (e.g., installing solar panels, burying power lines, upgrading/hardening older

infrastructure). In particular, four project types were frequently discussed: *Advance Assistance*, *Phased Projects*, *Nature-Based Infrastructure*, and *Hazard Mitigation Planning*.

### **3.2.2.1 Advance Assistance and Phased Projects**

In general, there was support for both Advance Assistance and phased projects. In some instances, stakeholders expressed a need for funding activities that are already covered by Advance Assistance, which indicates that they did not know about past availability of Advance Assistance. This suggests that if FEMA chooses to allocate funding for Advance Assistance, it may be important to invest in promotion and advertising to its stakeholders.

Support for Advance Assistance or phased projects tended to relate to addressing barriers communities face (i.e., lacking engineering capabilities, experiencing difficulties with BCA, and needing an extended timeline for large projects).

*“An issue is the time cap of 36 or even 54 months. Large projects take a decade sometimes. There can be years of permits and environmental assessments... Large projects are often done in phases; this makes sense from so many perspectives but if not allowed under the program, you are locking out major capital programs.”*

In some of the comments, stakeholders made comparisons between funding for Advance Assistance and phased projects. Specifically, there was frustration at the potential of initial funding for Advance Assistance but no promise of additional funding for project implementation. Multiple stakeholders highlighted that there was “no point” in doing Advance Assistance if projects were not going to be funded. This highlights that if Advance Assistance is something included in BRIC, communicating the value of Advance Assistance regardless of projects moving forward may be a way to promote buy-in.

Additionally, multiple stakeholders advocated for increased caps under Advance Assistance, noting that the past cap of \$200,000 has not been sufficient:

*“FEMA has done a great job with Advance Assistance, but capping it at \$200k per state means we’re creating a tiny cap on the ability for low-capacity entities to get funded for localized, traditional [Hazard Mitigation] projects.”*

*“Instead of Advance Assistance with paltry caps, we need to allow set-asides for phasing of complex projects... Providing front-end capacity will show results on the back end and encourage participation. Either this or significant increases in the state cap for Advance Assistance. \$200K is not enough to make a dent.”*

Stakeholders did not give any indication as to how much would be sufficient for Advance Assistance.

**Stakeholder recommendations for enhancing Advance Assistance and enabling phased projects include:**

- Provide funding for Advance Assistance and phased projects
- Increase the amount of Advance Assistance funding
- Invest in the promotion of Advance Assistance and its benefits (e.g., provide widely publicized trainings and resources)

### 3.2.2.2 Nature-Based Infrastructure

Another common theme among stakeholders was the request that FEMA allow and encourage nature-based infrastructure projects as part of the BRIC program. Of comments relating to project types, 12 percent explicitly discussed nature-based solutions and nature-based/gray infrastructure. The comments indicated that there is support for the inclusion of nature-based infrastructure projects and for FEMA to encourage and incentivize these project types. Some of the comments revealed that stakeholders may lack experience, guidelines, and knowledge for implementing these types of projects. Further, some stakeholders highlighted that there is a limited understanding and divergence of views related to the costs and benefits associated with many nature-based infrastructure projects, limiting the ability for those project types to meet the BCA requirement.

Separately, one stakeholder comment indicated that there needs to be better coordination between the FEMA headquarters and Regions about nature-based infrastructure:

*“The disconnect in messaging and eligibility between FEMA HQ and the Regions has to be addressed for BRIC to be successful. HQ continuously pushes environmental projects and co-benefits, but getting these projects approved by the Region is almost impossible.”*

Stakeholder feedback suggests that FEMA could address some of the barriers currently preventing stakeholders from implementing nature-based infrastructure projects.

#### Stakeholder recommendations for supporting nature-based infrastructure projects include:

- Provide funding for nature-based infrastructure projects
- Encourage nature-based infrastructure by providing pre-calculated benefits for those projects
- Incentivize nature-based infrastructure by giving those projects a higher ranking in the evaluation process or prioritizing them in funding decisions
- Provide project examples (large and small) of successful nature-based infrastructure projects
- Explore options for allowing innovative nature-based infrastructure projects that may not meet existing cost-effectiveness criteria

### 3.2.2.3 Hazard Mitigation Planning

Most stakeholders who provided feedback related to planning and project type eligibility were supportive of continued funding for hazard mitigation planning. Further, many stakeholders expressed concern that planning activities might no longer be funded:

*“FEMA should ensure the BRIC program (if replacing PDM) allows for an annual state set aside of enough funding to assist communities with the update of their local mitigation plans, as these documents are required to be eligible for any/all HMA programs.”*

*“Communities are likely to not continue updating/developing local HMPs without federal funding assistance. It is of utmost importance that the BRIC program keep funding planning activities.”*

However, not all stakeholders shared this view. A small minority of stakeholders advocated against funding hazard mitigation planning, and they shared the following insights:

*“Require local governments to have a vested interest in the plan. Grant funds just allow them to develop a plan that is ultimately put on the shelf to collect dust.”*

*“I would suggest not allowing grants for local mitigation plans, when at all possible. The plans that come out of those are really terrible.”*

Overall, the comments suggest that there may be a reliance on federal funding for hazard mitigation planning activities, and there is some uncertainty as to whether this funding is benefiting mitigation initiatives or simply helping Applicants and subapplicants meet eligibility requirements. The stakeholder comments suggest that if FEMA chooses not to fund planning activities, it may dissuade potential Applicants from pursuing BRIC funds because they will have abandoned the planning requirement, and that if FEMA does choose to allow funding for planning activities, there needs to be better accountability to ensure plans are serving their intended purpose.

**Stakeholder recommendations for improving hazard mitigation planning practices include:**

- Provide funding specifically for incorporating BRIC initiatives into HMPs
- Incentivize or require better planning practices if planning activities are funded through BRIC

### **3.2.3 Definitions**

Lastly, and separate from specific project types that were discussed, stakeholders were unsure of the definition of the terms “infrastructure” and “large infrastructure projects.” Aside from a lack of clarity, there was some concern among stakeholders about the use and definition of “large infrastructure projects.” Further, they expressed concern about the potential exclusion or lack of support for smaller or more traditional infrastructure projects.

*“What’s the definition of a large project? Concern that “large” means something different for smaller communities vs. huge metro areas. Also, concerned that small communities will think they can take on bigger projects than they really can.”*

As the comment above illustrates, some stakeholders were also concerned that the emphasis on “large” projects would systematically exclude small and rural communities, which have fewer resources to implement large projects or may not need large projects to reduce risks to natural hazards. Stakeholder comments revealed a desire for both small and large infrastructure projects.

*“Define a portfolio of projects based on states, populations, and disaster profiles, or ‘the big one’ in major metro areas will always win funding.”*

**Stakeholder recommendations in relation to definitions include:**

- Define “infrastructure” and “large infrastructure projects”
- Support a portfolio approach for selecting projects so that different capabilities and risk profiles are considered

## 4. Risk-Informed Decision-Making

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Throughout stakeholder outreach, stakeholders were prompted to consider how risk could be incorporated into the decision-making process for grant funding decisions at the national and project levels; in this chapter, their feedback has been categorized into three sections.

- (1) Support and concern for risk-informed decision-making,
- (2) Perceived limitations to making risk-informed decisions, and
- (3) Risk-informed funding incentivizing poor behavior.

Across engagement platforms stakeholder responses provided general insight about opinions on this type of funding model, which are presented in the first section. Responses also yielded insight about potential barriers to effectively implementing this funding model, which are highlighted in the second section. Beyond barriers to implementation, stakeholders also raised important concerns associated with risk-based funding decisions, discussed in the final section of this chapter.

### 4.1 Support and Concern for Risk-Informed Decision-Making

Across stakeholder engagement efforts, feedback detailed a range of stakeholder sentiment from support to concern about risk-informed funding decisions. Overwhelmingly, most comments centered on a variety of concerns stakeholders had about this type of funding model, with some comments indicating explicit support. Although most comments were centered on concerns, this does not necessarily imply that stakeholders are against risk-informed funding; rather, that they recognized the many barriers to effectively implementing risk-informed funding within the BRIC program. Below are two examples of stakeholder concerns regarding funding.

*“Decisions are only as good as the data and models used to guide them. Need a solid risk profile of the nation before implementing this funding model.”*

*“How often will the ‘risk data’ be updated or confirmed? If it is going to be like using the NFIP [National Flood Insurance Program] flood maps, you’ll be years to decades out of date!”*

Below is a contrasting comment of support.

*“All mitigation projects should be based on a risk assessment, with hazard mitigation efforts used to mitigate risk. The type of risk will vary across the country, but hazard mitigation is always risk based.”*

Among the comments that highlighted support for risk-informed decision-making, most stakeholders simultaneously recognized potential issues related to that type of funding structure.

*“As a high-risk state, I think it’s great! But I completely understand how that would limit the funding available to lower risk states who still need projects funded. The 7-year rule already ensures risk-based.”*

*“Using risk is a good idea, depending on how you define it. Current awards favor large population areas—make sure risk models do not.”*

Overall, even among the stakeholders who strongly supported risk-informed funding models, comments suggest a general acknowledgement that current strategies lead to biases in decision-making.

## **4.2 Perceived Limitations to Making Risk-Informed Decisions**

As discussed above, many stakeholders perceived limitations to making fair and effective risk-based decisions for hazard mitigation funding decisions. Overall, three main themes emerged as barriers to this type of decision-making: defining risk, incomplete and outdated risk information, and data accessibility. These main themes are discussed in the following sections.

### **4.2.1 Defining Risk**

An unclear definition of risk was a frequent theme within the stakeholder comments in relation to risk-based funding decisions. Overall, there was a lot of uncertainty with respect to how FEMA defines risk. Some stakeholders explicitly commented that there needed to be a standardized definition of risk to serve as the basis for models and data. On the other hand, some comments expressed concern about the incompatibility of a standardized definition of risk with local-level definitions of risk. These comments highlight contrasting perspectives (standardized vs. flexible definitions of risk) on the issue of deficiencies in defining and measuring risk.

*“It depends on the risk methodology used. Will it be determined nationally and required to be used among states? Currently, there is no dictated model for risk prioritization and each state does it differently—this does not lend to comparing risk fairly.”*

*“All risks are relative. For a small community or low-density county, what constitutes as risk and major problems for them will be very different from more dense communities.”*

Regardless of how risk is defined for the purposes of funding decisions, stakeholder comments suggest that FEMA should be transparent on how it is defining, interpreting, and using the concept of risk for funding decisions. This transparency can help provide a baseline understanding among stakeholders, getting everyone “on the same page,” and thus reducing the likelihood of frustrations that may emerge because of inconsistent risk definitions.

### **4.2.2 Incomplete and Outdated Risk Data**

Many stakeholder comments pointed out that risk data are either unavailable for their community or are outdated. Some stakeholders provided more specific details, highlighting that risk data are limited for measures of social vulnerability, economic impacts, integration of future projections (i.e., those that show potential climate change impacts, such as sea level rise projections), indirect impacts, wildfire, wind, shoreline erosion, permafrost degradation, hazards new to an area, and spatial data for certain hazards. A handful of participants also mentioned that flood risk data may be overrepresented, which could ultimately bias funding decisions. Lastly, many participants indicated that their flood maps in specific areas were out of date.

*“Some hazards have significantly better, more refined data than other hazards. For example, traditional fluvial flood risk—but what about pluvial risk? Or lightning strikes?”*

*“We face a variety of data gaps in our communities, particularly for some of the hazards that haven’t historically been present—for example, wildfire risk in Western Washington.”*

*“We need social vulnerability data and funding to produce risk assessments that can accurately model and compare relative risk to people, property, and the environment across the state and at the local level.”*

*“Make pertinent data available. I have not seen any FEMA wildfire data, only State. Multiple source of data and invest in technology that will provide better data.”*

Moreover, the availability and/or quality of risk data has implications for precisely what factors could or should be considered in FEMA’s calculation of risk. For example, as evidenced above, some stakeholders felt that social vulnerability is an important aspect of risk. However, concerns were raised about both the general utility of social vulnerability indicators in determining risk (particularly when applied to funding decisions) and the efficacy of tools currently available that measure social vulnerability.

The comments suggest that stakeholders perceive a significant amount of missing risk data across the country, which would be necessary to make risk-based decisions fairly. If FEMA uses risk-based models for funding or project prioritization decisions, feedback suggests that stakeholders would value consideration of risk model limitations in the decision-making process.

#### **4.2.3 Data Accessibility**

Among stakeholders, there was a general sentiment that small, impoverished, rural, and tribal communities will be at a disadvantage with risk-informed funding models. The stakeholders mentioned two primary reasons this would be the case: 1) there is limited risk data in these communities, and 2) low-density areas will inherently have a lower risk ranking.

*“It assumes that slightly minimizing a large risk for a large community is more valuable than completely eliminating a moderate risk for a small community.”*

*“You will need to define a portfolio approach for all selected projects, otherwise ‘the big one’ disaster in major cities like LA, San Francisco, NYC or DC will always win the decisions.”*

*“Higher population and infrastructure could skew funding to more populous applicants. Coastal regions have more risk of large disasters—hurricanes, earthquakes—and Midwest States may have more risks to less populated areas.”*

*“We still have areas that don’t have much for risk data that can be used. The areas that are prioritized will always be the metro areas, leaving much of our state out of luck. So, an improvement would be having risk data.”*

Stakeholder comments indicate that updates and improvements to risk-based models should address existing biases against small, impoverished, rural, and tribal communities. Separately, stakeholder comments suggest that FEMA should find alternative solutions to make equitable funding decisions if updates to the models are not feasible.

### 4.3 Risk-Informed Funding Incentivizes Poor Behavior

Throughout the engagement efforts, some stakeholders expressed concern about potential repercussions of risk-informed funding decisions. To illustrate how this would unfold, stakeholders highlighted how states and communities that are proactive in investing their own money in risk reduction (and therefore have lower risk) may perceive that they are being penalized by not getting as much funding. This is likely to in turn disincentivize community- or state-driven mitigation actions because they may not want to jeopardize their chances of being funded by BRIC, creating a vicious cycle in which states and communities become dependent on BRIC for funding mitigation projects.

*“Some states have been successful in reducing their risk. This concept hurts the states that have been doing the right thing. We still have areas of significant risk.”*

*“Coastal areas and overdeveloped floodplains will likely do well. You run the risk of rewarding and perpetuating poor planning and development choices.”*

These comments suggest that stakeholders are interested in incentivizing risk reduction measures (i.e., investments in mitigation and completing successful mitigation projects) as opposed to disincentivizing them through a reliance on risk-based funding models.

#### Stakeholder recommendations regarding risk-informed decision-making:

- Maintain national risk profiles, ensuring representation of all natural hazards
- Provide a clear definition of risk to guide stakeholders
- Update risk models to reduce biases against small and under-resourced populations
- Create funding incentives that encourage lowering hazard risk beyond FEMA-funded projects

## 5. Hazard Mitigation Planning and Plan and Project Implementation

Stakeholders provided significant feedback related to HMPs, the planning process, and plan and project implementation. Given the relationship between the planning process and plan and project implementation, comments related to these topics often echoed or complemented one another. (For example, buy-in from public officials, the private-sector, and the public was expressed as something that influences plan and project implementation but is also mediated by engagement in the planning process.) This chapter acknowledges the interconnectedness of these topics. Where possible and useful to do so, it attempts to isolate key themes. However, since distinctions between comments were sometimes unclear or “root causes” of particular challenges difficult to ascertain, there may be some thematic intersection throughout the chapter.

To the extent possible, this chapter expands on many themes brought up by stakeholders around the hazard mitigation planning process and plan and project implementation, although they may not always represent the most frequently discussed themes related to planning. Further, some key themes around necessary capacities and capabilities for planning and plan and project implementation are not included in this chapter because they are represented in detail in Chapter 2. Section 5.1 of this chapter focuses on the hazard mitigation planning process and Section 5.2 centers on plan and project implementation.

### 5.1 Hazard Mitigation Plans and the Planning Process

Hazard mitigation planning is an important process at all levels of government. It can help direct future development away from harm’s way and formal adoption of the mitigation plan creates legal support for mitigation actions and projects, avoiding lawsuits and public concern about property rights. Updating plans assists states and communities as changes in risk, information about risk and vulnerability, population demographics, land use, development patterns, and priorities occur.

#### 5.1.1 Hazard Mitigation Plan Funding and Quality

##### 5.1.1.1 Plan Funding

Broadly speaking, most stakeholders were supportive of continued funding for hazard mitigation planning. Further, many stakeholders expressed concern that planning activities (plan development and updates) might no longer be funded:

*“FEMA should ensure the BRIC program (if replacing PDM) allows for an annual state set aside of enough funding to assist communities with the update of their local mitigation plans, as these documents are required to be eligible for any/all HMA programs.”*

*“Communities are likely to not continue updating/developing [local HMPs] without federal funding assistance. It is of utmost importance that the BRIC program keep funding planning activities.”*

Several comments that shared this sentiment highlighted the importance of making hazard mitigation planning funds available through BRIC particularly for rural, tribal, small

impoverished, and other low-capacity communities. (For tribal-specific hazard mitigation planning comments, refer to Chapter 6.) This could also suggest that eliminating planning funds in BRIC may have wider impacts on the eligibility and participation of low-capacity communities in FEMA HMA grants at large, as PDM has traditionally been a primary avenue for planning funds.

*“I don’t see anywhere in DRRA [the Disaster Recovery Reform Act of 2018] with PDM being phased out where local or tribal mitigation planning will still be able to be done in anything other than HMGP. The long timelines from submission to award on HMGP isn’t the best vehicle for mitigation plans at all. Where in the DRRA is access to planning grant funds? We need to keep that in the program somewhere otherwise small rural or native population centers won’t be able to afford to update plans.”*

However, not all stakeholders shared this view. In the few occasions where stakeholders did not want BRIC funding to be directed to mitigation planning, it was not due to a fundamental opposition to planning, but rather a recognition that the plans produced following the existing process are not useful or effective.

*“Require local governments to have a vested interest in the plan. Grant funds just allow them to develop a plan that is ultimately put on the shelf to collect dust.”*

*“I would suggest not allowing grants for local mitigation plans, when at all possible. The plans that come out of those are really terrible.”*

Overall, the comments suggest that there may be a reliance on federal funding for hazard mitigation planning activities, and there is some uncertainty as to whether this funding is benefiting mitigation initiatives or simply helping Applicants and subapplicants meet eligibility requirements. The stakeholder comments suggest that if FEMA chooses not to fund planning activities, it may dissuade potential subapplicants from pursuing BRIC funds because they will have abandoned the planning requirement, and that if FEMA does choose to allow funding for planning activities, there needs to be better accountability to ensure plans are serving their intended purpose.

#### **5.1.1.2 Plan Quality**

As alluded to earlier, stakeholder feedback related to hazard mitigation planning revealed the sentiment that oftentimes HMPs are not meeting their full potential to influence meaningful mitigation actions. Stakeholders mentioned that plans are often completed with a “check-the-box” approach and that they “sit on the shelf,” suggesting HMPs are often produced primarily to meet grant eligibility requirements. According to stakeholders, there are currently limited incentives for going above and beyond baseline requirements for HMPs, for including detailed and actionable strategies in HMPs, and for implementing actions or projects outlined in the plan. Some stakeholders emphasized the need to integrate a mechanism for maintaining accountability of proposed actions and projects outlined in the HMP.

*“If a community gets a plan and fails to act on a single thing in it, there should be some sort of check and balance. Otherwise mitigation plans are just paper that a community does with FEMA or State funds and it sits on a shelf so they can be eligible for a project ‘maybe’.”*

*“The allocation of funding based on PLAN QUALITY would serve as the base of funding of additional projects in the plan by providing them with extra points for being part of this quality plan. No more consultant prepared pro-forma plans which sit on the shelf!”*

Stakeholders felt this issue was further exacerbated by their experience that many communities, particularly small impoverished communities, lack the staff and funding to complete and maintain HMPs in the first place, much less go beyond minimum requirements. This has implications for their ability to identify and implement projects (discussed further in Section 5.2), although opportunities exist for FEMA to provide support to these communities.

*“Many of our counties have very small populations densities.... They don't have the time or resources to be involved in the planning or implementation of plans or projects.”*

*“In small rural areas like we have in Alaska [mitigation] plans are key to identifying projects, but they lack any resources to develop them.”*

*“Many smaller or lower-resource communities have a planning deficit and aren't prepared to propose large or comprehensive mitigation projects. Interagency and interjurisdiction coordination can help bridge this gap [...] FEMA regions can help facilitate that coordination, through the [hazard mitigation] planning process.”*

Moreover, one concern raised by several stakeholders is the involvement of contractors in the planning process, especially given the resource constraints of low-capacity communities.

*“It is hard for small jurisdictions to completely participate in the HMP process. Often their input is written by the plan consultant without local input. Not that they've not been given opportunity, but because of limited time and staff.”*

*“It's great in theory. However small communities are not writing their plans, contractors are. The contractors are working to satisfy FEMA requirements rather than truly working with their communities.”*

At the same time, stakeholders recognized the importance of having a high-quality hazard mitigation plan. Some even provided anecdotes of successful plans and their role in facilitating strong project applications.

*“Mitigation planning is vital to finding and funding the right mitigation projects. In Utah, we have used small mitigation plans to drill down to very specific projects which in turn has led to successful mitigation grants.”*

*“Communities that invest the effort to produce quality mitigation plans general develop better projects.”*

#### **Stakeholder recommendations regarding actionable and quality plans:**

- Ensure plans focus on the identification of precise vulnerabilities and the development of action plans to address those vulnerabilities
- Allocate funding based on plan quality

- Develop hazard mitigation planning standards and require them as eligibility criteria for award
- Require or incentivize BCA for projects to be completed as part of the HMP process
- Introduce a requirement or checklist for actionable items and plan maintenance

## 5.1.2 Hazard Mitigation Planning: Plan Contents

### 5.1.2.1 Community Lifelines

Through stakeholder engagement, FEMA asked stakeholders to provide feedback about the Community Lifelines (lifelines) framework, and more specifically, how it could be applied to planning. Feedback highlighted that not all stakeholders were familiar with the lifelines framework or felt like they knew enough about lifelines to provide detailed feedback. Some stakeholders also indicated that they did not believe that local communities were sufficiently informed about lifelines or how to integrate them into planning.

*“I don’t think local communities have been adequately informed about planning projects with a focus on lifelines at this time.”*

There were, however, some stakeholders who did comment more specifically about lifelines. From those stakeholders, the general sentiment appears to be that the lifelines framework can be useful for the hazard mitigation planning process. Specifically, stakeholders saw it as an effective way to link response and mitigation and as an opportunity to collaborate with the private sector.

*“[We need] funding for integrated planning that brings private infrastructure owners into the process.”*

*“Lifelines will probably mean that we need to work closely with private sector. Many of the authorities for the infrastructure are not under control of the jurisdiction and are outside what a community can do. We need guidance on how to work with private ownership/companies.”*

Some stakeholders explicitly suggested formally integrating the lifeline framework into the planning process or highlighted that they already considered lifelines during the hazard mitigation planning process in some way, although perhaps not formally or using any consistent framework or methodology.

*“One item FEMA should consider is requiring Lifeline/BRIC consideration in local and state Hazard Mitigation Plans.”*

*“We consider all of the [lifelines] during our mitigation planning.... I wish the HMP was more based around the setup of these lifelines instead of the current format.”*

*“I think every community considers lifelines in mitigation planning, it just isn’t called lifelines.”*

Overall, comments indicate that integrating a lifelines framework in the hazard mitigation planning process may not be an unreasonable stretch for communities, if this is an approach FEMA decides to take. However, *if* there are requirements or incentives for integrating lifelines into HMPs, stakeholders expressed that they want guidance for integrating lifelines into the

planning process. Stakeholders also suggested that any guidance should contain descriptions and examples that are relevant to various types of communities (e.g., small communities, rural communities).

*“I would like to see [FEMA’s] thoughts on how to integrate [lifelines] into mitigation plans for small rural areas. It sounds like a great idea as long as it is clearly spelled out how to use and make it easy to use for the end user.”*

*“To incorporate lifelines into BRIC, you need to issue guidance of how to incorporate them into mitigation plans. If this is the way FEMA is going, Lifelines for every phase, then eventually it would be a good idea to put that into the FEMA mitigation plan guidance documents.”*

#### **Stakeholder recommendations regarding lifelines and the planning process:**

- Provide guidance on how to incorporate lifelines into the hazard mitigation planning process
- Encourage HMPs to consider lifeline impacts within each hazard profile
- Consider cross-lifeline dependencies and projects that maximize community benefit rather than mitigating individual lifelines
- Offer guidance on how to work with the private sector in the planning process
- Encourage states to identify lifeline projects in their plans, particularly large projects

#### **5.1.2.2 Building Codes and Standards and Local Ordinances**

Some stakeholders implicitly made the connection between planning and building codes and standards by discussing the importance of *where* structures are built in addition to *how* they are built, with an emphasis on limiting development in the floodplain and reflecting the impacts of climate change.

*“So long as communities develop in the floodplain, we’ll continue to have risk.”*

*“Encourage and promote planning to the 500 year or more flood level standards, and include future flooding scenarios (precipitation, sea level rise, etc.).”*

Issues associated with building codes and standards and local ordinances that are relevant to the planning process came up in a few different contexts. On the one hand, some stakeholders advocated for the adoption of higher standards and stronger ordinances, and said that this should be reflected in HMPs. However, this can be particularly challenging when those writing HMPs (often contractors) are not the ones writing local land use plans, and/or are not intentionally integrating existing ordinances and building codes into the plan (see also Section 5.1.3.3). Further, they suggested that HMPs should be utilized to identify policy windows for reforms to zoning and regulations, or that there should be strong incentives for using planning to support building code efforts.

*“[Incorporate] the implementation of adopting and properly enforcing the latest building codes in the community plans to create resilient communities for multiple hazards.”*

*“Stronger ordinances and stronger building codes would be most useful, but just putting in a plan, even a hazard mitigation plan, isn’t going to make it happen. Needs some more carrots and a little bit of stick to bring everyone along.”*

*“[BRIC should have] additional funding awarded to entities that are pursuing enhanced building codes and enforcement and resilient infrastructure features. Or [give] higher priority to receive funding.”*

On the other hand, there were stakeholders who were either against or skeptical of mandating or incentivizing stricter codes, standards, and ordinances. Specifically, these stakeholders believed that it would put small, rural, and impoverished communities at a disadvantage or that it would require too much political capital to implement, diverting energy and resources away from more immediately achievable objectives.

*“Adopting ordinances takes too much political capital that is usually only available after a disaster.”*

A second issue highlighted by stakeholders involves a disconnect between hazard mitigation planners and those individuals responsible for implementing and enforcing stricter building codes and standards and local ordinances. Stakeholders highlighted that although planners were aware of the benefits associated with these changes, there were various actors involved in the implementation and enforcement process that advocated against stricter codes, standards, and ordinances. Stakeholders also emphasized the constraints certain communities faced when they attempted to adopt stronger building codes or encourage design to higher standards than are enacted at the state level.

*“There is a disconnect between who develops the plans and who enables adoption of the regulations. Often planners know the benefits but find it impossible to debunk the accusations against stronger regulations.”*

*“According to National Association of County’s 2018 Emergency Management Survey of Counties: 22 percent of county respondents indicate that they do not regulate land use and 24 percent indicate that they do not regulate buildings codes. Correspondingly, 6 percent of counties report that they are not legally allowed to regulate local land use per state law and 8 percent report that they are not legally allowed to regulate local building codes per state law.”*

*“Not all counties have the authority to adopt new building codes and standards. For counties that lack this authority, will that impact their competitiveness for BRIC awards?”*

#### **Stakeholder recommendations regarding building codes and standards and local ordinances in the context of mitigation planning:**

- Incorporate building codes into HMPs and ensure plans at the local level are developed properly to meet more than minimum standards
- Reinforce plans that tie in building codes with incentives (or disincentives) to ensure that building codes are adopted and enforced
- Integrate mitigation planning with the zoning process at local level early and often

- Broaden eligible activities under planning to include code audits for strengthened floodplain management ordinances
- Encourage communities to tighten regulations on building in the floodplain through zoning and land use planning
- Tie risk data to zoning and building codes

### **5.1.3 Identified Barriers to Effective Hazard Mitigation Planning Process**

#### **5.1.3.1 Stakeholder Engagement**

Feedback suggests that stakeholder engagement associated with the planning process is currently falling short in many communities. In comments, the term “stakeholders” was used broadly in reference to the general public, private sector (as discussed in Section 5.1.2), elected officials, potential cross-jurisdictional partners, and other related entities.

Comments highlighted that many members of the public do not understand the need for mitigation or are simply not interested in being involved.

*“The general public and political leaders are often reluctant to recognize the necessity and/or effectiveness of mitigation activities and planning.”*

*“[The biggest challenges are] funding, staff time, community acceptance, and awareness on the part of elected officials of the need for mitigation.”*

This then impedes public buy-in, which can in turn directly influence political support and reduce the likelihood for project implementation. Comments suggested that through better engagement of the public and political officials throughout the planning process, some of these issues may be lessened. Moreover, stakeholders strongly advocated for not only engagement of the public and local officials but also raising awareness through education and outreach.

*“This process is a community vetting process to identify the most critical needs and creating a path to action. To make this successful, a range of key community officials need to be involved.”*

*“Stakeholder/public awareness programs and educating policy makers at the local level [are needed.]”*

#### **Stakeholder recommendations regarding stakeholder engagement:**

- Involve as many stakeholders in the process as possible to get broader ideas for mitigation activities and buy-in, particularly at the local level
- Use the planning process to educate local leaders and the public, in addition to gathering their feedback on plans
- Ensure transparency through the planning process
- Leverage the planning process as a way to work with the private sector and lifeline operators
- Conduct stakeholder engagement efforts before, during, and after the planning process
- Provide more resources for meaningful community outreach and engagement

- Make the quality of stakeholder engagement used in the planning process a criterion for grant application evaluation

### 5.1.3.2 Coordination

Beyond general engagement, stakeholders perceived that the planning process often lacks coordination with various levels of government and interagency partners. As stakeholders discussed coordination issues, they often illuminated the critical role effective coordination could play in the improvement of the planning process:

*“Interdepartmental planning is very helpful. Teaming up the state officials (especially the Department of Transportation and Emergency Management) with local municipalities during planning is extremely helpful for prioritization, funding, and implementation.”*

*“We must communicate better as a community. We have several parties involved from all areas on our HMP Council, but certain entities refuse to employ their services to our board. Namely, the local hospital. They are vital for these lifelines, yet, they refuse to be a part of our plan.”*

In addition, coordination during the planning process provides informal opportunities to build critical relationships among key stakeholders. These interpersonal connections can facilitate building and sustaining partnerships and identifying common cross-sector goals, solutions, and projects, all of which can encourage project buy-in and development.

*“Mitigation planning can bring together diverse partners.... This increased participation will help increase participation by all available stakeholders to increase the chance they will implement planned activities.”*

Two of these elements, building partnerships and identifying solutions, were identified as capacity needs in Chapter 2. This suggests that the hazard mitigation planning process may be an avenue through which FEMA can address some of the needs stakeholders have in building their capability and capacity.

#### Stakeholder recommendations regarding coordination:

- Have HMPs be reviewed locally by administrators, financial officers, council chairs, and directors of plans and department heads who are responsible for responding to the hazard events
- Explore opportunities for FEMA Regions to facilitate coordination through the hazard mitigation planning process
- Create an incentive for HMPs to include priority actions that have been identified by other agencies
- Host in-person workshops at the sub-state level (e.g., regional councils of government, planning organizations) that may or may not line up with multi-jurisdictional HMPs and include training on application dos and don'ts
- Incentivize mitigation plans to include regional approaches/solutions instead of every agency proposing its own mitigation projects in isolation

### 5.1.3.3 Plan Integration

As evidenced in the previous section, general coordination with multiple levels of government is needed throughout the hazard mitigation planning process. Going a step further, it is important for communities to integrate mitigation planning with other types of plans. This not only is helpful for increasing buy-in and the ability to implement plans, but also recognizes the inherent need to think about long-term needs and opportunities.

*“[When you] coordinate with multiple sectors and other local plans, [it can] increase buy-in, visibility, and leverage funding sources.”*

*“Integrate planning into specific regional and local comprehensive planning processes for inclusion of mitigation as part of five-year planning and implementation process in determining priority projects and funding for needed.”*

However, stakeholders perceived that HMPs often fail to properly and meaningfully integrate with non-hazard focused plans (e.g., land use plans, comprehensive plans, capital improvement plans) and other resilience plans alike.

*“Often they [HMPs and other plans] are unrelated due to who handles mitigation plans and who makes land zone rules. Also, without clear guidance, technical assistance, and quality actions, the two areas don’t intersect.”*

*“Integrate mitigation strategies and actions into more focused recovery plans. Go from a mitigation action ‘wish list’ to a concrete set of plans that direct specific action in the aftermath of a disaster.”*

*“Communities write Mitigation Plans as a requirement to access HMA grants but don’t use those plans for local decision making. Communities do however use Capital Improvement plans to guide investments and major construction. I would highly recommend that the Mitigation Planning Program emphasize to local communities that they can use capital improvement plans to meet the mitigation planning requirement, that way communities are using a more realistic tool for infrastructure decisions.”*

#### Stakeholder recommendations regarding plan integration:

- Institutionalize hazard mitigation planning concepts within all planning processes to ensure opportunities for mitigation are broadly explored and identified
- Encourage interagency coordination to facilitate plans (master plans, economic development plans, rural/agriculture plans, natural resource plans, etc.) that align (rather than contradict)
- Integrate hazard mitigation planning with other types of resilience plans (e.g., emergency operations plans, recovery plans, climate change adaptation plans)
- Allow subapplicants to utilize plans developed for other agencies

## 5.2 Plan and Project Implementation

One critical component of an HMP is the identification of mitigation strategies, actions, and projects that will reduce risk to a community. However, as evidenced in Section 5.1 and the

stakeholder observation below, plans are not seen as effective unless they lead to project implementation.

*“The [identification] and prioritization process are good to focus the program, but don’t do anything in and of themselves to advance implementation. Implementation is done through planning process, public and capital facilities planning and the local budget process.”*

Indeed, implementing projects is one of the ways that plans themselves can be implemented. To that end, this section reviews stakeholder feedback provided on plan and project implementation and the barriers encountered in realizing mitigation measures.

## **5.2.1 Barriers to Implementation**

### **5.2.1.1 Limited Buy-In and Competing Priorities**

Limited buy-in was frequently cited as a barrier to implementing projects (or even identifying projects to address hazards) as outlined in the hazard mitigation plan. The term “buy-in” was used in various contexts, and the meaning used by stakeholders was not always clear or consistent; for this chapter, it is used to imply general support for projects. First, stakeholders mentioned that buy-in and implementation go hand-in-hand, and that the planning process presents an opportunity to educate decision-makers on the benefits of action, which could help in getting their buy-in.

*“The more the merrier. The more that the plan is owned by the leadership and community, or tribe, the more implementation will happen.”*

*“This is all local-specific. I don’t know that the [identification] and prioritization process will have an impact. The local elected officials have to understand the benefits of action.”*

*“[Encourage] increased emphasis on demonstrating losses avoided and quantifying return on investment to elected officials.”*

However, stakeholders discussed that there is often limited buy-in from the public, local government, and relevant private entities (e.g., utility companies). This is problematic because as stakeholders pointed out, planning for and implementing large infrastructure projects will require sustained buy-in from multiple parties. This is further emphasized by the fact that some private-sector stakeholders own the utilities and lifelines that are the focus of mitigation efforts.

*“Large-scale projects will require consistent political will in the communities they are being implemented. Support from the public and significant financial input from the communities—taking money from the more immediate and in-your-face priorities, like fixing roads.”*

On many occasions, stakeholder comments attributed the limited buy-in for hazard mitigation projects to competing priorities, particularly more immediate priorities:

*“It’s hard to focus on the potential or ‘maybes’ when there are so many day-to-day demands and limited funds.”*

One stakeholder comment highlighted that despite having someone spearheading mitigation project initiatives, without sufficient buy-in from decision-makers, efforts could be unsuccessful:

*“The biggest challenge is funding. The second challenge is getting community officials to buy-in to mitigation projects. EMA [Emergency Management Agency] Directors work their tails off and then the local officials dismiss their efforts as not important.”*

Unsurprisingly, the previous three stakeholder comments highlight that *limited funding* is an important factor when considering barriers for implementation. This is consistent with two frequently stated perceived barriers to implementing mitigation projects: a lack of funding and difficulty meeting the match requirements. These findings highlight that to encourage more buy-in, it may be helpful to illustrate the economic benefits a community may realize with mitigation projects. Encouraging stakeholders to think about benefits, particularly if a project provides co-benefits, during the planning phase (in a locally relevant and non-prescriptive way; see Chapter 2), may be an effective strategy for improving buy-in from various stakeholders.

Further, one of the most prevalent recommendations stakeholders made with regard to reducing implementation barriers associated with buy-in and competing priorities was better stakeholder engagement during the planning process so as to involve critical stakeholders in project discussions from their inception in the hazard mitigation plan. This suggests that by addressing current shortcomings with engagement during the planning process, stakeholders can improve both planning and implementation outcomes.

*“The only way the mitigation planning process can be used to increase implementation is if you can gather enough participation in the community and get people to understand the process more clearly.”*

*“Mitigation planning can bring together diverse partners from government and NGO agencies. This increased participation will help increase communication by all available stakeholders to increase the chance they will implement the planned activities.”*

*“The planning process is an opportunity to educate the community and leadership and create partnerships to implement mitigation activities in the community.”*

#### **Stakeholder recommendations regarding project buy-in and competing priorities:**

- Engage in broad stakeholder engagement and invite a wide range of partners to the planning process
- Explore opportunities to educate local officials and demonstrate the benefits of both mitigation planning and mitigation activities
- Provide communities with guidance on how to leverage other sources of funding to ensure mitigation activities can be financed, particularly for low-capacity communities

#### **5.2.1.2 Project Identification**

Although it is not a panacea, stakeholders emphasized that project identification is a key part of the planning process that facilitates implementation. Furthermore, stakeholder engagement, as with many other facets of planning, can be an effective way to foster implementation and ensure members of the public have an opportunity to participate in identifying and prioritizing projects.

*“Mitigation plans should clearly identify practical and effective mitigation actions intended to be implemented at the local level. Mitigation plans should not just be broad “strategic” type plans.”*

*“Effective mitigation planning is done by moving the process away from the check-the-box outcome and toward a focus on the identification of precise vulnerabilities and the development of action plans to address those vulnerabilities.”*

*“Stakeholder engagement leads to quality project [identification], matching problem to solution.”*

Specifically, stakeholders commented on the importance of tying projects to identified risks and sources of funding. Moreover, comments suggested that it is helpful to identify responsible agencies who might contribute to implementation.

*“During the planning process, emphasis should be placed on the importance of developing strong actions (potential projects—fundable through HMA or not) reflective of the evaluated/presented risk within the plan. Private funds should be [identified] & solicited.”*

*“The mitigation planning process should be used to perform a risk assessment, identify hazards, and strategically plan how to mitigate those hazards /risk using available funding and implementation mechanisms.”*

*“It helps to hold agencies accountable for following through with identified and credible mitigation activities in their plans.”*

*“Identify sources of funding next to activities in the plans, as well as key stakeholders for successful implementation.”*

As BRIC encourages larger projects and those that mitigate risks to lifelines, an opportunity exists to identify these projects in HMPs and what is needed to act upon them.

*“The policies that have been established in the lifelines should be integrated into hazard mitigation plans (specifically State) for large projects. The number one consideration for projects is that they are referenced as action in plans. Critical facilities are generally the priority facilities or lifelines that are identified in hazard mitigation plans and under FEMA definition critical facilities include police, fire stations, medical facilities and 911/EOC [emergency operations center].”*

*“Steps communities can take to mitigate risks to lifelines—have a mitigation plan that is detailed enough to know what the risks are to the lifelines and identify the solutions. In Utah, we have several local mitigation plans that have done this, not based on lifelines, but have specifically drilled down into what needs to be done, and they applied for project grants and have been completing projects as identified in their plan.”*

#### **Stakeholder recommendations regarding project identification:**

- Provide a specific, tangible, quantifiable bonus / increased ranking to project applications explicitly identified and prioritized in plans

- Explore opportunities in other resilience plans (e.g., recovery plans) to identify both pre- and post-disaster projects
- Host post-plan workshops for communities that have completed mitigation plans in order to bring focus to the implementation of critical strategies
- Leverage the lifelines concept to encourage better project identification and ensure key pieces of information, such as responsible partners and other funding sources, are specified

### **5.2.1.3 Limited Capacity of Small Impoverished Communities**

As indicated in Section 5.1, low-capacity communities face challenges in meeting planning requirements and pursuing planning processes in general. This is especially of concern because BRIC may shift to prioritizing larger infrastructure projects.

*“Many smaller or lower-resource communities have a planning deficit and aren't prepared to propose large or comprehensive mitigation projects.”*

*“Most communities need technical support from multiple partners e.g., the states, FEMA, USACE, EPA to move forward with planning for such [large] projects. Once again accessing multiple funding sources in a timely manner also impacts this planning and project development processes.”*

Although the planning process can be a barrier to some communities, one stakeholder offered that it may also be part of the solution as communities shift from planning to implementation:

*“One of the problems in implementing mitigation projects is the technical expertise required to get to the point of implementation. It is my understanding that FEMA has primarily been interested in funding shovel ready projects. It takes a lot of funding and technical expertise to get a project to that point, and small communities with limited capacity struggle to get to that stage. It is hard to find funding for the studies that come before implementation. The Advance Assistance option and phased projects allowed under HMGP and PDM are helpful for that purpose, but that funding needs to be made available to communities more readily. Perhaps funding for those studies to prep mitigation projects should be made available through the hazard mitigation planning process.”*

One thing that could help small impoverished communities handle larger infrastructure projects is to increase the Periods of Performance. Specifically, stakeholders expressed that a typical three-to-four-year (36- to 48-month) POP is unrealistic, particularly because lengthy FEMA review and EHP processes make projects difficult to complete within the current POP. Moreover, they suggested that the POP should be less uniform and adjust for factors such as capacity, urban/rural status, and total project size. For example, stakeholders discussed the unique challenges faced in rural municipalities that warrant a longer POP, such as a lack of technical capacity, a scarcity of qualified labor, and long permitting processes. Additional recommendations included allowing phased project timelines, especially for large infrastructure projects, and streamlining processes such as internal review processes and the project extension process. Ultimately, stakeholders emphasized that a short POP may discourage Applicants and subapplicants from submitting innovative lifeline resilience projects that provide community-

wide risk reduction benefits and advocated for greater flexibility under BRIC. While standard POPs may disproportionately impact these lower capacity communities, this is an area of concern that was referenced by stakeholders representing communities of all sizes, and should be addressed globally.

**Stakeholder recommendations regarding improving capacity of small impoverished communities:**

- Allow for greater flexibility in the length of project Periods of Performance
- Offer training to communities to improve understanding of the hazard mitigation planning process
- Leverage interagency and interjurisdiction coordination
- Provide technical assistance for future project planning resulting from HMPs (e.g., how to prioritize and perform a BCA for identified projects in the HMP)

## 6. Tribal-Specific Issues

The tribal stakeholder engagement efforts conducted during the summer 2019 highlighted a breadth of tribal-specific needs, concerns, and recommendations for the BRIC program. This chapter covers the following tribal-specific issues:

- (1) Hazard mitigation planning,
- (2) Capability and capacity building,
- (3) Program design, and
- (4) Project development and application.

Given the fewer comments from tribal stakeholders than non-tribal stakeholders (648 and approximately 5,000, respectively) and their application to tribal-specific program elements, the analysis described herein was conducted independently from all other BRIC stakeholder engagement comments.

A baseline understanding of characteristics common to tribes is critical for FEMA’s administration of BRIC. These characteristics inform the way that tribal communities experience hazards and, by extension, provide insights into tribal-specific needs from a BRIC program design and implementation perspective. Table 1 summarizes these characteristics as communicated during engagement efforts and the respective outcomes for tribes, all of which were woven throughout collected stakeholder feedback and subsequent analysis.

**Table 1: Common Issues Expressed during Tribal Engagement**

Characteristic	Outcome
<b>Rural and isolated</b>	With one road in/out: small hazards can have large impact; evacuation route(s) and food access can be cut off; response time is slow.
<b>Low capacity</b>	Not many dedicated positions for hazard mitigation and/or grant management in tribal communities; those who manage grants wear many different hats.
<b>All tribes are unique</b>	Tribes are in different stages of hazard mitigation planning/experience; should not be treated all the same.
<b>Complex land/road ownership</b>	Project eligibility may be limited because there are often state and Bureau of Indian Affairs-owned roads throughout reservation; patchwork tribal land ownership can complicate potential project footprints.
<b>No tax base</b>	Tribes do not have tax bases; without this revenue, meeting even a 10% non-federal match is frequently prohibitive.
<b>Traditional knowledge</b>	Ability to incorporate traditional knowledge into hazard mitigation is important (e.g., cultural resources in hazard mitigation plans [HMPs] and Benefit-Cost Analysis [BCA], consideration of cultural lifelines).
<b>Relationship with state/county</b>	Nature of working relationships with state/county varies among tribes; can have implications for HMPs/planning, application reviews, eligibility, etc.

### 6.1 Hazard Mitigation Planning

Overall, stakeholders expressed support and interest in developing HMPs. A key message from discussions of hazard mitigation planning was that tribal communities are in different stages of

hazard mitigation planning (e.g., some have no HMPs, some are undergoing plan updates, some are participating in a multi-tribal hazard mitigation planning process). This means that the provision of technical assistance needs to be individualized, rather than provided en masse.

Stakeholders also stressed the importance of mitigating hazard impacts to cultural resources. Of 54 comments that mentioned hazard mitigation planning, 16 (29.6 percent) referenced the inclusion of cultural resources and traditional knowledge. Culturally significant areas and resources are tribal-specific; examples stakeholders referred to included sacred sites, burn sites, drawings on rocks, traditional food sources, gravesites, spiritual ground, language, and oral histories, among others.

*“Cultural resiliency—I would like to see this added as a component. We have sacred cultural sites. Protecting our food source is huge.”*

### Stakeholder recommendations related to cultural resources in planning:

- Incorporate (and/or promote) cultural resources as eligible to mitigate in HMPs
- Encourage the inclusion of traditional tribal knowledge into HMPs (e.g., use tribal words for hazards in the headings)
- Understand that future resiliency may look different for tribes compared to states (e.g., cultural awareness)

## 6.2 Capability and Capacity Building

### 6.2.1 Education and Training

Stakeholders identified a wide variety of training topics for capability building. The most frequently articulated training topic needs were grant-related activities (writing and management) and assistance with understanding and applying FEMA regulations (e.g., processes and procedures). Additional suggested training topics included the BCA, the eGrants system, and preparing technical studies. Section 6.4.2 provides more information about challenges with the BCA.

Stakeholders indicated the need for trainings that are accessible to tribes. One dimension of accessibility is training designed specifically for a tribal audience and/or training with other tribal members. One stakeholder noted that tribal members seemed more interested in traveling far distances for a tribal-focused training, rather than attending Emergency Management Institute (EMI) trainings. Summed up by another stakeholder:

*“I think you need (1) training that people can actually access. This grant [PDM] scares off so many tribal people because there’s so much and it’s so difficult to get hands around it... (2) Regional Tribal Liaisons.”*

Another key element of training accessibility articulated by stakeholders is the delivery of the training. Comments suggested the desire for direct, hands-on delivery styles, such as one-on-one, in-person, small group, or structured workshops. Stakeholders encouraged the provision of a virtual/remote component (e.g., webcast) for trainings because many tribes are remotely located and do not have the resources to travel to regionally located meetings or training sessions. Webinars and YouTube videos can also be helpful to reiterate information.

*“For some tribes that [one-on-one training] is what is needed. For other tribes with more advanced programs, we can more feel our way through it. If that [one-on-one training] were offered to other tribes and they were to take you up on it, then their lives would change.”*

*“A lot of tribes and small communities in Alaska lack the staff and training to meet management requirements. General training doesn’t solve that problem—people need mentors and one-on-one help to learn the process and skills and need more staff.”*

#### **Stakeholder recommendations related to education and training:**

- Create a “dummy” eGrants page in which Applicants and subapplicants can practice preparing and submitting applications
- Increase and enhance training offered by Regional Tribal Liaisons (RTLs)
- Offer trainings and workshops designed for a tribal audience
- Fund tribal coalition-building activities among tribes to facilitate tribe-to-tribe knowledge sharing (i.e., tribally driven partnerships)
- Create more regional training and innovation centers to host trainings

#### **6.2.2 Staffing and Full-Time Employment**

Many tribal communities have a distinct need for a baseline level of dedicated capacity (funding) to effectively participate in hazard mitigation activities. Stakeholders expressed interest in securing funding for full-time employment positions within tribes (e.g., grant writer, emergency manager), as mitigation activities are currently additional responsibilities given to already over-tasked staff. Technical assistance from FEMA in itself is not sufficient.

*“In order to build capacity/capability, we badly need a permanent full-time position to develop and manage mitigation projects. Right now, we just don’t have the staff to complete mitigation actions effectively.”*

*“My wish is to have a baseline minimum funding amount. To have an [emergency management] EM staff member, training, travel. Just having that person—that person can seek other funding sources. We don’t have that baseline. We have people trying to fill in to do parts.”*

There was a preference to sustain a full-time position for these activities within the tribe to keep investment within Indian Country, rather than bringing in external contractors or relying solely on technical assistance. Although this may not be possible under the current BRIC policy, tribes would like it discussed as a waiver or variance that could apply to them in the future.

*“We don’t want to hire [externally]; we need to learn. The last thing we want to do is to bring contractors in to write stuff. This would also keep the money in Indian Country.”*

*“The problem is that if you hire an outside vendor, there is so much copy/paste. To hire a person for a number of years would probably be better, for example, an emergency operations coordinator, grant writer, etc. People have too many hats.”*

*People are taking the technical assistance now, because the fire drill is on and someone has to do it.”*

#### Stakeholder recommendations related to staffing:

- Direct annual funding to hire a full-time Hazard Mitigation Specialist

### 6.2.3 Technical Assistance

While stakeholders emphasized building capability and capacity within tribes for self-sufficiency and long-term sustainability, comments also indicated recognition that technical assistance from FEMA (and RTLs especially) in application support is valuable and should be enhanced. Stakeholders articulated a desire for application support both before submission (i.e., application/project development) and after submission/during review (i.e., application correction period).

*“It would be helpful to know (1) what’s been successful before; (2) finding out why you’ve been rejected; (3) what will strengthen your application—to know after the grant cycle is over what worked and what didn’t.”*

Furthermore, stakeholders stressed the need for tribal representation in all stages of proposed application support through tribal-specific materials (e.g., project examples from other tribes), representation on application review panels, etc.

#### Stakeholder recommendations related to application support:

- Develop and share tribal-specific project examples and success stories
- Develop and share templates for project applications (including Advance Assistance)
- Incorporate tribal representation on application review board (as is standard practice for Tribal Homeland Security Grants)
- Provide greater transparency and clearer communication as to why applications were not selected
- Provide an application “editing period,” during which tribes can improve their application based on feedback from FEMA (e.g., RTLs)
- Create full-time FEMA positions embedded in vulnerable tribal communities dedicated to supporting BRIC project application development
- Hire RTLs per Region proportionate to tribal population

## 6.3 Program Design

### 6.3.1 Cost Share and Meeting Match

Tribal stakeholders frequently commented on the challenge of meeting the non-federal cost share; meeting the match is a prohibitive barrier to tribal participation in FEMA grant programs. Without a tax base and the associated revenue stream, many tribes are at a disadvantage and unable to meet even a 10 percent match.

*“Grant programs are built around the system of tax bases, but tribes don’t have tax bases. Our council will not agree to a proposal [because of the cost share requirement].”*

*“A waiver [for the non-federal cost share] is needed. A lot of tribes are different. Some tribes can afford it, but others can’t.”*

#### **Stakeholder recommendations related to cost share/meeting the non-federal match:**

- Provide a waiver for the non-federal cost share for small impoverished tribal communities
- Assess the economic impacts of no tribal tax base on the ability to pay to inform equitable non-federal cost shares for tribes

### **6.3.2 Small Impoverished Community Definition**

Stakeholders expressed that the current definition of small impoverished is not adequately capturing many tribal communities that *should* qualify within the definition parameters. Comments indicated that the current population count in the small impoverished community definition references the tribe by its total membership, rather than the community population.

*“We are made up of three communities that each are small and there is over 100 miles between them. But the tribe itself is over 3,000 people [and therefore does not qualify as small and impoverished].”*

#### **Stakeholder recommendations related to small impoverished communities:**

- Measure population by tribal community instead of tribal membership
- Direct funding to small impoverished communities

### **6.3.3 Tribal Set-Aside**

Of stakeholder comments that referred to the tribal set-aside in some way, 49 percent of comments advocated for an increase in the set-aside beyond the \$575,000 allocation per tribe. These comments commonly noted the cost-intensity of large infrastructure projects and challenges in competing against states (in the full competition) as reasoning.

*“Tribes have a hard time competing nationally, so the tribal set-aside is critical. Many tribes are among the most vulnerable to natural hazards, and a higher set-aside would be equitable to account for that.”*

Comments that did not support an increase in the set-aside (e.g., remain at \$575,000 or less), cited the challenge in meeting the cost share, as a higher funding amount would also require a larger non-federal match. These comments further emphasized the often prohibitive nature of the cost share. An additional theme was the desire among stakeholders for the tribal set-aside amount to be fair, although concepts of fairness were expressed differently.

Tribal stakeholders also expressed the desire for the remainder of the tribal set-aside to be reinvested into Indian Country, rather than going back into competition (as it currently does in PDM).

*“I just think that we have data that shows that tribes are not properly using the set-aside parity. There’s a need. Instead of giving this away to someone else who has that capability, be sure to put this back into the [tribal] community.”*

*“If it’s tribal money it should stay tribal money.”*

#### **Stakeholder recommendations related to the tribal set-aside:**

- Consider calculating the per capita tribal vs. non-tribal allocations of federal grants (e.g., the Homeland Security Grant allocations equate to almost \$150 for every non-tribal person in the United States, versus less than \$2 per tribal member)
- If funding remains in the tribal set-aside, reinvest it in tribal communities (e.g., pay for trainings) instead of funneling into the general competition pot

### **6.3.4 Competition**

Stakeholders overwhelmingly expressed concern regarding the competition and indicated that a competition was inherently unfair to tribes. When prompted if tribes would rather compete nationally or within a tribal-only competition, stakeholders often leaned toward not competing against states in a national pool, opting for tribal-only competition by extension. The stakeholder response below seems emblematic of this overall sentiment:

*“We want all the tribes to be funded... What we don’t want is to be taking money from each other. In this scenario you only presented these two options, and we would want to narrow our competition.”*

Themes of limited capacity and prohibitive non-federal matches also surfaced in the discussions around limited tribal application competitiveness in a national pool.

*“Yes and no. All these projects in Indian country are so important. It’s so important that they’re successful. But tribes are behind and there’s a reason for that—it will stay this way until it’s an equal playing field. If there’s additional funding, leave that for tribes. I would rather compete against someone who doesn’t have the match. Because who are you more likely to fund? The greatest good for the greatest people? What happens every time is that you have a larger project [that’s able to meet a] larger match—you will pick that every time over the small tribe.”*

#### **Stakeholder recommendations for competition:**

- Separate small impoverished and/or tribal communities from larger, more capable communities in the competition

## **6.4 Project Development and Application**

### **6.4.1 Project Types and Eligibility**

Stakeholders inquired about eligibility and expressed interest in a variety of project types, listed below. Some identified projects are already eligible in PDM, and stakeholders indicated a desire for continued eligibility of these project types.

- Dual use projects for opioid crisis (e.g., safe rooms with dual use as transitional sheltering or other health and human service needs)
- Shelter development
- Safe rooms
- Household water storage
- Food storage
- Microgrids
- Backup power sources (biomass/solar)
- Generators
- Structure air filtration
- Cell towers, radios, improved communication devices and systems
- Road projects (to improve evacuation routes)
- Relocation of public facilities above floodplain
- Retrofitting structures
- Acquisition/relocation
- Projects at the watershed scale
- Small floodwalls and levees
- Equipment

Stakeholders highlighted several concerns related to project eligibility in BRIC. First, unannounced utility shutoffs in California for wildfire prevention are not natural hazards but require mitigation nonetheless. Projects mitigating these man-made utility outages should be eligible. Secondly, stakeholders expressed frustration that projects are ineligible based on their categorization as “response equipment,” despite being used for mitigation purposes (e.g., trucks, radios):

*“We can’t do mitigation without the truck (for wildfire). They told us a piece of equipment is ineligible because it’s response equipment. Just because it could be response equipment, doesn’t mean that’s what it is for us. If we’re showing that we’re using equipment as hazard mitigation, then that’s what we’re doing.”*

#### **6.4.2 Benefit-Cost Analysis**

Tribal stakeholder comments referencing the BCA cited (1) barriers in meeting a BCR of 1.0, (2) the inability for the BCA to factor in non-monetized losses of cultural resources (due to both the lack of a pre-calculated monetary value assigned to cultural resources in the tool and the inherent challenge in assigning such a value), and (3) challenges related to using the analysis software (see Section 6.2.1). Specific challenges meeting the required BCR are closely related to the typical small, low-density nature of tribes.

*“The criteria for most of the mitigation programs tends to favor large communities in urban areas because of the way the benefit-cost analysis works*

*out. I work with tribes and coastal communities in Alaska that are facing the need to relocate because of increasingly severe environmental hazards. These are small, rural communities with high shipping expenses, high cost of living, and small populations. They have had a hard time winning competitive grants because of the high costs and low populations, but they are facing serious risks to lives and safety of entire communities.”*

Regarding cultural resources and the current tool, one stakeholder clearly stated:

*“Cultural resources cannot be monetized in BCA.”*

#### **Stakeholder recommendations for the BCA:**

- Add a mechanism to include/monetize losses to cultural resources within the BCA tool (e.g., sacred sites, cultural sites, subsistence resources)
- Incorporate the percent of the tribal nation impacted by a hazard in the BCA

#### **6.4.3 Lifelines and Large Infrastructure Projects**

Tribal stakeholders mentioned lifeline and large infrastructure projects (e.g., communications, replacing aging infrastructure, evacuation routes), but mostly as they relate to a desire to increase the tribal set-aside to be able to fund larger projects. One stakeholder commented on the concern of population size factoring into critical infrastructure project competitiveness:

*“Question about smaller tribes. They only have 100 tribal members, but they still have critical infrastructure impacted by recurrent flooding. Will smaller tribes have an equal opportunity to compete for BRIC grants moving forward?”*

Tribal stakeholders also emphasized the importance of recognizing tribal-specific lifelines (e.g., language, traditional food sources, other cultural resources):

*“There are unique definitions of tribal lifelines—e.g., language, food. There are multiple, and unique, tribal understandings of lifelines that are culturally and traditionally significant from tribe to tribe.”*

#### **Stakeholder recommendations for lifelines and large infrastructure projects:**

- Clearly communicate the use/function of lifelines versus Emergency Support Functions
- Provide the opportunity for tribes to identify their own cultural and traditional lifelines

## 7. Project Monitoring and Evaluation and Lesson Sharing

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To conclude the collection of stakeholder feedback chapters, this chapter highlights two overarching themes that emerged across different topics and engagement platforms. Specifically, this chapter details the ways in which stakeholders would like to promote project monitoring and evaluation and facilitate lesson sharing at all stages of the BRIC program.

Many of the stakeholder needs discussed throughout this chapter, such as a need for examples, case studies, and platforms for sharing information, are highlighted briefly in previous chapters. However, this chapter expands on these discussions while examining opportunities for linking stakeholder recommendations. Stakeholders framed their recommendations for project monitoring and evaluation and lesson sharing as strategies for enhancing local capacity, promoting innovation, increasing knowledge of benefits and costs, and making better investment decisions.

This chapter is divided into two sections:

- (1) Project monitoring and evaluation, and
- (2) Sharing lessons and best practices to enhance mitigation capacity.

Both sections are intended to inform program decisions that can ultimately aid local, state, and federal BRIC stakeholders in learning from one another and realizing their mitigation goals.

### 7.1 Project Monitoring and Evaluation

Overall, feedback indicated that stakeholders believed monitoring and evaluation<sup>1</sup> are important activities that can promote accountability and progress around mitigation initiatives and research. Through IdeaScale, stakeholders were asked to discuss grant project evaluation, including recommendations for methods and tools to evaluate the success and failure of BRIC-funded projects. Beyond the IdeaScale platform, the subject emerged when discussing various elements of the BRIC program.

Across engagement platforms, stakeholders noted different barriers to project evaluation. One of these barriers was limited funding for monitoring and evaluating projects after project completion. One stakeholder recommended that BRIC should provide *Evaluation Assistance* to encourage continued project evaluation, which could either be a funding-eligible activity or provided through non-financial technical assistance. While the stakeholder did not provide details about what this would entail, Evaluation Assistance could be interpreted as a form of financial assistance past grant Recipients could apply for with the purpose of implementing consistent project and evaluation. Separately, it could be interpreted as a form of technical assistance that is offered.

Another barrier highlighted through comments was the lack of clearly defined metrics for evaluating projects. One stakeholder suggested that these metrics should be defined based on previous projects:

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<sup>1</sup> Monitoring and evaluation activities typically occur after projects have been completed, and, in this case, the feedback provided was focused on the monitoring and evaluation at the project-level for awarded projects (as opposed to program-level evaluation or evaluation during application review).

*“Projects should be evaluated and monitored against a set of clearly defined performance metrics... Metrics should be developed from prior projects, if possible, to ensure necessary data can be collected and to identify gaps.”*

While there were few comments that provided specific recommendations for evaluation strategies, a handful of stakeholders advocated conducting loss avoidance studies in the aftermath of a disaster. Although FEMA currently conducts these studies, stakeholder feedback suggests more studies are needed or that the results of completed studies should be more accessible for stakeholder use.

*“Avoided loss studies can play an important role in determining how to allocate precious mitigation funds and provide an important marker to evaluate grant project success and failure.”*

Another recommendation provided through IdeaScale was that evaluation should focus less on the speed of funding obligation and project implementation and more on project impacts. Examples of potential project evaluation metrics provided include economic, social, cultural, and equity-based criteria. This particular recommendation infers a holistic evaluation of projects beyond primarily economic metrics.

Overall, the comments highlighted that stakeholders would like to see an increased emphasis on monitoring and evaluating projects. Ultimately, project monitoring and evaluation could directly contribute to FEMA’s mitigation goals at the federal level by aiding investment decisions. At the state and local level, monitoring and evaluation can contribute by developing best practices for states and local communities to use in project planning, guiding project prioritization decisions, and encouraging community buy-in. Beyond informing future mitigation projects, comments highlighted that monitoring and evaluation can also help existing projects by revealing areas for improvement or future upgrades.

#### **Stakeholder recommendations regarding project monitoring and evaluation:**

- Analyze loss avoidance data and make it easily accessible for stakeholders
- Conduct site visits to discuss and evaluate the performance of projects
- Provide Evaluation Assistance to encourage project monitoring and evaluation
- Clearly define evaluation metrics

## **7.2 Sharing Lessons and Best Practices to Enhance Mitigation Capacity**

Previous chapters highlight that stakeholders perceive a variety of deficiencies in terms of their capability and capacity to develop HMPs, apply for hazard mitigation funding, and implement effective hazard mitigation projects. Across these distinct phases of hazard mitigation, one common recommendation was to share lessons and learn from one another. Despite not being prompted to discuss “lessons learned” or “best practices,” dozens of stakeholders called for more effective use of an already-available resource: experience.

Stakeholders suggested that sharing examples of successful BCAs, grant applications, and mitigation initiatives could be a significant help for communities that lack the resources or experience to be competitive for federal mitigation funding. Further, by facilitating the sharing of this type of information and data, FEMA could indirectly foster innovation within communities and dialogue and partnerships among diverse communities and stakeholders.

An illustration of the receptiveness of stakeholders to examples was exhibited throughout the BRIC stakeholder engagement process. One of the most appreciated components of the BRIC webinars was the inclusion of examples of successful mitigation initiatives:

*“Our Tribe does not have a Grant Writer. More lessons learned examples like the two shown today [would be helpful].”*

*“I think these webinars are helpful! And help is definitely appreciated, and I think needed... Perhaps sharing prior grant applications and examples of successful projects, like are being provided in this webinar, would be good.”*

Despite being appreciative of these examples, stakeholders still wanted to see more examples, and in particular, examples that were relevant to their own communities. An additional benefit to providing many diverse examples of successful projects could be that stakeholders would begin to recognize that there is not one “right” way to do mitigation, which could in turn highlight the broad array of projects FEMA funds and potentially increase interest in mitigation activities.

Beyond simply sharing examples, there was a variety of different recommendations for ways that FEMA could facilitate information sharing. For example, one stakeholder suggested that FEMA create in-person opportunities for states and regions to share stories and lessons learned, such as workshops or meetings. Multiple stakeholders recommended that FEMA facilitate mentorships between communities that have had a successful mitigation track record and those that are low-capacity.

*“Funding to send local staff to Best Practices communities, so they can shadow and learn from the communities that are successful and doing things well.”*

Some stakeholders also recommended that FEMA create a database for stakeholders to be able to post and share lessons and best practices.

*“Develop an online case-study clearinghouse, where you can browse through lots of eligible project examples and success stories.”*

*“[We support] the creation of a database to track BRIC funds and project types as a resource for applications to learn more about eligible projects and best practices. It can be difficult for communities to find data and cost information for state and local adaptation activities. This database will help communities find flood mitigation projects that have been used in similar circumstances and glean from the best practices of other grantees in order to duplicate successful projects and techniques.”*

Beyond providing opportunities for lesson sharing, comments suggested that FEMA needed to provide incentives for experienced stakeholders to share lessons. One stakeholder recommended that FEMA provide incentives for Recipients and subrecipients to conclude their projects with an optional lesson sharing output. Based on the feedback provided by stakeholders, lesson sharing outputs among subrecipients could be in the form of a physical document detailing lessons, successes, and failures; a mentorship; contribution to a national database; or some other innovative strategy. An example of an incentive could be higher ranking on future grant applications. However, for this to be feasible, FEMA would have to be responsible for funding or establishing (and maintaining) the infrastructure for information sharing among stakeholders.

Lastly, one stakeholder provided a recommendation about a way FEMA could begin to activate lesson sharing without outside engagement:

*“Share information on statistics for previously successful applications. There should be an increased dialogue and more data available related to the kinds of projects FEMA funds every year through its programs. For example, as I am considering putting together an application, I would like to know if similar projects have been favored in the past, factors that differentiate a successful application for each kind of project, and any other data that may be informative. Useful data could also assist in creating innovative mitigation strategies.”*

As the comment indicates, FEMA has access to datasets that could be useful to stakeholders wanting to apply for hazard mitigation grants or self-invest in mitigation projects. Creating and promoting accessibility to these data could aid state, regional, and local mitigation initiatives and improve transparency between FEMA and its stakeholders. As mentioned previously, increasing access to completed BCAs, grant applications, and information about completed projects could serve to indirectly address some of the many needs expressed by stakeholders throughout the BRIC stakeholder engagement period. For example, providing sample BCAs could help reduce perceived barriers associated with completing the BCA by showing stakeholders the amount and type of data they need. Providing examples of funded and completed projects can also help communities (particularly low-capacity communities) brainstorm mitigation project ideas, promote creativity and innovation, and may reduce the desire for and reliance on projects with pre-calculated benefits. Finally, increasing the transparency around these data can ultimately help reduced the perceived complexity of mitigation and FEMA mitigation grants.

#### **Stakeholder recommendations regarding sharing lessons and best practices:**

- Create an online database of successful BCAs, grant applications, and funded projects, including FEMA data/analysis on project selection
- Fund in-person initiatives for lesson and best-practice sharing (e.g., site visits, workshops, mentorships)
- Incentivize grant Recipients to share lessons and best practices through practical and creative outlets

## 8. Conclusion

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This chapter summarizes the stakeholder engagement and recommendations for using stakeholder feedback throughout and after the BRIC program design decision-making process.

During BRIC engagement efforts throughout the summer of 2019, stakeholders expressed gratitude for FEMA’s outreach efforts. Stakeholders found the opportunities informative and appreciated being able to share thoughts and offer input during BRIC program development. These outreach efforts have begun to set the tone for what stakeholders can expect from FEMA as BRIC grows and evolves.

As stakeholders have noted, extensive outreach is a helpful first step, but it is incumbent on FEMA to pursue sustained efforts to engage stakeholders, both as BRIC is developed and implemented and beyond its launch as the program shifts to enhancements and continuous improvement over time. Across different topics and engagement platforms, stakeholders consistently expressed that they wanted continued high-quality engagement and outreach from FEMA as the BRIC program matures.

Further, after conducting such significant engagement efforts, it is important that FEMA consider stakeholder feedback throughout BRIC development to ensure that the time, resources, and effort allocated to this engagement were not in vain. One key concern that emerged from stakeholders was doubt that their feedback would be reflected in the BRIC program. This is also important to acknowledge because if stakeholders perceive that their engagement was used solely to satisfy an engagement requirement rather than influence decision-making, FEMA may jeopardize future outreach efforts or create resentment in instances where stakeholders do not “feel heard.”

Given the wide range of opinions and nuance in the 5,017 comments and 75 formal letters FEMA received, addressing each individual stakeholder comment would be impossible. Although specific quotes and recommendations are provided throughout the chapters, at no point should readers attempt to dig into the data, find a specific comment or recommendation, and find its resolution in the program design. This is because quotes and stakeholder recommendations are provided to summarize opinions within large quantities of data coming from diverse stakeholders, who in many cases have divergent perspectives about how BRIC should be developed.

Despite the inability to ensure that each stakeholder comment is incorporated within the BRIC program design, with this Stakeholder Feedback Report, FEMA has the opportunity to thoughtfully consider main themes of stakeholder feedback during BRIC program design. Further, because the stakeholder data reveals topics of importance to stakeholders, these data can be used to guide BRIC promotional materials and future conversations with stakeholders as the program is implemented.

# Appendix I: Questions Asked During Building Resilient Infrastructure and Communities Webinars

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## *Webinar 1: Infrastructure Mitigation Projects and Community Lifelines<sup>1</sup>*

1. How much and what type of technical assistance should FEMA provide to applicants applying for and implementing infrastructure mitigation projects?
2. What challenges do you foresee in implementing infrastructure mitigation projects?
3. How can FEMA best incorporate lifelines into BRIC?
  - a. What lifelines (if any) does your community consider during the mitigation planning process?
  - b. What steps can communities take to mitigate steps to lifelines?
  - c. What resources or support can FEMA provide that would improve the resilience of lifelines in your communities?

## *Webinar 2: Hazard Mitigation Planning, Grant Application and Evaluation, and Risk Based Funding*

### **Hazard Mitigation Planning**

1. How can the mitigation planning process be used to increase implementation of mitigation activities and actions by state, tribal, and local officials as well as private and non-profit interests?
2. What additional support can FEMA provide, such as increased technical assistance related to the hazard mitigation planning process or investments that can be implemented to reduce vulnerabilities from future hazard events?
3. What challenges hinder the implementation of existing mitigation strategies in FEMA-approved hazard mitigation plans?
4. How can the identification and prioritization processes used in hazard mitigation planning advance implementation of mitigation actions, such as adopting stronger ordinances, as well as projects?

### **Risk Methodology**

1. What limitations and risks do you see in using risk data to make funding award decisions to states, territories, and tribes versus a nationwide competitive program comparing project applications?
2. What sources of risk data do your community use for prioritizing grant funding for disaster mitigation activities?

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<sup>1</sup> During webinar 1, participants responded to questions via private chat to the user “1-FEMA Questions,” moderated by FEMA. For all other BRIC webinars, participants were prompted and responded via the poll function in Adobe Connect.

3. How can the risk data that is available in your community be improved to better inform actions that can be taken to improve disaster resiliency?

### ***Webinar 3: Funding & Resource Management and Benefit-Cost Analysis***

#### **Funding and Resource Management**

1. What challenges exist in managing funding and resources, especially in the context of managing large dollar figures for infrastructure grant projects?
2. What is the best way to track funding and resources?
3. What administrative impacts do you think might result from implementing these projects?

#### **Benefit-Cost Analysis**

1. How can states, tribes, territories, and local communities conduct a BCA more quickly and efficiently?
2. How should states, tribes, territories, and local communities consider, conduct, or demonstrate cost-effectiveness for non-FEMA-funded infrastructure investments?
3. What tools and methods would you recommend to improve the development of BCAs?
4. What resources would you use to develop BCAs for non-traditional or infrastructure mitigation projects?

### ***Webinar 4: Building Codes and Enforcement and Capacity and Capability***

#### **Building Codes & Enforcement**

1. What are the best tools for applying (and enforcing) hazard-resistant building codes?
2. What are the biggest challenges in building code enforcement, and how can these challenges be overcome?
3. How often are new building codes adopted, and how much delay is there in applying new codes after they are published?

#### **Capacity and Capability**

1. What capacity, capability, and training is needed to run successful grant awards, both small and large infrastructure-based?
2. What challenges exist when building capacity and capability within communities?

### ***Tribal Stakeholder Input Sessions 1 and 2 (Webinar)***

1. Do you want to see a dedicated tribal set-aside in the new program? If so, the same, more, or less than \$575k? Why? If not, why?
2. What type of technical assistance and/or capacity and capability building do you require to apply for and run a successful grant program?

3. Based on the vulnerabilities in your tribe, what types of projects do you envision for your tribe that will prevent future damages, loss of life, and sustain your tribe lifelines (food, water, shelter, etc.)?
4. How do you make a determination that something is a risk in your tribe? What types of risk exists within your tribe and how do you currently handle the risk?

## Appendix II: IdeaScale Prompts

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### Topic 1: Infrastructure Mitigation Projects

FEMA envisions that the BRIC program, once established, will focus on traditional mitigation projects and incentivize new, innovative large infrastructure projects that build resilient communities and reduces risks from all hazards.

FEMA seeks your opinions on:

- The amount and type of technical assistance FEMA should provide to applicants in applying for and implementing infrastructure mitigation projects
- What challenges you foresee in implementing these types of mitigation projects

### Topic 2: The Hazard Mitigation Assistance Application Process

How can FEMA improve or streamline the application form (and submission process) for BRIC projects? We especially welcome the opinions of individuals who have familiarity with FEMA's Hazard Mitigation Assistance application.

FEMA seeks your opinions on:

- What FEMA can do to make applying for HMA grants faster and easier
- What application requirements are **necessary** in seeking grant funding
- How the application process can be streamlined, while still retaining accountability and program effectiveness

### Topic 3: Building Codes & Enforcement

Building codes are the cornerstone of a resilient community, but less than 35 percent of communities have adopted the latest, most up-to-date hazard-resistant codes. What barriers do you think exist to community adoption of building codes, and how can BRIC avoid these problems?

FEMA seeks your opinions on:

- The best tools for applying (and enforcing) hazard-resistant building codes
- The biggest challenges in building code enforcement, and ways these challenges can be overcome
- How often new building codes are adopted, and how much delay there is in applying new codes after they are published

### Topic 4: Benefit-Cost Analysis (BCA)

Before FEMA can provide funding for a project, FEMA is required to compare the future benefits of a hazard mitigation project with its costs, called benefit-cost analysis (BCA). How can FEMA best conduct BCA for BRIC projects?

FEMA seeks your opinions on:

- How can states, tribes, territories and local communities conduct a BCA more quickly and efficiently

- How states, tribes, territories, and local communities consider, conduct, or demonstrate cost-effectiveness for non-FEMA funded infrastructure investments
- What tools and methods you would recommend to improve the development of BCAs
- What resources you would use develop BCAs for non-traditional or infrastructure mitigation projects

### **Topic 5: Risk Informed Funding**

FEMA is exploring the various options for developing a risk informed methodology for grant funding. How should FEMA prioritize funding for BRIC, both for allocation to states, territories, and tribes on the national level, as well as, on the project level through competitive priorities?

FEMA seeks your opinions on:

- What sources of risk data does your community use for prioritizing grant funding for disaster mitigation activities
- What limitations and risks you see in using risk data to make funding award decisions to states, territories, and tribes versus a nationwide competitive program comparing project applications
- How can the risk data that is available in your community be improved to better inform actions that can be taken to improve disaster resiliency

### **Topic 6: Hazard Mitigation Planning**

State, tribal, and local governments engage in hazard mitigation planning to identify risks and vulnerabilities associated with natural disasters and develop long-term strategies for protecting people and property from future hazard events that can be implemented using a wide range of public and private funding. How can state, territorial, tribal, and local governments best leverage FEMA funding for Hazard Mitigation Planning to guide investments in activities and projects that will break the cycle of disaster damage, reconstruction, and repeated damage?

FEMA seeks your opinions on:

- How the mitigation planning process can be used to increase implementation of mitigation activities and actions by state, tribal, and local officials as well as private and non-profit interests
- What additional support FEMA can provide, such as increased technical assistance related to the hazard mitigation planning process or investments that can be implemented to reduce vulnerabilities from future hazard events
- What challenges hinder the implementation of existing mitigation strategies in FEMA-approved hazard mitigation plans
- How the identification and prioritization processes used in hazard mitigation planning can advance implementation of mitigation actions, such as adopting stronger ordinances, as well as projects

### **Topic 7: Funding & Resource Management**

The BRIC program has the potential to be a very large-dollar grant program and is intended to provide funding on an annual basis. What can FEMA do to improve project funding and resource management and ensure BRIC's success?

FEMA seeks your opinions on:

- The challenges that exist in managing funding and resources, especially in the context of managing large dollar figures for infrastructure grant projects
- The best way to track funding and resources
- What administrative impacts you think might result from implementing these projects

### **Topic 8: Grant Project Evaluation**

FEMA wants to ensure that the BRIC program incorporates best practices for evaluating a project's performance. How should FEMA measure project success and failure?

FEMA seeks your opinions on:

- The best ways to evaluate grant projects to determine success and failure
- What methods or tools FEMA should use to collect data (and the type of data that should be collected)
- How communities can set risk-based goals for mitigation grants, and then track performance against those goals

### **Topic 9: Capacity & Capability Building**

The magnitude of the BRIC program will require an additional level of capability and capacity on the part of recipients and sub-recipients. How can FEMA improve capability and capacity of recipients and sub-recipients?

FEMA seeks your opinions on:

- What capacity, capability, and training is needed to run successful grant awards, both small or large infrastructure-based
- What challenges exist when building capacity and capability within communities

### **Topic 10: Community Lifelines**

Community lifelines are critical interdependent systems that enable continuous operation of government functions and critical business and are essential to human health and safety or economic security. FEMA's community lifelines help prioritize and focus response efforts that maintain or stabilize critical services and infrastructure and promote a better integrated and more coordinated response. The seven community lifelines are:

1. Safety and Security
2. Food, Water, Sheltering
3. Health and Medical
4. Energy (Power & Fuel)
5. Communications
6. Transportation
7. Hazardous Material

(For more information, visit FEMA's [Community Lifelines Implementation Toolkit](#) webpage.)

How can FEMA best incorporate lifelines into BRIC?

FEMA seeks your opinions on:

- What lifelines (if any) your community considers during the mitigation planning process
- What steps communities can take to mitigate risks to lifelines
- What resources or support FEMA can provide that would improve the resilience of lifelines in your communities

## Appendix III: Questions Asked During In-Person BRIC Engagements

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### *Listening Session Denton Workshop (Denton, TX)<sup>1</sup>*

1. What are some examples of innovative projects that you envisioned being funded by BRIC?
2. What communications or outreach methods and materials do you need to successfully implement BRIC?
3. What are your recommendations for methods and/or criteria for evaluating projects under BRIC?
4. How does your community factor risk into developing infrastructure and/or mitigation projects?
5. What are some specific features of technical assistance you envision being a part of the BRIC application process?
6. What additional lessons learned would you like factored into BRIC?

### *Tribal Stakeholder Listening Session (Cabazon, CA and Blue Lake, CA)<sup>2</sup>*

1. What challenges have you experienced with the current Pre-Disaster Mitigation (PDM) grant program?
2. If you could change anything about PDM, what would it be and why?
3. Do you want to see a continued dedicated tribal set-aside in the new program, BRIC? If yes, the same, more, or less than currently for PDM? Why or why not?
4. Should tribes compete amongst only tribes with a set-aside, use a national competition, or some combination?
5. What type of technical assistance do you require to apply for and run a successful grant program?
6. What types of projects do you envision for your tribe that will prevent future damages, loss of life, and sustain your tribe's lifelines?
7. What types of risk exists within your tribe and how do you currently address the risk?
8. Have you applied for other federal, non-FEMA grants in the past? If so, what challenges have you experienced applying for federal grants in the past? What could have helped make the process easier?

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<sup>1</sup> Questions asked during the workshop in Denton, TX, were prompted using the interactive and anonymous real-time polling application, Mentimeter.

<sup>2</sup> Questions during both Tribal Stakeholder Listening Sessions were asked verbally and used to guide a facilitated open discussion. The nature of the format yielded further discussion about topics not explicitly included within the formulated questions listed here.

9. Would tribes be willing to partner with another entity/private nonprofit (PNP) for technical assistance?
10. Would tribes like more direct technical assistance from FEMA or is the current level sufficient?
11. Would tribes prefer to receive funding to address their capability and capacity deficiencies rather than technical assistance?

## Appendix IV: Formal Comment Letters Submitted Regarding BRIC

Stakeholder Organization	Organization Type
AcquSight, Inc.	Private Sector
Advanced Energy Management Alliance	Non-Governmental
Alaska Institute for Justice	Non-Governmental
Alaska Native Tribal Health Consortium	Non-Governmental
American Flood Coalition	Non-Governmental
American Littoral Society	Non-Governmental
American Property and Casualty Insurance Association	Non-Governmental
American Rivers	Non-Governmental
Association of State Floodplain Managers	Non-Governmental
BuildStrong Coalition	Non-Governmental
Business Council for Sustainable Energy	Non-Governmental
City of New Orleans, LA	Government
City of New York, NY	Government
City of Norfolk, VA	Government
Coastal States Organization	Non-Governmental
County of Alachua, FL	Government
County of El Paso, TX	Government
County of Seminole, FL	Government
Congressional Fire Services Institute	Non-Governmental
Denali Commission	Government
DeWitt Co. Drainage District No. 1 TX	Government
Environmental Defense Fund	Non-Governmental
Environmental Emergency Services Inc.	Private Sector
EPDM Roofing Association	Non-Governmental
Farmers Insurance	Private Sector
Federal Alliance for Safe Homes	Non-Governmental
FEMA Region V	Government
FEMA Region VII	Government
GridWise Alliance	Non-Governmental
H2Bid, Inc.	Private Sector
Illinois Association for Floodplain and Stormwater Management	Non-Governmental
Illinois Emergency Management Agency	Government
Insurance Institute for Business & Home Safety	Non-Governmental
International Code Council	Non-Governmental
Mississippi River Network	Non-Governmental

Stakeholder Organization	Organization Type
Mississippi-Alabama Sea Grant Consortium	Government/Academic
Missouri Coalition for the Environment	Non-Governmental
National Advisory Council	Government
National Association of Homebuilders	Non-Governmental
National Association of State Energy Officials	Non-Governmental
National Audubon Society	Non-Governmental
National Emergency Management Association	Non-Governmental
National Oceanic and Atmospheric Administration	Government
National Wildlife Federation	Non-Governmental
National Resources Defense Council	Non-Governmental
New York State Floodplain and Stormwater Managers Association	Non-Governmental
North Carolina Coastal Federation	Non-Governmental
Pacific Gas and Electric Company	Private Sector
Pew Charitable Trusts	Non-Governmental
Scale Microgrid Solutions	Private Sector
Smart Vent Products Inc.	Private Sector
Southern Environmental Law Center	Non-Governmental
State of Colorado	Government
State of Delaware	Government
State of Iowa	Government
State of Louisiana	Government
State of Maryland	Government
State of New Mexico	Government
State of North Dakota	Government
State of Oregon	Government
State of South Carolina	Government
State of South Dakota	Government
State of Tennessee	Government
State of Utah	Government
State of Wisconsin	Government
Terrebonne Parish Consolidated Government LA	Government
Texas A&M University (Institute for Infectious Animal Diseases)	Academic
Texas Water Development Board	Government
The Conservation Fund	Non-Governmental
The Nature Conservancy	Non-Governmental
Theodore Roosevelt Conservation Partnership	Non-Governmental
Union of Concerned Scientists	Non-Governmental

Stakeholder Organization	Organization Type
University of California Santa Barbara (Marine Science Institute)	Academic
U.S. Chamber of Commerce	Non-Governmental
U.S. Green Building Council	Non-Governmental