BUILDSTRONG AMERICA

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SUBMITTED VIA REGULATIONS.GOV:
Office of Response and Recovery, Public Assistance Division
Federal Emergency Management Agency (FEMA)
U.S. Department of Homeland Security (DHS)
500 C Street, SW
Washington, DC 20472

Re: Comments of BuildStrong America on the DHS/FEMA Proposed Revisions to "Public Assistance Program and Policy Guide, FP 104-009-2" - Docket ID: FEMA–2024–0010

BuildStrong America unites a diverse coalition of stakeholders dedicated to minimizing disaster costs and fostering resilience across America. It is our mission to draw down disaster costs and losses by reducing risks to individuals, communities, and lifeline infrastructure systems and maximizing government investment in mitigation. Our vision extends to proactively mitigating risks associated with all hazards in the built environment, paving the way for a nation that thrives in the face of any disaster. The strength and success of BuildStrong is based entirely on its members, who are a coalition of firefighters, emergency managers and responders, insurers, engineers, architects, contractors and manufacturers, as well as consumer organizations, code specialists, and many others committed to building a more resilient America. Led by our members, BuildStrong is committed to advancing the priorities of our stakeholders and partners on behalf of a stronger America.

Over the past decade, BuildStrong America and our partners have been strong advocates for solutions to address the rising costs and impacts of disasters in the United States. We have identified many important opportunities for policy changes that promote mitigation and the smart investment of federal resources, including providing input that informed several key provisions of the *Disaster Recovery Reform Act of 2018* (DRRA, Division D of P.L. 115-254).

INTRODUCTION

We appreciate the opportunity to provide feedback on FEMA's Public Assistance Program and Policy Guide (PAPPG) Version 5. As key stakeholders in the field of disaster resilience and recovery, we recognize the critical importance of clear, equitable, and effective guidelines to ensure that communities can rebuild stronger and more resiliently following disasters.

The revisions in Version 5 present both challenges and opportunities. Our response aims to highlight areas where the proposed changes may impact communities and stakeholders, particularly in terms of the administrative burden, clarity of guidance, and alignment with broader goals of mitigation and resilience. We believe that through collaborative dialogue and thoughtful adjustments, FEMA can further enhance the effectiveness of the Public Assistance Program, ensuring it better serves the needs of all communities, especially those most vulnerable to the impacts of disasters.

CHAPTER 1

Declarations and Planning

Rebuild by Design has introduced the Atlas of Accountability, a new mapping tool designed to help communities and policymakers better understand localized risks from extreme weather events. According to the accompanying report, which analyzed FEMA's major disaster declaration data, 91 percent of congressional districts contain at least one county that has received a federal disaster declaration for an extreme weather event between 2011 and 2023. This widespread experience underscores the urgent need for bipartisan cooperation and for bridging the urban-rural divide to effectively address these challenges.[1]

However, the report overlooks a critical issue: FEMA's process for declaring major disasters is deeply flawed. The Disaster Recovery Reform Act (DRRA), Section 1239, directed FEMA to reassess the factors used to evaluate requests for Major Disaster Declarations for Public Assistance, specifically the estimated cost of assistance (i.e., the per capita indicator). BuildStrong is concerned that this mandate, which was initiated during the COVID-19 pandemic, was swiftly abandoned. Furthermore, PAPPG Version 5 shows no indication that this requirement will be addressed in the current policy review cycle.

Recommendation: FEMA should prioritize the reassessment of the criteria for Major Disaster Declarations, including the per capita indicator, to ensure that it accurately reflects the true scope and impact of disasters on communities. This reassessment should be conducted transparently and with input from a diverse range of stakeholders, including local governments, to create a more equitable and effective disaster response system.

Federal Cost Share

The Disaster Mitigation Act of 2000 established a framework for state, local, tribal, and territorial governments to engage in hazard mitigation planning as a prerequisite for receiving certain types of non-emergency disaster assistance.[2] BuildStrong strongly believes that incentivizing proactive measures is the most effective way to drive meaningful change in disaster resilience.

We are increasingly concerned about FEMA's delay in implementing regulations that would reduce federal cost share to at least 25 percent for the repair or replacement of eligible public or nonprofit facilities that have been damaged by the same type of disaster more than once in the past 10 years, if the property owner has not taken adequate steps to mitigate the risk.

Recommendation: FEMA should urgently finalize and enforce these long-overdue rules to ensure that federal disaster assistance is contingent on meaningful mitigation efforts. This policy will not only encourage responsible behavior but also reduce the financial burden on taxpayers by promoting resilience and reducing repetitive losses.

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[1] Rebuild by Design, *Atlas of Accountability*, accessed August 14, 2024, https://rebuildbydesign.org/atlas-of-accountability/.
[2] 42 USC 5172: Repair, restoration, and replacement of damaged facilities

CHAPTER 4

General Work Eligibility

In line with the statutory changes to the *Robert T. Stafford Disaster Relief and Emergency Assistance Act* resulting from the enactment of Section 1206 of the Disaster Recovery Reform Act of 2018, Public Assistance can now be used to fund building code and floodplain management administration and enforcement activities for a limited time. FEMA has fully integrated this policy into the draft PAPPG Version 5, as reflected in key sections under General Work Eligibility.

We applaud FEMA for implementing DRRA Section 1206 in a timely manner and fully integrating this policy into this draft version of the PAPPG. This supports BuildStrong's commitment to enhancing building code enforcement and resilience in disaster recovery efforts.

Climate Considerations

In the Climate Considerations section of this chapter (lines 1106-1113), BuildStrong commends FEMA's commitment to building a more resilient nation, particularly through the expansion of efforts within the Public Assistance program to promote the adoption of building codes and the use of cost-share incentives to enhance mitigation efforts. The adoption and enforcement of the latest building codes is one of the most effective measures to strengthen community resilience. Research from the National Institute of Building Sciences (NIBS) indicates that this could result in as much as an $11 return on investment for every $1 spent by taxpayers. However, BuildStrong believes the focus in the draft PAPPG Version 5 should shift more towards the enforcement of building codes rather than only their adoption.

We appreciate the mention of cost-share adjustments for mitigation activities in the PAPPG, but remain concerned that a critical policy, which we advocated for in 2017 and 2018, has yet to be implemented, even in interim form. The original provision in DRRA was designed to incentivize communities to take proactive steps before a disaster by increasing federal recovery assistance available after a disaster. This provision was so vital to Congress in the aftermath of hurricanes Harvey, Irma, and Maria, as well as the record-breaking 2017 wildfire season, that it was fast-tracked through the *Bipartisan Budget Act of 2018* (Sec. 20606 of P.L. 115-123) in February 2018, eight months before DRRA's eventual passage in October. Despite this urgency, the policy remains unimplemented more than six years after the law's enactment.

This delay has rendered some of the proposed incentives outdated. For instance, an approved mitigation plan was the first proposed criterion in the law.[3] As of June 30, 2024, all 50 states, the District of Columbia, and five territories, including American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands, have approved mitigation plans. Moreover, we are concerned that the recent federal emphasis on energy codes may detract from the original intent to prioritize and incentivize the enforcement of hazard-resistant building codes.

[3] Section 406(b)(3)(A)(i) of the *Robert T. Stafford Disaster Relief and Emergency Assistance Act* (P.L. 93-288)

We recognize resiliency as a co-benefit of energy efficiency. However, as a nation, we cannot allocate resources into solving only a singular problem while ignoring more comprehensive risks. There has been unprecedented funding into our national resiliency and lifeline infrastructure through the Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA). The IRA invests a historic $369 billion in climate- and energy-related provisions over the next decade to reduce emissions and bolster clean energy, for example. Unfortunately, none of this funding was included to specifically ensure homes and businesses are built to better withstand natural hazards. As new case studies emerge from areas like Texas and Florida in the aftermath of Hurricanes Beryl and Debby in 2024, it has never been more evident that individuals and communities are kept safe through the strength of their homes and by the infrastructure that provides critical resources and services in affected areas.

Recommendation: To reiterate, FEMA must urgently promulgate rulemaking to reduce the federal cost share for repetitive losses to 25 percent as originally mandated. This would make the 85 percent cost-share incentives authorized in DRRA for proactive mitigation efforts significantly more appealing to communities. Prioritizing the enforcement of hazard-resistant building codes, as well as promptly executing the delayed provisions, will ensure that federal disaster assistance is both equitable and effective in reducing future losses.

We understand the challenges surrounding the implementation of Stafford Act Section 406, which allows for "Incentive Measures" that increase readiness and resilience in disaster response. This provision permits FEMA to raise the Federal share for Section 406 assistance from 75 percent up to 85 percent for measures that enhance disaster readiness and resilience, as authorized under 42 U.S.C. 5172(b)(3)(A). However, FEMA has broad discretion under Section 406(b) to determine which readiness measures to incentivize, such as investments in emergency management programs, adoption of building codes, participation in the Community Rating System, and funding mitigation projects. Despite this authority, which was established by the Disaster Recovery Reform Act of 2018, FEMA has faced significant challenges in implementing these incentives, particularly in determining the appropriate value and corresponding effectiveness for incremental cost share increases

Recommendation: Given these complexities and outstanding questions over the cost share-incentive structure, we offer to convene a panel of stakeholders and experts to assist in developing effective policy solutions. This panel could provide valuable insights and recommendations to help FEMA implement this authority in a way that truly incentivizes readiness and resilience, ultimately benefiting communities nationwide.

CHAPTER 8

Codes and Standards

Lines 3955-4137 of PAPPG Version 5 provide the most detailed guidance on how codes and standards apply to eligible work under the Public Assistance Program, directing applicants to the “latest edition of FP-104-009-11.” However, it’s important to note that this link directs readers to Version 2 of the policy rather than the most recent interim Version 3. BuildStrong submitted a comprehensive response to FEMA's draft update of the FEMA Policy FP-104-009-11,

Consensus-Based Codes, Specifications, and Standards for Public Assistance (CCSSP) dated April 26, 2024. We were pleased to see that FEMA's proposed interim policy allows jurisdictions a range of options to determine the best approach for meeting their resilience needs. This flexibility is crucial as it enables communities to tailor solutions to their specific risks and requirements.

Recommendation: FEMA should ensure that the final version of the PAPPG includes a link to the most recent Version 3 of FP-104-009-11. This will provide applicants with the most up-to-date guidance and ensure they have access to the latest standards and policies for building resilience.

Consensus-Based Codes, Specifications, and Standards

In lines 3987-3988, the PAPPG encourages applicants to visit FEMA's Building Science Resource Library for additional information on select building codes. BuildStrong is concerned that this reference contradicts the FP-104-009-11 policy, as FEMA's Building Science currently defines "building codes" and "hazard-resistant codes" exclusively as those developed by the International Code Council (ICC), whereas the CCSSP interim policy recognizes codes from seventeen different organizations.

Across the nation, the conversation around code adoption has often shifted away from focusing on which provisions truly enhance community resilience. Instead, it has led to confusion about which specific codes will make buildings eligible for reimbursement after a disaster. FEMA's proposed CCSSP V3 policy addresses this issue by incorporating national model building codes from a variety of reputable organizations, such as the American Society of Civil Engineers (ASCE), International Association of Plumbing & Mechanical Officials (IAPMO), International Code Council (ICC), and National Fire Protection Association (NFPA), among others. This approach provides jurisdictions with a clear range of options, allowing them to select the most appropriate codes to meet their unique, localized resilience needs.

Prioritizing hazard-resistant codes over energy codes is crucial because it directly impacts a community's ability to withstand and recover from disasters, ultimately driving down the long-term costs associated with disaster recovery. When jurisdictions have the flexibility to choose from a broader range of nationally recognized codes, it fosters healthy competition among code developers. This competition helps keep costs reasonable and ensures that communities can implement the most effective and affordable solutions for reducing disaster risks.

Recommendation: FEMA should remove the reference to FEMA's Building Science Resource Library until the pre-disaster policies are revised to align consistently with the post-disaster policies. This alignment will ensure that communities are empowered to adopt the most effective hazard-resistant codes, driving down disaster costs while enhancing resilience.

APPENDIX J

Proper Installation

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BuildStrong applauds FEMA for creating Appendix J that reduces administrative burden and allows for precalculated benefits for mitigation activities. We would like to see the policy expanded to include the proper installation of resilient materials. These materials can absorb a shock and still return to their original state, meaning the material remaining in the elastic region of the stress-strain curve. However, for materials to remain resistant to shocks, they must be installed correctly and to technical specifications.

Recommendation: We are supportive of written certification by a registered engineer, architect, or design professional, that the project was designed and constructed in compliance with the applicable codes, specifications and standards identified as sufficient evidence. At a minimum, we would like to see transparency around the decisions that are outside of this scope.

Electric Grid

Critical infrastructure failures are a climate risk multiplier. Research has demonstrated how dramatically the impact of hurricanes/tropical cyclones (TC) may increase over time, due to compound effects of changes in storms and heatwaves.[4] These infrastructure failures drive compounding hazards, and life and safety impacts. Loss of electric service can also adversely impact other critical lifeline infrastructure systems, such as wastewater treatment and water transmission and distribution. Furthermore, power outages and compound hazards can significantly disrupt local business and supply chains, leading to secondary losses, and the enhanced connectivity of local and global economics potentially would further foster the impact.

Recommendation: For these reasons, FEMA should prioritize projects that strengthen the aboveground transmission and distribution networks, such as by requiring that all power poles in a vulnerable area meet high-wind or non-combustibility standards, and strategically underground local distribution networks. In doing so, FEMA can efficiently enhance the power system's resilience to adapt to historical risks and those from climate change.

A recent study of Harris County showed that undergrounding only 5 percent of the distribution networks close to the root nodes can reduce the expected percentage of Harris County residents experiencing at least one future longer-than-5-day TC-blackout-heatwave compound hazard by nearly half. Similarly, the power grids in the Florida Keys, that had been upgraded to steel, iron, and concrete poles, fared much better in the most recent hurricanes than the Puerto Rican systems built primarily with traditional wood poles designed to a lower standard.[5] Feng, Ouyang, and Lin (2022) point further to the potential to develop a unified design framework for enhancing power system resilience against various damage sources. The potential co-benefit and improved cost-efficiency induced by the unified strategy may better motivate utility companies

[4] Feng, K., Ouyang, M. & Lin, N. Tropical cyclone-blackout-heatwave compound hazard resilience in a changing climate. Nat Commun 13, 4421 (2022). https://doi.org/10.1038/s41467-022-32018-4

[5] Admin. (n.d.). "Pretty remarkable": How Florida got power back for 2 million after Ian – 7 NEWS 7. Retrieved October 14, 2022, from https://www.7news7.com/2022/10/13/pretty-remarkable-how-florida-got-power-back-for-2-million-after-ian/; Lawmakers question Luma Energy's ability to improve Puerto Rico's fragile power grid. (n.d.). MSN. Retrieved October 14, 2022, from https://www.msn.com/en-us/news/us/lawmakers-question-luma-energys-ability-to-improve-puerto-ricos-fragile-power-grid/ar-AA12DZjw

to mitigate the compound hazard risk.[6] Transmission infrastructure is at particularly high risk during the high wind events that disproportionately produce the most catastrophic fires in the western United States.[7]

Recommendation: FEMA should prioritize the burial of power lines in conjunction with the development of rural area solar microgrids. This approach is crucial for enabling rapid power shutoffs during high wind events, thereby reducing the risk of wildfire ignition and enhancing the resilience of rural communities.

Recycled Content

Additionally, FEMA should prioritize projects that utilize recycled content to encourage green initiatives throughout the program. For example, the use of products made from recycled content can dramatically reduce the volume of greenhouse gas emissions and the impacts of virgin resource extraction while maintaining strong and resilient materials. FEMA could prioritize projects where materials consist of recycled products instead of nonrecycled products whenever recycled products are available at no more than 25 percent greater total cost than nonrecycled products, and specified circumstances exist.

Recommendation: FEMA should prioritize projects that utilize recycled content, encouraging green initiatives across the program.

Defensible Space

Incorporating a pre-calculated benefits criterion for common defensible space mitigation projects into wildfire mitigation strategies at the community level is essential for enhancing resilience and expediting the implementation of protective measures. Defensible space projects, such as vegetation management and creating firebreaks, are proven to significantly reduce the risk of wildfire damage to homes and infrastructure. However, assessing these benefits at the parcel level presents considerable challenges, including the variability of terrain, vegetation types, and property sizes, which complicate the accurate calculation of cost-effectiveness on a case-by-case basis. This granular approach can be time-consuming and resource-intensive, leading to delays in project approval and implementation. By establishing a pre-calculated benefits framework at the community level, FEMA can streamline the approval process for these projects, enabling communities to act more quickly and efficiently in safeguarding their properties. This approach not only ensures that mitigation efforts are grounded in robust cost-benefit analysis but also incentivizes proactive wildfire risk reduction by making it easier for communities to secure funding and resources. In turn, this will lead to a more resilient built environment, reduced disaster recovery costs, and increased safety for residents in wildfire-prone areas.

Recommendation: FEMA should establish a pre-calculated benefits criterion for common defensible space mitigation projects at the community level. This framework will streamline the

[6] Feng, K., Ouyang, M. & Lin, N. Tropical cyclone-blackout-heatwave compound hazard resilience in a changing climate. Nat Commun 13, 4421 (2022). https://doi.org/10.1038/s41467-022-32018-4
[7] FIRE NAME (CAUSE). (n.d.). https://www.fire.ca.gov/media/t1rdhizr/top20_destruction.pdf

approval process and expedite the implementation of protective measures, such as vegetation management and firebreak creation, which are proven to significantly reduce wildfire risk.

Wildfire Water Infrastructure

Establishing pre-calculated benefits and guidance for mitigating the impact of wildfires on water infrastructure, particularly in preventing the contamination of drinking water resources, is critical for protecting public health and ensuring community resilience. Wildfires can cause severe damage to water systems, including the release of toxic chemicals into drinking water supplies due to the combustion of materials used throughout the water infrastructure (e.g. pipes and storage tanks).[8] The inclusion of pre-calculated benefits in FEMA's mitigation framework would enable communities to more rapidly implement projects that replace vulnerable components with fire-resistant and non-toxic materials, such as using iron, steel or copper pipes instead of plastic, and upgrading storage tanks to more resilient, fire-resistant designs. Additionally, guidance should include strategies for creating protective barriers around key water infrastructure and retrofitting water treatment facilities to handle post-wildfire contamination more effectively. By standardizing these mitigation practices and establishing pre-calculated benefits, FEMA can streamline the approval process, reducing delays and encouraging communities to proactively safeguard their water resources against the devastating effects of wildfires. This approach not only protects the environment and public health but also significantly lowers the long-term costs associated with wildfire recovery and water infrastructure repairs.

Recommendation: FEMA should incorporate pre-calculated benefits and provide detailed guidance for mitigating the impact of wildfires on water infrastructure, including water toxicity, within its mitigation framework.

In conclusion, BuildStrong America is committed to working collaboratively with FEMA to refine the Public Assistance Program and Policy Guide in a way that maximizes its impact on community resilience and disaster recovery. By addressing the challenges identified and leveraging the opportunities presented in Version 5, we can create a more robust and equitable framework that not only supports immediate recovery but also strengthens long-term resilience to reduce disaster costs. We look forward to continuing this vital dialogue and contributing to a more resilient future for all communities.

Respectfully,

Natalie F. Enclade

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[8] City of Santa Rosa Water [Online] / auth. Rosa, City of Santa. - March 22, 2018. - August 14, 2024.