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Jotham Allen
Federal Emergency Management Agency
500 C Street, S.W.
Washington, DC 20472

RE: Establishing a Deductible for FEMA's Public Assistance Program, FEMA-2016-0003

Dear Mr. Allen:

The National Institute of Building Sciences (Institute) is pleased to provide the following comments on the above referenced Supplemental Advanced Notice of Proposed Rulemaking (SANPR). The Institute commends FEMA for its leadership in identifying pathways to reduce the overall impacts of natural disasters through encouraging widespread adoption of mitigation measures. As identified in the SANPR, reducing the impacts of hazards—rather than just transferring the impacts—requires a coordinated approach engaging both federal and state government. The concept of a deductible with a related methodology to buy down the deductible through sensible investments in mitigation appears to be an effective means to reduce risk and efficiently utilize limited funding.

As you may know, the Institute was established by Congress under the Housing and Community Development Act of 1974 (P.L. 93-383) to work across the public and private sector to support advances in building science and technical criteria that improve the built environment. The Institute—through its Multihazard Mitigation Council (MMC); Building Seismic Safety Council; National Council of Governments on Building Codes and Standards; and Council on Finance, Insurance and Real Estate (CFIRE)—has a long history of supporting advancements in disaster resistance and mitigation.

As identified by the MMC in 2005, public sector investment in mitigation provides an average $4 return for every $1 invested.[1] The Council is in the process of completing a comprehensive examination of this initial finding and expansion to look at the benefits of investment in several federal programs and segments of the economy. The new study is expected to deliver initial results later this year and will provide important support for investment in mitigation. The study will specifically examine the benefits of implementing code and beyond-code requirements for specific flood, wind, seismic and wildfire strategies and the potential benefits of coordinated building retrofit activities.

[1] *Natural Hazard Mitigation Saves: An Independent Study to Assess the Future Savings from Mitigation Activities*, https://www.nibs.org/?page=mmc_projects#nhms

MMC and CFIRE have worked collaboratively to produce a report on "Developing Pre-Disaster Resilience Based on Public and Private Incentivization."[2] A copy of the report and a subsequent addendum are included with this submission and reinforce the multiple pathways available to encourage mitigation investments. In particular, they highlight the importance of development of comprehensive, multi-faceted strategies that cut across government and private sector stakeholders. While this SANPR is focused on the relationship between federal and state governments in reducing hazard risk, the Institute suggests examining where further linkages at the local level and with private sector entities can be established and leveraged.

The Institute is pleased to offer the following recommendations and comments in response to specific aspects of FEMA's proposal:

- If a state has not yet fulfilled its deductible when a presidentially declared disaster occurs, FEMA proposes that the state "identify one or more permanent work projects proposed under the disaster declaration to satisfy the remaining deductible amount." While this appears to be a fairly simple way to capture any remaining deductible funds, there does not appear to be a mechanism to assure that such projects are actually completed. Incompletion would result in states actually not meeting the deductible and ultimately impacting their future resilience. The Institute suggests FEMA examine mechanisms to assure such projects are completed. Such mechanisms could include adjusting the deductible amounts for future years.
- As recognized in the SANPR, HAZUS®MH is a valuable tool in supporting the identification of risk, but is both outdated and limited in the scope of the hazards it covers. Transparency, low barriers to utilization and replicability of results are important, but must be balanced with a comprehensive understanding of multiple hazards. To serve as a contemporary tool for estimating risk, the earthquake and wind models need to be based on the latest codes and standards. The flood model needs to be able to better approximate flooding in areas of low topography and more directly integrate the improved flood hazard data being developed by FEMA and other stakeholders. Estimating the business-related loss should also reflect the latest advancements. To facilitate the utility of HAZUS in determining multihazard risks, FEMA must invest in updating HAZUS to allow its use for additional hazards including wildfire, wind storms, extra-tropical cyclones, tornadoes and droughts.
- The establishment and funding of a dedicated disaster relief fund is an important measure of a state's ability to respond to a hazard event. However, additional clarity is needed regarding the application of such a fund. While not identified directly in the SANPR but as indicated in the Model Guidance appendix, it is important to recognize that such funds may not be centrally located, but parsed by agency, disaster type or initial source of funding. Further, as written in the SANPR it would appear that this funding (or a portion of the funding) may not actually reduce the deductible, but rather serve as pre-funding of the deductible. FEMA should consider providing some level of

[2] https://www.nibs.org/resource/resmgr/MMC/MMC_ResilienceIncentivesWP.pdf

multiplier to encourage this type of investment (maybe $1.50 to $1) and disincentivize raiding the fund during periods of reduced disasters or if the state is facing economic troubles (a time when pre-disaster resilience is most needed). Again, the Model Guidance appendix seems to provide additional clarity stating that dollars within the fund can be used for non-Stafford Act response and recovery and then be counted as credits against the deductible—if this is the case, then each dollar invested in the fund actually provides a $2 to $1 benefit. While the credit amount would be unchanged, clearly outlining this benefit may help states justify this type of investment. FEMA must also be careful to assure states do not “game” this credit by utilizing a fund to “pass through” money following a gubernatorial declaration.

- As reinforced by the MMC’s 2005 study, investments in mitigation provide a multi-fold benefit. The $3 to $1 benefit for mitigation measures identified by FEMA is generally consistent with these findings. The lack of a total cap on such investments is appropriate given the benefits, but FEMA may wish to consider placing a cap (although fairly high) on individual measures that could be implemented to assure the state implements a diverse approach that addresses multiple hazards. Further, a more nuanced approach than annual expenditure may be advised if a state is undertaking a comprehensive program to establish long-term investments in this area. A state may invest significant funds to establish a program with a lower funding amount needed to maintain the program. It may be advantageous to allow a state to declare upfront that a portion of these funds be applied to future years (which should be limited to the authorized life of the program as long as additional maintenance funds are appropriated). To encourage states to leverage their funding to support local mitigation measures and private sector investments, FEMA may wish to consider some level of recognition for cost share requirements from local government or the private sector (this could be at less than $1 to $1). This would allow limited funding to go further while encouraging additional investments. It would also capture the influence states can have on investments that improve overall resilience.
- The regular adoption and effective enforcement of building codes is an essential component of any strategy to increase resilience. The Building Code Effectiveness Grading Schedule (BCEGS) system does provide a mechanism for evaluation of a state’s status in this regard. However, the score alone does not indicate a states’ resilience. Construction volume is an important related metric that when combined with BCEGS, provides an indication of the penetration of code provisions into the building stock (e.g., if there is limited new construction or major renovations then codes will have limited impact). FEMA should consider developing a combined metric linking building code effectiveness and construction volume.
- Third-party accreditation of activities within the state is an important means of establishing and maintaining best practices. FEMA should leave the door open for rigorous, third-party rating and evaluation tools beyond the Environmental Monitoring and Assessment Program (EMAP) that meet the intent of increased resilience. Currently, the Alliance for National and Community Resilience (ANCR) is in the process of developing a benchmark system for whole community resilience. The

Institute recommends that FEMA leave open the potential to recognize additional accreditations or ratings that demonstrate a state's resilience.

- When implementing a multiplier (such as for EMAP accreditation) on a credit value that is capped, the multiplier should be on top of the amount invested up to the cap (meaning the credit with the multiplier could exceed the cap amount).
- Because all states are different and often serve as incubators for creative strategies to address pressing issues, FEMA should consider establishing an "other" category for credits—limited to a $1 to $1 ratio—where states can propose additional measures for credit. Of course, credits in this category should be subject to FEMA review to determine their effectiveness and contribution to the overall reduction in the cost of disaster response. Proposals that achieve such credit should be shared with the states and other stakeholders to advance the dialogue and allow additional states to propose similar measures.
- While states are the primary interface for the sub-national implementation of mitigation measures and the receipt of FEMA Public Assistance funds, significant investments are made at the local levels, which reduce the impacts of specific disasters. It may not be practical to account for such actions in a state-level evaluation of credits, but an evaluation may be conducted on a disaster-by-disaster basis to identify credits towards the deductible (which the state could subsequently pass on to the community's share of the recovery costs). Local efforts recognized could be similar to credits offered at the state level including investments in mitigation measures, the effectiveness of their building codes (which may be better than at the state level), accreditations and even their participation in the Community Rating System under the National Flood Insurance Program. It would be beneficial to clearly define the process how such local credits would be calculated in advance of the disaster.
- Given the shift in policy presented by the deductible and the potential costs imposed on states, FEMA is wise to consider a phased approach to implementation. However, by reducing the credit amount available during the implementation period to a proportion relative to the final deductible FEMA could delay implementation of mitigation measures. Once a deductible is implemented, states should be able to claim credit for all appropriate measures that increase resilience.
- The Institute agrees with FEMA that the deductible concept provides a coordinated approach across federal and state governments to reduce overall spending on disaster recovery through reducing exposure and encouraging cost-effective investments in mitigation activities. The alternative approach of simply raising the per capita indicator on its own does not increase resilience. It may send a signal to states to invest in resilience, but it does not provide the direction or incentives that the deductible approach provides. It simply redistributes the costs of such disasters.

While the deductible is an important step in reducing the costs post-disaster, FEMA must maintain a strong pre-disaster mitigation program to further reduce the need for post-disaster response. As clearly indicated in *Natural Hazard Mitigation Saves*, mitigation investments are highly cost effective. Advancing the deductible concept while reducing mitigation funding, or emphasizing response and recovery at the expense of mitigation, is counterproductive and limits the effectiveness of both strategies.

The Institute looks forward to continuing to work with FEMA and state and local governments to identify effective strategies to increase resilience and lessen the impacts of hazards on communities and the nation as a whole.

Respectfully Submitted,

Henry L. Green, Hon. AIA
President

Enclosure