



October 27, 2022

The Honorable Marcia Fudge, Secretary
U.S. Department of Housing and Urban Development
Regulations Division, Office of General Counsel
451 7th Street SW, Room 10276
Washington, DC 20410

RE: The Department of Housing and Urban Development Green and Resilient Retrofit Program (GRRP): Request for Information [Docket No. 2022-20855]

Dear Secretary Fudge,

As you may know, the American Institute of Architects (AIA) is committed to protecting the health, safety, and welfare of the public. Since 1857, this concern is central to all that we, as architects, do. As a key component of this goal, AIA works to support federal initiatives that ensure equitable and climate-conscious policies that positively impact the built environment, with particular emphasis placed on the Department of Housing and Urban Development (HUD)'s affordable housing programs. AIA writes to you today to provide our recommendations to HUD's public "Request for Information on the Green and Resilient Retrofit Program (GRRP)."

AIA represents over 94,000 architects and design professionals throughout the world, including many who specialize in affordable housing design. AIA appreciates HUD's commitment to improving the resilience and equitable development of affordable housing through the recently enacted "Inflation Reduction Act (IRA)." Designing for greater energy efficiency, resilience, and equity is a top priority for practicing architects.

However, because of often tight delivery schedules imposed by housing developers and authorities, architects are regularly pressured to design to minimal standards without public input. AIA welcomes greater stakeholder participation to provide valuable opportunities for local communities to communicate feedback on the homes meant to serve their needs.

Specific Information Requested

- 1) How can these measures and practices be deployed in a way that preserves the affordability of our properties?***
- 2) How might HUD factor in cost-effectiveness when evaluating applications for energy- and/or resilience-related projects?***

AIA recommends that HUD place a greater emphasis on climate assessments and specific design considerations as part of HUD's consideration to ensure the GRRP is prioritizing best practices for reducing energy consumption, improving housing resilience and equity, and improving indoor air quality. All HUD projects related to this (including for new or retrofit construction) should begin with a site-specific climate assessment that analyzes the geographical site and existing facilities.

Additionally, unless such an analysis indicates that managed retreat is required, the service lifespan for any HUD project should be lengthened, ideally to one hundred years. HUD should also actively consider considerations such as climate change-related impacts to the service life of the building (or projections of the service warranty life of the mechanical system and primary building envelope components). HUD should also work with stakeholders to review site-specific design features to alleviate climate-related building pressures, and consider locally available funding sources (such as Low-Income Housing Tax Credits, State-specific funding opportunities, etc.).

The Environmental Protection Agency (EPA) projects that mortality caused by poor air quality will be the single largest cause for economic losses as the U.S. faces climate realities in the coming decades.ⁱ To proactively address this reality, AIA recommends HUD consider implementing the ventilation requirements of ASHRAE 90.1 as part of the GRRP to ensure that all HUD-subsidized affordable housing units have high-quality ventilation systems with energy recovery ventilators, including minimum standards for filters. This will be critical in the case of a future pandemic spread through airborne illness, as the last few years of the COVID pandemic have demonstrated the critical role that indoor air quality plays in public health.

Energy storage must also be a top priority for HUD to consider, especially to alleviate problems during electric grid outage situations. Conventional battery systems are not always operational or usable during grid outages when housing occupants need them most. AIA recommends that HUD develop a pilot strategy for testing grid resilience measures to determine what key elements of these systems should be improved to ensure operability during extreme weather events.

Greater emphasis on adequate cooling assets should also be a focus for the GRRP. Many regions in the U.S., especially in the Pacific Northwest, are increasingly experiencing higher temperatures than for which the building stock was designed. In 2021, more than six hundred people died in Oregon and Washington from extreme heat,ⁱⁱ many of them elderly and living in affordable housing. Given that many jurisdictions do not require air conditioners as part of their building codes, we urge HUD to consider region-specific minimum standards for cooling HUD-subsidized affordable housing projects throughout the U.S. as heat events grow in severity and regularity.

3) *How might HUD encourage or require applicants to leverage other funding projects – such as owner equity, other federal, state, local, and/or utility grants, loans, rebates, tax credits, and incentives?*

To encourage HUD applicants to leverage other funding sources, AIA recommends that HUD partner with state and local authorities to provide an analysis of federal, state, and local funding opportunities for affordable housing development. Many architects who specialize in affordable housing development find it difficult to locate and apply for alternative local funding opportunities to help source these projects. This analysis would be especially helpful for developers in rural areas that often struggle to reach additional funding streams.

4) *While HUD seeks to maximize impact, how can HUD best ensure that funding is distributed equitably?*

AIA recommends that HUD develop transparent and public-facing processes. More specifically, AIA recommends that HUD minimize funding applications that require the need for an original template to be submitted by the applicant (which is currently the case for most federal and HUD-related applications). AIA recommends that HUD also utilize applications that simply require fields to be filled in by an applicant through a prebuilt template. Oftentimes, state and local funding applications do not require unique and original templates to be submitted by an applicant, making it much easier for less affluent and resourced jurisdictions to apply for additional housing funding.

5) *What incentives, financial support, and/or technical support would encourage owners to participate and get their properties benchmarked?*

AIA recommends two approaches to encourage building owners to get their properties benchmarked for energy and water use. First, AIA recommends that HUD provide greater support and resources to increase capacity for professionals evaluating building performance. Architects recognize a clear need for additional energy auditors and related professionals, as many jurisdictions simply do not have the capacity to conduct evaluations for buildings in their respective jurisdictions.

It would be immensely helpful for HUD to provide robust financial support to fund and train building evaluators, including building code enforcement officials, with a goal to build capacity nationwide for all housing jurisdictions.

Additionally, any information or databases that HUD controls related to energy and water use benchmarking should be available to the public through a national database. Doing so could create transparency and incentivize businesses and others by enabling building owners to compare their respective buildings' energy and water efficiency with other similar project cases within the database.

6) *What equity considerations should HUD consider when implementing property retrofits and benchmarking?*

Historically, some incentives have served to entrench existing disparities by providing federal assistance to better-resourced communities with the capacity to complete federal financial assistance applications. HUD must target GRRP programmatic impacts to disadvantaged and under-resourced communities to ensure that federal assistance is improving the lives and housing of those Americans most in need.

7) How should HUD balance geographic disparities in the needs for resilience interventions (i.e., more frequent in coastal areas) and the availability of other funds, from HUD and other agencies, for recovering from disasters?

For HUD to effectively balance geographic disparities to better assess the needs for resilience intervention, AIA recommends HUD analyze local environmental risks and building occupant health metrics in their prioritization for federal investment. HUD should consider these factors through a priority-setting process that utilizes site-specific climate assessments to calibrate federal assistance to areas identified in need of additional assistance.

In advance, we thank you for your review of AIA's recommendations for HUD's Green and Resilient Retrofit Program. As you and your team review official comments, please also feel free to utilize [AIA's new Resilience Project Process Guide](#).ⁱⁱⁱ This AIA resource is meant to support architects in designing a resilient, climate-adaptive built environment.

Please do not hesitate to contact me if you have any additional questions or would like more information from AIA.

Sincerely,



Sarah Dodge
Senior Vice President of Advocacy and Relationships
The American Institute of Architects

ⁱ https://www.epa.gov/system/files/documents/2021-10/technical-documentation-on-the-framework-for-evaluating-damages-and-impacts_maintext.pdf

ⁱⁱ <https://www.nytimes.com/interactive/2021/08/11/climate/deaths-pacific-northwest-heat-wave.html>

ⁱⁱⁱ https://content.aia.org/sites/default/files/2022-06/AIA46_Resilient_Process_061422.pdf