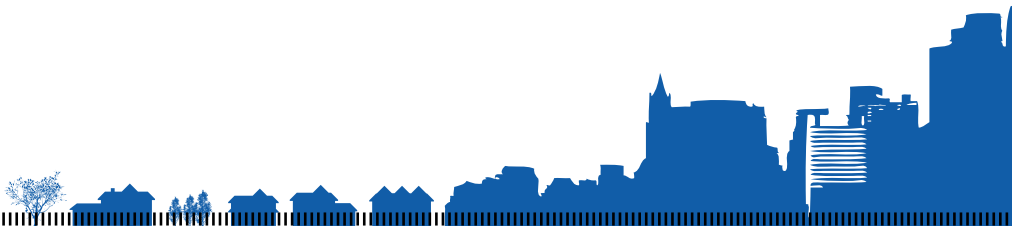


Advancing HUD's Learning Agenda through Cooperative Agreements with Historically Black Colleges and Universities, Hispanic Serving Institutions, Tribal Colleges and Universities, and Alaska Native/ Native Hawaiian-Serving Institutions

Short White Paper on American Indian, Alaska Native, and/or Native Hawaiian Housing Needs



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Introduction

The Office of Policy Development & Research (PD&R) within the U.S. Department of Housing and Urban Development (HUD) recently published a Notice of Funding Opportunity (NOFO) titled *Advancing HUD's Learning Agenda through Cooperative Agreements with Historically Black Colleges and Universities, Hispanic Serving Institutions, Tribal Colleges and Universities, and Alaska Native/Native Hawaiian-Serving Institutions*. Through this funding opportunity, PD&R seeks to fund quality research that contributes to knowledge on housing and community development and to support minority-serving institutions to conduct housing and community development research important to the communities and students the institutions serve. Applicants for funding must submit a research project proposal that addresses one of the specific research questions featured in the NOFO.¹ The research questions are broadly organized under seven topic areas: (1) Community Development and Place-Based Initiatives, (2) Disaster Recovery, (3) Fair Housing, (4) Homelessness, (5) Homeownership, Asset Building, and Economic Opportunity, (6) Housing and Health, and (7) American Indian, Alaska Native, and Native Hawaiian Housing Needs.

This short white paper is designed to provide a high-level overview of the current state of the research within the topic area of American Indian, Alaska Native, and/or Native Hawaiian Housing Needs, references to foundational studies related to American Indian, Alaska Native, and/or Native Hawaiian Housing Needs, and the general context for the research questions that are included in this NOFO. This paper is designed to provide potential applicants with a common grounding in the topic as they consider this new funding opportunity.

Background

The United States has unique trust and treaty obligations to American Indian tribes and Alaska Native villages and maintains a government-to-government relationship with Native American governments. The Native American Housing Assistance and Self-Determination Act of 1996 (NAHASDA), which governs HUD's Native American programs, commits HUD to provide federal assistance in a manner that recognizes Indian self-determination and tribal self-governance (<https://www.ecfr.gov/current/title-24/subtitle-B/chapter-IX/part-1000>). HUD's programs for Indian tribes and Alaska Native villages include Indian Housing Block Grant

¹See a full list of the research questions in Section III.G under the subheading "Eligible Research Questions."

(IHBG) programs (one formula and one competitive program), loan guarantees, the Indian Community Development Block Grant, and Tribal HUD-VASH (housing assistance for homeless Veterans).

Native Hawaiians do not have a formal government-to-government relationship with the United States; however, since establishment of the Hawaiian Home Lands Trust in 1921, Congress has recognized a special trust relationship with the Native Hawaiian community. In 2000, Congress amended NAHASDA, adding Title VIII, which provides funds to the Department of Hawaiian Home Lands to support housing for low- and moderate-income Native Hawaiian families.² HUD's programs for Native Hawaiians include the Native Hawaiian Housing Block Grant that supports building and operating housing for low- and moderate-income Native Hawaiians and a housing loan guarantee program.

Access to affordable, safe, and resilient housing remains a significant challenge in many native communities. High construction costs, limited local resources, remote locations, and climate and extreme weather events create barriers to meeting housing needs, while overcrowding and inadequate infrastructure exacerbate existing disparities (Pindus et al. 2017). Financing the construction and maintenance of affordable housing in tribal areas remains challenging. The nuances of trust land and unique ownership structures, along with complex funding structures, compound issues of largely stagnant funding under NAHASDA. In 2017, there was an estimated shortage of 68,000 housing units in tribal areas (Pindus et al. 2017).

Studies such as the Annual Homelessness Assessment Report (AHAR) have shown high rates of homelessness among American Indians, Alaska Natives, and Native Hawaiians. Research suggests this is due to poverty and housing shortages in tribal and other areas. Experts also argue that homelessness in tribal areas is hidden to some extent because families are more likely to double up with friends or family than to be literally homeless, that is to live in a place not meant for human habitation (Pindus et al., 2017; Wilder Research, 2020).

In 2017, HUD published four reports based on a comprehensive assessment of Native American housing needs (Corey et al., Levy et al., Listokin et al., Pindus, et al.). Pindus et al. (2017) showed that housing conditions are substantially worse among American Indian and Alaska Native (AIAN) households than among all U.S. households, with overcrowding in tribal areas being especially severe. A key finding is the regional variation in housing conditions.

Deficiencies in plumbing and/or kitchens were found in 6 percent of all Native American households in tribal areas, but the rate was 17 percent in Arizona and New Mexico and 21 percent in Alaska. Overcrowding in the absence of any other housing problem was found in 8

² HUD programs under NAHASDA serve low- and moderate-income Native Hawaiians who are eligible to reside on the Hawaiian home lands as determined by the Hawaiian Homes Commission Act.

percent of AIAN households in tribal areas, but the rate was 15 percent in Alaska, 14 percent in Arizona and New Mexico, and 13 percent in the Northern Plains.

Although a smaller proportion of Native Americans live in urban areas than is true for other racial groups, the majority of Native Americans live in urban areas. HUD's 2017 report found that Native Americans in urban areas were equally likely to have a high housing cost burden as other racial groups, but their homes were less likely to have complete plumbing and kitchens and were more likely to be overcrowded (Levy et al., 2017).

HUD's 2017 report on housing needs of Native Hawaiians focused on the needs of Native Hawaiians eligible for a lease on trust land administered by the Department of Hawaiian Home Lands (DHHL). HUD's Native Hawaiian Housing Block Grant (NHHBG) assists low-income (up to 80 percent of AMI) households that are eligible for a home lands lease and almost exclusively funds home ownership programs. The study shows the benefits of homeownership in the home lands (decreased cost burden, decreased overcrowding), but also finds that households on the waiting list for a home lands lease who had often rejected a lease offer often did so because they would not qualify for a mortgage or could not re-locate. Compared to other Native Hawaiian families, families on the waiting list for a home lands lease were more likely to be cost burdened, much more likely to be overcrowded, and more likely to report living in a home lacking complete plumbing. Stakeholders argued that Native Hawaiians need more affordable housing options, including rental housing.

To address these issues, it is important to consider tribal self-determination and sovereignty. For instance, HUD's pre-NAHASDA Indian housing production program was criticized for building housing not sensitive to tribal cultures and environments. Homes with the same design were built in New Mexico and Alaska. In contrast, case studies of successful housing initiatives in AIAN communities highlight best practices, uncover challenges, and provide actionable insights that can be adapted and scaled across diverse tribal contexts, ultimately enhancing the ability to meet critical housing needs (see Blosser et al, 2013; Gangarao et al, 2020; Lantz and Appelbaum, 2014). HUD's Office of Policy Development and Research and Office of Native American Programs supported a demonstration of culturally appropriate housing which revealed the potential of collaborative learning approaches to develop tribal capacity, ensure acceptance for sustainable technologies, and allow for cultural expression in housing design (Blanford et al., 2013).

Research Questions of Interest Related to American Indian, Alaska Native, and Native Hawaiian Housing Needs

HUD is interested in research proposals that address one of the following policy-relevant research questions, which are adapted from [HUD's Learning Agenda](#):

Construction-related topics

1. How do residential construction costs differ between tribal and non-tribal areas and what drives these cost differences? Does use of federal financing for residential construction increase costs in tribal areas in ways that are different than non-tribal areas?
2. Can use of innovative building technologies (such as modular, panelized, or 3D printing technology) and/or local sources of building components and materials in tribal areas reduce residential construction costs, improve energy efficiency, and/or improve resilience to natural hazards?
3. Are there model tribal building codes that could help reduce the cost of construction and improve climate resiliency? Do tribal nations adopt, modify, or enforce state or local building codes, and if so, how?
4. Is factory-built housing (manufactured or modular housing) an effective solution to housing challenges in tribal communities, e.g., affordability, shortage, and overcrowding? If so, how can these models be scaled up?
5. What strategies are institutions in tribal communities, including Tribal Colleges and Universities (TCUs), implementing to produce skilled laborers needed to close local housing construction workforce gaps? What types of training are most needed? What specific housing construction demand is being targeted? What is the estimate of the gap and/or needed laborers in the pipeline?

Culturally appropriate housing and community development

6. What are culturally appropriate housing designs and design features that tribal communities consider as minimal standards for establishing a sense of connectedness with tribal lands and tribal heritage? What are the most effective approaches to gathering culturally informed design information and how might approaches vary by segments of the tribal population?
7. What features and design standards are recommended to address multigenerational living in tribal communities and the integration of elders into the community when building or rehabilitating housing and, in particular, supporting residents' ability to age in place?

Disaster resilience and recovery

8. What are effective disaster preparedness recovery, mitigation, and adaptation strategies undertaken by one or more tribal communities in response to natural hazards and disasters of one or more types, including the COVID-19 pandemic?

Financing

9. What are innovative approaches to or models of financing the construction and maintenance of affordable housing in tribal areas, and how can these approaches or models be scaled and applied to other tribal areas?

Homelessness

10. How does homelessness in tribal communities present differently than homelessness in non-tribal communities, and what are effective ways to better measure the extent of homelessness in tribal communities?

Context for the Research Questions of Interest

Additional context for each of the ten research questions of interest is discussed in greater detail below.

Question 1: How do residential construction costs differ between tribal and non-tribal areas, and if so, what drives these cost differences? Does use of federal financing for residential construction increase costs in tribal areas in ways that are different than non-tribal areas?

Residential construction costs often vary significantly between tribal and non-tribal areas. Key drivers of these cost differences include remoteness, limited access to materials, scarcity of skilled labor, and infrastructure challenges in many tribal lands. Costs can be further influenced by specific regulations and compliance requirements for tribal lands, such as adherence to Tribal Employment Rights Ordinances (TERO) or other tribal preferences in contracting, which can affect project timelines and expenses. Additionally, federal financing for tribal housing construction may introduce unique cost considerations compared to non-tribal projects. For example, projects funded through federal programs often require adherence to specific environmental, historical, or cultural assessments that add layers of complexity and cost that are not as prevalent in non-tribal areas. Some tribes have reported that HUD funding limits, known as total development costs or TDC, are not adequate to cover the cost of the unit and associated development costs (infrastructure such as roads, utilities, and storm water management). Furthermore, prevailing wage requirements under Davis-Bacon and other federal mandates can increase labor costs for federally financed projects in tribal areas, particularly if local labor is scarce and contractors need to bring in outside workers.

Question 2: Can use of innovative building technologies (such as modular, panelized, or 3D printing technology) and/or local sources of building components and materials in tribal areas reduce residential construction costs, improve energy efficiency, and/or improve resilience to natural hazards?

The adoption of innovative building technologies, such as modular (Levitt, 2014), panelized (see Appendix C-3, Lantz and Appelbaum, 2020), and 3D printing (Rekhi and Stern, 2022), holds

significant promise for reducing construction costs, enhancing energy efficiency, and improving resilience to natural hazards in tribal areas. Sometimes the innovation can simply be a return to historical methods of construction (see Appendix C-5 Lantz and Appelbaum 2014, Bowen 2017, Gangarao et al. 2020). These technologies can offer cost savings by enabling off-site fabrication, reducing waste, and expediting project timelines, which is particularly beneficial in remote tribal areas where transportation costs and delays are common. Additionally, using locally sourced materials can minimize shipping costs and promote sustainability, and locally sourced labor can stimulate the local economy. By improving the resilience of housing structures, such as through flood-resistant, wild fire-resistant, or seismic-resistant designs, these technologies also offer long-term benefits by reducing vulnerability to natural hazards (Home Innovation Research Labs, 2023).

Question 3: Are there model tribal building codes that could help reduce the cost of construction and improve climate resiliency? Do tribal nations adopt, modify, or enforce state or local building codes, and if so, how?

Model building codes specific to tribal contexts could serve as a tool for reducing construction costs and enhancing climate resilience (Lantz and Appelbaum, 2014). While some tribes develop and enforce their own codes or modify state and local building codes to meet unique needs, a lack of uniform standards can pose challenges. Tailored codes that reflect local environmental and cultural factors can ensure that structures are built to withstand specific climate conditions while aligning with local values. Collaborative efforts to create standardized yet adaptable tribal building codes, perhaps drawing from successful models in other communities, could reduce costs by providing clear guidelines and helping to streamline the approval process for construction projects, especially those involving innovative materials and methods. The U.S. Environmental Protection Agency offers a Tribal Green Building Toolkit (EPA, 2024). The toolkit includes guidance, samples, and case studies for tribal green building.

Question 4: Is factory-built housing (manufactured or modular housing) an effective solution to housing challenges in tribal communities, e.g., affordability, shortage, and overcrowding? If so, how can these models be scaled up?

Factory-built housing, such as manufactured or modular homes, offers a viable solution for addressing housing shortages, affordability, and overcrowding in many tribal communities (HUD, 2020). These homes can be built more quickly and cost-effectively than traditional site-built homes, with the added advantage of consistency in quality control (Rekhi and Blanford, 2020). Factory-built housing is often designed with energy efficiency in mind, which can reduce ongoing utility costs for residents. Scaling up factory-built housing on tribal lands, however, requires investment in infrastructure to transport and install units and policies that encourage such models. Partnerships with manufacturers or modular housing firms could facilitate bulk purchases and technical support, making this model a scalable option to address chronic housing challenges.

Question 5: What strategies are institutions in tribal communities, including Tribal Colleges and Universities (TCUs), implementing to produce skilled laborers needed to close local housing construction workforce gaps? What types of training are most needed? What specific housing construction demand is being targeted? What is the estimate of the gap and/or needed laborers in the pipeline?

Addressing housing needs in tribal communities requires a skilled labor force, and tribal institutions, including Tribal Colleges and Universities (TCUs), play a critical role in producing skilled construction workers (Lantz and Appelbaum, 2020). Many tribal communities are implementing training programs that focus on trades such as carpentry, plumbing, and electrical work, which are essential to housing construction. Training in sustainable construction techniques and climate-resilient building practices is also becoming a priority, aligning with broader efforts to enhance resilience in tribal housing. Current estimates suggest a significant gap in the skilled construction workforce, particularly on tribal lands. Labor shortage is exacerbated by both the overall housing demand and the need to replace aging infrastructure. Expanding access to apprenticeship programs and partnerships with trade unions could help bridge this gap, enabling local talent to fulfill tribal housing demands and reduce reliance on outside labor.

Question 6: What are culturally appropriate housing designs and design features that tribal communities consider as minimal standards for establishing a sense of connectedness with tribal lands and tribal heritage? What are the most effective approaches to gathering culturally informed design information, and how might approaches vary by segments of the tribal population?

Culturally appropriate design in housing and community development is of unique importance in tribal areas, as tribes have a great diversity of cultural preferences and local needs. Though common themes exist with regard to the importance of the natural environment and sustainability as well as supporting a sense of community and tradition, the ways in which tribes accomplish these goals vary widely.

HUD's Sustainable Construction in Indian Country Report (Lantz and Appelbaum, 2014) highlights several tribes' insights for climate adapted and resilient housing design. For example, a recent project in the Nez Perce Tribe located housing clusters around a common area with the entrances to the East and designed their housing structures to offer the familiar shape of traditional teepees—both calling to mind traditional practices and offering functional adaptation to the local climate by keeping wind and elements out of the homes and offering greater shade and protection. Another example of traditional building design is the octagonal-shaped houses developed in the Native Village of Kwinhagak, Alaska, which offers enhanced energy efficiency due to its low surface area to volume.

Traditional Knowledge can also inform the approach to climate adaptation and water management, suggesting options to reinforce infrastructure to withstand or adapt to climate change, using natural or “low impact” design where possible (Tribal Adaptation Menu Team,

2019). For example, plans from the Pokagon Band of Potawatomi Indians situated housing in a way that reduced land fragmentation and protected traditional drainage patterns, and they added bioswales and rain gardens as natural alternatives to storm sewers (Lantz and Appelbaum, 2014).

Question 7: What features and design standards are recommended to address multigenerational living in tribal communities and the integration of elders into the community when building or rehabilitating housing and, in particular, supporting residents' ability to age in place?

In addition to being a cultural preference of some tribes, multigenerational designs can be well suited to both fostering a sense of connectedness as well as supporting the needs of more vulnerable members of the community. For example, HUD's 2017 study found that Native Hawaiians often prefer larger homes with outside areas to support multigenerational and extended family ("ohana") living and socializing (Corey et al, 2017). In another example, a development created by the Mississippi Band of Choctaw Indians featured a series of duplexes designed to support the needs of elderly and disabled members of the community (Lantz and Appelbaum, 2014). Intergenerational living may also offer some respite from the challenges of housing affordability and childcare needs (Generations United, 2014).

Question 8: What are effective disaster preparedness recovery, mitigation, and adaptation strategies undertaken by one or more tribal communities in response to natural hazards and disasters of one or more types, including the COVID-19 pandemic?

Tribal communities are on the front line of rapidly increasing disaster risk and climate change, as they face the impacts of wildfires, flooding, water scarcity, erosion, and rising sea levels (First Nations Development Institute, 2023). At the same time, they hold valuable knowledge and expertise that can play a critical role in reducing disaster risk and mitigating climate impacts. Many tribes are leading Traditional Knowledge-based solutions. To create effective disaster preparedness recovery, mitigation, and adaptation policies, it is essential to understand the strategies of tribal communities such as cultural burning to prevent wildfires and sustain biodiversity, clam bed restoration to address food security and carbon sequestration, and dryland farming to conserve water resources (First Nations Development Institute, 2023). One case study is the recovery efforts of the Santa Clara Pueblo Tribe following the 2011 Las Conchas Fire (Federal Emergency Management Agency (FEMA), 2023).

In 2024, the Alaska Native Tribal Health Consortium produced the report, "Unmet Needs of Environmentally Threatened Alaska Native Villages," (Alaska Native Tribal Health Consortium, 2024). In addition to highlighting the unmet needs of these communities, the report offers a conceptual implementation framework, as well as a myriad of case studies that include strategies such as managed retreat, relocation, reconstruction of a protective levee, and armoring riverbanks. It has been demonstrated that planning and risk assessments are effective ways to prepare and identify nuanced solutions. What is not often known is how to effectively braid funding to implement plans.

Question 9: What are innovative approaches to or models of financing the construction and maintenance of affordable housing in tribal areas, and how can these approaches or models be scaled and applied to other tribal areas?

While modest increases in NAHASDA funding have been made in recent years, funding has been largely stagnant or even reduced over the past 25 years. The Association of Alaska Housing Authorities found that HUD funding for Native American housing has decreased by 29% when accounting for inflation (Espinoza and Orbach, 2024). A significant portion of HUD funding allocated to tribes is used for the operation and maintenance of existing housing units, leaving insufficient funds for the construction of new homes. As a result, many tribes are hesitant to build new housing due to the lack of resources for both construction and ongoing maintenance. In 2017, HUD’s Native American Housing Needs Study estimated that 68,000 additional units would be needed to both replace severely inadequate units and eliminate overcrowding in tribal areas (Pindus et al. 2017).

The financing of the construction and maintenance of affordable housing in tribal areas often requires specialized knowledge and complex funding structures. Determining ownership, dealing with trust land, and the patchwork of ownership structure on some reservations are often barriers to accessing traditional financing. Tools such as Enterprise Community Partners’ Native Housing Developers Guide, as well as their Tribal Leaders Handbook on Homeownership and companion guide, aim to provide support and guidance to address this complex issue (Enterprise Community Partners, Inc., 2021). There remains a need for studies that highlight specific innovative approaches or models that can be scaled and applied to other tribal areas.

Question 10: How does homelessness in tribal communities present differently than homelessness in non-tribal communities, and what are effective ways to better measure the extent of homelessness in tribal communities?

HUD’s Annual Homelessness Assessment Report (AHAR) provides point-in-time estimates of the number of people experiencing homelessness, including estimates by race and ethnicity. In 2023, HUD estimated there were 23,116 American Indians, Alaska Natives, and Indigenous people experiencing homelessness, accounting for 2.6 percent of the sheltered and 4.9 percent of the unsheltered homeless population. About 3 percent of the U.S. population is estimated to be Native American, so the AHAR estimates show an overrepresentation of this group among people experiencing homelessness (<https://www.huduser.gov/portal/sites/default/files/pdf/2023-AHAR-Part-1.pdf>). According to tribal experts, however, these data are limited partly because many Native Americans in tribal areas would be homeless if they were not doubling up with family or friends. This situation has been termed “near homeless” (Wilder Research, 2020), and these households are not captured in HUD’s data.

HUD’s 2017 study of Native American housing needs (Pindus et al., 2017a) produced the first national estimate of “near homelessness” in tribal areas. The estimate was based on a household survey that captured the number of people who would have been homeless if they weren’t living

with relatives or friends. Tribal housing experts informed the research team that literal homelessness, defined as living in a place not meant for human habitation, was less common in tribal areas than “near homelessness,” defined as living with relatives or friends because you have nowhere else to stay. Consequently, the household survey included the items to capture near homelessness by asking respondents if anyone was living with them only because they had nowhere else to go. (The exact survey items are available in the technical appendixes to the study in Pindus et al., 2017b). Data analysis showed that 17 percent of American Indian and Alaska Native households included members staying with them only because they had no other place to stay. Based on the number of households with near homeless members and other information collected about the household members, the researchers estimated the number of near homeless people in tribal areas to be between 42,100 and 84,700 (Pindus et al., 2017a).

Although innovative, this approach left many questions about homelessness in Native American communities unanswered. The study did not estimate the number of literally homeless Native Americans in tribal areas. The 2017 report did not capture the number of near or literally homeless Native Americans in the United States who are *not* in tribal areas or who *are* in urban areas. The study did not examine regional and tribal variations in prevalence, types, and notions of homelessness. Methodologically, HUD’s 2017 report was based on household survey methods and analysis of American Community Survey data. Today, newer methods for counting people experiencing homelessness are being developed and applied, such as using remote sensing data.

HUD is interested in projects that contribute to understanding the types of homelessness in tribal communities and improving methods for measuring homelessness in tribal communities.

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Office of Policy Development and Research
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