

Participatory Models of Housing

Promising Design Practices for Affordable Housing on Tribal Lands

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About the Author

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Introduction

In the US, 22 percent of households in tribal areas either have severely inadequate housing or are overcrowded—or both.¹ This reality is abysmal, especially in comparison with the significantly higher quality of housing on nontribal lands. Furthermore, projects funded, designed, and/or run by the US Department of Housing and Urban Development (HUD) are often poorly built and designed in ways that do not respect cultural norms, perpetuating the economic instability implicit in inadequate housing. Simultaneously, there are several promising nascent efforts to develop housing that is affordable, higher-quality, and culturally sensitive. This paper examines three such efforts with reference to the following questions.

1. How do Native design practitioners define Native and culturally sensitive design?

2. How can design uplift Native communities? How can design create self-determination for tribes?

3. What current design practices exist that have been successful in addressing housing needs on tribal lands?

4. How do current design practices relate to past methods of housing construction on tribal lands?

5. How does federal policy influence the design decisions practitioners are able to make with tribal housing?

Methodology

In this paper, I seek to understand how the design processes of three organizations can improve Native affordable housing projects within tribal lands in the US. I first outline the current state of housing on tribal lands, including its present conditions and the history of policy governing Native housing. Rooted in existing literature and my conversations with Native practitioners, I then discuss the meanings and applications of Native design. The concept of design is widened here to include both the process by which a house is planned and constructed and the physical characteristics of the house itself. Finally, I analyze three case studies to pull out promising ways practitioners can leverage design to improve housing conditions. In this paper, I focus on design; however, in analyzing affordable housing practices, I necessarily incorporate financing, construction, and policy into my investigation.

In researching a topic that is sensitive due to the history and ongoing discrimination against Native populations, I sought to consult existing data and research as well as speak with Native practitioners. I reviewed literature, policy, and data to comprehend current conditions on tribal lands and examine the history of housing policies and design in Native areas. I also conducted interviews with experts and visited sites to understand the realities of Native housing in the Southwest. All knowledge about Native experience shared in this paper comes directly from interviews with housing practitioners affiliated with Native territories and/or projects, as well as site visits to housing projects on tribal lands. Those interviewed included architects, construction workers, financial experts, and leaders of housing financing and construction organizations and agencies.

Following the literature review and interviews, I identified notable efforts to develop design approaches that better respond to needs on tribal lands. The three case studies I include are the Pueblo of Jemez Housing Authority (POJHA) in New Mexico, Native Partnership for Housing (NPH) in New Mexico, and come dream. come build. (cdcb) in the Rio Grande Valley in Texas. cdc b works closely with a nonprofit architectural firm called buildingcommunityWORKSHOP ([bc]), which I mention in the case study. The first two organizations work in the Southwest. I focused on this region because of the comparatively high population of Native people, intense housing need, and the existence of traditional building aesthetics. Although the final organization, cdc b, is in Texas and does not yet work with Native communities, I include it here because it is currently working on an affordable housing

model that will soon be tested on tribal lands in collaboration with Native groups.

Part I: The State of Housing on Tribal Lands



Self-built house on the Navajo Nation

Courtesy of Navajo Engineering and Construction Authority

“...as of the 2013–2015 period, it would have been necessary to build around 33,000 new units to eliminate the overcrowding of the AIAN population in tribal

areas and another 35,000 new units to replace units that were severely physically inadequate, yielding a total need of around 68,000 new units”

- Housing Needs Assessment (2017)

1a: Present Conditions

The state of housing on tribal lands is the result of centuries of discriminatory policies. As such, the economic realities of Indigenous people and the deteriorated states of the housing stock are significantly worse than in other regions of the US. High poverty rates, unsafe living conditions, and overcrowding—which became especially harmful during the COVID-19 pandemic—are common in Native communities. Past projects undertaken by HUD and current federal regulations have not adequately supported the construction of high-quality housing on tribal lands.

According to the 2017 “Assessment of American Indian, Alaska Native, and Native Hawaiian Housing Needs” by HUD, the poverty rate in American Indian and Alaska Native (AIAN) tribal areas was 32 percent (2006–2010), nearly double the

average US rate of 18 percent.² The report also found that the share of households with plumbing deficiencies on tribal lands was 6 percent, compared with 1 percent for the US. Heating deficiencies were found in 12 percent of AIAN households, compared with 2 percent of households in the US. Lastly, overcrowding was an issue for 16 percent of tribal households, compared with 2 percent in the US.³ Tribal regions with the most severe levels of overcrowding included the Plains, New Mexico/Arizona, and Alaska.⁴ These living conditions were particularly harmful during the COVID-19 pandemic, when infection rates in Indian Country were 3.5 times the national average.⁵

The housing assessment concludes that “as of the 2013–2015 period, it would have been necessary to build around 33,000 new units to eliminate the overcrowding

of the AIAN population in tribal areas and another 35,000 new units to replace units that were severely physically inadequate, yielding a total need of around 68,000 new units,”⁶ a figure that is particularly striking given that there are 399,400 households in Indian Country.⁷ Moreover, others estimate that the number of new units and replacement units needed is much higher—closer to 200,000.⁸

HUD funding mechanisms for housing projects have not been fully effective at producing quality affordable housing on tribal lands. The primary program for federal funding of affordable projects on tribal land is Indian Housing Block Grants (IHBG), part of the Native American Housing Assistance and Self-Determination Act of 1996 (NAHASDA). (Both programs will be explained more in depth below.) A 2010 survey by the

US Government Office of Accountability (GAO) found that in general, half of tribes find IHBG to be effective at improving housing conditions and affordability on tribal lands. Of the respondents, 54.3 percent believed NAHASDA was very to extremely effective in improving housing conditions for low-income tribal members, while 45.3 percent believed it to be very to extremely effective at increasing access to affordable homeownership.⁹ However, 43.5 percent believed it to be moderately or not effective at improving housing conditions for low-income tribal members, and 50 percent believed it to be moderately or not effective at increasing access to affordable homeownership.¹⁰

Due to regulations, IHBG-funded projects—especially in the past 50 years—have sought to make housing affordable in part by cutting up-front costs, leading

“The mental frame for tribal housing is still one generated by the federal government.”¹⁵ Furthermore, “Federal agencies embody dominant cultural values concerning individualism, the power of markets, and the nuclear family that may

not match up well with the values of tribes and their people. Is it any wonder that tribal housing often looks like the quick and cheap version of the American suburban house?”

- David Edmunds

to the use of non-durable materials and construction methods. This is because when funded by an IHBG, the price of a single-family dwelling cannot exceed the total development costs (TDCs) as defined by HUD. However, TDCs do not consider operating costs of the house.¹¹ This means that infrastructure or features of the home that are more costly up front but save money in the long term, such as high-quality materials and energy-efficient systems, often cannot be included in affordable housing. In addition, HUD requires affordable housing to be of “moderate design,” which is defined as “housing that is of a size and with amenities consistent with unassisted housing offered for sale in the Indian tribe’s general geographic area to buyers who are at or below the area median income (AMI).”¹² In judging the size and quality of future affordable housing units, based on what is already on the reservation

and surrounding areas, HUD ensures that new projects in areas with low-quality housing will perpetuate poor housing standards. In turn, inadequate construction increases financial burden for families, who often bear maintenance costs.

The quality and aesthetic of existing projects funded and/or designed by HUD have set a precedent for Native housing. As David Edmunds and others explain in reflecting on their housing codesign process with the Pinoleville Pomo Nation in northern California, “The mental frame for tribal housing is still one generated by the federal government.”¹³ Furthermore, “federal agencies embody dominant cultural values concerning individualism, the power of markets, and the nuclear family that may not match up well with the values of tribes and their people. Is it any wonder that tribal housing often looks like the quick and cheap

version of the American suburban house?”¹⁴ Past HUD-funded and -regulated models have not only been of poor quality but often were not adapted to climate or culture. Future affordable housing assistance and projects should both meet the urgent need created by centuries of discriminatory policy while also setting up the foundations for tribes to have long-term stability and self-determination.

1b: Summary of Policy Governing Tribal Housing

Federal housing policy and funding is in an incomplete shift toward granting self-determination to tribes. Tribal self-determination was first established in a law in 1934. However, it was reversed in a congressional resolution in 1953 and then reinstated as policy by President Nixon in 1970.¹⁶ The concept was incorporated into the Indian Self-Determination and Education Assistance Act of 1975 (ISDEAA) and the Native American Housing Assistance and Self-Determination Act (NAHASDA), passed in 1996. NAHASDA, the primary policy governing affordable housing on tribal lands, aims to ensure access to funding, provide housing, and promote self-sufficiency of tribes.¹⁷ The act consolidated various programs into the IHBGs and the Title VI Loan Guarantee, which guarantees loans provided by private lenders, who

“Native communities have been systematically stripped of assets, stripped of resources. To me and Oweesta, homeownership is a reclamation of those assets.”

- Krystal Langholz

would not traditionally lend on tribal land because of risk. NAHASDA serves only Indian families whose income does not exceed 80 percent of AMI.

As part of the government’s goal to increase funding on tribal lands, NAHASDA amended the Section 184 Loan Guarantee Program, which had been passed four years earlier (in 1992). Section 184 loans aim to increase mortgage lending on Indian reservations or designated Indian operating areas through guaranteeing loans for private lenders, which would not traditionally lend on tribal land because of risk. They are the most common loans used for mortgages on tribal lands held in trust. However, as of 2017, “10 percent of all loans and 7 percent of the aggregate dollar volume insured by the program” were used on tribal trust lands due to other barriers that prevent lenders from

providing mortgages.¹⁸ In contrast, 88 percent of Section 184 loans were used on fee simple lands. A 2015 HUD study of mortgage lending on tribal lands found that “the Section 184 loan guarantee program enables lending on tribal trust land, but lenders identified daunting administrative barriers to establishing leases and title records. In addition, potential borrowers often have bad credit and lack knowledge of homebuying and homeownership.”¹⁹ This indicates that tribes need additional assistance to ready their government and members to use Section 184 loans.

As a result of current housing conditions on tribal lands as well as the history of how Indigenous people have been governed, Native families have been unable to build wealth for themselves, jeopardizing generational family stability. Current housing and historic governance have made

it difficult to become homeowners. In 2016, while 75 percent of households in tribal areas reported a strong desire to own their home, only 52.9 percent of Native people were homeowners.²⁰ According to the US Census Bureau, the homeownership rate as of 2022 for Native people is 61.1 percent.²¹ As Krystal Langholz, chief operating officer and executive vice president of strategy and capitalization for Oweesta Corporation, stated in an interview, “Native communities have been systematically stripped of assets, stripped of resources. To me and Oweesta, homeownership is a reclamation of those assets.”²² Lack of permanent housing makes it difficult to build and pass on wealth, which jeopardizes family stability.

Reclaiming control of tribal lands will require not only an increase in homeownership and better housing stock, but also a shift in power back to Native

communities. Many of those I interviewed felt that NAHASDA is contradictory in its goal for self-determination. Although the law provides some forms of assistance, the federal government simultaneously holds tribal lands in trust, preventing Native ownership of land, and extensively oversees the use of NAHASDA funds, often preventing tribal leaders from meeting what they see as community needs.²³ As Nick Tilsen, president and CEO of NDN Collective and a citizen of the Oglala Lakota Nation, pointed out in the 6th Annual Native CDFI Capital Access Convening—a training for Native CDFIs,²⁴ Native American financial institutions, partners, practitioners, funders, investors, and bankers—Native communities need to use resources and power to create new structures that allow for Native sovereignty. This means that those entities where power and resources are concentrated also need to give up

money and cede decision-making power to Native people. Design is one piece of the process of restoring self-determination for tribes.

Part II: Native Design



Master plan for the Thunder Valley Sustainable Community for the Oglala Lakota Nation on Pine Ridge Indian Reservation. As a collaboration between BNIM Architects and the Thunder Valley Community Development

Corporation, the plan accommodates Lakota ways of living through sustainability, certain features of the home, and the inclusion of gathering spaces.

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Design can be a powerful tool in that it allows one to imagine and invent new realities. I refer to design both as a process and its resultant material manifestation: the method of designing a house and the house itself. Indigenous knowledge and practice can serve as the basis for both aspects of design. For example, as argued in previous academic research, participatory process is important because it can negate entrenched colonial and professional power structures that diminish Native participation and create space for dialogue and activity that values Indigenous Knowledge. Norman Sheehan, in his framework of Respectful Design, explains that when design is informed by Indigenous Knowledge, it “is an aspiration for a deeper situational awareness that generates many divergent spaces where innovation can contribute positively to the well-being of the whole.”²⁵ Locally based co-creation forms new spaces

to identify and solve problems.²⁶ Lizette Reitsma refers to this as a “third space,” arguing that it is necessary for design in Indigenous contexts to create a “negotiable dialogical third space” to allow people to take ownership of their spaces.²⁷ In taking ownership, they have the control to alter and explore their environments. Leadership and participation of Native organizations, communities, and residents in design processes is critical to create spaces grounded in Indigenous Knowledge and need.

In response to the hierarchical structure that has governed housing on tribal lands, Indigenous design can respond to individual and community identity through a process of direct participation by community members. As Nathaniel Corum, co-founder of the Sustainable Native Communities Collaborative and



The Wa-di housing development in Santo Domingo, NM. A collaboration between the Sustainable Native Communities Collaborative, AOS Architects, and the Santo Domingo Pueblo.

Following community conversations each home includes a workshop in the back to support craft production.

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design director at MASS Design Group, sees it, “Architecture either heals or hurts.” For it to heal, it is necessary to respect others’ expertise in the design process. “When people really feel heard and you respect their expertise about how they live in a place within the design, then we can get somewhere good in collaboration. Community members are experts about their community. We designers bring technical expertise and count on and rely on their community expertise, and together we can sometimes do something that is better than what either of us could do separately.”²⁸ In a design process, all participants’ knowledge is treated as important, dissolving entrenched professional hierarchy and allowing for Native-led projects and processes.

Indigeneity exists both in the process of design and its physical

manifestation. As Reitsma states, “Co-created objects are representations of identity and thus can be seen as material presenters of the evolving third space.”²⁹ In the case of housing, the layout of space can accommodate specific uses tied to cultural identity. For example, the Western model of single-family housing places the kitchen and communal living spaces on the first floor and the bedrooms on the second. This layout, in some cases, does not align with Native ways of existing. As various members of the Pueblo of Jemez Housing Authority (POJHA) mentioned in my interviews with them, in their community multiple generations live in the same home and typically sleep on the first floor and share bedrooms. Cookie-cutter models in the Pueblo that have been built in accordance with HUD-approved designs have only second-floor bedrooms that are inaccessible to the elderly members of the families. This



The entry, in a brown material distinct from the rest of the house, was added on by residents.

Photo courtesy of Michael Fredericks

“When you are not part of the process of determining your own space in design and it’s given to you, you lose identity. And with the loss of identity the fabric of the community starts to break apart and you can see that in Alaska.”

- Michael Federicks

has made aging in place, an important part of the Pueblo’s culture, difficult.

Incorporating indigeneity in designs allows for the preservation of identity. I use identity here not as a fixed idea but rather as something that is continuously shifting. As Michael Federicks, president of the participatory Alaska-based interior-design firm SALT and an Alaska Native, states, “When you are not part of the process of determining your own space in design and it’s given to you, you lose identity. And with the loss of identity, the fabric of the community starts to break apart, and you can see that in Alaska.”³⁰ HUD projects have historically not centered residents in design, which has led to homes that do not align with cultural practice, making them difficult for Indigenous residents to live in. In Alaska, for example, an arctic entry—

and inside of the house—is an important element of the home. It serves not only to prevent heat loss from a house but also as a space for food preparation and open-casket funeral ceremonies. HUD housing in parts of Alaska did not incorporate the entries, leading residents to build them on.

In excluding the arctic entry, which is integrally tied to cultural practices, one erases identity as well. In this example and in other projects, HUD—through its funding, regulations, and designs—has not specified housing based on the cultural, social, and financial needs of Indigenous families and communities. In considering the case studies below, I analyze how each organization seeks to incorporate Indigenous Knowledge and respond to the needs of residents on tribal lands.

Part III: Case Studies

For each case study, I first describe the realities in which the organization operates and outline the greatest challenges it faces in its particular context. I then break down how its work addresses those issues. For one of my examples, I analyze the POJHA’s general strategy for approaching housing. For the other two—Native Partnership for Housing (NPH) and come dream. come build. (cdcb)—the discussion of their practices focuses on a specific project. My analysis of all three case studies centers on how the organizations, through their processes, create culturally sensitive housing that addresses both the immediate housing shortage and the need to create long-lasting homes that contribute to financial stability for their residents. Ultimately, I aim to provide examples for how design processes can create housing that serves Native residents and their communities.

My analysis of the POJHA demonstrates why design that responds to the cultural uses of space is critical to maintaining identity in the Pueblo and how participation should be used to create a long-term strategy for housing. My analysis of NPH and its current project, Karigan Estates with the Navajo Nation, shows why resident choice, quality design, and durable construction are critical to maintaining talent and building wealth within the Navajo Nation. Finally, in looking at the MiCASiTA project of cdcb and buildingcommunityWORKSHOP ([bc]), I show how incremental building and choice in design can improve both access to and the quality of housing.

Case Study I: Pueblo of Jemez Housing Authority

The Pueblo of Jemez Housing Authority (POJHA) is the tribal body that governs housing for the Pueblo of Jemez (POJ).³¹ The POJHA began operations in January 2020 with the goal of improving the quality of life for residents by providing affordable housing and homeownership, as well as fostering financial self-sufficiency for the tribe and its members. Previously, housing was a tribal department, meaning that the Governor's Office³² had oversight of projects and their funding. Upon recognizing that the POJ would be more successful in applying for grants if it had a tribal housing authority, Greta Armijo, executive director of the POJHA and a member of the POJ, sought approval from the tribal council to form a housing authority, which, she and others believed, would more effectively address housing needs in the Pueblo.

New Mexico contains 19 Pueblos, each of which is a sovereign nation with its own government and practices. The POJ is a small, two-square-mile area of land located in a narrow stretch between mountains northwest of Albuquerque, New Mexico, with a population of just over two thousand. As of the 2019 American Community Survey (ACS),³³ 24.8 percent of the population lives below the poverty line, compared with a rate of 18.2 percent in New Mexico. The average per-capita income is \$37,798, compared with \$44,963 in New Mexico.³⁴ Housing stock varies in condition and type: as of the 2020 ACS, 82 percent of the homes are single-family units, while 17 percent are manufactured homes.³⁵ Despite the need to build more housing, the POJ is running out of space. As Armijo explains, "A lot of community members see Jemez as their home. Hardly anyone leaves, or

they do leave but they always come home when they are ready to settle down. And there is really no housing stock here for them to come home to."³⁶ This makes the construction of high-quality homes that incorporate cultural needs and an effective tribal Housing Authority critical to efficiently using the remaining space in the POJ.

Past HUD interventions in the Pueblo have not provided culturally sensitive and high-quality housing. As mentioned in Part II of this essay, HUD funded a series of cookie-cutter-style homes in the 1970s and 1980s, executed by the All Indian Pueblo Housing Authority (AIPHA) and constructed in various Pueblos in New Mexico. The design was a Western layout, which did not accommodate gathering space for community events or aging in place for the multiple generations who usually share a house, two important

cultural practices in the POJ. In addition, construction was low-quality to the point that the homes have had to undergo major renovations. During interviews, POJHA staff shared the story of doing a rehabilitation project in which they realized that no drywall had been put into the home when it was built.³⁷

In cases before the formation of the POJHA, the tribal government did not complete affordable housing projects due to frequent staff turnover and changes in leadership, as well as the consequent lack of capacity to follow through on project plans within reasonable timeframes. Pueblo Place, a small subdivision on the reservation, is an example of such a project. It began in 1999 with the creation of a development plan by the tribal government. However, from 2004 to 2018, the original plan was repeatedly altered by various

“In our community our hope and goal is to not just help a certain class of people but to help the community as a whole. However, with federal funds our dollars are limited to a certain group of individuals that their funding and goals apply to...

They’re basing qualifications on one factor, which is income and not taking into account other elements of the family structure and situation.”

- Donovan Vicente

housing directors and shifting tribal leadership, and no work was done on the site until 2016–2018, when infrastructure—including roads, water, electricity, and fiber optics—were added to Pueblo Place. Finally, in 2021, the POJHA constructed the first home in the subdivision. Projects such as Pueblo Place created skepticism among tribal members about the tribal government’s ability to follow through on proposed housing and development plans, including acquiring funding for such projects.³⁸

In addition to internal issues that slowed the production of housing in the Pueblo, finding and qualifying for funding is a consistent challenge. As Armijo states, “Our tribe has to compete with the other 500+ federally recognized tribes for the same pot of funding through HUD to build homes for our community members.

Leveraging financial resources to seek investment funding can be challenging, especially for Low-Income Housing Tax Credits.”³⁹ In addition, federal regulations around funding are a major barrier for the POJHA in providing housing. Even though, in theory, the Pueblo possesses self-determination in how it develops housing, it cannot always execute what it believes is best for its community because the funding it receives from HUD is governed by regulations that do not align with the realities in the Pueblo. As Donovan Vicente, finance manager for the POJHA, states, “In our community, our hope and goal is to not just help a certain class of people but to help the community as a whole. However, with federal funds, our dollars are limited to a certain group of individuals that their funding and goals apply to... They’re basing qualifications on one factor, which is income, and not taking



An aerial view of the Pueblo Place project

Photo Courtesy of Greta Armijo

into account other elements of the family structure and situation.”⁴⁰ For example, HUD funding serves those in low-income ranges—below 80 percent of AMI. Donovan believes this is detrimental because it punishes Native people who have sought better employment but still need assistance even when their income is greater than 80 percent of AMI.

The POJHA’s perception of the inflexibility of HUD and federal policy creates barriers for the POJHA. Federal policy encompasses all of Indian Country, and in doing so lacks the specificity to incorporate unique realities of the Pueblo. To those who work for the POJHA, communications between the Pueblo and HUD do not always lead to tangible changes in federal policy that would aid the tribe. For example, HUD asks for accountability and results of housing projects through the

Governance Performance and Results Act (GPRA) to ensure that projects meet federal standards. As part of this accountability process, the POJHA must file extensive reports. However, as expressed by a former POJHA employee, “A big issue for tribal governments is that we have to keep reports on the services we’ve provided. We send them to Washington, DC, where I know they just throw them under a shelf without reading any of them. That’s why they don’t understand the reality of the reservation. They don’t want to read it. They don’t want to understand the actual Native tribe today... but the reports are a requirement.”⁴¹ Communication between HUD and the POJHA has led to frustration and a perceived lack of interest on the part of HUD in understanding conditions in the Pueblo or incorporating Indigenous Knowledge into policy and practice around affordable housing. As expressed by POJHA

staff in interviews, this type of consultation, followed by inaction, erodes trust between the Pueblo and HUD.

Given the context in the Pueblo and the history of past housing projects, members of the POJHA expressed, in interviews, the need for both the financing and design of housing to shift. They hope to eliminate the barriers to funding that prevent them from providing housing for all community members in need. In addition, they plan to use a participatory design process to construct housing that responds to the cultural identity of the Pueblo. The POJHA believes that unrestricted federal funds would allow them to serve more members of the Pueblo who need assistance and to work on housing projects that are culturally significant to the Pueblo but not eligible for HUD funding.⁴² This includes restoring the historic homes in

the central plaza that are now used by cultural organizations and therefore do not qualify for federal funding. In the long term, the POJHA hopes to become financially self-sustaining so as not to rely on federal funds and be required to adhere to federal guidelines.

To guide future decisions on tribal housing, the POJHA’s first action was to carry out a housing assessment and create a strategic plan with clear outcomes (both of which were still in process at the time of this research). As Armijo stated in an interview, **“We have been reaching out to all our members anywhere ... educating the board, the governors, the tribal administration to continue gaining that support and helping us achieve projects. The biggest thing that I am trying to implement is being transparent throughout the entire process.”**⁴³

“If I dance, I expect there to be at least 10 people at my house at the end of the day. So, we have to have a space where we can cater to all of those people. We eat a lot here, and it is a lot about sharing here, so we can’t have a round table; we have to have a long one for a lot of people.”

- Estevan Sando

The goal is that the housing assessment will inform the strategic plan, which will remain constant, even with changes in leadership, and, therefore, avoid delays on housing projects, such as with Pueblo Place. The POJHA believes that asking tribal members what they need in housing—as a step in creating the assessment and strategic plan—and educating them on financing and design options is a critical way to improve the quality of housing in the Pueblo. In addition, building projects is a powerful way to reengage the tribe with the possibilities of housing on the reservation. Armijo explains that “now we have a small project⁴⁴ happening right in the main village area, and people are like, ‘Oh wow, construction is really happening.’ People are now coming around, trying to get more answers, and applying for assistance. Really being engaged with the community and letting

them know what is happening has been helpful.”

The POJHA believes that design must respond to the existing use and aesthetics of Pueblo housing. The layout and use of space are critical to maintaining the function of the home. Estevan Sando, operations manager at the POJHA and a traditional dancer for the Pueblo, believes that design is knowing the community and the history of the place. The history includes the use of space. As he states, “If I dance, I expect there to be at least 10 people at my house at the end of the day. So, we have to have a space where we can cater to all of those people. We eat a lot here, and it is a lot about sharing here, so we can’t have a round table; we have to have a long one for a lot of people.”⁴⁵ The house design must respond to the way it is used by the residents.



Example of Pueblo architecture in the Taos Pueblo, New Mexico

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Triplex project build by the POJHA following a house fire that destroyed existing structures

Photo courtesy of Greta Armijo

The POJ is unique in that it has a surviving traditional aesthetic. This includes adobe as a primary building material. In discussing the traditional aesthetic of the POJ, Armijo emphasized that she believes continuity in building style is an important way to represent a unified identity in the Pueblo. This is particularly important in the center of the Pueblo, where a plaza surrounded by buildings is used for traditional dances on feast days. Vicente believes that designers should consider how their creations impact all aspects of

the community. This includes not only considering traditional aesthetics of the Pueblo, but also affordability and longevity in design and construction. In approaching housing, the POJHA wants to take in the various needs of the community.

Although the POJHA was recently founded, the awareness of past failures in financing and design of housing have influenced its goals as it plans for the future. Important takeaways from the POJHA include the following.

1. Participation should be used to create a long-term strategy for housing that will continue even with changes in leadership.

2. Design must respond to social and cultural use of space—for example, in the layout of the home—not only a traditional aesthetic. Otherwise, it contributes to the erasure of identity.

Case Study II: Native Partnership for Housing

The Native Partnership for Housing (NPH) aims to improve access to homeownership and high-quality housing for residents of the Navajo Nation through financial education, lending, and design and construction. NPH is in Gallup, New Mexico, near the border of the Navajo Nation. It was founded in 1996 as a community development financial institution (CDFI). After its founding, the organization established two subsidiary C corporations—Native Investment Holdings Inc. (NIH) and Clear Water Construction Partners Inc. (CWC)—allowing it to control the cost and quality of the homes they provide.

The Navajo Nation is a 27,000-plus-square-mile swath of land that includes parts of New Mexico, Arizona, and Utah. It is the largest tribe in the US, both in terms of land area and enrollment numbers. Due

to the size of the Nation, the quality of living conditions and housing varies. However, the population generally experiences high rates of poverty and overcrowding, with a large percentage of residents living in unsafe conditions. The most recent (2011) Housing Needs Assessment undertaken by the Navajo Housing Authority (NHA) showed that 57.4 percent of individuals make less than \$10,000 a year, compared with 7.4 percent across the US, while 24.5 percent of households make less than \$10,000.⁴⁶ In addition, there are high rates of overcrowding, which has been especially detrimental during the COVID-19 pandemic. Many homes on the reservation do not have reliable infrastructure. Nine percent of dwellings are heated with gas or electricity, compared with 84 percent in the US; 44 percent of residents do not have access to a public water supply; and 31 percent must transport/truck in their own water.⁴⁷ The lack

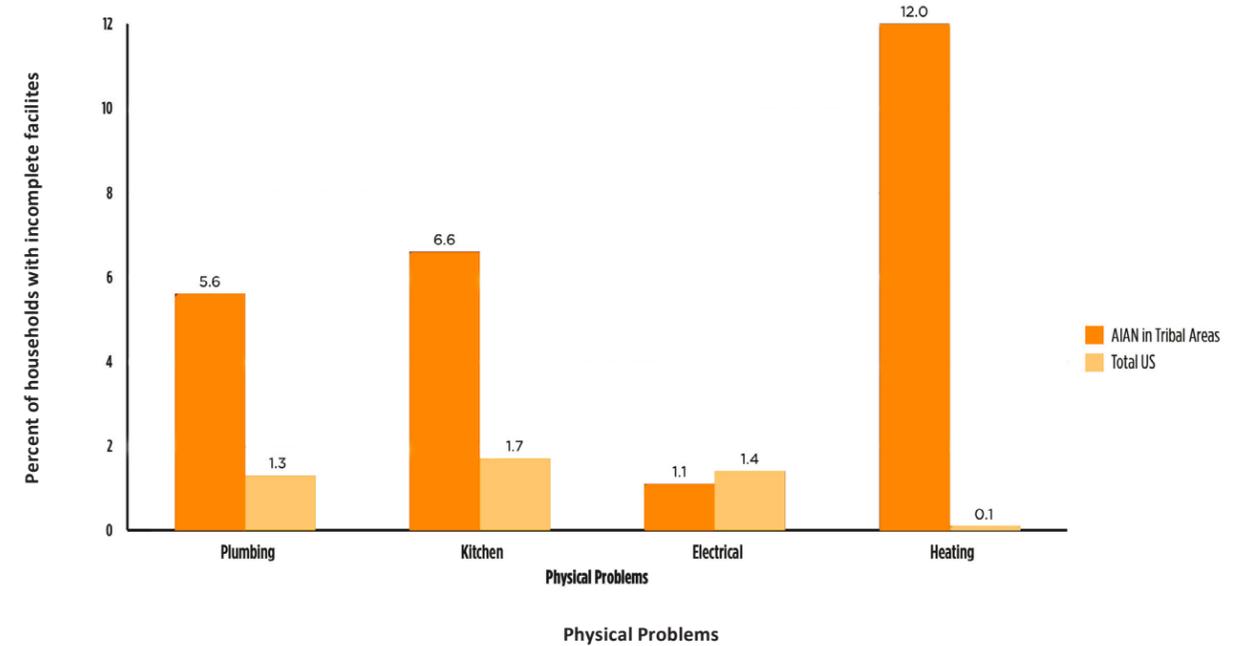
of infrastructure is caused, in part, by the low population density and the difficulty of installing systems in the desert terrain.⁴⁸

Poverty, overcrowding, and lack of infrastructure have generated substandard housing conditions on the reservation. In some cases, homes are self-built out of available materials or purchased from manufactured-home vendors. The 2011 Housing Needs Assessment showed that 50 percent of structures on the Navajo Nation are single-family homes, 17 percent are mobile homes, and 11 percent are hogans, which are traditional structures used for living and/or ceremonies.⁴⁹ Several federally funded and tribal-run affordable housing projects have been of low quality to the point of endangering their residents. For example, some developments by the NHA over the past 10 years are riddled with construction issues, burdening families with

repair costs or placing them in unsafe living conditions when the NHA does not provide repairs.⁵⁰ In an interview, a current CWC employee who previously worked on NHA projects explained that the NHA does not consider maintenance to be a critical part of construction. The NHA used the cheapest available materials, including those that would no longer be manufactured, making it difficult for residents to fix their homes in the future.⁵¹

A disorganized tribal leadership has, in many cases, exacerbated issues around housing and prevented federal aid from serving residents.⁵² Federal funds that are given to the NHA are often misspent. For example, in 2017 the NHA forfeited \$26 million to the federal government after HUD found that in 2012 the NHA did not complete affordable housing projects for which it was given funding.⁵³ A 2016

Housing Deficiencies in Tribal Areas



Source of data: Urban Institute Household Survey 2013-2015, American Housing Survey 2013

Source of chart: Pidus, "Housing Needs - Exec Summary," US Department of Housing and Urban Development, 2017



Houses on the Navajo Nation
Courtesy of NECA

NHA and HUD housing project
Photos by author

investigation into NHA housing projects by the *Arizona Republic*⁵⁴ led the Navajo Nation Council to dismiss the entire NHA board.⁵⁵ A 2017 report released by then Senator John McCain (R-AZ)—following a congressional review supported by the Senate Committee on Indian Affairs—detailed the misuse of federal funds by the NHA, including the conclusion that in the previous 10 years the NHA had received \$803 million dollars in Indian Housing Block Grants (IHBG) and had built only 1,110 new homes. McCain suggested that the federal government limit the amount of resources it provided for the NHA because of its misuse of funds. In a subsequent investigation, HUD did not find violations of federal law but expressed concern about vacant properties.⁵⁶

Adding to the complexity of building adequate housing, much of the land of the

Navajo Nation is held in trust. This means that the US government owns the land and leases it to residents. Priscilla Otero, chief financial officer for NPH and citizen of the Navajo Nation, stated in an interview, as we were looking at a map of the Nation, **“Like this area where I am living is for grazing; it doesn’t mean anything. It just means that I have permission to live here for 25 years, and then I have to renew my lease. That’s all it is. It doesn’t mean that I own anything. The federal government could say that they found some coal under me and that I have to move, and I would be cast out. It doesn’t mean anything. But a lot of Natives feel that it does have meaning to them because they made it to where it has meaning...The Navajo people feel that this area is sacred...”**⁵⁷

When residents of the Nation attempt to secure a homesite lease, which



NHA Modular Housing Development in Kayenta, AR

Courtesy of *The Arizona Republic*

is the first step in being able to build on trust land, they are often confronted with convoluted bureaucracy. In an interview, Otero explained her process for getting a homesite lease to illustrate how difficult it can be. **“I was over there every other week to see where the process was. Because I turned in all my stuff in Window Rock at Land Management, and the next time I went over there they said they sent it over to Church Rock. The reservation is big. We have five agencies. So even though you live within five miles of Window Rock, Window Rock is considered Western. There is a border there, so even though I am close to living there I have to report to Eastern, which is 120 miles away... So, I had to go to Church Rock like once a month. And then they told me that they had lost in transit from Window Rock to Church Rock the paperwork. Good thing I had another copy, so I gave that to them. My homesite**

lease was done in two years because I was consistently asking, “Where is it at? How come you haven’t signed it? Why is it in this office? What are you waiting for?” and they would say, “We are waiting for this or that, or we need a survey.” Well, who is going to do the survey? So, I had to go back to Window Rock and put in a request and pay again...That is what an individual has to do. They won’t do it for you. And not everyone will do that. Sometimes it takes eight years.”⁵⁸ According to interviews with NPH staff, the type of bureaucracy Otero describes complicates residents’ ability to build or purchase their homes and creates a feeling of hopelessness around securing housing.

Likely due to the complex conditions of the Navajo Nation, including the economic reality and the availability and quality of housing, the community

experiences outmigration even as the number of members enrolled in the tribe increases.⁵⁹ Although the number of enrolled tribal members has increased, those living within the Nation or on off-reservation trust land decreased by 4.9 percent between 2010 and 2020.⁶⁰ “The outmigration may result from a combination of tangible push factors, such as a lack of jobs, and possible pull factors from off-reservation communities that are perceived to have stronger economies, higher living standards, better housing, or education opportunities.”⁶¹ The NPH believes that the greatest issue on the Navajo Nation, and the root of outmigration, is the lack of middle-income housing and jobs, which drains talented people from the reservation.

NPH focuses on building high-quality homes that appeal to middle- and low-income residents through a process

in which the residents have a high level of choice in what is created. NPH aims to instill residents’ pride in their homes by directly involving families in the design process and aims to foster pride in the community as a whole by showing the improved housing standards that can exist on the reservation. This is illustrated by NPH’s Karigan Estates project, which is a 51-home subdivision located in the northeast region of Arizona in St. Michaels, near Window Rock, the capital of the Nation. The subdivision is on fee simple land,⁶² so residents of Karigan Estates own both their lot and home and do not need to acquire a homesite lease to build.

NPH takes unique approaches to financing, construction, and design. Instead of using federal funding for construction, which would require it to meet various regulations that would slow its building

“We can build homes such that a NAHASDA family could be next door to a market rate home, and no one would ever know the difference. Why would we do that? It instills pride in the community. Why shouldn’t a grandmother have a home with

running water? Why shouldn’t the home be safe enough for the grandchildren to be there? We build homes for generations.”

- NPH Employee

process, NPH uses it for down payment and loan assistance. This allows households with incomes below 80 percent AMI to move into moderately priced homes they otherwise could not afford. In addition, this use of funding means that within Karigan Estates, households of various incomes live in the same type of housing: one cannot tell a family’s income based on what their home looks like. As an NPH employee explains: “We can build homes such that a NAHASDA family could be next door to a market-rate home, and no one would ever know the difference. Why would we do that? It instills pride in the community. Why shouldn’t a grandmother have a home with running water? Why shouldn’t the home be safe enough for the grandchildren to be there? We build homes for generations.”⁶³ Through its financing, NPH is able to make high-quality homes available to lower- and middle-income residents. This

provides stable housing that individuals and families in need have not typically had access to through HUD-funded and NHA-run affordable projects, with the hope of bringing middle-income earners back to the reservation.

NPH also aims to increase talent on the reservation and instill pride in the community through its construction process. Clear Water Construction Partners Inc. (CWC), the subsidiary construction company of NPH, works on Karigan Estates. The employees who work for CWC are Navajo and are trained and hired full-time with benefits, which is not typical on the reservation. As a CWC employee working on Karigan Estates stated, usually Native laborers are hired for one-off jobs by larger construction companies that are not based in the Nation. This structure means that not only do employees not have job security,

but they also do not receive specialized training that would teach them marketable skills. The employee explained that CWC’s model not only helps its employees professionally and financially, but also provides them with a path to a stable and successful future.⁶⁴

Given the substandard conditions of much of the housing on the Navajo Nation, participatory process is an important method for residents and the community to both create alternative models for housing and feel pride in their homes. The housing presently available on the Navajo Nation conditions ideas of what can be available in the future. While visiting the Nation, I reviewed designs by the Navajo Engineering and Construction Authority (NECA) for two multipurpose buildings for Window Rock, the seat of the Nation’s government. The designs varied significantly: one a hexagonal

hogan structure built in wood to be used for group ceremonies, the other a shed-like structure for nonceremonial gatherings. The shed had the style of many of the manufactured homes one can see around the Nation: a rectangle with the door on the long side and small windows cut out. When speaking with an NECA employee who is a member of the Navajo Nation at the time of the interview about why he had decided on that type of structure, he stated, “We wanted a design that was simple.”⁶⁵ This example illustrates the way in which housing conditions the mindset around what is possible in design. One sees both the importance of the traditional structure of the hogan and the pervasiveness of the manufactured home. NPH believes that through participatory process—specifically, providing choice in design—the organization and residents can work together to respond to individual family needs and uplift the



Planned Project for Window Rock

Courtesy of NECA

“The professional does not want to live here...I’m a professional. I like the home I lived in in Denver, in Santa Fe, in Albuquerque. I’m not going back. So, what is the cost to the community then? ... What value do you place on the construction of a community? If you can instill pride you are going to bring members of the community back...Right now, instead of a magnet to attract, you have a visual that repels people.”

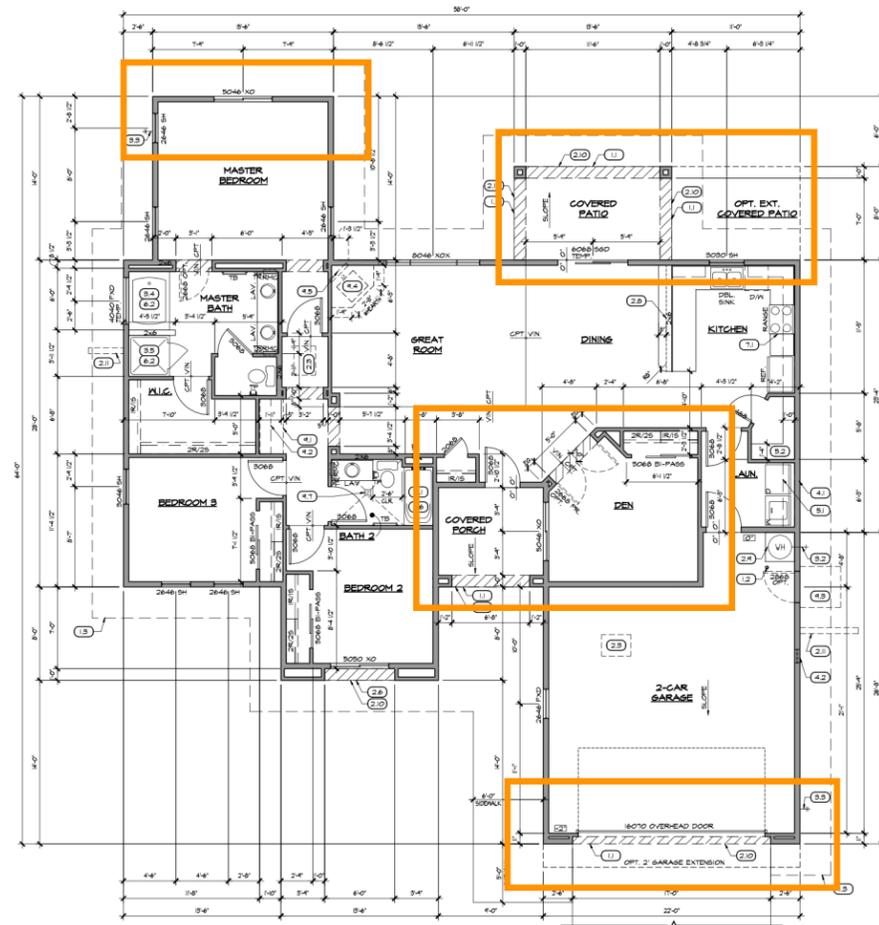
- NPH Employee

community as a whole.

When building in Karigan Estates, new residents choose from three layouts, each of which they can alter to expand and/or supplement with rooms, porch(es), and/or a garage. They also have several options for elevations and choose materials, colors, and other finish details of the exterior and interior of their homes. In doing so, they are more intimately involved in the housing design process. This creates a subdivision in which each home is, to a certain extent, personalized for the residents.

The aesthetic of Karigan Estates is typical of what one would see in a

subdivision of cities such as Phoenix or Albuquerque. It does not correspond to the types of housing available on the reservation, including the traditional hogans. The designs have this aesthetic because residents—who, in almost all cases, have seen housing available off the Nation in other cities in the Four Corners—have asked for it. In discussing these choices, an NPH employee stated: “The professional does not want to live here...I’m a professional. I like the home I lived in in Denver, in Santa Fe, in Albuquerque. I’m not going back. So, what is the cost to the community then? ... What value do you place on the construction of a community? If you can instill pride, you are going to



Plans of a Karigan Estates Housing model. Highlighted areas show parts of the home that can be added, expanded, or modified.

Courtesy of NPH



Karigan Estates Subdivision
Photos by author

bring members of the community back... Right now, instead of a magnet to attract, you have a visual that repels people.”⁶⁶ Residents reject the poverty and poor quality associated with reservation housing.⁶⁷ Instead, they align their homes with the construction standards and design available elsewhere. The hope with Karigan Estates is that creating long-lasting housing that residents are proud of will spread pride within the community and bring back those

living off-reservation.

Overall, NPH provides high-quality housing and instills pride in residents through the design process. Its model allows lower-income residents to access high-quality housing, pushing against the current narrative around housing in the Nation. Key takeaways from NPH’s design strategy include the following:

- 1. Residents’ choice—in the form of deciding on the plans, elevations, and finishes of their homes—is critical to creating pride in their homes and providing housing that they want to live in.**
- 2. Individuals’ participation in the design of their homes strengthens the community as well because it provides alternative models for high-quality housing in a space with a history of low-quality housing projects; it can also bring tribal members back to the reservation.**
- 3. Participation, combined with high-quality construction, can shift individual and community expectations around housing and provide hope for more effective housing projects in the future.**

Case Study III: Come dream. come build. and buildingcommunityWORKSHOP

Come dream. come build. (cdcb) is a nonprofit community housing development organization located in Brownsville, Texas, in the Rio Grande Valley (RGV). It was founded in 1974 and provides affordable housing through homebuyer education, financing, design, and construction services. On many of its projects it partners with buildingcommunityWORKSHOP ([bc]), a nonprofit design firm founded in Dallas, Texas, with offices in Brownsville and Houston. [bc] is known for its participatory design processes, as well as its affordable and disaster-recovery housing.

In South Texas, cdcb and [bc] work in areas that are home to many low-income households called “colonias.” Colonias originated on agricultural land outside of incorporated cities; developers sold land to low-income families as a contract

for deed, a predatory lending model in which developers retained the land title until it was paid off in full, which made it cheaper but left buyers unprotected if they defaulted on a payment.⁶⁸ This land was outside of the jurisdiction of cities and towns, so no authority could hold developers accountable for providing basic infrastructure. This led to the unsafe sanitary conditions in colonias today. Population growth on the border, especially in the 1980s, led to densification of colonias and exacerbation of the associated public health issues. Today, the jurisdiction of colonias varies: “some are incorporated communities under the control of the city, some are unincorporated under control of the county, and others may be in extrajurisdictional territories of cities which share some level of control with the county.”⁶⁹

Although definitions of a colonia vary, the Texas Department of Housing and Community Affairs (TDHCA) defines a colonia as “a geographic area located within 150 miles of the Texas-Mexico border that has a majority population composed of low- and very-low-income individuals and families. These families lack safe, sanitary, and sound housing and are without basic services, such as potable water, adequate sewage systems, drainage, utilities, and paved roads.”⁷⁰ The state has worked to improve the infrastructure and access to potable water within colonias. HUD and the US Department of Agriculture (USDA) expand the definition of a colonia to include settlements of modular or trailer homes near the border that do not have access to services.⁷¹ Within Texas alone, there are over two thousand communities that meet HUD’s definition of a colonia.⁷² However, the housing stock has largely

not improved. Housing in colonias is primarily constructed without technical or professional expertise and is made with available materials, such as wood or cardboard.⁷³ As the financial situation of residents improves, they will upgrade their homes through such methods as expanding existing structures or using more durable materials.

MiCASiTA is a housing model that cdc and [bc] are currently developing for communities facing persistent poverty, including in the colonias, Appalachia, and Indian Country. The first prototypes of MiCASiTA are being built in the Rio Grande Valley. I include it here as a case study because cdc, [bc], and local partners will be implementing it on tribal lands as well, starting in South Dakota. The model delivers high-quality manufactured housing, reducing price in comparison with



Housing in the Colonias
Photos by author

a stick-built home, while also incorporating regional specificity and resident choice into the design. It aims to increase wealth and improve living conditions for families.

In analyzing MiCASiTA, I first discuss the franchise model, then the financing behind the model, and finally the design for the homes. MiCASiTA will function as a franchise. cdcB recognizes that rural organizations often do not have the capacity to improve the complex and pervasive housing needs in rural areas. A franchise allows cdcB and other organizations to share knowledge and technical assistance across rural regions with persistent poverty. As Nick Mitchell-Bennett, executive director of cdcB, stated in describing the questions guiding MiCASiTA: **“How can we design and build something here that we can franchise into Native communities, into Appalachian communities, into Mississippi**

Delta communities where they don’t have a group like ours? We can help be that backup for them and help build a system that works...There is no point in reinventing the wheel if groups like ours can figure out how to share the wealth.”⁷⁴

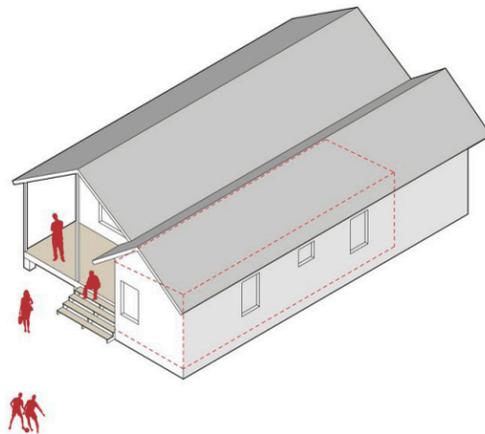
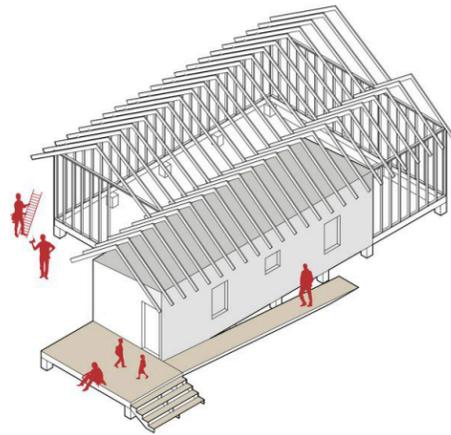
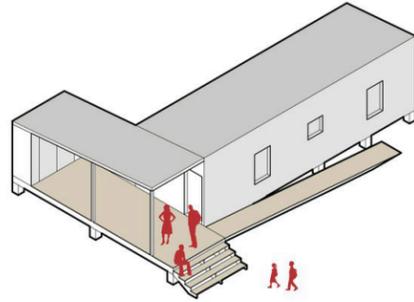
MiCASiTA uses modular design and off-site manufacturing to reduce the cost of construction, which makes housing more affordable. To facilitate the rapid production of MiCASiTA, the house is built off-site in a “factory” and then shipped and installed on the client’s lot. From the start of fabrication to installation, the process takes 30 days, with the goal of reducing housing costs to 80 percent of on-site, stick-built homes. In addition, using local labor for manufacturing and assembly contributes to wealth creation within the community. As I will elaborate on below, MiCASiTA provides high-quality modular design, allowing families to grow

their home over time as their income, assets, credit, and/or family grows. This lowers the financial barrier to entry for a family to purchase a home.

In its design, MiCASiTA is based on the incremental building techniques used within the colonias. As described above, families—usually for financial reasons—often build their homes in stages. An example of the trajectory of housing for an individual or family could be as follows. They may begin by purchasing a lot, then adding a manufactured house or constructing a home with available materials, continue by expanding that manufactured or self-built home, and then—as their financial situation improves—erecting a more durable house. As this building process is often undertaken without professional assistance, many self-built structures are hazardous to the

families that live in them. The idea behind the design of MiCASiTA, as described by Lisa Neergard, associate director of planning at [bc], is to take the process of incremental building “and then formalize it so that it no longer has the housing health risks that are now associated with how people are building on or constructing their own homes—and also attach it to a more secure and traditional lending model.”⁷⁵

The MiCASiTA model formalizes incremental building through a prefabricated modular system. A core, which contains a kitchen, bathroom, living space, and bedroom, forms the basis of the house. Clients can then choose at any time to add onto the core with rectangular boxes, including additional bedrooms, bathrooms, and/or flexible spaces. In addition, formalizing incremental building is financially beneficial for clients because



Conceptual diagram showing how MiCASiTA modules could be combined

Courtesy of cdc and [bc]

“Standardization isn’t always bad. So MiCASiTA said, what are the things we can actually standardize across the country?...But then, for example, in some Native communities it is important that the door is on the east side of the house...How do we fit those unique things into a standardized process to become successful, instead of trying to standardize everything?”

-Nick Mitchell-Bennett

it lowers their barrier to entry. As Neergard explained, “The period in which a family is trying to save up a down payment is such a fragile period of time. If any family emergency happens or a car breaks down, it puts that down payment into question. What makes MiCASiTA valuable and necessary is that it reduces that time frame and that needed down payment. Families are using equity to add on instead of relying on just savings.”

MiCASiTA proposes a standardized process of financing and design but not a standardized product. As Mitchell-Bennett stated in an interview: “Standardization isn’t always bad. So MiCASiTA said, what are the things we can actually standardize across the country? What about the loan product can be standardized, and then what about it can we fit culturally into each of the communities? What about this house can

be standardized? But then, for example, in some Native communities it is important that the door is on the east side of the house. Or, in Appalachia, this size of porch is more important than this size. How do we fit those unique things into a standardized process to become successful, instead of trying to standardize everything?”⁷⁶

When creating franchises, the goal is not to standardize the lending products and house design, but rather to adapt—through partnerships and a design review—the MiCASiTA model in a way that is culturally and climatically sensitive to the region. By developing a standard process, but adapting the model to each unique context, the goal is for MiCASiTA to respond to urgent housing needs while also creating houses that respond to the climate and culture of the region and the preference of residents.

The design of MiCASiTA

incorporates specificity in design at the scale of the region and the individual. Through the process in which a new franchisee is brought on board, MiCASiTA adapts to the region. The franchisees will be locally based organizations that are addressing housing issues in their community and ultimately will be responsible for delivering housing in their region. In the process of starting a MiCASiTA franchise in a new area, the design team of [bc] will lead a participatory process with local organizations and resident representation to adapt the design to the climate and preferences of that region. This has not yet been implemented, as MiCASiTA is in its initial stages. However, in Indian Country, this will include understanding traditional ideas related to housing. At the scale of the individual, residents designing a MiCASiTA home get to choose the layout and finishes of their house.

Resident choice is an important part of the creation of the home so that residents feel a sense of control over the process. As Benje Feehan, executive director of [bc] explains: **“Nothing drives us more crazy than affordable housing coming in and perpetuating, in my mind, this American capitalist dream of a brick house with the two-car garage or whatever it is with no consideration for that identity of place. When we think about design, we think about, ‘How does it contribute to identity of place and not begin to rob it of it?’ To me that is the role of design—a thoughtfulness that needs to occur when you intervene in place through a design.”**⁷⁷ Residents can choose many elements of their house. They choose the configuration of modules, which will have already been altered based on regional design need and preference, to create the layout for their home. In addition, they choose all the



MiCASiTA prototype house
Photos by author



MiCASiTA fabrication site
Photo by author

exterior and interior finishes. This process will be mediated through meeting(s) with a design team and a web application called Choice Empowers. The web application will allow them to design their ideal home and understand its pricing. This system allows for client involvement that is scalable, as residents are given a platform and the necessary information to make choices about their design without having to meet with architects.

When planning a participatory process, both organizations emphasized in interviews the importance of understanding power dynamics and the creative skills of residents. In the experience of cdc and [bc], the Latinx families they work with often feel pressured to answer questions about their home in the way they think white folks expect them to.⁷⁸ Because clients have low or extremely low incomes,

they focus on their needs over their wants for a home and therefore may not be able to dream up a home if given a blank sheet of paper. For both reasons, MiCASiTA provides options for families to choose from, as opposed to working with them individually to design the home from scratch.

Cdc and [bc] recognize that participation is a dialogue between designers, local organizations, and residents that can take many forms. There may be elements that are important for organizations to consider that residents will not convey through a participatory process. For example, as Neergard stated, **“As a professional, you recognize the importance of local knowledge and you understand the broader need for education.”** In the case of the current MiCASiTA prototype work in the RGV, residents falsely believe

that brick cladding adds more structural stability to their homes. Consequently, they ask for brick even when it is more expensive because they believe it will last longer.⁷⁹ In addition, paying attention to larger trends in a community, which residents may not mention in a meeting, can be a valuable way to understand the context.⁸⁰

Overall, the MiCASiTA model aims to create a replicable process that cuts costs

and reduces construction time of housing. Simultaneously, the model is adapted to cultural and climatic context through franchisee partnerships and a design review that influences the offerings in each region of the country. Clients are involved in the process and are allowed to personalize their homes by choosing the layout and finishes, as well as adding on over time. Key takeaways about the participatory process from cdc include the following.

1. Within the standardization of a process for delivering housing, there should still be specificity in the product. In the case of MiCASiTA, this is the adaptation to the climactic and cultural context in different regions through a participatory process with designers, local organizations, and residents.

2. Choice in design is an important method of resident empowerment. In running a participatory process, it is important to understand the capacity of audiences to express their wants (as opposed to needs) for their home. It may be necessary to provide an array of options, as opposed to a blank canvas.

3. Participation does not only take the form of conversations with residents and communities. It can include other strategies, such as paying attention to larger trends within a community or using such tools as MiCASiTA's web application.

Finally, in the context of Native communities on tribal lands, MiCASiTA could be a promising method to meet dire housing needs on tribal lands without

sacrificing construction quality, affordability, or cultural specificity.

Conclusion

Due to centuries of discriminatory policies, on tribal lands in the US there exists an intense need to provide thousands of housing units while also disrupting the practices that have led to unsustainable, federally funded housing projects. Past HUD-funded and -regulated housing initiatives have, in some cases, contributed to the erasure of Native identity and contributed to the ongoing financial instability of many Native families and communities. This is not only unacceptable but also prevents tribes from having true self-determination, despite that being a stated goal of NAHASDA. The work of the POJHA, the NPH, and cdc, in partnership with [bc], represent better paths forward for housing on tribal lands. The key to all organizations' success in meeting housing needs is the use of a participatory design process in which practitioners respect the perspectives of Indigenous people and

residents' choice directly influences the design of their home.

In continuing to improve housing on tribal lands, it is important to recognize that Native design and participation can look and feel different, depending on the context. However, as the three case studies demonstrate, participatory processes—coupled with improved funding regulations and a commitment to higher building standards—has the potential to provide safer and more culturally appropriate housing while also allowing families to build generational wealth and have pride in their home and communities. As Native practitioners and organizations continue to lead projects in collaboration with tribal, state, and federal governments, design is an important practice through which to improve both policy and housing.

Interviews

Susan Anderson, Enterprise Community Partners

Nathaniel Corum, MASS Design Group

Michael Fredericks, SALT

Krystal Langholz, Oweesta

Art Marrujo, Tierra Del Sol

Johanna Gilligan, Homewise

Elena Gonzalez, Homewise

Greta Armijo, Pueblo of Jemez Housing Authority

Donovan Vicente, Pueblo of Jemez Housing Authority

Estevan Sando, Pueblo of Jemez Housing Authority

Staff, Pueblo of Jemez Housing Authority

Priscilla Otero, Native Partnership for Housing

Staff, Native Partnership for Housing

Leo Barrera, come dream. come build.

Nick Mitchell Bennett, come dream. come build.

Edna Ocegüera, come dream. come build.

Benje Feehan, buildingcommunityWORKSHOP

Gerardo Gutierrez, buildingcommunityWORKSHOP

Luis Murillo, buildingcommunityWORKSHOP

Lisa Neergaard, buildingcommunityWORKSHOP

Oscar Olvera, buildingcommunityWORKSHOP

Endnotes

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- 23 NPH, POJHA, and cdc staff, interviews by author, July 15, July 27, and August 4, 2021, respectively.
- 24 A community development financial institution (CDFI) is a mission-driven organization that provides financial products and services for low-income communities.
- 25 Sheehan, Norman W. "Indigenous Knowledge and Respectful Design: An Evidence-Based Approach." *Design Issues* 27, no. 4 (2011): 70.
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- 30 Michael Fredericks, interview by author, July 16, 2021.
- 31 Outsiders are not permitted to take photographs of the Pueblo; the few photos I include are used with the permission of the POJHA.
- 32 Within the POJ, "the Governor represents the Pueblo of Jemez as an official Head of State and serves as the head of the tribal government. The Governor, Lieutenant Governor, and Second Lieutenant Governor are appointed at the start of each year by religious leaders and entrusted with sole authority to oversee and carry out all secular duties and responsibilities of the tribal government," <https://www.jemezpuablo.org/government/>.
- 33 I use the 2019 census here instead of the 2020 census for several reasons. Due to the COVID-19 pandemic, the 2020 census had a low response rate, meaning that it does not accurately represent US households. Furthermore, visits to households are usually used to confirm if units are vacant. However, these visits did not occur due to COVID; consequently, the census overestimates the number of US households. More information on navigating the 2020 census can be found here:

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41 POJHA former employee, interview by author, July 27, 2021.
42 Greta Armijo and Donovan Vicente, interview by author, July 27, 2021.
43 Greta Armijo and Donovan Vicente, interview by author, July 27, 2021.
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65 NECA employee, interview by author, July 15, 2021.
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