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From Affordable to Equitable: An Analysis of Affordable Housing as a Solution in a National Shortage

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FROM AFFORDABLE TO EQUITABLE:
AN ANALYSIS OF AFFORDABLE HOUSING AS A SOLUTION IN A NATIONAL SHORTAGE

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Abstract

Amid a national shortage of housing, the United States needs housing solutions that both remedy infrastructural concerns imposed by outdated standards of urban development and address a widespread lack of equity across several urban areas. Conventional approaches to public housing have proven ineffective in promoting equitable change within underdeveloped contexts. These areas desire innovative, intentional interventions that adequately address all aspects of their social, economic, and environmental needs that existing patterns of development have neglected for decades. Public and state sentiments regarding areas of concentrated poverty and segregation in urban space must change for a future of equitable housing to prosper. By embracing principles of contextuality, sustainability, and empathy, designers can work closely with the communities they design for, using informed perspectives to create communities of multifaceted inclusivity that empower users and foster equity in housing.

Key Words: architecture, affordable housing, housing equity, urban development

From Affordable to Equitable:

An Analysis of Affordable Housing as a Solution in a National Shortage

The ongoing housing crisis in the United States is often defined by rates of availability and affordability. Vacancies of residential units are limited—below 6 percent at the end of 2021[1]—a continuous commonality among a majority of American cities. Additionally, the cost of rent in recent years has increased dramatically. In the first quarter of 2022, rates were up by 12 percent nationally from the year prior, and many metro areas experienced elevated rates that surpassed 20 percent.[2] These numbers have yet to be alleviated in a widespread capacity, and households of lower annual income struggle with this reality the most. A 2020 study by Harvard revealed that 46 percent of renters were "moderately burdened"—paying more than 30 percent of earned income to landlords—and 24 percent spent over half.[3] Trends of rising unavailability and unaffordability in the housing market leads to difficulty in maintaining increasingly unsustainable lifestyles for low-income groups. When these lifestyles become ultimately unaffordable, they threaten the quality of life for those facing financial hardship.

The growing truth is that the United States is in need of housing solutions that are more than "affordable." The market seeks solutions that emphasize a comprehensive quality of equity, targeting specific social, economic, and environmental needs that the housing market currently fails to meet. For one, access to fair, quality housing is essential for the wellbeing of any person, and the United Nations has deemed adequate housing as a human right. To be adequately housed is to have

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[1] Cathleen McGuigan, "The Housing Crisis Continues: High Demand, Low Vacancy, and Soaring Prices Are Tough on the Low End of the Market [Editorial]," *Architectural Record*, no. 10 (October 2022): 16. https://search-ebscohost-com.libproxy.unl.edu/login.aspx?direct=true&db=bvh&AN=845497&site=ehost-live.
[2] Ibid.
[3] Ibid.

access to "appropriate services," keep with one's culture, and live without fear eviction.[4] Additionally, sustainability is a concern of global importance that the United States is obligated to address in architecture. Sustainability can be described generally as "integrating economic, social, and ecological performance [in architectural practice] such that the current needs [of users] are met without compromising the ability of future generations to meet theirs."[5] These premises of adequate housing and sustainability set the foundation for equitable housing.

However, forming housing solutions that are responsive to the users' needs—not to mention responsive to other complex facets also relevant to architecture—is no small feat. Several factors influence the development and cost of housing units, preventing swift and large-scale implementation. For one, the national rate of construction can decline in response to inflation, labor shortages, and problems within the global supply chain.[6] While construction efforts in the early 2020s developed a large quantity of housing units (both single-family homes and multi-family projects), the output of units notably could not keep up with demand;[7] and in the present, this remains a problem. Additionally, producing a large quantity of housing does not prove cheap, which includes some new residential units imposing "environmental costs" for lacking an environmentally sustainable quality.[8] Further, complex dynamics shift within the housing market in response to changing rates of unemployment, wage, and demand, which strongly influences rates.[9] Evidence also suggests that land use equity is strongly connected to affordability of a given place.[10] In all, these are complex problems larger than what the scope of architecture can address or solve alone.

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[4] United Nations, "The Human Right to Adequate Housing | OHCHR," United Nations, accessed March 24, 2024, https://www.ohchr.org/en/special-procedures/sr-housing/human-right-adequate-housing.
[5] Ellen Dunham-Jones and June Williamson, *Retrofitting Suburbia: Urban Design Solutions for Redesigning Suburbs* (Hoboken, NJ: Wiley, 2011), viii.
[6] McGuigan, "The Housing Crisis Continues," 16.
[7] Ibid.
[8] Ibid.
[9] Ibid. Currently, models are showing low rates of unemployment, high wages, and high demand. These trends lead the market to experience higher prices.
[10] Ajay Garde and Qi Song, "Housing Affordability Crisis and Inequities of Land Use Change," *Journal of the American Planning Association* 88, no. 1 (June 2021). https://doi.org/10.1080/01944363.2021.1911673. This concept is taken from an analysis of California's land use distribution in 2022.

The ideology of the designer, however, is to empathize with the user in order adequately meet, if not exceed, their needs while creating an equitable environment. This ideology can be observed in emerging methods of affordable housing interventions that reconcile quality and quantity of units while mitigating costs of implementation.[11] Similarly, there are instances of affordable housing projects within the United States that fail to establish equitable living conditions for the user. Cases of affordable housing interventions each demonstrate varying degrees of success in providing a multilaterally equitable product (longevity of such projects is worthy of note, as well). Success of such cases can be evaluated in terms of "synergistic economic, social, and environmental impacts" on their relative contexts.[12] Every case is thus a valuable resource in analysis and evaluation of the distinct residential contexts found throughout the country's urban landscape.

This paper aims to argue that "affordable housing" as a concept—in order to embody an equitable solution to a national housing shortage—needs contextuality, sustainability, and empathy to be successful. In many cases, the concept of "affordability" is applied to a project and situated within a place without acknowledgement of its historic, cultural context. The realms of sustainability that accompany architecture are also commonly unrecognized in these cases. At the root of these concerns is a pervading, perhaps disturbing lack of empathy that prevents large-scale investment in low-income social housing. Thus, the outcome is often a collection of conventional interventions that do not target the complex, innate issues of the underperforming sectors they are attempting to serve. Existing conditions within these communities tend to stagnate in the aftermath; some communities, however, have been observed to worsen in the wake of such projects (the specifics of which will be discussed later in greater detail). Returning to conventional, "affordable" housing solutions will only perpetuate these patterns, offering no feasible means for

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[11] McGuigan, "The Housing Crisis Continues," 16. The author points to varying multifamily projects, two in California and one in New York, two states that are notorious for inequitable cost-of-living distributions.
[12] Dunham-Jones and Williamson, *Retrofitting Suburbia*, viii.

equitable change to take root and manifest in areas that demand an improved quality of life for residents.

Examining a range of both conventional and innovative affordable housing methods can help inform a pathway to an equitable future in American housing. In order to understand these cases, particularly the ideologies that substantiate their implementation, it is essential to firstly investigate what events and factors in history have shaped the current state of the housing field. Becoming familiar with the course of urban development in America will offer the insight to evaluate the ingrained complexities of modern housing more critically. Ultimately, this knowledge can be used to find informed, innovative housing solutions that will establish and maintain a national standard of equitable housing.

History and Complexities of the American Housing Landscape

The current condition of the American housing landscape can be linked to trends of urban development patterns that have persisted through a majority of twentieth century. The ideologies that largely underpin these patterns, however, can be traced to urbanist principles of city planning and land use distribution, some of which date as far back as the nineteenth century. In short, a combination of principles and policies that were supported by prominent urbanists of the nineteenth and twentieth centuries are responsible for shaping the existing housing landscape. The following section is by no means an exhaustive resource of American urban history, but it provides a level of depth that is sufficient for further critical evaluation.

Firstly, the process of suburban sprawl is a decisive urban development strategy in urban history, arguably the most fundamental in understanding how modern American infrastructure was informed. Suburban sprawl is a pattern of urban development that was characterized in twentieth century America by a shift in city-living to that of suburbia. During much of this time, populations across the United States would “sprawl” across vacant landscapes, establishing private, single-use

forms that dominated their settings.[13] Often credited as an influential figure in the realization of suburbia and the extensive implementation of suburbanization is urbanist Ebenezer Howard. His "Garden City" concept was designed with the intention to merge the urban lifestyle with a rural backdrop, drafting diagrams of 6,000-acre towns that segregated land use into distinct rings of urban activity: a central park and civic institutions at its center, transitioning then to houses and commercial avenues, and finally marked with industrial and agricultural practices its edges.[14] Two real world examples of his work realized in physical space are the towns of Letchworth and Welwyn Garden City near London. Howard's planning principles were sustained through a large portion of the twentieth century by future advocates of suburbanism, such as Lewis Mumford, who cofounded the Regional Planning Association of America and actively promoted such principles through this organization.[15]

The ideology behind the phenomenon of suburban sprawl involves a combination of practical applications of modernist planning principles and concerns raised by "scrupulous" parties about intermittent development occurring in areas outside of the urban sphere.[16] This intersection of ideals resulted in a separation of uses into various districts, connected by an automobile-centric infrastructure. Reliance on transport via an automobile can be linked to the widespread administration of the suburban, establishing low-density, evenly spread populations that encouraged, if not required, the use of an automobile to get from one place to another.[17] Urbanists Le Corbusier and Frank Lloyd Wright continued to perpetuate this dependence. With the inspiration of the Garden City, the automobile embodied something of a tool in their corresponding models of

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[13] Ibid, x.
[14] Benjamin Schneider, "15 People Who Shaped the Modern American City," Bloomberg.com, December 20, 2018, https://www.bloomberg.com/news/articles/2018-12-20/15-people-who-shaped-the-modern-american-city.
[15] Ibid.
[16] Dunham-Jones and Williamson, *Retrofitting Suburbia*, xii.
[17] Ibid, x.

utopia that could establish a large-scale development of "decentralized cities" with segregated land uses.[18]

A relevant example of a housing project impacted by patterns of suburbanization and the growing popularity of suburban living is a mid-twentieth century development called "Elctchester," a public housing endeavor designed for the Local 3 labor union of electricians in New York City. Development of this project began in an era where little support existed in public and state realms for affordable housing integrations. However, internal advocacy and investment in the project's development attracted external attention, and the unique methods that conceived and established Elchchester's permanent place among the near-suburban threshold of Queens was viewed by many at the time as "impressive and groundbreaking" when compared to previous conceptions of public housing.[19] With time, the project would largely lose this appeal due to the increasing attractiveness of suburban living that the settlement could not compete with—as well as possessing a quality of exclusivity that created a divide between the property and its surrounding context.

The plans for Electchester consisted of a total of 2400 housing units and a variety of retail and entertainment amenities for its residents, developed over the span of five separate cooperative projects in 17 years. This particular scheme of public housing was established specifically for the union of Local 3 with the intent of cultivating a versatile community that extended beyond the notion of "shelter,"[20] catering to the needs of its members in the form of a largely insular, multifunctional housing development. Support was garnered for the project both among city officials and within the employment of the worker's union itself. To help fund the project, a striking majority of Local 3's workers contributed a portion of their wages to be set aside (only 46 members

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[18] Schneider, "15 People Who Shaped the Modern American City."
[19] Hilary Botein, "Visions of Community: Post-war Housing Projects of Local 3, International Brotherhood of Electrical Workers, and Local 1199, Hospital Workers Union," *Planning Perspectives* 24, no. 2 (April 2009): 177, https://doi.org/10.1080/02665430902734293.
[20] Ibid, 178.

among thousands declined to partake),[21] highlighting a commendable level of membership investment that would promote community empowerment due to a collective sense of pride and accomplishment in the finished product.

However, as previously noted, the project faced issues when concerns were raised regarding its inherent exclusivity. The aspect of insularity that was established with the addition of supplemental amenities within Electchester's framework meant that residents rarely ventured into the surrounding neighborhood beyond commuting to work,[22] often disconnecting the project and its site from its broader context. In addition, employees of Local 3 were offered priority access to housing, in which an estimate revealed that union workers occupied 90 percent of available units;[23] members of adjacent communities attempting to seek residency in Electchester voiced many complaints about the inequity of the project. Into the 1960s, an ongoing lack of racial integration through the property would lead housing activists to demand that its discriminate character be resolved, though little success was achieved.

Ultimately, the "inward-looking" ideologies that provided the framework for Local 3's cooperative housing development promoted an exclusive and homogenous community that did not recognize the needs or desires of outside individuals.[24] While it was a successful housing experimentation that empowered its membership and sparked wider public and state acknowledgement of public housing as an urban development methodology, such success was short-lived when taking into account its many shortcomings regarding equity. The project was further removed from its initial praise in the popularization of suburbanization, gaining significant appeal through the twentieth century that cast the ambitions of Electchester in its ever-sprawling shadow.

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[21] Ibid, 181.
[22] Ibid, 182.
[23] Ibid, 183.
[24] Ibid, 191.

As suburbanization continued to grow in popularity across the United States, key criticisms began to emerge that opposed its continued integration in city planning and development. Twentieth century urbanist William H. Whyte, in particular, was known for opposing the ideals and practices of suburban sprawl. His published work titled *The Organization Man* is a noted "bestselling indictment of culture of conformity in 1950s suburbia and corporate America."[25] Additionally, he conducted extensive research of urban public space in New York City, using his small-scale observations to justify the notion of increased downtown investment rather than sprawl.[26]

In more recent decades, the impact of suburban sprawl in shaping the present development of residential urban fabric has become strikingly apparent. Returning to the principles of Howard, some critics of his theories in believe that American city planning has been distorted by an "anti-urban bias,"[27] evident today in the widespread investment in private, low-density suburban forms that has existed for decades. This investment then perpetuates the existence of underutilized urban space and further fractures the urban fabric across several cities in the United States. In light of a national network of transportation infrastructure that emphasizes automobile dependency, people without automobiles (typically those with low annual income) find difficulty in getting from place to place, especially if alternative transit systems are unreliable or nonexistent. Thus, cities that have been highly influenced by suburban sprawl ideologies are often referred to as unwalkable, providing unstable living conditions for a majority of low-income groups.

Ultimately, suburban sprawl has generated problems in the physical development of urban space and in the practice of conceptualizing urban space. The principles that dictate the separation of uses—and further, the distinction between the realms of people and buildings from cars—are

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[25] Schneider, "15 People Who Shaped the Modern American City."
[26] Ibid.
[27] Ibid.

rational in reason.[28] However, the development patterns characterized by suburbanization are outdated, unsuited to the support of "contemporary households or workplaces."[29] In addition, the conventional suburban form is based in "pervasive" zoning codes, land use practices, and an enduring automobile culture that are contributing to the increasingly unsustainable urban environment that is the present-day suburbia.[30]

As patterns of zoning and land use distribution continued to evolve into the twentieth century, certain ideologies regarding the presence of impoverished and minority groups within the fabric of urban cores took root in political and urban policy. Urban renewal is considered a major factor in shaping current policies regarding poverty and segregation; it is understood as an era and policy of urban development that started with the introduction of the Housing Act of 1949. A prominent figure in the history of urban renewal is urbanist Robert Moses. He engaged in "slum clearance" that allowed for the development of large-scale public housing and civic projects, responsible for the construction of 13 bridges, 416 miles of parkways, and approximately 150,000 housing units in the New York metropolitan area.[31] However, his "notorious" Cross-Bronx expressway exemplifies the qualities of a freeway project in the heart of urban renewal; in highway construction alone, Moses displaced around 250,000 people from their homes and severely fragmented their neighborhoods.[32] A common quality among his projects that most strongly disturbed existing urban infrastructure intervened in areas of concentrated low-income and minority persons,[33] a practice that lies at the heart of urban renewal and its ideologies.

Methods of urban renewal involve targeting and removing underperforming lots within cities to clear space for higher quality—and often far more expensive—property. These practices

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[28] Dunham-Jones and Williamson, *Retrofitting Suburbia*, xii.
[29] Ibid.
[30] Ibid.
[31] Schneider, "15 People Who Shaped the Modern American City."
[32] Ibid.
[33] Ibid.

are historically entrenched in the feeling of "urban unrest" among suburban white citizens and representatives regarding the massive civil rights problem prevalent in the 1960s,[34] a problem that forced predominantly white populations to acknowledge underdeveloped sectors that existed in urban space. However, the increased visibility of concentrated poverty and minorities spurred a broad shift in public opinion—particularly in the reframing of the issue as "the ghetto"—that informed the belief that impoverished areas and the people within them should naturally be the "necessary targets of intervention."[35] This truth prevails in modern practice as urban renewal lots continue to target areas of concentrated poverty.

Public housing projects, in addition, were utilized as a narrative in informing public opinion regarding issues of poverty in urban neighborhoods. Various policy makers often depicted projects of this type in a negative light, suggesting that their implementation "distilled the damaging influence of poverty on urban neighborhoods."[36] As a result, government participation in projects that were centered in underperforming urban areas was limited. Public housing continues to define a widespread attitude of "comprehensive place based anti-poverty" in present-day urban neighborhoods as well as modern approaches to community development.[37] However, the full context of public housing—its successes and failures—is rarely discussed in current housing policy and discourse.[38]

Frequently, the topic of deconcentration theory accompanies the discussion of urban renewal and its impact on modern practice. Deconcentration theory suggests that areas of concentrated poverty pose adverse impacts on the well-being of its residents. Thus, the theory

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[34] Tony Roshan Samara, Anita Sinha, and Marnie Brady, "Putting the 'Public' Back in Affordable Housing: Place and Politics in the Era of Poverty Deconcentration," *Cities* 35 (December 2013): 320, https://doi.org/10.1016/j.cities.2012.10.015.
[35] Ibid.
[36] Ibid.
[37] Ibid.
[38] Ibid.

argues that these communities should be "dispersed rather than strengthened."[39] Often applied in union with efforts of urban renewal, deconcentration had become policy throughout many cities across the United States. Modern research indicates a national pattern of deconcentration that stimulates disinvestment in affordable housing, leading to an increase of vacant units across several American cities. City officials then exploit these vacancies to justify demolition of the property,[40] perpetuating a standard of urban renewal in areas with more dense concentrations of low-income or minority persons. Urban renewal and deconcentration endeavors between 2000 and 2008 have destroyed over 99,000 public housing units—a rate of at least 11,000 per year on average.[41] Currently, researchers believe that "hundreds of thousands of public housing units" have been lost because of these policies, and this mindset of redevelopment is associated most closely with "urban real estate markets and gentrification."[42]

A second case study in New York City, the development of 1199 Plaza between 1970 and 1974, demonstrates the significance of disinvestment in public housing that occurred in the eras of urban renewal and deconcentration. Large-scale recognition and implementation of the suburban form in the creation of suburbia "exacerbated segregation by race and class" in the decades to follow.[43] The integration of a diverse, supportive community that Local 1199 attempted to pursue could not be realized in the face of the increasing standardization of urban development patterns that normalized the exacerbation of concentrated poverty and segregation.

The cooperative housing development of 1199 Plaza included 1590 housing units of low and moderate rates, situated within a context that would attempt to integrate members of the 1199 labor union into an existing community in an effort to promote equitable living conditions rather

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[39] Megan Reid, "Public Housing and Gender: Contextualizing the 'We Call These Projects Home' Report." *Cities* 35 (December 2013): 338, https://doi.org/10.1016/j.cities.2012.10.006.
[40] Samara, Sinha, and Brady, "Putting the 'Public' Back in Affordable Housing," 322.
[41] Ibid, 319.
[42] Ibid, 321.
[43] Botein, "Visions of Community," 192.

than erect an entirely distinct environment (as per Local 3's bold community engagement endeavors). Local 1199 was a hospital worker's union that was predominantly comprised of females and people-of-color. With a co-leadership that consisted of those who were Russian-Jewish in background, the union possessed an understanding of a broader conception of community that involved economic integration along with racial integration,[44] emphasizing a strengthened quality of diversity within the membership and philosophies of Local 1199. The ideologies in the conception and development of Plaza 1199 were outward reaching in nature, designing a product of "acclaimed" design to create a racially and economically integrated community within a highly populated district of the city that would reflect the union's overall position in the scheme of civil rights.[45]

Unfortunately, by the time the union had rallied the necessary support to fund and construct such a project (Local 1199 could not consider internal funding due to the sparse wages of its workers), investment had shifted from public housing to private market endeavors.[46] This widespread disinvestment in public housing combined with a cultural shift to popularized private and suburban living proceeded to perpetuate the processes of urban renewal and deconcentration among America's urban fabric. Consequently, the project is now enmeshed in a low-income context,[47] its efforts to establish an integrated, equitable community thus proving unfruitful.

For decades, criticisms of urban renewal and deconcentration have pointed out the adverse and damaging effects that these methods of urban development have imposed upon the urban fabric of America. Research that challenges these practices has often pointed to the political depiction of affordable housing and its residents as being shallow and "cartoonish,"[48] an unfair and perhaps childish assessment of the conditions that exist among areas of concentrated poverty and

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[44] Ibid, 188.
[45] Ibid, 191.
[46] Ibid.
[47] Ibid, 192.
[48] Samara, Sinha, and Brady, "Putting the 'Public' Back in Affordable Housing," 320.

segregation. African American urbanist W.E.B. Du Bois was a significant figure in understanding the sociology of segregated communities. With his background as a writer, sociologist, and civil rights advocate, he conducted the first sociological study of a black community in the United States and published his findings in a book titled *The Philadelphia Negro*.[49] His research involved the analysis of Philadelphia's Seventh Ward including its housing stock, community institutions, and street life along with detailed surveys of its residents; the issues he noted to be prominent within this community (that were "willfully ignored" by neighboring white communities) continued to endure through the twentieth century.[50]

Urban renewal and deconcentration policies are also criticized to fall in opposition to the concept of "community" in America. In particular, the emphasis on deconcentration in policy incites a "disregard" for the significant historical context of the communities it targets, which contradicts the "general U.S. cultural belief in value of strong communities."[51] The character and culture of communities that do not fall in line with the ideals of urban renewal and deconcentration are evidently deemed unimportant or unnecessary to the benefit of urban neighborhoods and are thus erased from the fabric of urban space. A strong supporter of the visibility of "community" in urban development was urbanist Jane Jacobs. Her book *The Death and Life of Great American Cities,* a publication that notably dismissed Ebenezer Howard's concept of the Garden City, served as a "love letter" to the qualities of colorful communities that urban renewal developments often uprooted—"crowded neighborhoods, chaotic streets, jarring mixtures of people and land uses."[52] She is indicated to have strongly opposed the principles and practices of Robert Moses, advocating for smaller, more intimate city blocks with mixed-use programs (reminiscent of where she lived in Manhattan's West Village) as opposed to freeways and superblocks.[53] It should be noted that recent

[49] Schneider, "15 People Who Shaped the Modern American City."
[50] Ibid.
[51] Reid, "Public Housing and Gender," 339.
[52] Schneider, "15 People Who Shaped the Modern American City."
[53] Ibid.

criticisms point out her "idyllic" and biased perspective of her New York neighborhood that swept concerns of housing affordability and segregations under the rug,[54] aspects of significant relevance to urban development patterns that must be included in the conversation of equitable housing.

With the current state of the American housing landscape, there is a growing need for architecture to address environmental sustainability from the repercussions of suburban sprawl, urban renewal, and deconcentration. These practices pose detrimental effects to the global climate in that demolition of property releases carbon emissions—known as embodied carbon—into the atmosphere, though no public data exists that estimates a national quantity of emissions from construction materials as of January 2024.[55] However, many major urban settlements across the United States possess some of the "largest per capita carbon footprints" internationally,[56] highlighting a concern of global proportion that requires an immediate assessment of American urban development patterns that have contributed significantly to the perpetuation of an unsustainable climate. A critical evaluation of these patterns is key in mitigating future emissions and supporting sustainable urban development practices, which will contribute to a more equitable residential landscape.

Having acquired an in-depth understanding of the course of residential urban (and suburban) development in the United States, the discussion will shift focus to more recent approaches in pursuit of affordable social housing solutions. Firstly, the notion of "affordable" housing as a conceptual device in designing modern solutions for low-income groups will be challenged. This will reveal vital flaws in the conventional practices that inform many affordable housing projects across the nation. Secondly, these flaws will be acknowledged as gaps within current practices that can be filled with more forward-thinking ideologies to housing design. These

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[54] Ibid.
[55] Andrew Chase, "Efforts to Reduce the Embodied Carbon Emissions of Building Materials," U.S. Green Building Council, January 10, 2024, https://www.usgbc.org/articles/efforts-reduce-embodied-carbon-emissions-building-materials.
[56] Dunham-Jones and Williamson, *Retrofitting Suburbia*, 3.

ideologies will be identified in principles that encompass contextual, sustainable, and empathetic design, which have the potential to embody an equitable solution in a pervading housing crisis.

Challenging "Affordable" Housing: Broad Conventional Methods

As mentioned previously, "affordable" housing is often applied to modern social housing projects in a broad, conceptual sense. In essence, this framework of housing is too nonspecific to address issues of context, sustainability, and empathy in design, stripping many low-income housing cases of their potential to equitably serve underperforming communities. Conventional affordable housing strategies lack contextuality, unable to identify and address the inherent issues within areas of concentrated poverty or segregation; they lack sustainability, unable to prompt meaningful change in improving social, economic, and environmental conditions across various scales; and they lack empathy, unable to understand the perspectives of diverse, low-income communities and their value in the development of urban space.

The ongoing lack of contextuality in affordable housing can be associated with the prior discussion of disinvestment in affordable housing projects across many major urban cities, an unfortunate outcome of deconcentration policy. As described, the policies and practices of deconcentration actively target communities of concentrated poverty and minority groups. They seek to continuously displace underdeveloped areas and the people within them further from increasingly gentrified urban cores, exacerbating unsustainable conditions and lifestyles among inequitable urban landscapes that plead to be addressed and resolved; but social housing projects cannot afford to provide responsive solutions. Thus, architecture is not given the opportunity to intervene.

As mentioned, disinvestment in affordable housing methods spurs a standardization of unsustainable urban development practices. The continued application of these processes, in their efforts to define virtually homogenous urban cores across the country, perpetuates prevalent conditions of social and economic inequity; additionally, urban renewal practices are proven to be

environmentally destructive in their cyclic habit of stacking reconstruction emissions upon embodied carbon from demolition. Ultimately, social, economic, and environmental conditions within urban spheres decline and fester.

Regarding the unsustainability behind these urban development practices, studies have been conducted to shed light on the application of conventional housing solutions and the negative characteristics they often impose upon their sites. Conventional solutions to social housing can result in intensified gentrification and the continued displacement of segregated minorities. Promoting equity through the integration of low-income groups is a quality that all cases that were included in the study lacked, and a gradual growth of gentrification was observed over time as lower-income groups could not continue to sustain the growing expenses of their lifestyles.[57] Notably, the common outcome among these cases is tied to a misplaced investment on the part of project developers, shifting attention from affordability to instead achieve LEEDND accreditation for an allegedly "sustainable" neighborhood development project. "LEEDND" stands for Leadership in Energy and Environmental Design for Neighborhood Development and is a rating system used to evaluate the sustainability of a given neighborhood development. Investigation of the LEEDND rating system and its scale points to the unbalanced character that underpins accreditation; little emphasis is placed on a project's ability to integrate low-income groups, which would likely foster equity in these neighborhoods. Researchers point out that equitable built environments can be sustained by accommodating low-income residents,[58] a mindset that should be standardized in modern urban development. However, the rating system as it exists spurs a conflict of interest for project developers—the perceived value of affordability in the larger scope of accreditation—that

[57] Nicola Szibbo, "Lessons for LEED® for Neighborhood Development, Social Equity, and Affordable Housing," *Journal of the American Planning* Association 82, no. 1 (December 2015): 38, https://doi.org/10.1080/01944363.2015.1110709.
[58] Ibid.

leads to the exclusion of affordability in contemporary housing developments. In turn, these communities experience increased gentrification and displacement of low-income groups over time.

Most consequential of all is that the perpetuation of urban renewal and deconcentration patterns in the present points to a chronic lack of empathy for the communities they target—and for the people within them. A repeating cycle of political disinvestment spurs development strategies that ignore the significance of contextuality in underperforming urban sectors, the need for improved sustainability in these environments, and the absence of empathy for the human beings affected and trapped in the cycle's succession. A drastic change to existing patterns of urban redevelopment must occur in order to break this disruptive cycle. This change—long-lasting and equitable—will require more innovative and intentional solutions to housing that push beyond the boundaries of conventional methods.

However, the lack of investment in inventive solutions to address the complex problems that saturate the American housing landscape is severe, unlikely to be remedied without large-scale reassessments in both mindset and policy. Efforts have been made in the twenty-first century to coordinate investment in public housing interventions, though when such interventions are applied with the standard framework that accompanies conventional urban development—and the conceptual aspect of "affordability" in housing—their influence in advocating for more equitable conditions is limited. An example of this can be found in the analysis of three interconnected affordable housing projects in the Station District of Santa Ana, California, each developed within a similar time frame. Upon close inspection, these projects also reveal complex dynamics between the various parties involved in the planning and development stages of affordable housing projects, typically between community, political, and economic agents, [59] that are crucial to recognize as they are reflective of common urban development relationships across many American cities.

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[59] Carolina S. Sarmiento and J. Revel Sims, "Façades of Equitable Development," *Journal of Planning Education and Research* 35, no. 3 (June 8, 2015): 324, https://doi.org/10.1177/0739456x15586629. These dynamics

The first project to be built within the Station District was the Triada. This development consisted of subsidized affordable housing units for sale and rent, a community center, and an open space to be shared by residents. Community activists, organizations, and neighborhood associations were at the forefront of planning, advocating for a specialized community benefits agreement (CBA) that would promote positive development and legally bind the community, the city, and the project developer. This agreement included employment-related provisions and anti-displacement measures that would ensure community members a sense of security. When matters arrived at a vote from the city council, a legally binding contract was left out of the final development agreement, and only a few of the original benefits listed in the CBA were included. Ultimately, the project was perceived as a success with the approval of necessary affordable housing and emphasized involvement from the community in the early development stages, though those from the community who were involved were notably "less satisfied with the results of the planning process."[60]

The second project to be built was the Terraces at Santiago. This development was designed to house thirty-five affordable units that showcased two-, three-, and five-bedroom arrangements. Beyond residential units, the project also houses a community room, a small children's playground, and an outdoor courtyard accessible to residents. When compared to the Triada, this project had a much swifter (and more simplistic) planning process and significantly less community involvement. Despite this, the Terraces are well regarded in terms of environmental sustainability and affordability.

The third development was the Depot at Santiago, and this project was observed to have a more problematic developmental process when compared to the previous two. One such problem stems from the project site, a 1.47-acre lot of industrial warehouses deemed vacant by the city,

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relate back to the many complex factors discussed earlier in the paper that act as barriers to the implementation and endurance of equitable housing environments.

[60] Ibid, 330.

though people still actively occupied the space, including those that operated businesses on the site. Meetings would be held regarding the planning and development of the Depot, and one of which was attended by predominantly white members of the community. Concerns were raised regarding the logistics of traffic and circulation as well as retail that the project would provide. The most apparent issues raised, however, dealt with the effects on the quality and property values of the adjacent Santiago Street Lofts along with the "type" of tenant that would be living in the proposed developments.[61] Historically, the Santa Ana area consists of a population that is mostly Mexican and Hispanic in descent, revealing a problematic aspect of the Depot in that a homogenous body within the community was intent to emphasize strict control in what racial, social or economic profiles be allowed residence in the property.

Overall, the location of these affordable housing interventions is centralized in areas of concentrated gentrification. Tensions can be traced between the various parties and complexities that comprise "affordable" housing. This tension most candidly reveals itself in the planning stages between political and economic agents when addressing the needs of the community. While there was a genuine pursuit towards establishing equitable living environments in an urban fabric that is "especially unaffordable and overcrowded,"[62] the underlying complexities that constitute the community of the Station District are undermined. Ultimately, the specific needs of this community are unheard and unmet, creating an inequitable environment that perpetuates the displacement of people that are centric to the area's history and culture.

As previously discussed, low-income strategies that possess broad objectives of achieving affordability fail to establish and promote equitable communities. The housing market desires interventions that seek closer involvement on the scale of the community, acknowledging context, improving sustainability, and illustrating empathy. New models are emerging that demonstrate

[61] Ibid, 331.
[62] Ibid, 327.

innovative, intentional developments of affordable housing, and the key to success within these models lies within community involvement and empowerment during the planning and early design phases. A conventional solution that does not account for the collective members of the community it serves will not produce lasting, meaningful change. The needs of the user, as well as those of their contextual environments, must have the opportunity to be voiced and carefully, empathetically considered to cultivate communities—and certainly homes—that are truly equitable.

Context, Sustainability, and Empathy: Innovative, Intentional Solutions

As discussed in the previous section, conventional methods and cases of housing oriented toward low-income groups often apply a conceptual, "affordable" framework that is unable to address issues of context, sustainability, and empathy. Without these contextual, sustainable, and empathetic qualities, such projects can undermine efforts to seek positive, lasting change in underdeveloped communities. Persisting, place-specific problems are not given a priority—some cases cannot afford to, and others do not care to due to a standard of disinvestment—resulting in an overall lack of constructive development, notably the development of equity.

However, low-income housing does not have to be generalized, nor should it be generalized at all. As models of "affordable" housing exist, there are also low-income models that seek innovative and intentional solutions to pervading problems of the communities they serve. These examples exhibit improved conditions of equity because they strive to accurately meet the needs of their users and environments. In turn, they provide an opportunity to cultivate equity for people and places. Aspects of contextuality, sustainability, and empathy and their benefits in the design process will be thoroughly discussed to demonstrate their impact in creating responsive, equitable solutions to housing.

Regarding contextuality, there are many factors to consider when examining underdeveloped communities across the expanse of America's urban fabric. One factor to take into

consideration is the relative diversity of the community being built for, defined by the scales of race, gender, and income associated with a place. The reality of the existing housing landscape is that urban renewal and deconcentration patterns have created highly concentrated zones of poverty and segregated minorities that are disconnected from developed urban cores. The integration of diversity in urban neighborhoods is widely missing, which amounts to a similar lack of equity among residents. Advocation for diversity in communities is imperative, but it is a difficult thing to achieve with preconceived notions of concentrated poverty acting as an inhibitor to favorable urban development. With evidence to support the idea that diversity is necessary for the development and longevity of equity in the housing landscape, there is hope in shifting past mindsets to instead welcome integrated diversity in the central fabric of urban space.

In the analysis of underdeveloped urban contexts, race, gender, and income are frequently intertwined. Numerous activists have sought to call attention to instances of inequitable living conditions for segregated communities (such as Du Bois with his sociological study of Philadelphia's Seventh Ward) or those who are generally perceived as less fortunate. Women, in particular, are responsible for shaping an activist history of advocacy for improved housing conditions in impoverished neighborhoods in the United States. The figures that will be mentioned are by no means exhaustive, but their achievements are considerable and still recognized in the present.

First, Jane Addams is a noteworthy figure in women's activism. In the late nineteenth century, she was responsible for co-founding the Hull House in Chicago's Near West Side. This was a "settlement house" run entirely by women, housing a combination of programs that included a community college, recreational center, and clinic.[63] The Hull House was intended to assist immigrants and poorer persons of the area; immigrants could receive language classes provided by the institution, and victims of domestic violence received shelter.[64] Historically, this settlement

[63] Schneider, "15 People Who Shaped the Modern American City."
[64] Ibid.

house deeply and positively impacted the lives of minority and impoverished groups in the nineteenth and twentieth centuries. Additionally, she and her staff of the American Sociological Association collected comprehensive sociological data about the surrounding neighborhood, which was used to campaign for women's rights and policy reforms regarding immigration and child labor.[65]

Next, activist Catherine Bauer Wurster's contributions were critical in the field of public housing development in the twentieth century, and her ideals remain relevant in the present with a national need to address housing policy and find equitable public housing solutions. She was a popular figure of her time in the advocation for high-quality public housing. In her 1934 book titled *Modern Housing*, she indicted the United States for its national failure to build "comfortable, dignified housing for ordinary people" in a shortage of housing.[66] She proceeded to write a majority of the U.S. Housing Act of 1937, marking the creation of America's public housing program.[67] Her principles included top-down approaches to social housing interventions,[68] [definition of top-down urbanism ideologies]. Urbanist Jane Jacobs criticized this "ongoing faith" in top-down ideals to public housing, but Wurster contended that issues of segregation could not be challenged without interventions of this type,[69] a problem that Jacobs' principles largely disregarded, as previously noted.

Finally, Grace Lee Boggs was a Chinese-American activist of the twentieth century, recognized for her participation in and contributions to political and neighborhood activism. Her early activist endeavors included advocating for tenants-rights on Chicago's South Side, soon becoming enmeshed in "radical black politics" from the early 1940s and was involved in political

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[65] Ibid.
[66] Ibid.
[67] Ibid.
[68] Ibid.
[69] Ibid.

movements such as Black Power and New Left.[70] Her activist efforts shifted in the late 1970s to neighborhood engagement, founding an intergenerational community arts and activism organization known as "Detroit Summer" with her husband that worked to mitigate the gradually declining conditions of the city.[71]

In a broader scope, women who participate in similar forms of activism tend to come from poorer communities, commonly opposing efforts of forced relocation imposed by deconcentration policies.[72] Deconcentration movements, as discussed previously, are detrimental to communities of poverty and segregation as they frame these areas as complications within otherwise profitable, thriving urban environments. Marked as targets of urban renewal, large swaths of underdeveloped communities are destroyed in the wake of these practices, forcing the people that live within them to relocate. Ensuring that these communities remain intact is crucial in the advocation for equitable living conditions because women who live in impoverished communities commonly form supportive circles in which they exchange emotional or material resources with one another. This behavior is especially common among minority groups, particularly those with prominent African American and Mexican cultures.[73] These support groups are imperative to these communities as they help alleviate the hardships that accompany poor lifestyles. Removing the foundation for these avenues of support poses a threat to their way of living, thus it is important to recognize and elevate these diversified communities with rich histories of social support networks.

Along with scopes of race and gender, the scale of income between various residential sectors plays a critical factor in shaping urban social conditions. Present-day research emphasizes that accommodating the needs of low-income groups can help create and support more equitable living conditions within urban spaces. Broadening the scope of income classes included within

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[70] Ibid.
[71] Ibid.
[72] Reid, "Public Housing and Gender," 338.
[73] Ibid.

developing affordable housing projects combats gentrification and the erasure of significant and long-standing cultural contexts. Integrating strategies into social housing projects that capitalize on the inclusion and elevation of low-income groups promotes a celebration of their culture and history. Thus, principles of urban development that acknowledge the diverse contexts of these groups can be utilized to improve and support equitable living conditions within the places most vital to them

Another aspect that encompasses innovative and equitable solutions to housing is sustainability. In light of the damage that suburban sprawl has incurred on present-day infrastructures, it is important for future housing development endeavors to address a lack of density prevalent throughout a significant portion of America's urban fabric. In addition, urban renewal and deconcentration approaches contribute further to a broken, sparse urban landscape, and impose additional negative effects to the global climate through mass amounts of carbon emissions. These patterns are as equally unnecessary in practice as they are harmful. Universally, the global North possesses a market for housing that has already been built, estimated to contain 80 percent of 2050's stock.[74] Demolishing and rebuilding is not (and never has been) an environmentally feasible housing solution. Urban processes of retrofitting and revitalizing can serve to mitigate emissions by "decarbonizing" existing structures[75] while reconnecting broken city fabric, contributing to a better quality of life and improved livability across diluted urban conditions. In this way, environmental and social sustainability can conjoin to establish greater, more meaningful change within communities.

Retrofitting is an architectural practice commonly associated with methods of adaptive reuse, an urban redevelopment strategy that repurposes old structures for new functions while

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[74] Katharine Logan, Joann Gonchar, and Pansy Schulman, "Shelter from the Storm: Design Firms and Builders Are Fostering Equity through Innovation in Affordable, Climate-Smart Housing," *Architectural Record* 210 (June 2022): 88, https://search-ebscohost-com.libproxy.unl.edu/login.aspx?direct=true&db=bvh&AN=839990&site=ehost-live.
[75] Ibid.

improving their energy performance. In a general sense, retrofitting in architecture is "to install parts of equipment not available during the original construction or manufacture," though the ideals that are fundamental to retrofitting extend to include the betterment of the built environment through positive and lasting change.[76]

An example of the environmental and humanitarian benefits to retrofitting can be observed in a foreign case located in Hamilton, Ontario. Ken Soble Tower, originally built in 1967, is an 18-story, 146-unit senior's housing tower that managed to massively reduce its emissions despite its tight budget, a noted 94 percent reduction compared to the operation of the original structure,[77] demonstrating the authority that retrofits can command in designing for a more sustainable future. Along with its improved energy performance, the retrofit includes several updates that enhance the quality of life for occupants of the building. Designers prioritized a "comfort-first" quality to the framework of the retrofit that included the betterment of "residents' well-being, safety, and climate resilience" of the structure,[78] serving as a major milestone in the pursuit of improving environmentally inefficient structures to serve as potential housing stock as well as establishing a sustainable social environment for users.

The utility of retrofitting in enhancing the energy performance of outdated, inefficient structures on a case-by-case basis demonstrates its potential in generating environmentally conscious design. However, when implemented at a larger scale, its influence can span into the realms of social and economic sustainability. Practices of suburban retrofitting aim to revitalize underutilized urban space by revising or replacing the traditional patterns of urban organization that have "dominated land-use decision making and development for decades."[79] A critical analysis of America's current urban landscape reveals the conventional suburban form as an epidemic

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[76] Dunham-Jones and Williamson, *Retrofitting Suburbia*, xii.
[77] Logan, Gonchar, and Schulman, "Shelter from the Storm," 89.
[78] Ibid.
[79] Dunham-Jones and Williamson, *Retrofitting Suburbia*, xii.

figure. For a number of reasons, suburban settlements are gaining traction as places of "centrality" outside of major urban cores; some factors influencing popularity of modern suburban living include trends of regional and job growth that spur a desire for more multiunit housing in the suburbs.[80] Undeveloped land is incredibly limited in the wake of suburban sprawl, however, and what little of it remains is often expensive due to its relative unavailability.

Suburban retrofitting strategies can be implemented across the low-density fabric that permeates the American urban landscape to both remedy a problem of fragmented, underperforming space and cater to the increasing appeal of suburban living. Methods of suburban retrofitting encourage larger lot redevelopments, promoting increased density and a greater ability to shift existing patterns of urban development; in turn, this introduces a new, progressive "urban node" that offers a diversity of uses and housing types with increased affordability.[81] Ultimately, multifunctional retrofits of higher density and walkability will reduce carbon emissions through an estimated 30 percent cut in VMT (vehicle miles traveled) while enhancing social capital,[82] offering a sustainable alternative to conventional, arguably antiquated methods of development that produced the current fractured state of American urban fabric. Through the gradual reform of urban development practices, a suburban retrofitting standard is probable to take root across a network of cities with the noted observation that, "One successful retrofit tends to breed another."[83]

Along with flexibility of scale, suburban retrofits are flexible in time of redevelopment. Incremental urbanism, while not strictly a practice of suburban retrofitting, is characterized by an additive, gradual evolution of cities (not limited to those within the United States) in which the overall urban form exhibits the "imprint of a broad spectrum of interests."[84] Such an approach to

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[80] Ibid, 4.
[81] Ibid, 5.
[82] Ibid, 3. This reduction in emissions is accomplished by achieving a similar density to urban projects but with differing urban qualities. People can complete everyday tasks in one place without the need to get in a car in between these tasks.
[83] Ibid, 6.
[84] Ibid, 2.

redevelopment demonstrates the ability for steady, conscientious interventions to be attentive of existing contexts and cultures, elevating and celebrating them in revitalized urban space. This reflects the intent of suburban retrofitting and embodies what wants to be realized through modern retrofits in American urban space.

Alternatively, the implementation of "instant cities" as a method of suburban retrofitting operates with a similar intent to incremental urbanism. As the name implies, instant cities often utilize large-scale redevelopment strategies to change current suburban land use trends at a far more rapid pace than the practices involved in incremental urbanism. However, the strategies that establish instant cities are not frequently utilized due to a perception of inauthenticity that has come to be associated with these developments.[85] However, amid a global climate crisis that demands for substantial and swift redevelopment of suburban space, urbanism experts believe that such large-scale interventions are becoming increasingly desirable.[86]

Suburban retrofits have incredible potential in the widespread reassessment and redevelopment of conventional land use distribution. With a gradual, continuous implementation of suburban retrofits nationwide, they gain a level of financial predictability that increases the feasibility of housing affordability in redevelopment.[87] However, a future in which the potential of retrofitting at a large, suburban scale is fully realized will come with challenges. Entrenched standards of urban renewal and deconcentration have exacerbated issues of gentrification in the present, and infrastructural modifications are inevitable with the existing state of America's protracted transportation network. Additionally, advocates for strengthened application of suburban retrofitting emphasize that this type of redevelopment possesses a quality of "leadership" in defining a new urban era that symbolizes "larger cultural aspirations."[88] Instances of incremental

[85] Ibid.
[86] Ibid, 3.
[87] Ibid, 6.
[88] Ibid, 14.

and instant development are valuable to the success of large-scale urban redevelopment. By applying informed perspectives of urban planning to conceive innovative solutions that utilize these frameworks of development, new standards of urban space can derive sustainability from what previously was not while embracing diverse contextualities and empathetic community engagement.

On this note, the final piece that conjoins with contextual and sustainable conscientiousness—the value that ultimately encourages such attentiveness in design—is empathy. Empathetic design utilizes methods of planning that seek to work closely with the user, acknowledging their unique, contextual needs while designing for a more environmentally prosperous future. Innovative solutions with community involvement and activation at their core are those that embody empathetic design. They also achieve the greatest success in shifting conventional development practices and instilling change in previously inequitable environments.

Prominent figures within the realms of design and development are actively advocating for the inequitable conditions across American urban fabric to be addressed and alleviated through a variety of methodologies. The first step in this process involves understanding that, above all, architects are first citizens that can operate on local scales to introduce policies that seek intimate, community-based change.[89] Architects, as citizens, are just as relevant to the communities they design for as the residents that occupy them; as citizens, architects can empathize with the users they seek to elevate by engaging in development practices on both local and national scales that advocate for a shift back to widespread investment in social housing for low income groups.

A common mindset among designers that engage in community involvement practices in the advocacy for equitable design is that they believe these sorts of habits are what constitute the most successful architects,[90] and this is the utter truth. Seeking close interaction on the scale of

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[89] Karen Kubey, "Allies in Equity: A Conversation with an Architect, a Developer and a Former Federal Housing Official," *Architectural Design* 88, no. 4 (July 2018): 130, https://doi.org/10.1002/ad.2330.
[90] Ibid, 131.

neighborhoods and communities that desire positive intervention—and have desired such intervention for a long time—allows for the needs of these places to be acknowledged, understood, and addressed through responsive architectural design. This sort of design simply cannot be achieved without the presence of empathy, which lies at the core of forward-thinking, equitable design. An equitable future of housing coexists with empathetic design; the opposite is just as true and will continue to be the case if conventional development patterns prevail further into the twenty-first century.

Conclusions

The ideologies of suburbanism and the processes of urban renewal and deconcentration have deeply influenced the development of the modern American housing landscape. The surge in suburban populations amid a national housing shortage emphasizes the urgent need for housing solutions to be implemented in these areas. However, the entrenched and pervading low-density suburban infrastructure conjoined with expensive land costs present challenges that limit initiatives to implement these solutions. Simultaneously, these factors contribute to widespread housing disparities that impact the lives of low-income groups most severely, finding themselves unable to afford increasingly unsustainable lifestyles in urban and suburban markets alike.

Further, preconceived notions of low-income communities and their detriment to surrounding urban contexts perpetuates their marginalization through urban renewal and deconcentration efforts. Residential conditions across a vast majority of American cities are largely inequitable as a result. To address these systemic issues, a fundamental shift in public and state mindset is imperative, one that prioritizes social, economic, and environmental equity in housing design and policy.

By embracing principles of contextuality, sustainability, and empathy, designers can establish visibly inclusive communities that empower residents and offer avenues of opportunity to those who need it the most. Through innovative, intentional design and policy interventions, all American

citizens, regardless of race or social class, can have access to housing that is affordable, safe, and dignified. Such an approach serves to alleviate existing issues within the housing market; additionally, this sets the foundation for a more prosperous future for citizens and their environments. Thus, the pursuit of equity in housing is both a moral imperative and a strategy for building resilient, thriving communities.

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