



Barriers and Enablers to Affordable Housing Construction: Insights from Construction Industry Professionals *

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Abstract: Recent research emphasizes the urgent need to improve affordable housing accessibility, 8 safety, and quality while addressing poverty and economic mobility. However, there is a lack of 9 comprehensive studies on US affordable housing construction. Our study focused on barriers and 10 enablers of affordable housing construction in Upstate New York through interviews with ten con-11 struction industry professionals. We identified obstacles like funding shortages, regulatory com-12 plexities, and administrative hurdles. Enablers included increased advocacy, strategic tax credit use, 13 and reduced zoning restrictions. Although a housing supply-demand imbalance persists, emerging 14 solutions and collaborative efforts signal a promising, equitable, and sustainable future. 15

Keywords: Affordable housing; construction management; sustainable construction; housing shortage.

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1. Introduction

About 70% of extremely low-income families are severely cost-burdened spending 20 more than 50% of their income on rent and utilities, and only one in four extremely low-21 income families receive assistance [1]. The U.S. Department of Housing and Urban Devel-22 opment (HUD) defines affordable housing as "housing in which the occupant is paying 23 no more than 30 percent of gross income for housing costs, including utilities" [2]. How-24 ever, this definition stands in stark contrast to the reality faced by millions of Americans, 25 where the supply of affordable housing woefully lags demand, forcing individuals into 26 unaffordable housing or, worse yet, homelessness which is the reality of over half a mil-27 lion people on any given night. 28

While industry professionals are making efforts to address the affordable housing 29 deficit, statistics paint a grim picture of a crisis that shows no signs of abating [3]. Housing 30 costs continue to surge, far outpacing household incomes, a phenomenon that dispropor-31 tionately affects lower-income individuals residing in areas with an inadequate supply of 32 social or public housing. A glaring example lies in San Francisco, where the poorest 5% of 33 residents earn a meager approximate monthly income of \$650, while the bottom 5% of 34 rental rates are around \$1,500 per month [4]. This incongruity stresses the stark reality 35 that the existing supply of affordable housing is grossly insufficient. 36

Affordable housing should be built at a price that does not cost so much that it pro-37 hibits its occupants from meeting other basic living costs or threatens their enjoyment of 38 basic human rights while being adequate in quality and location [5]. There is a perception 39 that housing affordability is just an issue in big cities but, housing affordability is just as 40big a problem in cities and counties around Upstate New York. For example, Rochester, 41 Syracuse, and Albany are experiencing housing crises fueled by rising rents and a short-42 age of affordable housing [6]. In New York State, 73% of renter households are extremely 43 cost-burdened, 75% fall into this category in Rochester and there is a shortage of 655,940 44

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affordable rental homes available for extremely low-income renters [7]. Further, the an-1 nual household income to afford a two-bedroom market rental home in New York State is \$83,375 [8].

In this study, the barriers and enablers of affordable housing will be critically ana-4 lyzed including the project factors that affect the construction process. The findings of this 5 study can help decision-makers and key stakeholders in the construction industry as they 6 work towards building more affordable housing and combating the housing shortage. 7

2. Affordable and Sustainable Housing Construction

One of the identified barriers to affordable housing construction is land acquisition 9 [5] and issues with building on brownfield sites due to unexpected levels of contamination 10 [9]. Further, there is a lack of correspondence between the development of affordable 11 housing units versus the actual geographic need for development and expansion [10]. 12 Land-use regulations are often too restrictive or too relaxed and sometimes have political 13 implications [5]. For example, residents oppose plans for affordable housing in their 14 neighborhoods due to fear of increased congestion, decrease in property value, and strain 15 on public infrastructure like schools, power, and parking availability [5]. 16

As the need for affordable housing keeps growing, contractors need to find alterna-17 tive ways to build inexpensive and sustainable homes to improve the quality of life for 18 people. According to Kimberlin et al. [11], the two most significant sources of subsidized 19 rental housing in the United States are the Low Income Housing Tax Credit (LIHTC) and 20 the Housing Choice Voucher (HCV) program. However, they have some shortcomings, 21 the LIHTC program is only available for new construction or rehabilitation, eliminating 22 funds to fix up old affordable homes that are no longer livable [11]. While the HCV re-23 quires that the renters pay 30% of the household income on rent and then the government 24 pays the rest, not enough are issued each year, and the waitlist for receiving one of the 25 vouchers can take several years. Income averaging sets a limit on the average income of 26 households at 60 percent of the Area Median Income (AMI) and no household income 27 exceeds 80 percent of AMI. This approach can ensure affordable housing is built in the 28 places where they are most needed [12]. Another approach is for each state to formally 29 recognize housing as a fundamental right by amending their respective state constitu-30 tions. This recognition would entail states committing resources to expand affordable 31 housing options, thereby addressing the increasing demand from their populations [13]. 32

Sustainability is a crucial consideration in housing construction in the United States 33 due to the growing demand for affordable housing and the need to provide long-term 34 cost savings for residents and owners, improve indoor environmental quality, increase 35 home value, and enhance occupant comfort. Developers can also use ecological features 36 as a marketing tool for sustainable homes [14]. One of the most critical success factors for 37 sustainable affordable housing is price and rental cost [15]. 38

Despite dealing with obstacles such as limited public awareness of sustainable hous-39 ing benefits, lack of interest from key stakeholders, high initial costs, lengthy payback pe-40riods, and insufficient investment in sustainable housing, sustainability can be promoted 41 in housing by educating firms on sustainable design, raising public awareness about the 42 benefits of sustainable housing, enforcing laws that mandate the use of sustainable con-43 struction methods, offering financial incentives for adopting sustainable solutions, and 44 supporting emerging technologies that can optimize energy efficiency [16,17]. Under-45 standing the current state, barriers, and enablers of affordable housing construction is cru-46 cial to implementing sustainable solutions effectively. 47

3. Methodology

Semi-structured interviews were conducted to gather construction industry profes-49 sionals' insight on the status of affordable housing in Upstate New York discussing the 50 current state, barriers, and enablers of affordable housing construction. The interview 51

questionnaire was developed after an in-depth literature review of the gaps in identifying1the barriers and enablers of affordable housing construction. Institutional Review Board2(IRB) approval was obtained for the study from the authors' institution.3

The target group for this study included professionals who are knowledgeable in 4 affordable housing construction and have had experience either working on or overseeing 5 affordable housing projects in Upstate New York. They were identified through a snow-6 ball sample of professionals in the affordable housing construction business. Ten out of 7 the thirteen participants who were invited participated in the interviews (Table 1). Two 8 participants were interviewed simultaneously. The interviews began with six demo-9 graphic questions followed by twelve questions surrounding the current state, barriers, 10 and enablers of affordable housing in Upstate New York. Each interview was recorded 11 and transcribed on the Zoom cloud recording system for future reference to make data 12 analysis more efficient. Proper data collection procedures were developed to maintain 13 consistency throughout the interview process. The transcripts were coded for thematic 14 analysis. 15

		Years of		Organization
	Job Title	Experience	Population Served	Туре
Participant 1	CEO/President	Over 20 years	Families, seniors, special needs, and middle income	Private
Participant 2	CEO/President	15-20 years	Low-income, seniors, fam- ilies, and homeless	Non-profit
Participant 3	Project Manager	10 years	Changes yearly based on	
Participant 4	Senior Project Coordinator	5-6 years	state funding goals	Private
Participant 5	Project Manager/ Estimator	35 years	Income qualified, 75% af- fordable and 25% market	Private
Participant 6	Senior Project Manager	5 years	Seniors and low-income	Private
Participant 7	President	9 years	Seniors and low-income	Private
Participant 8	Senior Vice President	35-38 years	Low-income families	Non-profit
Participant 9	Managing Partner	8 years	Changes yearly based on state funding goals	Private
Participant 10	CEO/President	35 years	Low-income families	Private

Table 1. Demographic information of participants

4. Results and Discussion

In defining affordable housing, participants who were in senior leadership roles (i.e., 19 CEO/President) and work in the development side described the concept as the cost of 20 rent not being more than 30 percent of an individual's income. However, participants who 21 hold construction manager positions described affordable housing as housing that is no 22 more than 30 percent of the total household income because anything greater than that 23 not only makes it unaffordable but also forces people to make financial decisions based 24 on their limited income. They also mentioned that affordable housing usually gets a neg-25 ative image because people assume it is "low-income" or "Section 8" housing. 26

The participants reiterated the shortage of affordable housing in Upstate, New York 27 and most of them believe there will never be enough affordable housing to meet the demand. Rents are also continuing to rise, which poses a problem to most residents in need 29 of affordable housing because their income is not enough to pay their rent and other necessities. A few of them alluded to a promising future for affordable housing, and the need 31 for more funding and incentives to build affordable housing. Participants mentioned the 32

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New York State governor's proposed plan to provide financial support for affordable 1 housing. One participant commented on how technology more than ever is being adopted 2 in the construction industry. They believed that emerging technologies should be used in 3 affordable housing construction projects. One of the participants who is heavily involved 4 in affordable housing construction mentioned that their company hasn't slowed down 5 building affordable housing and doesn't see it slowing down anytime soon. Building af-6 fordable housing becomes more than just a new home but an asset to the community, 7 helping them grow and meet the needs of their members. 8

The main barriers to affordable housing construction that were mentioned are finan-9 cial aspects, rules and regulations, and poor advocacy. All the participants agreed that 10 financial aspects are a major barrier to affordable housing construction. An investor's 11 main goal is to maximize profits, and there are a lot more obstacles to overcome to make 12 a profit in building affordable housing compared to market-rate housing. State and fed-13 eral governments have strict rules and regulations that need to be met by developers in 14 affordable housing projects, which makes these projects complicated. For example, regu-15 latory issues on land use and building restrictions, delays in development, administrative 16 roadblocks like the length of application, and the decision-making process for rezoning 17 increases the time to receive permits and correlates with higher land and housing prices. 18 These regulations cause issues because most communities are under pressure to raise 19 taxes for public service funds, which results in policies being implemented that favor the 20 construction of higher-cost developments and pushes back affordable housing construc-21 tion. Participants also discussed the low-profit margin in building affordable housing set 22 by New York State. Participants mentioned the need for more state funding since only one 23 out of three projects that apply get funded. Another barrier is inadequate advocacy, af-24 fordable housing is a niche market and only companies with a mission that believes in 25 building affordable housing advocate for it. One participant stated that the National As-26 sociation of Homebuilders only advocates for affordable housing about 25% of the time 27 because people are more concerned with market rate housing because that is where more 28 of the money is. Another challenge that projects face is labor shortages, especially in iden-29 tifying qualified minority contractors to work on these projects. 30

While overall advocacy for affordable housing is limited, it's worth noting that some 31 participants pointed out that developers of affordable housing actively advocate for their 32 projects at community meetings. Completed affordable housing construction projects also 33 serve as advocates for more of these projects because they demonstrate the benefits. More 34 advocacy is needed to encourage more affordable housing. Funding through state and 35 federal tax credits supports affordable housing construction. Low-income tax credits are 36 the largest government program to subsidize housing. There are also other tax credits like 37 historic and brownfield, which can be used by themselves or paired with low-income tax 38 credits. Other types of financing that can be used are private construction loans and con-39 ventional bank financing. These types of financing are usually used on smaller projects or 40 individual units. More green funding and funding that meets the specific needs of a cer-41 tain population can also encourage affordable housing construction. Flexible funding 42 sources would make affordable housing funding less complicated because one of the is-43 sues that developers are facing is the complex requirements that go with funding. Finally, 44 reducing restrictions on affordable housing can encourage its adoption. The participants 45 believe that people are starting to understand how important building affordable housing 46 is to New York and the United States due to new resources and funding opportunities. 47

One of the project factors that impact affordable housing construction is the budget. 48 Three main components that the participants identified that make up the budget of an 49 affordable housing project are acquisition costs, construction costs, and soft costs. Acquisition costs are all costs included in obtaining the property. Then the construction costs 51 include all the costs needed to construct the project. Lastly, the soft costs include environmental, architectural, legal, and financing costs. When building a market-rate home, you build as cheaply as possible and receive cash flow over time, but cash flow is limited for 54 affordable housing. That is why there is a larger developer fee for affordable housing com-1 pared to market-rate housing. Another key aspect of the budget is how much funding the 2 developer can receive from the state and how much rental income the developer can re-3 ceive from the affordable housing project. Changes in construction costs can also impact 4 a project budget. Another project factor is schedule delays. Building a construction sched-5 ule with a feasible timeline is crucial for a successful project. The three main phases of an 6 affordable housing project include the concept and application phase which can take 1-3 7 years and entails getting funding for the project, then the construction phase, which de-8 pending on the size, can take anywhere between 11 and 24 months. Then the closing 9 phase, which can take anywhere from 6 months to a year. The duration is affected by the 10 time it takes to receive funding and the complexity of the project. Most non-profit organ-11 izations cannot afford to spend money until they know that they have funding secured, 12 unlike private organizations. In extreme situations, an affordable housing project could 13 take 5 to 7 years. Other schedule impacts are public approvals, rezoning, permitting, en-14 vironmental factors, and site control. One often overlooked issue is the time it could take 15 to complete due diligence, negotiate, and get a reasonable price for the piece of land from 16 the seller. The environmental factor due to unforeseen conditions is one impact that al-17 most all the participants discussed. Material delays, supply chain issues, and labor short-18 ages were other schedule impacts described, especially due to disruptions such as the 19 COVID-19 pandemic. Location emerged as a critical factor in the success of affordable 20 housing projects, with careful assessment of community fit and accessibility to transpor-21 tation and amenities playing a pivotal role in site selection. 22

Most affordable housing projects in New York State have been required to build sus-23 tainably for the last 10-15 years. One participant pointed out that in 3 to 4 years, affordable 24 housing might become all-electric, eliminating fossil fuels 100%. Today's projects are be-25 ing designed to meet Energy Star standards or achieve LEED certification. Another par-26 ticipant stated that the sustainability goals are based on the location, project size, available 27 rebates, and the feasibility of recommended approaches. Also, the government provides 28 guidelines and sets minimum standards for sustainability. Third-party consulting firms 29 were commonly engaged to develop and oversee sustainability plans, and advocacy 30 groups at local and state levels further encouraged sustainable building practices. 31

5. Conclusion

In conclusion, this study explored the landscape of affordable housing construction 33 in Upstate New York. Key findings suggest that the high cost of entry, stringent rules and 34 regulations, and lack of funding and advocacy are the main barriers to constructing more 35 affordable housing. To foster the growth of affordable housing, it is imperative that more 36 substantial funding mechanisms are put in place, coupled with a reconsideration of the 37 regulatory framework to provide greater flexibility without compromising safety and 38 quality standards. Additionally, advocacy efforts should be intensified to raise awareness 39 and support for affordable housing initiatives, both within the private sector and among 40non-profit organizations. With the affordable housing crisis not ending anytime soon, 41 more work can be done to understand how low-income families can afford rent at 30% of 42 their household income. 43

One of the limitations of this research study is that the participants were mostly from 44 the private sector and a limited number of non-profit organizations implying a need for 45 future research to encompass the perspectives of the public sector. Moreover, expanding 46 the scope of inquiry to include a broader geographical area within New York State can 47 yield a more comprehensive understanding of the barriers to affordable housing construc-48tion and facilitate the development of region-specific solutions. As the quest for affordable 49 housing continues, these efforts will remain instrumental in shaping the future of housing 50 accessibility in the region. 51

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