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Analyzing the Supply-Side Dynamics of Affordable Housing in the United States

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**Analyzing the Supply-Side Dynamics of Affordable Housing
in the United States**

By

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**An Honors Thesis in partial fulfillment of the requirements for the degree Bachelor of
Science in Business Administration in Finance and Real Estate**

**Sam M. Walton College of Business
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Introduction

Across the United States (U.S.) there is a shortage of affordable housing for low-income individuals and families. To qualify for affordable housing, the income of a household must be at or below 80% of the median income for the respective area. In addition, the qualification for extremely low-income housing requires a median income at or below 50% of the median for the area. The median income fluctuates across the United States due to the cost of living; however, regardless of region, there is a deficit between the amount of available housing and the number of households that qualify for it.

This crisis stems from the supply side of the equation, and due to several factors, it is more critical than it has been in the last sixty years. Since the financial crisis in the early 2000's, the U.S. has been significantly under-building new homes. According to the National Association of Home Builders, new construction starts have been substantially lower in the last decade than any decade since the 1960's (Dietz, 2020). This data is even more exaggerated when adjusted for population. The U.S. has also experienced a sharp increase in interest rates within the last two years which has decreased the buying power of consumers. This increase, instituted by the Federal Reserve, was in response to staggering inflation in the U.S. which peaked at 9% in 2022 and brought about a decrease in the buying power of consumers (Statista, 2024).

According to the National Association of Realtors, the average age of first-time home buyers in 2023 was 35 years of age (NAR, 2023). Over the last several years, the Millennial generation has begun buying homes. The Millennial population is the largest generation alive, even surpassing Baby Boomers. It is therefore reasonable to derive that the demand for homes is at a historical high while supply is at a historical low. Home prices have continued to rise since the spike during the pandemic while wages have risen at a slower rate, thus contributing to the crisis.

These factors have contributed to data from the National Association of Realtors which state that the national housing affordability index hit a historical low registering in the low 90's in August of 2023 (Hyman, October). This means that the average household only makes approximately 90% of what it would take to afford an average house. Perspective of the magnitude of this crisis is gained by considering that households needing access to affordable housing make up at or below 50% of the median income in their respective areas.

There are several entities and programs in place whose sole purpose is to combat the issues that come along with affordable housing. Within the last century, legislation has been passed to make it easier for households to access financing and to combat discriminatory lending practices. Rental assistance programs are available to help households rent properties on the private market by subsidizing their rent payments. These programs are made available through the Federal Department of Housing and Urban Development as well as local Public Housing Authorities (Forbes, 2023).

Additionally, there are programs intended to catalyze development on the supply side of the affordable housing equation. Funded through the Department of Housing and Urban Development, the National Low Income Housing Coalition provides funds through three avenues: 1) The Low-Income Housing Tax Credit, which provides an incentive for non-profit and for-profit entities to develop affordable housing; 2) The National Housing Trust Fund, which provides funds for development of housing for households with extremely low income; and 3) The HOME Investment Partnerships Program, which provides grants to states and localities to develop affordable housing and rental assistance usually in conjunction with non-profit organizations.

While the programs and legislation in place have been making progress for decades, they are not in a position to solve the issue of affordable housing anytime soon. The deficit of affordable housing has continued to rise due to the many interrelated factors in the U.S. economy. Through analysis of existing legislation and programs as well as a zoomed-in analysis of the Northwest Arkansas Metro, this paper will explore the multifaceted supply side of affordable housing and begin to understand how existing resources and processes can be leveraged and altered to achieve the goal of housing for all.

Causes of the Affordable Housing Crisis

There are direct and indirect forces within the economy and the real estate environment that have the ability to affect the affordable housing market. These factors are interconnected in different ways; therefore, there is no single factor that has the largest impact, rather it is the combined action of all these forces working together. On the supply side of affordable housing, factors that attribute to the crisis include: rising housing costs, zoning and land use regulations, wage growth, urbanization and gentrification, underbuilding of homes, and the age of first-time home buyers. While many factors throughout history have contributed to the climbing action of the crisis, the factors stated above are making a large impact on the affordable housing market in 2024.

Owning a home is a staple of the American Dream and a key tool to building wealth. One of the benefits of owning a home is the appreciation value over time. Rising home prices over time have been quite significant since the turn of the century, and according to the Federal Reserve Economic Data, the median price of a home in the United States has grown approximately 162% since the year 2000 (Federal Reserve Bank Of St. Louis, 2024). Several things attributed to this rise in prices such as low interest rates, shortage of supply, and increasing demand.

Another factor that worked in tandem with the rising price of houses was the lagging growth of wages. The LBM Journal, which is the leading media company serving lumberyards and building materials, published an article on their findings. The price of houses has increased approximately two times faster than wages since 1985 (LBM Journal, 2023). This has caused the house-price to income ratio to more than double in the same time period. The American Dream of owning a house has become more and more difficult for the average household, much less households that make below median income.

Following the shock of the financial crisis, new construction starts were slow to pick up the pace again. The U.S. significantly underbuilt homes during the 2010's. According to a publication from Realtor.com, "given how many households were formed between 2012 and 2022, the U.S. is short of 6.5 million single-family homes." (Swaminathan, 2023). This is a staggering figure and helped contribute to the rise of prices due to the shortage. The publication also mentioned that even though households are opting for multi-family homes; there is still a 2.3 million home gap in supply (Swaminathan, 2023).

Interestingly enough, at a point when the U.S. is at a significant shortage in housing, the largest generation has reached home-buying age. The Millennials have overtaken the Baby Boomers as the largest generation of people in the U.S. (Fry, 2020). Therefore, it makes logical sense that the average age of a first-time home buyer was 35 years old in the year 2023 (NAR,

2023). This age demographic falls right in the middle of the millennial generation. Moreover, the timing of this contributed to the crisis. Combined with the other factors it created a perfect storm.

Another topic that is prevalent in the affordable housing conversation is the local guidelines surrounding zoning and land use regulations. These guidelines determine what is and is not allowed on certain properties, depending on how it is zoned. Guidelines include such restrictions on what a property can be used for, the density allowed which includes number of dwellings per acre and building height, design regulations, process regulations, and quality regulations, to name a few. Such guidelines contribute to the cost of improving land and constitute what can and cannot be built on land. According to a study done by the CATO Institute, states and local governments that have more regulations generally tend to have higher housing prices (Calder, Zoning, Land-Use Planning, and Housing Affordability, 2017). Additionally, the processes through which development must be approved and permitted add extra costs and delays that contribute to the rising prices of houses.

Finally, trends such as urbanization and gentrification are also important to note. In practice, they go along with zoning and land use regulations. Urbanization is the rapid movement of people into an urban area, thus increasing density. Growth in density inherently results in scarcity of land, thus increasing its price. This is a challenge when dealing with affordable housing in dense areas. Comparatively, gentrification tends to be the conversion of affordable housing units into higher-priced residences and luxury developments. The challenge is that gentrification reduces the supply of affordable housing for lower income populations while increasing property values and property taxes. These are trends that cities and local governments are dealing with and are significantly contributing to the crisis.

Impact of the Affordable Housing Crisis

The Department of Housing and Urban Development defines “affordable” as not exceeding 30% of gross income spent on housing including utilities (HUD, 2011). The U.S. Census in 2020 determined that the national median income was approximately \$68,000. According to a report published by the National Low Income Housing Coalition for the 2023 year, the fair market rent for a two-bedroom apartment was almost \$1,500 (NLIHC, 2023). Therefore, computations based on these national averages indicate that households making below approximately 88% of the median income cannot afford the fair market rent. Because of this, households have begun spending a larger portion of their income on housing, which decreases their ability to spend in other areas such as groceries, transportation, healthcare, childcare, savings, and retirement.

Additionally, the average rent in the U.S. for an apartment has risen approximately 23% from January 2021 to November of 2023, thus increasing the cost burden on households (Statista, 2023). Comparatively, rental vacancy rates have been less than 7% since quarter 1 of 2019 (FRED, 2024). Consequently, the shortage of supply and the increase in demand has triggered increased rental rates. With interest rates remaining at a plateau in quarter 1 of 2024, people are less likely to move out of existing housing. Therefore, an increase in the supply of housing is essential in order to make a positive impact.

It is also important to understand the social impact of the affordable housing crisis. The people who are affected are numerous and widespread. For instance, the median wages paid to approximately one third of the workforce are lower than that required for a full-time worker to

afford a reasonable apartment at fair market rent (NLIHC, 2023). When people think of the housing affordability crisis, they tend to think of extreme poverty and homelessness across the U.S.; however, it is important to realize that there is more to it than extreme poverty. People who are affected by the crisis are servers, retail workers, secretaries, personal care aides, clerks, senior citizens, and motor vehicle operators to name a few.

Moreover, studies have been done on the short and long-term impact on children who grow up in neighborhoods with low-poverty rates compared to neighborhoods with high-poverty rates. A study done by a Harvard Professor of Economics yielded empirical evidence that children who grow up in a low poverty neighborhood have higher college attendance rates, generally earn more money, are less likely to become single-parents, and are more likely to disrupt the pattern of poverty in their families (Chetty, 2016). This study also determined that growing up in a more prosperous neighborhood produced generational benefits for children and families (Chetty, 2016). Therefore, working to combat the crisis in the present will hopefully reap benefits into the future.

The lack of affordable housing also has an impact on national and local economies in the sense that it reduces the economy from operating at its potential capacity. Without access to affordable housing, the ability of a household to increase wages by matching skills with jobs is constrained because they cannot afford to move to places where higher paying jobs are available, thus causing GDP to increase at a slower rate. It also reduces the ability of local economies to generate revenue in the form of local taxes because access to affordable housing increases job creation and retention and boosts local economies as well as the national economy.

Literature Review

In this section, three reports will be discussed that analyze different variables that contribute to the pricing of homes. Factors such as land use regulations and zoning, and the concentration of the home-builder industry are brought forth and explored to determine what, if any, impact they have on affordable housing in the U.S. Additionally, a broad overview of housing markets, general trends, and economic conditions will be presented. While all these reports stand alone, there are ties between all of them; therefore, there is no one single cause for the affordable housing crisis, but a plethora of interrelated factors that contribute to the inertia of the crisis itself.

In a policy analysis report published by Cato Institute, there is a statistical correlation derived between the land use regulations and zoning practices of local governments and the price of homes in that same region (Calder, Zoning, Land-Use Planning, and Housing Affordability, 2017). Cato Institute is a public policy research organization and think tank that promotes libertarian ideas in policy debates. In her report, Vanessa Brown Calder argues that increased zoning and land use regulations have caused the price of homes to increase. Research is drawn from court decisions based on land-use controls in every state in the U.S. and the average price of homes in their respective states.

Interestingly enough, based on the evidence, there is a positive correlation between the number of land-use controls and the price of homes in almost every state in the U.S. Furthermore, the states with the most land-use controls have the highest average home prices. Surprisingly, these states receive the most funding from the federal government for affordable housing and rental assistance. It seems that the federal government is subsidizing the states that

have the most land-use controls which disincentivizes the tackling of local housing problems within the local governments. If governments were to reduce the number of land-use controls, there would likely be a reduction in the prices of homes which would reduce the need for federal subsidy and lessen the impact of the affordable housing crisis.

In the Department of Housing and Urban Development's National Comprehensive Housing Market Analysis, a broad overview of the economy as a whole, along with certain indicators and demographic trends was provided in great detail. It also included an overview of the housing market since the year 2000 (U.S. Department of Housing and Urban Development, 2023). This report provides comprehensive data on the state of the nation as well as forecasted numbers through 2025. The report provides insight on these topics during the early 2000's, and on the evolution of these topics over the last two and a half decades. This analysis report provides an overview of where we are as a nation quantitatively, which can help drive decision-making moving forward.

Although there was an unmistakably significant drop in employment and a spike in unemployment during 2020 and 2021, the numbers suggest that the economy has returned to its pre-pandemic state regarding unemployment rate and the number of non-farm payroll jobs. It seems that almost every state has fully rebounded to its pre-pandemic levels while several states have experienced significant growth beyond those same levels. Employment is expected to continue to grow, although the rate of growth has begun to decelerate due to the increase in interest rates and inflation (U.S. Department of Housing and Urban Development, 2023).

Even though demographically the rate of population growth has reached the pre-pandemic level, the forecast expectations predict that growth will slow moving toward the year 2025. Additionally, the international migration of people into the U.S. is resurging. It began to decline during the Trump administration then hit a low point during the pandemic. It now has begun to rise back to pre-pandemic levels with the largest group of migrants originating in Mexico at the time of the HUD report (U.S. Department of Housing and Urban Development, 2023). Additionally, since 2010, the biggest shifts in population age groups are millennials and baby-boomers as they continue to age, which makes practical sense as they are the largest population groups.

The housing market has seen a shift over the last two and a half decades from people renting rather than owning. Integral in this shift is the millennial population and the international migration which has increased demand dramatically, causing prices to rise in part. Additionally, when interest rates began to rise in 2023, home sales started to ease, but there was no significant increase in supply; therefore, home prices never came down. The data clearly shows that despite the significant measures taken by the Federal Reserve, home prices continued to rise across the nation. Home buying is becoming a far-fetched dream for many Americans. The rental market has seen tight conditions as well. There is not enough supply to meet the demand, which has caused vacancy rates to be extremely low, and for rental rates to be extremely high (U.S. Department of Housing and Urban Development, 2023).

In another research report published by the Harvard Joint Center for Housing Studies, the concentration of the home building market and how it potentially has an impact on the supply and pricing of new homes is discussed (Ahluwalia, Baker, & Colton, 2022). Over the last 20 years, two homebuilding companies, specifically D.R. Horton and Lennar, have grown to

accumulate a significant portion of the home building market share. While the industry itself is not as fragmented as other industries are, this accumulation could continue to gain market share in the coming years and could potentially have a significant impact on the market for new homes, especially for low-income earners.

Mainly through strategic acquisitions, these two players have become dominant forces in almost all 50 metros across the United States. Home building is a regionalized operation, meaning to be successful you have to be present in the area in which you are producing. It requires having a pulse on local supply conditions, relationships with local officials, and relationships with local subcontractors. That is why acquiring local homebuilding companies is the most productive means of scaling operations when capital is readily available. Otherwise, starting from scratch in new markets would be required, which constitutes a lot more work and research.

In theory, as companies are able to scale their operations, they should be able to achieve economies of scale and spread their fixed costs across a wider amount of goods, thus decreasing their prices. However, it seems that so far, having more concentration has led to a slower production of new homes as well as more volatility in the pricing of homes. Additionally, the majority of new homes are built in metro areas. In these metro areas, the two largest national home builders rank first or second in almost three quarters of them while the data shows that the number of homes being produced is still substantially lower than the amount being produced twenty years ago (Ahluwalia, Baker, & Colton, 2022).

There is the possibility that as these dominant companies get larger, especially in certain metro areas, they will have enough control of the market to have a strong influence on the rate of production of homes as well as control over the pricing. However, regional builders are still integral to the backbone of homebuilding in the United States. Because they are centralized in their respective regions, they tend to have a better advantage with suppliers and local knowledge. There remains research to be done in this area and what the future makeup of homebuilding looks like.

Overall, these three reports can provide an interesting perspective on how to combat the housing affordability crisis moving into the future. Rather than increasing the amount of subsidy funds provided by the government, other actions need to be taken. Spending more money on federal programs, while potentially beneficial, will never be enough to make a significant impact on the crisis. Therefore, actions need to be taken to ease land use controls and regulations in the states where the most federal dollars are going. Additionally, it makes logical sense that allowing more and more people to come into the country will only increase the problem by adding to the demand side of the equation. More people vying for the same goods or services causes shortages and increases in prices. Finally, more research needs to be done on the impact of home builder concentration within metro areas because they could potentially be influencing the problem by slowing production and increasing prices.

Policy Responses

The housing affordability crisis has become a highly prevalent issue within households and communities. In the face of rising home prices and rents, stagnant incomes, and lack of supply, policymakers are increasingly turning to a range of policy responses to combat these

challenges. This section will examine various policy approaches directed at tackling the issues of the complex dynamics of the supply side of affordable housing. By exploring the role of government interventions in shaping housing markets and encouraging affordable housing development, this section seeks to provide insight into effective strategies for addressing the housing affordability crisis and fostering sustainable communities.

From a national standpoint, the Low-Income Housing Tax Credit is a program that encourages development of affordable housing by awarding tax incentives to developers. Funded through the Department of Housing and Urban Development, it provides a potential avenue for developers to construct new or rehabilitate existing housing affordably. According to a research report by the Urban Institute, approximately 3 million affordable housing units have been placed in service since 1986 (Scally, Gold, & DuBois, 2018). It is one of the longest existing housing programs in the U.S. and has been successful in providing affordable housing.

However, the Low-Income Housing Tax Credit program has many drawbacks. Putting together a proposal that utilizes this program is extremely complex and requires the cooperation of many stakeholders along with the legal expertise of attorneys. Additionally, these pacts are made more complex by encompassing multiple programs simultaneously in order to generate the necessary funding to produce developments. The program structure also tends to cause these developments to occur in lower income sites which tends to concentrate poverty and promote racial segregation. The funds dispersed through this program depend on national subsidies and are concentrated in metro areas with the largest affordable housing challenges; however, these areas also have the highest land use controls which could disincentivize local governments to combat the issue of affordable housing. While this program has accomplished a lot, it is only a band aid to the larger issue.

Another interesting program that provides a different way of combatting affordable housing is a Community Land Trust. A Community Land Trust is a privately held nonprofit that is created to provide access to secure affordable housing for community members (National Association of Home Builders, 2008). In short, the CLT owns the land permanently, but leases the ground to whomever buys the house upon which it is situated. They also regulate the amount of profit one can make from selling their home, which is a disincentive for investors but a practical way to make housing more affordable for those who need it.

While this type of program does provide benefits, it is difficult to institute because it faces competition from other real estate developers when buying land, and it also faces political and ideological resistance within communities. Additionally, the fact that the owner would not own the land their home is situated on, as well as the cap on the profit they would make when they sell their home presents a potentially difficult decision when determining whether to buy a home from a CLT. While it does provide a unique perspective on affordable housing, it is difficult to sustain because it depends on grants and government programs to attain purchasing power to buy land, and there is only so much to go around.

Mixed-Income Housing initiatives also present another way to create affordable housing. The purpose of mixed-income housing is to provide housing for households with a range of incomes. By doing this, integration of diverse socioeconomic backgrounds come together fostering social and economic cohesion. These are usually developed through Public-Private Partnerships which allow leveraging of public and private resources to deliver a successful and

sustainable project. These types of developments are usually viewed as more socially acceptable because they are not solely concentrating poverty into one area. There are many benefits to this type of development such as diversity of income levels, and increase in access to opportunity through amenities, services, and quality schools and employment centers (National Housing Conference, 2024).

Many examples of successful developments can be found in New Orleans, Louisiana; Providence, Rhode Island; Seattle, Washington; and Denver, Colorado among others. However, mixed-income developments are geared toward metropolitan areas rather than suburban areas. They are not as successful or attractive in areas where cross-subsidy cannot be attained, meaning that the higher income households offset the cost of the lower income households. Nonetheless, mixed-income housing initiatives seem to be an attractive avenue for the development of affordable housing. This model can be used by private developers because the cost can be spread across a wide range of units. Mixed-Income Development is likely to become more popular in metropolitan areas in the future because of the benefits and attainability.

Finally, Accessory Dwelling Units (ADUs) will be discussed. The purpose of these units is to increase the supply of affordable rental units by allowing homeowners to build secondary dwelling units on their properties. They allow for the creation of more units without significant changes to the makeup of neighborhoods. They are unsubsidized and gently infill land. ADUs are legal in at least 9 states and in many cities and counties within the U.S. (Kelleher, 2024). This is an example of a land-use control or regulation that could have a positive impact on the affordable housing crisis if it was more widely adopted. It is a positive way to increase the supply which helps reduce prices and rents, while not relying on government subsidy. The homeowner benefits as well through the creation of a revenue stream accessed by renting their unit out.

Overall, there are many programs and policies in action that relate to the supply side of affordable housing as well as policies and programs that supply financing. However, in order to really begin to shift the tide of the crisis there has to be more involvement from the private sector. This is why mixed-income housing initiatives and accessory dwelling units, as an arm of land-use controls, could prove crucial to solving the supply issue of the crisis. Government subsidies are solely a crutch, it seems, because it is not realistic for the government to significantly increase the amount of money that is being spent. Rather, it is up to state and local governments to help solve the issues which can be directly impacted through their policies. Encouraging and incentivizing local production through land-use controls and through government processes is critical to creating positive change to the affordable housing crisis.

Northwest Arkansas Metro

As a student at the University of Arkansas it seems fitting to highlight the region in which the university abides. The Northwest Arkansas Metro is one of the fastest growing regions in the country. It is home to giants such as Walmart, JB Hunt, and Tyson Foods among others. These companies along with the University of Arkansas draw people from across the country. As it relates to affordable housing, Arkansas ranks 50th in the U.S. in housing wage for a two-bedroom apartment when ranked from most expensive to least expensive according to a National Low Income Housing Coalition report (NLIHC, 2023). Additionally, another interesting statistic is that Arkansas ranks 43rd in the U.S. in land-use regulation when ranked from most to least

restrictive according to a Cato Institute report (Calder, Zoning, Land-Use Planning, and Housing Affordability, 2017). Arkansas is one of the most affordable places to live in the U.S.; however, with the rapid growth experienced in the Northwest Arkansas Metro, challenges with supply of affordable housing are being faced with rapid increases in housing prices.

The Northwest Arkansas Council is a private nonprofit organization established by Sam Walton, Don Tyson, and J.B. Hunt, the founders of Walmart, Tyson, and J.B. Hunt. They support the development of the region through many different avenues, one being affordable housing. This organization is tackling the issue by advocating for and developing workforce housing in the NWA region. With support from the Walton Family Foundation, it published a phase one and phase two assessment on Housing Policy in the region among tier one and tier two cities. These assessments dive deep into the housing policies, land-use controls and regulations, and ordinances that affect the housing market and the supply of new housing. The assessments conclude with recommendations meant to address the challenge of the supply of affordable housing as well as fostering a regional environment that encourages the development of workforce housing, infill development, middle housing, and ADUs, to name a few.

The number one key finding of these assessments is that “housing affordability is a regional challenge that requires regional solutions developed and implemented through regional and local partnership” (Zimmerman, et al., Northwest Arkansas Housing Policy Landscape Assessment Phase One Report, 2020). These assessments set out to understand how the current regional and local entities are functioning through their policies and codes. In addition, they quantitatively analyze how these entities perform in action and recommend changes to policies and codes to make housing affordability more attainable moving forward. The assessments promote practical changes that can have significant impacts on the communities they serve while not asking for more subsidy from governmental agencies.

Increasing housing affordability requires getting creative with existing regulations and ordinances. A great example of this is a mixed-income mixed-use development that is being built in the Northwest Arkansas metro bearing the name Big Emma. Through a joint public and private partnership with the Walton Family Foundation, an apartment building is being built that will provide workforce housing at lower rates for lower income people in the region while maintaining the aesthetic and feel across all units. Northwest Arkansas boasts extremely high property values which can average around five dollars per square foot across the region (Zimmerman, et al., 2020). By utilizing a mix of development strategies, the cost of these developments can be spread across a wider range of units including retail lease space that provides a higher revenue stream as well as an amenity to the area. This allows the project to attain profitability and investment attractiveness while combatting the issues with the supply of affordable housing.

While this is a great avenue for producing affordable housing, it won't produce enough to equalize the shortage that exists in the area. Therefore, other actions need to be taken. According to the assessments, the lack of middle-income housing in the area can be addressed by encouraging local developers and investors to build multi-family and single-family units that are moderately priced and fill in vacant areas in the region. However, in order to achieve this outcome, local planning agencies need to allow a more diverse range of housing options that can be built. Altering existing zoning and land-use regulations can also directly impact how

development occurs and how it contributes to solving the housing affordability crisis. Small changes that deal with zoning, lot width minimums, housing density, infill development, and accessory dwelling units can cause development to make more sense and be more attractive to developers and investors.

Other recommendations include expediting review processes, limiting the fees associated with permitting, and adjusting parking requirements where it makes sense. These changes, while small, have the potential to have a large impact on the challenges that developers and investors face when deciding how and what to build. Increasing the supply of multi-family and single-family dwellings is beneficial to the entire region and should be the goal of local municipalities. These assessments provide avenues for local and regional entities to help combat the affordable housing crisis by making it easier to increase the supply of homes in their regions without increasing subsidies.

Challenges and Future Directions

While this study has provided insight into the complex nature of the supply of affordable housing, there remains to be a lot of work to do. It is undisputable that we are facing a crisis within the supply side of affordable housing as it is evident in every state in the U.S. (National Low Income Housing Coalition, 2024). Other notable challenges include reforming local land-use regulations, acceptance of different types of developments, education on the issues at hand, and dependence upon national programs that subsidize housing rather than solve issues. Moving forward, more research should be done on the relationship between land-use regulations, government funding, and the availability and supply of affordable housing. Solving the crisis requires taking a local and regional approach by sparking positive change and initiatives in our communities and taking ownership of the issue since housing affordability affects the entire ecosystem, not just the people who most need access to it. Encouraging and incentivizing different types of development is key to equalizing the shortage of housing in the United States.

Reforming land-use regulations at the local and regional levels is a potential direction to move forward in the future. As discussed in the report from CATO Institute, there is a correlation between the number of land-use regulations and the affordability of housing in their respective areas (Calder, Zoning, Land-Use Planning, and Housing Affordability, 2017). Local regulations and ordinances directly impact the types of housing, the densities allowed, the regulations that govern lots, and types of developments that can be constructed. In the Northwest Arkansas region, the Northwest Arkansas Council published two assessments on regional land-use regulations and how they affect housing (Zimmerman, et al., Northwest Arkansas Housing Policy Landscape Assessment Phase One Report, 2020). These assessments concluded that regional problems require regional solutions, and that recommended changes to the local regulations could support an ecosystem which encourages and incentivizes the development of different types of housing that will have a positive impact on housing supply.

It is important to keep in mind that allowing for more density and development contributes to urbanization which causes the price of land and dwellings to increase due to the concentration of the population. There must be a balance between the two that takes into account what the region can support without over-densifying and pricing people out of the market even more.

Across the country, there is a significant lack of middle housing. This refers to housing for middle income earners and takes many forms (National Association of Home Builders, 2023). What is important to implement these changes is educating people about what they are and what they can accomplish. Terms like middle housing, land-use density, mixed-income housing, and similar terms are not common jargon and are not commonplace in development. Local builders and investors do what they know and what is easy, which is generally single-family detached and some multi-family housing; however, a more diverse range of housing is crucial. Encouraging infill development, mixed-use and mixed-income housing, cluster housing, and accessory dwelling units are prime examples of possible solutions.

Ultimately, people are resistant to change, so inevitably there are challenges associated with creating positive change and pushing new initiatives. Although it is important to remember that while increasing housing affordability supply benefits an individual household as well as the community as a whole, it is also extremely important that communities have workforce housing that is affordable for those who provide critical services such as firefighters, teachers, and healthcare workers. Additionally, when a household is spending less on housing it is able to spend more on groceries, healthcare, education, extracurricular activities, and more. This in turn benefits the local economies and benefits well-being and standard of living which can produce generational benefits.

Conclusion

In conclusion, this thesis has investigated the dynamics of affordable housing supply through a comprehensive analysis of cause and impacts, literature review, policy responses, and a zoomed in view of the Northwest Arkansas Metro. By examining a multitude of resources and data from reputable sources, it seems clearer than ever that there is a shortage of housing supply, and this has been a driving factor for the increase of home prices and rents in the U.S. Furthermore, I would argue that while existing affordable housing policies and programs have produced positive results, they will not be able to solve the crisis on their own. The solution to the affordable housing crisis abides in local regions and communities. The problems being faced require local and regional solutions. Rather than creating more avenues for subsidy, innovation in land-use regulations need to occur in order to encourage and incentive the creation of more housing. Getting creative with development and innovative with solutions are the keys.

While the crisis is widespread across the U.S., the challenges associated with increasing supply are unique in local areas for many reasons: social, political, and economical. Interestingly enough, through my research I found a study on the correlation between land-use regulation and the cost of housing as well as an assessment of local land-use regulations in my local area. Furthermore, they seemed to corroborate each other's findings, in that reforming and innovating local land-use regulations is crucial to combat the crisis moving into the future. While existing programs like the Low-Income Housing Tax Credit have proven beneficial, the complexities that arise from public programs and Public-Private Partnerships appear to hinder the ability to increase supply at a sustainable pace. Development of housing must become more attractive to developers and investors to ever be able to close the gap of the shortage. By implementing changes in local regulations, infill development, mixed-use, mixed-income, and middle housing become easier to produce and therefore can better combat the issues we face.

Looking forward, it is important to explore different avenues for increasing housing supply. Admittedly, this is not without its challenges. While on paper solutions seem simple, they are complex in nature to carry out due to the processes, entities, and traditions involved. For example, the long held American Dream of a single-family detached home is engrained in our culture. However, times are changing, and it is critical that there be an increase in supply of housing that is attainable. It is important to understand that encouraging production of infill developments and accessory dwelling units are a great way to increase supply while minimally altering the makeup of existing neighborhoods. Additionally, affordable housing generally has a negative connotation in society, but I would argue that the goal for housing affordability is something that affects communities at large regardless of socioeconomic status. Therefore, it seems to be in the best interest of the community to strive toward housing affordability.

Ultimately, the recommendations outlined in this thesis would take time to implement, but there is no solution to the housing affordability crisis that could solve it overnight. However, cultivating an ecosystem in which developers and investors are encouraged and incentivized to produce projects that serve a larger purpose is intrinsically valuable and will pay dividends into the future. How this is done is by streamlining processes that cost time and money, altering existing regulations so that more diverse housing can be produced, and educating stakeholders on these topics. It is undisputed that we need more housing, but a majority of people are unaware of the processes and roadblocks that stand in the path of production. While land-use regulations and controls serve important purposes, it is equally important that we balance those control measures with the needs of our communities. Let us push forward in solving problems in our local and regional areas with local and regional solutions that benefit society as a whole.

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