PROMISING PRACTICES FOR WORKFORCE HOUSING: IMPLICATIONS FOR
COLLEGES AND UNIVERSITIES

Emily Arnold

An honors thesis submitted to the faculty of
the Kenan-Flagler Business School at the
University of North Carolina at Chapel Hill

Chapel Hill
2020

Approved by: _____

(Dr. James Johnson)

ABSTRACT
Emily Arnold
Promising Practices for Workforce Housing: Implications for Colleges and Universities

Although the first affordable housing program begin in 1917, the United States still faces

a significant shortage of affordable housing today. The shortage disproportionately

affects low-income workers who cannot afford to live near their jobs and face growing

commutes. In order to mitigate the worsening effects of the shortage on lower income

workers, non-governmental organizations are increasingly engaged in workforce housing

development. This research draws on the extant literature, key informant interviews and

surveys of affordable housing experts, and case studies of actual workforce housing

development projects to create a set of "promising practices" that colleges and

universities can deploy to develop much-needed workforce housing for some of their

employees.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

I. OVERVIEW

America is facing an affordable housing crisis. The crisis is evident in all sized metropolitan areas, micropolitan and rural communities, and in university towns like Chapel Hill. Across the nation, a diverse demographic, including older, homeless, disabled, extremely low income, and working poor individuals, is affected by the crisis. Housing is considered affordable when it costs less each month than 30% of household monthly income (McCarthy, 2019). According to the National Low-Income Housing Coalition, no county in any state has modest two-bedroom apartments available to workers earning minimum wage (McCarthy, 2019).
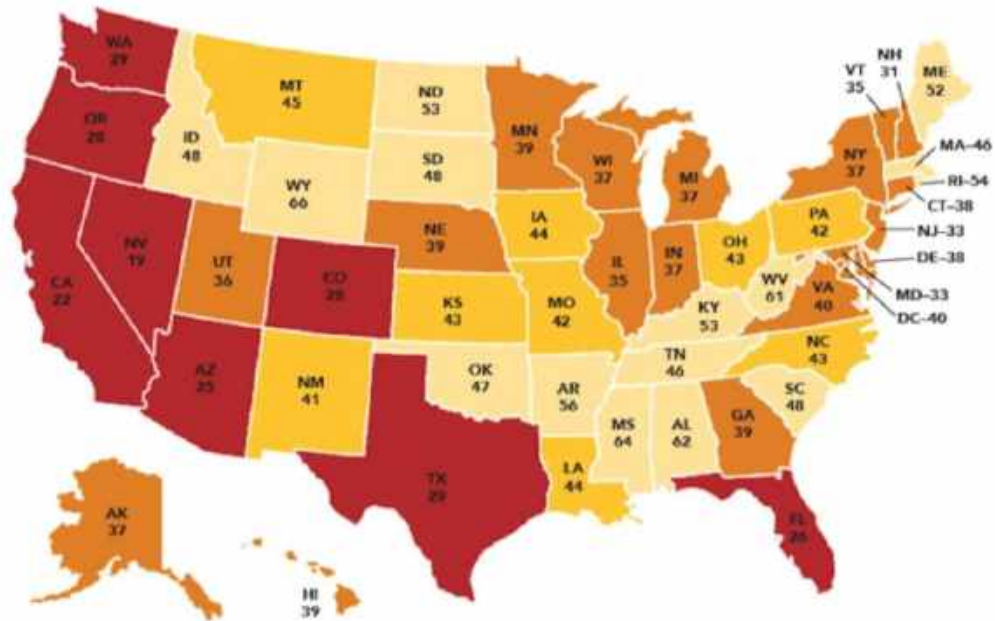

Figure 1 *Affordable and available rental housing units per 100 low income renters in each state. Source: National Low-Income Housing Coalition.*

The affordability problem has other implications for the millions of Americans struggling to make housing payments. Two in five adults would not be able to come up with $400 if faced with an emergency right now; one in five adults are unable to pay the current month's bills in full (Lowery, 2020). Young adults face rising health coverage costs, student debt, and childcare, preventing them from saving enough money each month to ensure future financial stability. Millions of young Americans are being priced out of cities they grew up in (Florida, 2015). If the housing affordability issue persists, young adults may never be able to afford a home and a family using the government's standards of affordability.

As Figure 2 shows, a diverse array of institutional actors, including federal, state, and local governments, community development corporations and other nonprofits organizations, and a host of private sector entities, are trying to address the housing affordability crisis. To create affordable housing for the diverse demographics who need it, these institutional actors are leveraging a diverse portfolio of government dollars, private capital, and philanthropic resources. Figure 2 does not include all possible organizations or types of affordable housing and cannot replicate the complex system of relationships involved in affordable housing projects, but provides a general conceptual framework for this research.
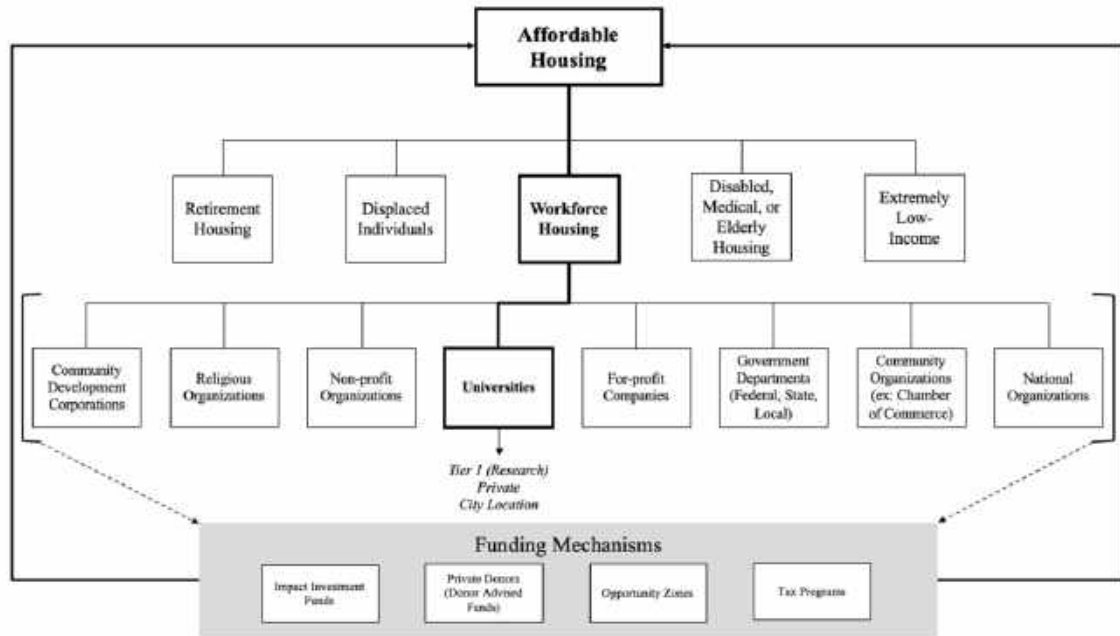
Figure 2 *The second tier of the figure outlines different types of affordable housing, or who a particular housing project could be designed for. The third-tier outlines groups that may work on housing projects. Funding mechanisms that can be used by any organization are listed at the bottom of the figure. This research looks specifically at workforce housing. Under workforce housing, it looks at the efforts made by universities and companies.*

A. Overview of Housing Market

The housing market functions correctly when the market values of homes are greater than the cost of land and developing those homes. As long as the market needs additional high-end homes and apartments, developers will continue to produce them. Sandy Ikeda (2016) with the Foundation for Economic Education explained that in general, there are three types of homes. Class A homes are typically luxury homes, Class B homes are typically middle-class homes, and Class C homes are typically lower-class homes. New homes usually enter the market through Class A, as these projects are more profitable for developers and help keep the costs of Class B and Class C homes lower (Ikeda). Over time, these homes deteriorate and neighborhoods shift around them so they may fall into Class B or even C.

3

Developers will not invest in an area if the market rate for housing does not cover the costs of development. In order to make this housing more affordable, lending institutions and government programs provide assistance. For example, several banks offer lower interest rates on mortgages for first-time homebuyers (Bank of America). The Department of Housing and Urban Development provides housing vouchers for those earning below 50% of area median income [AMI] (Cartier, 2018). These vouchers help homeowners purchase homes in areas with high market rates by covering the difference between the actual price and what homeowners can afford. The government also incentivizes developers to create housing for those earning below 80% AMI through low-income housing tax credits, which reduce development costs (Cartier, 2018). Developers can take advantage of these tax cuts as long as the properties remain affordable long-term.

B. Research Context

Efforts to build workforce housing constitutes an interesting case for further study. Industry experts use the phrase "workforce housing" in different ways. Most define workforce housing as housing designed for those who have gainful employment but cannot afford housing prices in their local communities (Machak, 2019). These people often do not qualify for typical affordable housing programs. Because of the gap between affordable housing assistance and the market price of housing in many cities, those in workforce housing are often referred to as the "missing middle" (Cartier, 2019). The missing middle includes those employed as police officers, fire and other emergency personnel, and other civil servants, including public school teachers, whose jobs are to

protect public health and safety as well as educate our youth. These individuals do not qualify for government housing subsidies.

Workforce housing units are often Class B and C$_1$ multifamily properties. Exact income limits for workforce housing programs are different in each city. Since rents increased more than wages in the decade since the last recession, demand for workforce housing remains strong. Nationally, the current supply of workforce housing has a vacancy rate lower than 5% (CRBE, 2018). There are at least three major barriers to increasing the supply of workforce housing.

The first is the paucity of older properties that are safe enough to rehabilitate (CBRE, 2019). The second is the possibility or risk of upgrading older housing to a level or price point that it is no longer affordable for the missing middle. The third is most workforce housing properties, irrespectively of whether they are recently renovated or newly constructed, cannot quickly turn profits while staying true to workforce housing prices. Because of the lack of return on investment, many investors shy away from Class B and C properties where they cannot raise rents (Obando, 2019). Given the growing demand from the missing middle, clearly innovative approaches are required to increase the workforce housing supply.

In regards to universities, workforce housing refers to housing meeting the above qualifications provided for staff members. Since the salaries of janitorial staff, cooks, and other staff often do not match the cost of living in the communities surrounding universities, they may need housing assistance.

---

[1] Class B and C units are older properties that tend to cater to lower-income tenants. Developing these units carries higher risks due to the age of the buildings.

C. Impact for Employers and Employees

Organizations that offer housing benefits for their employees see several reasons for doing so. Housing benefits are often intended to help employees live closer to their workplaces and to reduce the financial burden of homeownership. However, these assistance programs tend to have a positive impact on both the employees and the employers.

Reduced commutes can improve overall health in employees. According to a study conducted in 2011, commuting time can adversely affect heart health (Allen, Barlow, Hoehner, & Schootman, 2012). Long commutes lead to higher levels of stress from traffic congestion and the length of time spent sitting in stalled traffic. The study found that commutes longer than 10 miles could lead to elevated blood pressure and increase the commuters' risks of becoming obese (Allen, Barlow, Hoehner, & Schootman, 2012). By living within a 10-mile radius to their workplaces, employees will see improvements in their long-term health and face fewer challenges as they age. Improved health among employees tends to lead to better performance in the workplace.

Housing benefits for employees also help to reduce stress among employees. In a financial wellness survey taken in 2017, over half of the participants indicated that they were stressed about their current financial situation (Allison & Harding, 2017). Housing contributed greatly to the financial stress the participants faced. Seven percent of the participants actually indicated that they were close to losing their homes, and 42% could not cover all monthly household expenses (Allison & Harding, 2017). Housing assistance would alleviate some of this financial stress and allow employees to focus more on their work.

Many employers are turning to housing assistance programs in order to retain talented employees and reduce hiring costs associated with replacing employees who leave. In 2017, a study of major employers found that 87% of participants want to improve employee retention (Harlem, 2018). These employers reported replacement costs of up to 150% of the employees' annual salaries. Employees who receive housing assistance are more loyal to their employees and work harder for the company (Harlem, 2018). Organizations who want to retain more employees in the future could do so by providing housing benefits.

D. Research Question

Colleges and universities employ a large support staff who face housing affordability issues. They include, among others, custodial staff and food service workers, mail clerks, bus drivers, and administrative support personnel, whose salaries do not match the cost of living in the communities near the universities that employ them. Recognizing the challenge that this poses for higher education institutions, especially those in rapidly grow cities and towns with escalating housing costs, this research seeks to answer the following question: Are there "promising practices" in the affordable housing space that colleges and universities can deploy to create workforce housing for their employees who need it?

E. Research Significance

The housing affordability crisis is affecting the ability of both public and private sector employers, including higher education institutions, to recruit and retain workers today. In response, employers, especially those in markets that are experiencing rapid population and job growth, are pushed to invest in workforce housing to remain viable

and competitive in our increasing global economy. Due to the escalating cost of both single- and multi-family accommodations in Chapel Hill, for example, some university workers—custodial and other support staff among others--are commuting up to 50 miles one-way daily to perform jobs that do not pay them enough to live in Chapel Hill or closer to the University.

Moreover, in 2019, the town only approved the construction of 78 new affordable units and managed to preserve 147 units of existing affordable housing (Town of Chapel Hill, 2019). Altogether, the town has a total of 1,155 affordable units, which is not nearly enough to house the estimated 10,000 permanent Chapel Hill residents with below poverty level earnings, let alone to accommodate the "missing middle" who work at UNC-Chapel Hill but cannot afford to live in the city.

F. Takeaways

This research identified eight promising practices that colleges and universities interested in developing workforce housing should follow. Numerous institutional barriers exist to implementing these practices, but the potential positive outcomes outweigh the inherent risks. While some universities are already working on workforce housing, many universities failed to incorporate the promising practices identified in this research. Universities should implement these practices going forward

II. LITERATURE REVIEW

Only 30 out of every 100 low-income families are able to find affordable housing in the U.S. The working poor in particular struggle to find housing as they do not qualify for government assistance due their employment status. Six demand drivers for workforce housing are highlighted below.

A. Great Recession

While the job market managed to recover after the 2008 crash and evolve, the housing market has not. Even those with jobs cannot always afford to live in the areas they work. Longer commutes are now considered a normal part of working in a city. Living in the city itself would be too expensive for the average lower income worker. Workforce housing often is seen as a solution to pricey housing, but the lack of housing market recovery creates a shortage of housing that the low-wage workforce or missing middle can afford (Parlow, 2015). Although the crash of 2008 was over a decade ago, the housing market's slow recovery has prompted a new conversation about the importance of workforce housing.

Because of the slow pace of recovery after the recession, poverty levels in some areas remain at recession-era levels. People living below the poverty line often are forced to stay in low-income neighborhoods due to lack of affordable alternatives (Holmes & Kneebone, 2016). When poor people have no choice but to stay in deteriorating neighborhoods, they have little opportunity for wealth accumulation and mobility.

Concentrated poverty disproportionately affects people of color, making it even harder for residents of poor neighborhoods to leave.

The Great Recession has other lingering effects. For example, families with school-age children often are constrained to neighborhoods and school districts with inadequate resources to ensure their children a high quality education (Dastrup & Ellen, 2012). Due to the collapse of the housing market, these families also may be saddled with damaged credit scores, which exacerbate a cycle of poverty they cannot escape without help.

B. Wage stagnation

Wage stagnation existed long before the recession. When wages stagnate, families have to spend more on basic necessities (Wisman, 2013) and therefore find it difficult to build wealth, a situation that locks them in their current socioeconomic class. Moreover, since they no longer have extra money needed to cover unexpected costs, they are forced to take on additional debt when emergencies arise.

The size of the working poor population has increased in the years since the recession due to further wage stagnation and growing wealth inequality in American society (Kristof, 2020). These developments have led to a shrinking of the middle class and contributed to an increase in concentrated poverty in U.S. cities, which put additional pressure on the demand for affording housing. The people hardest hit by wage stagnation and the widening wealth gap are those without a college education who find themselves in a "demographic depression" due to their economic circumstance and deteriorating health status (Kristof, 2020).

Wage stagnation affects almost everyone, seemingly only sparing the country's top earners. Financial deregulation allowed the salaries of the top 1% and even the top 10% to increase at a faster rate (Mishel, 2015). These large salary gaps siphon more economic power from those on the bottom rung of the wealth ladder. Because they hold less economic and political power, their needs for housing have gone under-addressed.

C. Student Debt Crisis

The student loan crisis is another contributor to the high demand for workforce housing. Students graduate with college degrees and may have a job that pays well, but are burdened by student debt that they cannot easily repay. The student loan debt total is currently higher than car loans and credit debt (Johnson, 2019). The high cost of a college education already excludes many from degrees and the student loan crisis makes obtaining a degree seem impossible to those who do not have large amounts of money saved. Graduating students cannot afford to live near their workplaces and continue to pressure the workforce housing market.

Over 70% of recent college graduates have seen declining pay increases, decreasing their ability to live near their workplaces (Mishel, 2015). Many are forced to live with multiple roommates and are still cost-burdened. While STEM[2] graduates are some of the most sought-after employees, their wage increases are still not keeping up with the rate of inflation (Mishel, 2015). Because of these wage problems, college debt is an issue that refuses to shrink.

While mortgage interest rates are the lowest they have been in over a decade, people under the age of 35 are not buying homes. College graduates with existing student

[2] Science, Technology, Engineering, Mathematics

debt usually do not qualify for mortgage financing (Rose, 2016). Student debt is usually not a short-term problem, as some debt takes over a decade to repay. In the second America Home Survey, half of the participants that reported having student debt named that debt as a major barrier between them and homeownership (Rose, 2016). Student debt continues to decrease the number of adults able to purchase homes.

Increases in student debt relief increase homeownership among young adults. While student debt may be on the rise, access to student debt relief may open doors for those who want to own homes. In some states, the costs of mortgages are decreasing, making homeownership a possibility for some debt-burdened residents. For example, Ohio had one of the highest average affordable down payments compared to the average of student debts in Ohio (Passy, 2019). Adequate debt relief for these students could allow them to own homes in the near future.

D. Exclusionary zoning

Exclusionary zoning also has exacerbated the housing affordability crisis. Exclusionary zoning occurs when cities use zoning codes to prevent more affordable forms of housing to be built in wealthier neighborhoods (Reeves, 2017). By preventing lower income individuals from occupying space in wealthier neighborhoods, city officials take away opportunities for lower-income individuals to gain access to better resources and safer communities. Reeves (2017) characterized exclusionary zoning as "opportunity hoarding" where wealthy residents prevent the construction of affordable housing in their neighborhood due to the perceived effect on their property values as well as the composition and quality of their schools. This type of opposition to workforce housing—

and affordable housing more generally--is called NIMBYism, which stands for Not In My Backyard.

Exclusionary zoning has been around for over 100 years. These laws replaced general nuisance laws and allowed the government to control what could and could not be built in certain areas (Erickson, 2012). Zoning separated business districts from residential districts. However, cities eventually turned to these laws as a way to segregate neighborhoods and force out unwanted residents. While zoning codes have adapted, some original codes still stand, harming the production of affordable housing.

Affordable housing, and by extension workforce housing, works well when multifamily units can be constructed. However, most city zoning codes prevent these types of units in middle- and upper-class neighborhoods. These units cannot exist when codes mandate density maximums and minimum lot sizes (Rigsby, 2016). By shutting out multifamily housing, governments successfully keep all of a city's poor residents in specific areas and keeping those people from escaping poverty.

E. Gentrification

Gentrification is yet another driver of the demand for workforce housing. This is a process where wealthier—and most often white—individuals purchase deteriorating properties in older downtown area neighborhoods, which are typically occupied by people of color, and engage in wholesale rehabilitation of the property and demand improved services from the City (National Geographic Society, 2019). As the "gentry" move in and upgrade these neighborhoods, long-term residents are forced out due to rising property values and a higher cost of living. Displaced residents are often forced to move to other lower-income neighborhoods that not only may be of lower quality but

also may destroy valued social networks as well as increase both the length and cost of their daily journey to work.

Gentrification erases long-standing cultures in affected neighborhoods. Immigrants occupy some neighborhoods at risk of gentrification, and when they are displaced, the diverse cultural fabric of these neighborhoods disappear (Capps, 2019). During periods when gentrification is in full swing, cultural clashes can turn old residents against new residents. However, neighborhoods are constantly changing and gentrification occasionally may be conflated with other shifts in neighborhood composition (Capps, 2019). Community members must be aware of the signs of certain changes in order to identify gentrification.

One example of gentrification in action and the adverse effects it has on the culture of neighborhoods is the Harlem neighborhood of New York. As of 2008, traditional food, music, and clothing were disappearing from the streets as new Harlem residents opted for healthier food and new styles (Gørrild, Obialo & Venema, 2008). While at first glance the phenomenon is harmless considering consumer preferences are fickle, these new preferences were ushered in by non-traditional Harlem residents. These new residents came to revitalize Harlem and take advantage of the new high-rise apartment buildings recently approved by the city. Long-time Harlem residents worried that Harlem would soon become an extension of the East Side of Manhattan instead of a unique community (Gørrild, Obialo & Venema, 2008). While the crime rate dropped and the median income rose, Harlem lost several of the staples it once had as the capital of African American culture in New York.

F. Government Action

For decades, the federal government approved policies that segregated American neighborhoods and prevented people of color from obtaining mortgages. Back in the 1930s, the Federal Housing Administration [FHA] discriminated against black families by refusing to insure mortgages for properties in or near predominately black neighborhoods (Gross, 2017). The organization justified its actions by claiming that the presence of black families in or near white neighborhoods lowered property values. The practice would later be known as redlining, as maps of housing were color-coded based on who lived in certain neighborhoods (Gross, 2017). Any neighborhoods where black families lived were colored red and considered too risky to insure. The FHA went as far to state that different racial groups should not be allowed to live in the same neighborhood in its manual. In 1968, the Fair Housing Act passed and redlining was determined to be illegal (Gross, 2017). However, the practice remains undone, as affordability issues and racial discrimination persist.

The federal government now focuses all housing efforts through the U.S. Department of Housing and Urban Development [HUD]. In 2018, the *New York Times* reported that HUD, under the leadership of Secretary Ben Carson, was not doing enough to curb the growing housing affordability problem. In fact, Carson planned to triple rents for over 700,000 low-income renters (Thrush, 2018). While Carson's goal was to motivate people to find ways to earn enough money to cover the difference between their old and new rents, local officials saw the increase as an additional burden on local housing programs. Housing authorities and HUD leaders continue to disagree on the role the federal government should play in affordable housing creation. Local and regional

programs are not strong enough on their own, but Carson believes federal aid should be temporary and less common to encourage more work from local groups.

While government intervention may not be enough, the National Low-Income Housing Coalition [NLIHC] provided a few recommendations for the federal government in 2019. NLIHC felt these recommendations were necessary; according to a recent survey conducted by NLIHC, 76% of voters are more likely to vote in 2020 for a presidential candidate who has a plan for affordable housing relief. Given that current funds are not enough, the federal government should expand the budget for HUD's grant programs (Yentel, 2019). NLIHC also wants to see more protection for renters in the future.

Demand is still high for workforce housing, and although efforts to increase the supply are in full force, economic and political barriers still exist that prevent the people that need the housing from obtaining it. Research is critically needed that begins to identify promising practices for creating more workforce housing in U.S, cities, towns, and rural areas, which is the primary goal of this study. The objective is to identify practices and create guidelines that colleges and universities aspiring to build work force housing can use to do so.

III. METHODOLOGY

A three-pronged research strategy was employed in this study. Each strategy was designed to gather qualitative insights into promising practices employed to create workforce housing. The IRB approval for the research instruments used in this study appears in Appendix A.

A. Data Collection

Interviews were conducted with three affordable housing experts who were selected based on their published work, expertise in workforce housing development, and experience with community partnerships. The protocol used in these interviews, which contains the specific questions posed to each of these key informants, appears in Appendix B. Their expertise is summarized in Table 1.

Table 1 Description of Interviewees

Interviewee	Job	Location	Years of Experience	Expertise
Participant A	Principle	Southeast	20+ years	Worked with universities and companies involved in affordable housing
Participant B	Researcher	Mid-Atlantic	10+ years	Years of published literature on affordable housing
Participant C	Company President	Northeast	20+ years	Head of affordable housing non-profit organization
Participant D	City Official	Southeast	15+ years	Head of Affordable Housing Initiative for hometown
Participant E	Mayor	Northwest	10+ years	Leader of innovative affordable initiative both in city and across the country

Based on existing research and key informant interviews, case studies of four organizations—two private universities and two financial institutions—that have successfully built workforce housing also were undertaken. Johns Hopkins University and the University of Chicago were the two private higher education institutions and Bank of America and the Bridge Investment Group were the two financial institutions.

John Hopkins University made a strong case study because it has been a long-time participant in conversations regarding affordable housing in Baltimore (Broadwater, 2018). Currently, the university and the medical center are working together to create cleaner, more affordable housing in East Baltimore. The City aims to revitalize the area while ensuring that the current residents can continue to live there in the future (Broadwater, 2018). John Hopkins has the benefit of being a private university, meaning that it can invest money as well as time in projects.

The University of Chicago made a strong case study because it is Tier I higher education institution located in a city with a history of affordable housing disasters. Not only does the university work on projects in surrounding neighborhoods, it also provides subsidized housing for university employees (Office of Civic Engagement, 2015; Mordfin, 2016). Chicago is an expensive place to live, which means that many university employees cannot live close to where they work. As a private school, the University of Chicago, not unlike Johns Hopkins, can make larger financial investments in workforce housing projects.

Bank of America made a good case study because of its expertise in housing finance and its pledge in the spring of 2019 to invest $5 billion in workforce housing (Nguyen, 2019). Headquartered in Charlotte, NC, Bank of America has numerous

locations in both large cities and small towns throughout the country. Across its vast

geographic footprint, employees and customers alike struggle to afford housing, and

Bank of America set out to help them (Bank of America, 2019). In so doing, the

company also recognized the potential return on its investment in workforce housing. The

company invests in housing by providing funding and other resources to housing tenants.

In some cases, the company also participates in the development process, working with

partner institutions to create housing plans and construct the housing.

Similar to Bank of America, the Bridge Investment Group—a real estate fund

manager—made a good case study because of its numerous office locations, its expertise

in residential real estate, and its pledge to invest $619 million in workforce housing

projects near its offices (Ruterman, 2019). The company has offices in cities such as Los

Angeles, New York, and Seattle where the cost of living is high and there is a severe

shortage of affordable housing for both public and private sector workers (Ruterman,

2019). And not unlike Bank of America, Bridge Investment Group expects a large return

on its investment in workforce housing.

Finally, in order to gain additional insights into promising practices, telephone

surveys were conducted with other private universities as well as financial services firms

who have engaged in workforce housing development. In total, 30 organizations

participated in the telephone survey. The protocol used in the telephone surveys appears

in Appendix C. A summary of the survey responses appears in Appendix D.

B. Measurements

With an eye toward identifying common or consistent themes, a content analysis

of the key informant interviews with affordable housing experts as well as of the

19

information gathered via the four case studies and surveys of other experts in this space was conducted. For the purpose of this study, revealed strategies or responses to one or more of the previously identified demand drivers for workforce housing were evaluated as potential "promising" practices for colleges and universities interested in building this type of housing in the years ahead. The case studies also highlighted the current efforts of organizations involved in workforce housing that did not fall under any of the promising practices. These actions are worthy of notice as they provide a strong foundation for recommended actions for the future.

C. Limitations

Due to time constraints, this study relies on a limited number of case studies, key informant interviews, and survey responses. No comprehensive database exists of colleges and universities involved in affordable housing, so only higher education institutions with documented involvement in affordable housing were contacted. This means the sample of key informants and survey participants was purposeful, not random, as the case studies of universities were limited to private institutions. No public sector institutions engaged in workforce housing development were included. For this reason, the findings are referred to as "promising" as opposed to "best" practices. A much more robust data gathering effort is required to validate the practices identified in this study.

IV. FINDINGS

The findings of this study are organized in two separate but inter-related categories. The first is comprised of general observations about the involvement of colleges and universities in workforce housing and affordable housing more generally. The second section highlights the promising practices culled for the research on institutional practices in both university setting and the private sector.

A. General Initiatives

Current university initiatives are important because they can serve as the foundation on which a portfolio of "promising practices" can be built. This research— the survey responses and the case studies in particular—suggests that many colleges and universities are engaged in applied housing research and community outreach, but few have actually developed workforce housing.

Several schools provide clear directives on housing affordability issues and on how both students and faculty can become involved in affordable housing work. Some make housing a part of their mission by offering specific classes and programs for students interested in facilitating community improvements through housing. Others focus on housing research and securing grants for specific housing projects. And still others embrace interdisciplinary approaches to housing, which allows students with differing interests to participate in community improvement initiatives.

The University of Chicago, for example, has four different departments and initiatives that offer students engagement opportunities in housing issues in the city. The

Law School offers one class and several seminars that are dedicated to helping evicted low-income tenants. The Harris School of Public Policy offers workshops and holds events dedicated to housing improvement. The School of Social Service Administration also holds workshops on housing issues. And the University's Kreisman Initiative for Housing Law and Policy brings together interested students from a wide range of departments to engage in affordable housing work in Chicago. All of these programs and initiatives aim to serve the needs of the city while teaching students skills they will need to solve pressing housing problems in the future.

Few colleges and universities have engaged in housing development for their employees. However, some have provided vacant school property and survey responses show that others have helped acquire city owned property for the construction of new housing units. In addition, several schools have contributed to their community through revitalization efforts, choosing one or more buildings to repurpose.

Among the universities that have engaged in housing development, few have targeted their "missing middle" employees for affordable residential accommodations. The University of Chicago, for example, provides housing stipends for full-time professors and housing assistance for a few hourly workers, depending on how long those employees have been with the school. Most low-wage workers (e.g., kitchen, housekeeping, and security staff) are all hired by a partnering company, which relieves the University of any responsibility for their well-being. As a consequence of the University's focus on affordable housing for faculty, reportedly there has been an increase in gentrification in the Woodlawn neighborhood and other communities

surrounding the University campus as full-time faculty have moved in and renovated houses (Figure 3).

Figure 3 Children *in Chicago's Woodlawn neighborhood pass newly renovated homes. Source: Chaskin, Joseph, Khare, 2014.*

While the University of Chicago has narrowly focused on faculty housing, Johns Hopkins University has concentrated its efforts more broadly on revitalizing neighborhoods, educating children, and helping university employees purchase homes in East Baltimore where it is located. JHU currently has two main initiatives in Baltimore. In East Baltimore, the school is helping to revitalize neighborhoods and educate the children. For example, the university partnered with other key community stakeholders to build the Henderson-Hopkins K-8 School, the first new school in East Baltimore in over 20 years. Along with housing for its employees, Johns Hopkins also invested in retail and office space in East Baltimore which brought additional jobs to the community. More

jobs are now available in the neighborhood as Johns Hopkins continues to invest in additional retail and office space. And most notably, given the thrust of this research, Johns Hopkins also helped university employees purchase homes in the neighborhood (see Figure 4).

Figure 4 Students *and faculty break ground for new apartments as part of the East Baltimore Development Initiative. Source: provided by Office of the President*

B. Promising Practices

Eight promising practices were identified in this research. Each of these practices is described below. Where possible, specific examples from the case studies are presented as supporting evidence of the veracity of the practices.

Promising Practice #1: Defined Plans.

A carefully crafted strategic development plan enhances the likelihood of a successful workforce housing project. The plan should specify the number of units that can be built on the land identified for the development. It should identify project partners and describe in detail what role each partner will play. The production process should be

clearly articulated and outlined in discrete steps so there is no room for misconceptions or

errors. Known costs and other financial aspects of the project and a timeline should be

included.

By creating a plan, project leaders ensure that the steps of the production process

are clear to all parties involved in the project. Discussions about the plan will also clear

up any misconceptions or errors. As one key informant noted, the plan should serve as a

measure of accountability; if one party fails to deliver on its part of the plan without

reason, the/ other parties will know. These steps will ensure that all parties are able to

help create housing with minimal frustration or hesitation. Finally, plans often break

down massive projects into a series of approachable steps. While workforce housing

development may seem daunting to even the most experienced parties, these steps ensure

that all parties are able to help create housing with minimal frustration or hesitation.

Bank of America uses documented and defined plans when approaching

workforce housing, and has seen great success with them. The company is able to use

plans to justify the development of housing to shareholders, and the clarity of the plans

allows shareholders to contribute thoughtful feedback to the company. Plans also help

Bank of America stay on budget and avoid overspending when problems arise. While the

plans cannot control external events, Bank of America's plans provide a straightforward

timeline to follow that can be adjusted with relative ease when needed. The plans will

serve as guidance for future teams working on workforce or affordable housing projects.

Project plans are a key piece of the company's success with housing development.

Several schools surveyed responded that they already had documented plans for

involvement in affordable housing. These plans allow schools to communicate all of their

actions with their communities and stay organized while carrying out numerous initiatives. Plans are adjusted as new departments and student groups get involved. Each plan includes a timeline and planned financial contributions from the school.

Promising Practice #2: Inclusionary Zoning.

One key informant cited exclusionary zoning laws as the number one obstacle to affordable housing production. Exclusionary codes restrict density and impose other regulatory barriers that make it difficult to build workforce housing—or any affordable housing for that matter. Inclusionary zoning laws remove the barriers inherent in exclusionary zone codes. They allow flexible density maximums and bend other regulations so that various types and sizes of multiple family housing are possible in areas formerly zoned for single-family housing units only. With inclusionary zoning, the production of affordable units increases and mixed income areas emerge. Communities with inclusionary zoning practices also tend to be more diverse—racially and ethnically as well as socioeconomically. Inclusionary zoning codes reflect YIMBYism, which stands for Yes In My Backyard, the antithesis of NIMBYism—Not in My Backyard.

By advocating for inclusionary zoning codes, organizations demonstrate their dedication to working with city officials. Many current codes prevent dozens of housing projects every year. With inclusionary zoning, production of affordable units increases and mixed income areas emerge. Communities with inclusionary zoning practices also tend to be more diverse and see greater economic participation from those on the lower end of the wealth spectrum.

Bridge Investment Group invests more of its resources into communities with inclusionary zoning than in other communities. These properties tend to see more tenants

of diverse backgrounds. These projects can also support more tenants, as more units per

acre are allowed. Flexible zoning codes also means that Bridge's properties are

profitable, making the company more likely to continue to invest in those communities in

the future. Bridge is very knowledgeable about zoning codes and looks for inclusionary

codes when choosing where to invest. Interest from companies like Bridge has drawn

other businesses to those communities as well.

Very few universities have widespread knowledge of local zoning codes. While

certain departments know a lot about local zoning, others learn just enough about these

codes to stay in housing conversations and come up with realistic housing solutions.

Promising Practice #3: Transparency.

University-sponsored projects can potentially harm community members if the

interests and wishes of community members are not taken into account. For this reason, it

is imperative to demonstrate at the outset of any proposed initiative how the community

will benefit and not be exploited or adversely affected. Community members are not

subjects to study, but real people who may need a helping hand. Given this risk,

transparency becomes even more important, especially for community members who

may be suspicious of the University's intentions.

Transparency increases trust and garners broader community engagement in

efforts to build workforce housing. Transparency involves informing the public about

facts related to workforce housing projects, including funding sources, potential risks,

and unit appearance. While some information about funding and expenditures may need

to be protected for legal reasons, other information should be shared with the public.

Fully transparent parties also inform the public on their motivations for working on

projects as well as benefits they hope the projects bring to the communities in question. Finally, a transparent party informs the community about what will happen after the project is completed.

Transparency helps remove doubts around workforce housing and increases the likelihood that community members will approve of housing being built in their neighborhood. One key informant stressed the importance of transparency by calling it the difference between a NIMBY community and a YIMBY community. Being transparent with community members allows them to feel more connected to the projects and included in the decision making process, even if they do not actually get votes. While sensitive information about potential residents should not be shared with communities, informing communities about the people who may soon join them helps ease the transition for project inhabitants. No inhabitant wants to feel unwelcome, and organizations can help prevent that by being transparent at all times.

Several company survey respondents noted that they worked with community members to keep everyone informed of both progress and setbacks during projects. They noted further that all project financial information was published and could be accessed online. In addition, survey respondents noted that they went to great lengths to ensure that all project stakeholders were in agreement about next steps as projects moved forward. That is, they worked to keep community members informed of any changes in project design, timelines, and costs.

Both Johns Hopkins University and the University of Chicago consider transparency to be one of their biggest priorities. These schools aim to communicate all

project ideas and activities with community members. They see transparency as a way to build trust, minimize community opposition, and break through institutional barriers.

Promising Practice #4: Developer Support.

If not the most important, developers are one of the key actors in the workforce housing development process. They create design plans, estimate financial needs, and often present projects to city officials. A developer's role in a project starts long before construction begins. While not every developer knows every zoning code by heart, they often understand these codes better than other project participants. Developer support should be mobilized as early as possible in the project timeline.

While developers may not know much about organizations' specific needs, they know a lot about how to legally maximize housing unit density on limited land area. Organizations without housing development knowledge need developer support to gain that knowledge. Support is also a two-way street. Outside developers may find it difficult to gain community approval without the assistance of larger local organizations, who tend to be major players in their communities. Organizational support can also be beneficial to developers presenting plans to city officials and bolster developers' reputations among city officials. Key informants in this research agreed that developer support is the most important part of workforce housing projects.

Bridge Investment Group ensures that it has a developer as a partner in every project, and will not start a new project without developer support. Developers provide Bridge Investment Group with realistic estimates of project costs and the time each project needs for completion. In return, Bridge helps developers put together plans for each city and supports them during the approval process. While Bridge may have

different goals than developers do for each project, it finds ways to align its goals with the developers' goals. Because Bridge has solid support from developers, its projects are rarely behind schedule or over budget. In fact, many projects come in under budget as the partners work to keep costs low.

When asked about developer relations, about half of the university survey respondents indicated they looked for developer support early on in their projects. All schools work with developers during their projects, but some said they try to keep a healthy distance between themselves and the developers—in all likelihood to maintain the appearance of objectivity and fairness.

Promising Practice #5: Joint Ventures.

Joint ventures redistribute the stress of workforce housing development among multiple parties. With joint ventures, all project partners share the risks and the rewards of the project. Each party has an agreed-upon contribution to the project, although each contribution may not be equal. Joint ventures may be between any two or more entities working on housing, but should involve either a non-profit housing organization, a developer, or a government organization familiar with housing development. Joint ventures are typically between unrelated organizations so that each party brings something unique to the partnership.

These partnerships aim to reduce risk in workforce housing development. Partners are also able to pool their resources to provide more funding, tools, and support for the community. Multiple respondents indicated that in their experience, partnerships resulted in more successful projects because neither partner shouldered all of the risk or did all of the work. However, every joint venture looks different so while they cannot always be

compared to one another, there are general principles that can be replicated across different projects and partnerships.

Bank of America has joint ventures with several types of organizations. In San Francisco, the company partnered with local housing non-profits and the City itself to redevelop former public housing. In Los Angeles, it pursued the same strategy in renovating apartments in the Jordan Downs Development (Figure 5). While Bank of America contributed more financial resources than others involved, all organizations took on an equal amount of risk during development. Each organization in the partnership had a different strength, making the venture more successful. The joint venture enabled the organizations to offer more to residents of the new housing than one of the organizations alone could offer to them.

Figure 5 *Newly constructed apartments in the Jordan Downs development, renovated by Bank of America. The project was completed through a joint venture with the City of Los Angeles as well as numerous local non-profit organizations. Source: Ogilvie, 2019*

Universities often look to work with affordable housing agencies through joint ventures. Joint ventures alleviate some of the financial pressure faced by universities and

bring new ideas to the table. While not every project is done through a joint venture, the vast majority of university-supported affordable housing projects are.

Promising Practice #6: Community Involvement

While community involvement is a broad concept, it is a crucial one in workforce housing development. Community involvement means informing the current community residents of construction plans and allowing them to provide feedback. The residents would also be able to give feedback during the construction process. Residents may also be the ones to request more affordable housing in their neighborhoods. In these cases, residents see a need and feel that affordable housing is the best way to address that need. While not all community involvement will propel projects forward, constructive involvement is still valuable as it provides developers and partners with new ideas.

Community involvement can reduce the presence of NIMBYism. When community residents feel their concerns are going unnoticed, they can erect barriers in an effort to prevent progress. These conversations should work both ways, and organizations should try to educate the community members about the project and help them look past stereotypes. Support from the community may also help sway city officials who are unsure about the benefits a project could provide. However, organizations should be careful not to delegate too much power to the community, as doing so may slow down the project and prevent any work from being done.

Several survey respondents indicated that they looked for community support before beginning work on their projects. The additional support helped remove some regulatory barriers when dealing with the cities themselves. The survey respondents took community opinions into consideration, but occasionally ran into issues when conflicting

opinions emerged. Supportive communities also tended to be more receptive of the new residents when they moved in. Overall, the community support helped new residents feel included upon moving in and reduced the stigma that comes with workforce housing.

Johns Hopkins University had the full support of the community when beginning the redevelopment process on Baltimore's East Side. After years of neglect, the community needed to be heard. The University listened, and proceeded with the redevelopment efforts by leveraging feedback from the community.

Promising Practice #7: Renovation and Adaptive Reuse

In some instances, renovating and adaptive reuse of existing properties may be a more viable—and profitable—pathway than attempting to build new workforce housing. This strategy may involve renovating and transforming an obsolete commercial structure into housing units. It may also involve renovating existing housing units so they are more inhabitable by redesigning floor plans, repainting, repairing old wiring and piping, and other structural improvements. By repurposing existing buildings, organizations often can save time and money. However, the effectiveness of this strategy as a solution to the workforce housing crisis is limited by the number of older buildings that are eligible for redevelopment. Moreover, in some cases, organizations may find it more beneficial or cost-effective to level an older structure and reuse the land for workforce or mixed income housing.

Renovation and adaptive reuse of existing properties also is a great way to reduce urban sprawl. By repurposing existing buildings, organizations save money and time on leveling new land as well reducing the size of cities. In some cases, organizations may find it more beneficial to level older structures and reuse the land. Either way,

revitalization can transform entire neighborhoods without increasing their size through

the redevelopment of just one building.

Bridge Investment Group's strategy for workforce housing development is carried

out exclusively through renovation and adaptive reuse of existing properties. The

company purchases vacant or rundown apartment buildings and renovates them for future

use. In some cases, the company has even taken old industrial or retail space and created

apartments out of the existing structure. The company likes to revitalize spaces instead of

building new ones because revitalization takes less time, is generally less expensive, and

the project approval process is generally easier.

Figure 6 *An exterior view of the Midpointe Apartments, one of Bridge Investment Group's workforce housing projects. The building was renovated by Bridge. Source: Bridge Investment Group, 2019*

Several universities have chosen to renovate older buildings or repurpose vacant

lots. For example, the University of Chicago created an arts campus out of vacant lots in

a neighborhood adjacent to the school. The Arts Campus brought new life to the

neighborhood and attention to residents that needed additional assistance. The success of the project also encouraged the University to get involved in similar ways in other neighborhoods.

Promising Practice #8: Accessibility

Accessibility is one of the most overlooked factors in affordable housing development. Typically, accessible properties[3] are located close to public transportation and employment centers, which allow residents a shorter journey to work. Grocery stores, pharmacies, and other amenities are usually close by. Selling potential residents on the idea of gaining greater financial independence as result of spending less on transportation, developers of accessible properties generally try to avoid parking mandates and therefore may offer few parking spaces in their developments. They also may offer few amenities if reasonable options are located nearby. In such instances, residents may be hurt by the higher cost of food and other necessities.

Very few key informants in this study created accessible housing. These units were often too expensive to build. The few properties that did aim for accessibility tried to build close to bus stops farther from the center of the city, but even these were pricey. Survey respondents reported that developers often fought against having affordable units near public transit systems because the units could rent for a much higher price.

Affordable properties with access to public transit therefore are typically far from employment centers, meaning residents still have to spend hours a day traveling to and from work. While some survey respondents noted that their states or localities required

[3] Accessible properties may or may not cater to those with special needs. Typically, in this specific context, the word "accessible" does not refer to someone's physical condition and ability to get around.

certain amenities to be within walking distance of such properties, only a limited number of the units in such developments were "affordable."

Several universities also cited difficulties with incorporating accessibility into plans for their projects. Many relied solely on redeveloping existing properties. However, some schools did take advantage of vacant land near their campuses as a way of creating new housing in a more desirable location.

V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Through key informant interviews and surveys of experts in affordable housing and case studies of both university- and private sector-initiated workforce housing projects, eight promising practices were identified that other colleges and universities interested in developing workforce housing for their "missing middle" employees might consider. They are labeled "promising" as opposed to "best" practices due to the limitations of the data relied on in the study.

While valuable insights were gained from university-based case studies and key informants, most universities prioritize affordable housing in general over workforce housing for their missing middle employees. That is, they tend to place an emphasis on housing full time faculty as opposed to lower income employees. In fact, some colleges and universities outsource low-wage jobs and therefore have no responsibility for providing those employees with any benefit beyond a paycheck.

Johns Hopkins University was the exception. It adopted a whole community approach in its efforts to rebuild East Baltimore. In so doing, it embraced many of the promising practices highlighted in this research. Johns Hopkins engaged the resident of East Baltimore and a diverse set of stakeholders, including local government officials, developers and philanthropy, in the redevelopment process, which included the adaptive reuse of existing properties as well as the construction of new housing for some of its employees. Both Bank of America and the Bridge Investment Group embraced similar strategies in their workforce housing development initiatives.

In the years ahead, colleges and universities need to focus attention on creating workforce housing for their support staff who are responsible for day-to-day operations. Without these employees, higher education institution will not be able to operate in an effective and cost-efficient way.

A. Action Strategies

For colleges and universities that might be interested in developing workforce housing, several recommendations emanate from this research. Some recommendations come directly from the promising practices while others are more general recommendations.

First, interested colleges and universities should have a clear plan for providing housing assistance to employees. The plans should outline planned location of the housing, design parameters, funding sourcing, and a development construction strategy and timeline so project stays on budget and is able to secure the required funding to complete the project.

Occupancy plans should be as specific and detailed as possible. Plans should include a process for determining which employees are eligible for assistance, and should prioritize employees who currently commute long distances every day over those who already live closer to the school.

Second, colleges and universities that desire to invest in workforce housing will probably have to advocate for changes in zoning laws that currently exclude or prohibit the construction of most types of workforce housing. Inclusionary zoning laws will remove some of the barriers that colleges and universities often face in their development project and in this specific instance well allow higher education institutions to create

housing for employees close by. Workforce housing projects will likely need higher density maximums than other buildings in the area and institutions with free transit systems also could benefit from reduced parking mandates. For example, Chapel Hill's bus system is free, so any university employee who might gain access to workforce housing that might be built may not need a car and therefore could live without on-site parking spots.

Universities need to be prepared to produce research and information on the benefits of inclusionary zoning. University opinions often carry a lot of weight in their communities, and they should take advantage of their position to lobby for change in zoning laws. Inclusionary zoning not only helps universities provide housing for lower income employees, but allows local developers to build more affordable housing for city residents as well. These zoning laws may not need to be permanent, but could be flexible and allowed only for developers creating a certain number of affordable units.

Third, colleges and universities should have a process for openly sharing information about their proposed workforce housing project with their employee and members of the broader community. If projects fall behind or lack funding for completion, the universities should not shy away from releasing that information. In fact, hiding it may create a rift between the university and the community and cause employees to look elsewhere for work. Employees must be able to trust their university to deliver on its promises.

Universities may find it useful to have a set system for releasing project updates and status reports. The communication strategy may include weekly or monthly project updates that anyone can access; a weekly newsletter updating university employees on

the status of the project; and routine communication with donors and major stakeholders keep them abreast of project developments.

Fourth, colleges and universities need to look for developer support for projects before they start. Local developers are the most knowledgeable about zoning laws, the costs of construction, and reasonable timelines for this type of project. University-developer partnerships are mutually beneficial relationships, as developers may need the support of universities to get their plans approved by city officials in a timely manner. Creating workforce housing can be difficult, so universities need to look for developers with a lot of experience with affordable housing.

A developer should be engaged well before project plans are finalized. The developer should be an integral part of the planning process. With insights into a project's potential impact on employees and the community, the developer can be helpful in securing donor support for the proposed project. In addition, working with the right developer will aid in controlling project costs while creating as many affordable units as possible given the size and location of the housing development site. When looking for developers to work with, universities should choose local developers who are trusted by community members and city leaders.

Fifth, in attempting to build workforce housing, universities should consider working collaboratively with other groups in the community. Some university employees may be members of skilled trades unions who would be willing to help construct the housing. Local non-profit organizations may have access to donated materials and also may be willing to help construct the housing. Local government organizations may also

be willing to help. Creating a joint venture will relieve some of the financial pressure and allow the project to have a greater impact.

When looking for partners, universities should consider several types of organizations and strive to forge strategic alliances with whose missions align with project goals. For example, a university struggling to find community support could look for assistance from a local interest group or a church. A university struggling with the construction aspects of the project could look for assistance from a housing non-profit. A university struggling to work around zoning codes could look for assistance from real estate groups and construction companies familiar with zoning. A strong partnership is one where all partners can contribute and feel valued.

Sixth, workforce housing projects will not be successful if there is major opposition to university employees to taking up resident in the community. While listening to all opinions from community members may be difficult, universities should not underestimate the importance of hearing them. Community members should be included in all stages of projects, and universities should be sharing information about the projects with community members.

Universities should provide community members with a way to voice their opinions or concerns. They may create a special website or phone line where individuals can register their concerns. Universities should also educate community members on the intentions of the project, as some might question the universities right to encroach on their territory. Having community support can mitigate a host of issues that can arise with workforce housing development projects.

Seventh, colleges and universities should look for local properties that lend themselves to renovation and adaptive reuse as workforce housing. Oftentimes neighborhoods near universities contain vacant houses, shops, or offices that can be repurposed. Transforming such properties into workforce housing can potentially raise property values in the community and create a safe and more welcoming environment for the new occupants and members of the broader community more generally. Such projects also have the potential to drive up property values, which can in turn lead to the economic dislocation of nearby residents and the influx of affluent newcomers—a process defined earlier as gentrification.

While the university must be careful not to displace current members of the communities, they should not shy away from renovation and adaptive reuse projects. When done properly, renovation and adaptive reuse projects allow universities to boost economic mobility while also providing must needed affordable housing in the community.

Finally, colleges and universities should prioritize accessibility when choosing locations for workforce housing projects. To the maximum extent possible, project locations should be close to transit systems, grocery stores, pharmacies, and other amenities. Residents need to be close to these amenities to save time and in some cases money instead of having a vehicle. While some of these amenities may have higher prices for products than those located further from the university, the time saved is likely more valuable to the employees.

While transit systems are designed to cover large areas, some areas in a system are better than others. Universities often have their own transit systems or are located

close to several stops. Universities should take advantage of their position when looking for housing for employees. An ideal location would be at most a ten-minute walk from a transit stop and within a ten-minute walking distance from shops and restaurants.

In addition to the foregoing promising practices for workforce housing development, there are other, more generalized practices in the affordable housing space that colleges and universities looking to provide housing assistance to their employees. They include the following.

Universities could embrace the traditional model of housing assistance that many corporations use to provide housing for their employees. These programs utilize housing vouchers similar to those provided by the federal government. Vouchers can have different values depending on the targeted neighborhoods and the positions of the employees requesting the vouchers. Employees usually agree to work for the organization for a specified amount of time in order to obtain the voucher. Several universities have these programs in place for full-time faculty already and could easily expand them to include lower-income employees. However, these vouchers do not help increase the housing supply or address the overall housing shortage.

Universities could also choose to focus on properties they already own. Several universities own vacant land or unused buildings that could be transformed into workforce housing for employees. This method ensures that essential employees are close to the school and reduces the number of regulatory barriers faced. While it involves the same procedures as renovation and adaptive reuse, the buildings are not part of the greater community but just part of the school. This method may not be as popular since

the vacant land and empty buildings could also serve as additional dorm space for students, which many universities need.

Finally, one key informant urges colleges and universities to look beyond typical solutions to workforce housing. Local governments and non-profit organizations often follow traditional processes to develop workforce and affordable housing; universities can use their resources to find new and creative ways to address the housing shortage while still providing housing to lower-income employees. Other organizations may not have the research tools and knowledge necessary to find these new solutions.

B. Potential Barriers

While the future of housing partnerships is bright, the workforce housing industry does face some barriers. Government regulation is a major barrier. Public universities operate under fairly strict state laws, so they may not be able to contribute the resources required to make projects successful. They may need to find different and creative ways to engage in housing development for their employees.

Time constraints are another barrier. Universities are accustomed to long-term projects. However, the time and resources required to complete a workforce housing project far exceed the typical large scale university initiative. It is critically important to understand both the time and resource commitments required to successfully execute a workforce housing project.

In addition, workforce housing projects can be very expensive for all parties involved. If universities want to have a true impact, they will probably need to shoulder a large share of the project costs. For universities without large endowments or other

sources of cash, this means they will have to appeal to their alumni and other potential donors for support for their workforce housing initiative.

C. Suggestions for Further Research

This research suggests several topics that were beyond the study's scope but need further exploration. Some universities work closely with their affiliated healthcare systems and some do not. In the future, researchers should look into how the universities and their affiliated medical centers can work together to build or produce workforce housing.

Another topic worthy of further research involves the monetary impact of affordable housing investments. Future researchers should perform a thorough analysis of the impact of these new affordable properties on neighborhood median household income and median housing value. Researchers also should look at how these properties may affect the long-term employability of residents and whether the effect has an impact on the neighborhood as a whole.

Finally, Bridge Investment Group, one of the case study companies in this study, claims to have a nearly perfect formula for creating successful workforce housing projects. Researchers should look further into Bridge's funding model. If Bridge's projects do tend to have better outcomes than those of other companies or housing providers, perhaps others can replicate the model. However, more research into the inner workings of the Bridge's model is necessary before it potentially can be considered a best practice in the industry.

VII. APPENDIX

APPENDIX A

THE UNIVERSITY
of **NORTH CAROLINA**
at **CHAPEL HILL**

To: Emily Arnold and James Johnson
Kenan-Flagler Business School

From: Office of Human Research Ethics

Date: 2/05/2020
RE: Notice of IRB Exemption
Exemption Category: 2.Survey, interview, public observation
Study #: 19-3086

Study Title: The Impact of Universities on Affordable Housing Projects

This submission, Reference ID 265861, has been reviewed by the Office of Human Research Ethics and was determined to be exempt from further review according to the regulatory category cited above under 45 CFR 46.104.

Study Description:

Purpose: I will examine ways in which universities interact with affordable housing projects in order to see the impact they have. I want to understand if universities are contributing the resources projects need to be successful. I also want to compare this impact to the impact companies have on affordable housing projects.

Participants: I will interview a contractor, a university faculty member, a company employees, and someone from a housing authority who all have experience working with affordable housing projects. I will also interview other key participants in the projects from two universities and two companies as part of small case studies.

Procedures (methods): I will conduct interviews and perform four small case studies based on the answers provided in the interviews.

Investigator's Responsibilities:

If your study protocol changes in such a way that exempt status would no longer apply, you should contact the above IRB before making the changes. There is no need to inform the IRB about changes in study personnel. However, be aware that you are responsible for ensuring that all members of the research team who interact with subjects or their identifiable data complete the required human subjects training, typically completing the relevant CITI modules.

The IRB will maintain records for this study for 3 years, at which time you will be contacted about the status of the study.

Figure 7 *IRB approval for study*

APPENDIX B

I asked the following questions in preliminary interviews. Each interviewee had 10+ years of experience with affordable housing development. Interviewees will remain anonymous, and had the choice of whether or not to participate in an interview.

Interview Questions:
1. Please describe your experience with affordable housing.
2. What characteristics or actions make affordable housing projects successful?
3. What characteristics or actions do not make affordable housing projects successful?
4. Are you familiar with workforce housing development in particular?
5. How can universities contribute to workforce housing development?
6. What do you recommend for any groups looking to get involved in workforce housing development?

In some cases, I asked follow-up questions for clarification.

APPENDIX C

I conducted 30 telephone surveys using the questions below. Each survey respondent was informed of the purpose of the survey and had the opportunity to choose whether or not to participate. All responses were anonymous in the sense that no personal data was stored and the school or company name was not retained.

Are you with a university?

○ Yes   ○ No

Did your organization have a documented plan for the project or involvement?

○ Yes   ○ No/NA

Did your organization define growth or improvement measures?

○ Yes   ○ No/NA

Did your organization find or provide guaranteed funding for the project?

○ Yes   ○ No/NA

Did your organization look for neighborhood support before beginning?

○ Yes   ○ No/NA

Did your organization look for developer support before beginning?

○ Yes   ○ No/NA

Did your organization involve resident or beneficiary opinions in the planning process?

○ Yes   ○ No/NA

Did your organization have support or engagement from community leaders?

○ Yes   ○ No/NA

Did your organization have an understanding of zoning restrictions in the area?

○ Yes   ○ No/NA

Was your organization willing to work with city leaders to solve issues that arose during the project?

○ Yes   ○ No/NA

Did residents have clear ownership over units?

○ Yes   ○ No/NA

Did your organization find new ways to utilize old structures?

○ Yes   ○ No/NA

Were members of your organization involved in the project?

○ Yes   ○ No/NA

Was involvement part of your organization's mission?

○ Yes   ○ No/NA

Did your organization hear and consider concerns from skeptical parties?

○ Yes   ○ No/NA

Did you work in mixed income areas?

○ Yes   ○ No/NA

Did your organization look for participation from knowledgeable actors?

○ Yes   ○ No/NA

Did your organization develop or underwrite property owned by the organization?

○ Yes   ○ No/NA

Did your organization acquire property for use in construction of new units?

○ Yes   ○ No/NA

Did your organization have a clear cost plan?

○ Yes   ○ No/NA

Did your organization consider transportation issues when choosing project location?

○ Yes   ○ No/NA

Was your organization transparent about the motivation, progress, and outcome of your involvement?

○ Yes   ○ No/NA

Did your organization clearly define target residents/beneficiaries?

○ Yes   ○ No/NA

Did your organization take time to understand implications of involvement?

○ Yes   ○ No/NA

Figure 8 *Survey questions*

APPENDIX D

Table 2 Survey Responses

Question	Universities		Companies	
	Yes	No/NA	Yes	No/NA
Documented plan for involvement?	15	0	15	0
Defined growth or improvement measures?	12	3	7	8
Found or provided guaranteed funding for the project?	9	6	15	0
Gathered neighborhood support before beginning?	13	2	4	11
Had developer support before beginning?	5	10	8	7
Involved resident or beneficiary opinions in planning process?	12	3	6	9
Support and engagement from community leaders?	13	2	12	3
Understanding of zoning restrictions in the area?	3	12	8	7
Willingness to work with city leaders to fix problems?	15	0	15	0
Clear ownership by residents or beneficiaries?	9	6	11	4
Participation from knowledgeable at-risk actors?	15	0	15	0
Developed or underwrote property owned by organization?	6	9	2	13
Acquired property for use in construction of new housing?	2	13	7	8
Clear cost plan?	15	0	15	0
Found new ways to utilize old structures or sites?	13	2	10	5
Considered transportation issues when deciding on project location?	7	8	3	12
Involved members of your organization in project?	11	4	13	2
Involvement part of your organization's mission?	15	0	15	0

Heard and considered concerns from skeptical parties?	11	4	10	5
Worked in mixed income areas?	12	3	15	0
Transparent about motivation, progress, and outcome of involvement?	15	0	15	0
Clearly defined target residents or beneficiaries?	15	0	15	0
Took time to understand implications of involvement?	15	0	15	0

REFERENCES

Allen, P., Barlow, C., Hoehner, C., Schootman, M. (2012). Commuting Distance, Cardiorespiratory Fitness, and Metabolic Risk. *American Journal of Preventative Medicine, 42(6)*, 571-578. doi: 10.1016/j.amepre.2012.02.020

Allison, K., Harding, A. (2017). *Employee Financial Wellness Survey*. Retrieved from PricewaterhouseCoopers website: https://www.pwc.com/us/en/private-company-services/publications/assets/pwc-2017-employee-wellness-survey.pdf

Aurand, A., Emmanuel, D., Yentel, D., Errico, E., & Pang, M. (2018). *The Gap: A Shortage of Affordable Homes.* Retrieved from the National Low-Income Housing Coalition website: https://reports.nlihc.org/sites/default/files/gap/

Bank of America. (2019). *Breaking New Ground: The Fight for Affordable Housing.* Retrieved from Bank of America website: https://about.bankofamerica.com/en-us/who-we-are.html

Bank of America. (2019). *Community Homeownership Commitment*. Retrieved from: https://www.bankofamerica.com/mortgage/affordable-housing-programs/

Bank of America. (2019). *The Low-Income Housing Challenge.* Retrieved from the Bank of America website: https://www.bofaml.com/en-us/content/low-income-housing-challenge.html

Bonds, J. M., Burnett, A., Sissman, E. (2018). Community Finance in East Baltimore: A Study of Phase One Redevelopment and Financing. *Community Practice Papers, The Federal Reserve Bank of Richmond.* Retrieved from: https://www.richmondfed.org//media/richmondfedorg/publications/community_development/practice_papers/2018/practice_papers_2018-3.pdf

Bridge Investment Group [Bridge]. (2019). *Workforce and Affordable Housing*. Retrieved from: https://www.bridgeig.com/workforce-affordable-housing/

Broadwater, L. (2018). *City housing officials to seek up to $100M subsidy for East Baltimore development plan*. Retrieved from Baltimore Sun website: https://www.baltimoresun.com/maryland/baltimore-city/bs-md-ci-perkins-homes-tif-20180322-story.html

Burgunder, L. (2019). *Johns Hopkins Collaborates on Plan to House, Care for Baltimore's Homeless Population.* Retrieved from: https://hub.jhu.edu/2019/07/09/johns-hopkins-hospital-housing-health-care-baltimore-homeless/

Capps, K. (2019). *The Hidden Winners in Neighborhood Gentrification.* Retrieved from CityLab: https://www.citylab.com/equity/2019/07/gentrification-effects-neighborhood-data-economic-statistics/594064

Cartier, B. (2019). *Introduction to investing in the 'missing middle' and workforce housing*. Retrieved from: https://www.stessa.com/blog/missing-middle-and-workforce-housing

Chaskin, R., Joseph, M. (2015). Integrating the Inner City: The Promise and Perils of Mixed-Income Public Housing Transformation. *Chicago: The University of Chicago Press.*

Chaskin, R., Joseph, M., Khare, A. (2014). The Enduring Significance of Race in Mixed-Income Communities. *Urban Affairs Review*, DOI: 10.1177/1078087414537608.

CBRE Research. (2018). *The Case for Workforce Housing*. Retrieved from: https://www.ncsha.org/wp-content/uploads/2018/12/US-Multifamily-The-Case-for-Workforce-Housing-%E2%80%93-Nov-20181.pdf

Dastrup, S., Ellen, I. (2012). *Housing and the Great Recession*. Retrieved from the Furman Center website: https://furmancenter.org/files/publications/HousingandtheGreatRecession.pdf

Department of Housing and Urban Development, United States of America. (2013). Preserving Affordable Rental Housing: A Snapshot of Growing Need, Current Threats, and Innovative Solutions. *Evidence Matters*. Retrieved from: https://www.huduser.gov/portal/periodicals/em/summer13/highlight1.html

Economic Policy Institute. (2019). *Minimum Wage Tracker.* Economic Policy Institute. Retrieved from https://www.epi.org/minimum-wage-tracker/

Erickson, A. (2012). *The Birth of Zoning Codes, a History.* Retrieved from CityLab: https://www.citylab.com/equity/2012/06/birth-zoning-codes-history/2275/

Florida, R. (2015). *The Deep Roots of America's Housing Affordability Crisis.* Retrieved from: https://www.citylab.com/equity/2015/05/the-deep-roots-of-americas-housing-affordability-crisis/393773/

Gørrild, M., Obialo, S., Venema, N. (2008). Gentrification and Displacement in Harlem: How the Harlem Community Lost Its Voice en Route to Progress. Retrieved from:

https://www.humanityinaction.org/knowledge_detail/gentrification-and-displacement-in-harlem-how-the-harlem-community-lost-its-voice-en-route-to-progress/

Gross, T. (2017). *A 'Forgotten History' of How the U.S. Government Segregated Housing.* Retrieved from: https://www.npr.org/2017/05/03/526655831/a-forgotten-history-of-how-the-u-s-government-segregated-america

Harlem, J. (2018). *Why Employers are Turning to Employer-Assisted Housing Programs.* Retrieved from: https://www.fels.upenn.edu/recap/posts/1570

Holmes, N, Kneebone, E. (2016). *U.S. Concentrated Poverty in the Wake of The Great Recession.* Retrieved from the Brookings Institute website: https://www.brookings.edu/research/u-s-concentrated-poverty-in-the-wake-of-the-great-recession/

Ikeda, S. (2016). *How the Housing Market Works.* Retrieved from the Foundation for Economic Education website: https://fee.org/articles/how-the-housing-market-works/

Johnson, D. (2019). *What will it take to solve the student loan crisis?* Retrieved from the Harvard Business Review website: https://hbr.org/2019/09/what-will-it-take-to-solve-the-student-loan-crisis

Law School, The University of Chicago. (2019). *Housing Initiative Transactional Clinic Significant Achievements for 2018-19.* Retrieved from: https://www.law.uchicago.edu/news/housing-initiative-transactional-clinic-significant-achievements-2018-19

Lowery, A. (2020). *The Great Affordability Crisis Breaking America.* Retrieved from: https://www.theatlantic.com/ideas/archive/2020/02/great-affordability-crisis-breaking-america/606046/

Lubeck, A. (2019, November). Alternative Affordable Housing Models. Investing in Affordable Housing. *Symposium hosted by the Kenan Institute of Private Enterprise and the Leonard W. Wood Center for Real Estate Studies.*

Machak, L. (2014). *MFE Question: What exactly is workforce housing?* Retrieved from: https://www.multifamilyexecutive.com/property-management/demographics/mfe-question-what-exactly-is-workforce-housing_o

Mansueto Institute for Urban Innovation, University of Chicago. (2019). *Kreisman Fellows: 2019-2020.* Retrieved from: https://miurban.uchicago.edu/our-people-kreismanfellows-2020/

McCarthy, B. (2019). *The Facts on Affordable Housing in the United States.* Retrieved

from: https://www.politifact.com/article/2019/dec/30/facts-housing-affordability-united-states/

Mishel, L. (2015). *Causes of Wage Stagnation.* Retrieved from the Economic Policy Institute website: https://www.epi.org/publication/causes-of-wage-stagnation/

Mordfin, R. (2016). *Housing Heats Up at Chicago.* Retrieved from the University of Chicago School of Law website: https://www.law.uchicago.edu/news/housing-heats-chicago

National Geographic Society. (2019). *Gentrification.* Retrieved from: https://www.nationalgeographic.org/encyclopedia/gentrification/

Norquist, J. (1998). *How the Government Killed Affordable Housing*. Retrieved from: https://spoa.com/how-the-government-killed-affordable-housing

Nguyen, L. (2019). *BofA Pledges $5 Billion for Its Affordable-Housing Program*. Retrieved from: https://www.bloomberg.com/news/articles/2019-04-02/bofa-pledges-5-billion-for-affordable-housing-in-5-year-effort

Obando, S. (2019). *Demand for Workforce Housing to Remain Strong in 2019.* Retrieved from: https://www.nreionline.com/multifamily/demand-workforce-housing-remain-strong-2019

Office of Civic Engagement, University of Chicago. (2015). *Employer Assisted Housing Program.* Retrieved from: https://humanresources.uchicago.edu/

Office of the President, Johns Hopkins University. (2019). *Homewood Community Partners Initiative*. Retrieved from: https://president.jhu.edu/anchor-initiatives/homewood-community-partners-initiative/

Ogilvie, J. (2019). *What's going on with the Jordan Downs redevelopment?* Retrieved from: https://laist.com/2019/06/21/dear_laist_whats_going_on_with_the_jordan_downs_redevelopment.php

Parlow, M. (2015). *Whither Workforce Housing?* Journal of Affordable Housing & Community Development Law, 23(3-4), 373-392. Retrieved from American Bar Association website: https://www.americanbar.org/groups/affordable_housing/publications/journal_of_affordable_housing_home/

Passy, J. (2019). *This is the most affordable housing market for buyers with student debt*. Retrieved from: https://www.marketwatch.com/story/this-is-the-most-affordable-place-to-buy-a-home-with-student-debt-2019-10-15

PolicyLink. (2019). *An Overview of America's Working Poor*. Retrieved from:
      https://www.policylink.org/data-in-action/overview-america-working-poor

Reeves, R. (2017). 'Exclusionary zoning' is opportunity hoarding by the upper middle
      class. *Real Clear Markets*. Retrieved from:
      https://www.brookings.edu/opinions/exclusionary-zoning-is-opportunity-
      hoarding-by-upper-middle-class/

Rigsby, E. (2016). *Understanding Exclusionary Zoning and Its Impact on Concentrated
      Poverty.* Retrieved from: https://tcf.org/content/facts/understanding-exclusionary-
      zoning-impact-concentrated-poverty/?session=1

Rose, C. (2016). Overcoming the Obstacles Student Debt Presents to the Ability to Buy a
      Home. *Journal of Financial Service Professionals, 70(5),* 72-80.

Ruterman, C. (2019). *Bridge Investment Group Deploys $619M in Workforce &
      Affordable Housing Strategy*. Retrieved from:
      https://www.bloomberg.com/press-releases/2019-10-01/bridge-investment-group-
      deploys-619m-in-workforce-affordable-housing-strategy

Thrush, J. (2018). *As Affordable Housing Crisis Grows, HUD Sits on the Sidelines.*
      Retrieved from the New York Times website:
      https://www.nytimes.com/2018/07/27/us/politics/hud-affordable-housing-
      crisis.html

Town of Chapel Hill. (2019). *Affordable Housing Annual Report*. Retrieved from:
      www.chapelhillaffordablehousing.org

Waldman, A. (2019). Office of Civic Engagement Program Assists University
      Employees in Buying South Side Homes. Retrieved from:
      https://www.chicagomaroon.com/article/2019/1/30/office-civic-engagement-
      program-assists-university/

Wisman, J. (2013). Wage Stagnation, Rising Inequality, and the Financial Crisis of 2008.
      Cambridge Journal of Economics, 37(4), 921-945. doi: 10.1093/cje/bes085

Yentel, D. (2019). Solutions to the Affordable Housing Crisis. Retrieved from the
      National Low Income Housing Coalition's website:
      https://nlihc.org/sites/default/files/Solutions-to-the-Affordable-Housing-Crisis.pdf