PUTTING PRESERVATION TO WORK: WORKFORCE HOUSING AND ADAPTIVE REUSE

By

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(Under the Direction of John Crowley)

ABSTRACT

Many American cities, regions, and states have begun to recognize the availability of housing that is conveniently-located and affordable to moderate-income “workforce” families as an important part of building sustainable economies. Although there is no national standard for workforce housing programs or incentives, many developers have creatively made use of available funding to construct residences that are targeted to middle-income professionals whose services are essential to well-functioning cities. This thesis explores the question of whether historic structures are being repurposed for use as workforce housing developments, with a focus on those developments deemed exemplary by the Urban Land Institute’s Terwilliger Center for Housing through its Jack Kemp Award for Excellence in Affordable and Workforce Housing.

INDEX WORDS: Adaptive reuse, Affordable housing, Historic preservation, Urban Land Institute, Workforce housing

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CHAPTER 1 – INTRODUCTION

I have always taken interest in unused historic buildings, and tend to be the sort of person who sees potential more clearly than decay. Over the course of the past few years, as I have been studying the past, present, and future of the built environment, my understanding of both the power and the challenges held within the walls of the countless boarded-up structures scattered across our cities has deepened and (I like to think) become more pragmatic. Still, I cannot help but feel a tinge of frustration when adaptive reuse projects so often seem to create housing that will be inaccessible to members of the communities that surround them. How can these projects truly preserve the history of their neighborhoods when they are unaffordable to their populace?

I've read that the development of city centers and suburbs can be imagined like waves – that at times pressure to build pushes outward toward the fringes of the urban fabric, but that the tide is turning and the core is once again desirable to the trend-setting forces that be who will return to city centers with investors close on their heels. Though I understand that these ebbs and flows are a natural part of growth, I can't help but think of the millions of people that this analogy represents as the sand being stirred up, pushed away, resettled by the force of the waves. I decided to look at what cities have been doing to address these problems. I had read about affordable housing and inclusionary zoning, but I wanted to find out what these efforts really looked like, and whether

historic properties were being used in conjunction with efforts to diversify housing stock and revitalize neighborhoods without making them inaccessible to their own residents.

Almost immediately, I came across the idea of “workforce” housing, and the projects that have been incentivized and promoted as such. These projects interested me for several reasons. To begin, they addressed a group of people that I saw as being incredibly vulnerable to the “ebbs and flows” of the desirable neighborhood tide I discussed earlier, but a group that very seldom seems to be on the receiving end of innovatively designed housing schemes – families with too much income to qualify for most “low income” or “affordable” housing, but often not enough to afford homes close to work or in walkable neighborhoods. Additionally, as I began to look into different projects that have been called “workforce housing,” I noticed an incredible amount of diversity in the types of units that were being created, the goals of the projects, and even the definition of who the “workforce” was. Indeed, much of the available literature on the topic celebrates projects that have creatively combined the goal of constructing workforce or mixed-income housing with other incentives or addressed other needs that are present in the community, ranging from sustainability to transit-oriented development and even, of course, adaptive reuse.

I decided to explore this topic further, to investigate whether and how the homes dubbed “workforce housing” are addressing affordability for mid-level earners. I have put the pessimism that struck me one morning not too long ago

back where it came from, and begin the process hopeful that the answer will be "quite effectively."

Objective

The term workforce housing has come into use among planners and developers, typically in response to concern that, in many American cities, workers living on moderate incomes cannot afford to live in the communities they serve. This thesis aims to explore the feasibility of combining the goals of creating workforce housing and historic preservation through the repurposing of vacant historic buildings. This examination will begin with an analysis of homes that have been created as workforce housing. This analysis is necessary because, due to the localized and uncoordinated nature of workforce housing programs, the resulting projects vary greatly in size, form, setting, and even target population. Such variety can oftentimes be beneficial by allowing the flexibility and creativity necessary to address each community's issues on an individual basis. By examining programs from a broader perspective, however, it is hoped that lessons might be learned about the successes and failures of these projects. The research questions to be answered herein, therefore, are:

> What types of housing are being created under workforce housing programs?
>
> and
>
> How are the goals of housing affordability and historic preservation being combined in workforce housing adaptive reuse projects?

Limitations

Unfortunately, the incohesive nature of workforce housing programs and incentives that allows them to be creatively applied and responsive to their communities – and therefore an interesting research topic – poses a challenge when it comes to data collection. Because there is no federal workforce housing grant or directive, even the term “workforce” can have different income requirements and meanings within the scope of different projects. Additionally, these programs are still relatively young despite their increasingly common usage within the last decade. As a result, there does not appear to be any aggregate data on completed projects, and program evaluations are still relatively rare.

Because of this lack of amassed data, it was decided that the projects analyzed would be limited to winners of the Jack Kemp Excellence in Affordable and Workforce Housing Award. The Kemp Award, given annually by the Urban Land Institute, has been given to exemplary developments that “ensure housing affordability for a range of incomes, particularly for households earning below 120 percent of area median income (A.M.I.), or mixed-income developments that serve households below 60 percent of A.M.I.”[1] An examination of only award-winning projects will, of course, exclude many of the failed or poorly-executed cases from which many lessons could have been learned, a limitation to this study that must be considered throughout.

[1] "Jack Kemp Excellence in Affordable and Workforce Housing Awards", Urban Land Institute http://uli.org/programs/awards-competitions/jack-kemp-awards/ (accessed January 24, 2015).

Another limitation to the applicability of the conclusions of this study to other cities is brought by the predominantly dense, urban setting of the majority of the projects being analyzed. While it is true that the need for workforce housing programs is felt the most in high-priced housing markets and therefore most commonly in larger cities, many early workforce housing programs were implemented in upscale resort towns that offered few housing options for service industry workers, and those programs do not appear to be represented within the Kemp Award-winning projects. Discovering the reasons behind this lack of representation, however, is beyond the scope of this thesis. In spite of these challenges, the location and scale of the projects to be examined are diverse enough that the conclusions should be able to paint an accurate picture of successful workforce housing across the United States.

Notes about Terminology

Discussions of housing affordability can quickly become complex when burdened with an "alphabet soup" of acronyms and vague terminology. The terms below can sometimes be taken to represent broader or narrower definitions, but herein should be understood in the following manner:

- Affordable Housing: The U.S. Department of Housing and Urban Development (H.U.D.) considers families who pay more than 30 percent of their income for housing to be cost

burdened.[2] This puts them at high risk of having difficulty affording food, transportation, or medical care,[3] regardless of where their household income falls in relationship to the average for their community, their city, or the nation. The term “affordable housing,” therefore, refers to housing that is intended to be accessible, but does not necessarily mean that it will be targeted toward low-income households. Within the context of this thesis “affordable housing” should be taken to mean housing units that will be rented or sold for below market value. There is no set amount or percentage below market value required for housing to be considered “affordable,” but affordable housing programs are generally located in areas where the gap between the cost of market value homes, and the cost of housing that can be afforded by residents, is significant.

- Area Median Income (A.M.I.): Instead of comparing the price of affordable homes to market rate, questions of affordability are typically measured in relationship to Area Median Income, adjusted for household size.[4] Each year, A.M.I. is calculated for every metropolitan area and rural county in the

[2] "Affordable Housing", U.S. Department of Housing and Urban Development http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/affordablehousing/ (accessed February 8, 2015).
[3] *Bending the Cost Curve on Affordable Rental Development: Understanding the Drivers of Cost* (Urban Land Institute Terwilliger Center for Housing and Enterprise Community Partners, 2013).
[4] Alan Mallach, *A Decent Home: Planning, Building, and Preserving Affordable Housing* (Chicago: Planners Press, 2009), 5.

United States by the U.S. Department of Housing and Urban Development, or H.U.D. Basing affordability on the percentage of A.M.I. that households should make in order for rent or mortgage payments to follow the 30 percent rule described above allows affordability to be compared between areas, even though median income and the price of housing can vary.

- Low Income: In federal terminology, low income households are those that earn between 50 and 80 percent of A.M.I., and very low income households are those below 50 percent of A.M.I. Households living in poverty are determined by federally-set poverty thresholds, which are number values that can be adjusted by household size but remains consistent in spite of location within the contiguous U.S. (though they are adjusted for Alaska and Hawaii). Federal poverty thresholds are determined according to Consumer Price Index, not A.M.I., in order to ensure that poverty rates accurately reflect the number of households that are unable to afford basic necessities instead of displaying relative poverty.[5] Collectively, the term “lower-income” refers to all households with an income of below 80% of A.M.I.[6] Within

[5] "What Are Poverty Thresholds and Poverty Guidelines?", Institute for Research on Poverty, University of Wisconsin-Madison http://www.irp.wisc.edu/faqs/faq1.htm (accessed March 3, 2015).
[6] Mallach.

the context of several of the projects discussed in this thesis, other levels of A.M.I. are used to determine eligibility and distinguish “workforce” from “low-income” units. The percentage of A.M.I. to which units are targeted will be used whenever possible to avoid confusion surround varying definitions of these terms.

- Preservation: This thesis aims to examine workforce housing projects that include historic preservation, meaning the rehabilitation, protection, and conservation of buildings of historic significance. Historic significance is a connection between a property and the historical narrative, be it an association with an important event, person, or development, a representation of an important architectural, engineering, or landscape architecture achievement, or the potential to yield information in the future.[7] The official list of historic districts, sites, buildings, structures, and objects, the National Register of Historic Places, is kept by the National Park Service. To be eligible for listing, a property typically must be at least 50 years old and retain much of its original look in addition to historic significance. Most of the incentives for preservation to be discussed in this thesis require that a property be listed in, or deemed eligible for

[7] "National Register of Historic Places Program: Fundamentals", National Park Service http://www.nps.gov/nr/national_register_fundamentals.htm (accessed March 3, 2015).

listing in, the National Register, whether individually or as a contributing part of a district. This is not to say that older buildings that are not eligible should not be considered for reuse, only that buildings that have the requisite age, integrity, and significance to be listed often yield more incentives for rehabilitation than those that do not. It should additionally be noted that the term "housing preservation" is commonly understood to refer to efforts to ensure that affordable housing remains affordable.[8] The full terms will be used to avoid confusion.

- Workforce Housing: There is no commonly-accepted definition of the term "workforce housing," but it is often used in the case of housing that is targeted toward citizens who fill necessary jobs within a community but make only moderate incomes. Individuals such as teachers, police officers, medical support staff, and those working in the service industry are often cited as individuals who struggle to afford housing in spite of full-time and crucial employment. The National Housing Conference considers homes in which "at least one full-time worker who earns between the minimum wage and the amount needed to afford to live in the area" to be workforce housing,[9] a definition which highlights the fact

[8] Mallach, 239-340.
[9] Ibid., 23.

that the term does not necessarily apply exclusively to lower-income households. Workforce housing projects do not always rely on grants or tax incentives for their construction, and they do not always have income qualifications. The term does not exclude rental or purchase units. The variety of definitions for the term that have been used by developers will be discussed in further detail in Chapter 3.

CHAPTER 2 – LITERATURE REVIEW

Before delving into an analysis of current programs, it is important to explore available literature on the subject. The literature review to follow looks not only at program evaluations of workforce housing programs, but studies which assess contemporary need for this type of housing. The evolution of today's approach to housing affordability will also be considered. Finally, the relationship between historic preservation and economic development will be discussed, with a focus on incentives which can offset the costs of rehabilitation.

Necessity of Workforce Housing Programs

Matthew J. Parlow's article, "Whither Workforce Housing?" places emphasis on the distinction between programs driven by supply, which were prevalent between the 1930s and 1970s, and more recent programs that have focused on the demand for affordable housing by encouraging private-sector development.[10] Parlow views this change as a gradual shift in philosophy rather than the result of a singular legislative act. He additionally argues that the decline of housing prices since they reached their peak in 2007 should not signal the end of the state, local, and public-private partnership programs that were created during the 1990s and 2000s. In spite of the rapid drop in housing value

[10] Matthew J. Parlow, "Whither Workforce Housing? ," *Fordham Urban Law Journal* 40, (2012-2013): 1648.

that accompanied the mortgage crisis of the mid-2000s, as of 2013, the cost of housing had begun to rise again in spite of wage stagnation.[11] This perspective suggests that the "Great Recession," which officially lasted from December 2007 to June 2009,[12] did not ultimately make the task of finding housing within an easy commute from their places of employment more affordable for the majority of middle-income Americans.

The sentiment that workers are continuing to struggle with housing affordability was shared by Maya Brennan and Laura Williams, authors of "Paycheck to Paycheck 2011: Is housing affordable for Americans getting back to work?" The report argues that "many workers cannot afford to live in the communities they serve."[13] Brennan and Williams came to this conclusion by analyzing housing affordability for the five jobs in the industry sector that were doing the most hiring in mid-2011 as the nation emerged from recession and employers began to hire. The typical salary ranges of these employees – accountants, groundskeepers, janitors, office clerks, and security guards – were compared to the fair-market rents of two-bedroom apartments and the median home prices in 209 American metropolitan areas.[14]

The results revealed that none of these occupations could be expected to provide a salary on which a two-bedroom rental or median-priced home could be afforded in any market.[15] When excluding the relatively high-earning position of

[11] Ibid., 1665.
[12] *The Recession of 2007-2009* (United States Bureau of Labor Statistics, 2012).
[13] Maya Brennan and Laura Williams, *Paycheck to Paycheck 2011: Is Housing Affordable for Americans Getting Back to Work?* (Center for Housing Policy, 2011), 4.
[14] Ibid., 1.
[15] Ibid., 2-3.

accountant, the remaining four occupations – with a combined salary range of $21,000 to $37,000 – were likely to be unable to afford housing in more than two thirds of the areas included in the study.[16] Brennan and Williams conclude that

> These data reinforce that jobs are only part of the answer. To ensure that newly employed workers can afford to meet necessary expenses for nutritious food, health care, and education, states and localities need policies that expand the supply of affordable housing.[17]

Another recent report, "Bending the Cost Curve on Affordable Rental Development: Understanding the Drivers of Cost," attempted to identify persistent regulatory barriers that might prevent the construction of affordable housing. The 2013 study is the result of a partnership between Enterprise Community Partners and the Urban Land Institute's Terwilliger Center for Housing. Through a series of roundtable discussions in Chicago, Denver, Los Angeles, New York City, and San Francisco,[18] the study found that, due to fixed costs such as land, legal fees, and the expense of applying for funding, projects with a smaller number of units may not always be profitable to developers.[19] Additionally, it was found to be difficult for developers to acquire financing for multifamily units in need of little or no rehabilitation.[20] Both of these findings could be especially relevant when considering the profitability of historic rehabilitation projects in the creation of affordable housing. Indeed, meeting

[16] Ibid., 2.
[17] Ibid., 4.
[18] *Bending the Cost Curve on Affordable Rental Development: Understanding the Drivers of Cost*, 3.
[19] Ibid., 4.
[20] Ibid., 6.

requirements such as historic preservation standards was cited as a burden that often had notable effects on development costs.[21]

Overall, the study yielded a number of recommendations to create a climate that can better promote the development of affordable housing. A primary theme that emerged was the need for coordination and consolidation of approval processes, requirements, and incentives. Meeting conflicting standards was seen as a significant hindrance by developers. The distribution of information and best practice case studies was also seen as a vital but often overlooked aspect of promoting affordable housing projects.[22]

The above research suggests that the current need for affordable housing projects remains present in many, if not most, metropolitan areas. It appears, however, that challenges remain when it comes to encouraging the private sector to address these needs. The studies discussed in the following pages are evaluations of programs that have been implemented. They will focus more specifically on workforce housing programs, whether they encourage accessible rental units or homeownership.

Background and Evolution of Workforce Housing in the United States

Present-day conceptions regarding the appropriate role of housing programs and incentives can be said to have begun evolving with the actions of reformers of the late nineteenth and early twentieth centuries, who began to call for housing codes to prevent the lack of light and ventilation that was commonly

21 Ibid., 8-9.
22 Ibid., 12.

found in urban tenements of the time.[23] Although these early activists initially expressed more concern for consequences to residents' health of these poor conditions than for issues of affordability per se, it was soon understood that tenement-dwellers accepted such circumstances because their incomes demanded it.[24] Planner and author Allan Mallach notes in *A Decent Home: Planning, Building, and Preserving Affordable Housing* that, "[a]s is still true today, affordability was as much a problem of the lack of income as of the cost of housing."[25] The issue was not generally seen as the federal government's responsibility, so – with the exception of a few short-lived developments constructed during the First World War – the problem of housing affordability was left to market forces.

The New Deal and the corresponding shift in ideology that it represented would establish a model for affordable housing that would remain prevalent throughout the United States for half a century.[26] Out of this politically liberal climate came the Housing Act of 1937, commonly called the Wagner Act for its author, New York Senator Robert Wagner.[27] The Act created local Public Housing Authorities, which constructed, owned, and operated newly-created affordable housing developments with federal oversight.[28]

The public housing developments created in the early years of this act might today be considered workforce housing developments. Residents were

[23] Mallach, 29-30.
[24] Ibid., 31-32.
[25] Ibid., 32.
[26] Ibid., 37.
[27] *A Right to Housing: Foundation for a New Social Agenda* (Philadelphia: Temple University Press, 2006), 114.
[28] Ibid., 142.

required to prove ability to pay rent to cover the housing authorities' costs, and the developments were generally seen as successful and pleasurable places to live. Mallach argues that a number of factors present throughout the 1950s resulted in "something close to a perfect storm of well-intended but misguided policies [which] undermined public housing and turned it into a watchword for failed social policy."[29] As many working-class families who had originally been residents of public housing were able to afford to move out due to the nation's postwar prosperity and development boom, new rules required housing authorities to house poorer households were put into place. Additionally, as urban renewal and highway building programs displaced inner-city families, those with nowhere else to turn found themselves moving into public housing.

Public housing tenants' median income dropped from 64 percent of the national median in 1950 to just 27 percent in 1980, reflecting the abandonment of these units by working families who could afford housing in new suburbs, and their replacement by lower-income tenants. As the populations of these developments became poorer, housing authorities were encouraged to be increasingly cost-conscious. The resulting housing projects became both increasingly isolated from their surrounding communities and much denser, often taking the form of high-rise complexes with thousands of residents. Federal operating subsidies were provided to housing authorities beginning in the mid-1960s, with further funds for renovation allowed beginning in the mid-1970s. By that time, Mallach notes, the atrocious conditions of certain public housing

[29] Mallach, 35.

developments had been widely publicized, and the public's view of this approach to housing had soured, despite the fact that many housing authorities continue to operate successful developments to this day. [30]

Throughout the 1960s, the need for a new approach to affordable housing was increasingly felt, culminating in 1968 with the Housing and Urban Development Act. The new Act set forth a goal of creating 600,000 units per year over ten years, to total six million homes for lower-income Americans.[31] The government's role in the programs created by the new Act was not to create or manage affordable housing units, but merely to provide subsidies that would incentivize their development and operation. The programs created by the Act ultimately resulted in the construction of 1.2 million units, far short of the stated goal, but the nation's stock of affordable housing was more than doubled by these additions. This was done by subsidizing mortgage interest rates down to 1% both for home buyers earning 95 percent or less of Area Median Income, and for developers of affordable housing.[32]

Within a few years of the programs' beginnings, however, problems began to give reason to reassess the details of this approach. The amount of money that the federal government was committing to spend over the next three or four decades in order to subsidize long-term mortgages began to mount, but there were additional problems that arose surrounding the homes themselves and the impact that these programs would have on communities. The need for such an

[30] Ibid., 36.
[31] Ibid., 38.
[32] Ibid.

emphasis on new construction when so many older homes were sitting vacant began to draw skepticism. Additionally, many of the homes built were of poor quality and sold with no inspection to new owners who had not been educated about maintenance. When the new homes fell into disrepair, their owners realized that the cheapest option would be to simply walk away.[33] In spite of their problems, the programs successfully made affordable housing, whether for rental or purchase, a reality for a large number of families.[34] The programs were phased out in 1975, a decision which received few objections from a public that agreed changes were necessary.

Those changes came in the form of the Section 8 program, signed into law by President Gerald Ford in 1974, only a few weeks after he took office. This program was based around the issuance of certificates, either to low-income families who would use them to pay for market-rate rentals, or to developers who would construct units for occupancy by income-eligible families who would pay what rent they could, with the Department of Housing and Urban Development (H.U.D.) paying the difference.[35] Through the latter years of the 1970s, Mallach notes, emphasis was still placed on the construction of new units through development certificates, with the result being projects that benefitted both developers and tenants. In the early 1980s, however, the Reagan administration shifted focus to the Section 8 “voucher” program, which provided rental certificates directly to families. The vouchers, the new administration argued,

[33] Ibid., 40.
[34] Ibid., 38-39.
[35] Ibid., 42.

addressed the problem of affordability more directly than production programs, and for less overall expense to the federal government. The rental certificate program, renamed Housing Choice Vouchers in 1998 though still commonly referred to as "Section 8," was distributing over two million such vouchers by 2004. This affirms Mallach's argument that "[w]ith the exception of a trickle of funds for small production programs serving the elderly and disabled, all incremental resources administered by H.U.D. were devoted to addressing the demand side of the affordable housing equation."[36]

In addition to the Section 8 program and remaining public housing developments, state and local programs have worked to increase housing affordability since as early as the 1920s. One way that every state, the District of Columbia, and a number of local municipalities have worked to promote this goal is through agencies that issue tax-exempt Mortgage Revenue Bonds, or MRBs. They can be used to finance multifamily housing that includes units reserved for lower-income families, or to provide low- to moderate-income families with low-interest mortgages. As of 2005, Mallach estimated that MRBs were used to finance 100,000 home mortgages and construct 130,000 dwelling units per year.[37]

Federal housing policy has seen a gradual shift away from public operation and toward incentives for private construction and management in the nearly half-century since the Department of Housing and Urban Development was created in 1968. Additionally, the focus of assistance has changed as

[36] Ibid., 43.
[37] Ibid., 44.

H.U.D. and local housing authorities have worked to serve those at the low end of the income spectrum on tight budgets. Without disagreeing that housing for low-income families who may otherwise face homelessness, economists and housing advocates from many regions have additionally begun to draw attention to the supply and location of moderately-priced "workforce" housing. As employment centers have relocated from city cores to the suburbs, they argue, adequate housing for their workforce has not been created. Families have had to accept longer commutes in exchange for affordability, fueling sprawl and pollution, and creating increasing burdens on infrastructure. Housing advocates argue that this lack of accessible, affordable housing for the labor force can cause families to relocate to other cities and make it difficult for local businesses to attract employees.[38]

The wide array of existing definitions of the term "workforce housing" will be discussed further in Chapter 3. As mentioned earlier, the National Housing Conference considers workforce housing to be for households who live on an income between minimum wage and that necessary to afford housing.[39] Since there is no federally-funded workforce housing program, communities have the ability to define the term based on the need in their area and create their own solutions. Many community leaders have begun to see the creation of workforce housing as a necessary component of economic growth and attracting both employers and residents, as opposed to the traditional view that affordable

[38] Ibid., 22-23.
[39] Ibid., 23.

housing is a social issue.[40] Reviewing, or even grasping, the breadth of methods through with different communities have addressed this problem is challenging, but some methods commonly employed include housing trusts, local development incentives, and tax credits.

A popular method by which most states and many local governments provide money specifically for affordable housing is through the creation of housing trust funds. Sources of revenue vary, as do the amount of money generated and the types of projects undertaken. The majority use the money collected to fund the production of affordable housing, whether targeted to low- or moderate-income families. By 2005, there were 37 state and about 400 local housing trust funds, with as much as $100 to $200 million generated by housing trust funds in states including Washington, New Jersey, and Florida;[41] many use at least part of the money collected to address their need for affordable workforce housing. A national Housing Trust Fund was established by the Housing and Economic Recovery Act of 2008. The goal of this national program is to raise money for the production of housing for extremely low- and very low-income families.[42]

Some local programs have been developed to incentivize the creation of workforce housing by waiving fees and expediting review processes for

[40] Trisha Riggs, "Workforce Housing: 'An Economic Necessity, Not a Social Issue'," *Urban Land*, (2011).
[41] Mallach, 45.
[42] "National Housing Trust Fund; F.H.F.A. Directs Initial Funding to the National Housing Trust Fund", Housing Trust Fund Project http://housingtrustfundproject.org/housing-trust-funds/national-housing-trust-fund/ (accessed February 5, 2015)., and "Housing Trust Fund", US Department of Housing and Urban Development https://www.hudexchange.info/htf (accessed February 5, 2015).

developers. Austin, Texas's S.M.A.R.T. program – intended to promote homes that are Safe, Mixed-income, Accessible, Reasonably priced, and Transit oriented – offers developers a tiered scale through which developers can receive waivers of the city's capital recovery fee, development review and inspection fee, and some impact fees. Developments of four or fewer units must be entirely "reasonably priced," or targeted toward moderate-income households. Developments with five or more units allocate as few as 10 percent of units for workforce housing in exchange for 25 percent of fees waived; developments with 40 percent workforce units will have fees waived entirely. The price of the fees waived is typically around $600 per unit for multifamily construction, and $2,000 per unit for single family housing. The time saved by having the review process expedited and having S.M.A.R.T. program staff assist in resolving issues with other city departments further simplifies the entire process of creating this housing, making it less risky and more appealing to developers. The program is considered to be an excellent and successful example of local incentives in the form of waived fees.[43]

The provision to developers of local incentives (usually in the form of a density bonus) in exchange for setting aside a percentage of units built as "affordable" has come to be known as inclusionary zoning. Inclusionary zoning programs are used at the state and local in a growing number of regions, and can be voluntary or mandatory. The goal of these programs is generally seen to be the promotion of mixed-income neighborhoods, which ideally create a more

[43] Urban Land Institute, *Workforce Housing: Innovative Strategies and Best Practices* (Washington, D.C.: Urban Land Institute, 2006), 16.

even dispersal of affordable units throughout a community, improving access to amenities for lower-income families. As will be discussed further in Chapter 3, inclusionary zoning is sometimes used not to open access of expensive neighborhoods to lower-income families, but to ensure that neighborhood revitalization projects, such as infill in underserved areas, do not rapidly gentrify communities by creating developments that are geared exclusively toward higher-income families.

Montgomery County, Maryland, which borders Washington, D.C., was among the first municipalities to instate a program of this kind.[44] Montgomery County's program, known as the Moderately Priced Dwelling Unit (MDPU) program, was enacted in 1976 and is mandatory for developments containing more than 35 units located in areas zoned for lots half an acre or smaller. Developers are required to reserve up to 15 percent of residential units built for sale at affordable prices, for which they receive up to a 22 percent increase in allowed density. The affordable homes created are marketed to first-time homebuyers with moderate incomes.[45]

Voluntary inclusionary zoning programs, such as New York City's Mixed-Income, or 50/30/20 policy, typically work in a similar manner, but with developers having the right to choose not to accept the zoning incentives. In the case of New York's program, low-interest loans are given to developers in addition to density bonuses. The program is also distinct for its three-tiered system, in which 20 percent of units must be restricted to low-income tenants, 30

[44] Ibid., 27.
[45] Ibid., 28.

percent to moderate-income tenants, and the remaining 50 percent may be rented at market rate.[46]

Many inclusionary zoning programs have been successful in reaching their goals of increasing the diversity of incomes within buildings or neighborhoods. Critics of this type of program, however, point out that in extreme cases, such as in some high-priced areas of New York City, the result can be a 90 percent difference in the rent that next door neighbors pay for identical apartments. The only difference, they say, is that one neighbor won a lottery or was otherwise more successful at navigating "the system" to gain access to the affordable unit.[47] As Nicholas Brunick, Lauren Goldberg, and Susannah Levine point out in "Large Cities and Inclusionary Zoning," however, inclusionary zoning programs often possess the potential to have the largest effects in large cities, where the high prices of market-rate units can offset the developers' losses on below-market units.[48]

Because many workforce housing projects are mixed-income and include units targeted toward low-income families, they are often eligible for the federal Low Income Housing Tax Credit, or L.I.H.T.C.. In order to qualify for L.I.H.T.C., low-income units must be rentals, and meet one of the two following thresholds:

[46] "Mixed Income (50/30/20)", Furman Center for Real Estate and Urban Policy http://furmancenter.org/institute/directory/entry/mixed-income-503020 (accessed Februrary 10, 2015).
[47] Josh Barro, "Affordable Housing That's Very Costly," in *The Upshot*, ed. David Leonhardt (The New York Times, 2014).
[48] Nicholas Brunick, Lauren Goldberg, and Susannah Levine, *Large Cities and Inclusionary Zoning* (Business and Professional People for the Public Interest), 4.

- The 20-50 Rule: Qualifying projects must reserve at least 20 percent of units for rental by households at or below 50 percent of the A.M.I., adjusted for household size, or
- The 40-60 Rule: Qualifying projects must reserve at least 40 percent of units for rental by households at or below 60 percent of the A.M.I.[49]

Additionally, the resident's monthly housing costs (meaning rent plus a utility allowance) cannot exceed a pre-determined L.I.H.T.C. limit, which is based on a percentage of A.M.I. L.I.H.T.C. units must remain affordable to households at the income levels determined as targets by the developers for at least 30 years.[50] A limited amount of L.I.H.T.C. credits are allocated to each state, calculated by the state's population. Federal law requires that priority be given to projects that are targeted toward the lowest-income households and that are to remain affordable for the longest period of time,[51] making it difficult to use these incentives for projects that target relatively higher-income "workforce" households.

Program Evaluations

Because workforce projects are often driven by flexibility and creativity (thus resulting in a great variety of approaches), nationally-sourced data is not available to paint a clear picture of where each development is located, what its

[49] "L.I.H.T.C. Basics", US Department of Housing and Urban Development http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/affordablehousing/training/web/lihtc/basics (accessed February 8, 2015).
[50] Ibid.
[51] Ibid.

goals and objectives are, or how effective incentive programs have been. A number of studies, however, have been conducted on to evaluate the successes and failures of particular workforce housing programs, grants, and incentives. For the purposes of this review, only evaluations published since the Great Recession formally began in December 2007[52] will be considered. This recent economic downtown was chosen as a cutoff point because of the real and perceived effects that it had, on housing affordability.

In her 2008 evaluation, "Quantifying the Value Proposition of Employer-Assisted Housing: A Case Study of Aurora Health Care," the Center for Housing Policy's Lynn M. Ross examined the efforts of a single employer to recruit and retain employees. Aurora Health Care, a not-for-profit provider with over 10,000 employees in the Milwaukee metropolitan area,[53] attempted to confront the problems of turnover and high absenteeism linked to staff with long commutes by providing affordable housing in the neighborhood of the hospital through employer-assisted housing, or EAH. Ross notes that proponents of EAH programs claim benefits not only to the employees living in this form of workforce housing, but to their coworkers by reducing the negative effects of high turnover on productivity and morale, and even to the community at large by revitalizing surround neighborhoods.[54]

Aurora Health Care's EAH program that provides eligible employees with loans of up to $3,000 which are forgivable over a five-year period if the employee

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[52] *The Recession of 2007-2009*.
53 Lynn M. AICP Ross, *Quantifying the Value Proposition of Employer-Assisted Housing: A Case Study of Aurora Health Care* (Center for Housing Policy, 2008), 4.
54 Ibid., 3.

continues to be employed the company and maintains ownership and occupation of the home.[55] It began in the early 1990s with a "walk to work" program that encouraged employees to live in the community surrounding one of Aurora's 13 hospitals and was later expanded to include any of the company's employees who purchase homes in Milwaukee, Wisconsin, where about 10,000 of the total 26,000 employees live.[56]

Lynn's evaluation found that the participants in Aurora's EAH program stayed with the company for a significantly longer period of time than average, supporting the theory that the program would have a positive impact on employee retention.[57] Additionally, Ross's evaluation showed that participants in the program were, on average, younger than the organization's employee base as a whole, suggesting that the program may be effectively retaining an especially important group of employees.[58] Overall, Ross concluded that more data is needed to prove whether or not this EAH program (or EAH programs in general) effectively saved the organization recruiting costs or impacted employees or the community on a large scale. From the data available, however, there does appear to be a negative correlation between program participation and turnover.[59]

In 2008, Florida International University's Metropolitan Center used the Municipal Scorecard for Affordable Housing Delivery (MS-AHD) model to

[55] Ibid., 5.
[56] Ibid., 4.
[57] Ibid., 6.
[58] Ibid., 7.
[59] Ibid., 11.

evaluate workforce housing programs across South Florida.[60] The three-county region's most successful examples of workforce housing were then analyzed, and a number of recommendations were drawn from these "best practice" examples. The MS-AHD model is a comprehensive tool that uses evaluations of initiatives' policy and management, planning and land use, dedicated funding, and institution building to determine their level of success.[61] The study's findings reveal that the most effective workforce housing programs include cooperation between local agencies and governmental departments, and often include public/private partnerships.[62]

The chosen "best practice case studies" consist of programs and policies that represent a broad sample of approaches to addressing the problem of housing affordability in this costly housing market. While the report focuses on the various methods of funding and incentivizing this the resulting homes have taken equally diverse shapes. They include:

- incorporation of workforce housing units into newly constructed condominium, townhouse, and single-family developments, both intended for rental and purchase,
- rehabilitation of single-family homes,
- and conversion of historic hotel and studio apartment units into one- to three-bedroom apartments and condominiums.[63]

[60] *South Florida Workforce Housing Best Practices: City of Boynton Beach, City of Delray Beach, Town of Davie, City of Miami Beach and City of West Palm Beach* (Prepared for South Florida Regional Business Alliance by The Metropolitan Center at Florida International University, 2008), 2.
[61] Ibid.
[62] Ibid., 3-4.
[63] Ibid., 5-9.

The settings of these homes also varies widely, from planned suburban neighborhoods of single-family homes and townhomes to apartments located in dense beachside areas traditionally dominated by tourists and retirees. The creativity and coordination that the Metropolitan Center found necessary to create and implement successful policies has no doubt additionally allowed these homes to blend smoothly into the surrounding urban fabric.

A Moderately Priced Housing Report for the Philadelphia-area county of New Castle, Delaware was published in October, 2014. The report included an independent assessment of the success of the county's Inclusionary Zoning Policy, which had been enacted in 2008.[64] The Workforce Housing Ordinance, adopted alongside the Inclusionary Zoning Policy, offered a density incentive to developers who made 20 percent of units created as workforce housing that would be affordable (meaning their monthly cost would be no more than 30 percent of household income) to families with household incomes of 120 percent of the Area Median Income. Ten percent of those units were to be affordable to households earning between 50 and 80 percent of A.M.I.. Rehabilitation of existing units could account for no more than half of the workforce units created. In return for creating the correct numbers of affordable housing units and additionally making a donation of 1.2 percent of building permit construction value to a Housing Trust Fund, developers could earn as much as a 100 percent density bonus.[65]

[64] Arundel Community Development Services and Innovative Housing Institute, *Moderately Priced Housing Report* (New Castle County, DE, 2014), 2.
[65] Ibid., 9.

The study found that of the ten workforce housing subdivisions that had been constructed since the ordinance was enacted, 342 workforce units had been created on a total of 3,020 lots. The workforce housing units included 64 single family detached houses, 19 duplexes or "twins," 165 townhouses, and 94 apartments. Three of these developments were comprised of rental units; the remainder of the homes were for purchase.[66]

Developers commonly reported difficulty selling the number of workforce units that had been required in exchange for the density bonuses they received. The researchers concluded that much of this trouble was due to the fact that the "workforce" units (which could be targeted to households earning as much as 120 percent of the AMI) were often not significantly less expensive than market-rate units.[67] In spite of an 18.4 percent decrease in the median sales price of new homes between the time that the ordinance was established and the time that it was evaluated, the maximum allowable sales price for workforce units remained at the same level.[68] In response to difficulty selling workforce units, many developers sought and obtained the same density bonuses through rezoning as they would have been awarded by participating in the voluntary Workforce Housing Ordinance.[69] The incentive, in other words, was not only optional, but was ultimately seen as creating the burden of unsold or unrented units.

[66] Ibid., 11.
[67] Ibid., 13-14.
[68] Ibid., 13.
[69] Ibid., 15.

In response to their findings, the researchers made the following suggestions to New Castle County concerning the future of its workforce housing program:

- Allow the current ordinance to expire and create a Moderately Price Dwelling Unit Ordinance,
- Apply the new ordinance to all rezoning applications to prevent developers from receiving the same benefits without adhering to the policy as they had before,
- Adjust A.M.I. requirements to ensure that the ordinance is incentivizing the creation of housing units at a price below market value, and
- Make ordinance mandatory to developments of more than 25 units.[70]

The researchers additionally suggest that the community, as well as stakeholders such as local nonprofits, need to be better-educated about the program and its benefits.[71] Perhaps the most important lesson garnered from this study, however, is the original ordinance's inability to promote affordable housing that resulted from failing to update the maximum allowable cost of workforce units as market prices fell. The program was unable to adapt to these changes, and new housing units sat empty as a result.

To conclude, the limited evaluations that have been conducted on the success rates of workforce housing programs in the years since the housing

[70] Ibid., 16-23.
[71] Ibid., 28.

crisis of 2008 have suggested that workforce housing programs can have positive results when they closely reflect their communities' needs. Only the South Florida case study addressed the difference between rehabilitation and new construction, with the success of rehabilitations seeming to be attributable to their "blending in" to their surroundings. The following research has examined the effects of preserving older buildings more directly. As with the case studies, the focus remains on adaptive reuse.

Rehabilitation and Historic Preservation as Tools for Economic Development

Recent literature has argued that historic preservation is among the most effective methods of promoting sustainable investment into economically lagging neighborhoods. The historic preservation movement, however, has not always sought to align itself with goals of neighborhood renewal, as efforts of the eighteenth and nineteenth centuries were largely focused on the importance of individual structures to the story of American heritage.[72] Indeed, the National Historic Preservation Act of 1966, the first federal law intended to prevent the loss of historic landmarks,[73] was more concerned with addressing the threat of urban renewal than with creating a catalyst for it. The Act created the National Register of Historic Places, an inventory of historically significant properties and districts that were guaranteed a review if their integrity was ever threatened by a project that included federal funds. [74]

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[72] Andrew Hurley, *Beyond Preservation: Using Public History to Revitalize Inner Cities* (Philadelphia: Temple University Press, 2010), 5.
[73] Sara C. Bronin and Ryan Rowberry, *Historic Preservation Law*, In a Nutshell (Saint Paul, MN: West Academic Publishing, 2014), 5.
[74] Hurley, 9.

When suburban greenfield development increased in the years following World War II, it was initially the most efficient way to house America's rapidly-growing middle class. Before long, however, it became clear that efforts had to be taken to prevent further abandonment of city centers. Many of the well-intentioned policies that aimed to bring population back to city centers in the years following World War II had already eradicated entire urban neighborhoods that had been deemed blighted, however; 383,000 dwelling units were demolished between 1949 and 1967, displacing 600,000 residents.[75]

In *Beyond Preservation: Using Public History to Revitalize Inner Cities,* Andrew Hurley argues that, as criticism of urban renewal's negative effects on cities' social and economic vibrancy mounted throughout the 1960s, the concept of "adaptive reuse" began to emerge as a method of aligning historic preservation with the goals of attracting investment, creating jobs, and increasing tax revenue. Adaptive reuse is generally understood to mean a project in which a building's façade changes very little, but its interior is redesigned to accommodate new uses.[76] The adaptive reuse of an unused school, for example, could provide the commercial, office, or residential space needed by the surrounding community. Hurley suggests that support for these projects was implied but not overtly stated in the Preservation Act of 1966, and that Congressional acts in following years began to address the issue more directly.

[75] Ibid., 10.
[76] Ibid., 12.

The following laws, he suspects, were the successful element in swaying the views of many urban real estate developers to support historic preservation:[77]

- The Tax Reform Act of 1976, which
    - allowed for either a five-year period of amortization of rehabilitation expenses (meaning costs excluding those of the land and original building shell), or accelerated depreciation costs to be used for both the cost of a building's shell and the cost of its rehabilitation,
    - decreased the amount of depreciation that could be claimed on buildings that had been constructed in the place of demolitions, and
    - discouraged the razing of historic properties by preventing developers from writing off demolition costs.[78]
- The Revenue Act of 1978, which provided a 10 percent tax credit in place of the five-year amortization allowed by the 1976 Act, and
- The Economic Reform Tax Act of 1981, through which
    - A 15 percent credit for qualifying rehabilitation expenditures was given for buildings at least 30 years old,
    - A 20 percent credit for qualifying rehabilitation expenditures was given for buildings at least 40 years old, and
    - A 25 percent credit was given toward "Certified Historic Rehabilitation" of qualifying buildings over 50 years old.[79]

[77] Ibid.
[78] *Rehabilitation Tax Credit* (Department of the Treasury Internal Revenue Service), 1-2.
[79] Ibid.

- The Tax Reform Act of 1986, which granted a 20% tax credit for the "substantial rehabilitation of commercial, agricultural, industrial, or rental residential buildings that are certified as historic."[80]

Hurley points to the 17,000 qualifying historic rehabilitations between 1976 and 1986 as an indicator of the legislation's success in encouraging reuse, but additionally notes that demographic shifts in the United States were contributing to a return to the city center by single women, childless professional couples, and retirees.[81]

The question for developers, of course, is whether incentives, when combined with the increasing marketability of historic urban properties, can ultimately make rehabilitation a more profitable option than new construction. *Economics and Historic Preservation: A Guide and Review of the Literature,* Randall Mason's 2005 discussion paper for The Brookings Institution's Metropolitan Policy Program, draws from a number of studies on historic preservation's benefits to address this question. Mason first cites Donovan Rypkema's 1991 study, which concluded that in many circumstances, "historic preservation is a rational and effective economic response,"[82] in part because of the revenue generated within the community by rehabilitation projects, which tend to use both more locally sourced supplies and labor than new construction projects. Additionally, Mason notes that studies measuring the broader impact of

[80] "Federal Historic Preservation Tax Credits", Illinois Historic Preservation Agency https://www.illinois.gov/ihpa/Preserve/Pages/taxcredits.aspx (March 28, 2015).
[81] Hurley, 13.
[82] Randall Mason, *Economics and Historic Preservation: A Guide and Review of the Literature* (The Brookings Institution Metropolitan Policy Program, 2005), 6.

historic preservation projects have consistently found measurable benefits to the economy, whether measured by generation of jobs, income, or state and local tax revenues.[83]

The topic of this thesis is, at its core, a question of how to improve the quality of life of a given city's workforce. Donovan Rypkema's 2005 study confirmed his 1991 statement above, finding that rehabilitation projects have greater impacts both on local labor demand and on stimulating local purchases from local retailers and wholesalers.[84] Rypkema additionally notes that "[h]istoric preservation will need to be part of the economic development strategy for those communities that wish to maintain a competitive edge."[85] As cities vie for employers, policies and incentives can be duplicated, but well-preserved historic resources cannot.

Housing affordability and historic preservation are sometimes painted as conflicting elements of urban planning, but the creation of workforce housing and a commitment to historic preservation have independently been shown by the literature reviewed herein to be methods by which cities and regions can strengthen their economies, market themselves to potential employers and residents, and improve their citizens' quality of life. Combining the goals of workforce housing affordability and historic preservation, then would seem to be a great opportunity. It is therefore the goal of this thesis to investigate the feasibility of creating workforce housing through the adaptive reuse of historic

[83] Ibid., 8.
[84] Donovan D. Rypkema, *The Economics of Historic Preservation: A Community Leader's Guide* (2005), 14.
[85] Ibid., 23.

buildings. The following chapter will examine workforce housing projects that are considered exemplary by the Urban Land Institute, with a focus on three examples of adaptive reuse.

CHAPTER 3 – ANALYSIS AND CASE STUDIES

As noted in the introduction, the attention presently given to the issue of workforce housing affordability is a fairly recent development. The newness of the term, combined with the disparate nature of workforce housing incentives and programs, has made data collection challenging. Instead of analyzing developments created under the guidance of certain programs, the Urban Land Institute's Jack Kemp Excellence in Affordable Housing Award winners and finalists were considered, as they represent a diverse, if disproportionately successful, sample. In this chapter, the winners and finalists will be examined in order to learn more about the forms that these outstanding developments have taken, as well as the objectives that were contained in the projects alongside the goal of increasing affordability.

Case Selection: Urban Land Institute's Jack Kemp Excellence in Affordable Housing Award

The nonprofit Urban Land Institute has been conducting research on growth, decay, and challenges in American cities since its conception in the late 1930s[86] and has now grown to include over 33,000 members worldwide.[87] The organization has long sought to explore the balance between public and private

[86] "History", Urban Land Institute http://uli.org/about-uli/history/ (accessed February 11, 2015).
[87] "About", Urban Land Institute http://uli.org/about-uli/ (accessed February 11, 2015).

interests, as well as to advocate for innovation and sustainability in urban development. The Terwilliger Center for Housing was established in 2007 with a $5 million gift from J. Ronald Terwilliger, former C.E.O of a major multifamily residential developer in Atlanta and past chairman of Habitat for Humanity's international board of directors.[88] Since 2008, the Terwilliger Center has recognized developments that have displayed excellence in the provision of housing for working families with the Jack Kemp Workforce Housing Models of Excellence Award, named for the late Secretary of the Department of Housing and Urban Development and author of federal Enterprise Zones legislation. The Terwilliger Center for Housing's National Advisory Board determines recipients of the award based on:

- Affordability;
- Proximity to centers of employment and transportation hubs;
- Quality of the design and site planning;
- Involvement of public and private partnerships;
- Use of regulatory reform to reduce costs;
- Energy efficiency;
- Sustainable green construction and land development;
- Innovative building technologies and systems; and
- Replicability of the development.[89]

In addition to the above criteria, developments are required to include "at least 25 percent or 25 units (whichever is less) [which] are affordable to households below 120 percent of the H.U.D. area median income (A.M.I.)" although, if the need for housing by households at above 120 percent of A.M.I. is

[88] Urban Land Institute, *Housing America's Workforce: Case Studies and Lessons from the Experts* (Washington, D.C.: Urban Land Institute, 2012), v.
[89] Ibid., iv.

clearly demonstrated, the development may be considered.[90] At least some of the development's units must be targeted toward households above 60 percent of A.M.I.. Public subsidies cannot exceed 25 percent of total development cost.[91]

Beginning in 2012, a number of finalists have been announced in addition to award winners. There have been a total of 28 winners and finalists in the years 2008-2014.

Year	Winners	Finalists
2008[92]	• Boulevard in Anaheim (Anaheim, California) • Legacy at Lincoln Park (Rockville, Maryland) • Morgan Woods (Edgartown, Massachusetts)	
2009[93]	• Casa del Maestro – Phase II (Santa Clara, California) • The Kalahari (New York City, New York) • Miller Ranch (Eagle, Colorado) • South City Lights (South San Francisco, California)	
2010[94]	• 33 Comm (Chestnut Hill, Massachusetts) • Capital Quarter (Washington, DC) • Fire Clay Lofts (Denver, Colorado) • Miller's Court	

[90] "Eligibility and Criteria: Jack Kemp Excellence in Affordable and Workforce Housing Awards", Urban Land Institute http://uli.org/programs/awards-competitions/jack-kemp-awards/eligibility-criteria/ (accessed February 11, 2015).
[91] Ibid.
[92] "Creating Workforce Housing: Terwilliger Models of Excellence", Urban Land Institute Terwilliger Center for Housing http://uli.org/awards/2008-jack-kemp-award-winners/ (accessed November 25, 2014).
[93] "Creating Workforce Housing: Kemp Models of Excellence", Urban Land Institute Terwilliger Center for Workforce Housing http://uli.org/awards/2009-jack-kemp-award-winners/ (accessed November 25, 2014).
[94] "Jack Kemp Awards Gala 2010", Urban Land Institute http://uli.org/awards/2010-kemp-award-winners/ (accessed November 25, 2014).

	(Baltimore, Maryland)	
2011[95]	• Columbia Commons/Columbia Hicks (Brooklyn, New York) • On the Park (Seattle, Washington) • Tapestry (New York City, New York) • The Hayes at Railroad Square (Haverhill, Massachusetts)	
2012[96]	• The Century Building (Pittsburgh, Pennsylvania) • Rhode Island Row (Washington, DC) • Via Verde (Bronx, New York)	• The Balton (New York City, New York) • Beckstoffer's Mill Loft Apartments (Richmond, Virginia)
2013[97]	• Masonvale (Fairfax, Virginia) • Yarmouth Way (Boulder, Colorado)	• Lofts at Reynoldstown Crossing (Atlanta, Georgia)
2014[98]	• Emerald Vista (Dublin, California) • The Box District (Chelsea, Massachusetts)	• 30 Haven (Reading, Massachusetts) • Old Town Commons (Alexandria, Virginia) • Paseo Verde (Philadelphia, Pennsylvania)

Table 1: Kemp Award Winners and Finalists, 2008-2014

One of the three finalists of the 2014 awards, Alexandria, Virginia's Old Town Commons, was not included in this study. The mixed-income development includes two income brackets: of 365 total units, there are 134 rental units

[95] "U.L.I. Terwilliger Center Workforce Housing Awards Gala 2011", Urban Land Institute http://uli.org/awards/2011-jack-kemp-awards-winners/ (accessed November 25, 2014).
[96] "Jack Kemp Workforce Housing Models of Excellence Awards", Urban Land Institute Terwilliger Center for Housing http://uli.org/awards/announcing-the-2012-jack-kemp-award-winners-and-finalists/ (accessed November 25, 2014).
[97] "Jack Kemp Workforce Housing Models of Excellence Awards", Urban Land Institute Terwilliger Center for Housing http://uli.org/awards/2013-jack-kemp-awards/ (accessed November 25, 2014).
[98] "Jack Kemp Excellence in Affordable & Workforce Housing Awards", Urban Land Institute Terwilliger Center for Housing http://uli.org/awards/2014-jack-kemp-award-winners-finalists/ (accessed November 25, 2014).

serving households earning up 50 percent of A.M.I., and 231 market-rate for-sale units.[99] Because none of the units in this development were targeted toward moderate-income families, it was not considered a workforce project and excluded. The remaining 27 developments were analyzed, and a typology was created to illustrate categories that appeared. Then, themes which unite many of the projects were identified. Not surprisingly, the desire to respect the history and architectural character of the community through adaptive reuse was only one of a several themes that appeared in a significant number of the projects. Finally, three of the Kemp Award-winning projects that employ adaptive reuse will be examined as case studies

[99] Ibid.

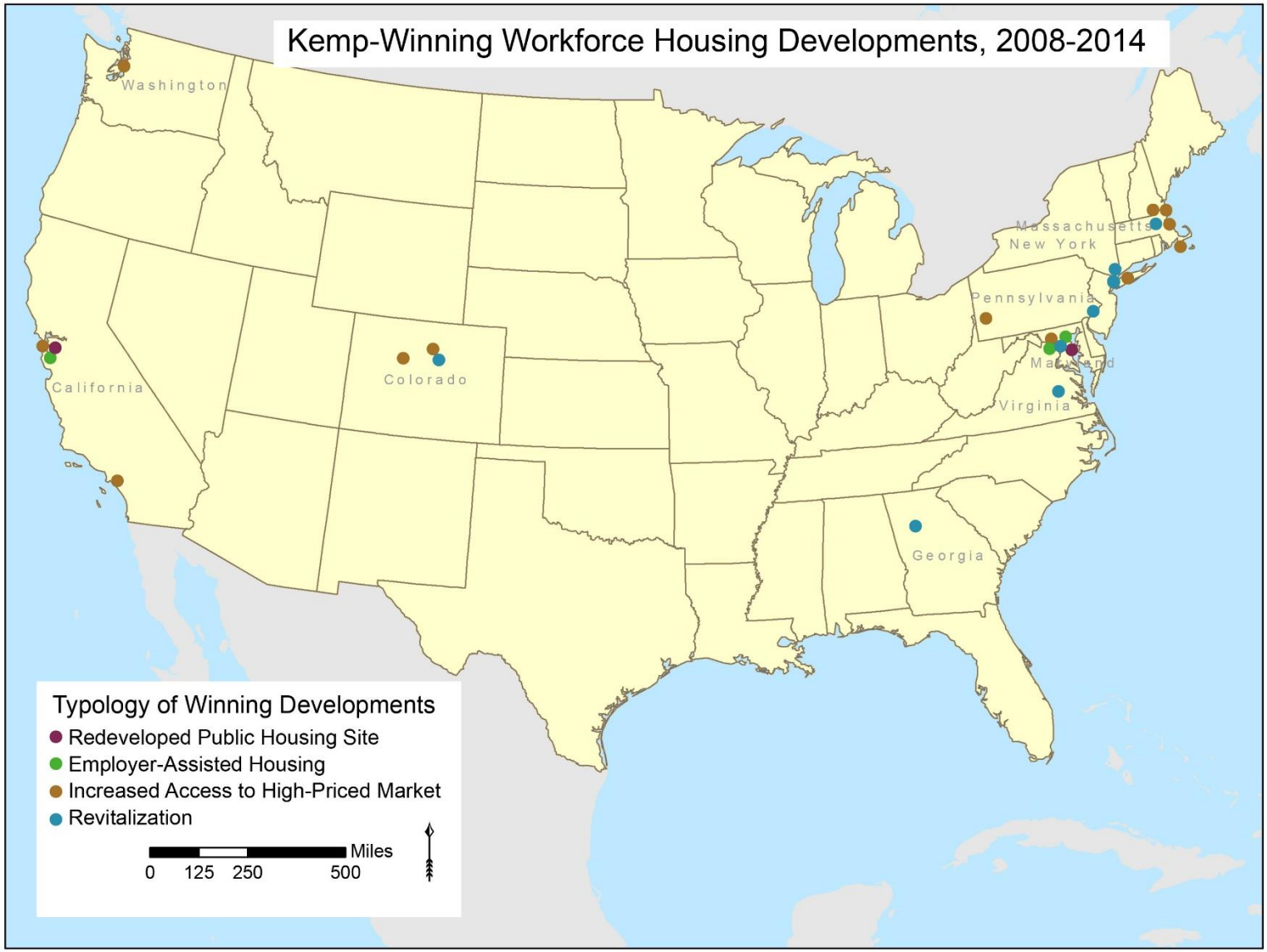

Figure 1: Location and typology of Kemp Winners[100]

Analysis of Cases

Four categories were created after reading overviews of each of the winners, into which each of the developments in question fit easily. These categories, to a great degree, highlight the desired impacts implicit in the creation of workforce housing. Including housing for families at a mixture of income levels within the development is an element of 85 percent of the winners and is often noted in Terwilliger Center literature to be a "best practice" among workforce housing developments,[101] but case studies and best practice narratives seem to show that the relationship between the developments and the income levels of their surrounding communities is another important element of the project. The developments were consequently divided into the following four categories:

Public housing site redevelopment: Two winners (as well as the excluded development, Old Town Commons) were mixed-income communities that had been built to replace older public housing complexes. These projects often increase density in order to result in the same number of low-income units in addition to new workforce and market-rate rentals. See Table 2.

[101] Urban Land Institute, *Workforce Housing: Innovative Strategies and Best Practices*.

Figure 2: Capital Quarter, Washington, DC. Before redevelopment.[102]

Figure 3: Capital Quarter, Washington, DC. After redevelopment.[103]

Employer-assisted housing (EAH): As was noted in Chapter 3, helping employees afford homes within close proximity to the workplace may ultimately benefit employers by reducing the costs of absenteeism and turnover.104

[102] "Wrapping up at Capitol Quarter: Construction Completed, Nearly a Decade of Photo Treks Now Finished" (accessed January 25 2015).
[103] Ibid.
[104] "Employer-Assisted Housing: A Pragmatic Solution for Communities and Employers", Metropolitan Planning Council http://www.metroplanning.org/work/project/8?utm_source=%2fourwork%2farticleDetail.asp%3fpageID%3d3%26objectID%3d1041%26categoryID%3d2&utm_medium=web&utm_campaign=redirect (accessed February 12, 2015).

Although these programs commonly focus on helping employees purchase existing homes by offering aid with down-payments or low-interest mortgages, some employers have partnered with developers and other agencies to create affordable rental units. Interestingly, each of the EAH developments considered were targeted to teachers. See Table 3.

Revitalization: Kemp Award literature lauds many workforce housing projects for their ability to act as neighborhood catalysts of revitalization, and 10 of the 27, or 37 percent fell into this category. Including workforce and low-income housing units in residential developments can lessen the effect of the gentrification that often results when market-rate housing is built in disinvested or lower-income neighborhoods. See Table 4.

Increase of accessibility to high-priced markets: Perhaps the type of project most commonly associated with the term workforce housing, these developments are located in areas that are not normally accessible to many of the employees that work nearby. The creation of housing units to be sold or rented below market rate offers the opportunity for these workers to have homes in close proximity to work, instead of accepting long commutes from more affordable neighborhoods. 12 of the 27 projects, or 44 percent, fell into this category. See Table 5.

	Location	Workforce units/total	Building Type(s)	Unit Types	Rent/Purchase	Mixed-Income	Mixed-Use	Green Building	Brownfield Remediation	Adaptive Reuse	Density
Capitol Quarter	Washington, D.C.	44/77	3- to 4-story six-plex townhomes	Up to 4-bedroom	Purchase	Y	N	L.E.E.D. Silver	N	N	37 dwelling units/acre
Emerald Vista	Dublin, CA (San Francisco Bay Area)	14/378	• 3-story apartment buildings ("affordable" units) •3-story townhouses (below market and market) • detached homes (market value)	1- to 3-bedroom	Both ("affordable" rentals; "workforce" for purchase)	Y	N	High score from Build It Green's GreenPoint Rated system	N	N	15.8 dwelling units/acre

Table 2: Redevelopment of Public Housing sites[105]

[105] "Jack Kemp Awards Gala 2010". and "Jack Kemp Excellence in Affordable & Workforce Housing Awards".

	Location	Residents	Workforce units/total	Building Type(s)	Unit Types	Rent/Purchase	Mixed-Income	Mixed-Use	Green Building	Brownfield Remediation	Adaptive Reuse	Density
Casa del Maestro - Phase II	Santa Clara, CA (San Francisco Bay Area)	Teachers of the Santa Clara Unified School District	30/30	3-story apartment buildings	1- and 2-bedroom	Rental	N	N	L.E.E.D. Silver	N	N	20.0 dwelling units/acre
Masonvale	Fairfax, VA (Washington, D.C. Area)	• Faculty, staff, and full-time graduate students at George Mason University • Employees of the City of Fairfax and Fairfax County	156/156	• 2- to 3-story stacked flats • duplexes • townhouses	1- to 3-bedroom	Rental	N	N	Energy Star Certified	N	N	13.8 dwelling units/acre (development surrounded by 16-acre conservation area)
Miller's Court	Baltimore, MD	Teachers of Baltimore City School System	40/40	4-story apartment building	1- to 3-bedroom	Rental	Y	Y	L.E.E.D. Gold	Y	Y	45.6 dwelling units/acre

Table 3: Employer-Assisted Housing[106]

[106] "Creating Workforce Housing: Kemp Models of Excellence"., Lisa Amin, "School Offers Teachers Housing Incentive," *ABC 7 News - San Francisco, Oakland, San Jose*, September 22, 2008 2008., "Casa Del Maestro - Second Phase of Affordable Housing for Teachers Opens in Santa Clara," (Thompson Dorfman Urban Residential Development)., "Masonvale Site Plan", Masonvale http://www.masonvale.com/pages/site-plan.asp (accessed January 25 2015)., and "Mayor and City Council of Baltimore Real Property Tax Levy July 1, 2014 to June 30, 2015", City of Baltimore, Maryland http://cityservices.baltimorecity.gov/realproperty/default.aspx (accessed January 25 2015).

Location	Workforce units/total	Building Type(s)	Unit Type(s)	Rent/Purchase	Mixed-Income	Mixed-Use	Green Building	Brownfield Remediation	Adaptive Reuse	Density
Harlem, New York	116/156	Building ranging from 6 to 12 stories	Studio, 1-, 2-, and 3-bedroom	Rent	Y	Y	Energy Star appliances	N	N	376.3 dwelling units/acre
Richmond, VA	11/22	1-story former mill building	1-bedroom loft	Rent	Y	N	EarthCraft Standards; 15% more efficient than typical home	N	Y	24.9 dwelling units/acre
Chelsea, MA (Boston Area)	21/248	• 3-story apartment buildings • Townhouse-style condominiums • Renovation of historic mill	1- to 4-bedroom	Both	Y	N	1 of 6 projects L.E.E.D. Platinum	Y	Y	23.6 dwelling units/acre
Denver, CO	32/166	• Renovated historic warehouse • Townhouses • 2- to 3-story mixed-use buildings	• 1- and 2-bedroom lofts • Live-work units • Townhouses	Purchase	Y	Y	Energy Star appliances, Aquatherm HVAC	Y	Y	41.5 dwelling units/acre

Table 4: Revitalization[107]

[107] "Jack Kemp Workforce Housing Models of Excellence Awards"., "Jack Kemp Awards Gala 2010"., "Jack Kemp Excellence in Affordable & Workforce Housing Awards"., "Residences", Fire Clay Lofts and Unbran Ventures, llc

	Location	Workforce units/total	Building Type(s)	Unit Type(s)	Rent/Purchase	Mixed-Income	Mixed-Use	Green Building	Brownfield Remediation	Adaptive Reuse	Density
The Kalahari	Harlem, New York City	90/249	Two 12-story buildings	Studio, 1- to 3-bedroom	Purchase	Y	Y	L.E.E.D. Silver	N	N	197.6 dwelling units/acre
Lofts at Reynoldstown Crossing	Atlanta, GA	28/29	3-story building	2-bedroom	Purchase	Y	-	-	N	Y	16.1 dwelling units/acre
Paseo Verde	Philadelphia, PA	17/120	4-story building	1- to 3-bedroom	Rental	Y	Y	Platinum under L.E.E.D for Neighborhood Development Program	Y	N	63.2 dwelling units/acre
Rhode Island Row	Washington, D.C.	219/274	4-story building	1- to 3-bedroom	Rental	Y	Y	Green roof, TOD	N	N	32.2 dwelling units/acre
Tapestry	Harlem, New York	55/185	12-story building	1- to 3-bedroom	Rental	Y	Y	L.E.E.D. Gold	N	N	308.3 dwelling units/acre
Via Verde	Bronx, New York	71/222	20-story building	1- to 3-bedroom	Purchase (Co-op)	Y	Y	L.E.E.D. Gold	Y	N	148.0 dwelling units/acre

Table 4 (continued): Revitalization

http://www.fireclayloft.com/residences.html (accessed January 26 2015)., and Cara Buckley, "A Building Brings Haves and Have-Somes Together," *The New York Times*, June 25, 2010 2010.

Location	Workforce units/total	Building Type(s)	Unit Type(s)	Rent/Purchase	Mixed-Income	Mixed-Use	Green Building	Brownfield Remediation	Adaptive Reuse	Density
Reading, MA (Boston Area)	18/53	4-story building	1- and 2-bedroom	Rental	Y	Y	Built w/ Green-Staxx to L.E.E.D. standards	N	N	53 dwelling units/acre
Chestnut Hill, MA (Boston Area)	15/57	Two buildings, 3 and 4 stories	unknown	Purchase	Y	N	Energy Star appliances, drought-resistant landscaping	Y	N	44.5 dwelling units/acre
Anaheim, CA (Los Angeles Area)	36/56	Townhouses, single-family homes	unknown	Purchase	Y	N	Energy Star	Y	N	10.3 dwelling units/acre
Pittsburgh, PA	32/60	12-story former office building	Studio, 1- and 2-bedroom	Rental	Y	Y	Open-loop geothermal system Bicycle commuter ctr	N	Y	374.5 dwelling units/acre
Brooklyn, New York	49/136	6-story building	Studio, 1- to 4-bedroom	Both	Y	N	N	N	N	137.4 dwelling units/acre
Haverhill, MA (Boston Area)	19/57	7-story former mill buildings	1- and 2-bedroom flats and duplexes	Both	Y	N	Energy Star Appliances	Y	Y	85.4 dwelling units/acre

Table 5: Projects aiming to increase affordability in high-priced neighborhoods[108]

[108] EYA, "Study Measures Impacts of Smart Growth Developments," in *City Dweller* (The Neighborhoods of EYA, 2013)., "Jack Kemp Awards Gala 2010"., "Wrapping up at Capitol Quarter: Construction Completed, Nearly a Decade of Photo Treks Now Finished"., "Wexford Way & Carlow Court at Emerald Vista: Phase I Coming August 2012," (Eden Housing, 2012)., "Capitol Quarter Townhouses", Capitol Riverfront Business Improvement District http://www.capitolriverfront.org/go/capitol-quarters-townhouses (accessed January 25

	Location	Workforce units/total	Building Type(s)	Unit Type(s)	Rent/Purchase	Mixed-Income	Mixed-Use	Green Building	Brownfield Remediation	Adaptive Reuse	Density
Legacy at Lincoln Park	Rockville, MD (Baltimore-Washington DC Area)	31/60	Townhouses, single-family homes	2- and 3-bedroom	Purchase	Y	N	Energy Star	N	N	5.17 dwelling units/acre
Miller Ranch	Edwards, CO	282/282	Condominiums, row houses, duplexes, single-family homes	1- to 3-bedroom	Purchase	N	N	Colorado Green standards	N	N	9.4 dwelling units/acre
Morgan Woods	Edgartown, MA (Island of Martha's Vineyard)	24/60	21 buildings: "clustered" multi-family units disguised as large single-family homes	1- to 3-bedroom	Rental	Y	N	Energy Star	N	N	5.0 dwelling units/acre
On the Park	Seattle, WA	54/268	8-story building	Studio, 1- and 2-bedroom	Rental	Y	Y	Proprietary building materials	N	N	178.7 dwelling units/acre
South City Lights	South San Francisco, CA	70/280	Six 4-story buildings	1- to 3-bedroom	Purchase	Y	N	-	N	N	21.5 dwelling units/acre
Yarmouth Way	Boulder, CO	10/25	Single-family homes and rowhouses	3- and 4-bedroom	Purchase	Y	N	Comply w/ Boulder's Green Points Program	N	N	13.7 dwelling units/acre

Table 5 (continued): Projects aiming to increase affordability in high-priced neighborhoods

2015)., and "Crossroads at Emerald Vista", NewCondosOnline.com http://www.newcondosonline.com/california-condos/dublin-new-homes/crossroads-at-emerald-vista/ (accessed January 25 2015).

In addition to seeking to provide accessible and affordable housing within specified income brackets, a wide array of secondary development goals that may effectively be combined with the provision of workforce housing are highlighted by Kemp Award-winning projects. Few, if any of the award-winning projects that were analyzed were in fact undertaken with their affordability to their locale's workforce residents being the exclusive stated goal of development. Some of the recurring secondary aims include:

A commitment to sustainability and green construction: Sustainability is part of the criteria by which Kemp entries are judged, and it is worth noting that early every one of the 27 projects analyzed included efforts to build sustainably. This includes nine projects (33 percent of those analyzed) that have received, or plan to receive Leadership in Energy and Environmental Design (LEED) certification from the U.S. Green Building Council. Projects commonly use Energy Star appliances and high-efficiency heating and air conditioning systems within units, an investment by the builder that not only appeals to environmentalists but aims to make significant reductions in occupants' utility bills. These efforts can be costly, but were incentivized in several (though certainly not all) of the cases in which great strides were taken to build sustainably.

Figure 4: Tapestry of East Harlem, New York[109]

The developers of 2011 winner Tapestry of East Harlem, for example, received over $500,000 in grants from the New York State Energy and Research Development Agency as a result of their efforts, which included a green roof to reduce storm water runoff, rainwater harvesting, water-conserving toilets, Energy Star appliances, and highly-insulated exterior walls, roof, and windows.[110]

Proximity to Transit: When including the cost of transportation in calculations of affordability, the Center for Neighborhood Technology's *Housing and Transportation Affordability Index* concludes that only 28 percent of neighborhoods in the United States are truly accessible to the typical household.[111] New development at the edge of metropolitan areas may not yet have the necessary population to support services such as schools and child care centers, grocery stores, or medical clinics, an imbalance that can be

[109] Christopher Coes, *L.O.C.U.S. Steering Committee Members Honored at U.L.I. Terwillinger Center Awards Gala* (Smart Growth America, 2011).
[110] "U.L.I. Terwilliger Center Workforce Housing Awards Gala 2011," (Urban Land Institute, 2011).
[111] EYA.

especially burdensome to residents of affordable housing.[112] In response to increasing awareness of the high costs associated with long commutes, some mortgage lenders have begun to take the average commute time for residents of an area into consideration when calculating borrowing capacity.[113]

Locating workforce housing within close proximity not only to employment, but to the services and community support that residents will need frequently (thus significantly reducing the cost of transportation), is therefore an important factor in determining the success of a project. The majority of Kemp winners and finalists have been located in or near large cities, and ease of access to mass transit is one of the stated criteria for winners. Designing affordable housing as transit-oriented development (TOD) can be a challenge because of existing single-use zoning, parking minimums, and the high price of land near transit nodes.[114] Several of the developments examined were able to overcome these challenges by gaining community support for rezoning and flexibility of parking requirements.

[112] Avi Friedman, *Homes within Reach: A Guide to the Planning, Design, and Construction of Affordable Homes and Communities* (Hoboken, NJ: John Wiley & Sons, Inc., 2005), 25.
[113] "Location Efficient Mortgage", Natural Resources Defence Council http://www.nrdc.org/cities/smartgrowth/qlem.asp (accessed February 24, 2015).
[114] The Center for Transit-Oriented Development, *Mixed-Income Housing: Increasing Affordability with Location Efficiency* (Oakland, CA: Federal Transit Administration, 2009), 10.

Figure 5: Rhode Island Row, Washington, DC[115]

One such example is Washington, DC's Rhode Island Row, a TOD located on the site of an underused commuter parking lot owned by the Washington Metropolitan Area Transit Authority. The process of planning Rhode Island Row took five years as a result of the challenges brought by the infill project, which is in an area formerly zoned for industrial use. The developer worked closely with community members to gain support, and the development's 274 units are comprised of 219 workforce units and 55 units reserved for households earning 50 percent of Area Median Income, housing that was desperately needed in the area.[116]

Mixed-Income: The increase of mixed-income communities has come to be viewed as a solution to the problems of concentrated poverty and neighborhood disinvestment. Whether through the creation of new developments such as those discussed herein or through the provision of housing vouchers that allow renters to access higher income neighborhoods,

[115] "Washington, D.C.: Affordable Housing at Rhode Island Row", US Department of Housing and Urban Development http://www.huduser.org/portal/casestudies/study_04072014_1.html (accessed February 25, 2015).
[116] "Jack Kemp Workforce Housing Models of Excellence Awards".

programs commonly aim to achieve reduction in poverty rates, desegregation, and urban revitalization.[117] 23 of the 27 developments analyzed, or 85 percent, include a mixture of incomes. This majority is even more striking when the three employer-assisted housing developments are excluded (since residents become eligible as a result of their employment, not of their income). Of the developments that focus on income level for resident eligibility, then, only one targets workforce residents exclusively.

Indeed, research has shown that mixed-income neighborhoods are most stable when they include a variety of income levels, as moderate-income residents can bridge differences between low-income and high-income residents who might otherwise be more reluctant to interact.[118] The inclusion of workforce-level housing, therefore, appears to be an important aspect of the success of mixed-income housing developments. Many of the developments examined use a three-tiered scale of affordable (or low-income), workforce, and market-rate units. Including a number of market-rate units in a development can offset the number of subsidies required to construct the remaining units as well as increasing the income diversity of the community.[119] Although research on the benefits of social interaction fostered by mixed-income developments is not conclusive, lower-income residents have reported increased self-esteem and reduced stress resulting from increased safety[120] The mixture of income groups

[117] Diane K. Levy, Zach McDade, and Kassie Dumlao, *Effects from Living in Mixed-Income Communities for Low-Income Families: A Review of the Literature* (Urban Institute Metropolitan Housing and Communities Center, 2010), 2.
[118] Ibid., 4-5.
[119] The Center for Transit-Oriented Development, 3.
[120] Levy et al., 11.

varied widely between the developments; the makeup of several of these will be discussed in more detail within the case studies below.

Mixed-Use: 11 of the 27 developments (41 percent) included retail or commercial "mixed use" functions that are open to the public. Community space such as clubhouses was excluded. Not surprisingly, the mixed-use developments were primarily located in major cities such as New York, Philadelphia, or Washington DC, where lower-level commercial space is common. There was also a predictable correlation between the mixed-use and high density, with an average density among the mixed-use developments of 135.1 dwelling units per acre, more than a 50 percent increase from 85.3 dwelling units per acre, the average density of all developments analyzed. Mixed-use development, which was quite common in cities before the age of the automobile, has grown popular again in recent years. It is often touted as an optimal use of urban land because of the resulting decrease in congestion and convenience it offers to residents.[121]

The incorporation of commercial spaces into affordable or mixed-income developments can offset the cost of leasing or selling affordable units for below market value. Often, mixed-use developments additionally aim to assist in the economic revitalization of the neighborhoods beyond development boundaries.[122] This intention is clearly visible within the Kemp winners and finalists. Of the

[121] Joseph S. Ph.D. CRE Rabianski and J. Sherwood MBA Clements, *Mixed-Use Development: A Review of Professional Literature* (Atlanta, GA: Department of Real Estate, Georgia State University, Prepared for and Funded by The National Association of Industrial and Office Properties Research Foundation, 2007), 6.
[122] Friedman, 226.

developments that were categorized as revitalization projects, a disproportionate 70 percent contained commercial space.

Brownfield remediation: Eight of the 27 projects analyzed (30 percent) were constructed on former brownfield sites – sites at which the presence of a hazardous substance, pollutant, or contaminant complicates the prospect of redevelopment or reuse.[123] Brownfield remediation was especially common among projects that involved the adaptive reuse of buildings with formerly industrial use, with four of six such projects involving cleanup. Brownfield sites are commonly former industrial sites; the location of these nineteenth- and early twentieth-century mills, lofts, or warehouses is often desirable for residential use today because of their proximity to waterfronts and transit corridors.[124]

Between 1997 and 2011, the Federal Brownfields Tax Incentive encouraged cleanup of brownfield sites by allowing environmental cleanup costs to be fully deducted the year incurred.[125] The majority of the brownfield projects analyzed appear to have qualified for this incentive (meaning that the land had been purchased before the incentive sunset in late 2011), and several took advantage of incentives at the state level as well.

[123] "Brownfields and Land Revitalization", United States Environmental Protection Agency http://www.epa.gov/brownfields/index.html (accessed January 29 2015).
[124] Evans Paull, "Brownfields Redevelopment Tax Incentives for Preservation Projects," *Forum Journal* 28, no. 2 (2014): 19.
[125] "Brownfields and Land Revitalization"., Paull, "Brownfields Incentives for Preservation," 21.

Figure 6: The Box District, Chelsea MA. The development includes both restored buildings (left) and new construction (right).[126]

One example is the Box District, located in the Boston Area. The project received a number of grants ranging from those promoting smart growth to green building, as well as funding from the MassDevelopment Brownfield Redevelopment Fund for its work toward remediating a contaminated industrial site for use as housing.[127] The site that was remediated in the course of redeveloping the Box District included two historic industrial buildings which were repurposed as loft apartments as well as land from which structures were removed and replaced with new buildings.[128] The project further received incentives for its historic preservation efforts and its proximity to mass transit, [129] making it among the most diversely-funded projects among the Kemp winners examined.

Historic preservation and adaptive reuse: Rehabilitating an existing structure for use as affordable housing can be an opportunity retain neighborhood character and create unique housing options that give residents a

[126] "Box District Park, Chelsea Mass", LandscapeOnline.com http://landscapeonline.com/research/article/17479 (accessed February 25, 2015).
[127] "Jack Kemp Excellence in Affordable & Workforce Housing Awards".
[128] "Adaptive Reuse Revitalizes Chelsea Box District Nei Gc Designed by Tat", High-Profile http://www.high-profile.com/adaptive-reuse-revitalizes-chelsea-box-district-nei-gc-designed-by-tat/ (accessed January 31, 2015).
[129] "Jack Kemp Excellence in Affordable & Workforce Housing Awards".

feeling of connection to the community and its past. Seven of the 27 developments (26 percent) included the adaptive reuse of an older building. In some of these cases, such as Denver's Fire Clay Lofts, the rehabilitated building was only a small component of a larger development that was primarily new construction. They were, however, more likely to be "Revitalization" projects (four of the seven), and more likely to involve brownfield remediation (also four of seven) than the projects as a whole. The prevalence of brownfield sites is closely connected to the strongest theme: six of the seven adaptive reuse projects used buildings that were historically used for industrial purposes.

Figure 7: Fire Clay Lofts, Denver CO[130]

Indeed, historic industrial buildings are often seen as providing an excellent opportunity for residential or commercial reuse. Economic changes that took place during the late decades of the twentieth century left a large number of manufacturing buildings vacant.[131] They are often relatively large

[130] "Fire Clay Lofts & Condos for Sale" http://livetherockies.net/fire-clay-lofts-condos-sale-3101-3295-blake-street-denver-80205/ (accessed February 25, 2015).
[131] S.R.A. International Inc., *Revitalizing America's Mills: A Report on Brownfields Mills Projects* (US Environmental Protection Agency), 5.

structures with open floorplans, making them easily adaptable to modern needs. Industrial buildings like mills commonly feature high ceilings and large windows, making them highly marketable. Their connection to large employers of the past roots them to the development of the communities that surround them. Additionally, since many nineteenth-century mills were originally powered by water, their waterfront locations make their locations desirable for redevelopment.[132] The challenges and benefits of adaptive reuse will be discussed in further detail in the individual case studies that follow.

A final observation highlights the diversity of these projects is the wide variety of grants and tax credits that were creatively used to finance the developments. Incentives known to have been used include:

- Inclusionary zoning incentives: discussed in greater detail in Chapter 2, the details of the incentives can vary. The goal, however, is to promote the development of mixed-income housing.
- Brownfield redevelopment grants and tax credits
- Low Income Housing Tax Credits
- Affordable Housing Trust grants
- Redevelopment Authority grants
- New Markets Tax Credit (NMTC): this credit can be used in census tracts where poverty is above 20 percent or median income is below 80 percent of

[132] Ibid.

AMI. NMTC provides private investors in these areas with a credit equal to 39 percent of the investment made toward community development.[133]

- Energy efficiency and green construction grants
- City and county incentives:
  - Grants
  - Density bonuses
  - Expedition of applications
  - Waiving of fees
  - Cooperation with rezoning process
- Land swaps and reduced-price land sale and lease.

Analysis of the breadth of winning projects that have been deemed "exemplary" by the Terwilliger Center for housing has shown that these projects are, more-often than not, quite multi-faceted and responsive to diverse community issues. To follow, one case study each from three of the four categories of projects will be discussed. Since "public housing site redevelopment" projects are inherently new construction, that category will not be represented. The case studies were drawn from the increase of access, revitalization, and employer-assisted housing categories.

[133] "New Markets Tax Credit Fact Sheet", New Markets Tax Credit Coalition http://nmtccoalition.org/fact-sheet/ (accessed February 8, 2015).

Case Studies: Three Successful Examples of Rehabilitated Structures Being Used as Workforce Housing

The ultimate goal of this study is to examine cases in which the goals of historic preservation and housing affordability have been combined to create workforce housing developments in buildings that have been adaptively reused. After examining the trends that united many of the Kemp Award Winning workforce housing projects, one case study was selected from each typology described above. The following cases illustrate the diverse housing needs that adaptive reuse projects can meet. Their locations, clustered in the Middle Atlantic States, may at first glance appear to suggest that adaptive reuse projects are more common or more successful in this region. This is not the case. The three case studies explored herein were chosen for their diversity of building form and intended roles with relation to their surroundings. Unfortunately, given the limited sample size of only 7 adaptive reuse projects found within the 27 Kemp winners and finalists, diversity of location had to be sacrificed.

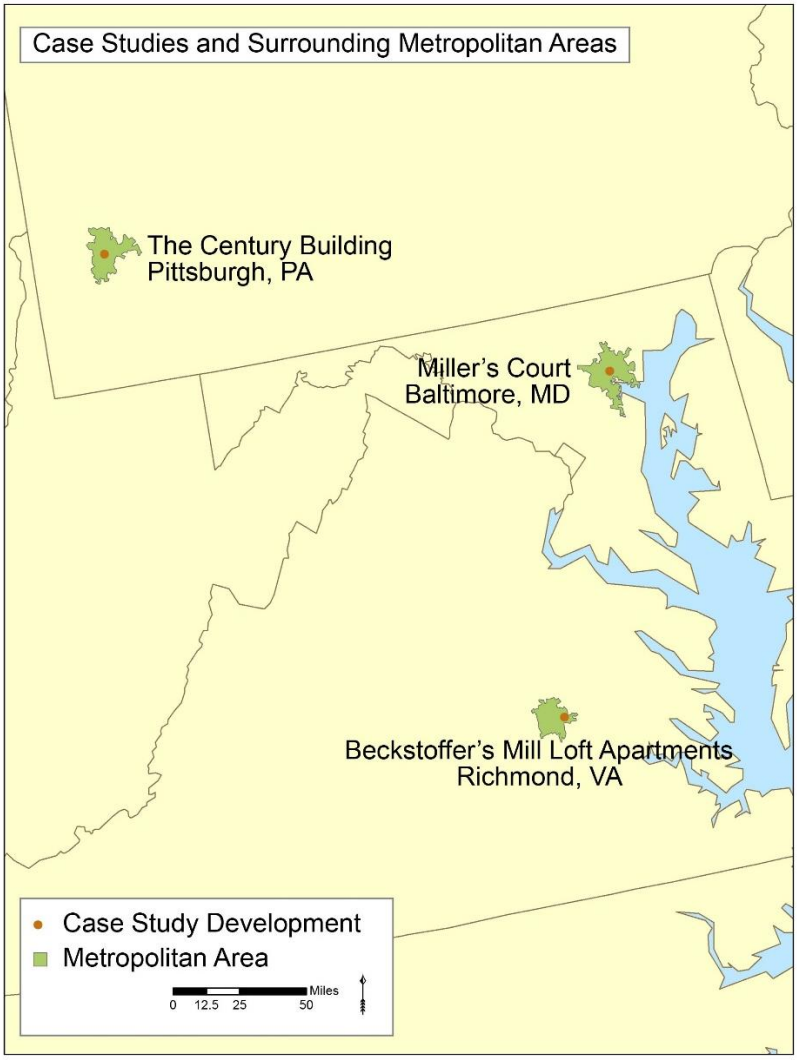

Figure 8: Location of case studies

Employer-Assisted Housing: Miller's Court – Baltimore, Maryland

Miller's Court is located at the western edge of the Baltimore neighborhood of Charles Village, which abuts the Baltimore Museum of Art and the 21,000-student[134] campus of the Johns Hopkins University. Aside from a

[134] *Johns Hopkins University Fact Book* (Baltimore: Johns Hopkins University, 2014), 20.

student-oriented retail strip located along the neighborhood's northern boundary, the community is largely residential.[135] The housing types vary, including single-family houses, row houses, and condominiums. However, as Table 6 displays, the number of owner-occupied homes is significantly lower than in the city as a whole. This high proportion of rental properties is likely explained by the large student population.

	Baltimore City, MD	**Charles Village Census Tract 1206[136]**
Population (2010)	620,961[137]	3,269[138]
Median Household Income (2012) [139]	$40,803	$16,505 (40% of A.M.I.)
Owner-Occupied Housing Units (2012)[140]	48.8%	10.9%

Table 6: City and neighborhood overview for Miller's Court

[135] "Charles Village", Live Baltimore Home Center http://livebaltimore.com/neighborhoods/charles-village/#.VNaRG_nF9Mg (accessed February 7, 2015).
[136] Tract 1206 includes the majority, though not all, of the Charles Village neighborhood as defined by the Live Baltimore Home Center.
[137] United States Census Bureau, "Annual Estimates of the Resident Population: April 1, 2010 to July, 2013 - United States - Metropolitan and Micropolitan Statistical Area; and for Puerto Rico."
[138] United States Census Bureau, "Population, Housing Units, Area, and Density: 2010 - County -- Census Tract 2010 Census Summary File 1" http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF (accessed February 7, 2015).
[139] United States Census Bureau, "Census Explorer: 2012 American Community Survey" http://www.census.gov/censusexplorer/censusexplorer.html (accessed February 7, 2015).
[140] Ibid.

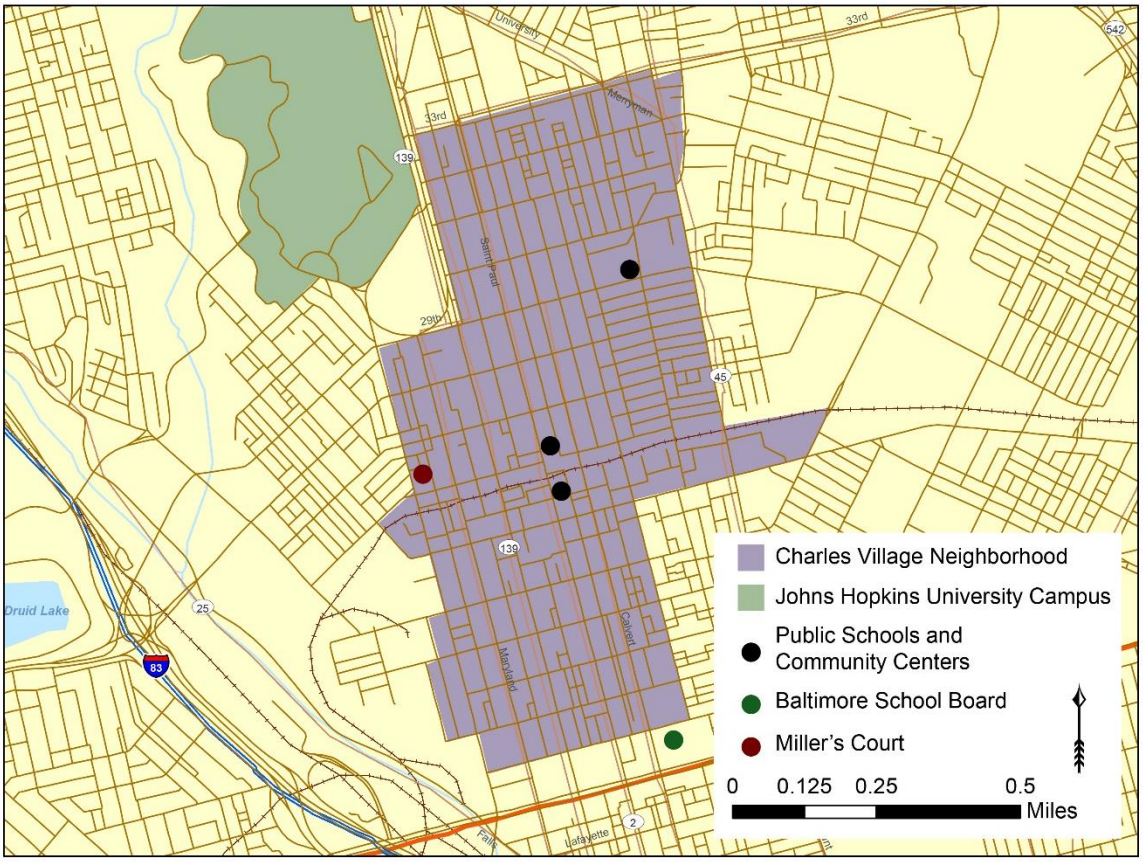

Figure 9: Miller's Court and Surroundings, Baltimore, Maryland

As an Employer-Assisted Housing project, the lofts and commercial space at Miller's Court were created specifically to address the problem of burnout among young employees of the Baltimore City School System who had been recruited by programs such as Teach for America.[141] The project was first conceived by Donald Manekin, a developer who acted as the school system's interim chief financial officer from 2002 to 2004 on a volunteer basis. Manekin sought to address the isolation often felt by Teach for America participants, who are typically recent college graduates that are placed to work in underserved

[141] Marks Thomas Architects, "Miller's Court: From Forgotten Factory to a National Model of Social Sustainability," (Baltimore, MD: Marks, Thomas Architects), 1.

schools for a minimum of two years.[142] More than half of the area's program's participants were leaving the program or asking for reassignments after the two-year period was up,[143] and Mannekin, through his family company Seawall Development Company, aimed to create an environment where these young teachers could support one another.[144]

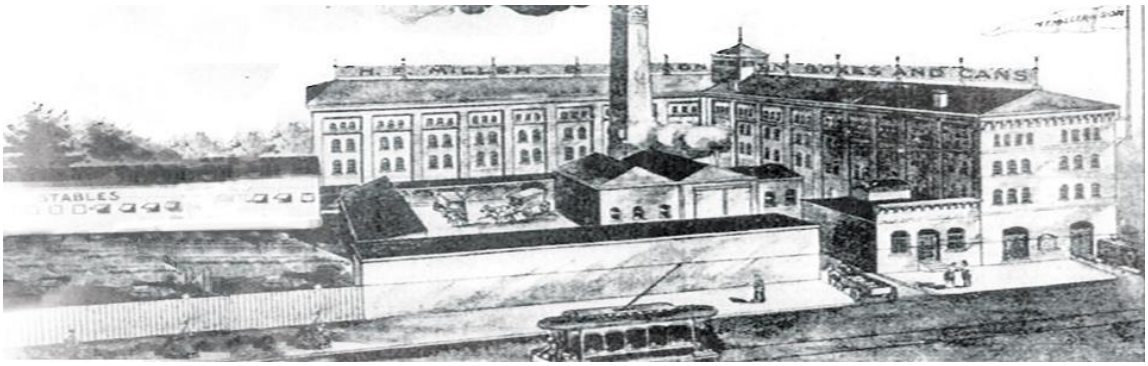

Figure 10: Illustration of Miller's Court when in use as a box and can factory[145]

The site chosen to bring this concept to life was the H.F. Miller & Sons Tin Box and Can Manufacturing Plant, which had been sitting vacant for nearly 20 years. Constructed in three stages in 1890, 1895, and 1910, the building occupies half of a city block, its U-shaped form creating a private courtyard in the center. All three of the building's sections were constructed of brick with similar details, though the first two portions to be constructed were four stories tall and therefore easily distinguished from the three-story 1910 addition.[146] The building's interior is typical of late-nineteenth and early-twentieth century

[142] Tom Liebel, "Baltimore Rehab: Sociall Responsible Development," in *Main Street Story of the Week* (Washington, DC: National Trust for Historic Preservation, April 2009).
[143] Marks Thomas Architects.
[144] Liebel.
[145] "Miller's Court - an Urban Oasis for Teachers and Nonprofits", Seawall Development Company http://millerscourt.com/ (accessed January 25 2015).
[146] Helen Johnson, "The Economics of Rehabilitation for Affordable Housing Projects: Are the Secretary of Interior's Standars for Rehabilitation a Significan Barrier to Project Completion" (Masters Thesis, University of Pennsylvania, 2010), 49.

industrial structures, with a primarily open floor plan, iron fire doors, and post and beam construction. Its role as home to one of the nation's largest tin box and can manufacturers at the time of its construction make it significant to Baltimore's industrial development.[147] H.F. Miller & Sons became part of the American Can Company in 1900, under whom cans were manufactured in the building until it was replaced by a new facility in the early 1950s. The building was divided and used as office space for several decades before becoming vacant. It had been acquired by several developers with unsuccessful plans for residential reuse before it was purchased by Seawall Developers. [148]

Figure 11: Miller's Court, Baltimore MD, after renovation[149]

The site is within four blocks of the Johns Hopkins School of Education,[150] six blocks of a public school and community center, and one mile of the Baltimore School Board headquarters, making it an ideal location that would allow many residents to walk or bike to work or school.

[147] Ibid., 51.
[148] Ibid., 52.
[149] "Miller's Court - an Urban Oasis for Teachers and Nonprofits".
[150] Liebel.

The project took advantage of a number of financing tools, including state historic tax credits in addition to the federal Historic Rehabilitation Tax Credit. One of the keys to Miller's Court's success appear to be in Seawall Developers' use of the New Markets Tax Credit, which was designed to stimulate private investment into businesses in distressed communities.[151] In addition to creating 40 residential units, the rehabilitation of Miller's Court created 35,000 square feet of commercial space. This commercial space includes offices that are targeted toward educational non-profits, shared conference rooms, courtyard, and fitness center that are accessible both to residential and commercial tenants, and an internet café that is open to the public. Including this mixed-use component in the project not only gave the developers access to the additional tax credit, but further the project's goal of creating an inclusive sense of community among its tenants.[152]

Miller's Court has been considered a success and is reported to be fully-occupied. This project has addressed the fairly specific problem of teacher burnout by creating an affordable and community-oriented housing situation. By repurposing a historic factory building, the developers were not only able to take advantage of additional tax credits, but they ensured that the project would fit seamlessly into the surrounding neighborhood.

[151] "New Markets Tax Credit Fact Sheet".
[152] Marks Thomas Architects, 2.

Increasing Access to High-Priced Areas: The Century Building – Pittsburgh, Pennsylvania

After decades as a purely business center, downtown Pittsburgh is beginning to attract residents.[153] In 2006, like many central commercial cores, Pittsburgh's downtown "Golden Triangle" neighborhood was experiencing a construction boom, with hundreds of high-end residential units being created. The new condos were targeted toward empty nesters looking to downsize and well-off young professionals. Some locals feared, however, that the housing being built would not be accessible to many of the young workers who sought to move into the city's center.[154] In response to these concerns, the Downtown Housing Working Group was formed by the Pittsburgh Downtown Partnership, with the intention of promoting the development of affordable and workforce housing.[155]

	Allegheny County	**The "Golden Triangle" Census Tract 201**
Population (2010)	1,223,348[156]	4,385[157]
Median Household Income (2012)[158]	$50,664	$50,809
Owner-Occupied Housing Units (2012)	65.8%	25.7%

Table 7: City and neighborhood overview for the Century Building

[153] Franklin Toker, *Pittsburgh: A New Portrait* (Pittsburgh, PA: University of Pittsburgh Press, 2009), 43.
[154] Mark Belko, "Downtown Housing Boom No Illusion: Commitments More Than Adequate for 246 New High-Priced Condominiums," *Pittsburgh Post-Gazette*.
[155] "Jack Kemp Workforce Housing Models of Excellence Awards".
[156] United States Census Bureau, "Allegheny County, Pennsylvania" http://quickfacts.census.gov/qfd/states/42/42003.html (accessed February 7, 2015).
[157] United States Census Bureau, "Census Explorer: 2012 American Community Survey".
[158] Ibid.

As Table 7 illustrates, the median income for the area surrounding the Century Building is very close to that of the county as a whole. Studies by Pittsburgh Downtown Partnership have shown that moderate-income households are rising in the city's center, replacing the dichotomy of the very wealthy and lower-income households that had previously lived downtown.[159] The demand for housing by these moderate-income renters, many of whom live alone, had continued to grow.[160]

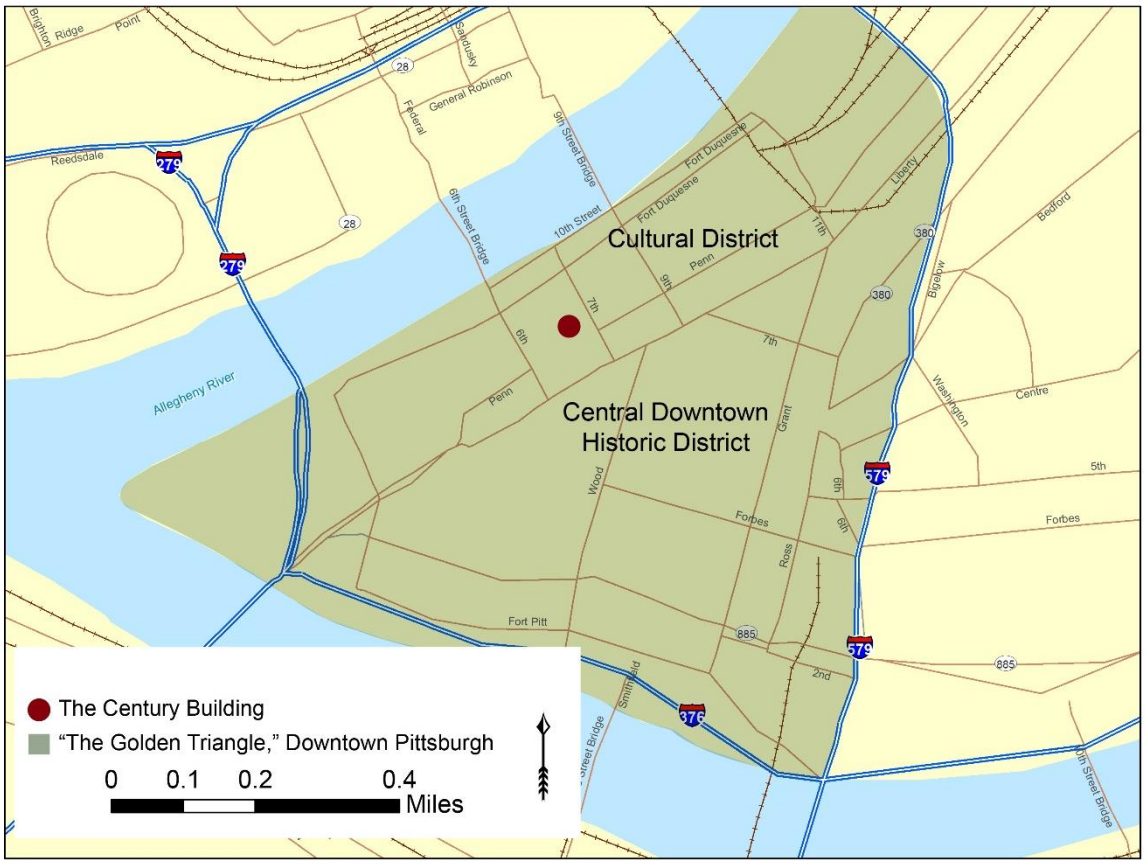

Figure 12: The Century Building and surroundings, Pittsburgh, Pennsylvania

[159] Melissa Rayworth, "The Changing Face of Downtown Living," *Pittsburgh Magazine*, December 21, 2013.
[160] Downtown Pittsburgh Partnership, *Living, Working & Commuting: 2010 Studies Profiling Downtown Pittsburgh Residents, Workers and Commuters*, 2-3.

The Downtown Housing Working Group partnered with the Pittsburgh Cultural Trust, the Urban Redevelopment Authority of Pittsburgh, the Southwestern Pennsylvania Commission, the Pennsylvania Housing Finance Agency, Allegheny County, Federal Home Loan Bank, the Strategic Investment Fund, and T.R.E.K. Development to rehabilitate the Century Building. Built in 1907, 12-story office building is now listed in the National Register of Historic Places. The building's upper nine floors are now occupied by a total of 60 apartments: 28 "affordable" units and 32 "workforce" units. 30-year covenants restrict the workforce rentals to households earning between 60 and 120 percent of area median income.[161] Lower levels are utilized as commercial and amenity space, including two street-facing restaurants and a bicycle commuter room constructed to encourage alternative commuting habits. The building successfully used historic tax credits and private low-income housing tax credits, as well as achieving L.E.E.D. Gold status.[162]

Figure 13: The Century Building, Pittsburgh, Pennsylvania[163]

[161] "Jack Kemp Workforce Housing Models of Excellence Awards".
[162] Ibid.
[163] "Century Building", T.R.E.K. Development Group http://trekdevelopment.com/projects/featured-projects/the-century-building-downtown/ (accessed February 13, 2015).

By repurposing the Century Building for use as workforce housing, the Downtown Housing Working Group began working toward the goal of making downtown Pittsburgh accessible to moderate-income households. Its historic façade remains a contributing part of the cultural district, and as a mixed-use development it remains an active part of the streetscape. Its affordable rentals allow several dozen new residents to take advantage of the thriving "Golden Triangle."

Revitalization: Beckstoffer's Mill Loft Apartments – Richmond, Virginia

Richmond, Virginia's Church Hill neighborhood was developed in the mid-nineteenth century, dominated at the time by middle-class housing and commercial structures.[164] In recent decades, the neighborhood has suffered greatly from disinvestment and blight. An analysis of the northern section of the neighborhood, whose boundary excludes the Beckstoffer's Mill site by just one block, found less than 20% of the area's residential structures to be of sound condition, with the remainder in need of repairs beyond regular maintenance, rehabilitation, or clearance.[165]

[164] National Register of Historic Places, *Church Hill North Historic District, Richmond, Va, National Register # 127-820*, 7-1.
[165] Community Planning Partners, *A Blight Study of the Residential Buildings in the North Church Hill Community* (City of Richmond, 2010), 5.

	Richmond City	Church Hill Area Census Tract 201
Population (2012)	204,247[166]	1,121[167]
Median Household Income (2012)[168]	$39,445	$26,815
Owner-Occupied Housing Units (2012)[169]	44.1%	44.1%

Table 8: City and neighborhood overview for Beckstoffer's Mill

The Beckstoffer's Mill building was constructed in 1937 for use as a lumber mill. It had been vacant for a number of years when it was acquired by the Better Housing Coalition,[170] a local nonprofit community development corporation that has been creating affordable housing through new construction, rehabilitation, and adaptive reuse for 25 years.[171] The historic mill building, which is not individually listed in the National Register of Historic Places but is considered to be a contributing property within the Church Hill North Historic District,[172] is located at the center of a residential neighborhood, and so its reuse as apartments fit well within the neighborhood. In addition to receiving a number of grants, and stimulus funds from the city of Richmond, the developers were able to sell a historic tax credit equity to Capital One to help finance the project.[173]

[166] United States Census Bureau, "Richmond City, Virginia" http://quickfacts.census.gov/qfd/states/51/51760.html (accessed February 7, 2015).
[167] United States Census Bureau, "Census Explorer: 2012 American Community Survey".
[168] Ibid.
[169] Ibid.
[170] "Jack Kemp Workforce Housing Models of Excellence Awards".
[171] "Better Housing Coalition" http://www.betterhousingcoalition.org/.
[172] National Register of Historic Places.
[173] "Jack Kemp Workforce Housing Models of Excellence Awards".

Figure 14: Beckstoffer's Mill and surroundings, Richmond, Virginia[174]

Of the 22 residential units created by the rehabilitation, 11 are market-rate units. The remaining 11 are workforce units, some restricted to households below 80 percent of A.M.I., and some to households below 120 percent.[175] The project is considered to be a catalyst for further neighborhood improvements. The Coalition followed Earth Craft standards in the renovation, creating units that are 15 percent more energy efficient than required by code. The Better Housing Coalition has plans to complete three additional phases of the project by constructing 44 new apartments for low-income seniors and families and rehabilitating several existing single-family homes adjacent to the mill site.[176]

[174] National Register of Historic Places. And "North America."
[175] "Jack Kemp Workforce Housing Models of Excellence Awards".
[176] Ibid.

Figure 15: Beckstoffer's Mill, Richmond, VA[177]

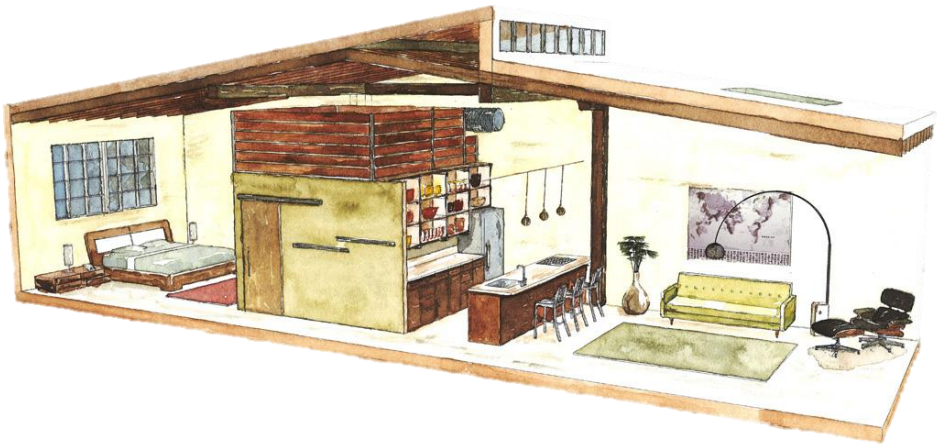

Figure 16: Sketch of an apartment in Beckstoffer's Mill.[178]

The Beckstoffer's Mill project demonstrates a successful case of workforce housing being created through adaptive reuse toward the ultimate goal of promoting neighborhood revitalization. By creating a number of income-restricted units that are accessible to moderate-income households, the Better Housing Coalition avoided making the development inaccessible to residents of the surrounding neighborhood.

[177] "Herman J. Beckstoffer Remembered" http://bexmill.blogspot.com/2011_05_01_archive.html.
[178] "Beckstoffer's Mill Loft Apartments", Better Housing Coalition http://bhchomes.org/properties/view/67 (accessed January 25 2015).

The above case studies have shown that adaptive reuse projects have successfully addressed each of the most common objectives of workforce housing projects. Whether aiming to provide housing for a particular employee base, increase moderate-income access to a high-priced market, or act as a catalyst for neighborhood revitalization, the rehabilitation and reuse of these historic structures has not imposed overwhelming cost burdens or constrained other development goals. In fact, historic preservation tax credits were used in each project, and, with the goal of sustainability being part of their rehabilitations, each of the buildings is now more energy-efficient than many modern buildings.

CHAPTER 4 – CONCLUSION

Findings and Summary of Analysis

Drawing comparisons from projects connected by such a broad term as workforce housing may seem impossible. While it is true that developments that identify themselves as workforce housing have taken a great variety of forms, deeper analysis of the problems being addressed revealed a great deal about the necessity of housing targeted toward families living on moderate incomes. Two questions were initially posed as the process of this research began: *What types of housing are being created under workforce housing programs?* and *How are the goals of housing affordability and historic preservation being combined in workforce housing adaptive reuse projects?* Although the intention at first was to find trends that pertained to form, the typology that emerged shows that the developers at hand have been commendably responsive to the broader issues within communities.

The four categories of workforce housing that were identified among the Kemp winners and finalists, redevelopment of public housing sites, employer-assisted housing, increase of affordable housing in high-priced areas, and encouraging neighborhood revitalization, address related but distinct challenges that are faced by neighborhoods at different stages in the cycle of growth and decline. Though the first two categories, were much less common than the other two, their inclusion in the list of winners displays some of the most creative

solutions to local challenges of any of the winners. Projects including the redevelopment of public housing sites are a way to increase density and encourage public-private partnerships, in addition to creating mixed-income developments that can aid in offsetting the cost of rentals subsidized for low-income families. Employer-assisted housing programs provide employees with the opportunity to live in closer proximity to their workplaces than they would otherwise be able to afford. Although these programs do not always take the form of developments and can alternatively be provided by employers in the form of rental or mortgage assistance, the development of a neighborhood or a building specifically for certain employees can aid in community building. Such is the case with Miller's Court, where teachers new to the Baltimore neighborhood of Charles Village are encouraged to interact by shared spaces.

The second two categories of workforce housing that were identified, increase of affordable housing in high-priced areas and catalysts for revitalization, tended to be focused on slightly broader challenges. The developments that intended to create more affordable housing in high-priced markets tended to be mixed-income, and were more likely to include a mixture of rented and owned units than any other category. Often the aim seemed to be to provide access to pricey cities and neighborhoods for moderate-income families without fostering the isolation that midcentury public housing is often charged with creating. Likewise, workforce housing developments goals of revitalization were seen as a way to encourage reinvestment in economically struggling areas without too abruptly changing the area's demographics.

The analysis additionally suggests that adaptive reuse can be a successful part of workforce housing projects, as it was a successful element of developments that fell into three of the four categories. The developers discussed in Chapter 3 have combined preservation tax credits with a vast array of additional incentives and funding sources to create housing targeted toward moderate-income households. Although the sample size is limited, it appears that adaptive reuse is most popular in workforce housing developments that aim to have revitalizing effects on their surrounding communities. This is likely explained by the likelihood of abandoned and vacant industrial buildings to be in neighborhoods that have suffered from low property values and disinvestment over a period of decades, whereas the same site, if located in a high-priced market, would be more likely to be redeveloped in a shorter time frame.

One issue that may have an effect on the feasibility of affordably rehabilitating industrial buildings is the future of the Federal Brownfields Tax Incentive Program, which has been inactive since 2013. Of the seven adaptive reuse projects discussed in this thesis, four involved brownfield remediation and were begun when the program was in effect, meaning that the developers would have been able to pursue tax deductions of remediation costs as repair to the land. There is a movement to have the program reinstated, but its future is uncertain.[179] A number of states, and even some regions and municipalities, have their own stimulus programs for brownfield remediation, and these localized incentives will hopefully be sufficient to encourage future rehabilitation projects.

[179] "Brownfields and Land Revitalization".

After examining a number of developments, the barriers described by developers in the 2013 study "Bending the Cost Curve on Affordable Rental Development: Understanding the Drivers of Cost" came to mind. In that report, developers cited project scale as one of the major concerns when selecting a project.[180] A look at the Kemp-winning projects reveals that, as might be suspected, projects that make use of older buildings tend to be much smaller than those that involve new construction. The five winning projects that consisted only of rehabilitation averaged under 42 units, which is just over a quarter the size of the average 161 units contained in developments that included new construction. Coupled with the cost of renovation (and often brownfield remediation as well), the comparatively small size of older buildings may play a role in their being passed over by developers.

Given the successes that have resulted from attempts to streamline the process of developing affordable and mixed-income housing in a number of cities as discussed in the Literature Review, this is an approach to the promotion of bringing historic buildings back to life as workforce housing that could be explored. Historic preservation and housing affordability are often envisioned as totally separate, or even competing goals, but the fact remains that historic structures sit unused in the same cities where many families are burdened by housing costs. Efforts as simple as training city employees to help developers navigate this divide would likely have dramatic impacts. If developers are not

[180] *Bending the Cost Curve on Affordable Rental Development: Understanding the Drivers of Cost*, 4.

encouraged to use these resources as part of projects that diversify housing options and revitalize communities, they simply will not

Recommendations for Future Research

As cities and regions continue to explore ways to market themselves to employers and residents, many may start to realize the importance of addressing the need for housing that is affordable to moderate-income families. This research was conducted in the hopes that a better understanding of what types of projects are being produced as a result of new incentives would aid planners seeking to address this issue. The limitation of only looking at Kemp Award-winning projects was never far from mind throughout the course of this research. Although there are clear benefits to only examining developments that have already been deemed "successful," it would be interesting to compare the results discussed in the first section of Chapter 3 to numbers that represent a wider sample of projects. Additionally, because these developments were completed so recently, it was difficult to know to what extent many of their goals were achieved. A more thorough program evaluation in which a number of winning projects are analyzed for indicators such as occupancy rates, tenure, and effects on the community are analyzed after five or 10 years may be very telling.

One topic that was only briefly touched upon within this analysis is the issue of differences between workforce housing programs that create units for rental and those that promote ownership. One of the reasons that this topic was neglected is the fear that workforce ownership programs that assist homebuyers with the purchase of existing homes (such as the mortgage assistance programs

discussed in the Literature Review), instead of focusing on the creation of new units through construction or reuse, would result in ownership opportunities being underrepresented. A study that included all of the workforce programs, developments, and incentives for a single city or region would allow for a comparison between rental and purchase options that painted a truer picture than analyzing the Kemp Winners for prevalence of one method of occupancy over the other.

Finally, as a thesis for an Environmental Planning and Design program, the focus of this research was directed much more toward form than finance. Funding obviously plays a major role not only in the success of a housing project, but in a developer's willingness to take it on. A more thorough analysis of the combination between preservation tax credits and workforce housing programs would be incredibly useful to future advocates.

Conclusions

At the very beginning of this research, inspiration was the result of the question of whether workforce housing incentives could be used to encourage the rehabilitation of significant structures while at the same time protecting neighborhoods from the gentrification that can result when large-scale developments bring large numbers of high-income families to traditionally low- and moderate-income areas. The resulting case studies give cause for hope. The methods by which problems of housing affordability are addressed have changed significantly over the span of the last century, with much of the pressure now resting on the private and nonprofit sectors to creatively use available

incentives and funds toward the creation of homes for low- and moderate-income families.

As cities attempt to define themselves in a post-industrial climate, many have paid increasing attention to their character or personality. In the same vein, many are realizing that in order to attract both employers and residents, they must maintain housing options that are affordable to families at a variety of income levels. This thesis has not attempted to argue that every vacant mill in the United States can be successfully converted for use as affordable housing, or that affordable housing units should only be created in existing buildings, only that it is a feasible option. There is no question that new construction will continue to comprise the majority of housing units created, but the research found in this thesis suggests that taking stock of existing structures within a community might just result in a successful, affordable, and well-preserved project.

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