VIRTUS
REAL ESTATE CAPITAL

Affordability
White Paper Vol. 2

The Affordable Housing Crisis—
and Workforce Housing as Part of the Solution

EXECUTIVE SUMMARY

Over the last several years, Virtus has pursued a Workforce Housing strategy based on the thesis that quality rental housing for the mass renter is vastly under-supplied nationwide. Similar to the other Virtus targeted areas of healthcare and education, Workforce Housing offers the potential for a triple beneficiary outcome. That is to say, good Workforce Housing can have a meaningful social impact by benefiting the residents at the property and the broader community at large, all while having the potential to deliver compelling risk-adjusted returns. Not surprisingly, this property type has become highly demanded by market participants from individuals to institutions. There is good reason for this enthusiasm: housing is an incredibly needs-based asset, and most American cities have enacted decades of urban policy that make it difficult to add enough quality yet affordable rental housing. At this point, it seems impossible to build enough stock at a low enough cost to provide adequate housing, especially in economically attractive markets and locations. However, the resulting "moat of safety" for owners of the existing Workforce Housing is intertwined with the social problems that create this opportunity: stagnating tenant incomes, rising rental costs, and outdated urban policies cause an unsustainable decoupling between economic incentives and social wellbeing. At Virtus, we believe it is both morally and economically crucial to understand the full dimensions of the nation's housing crisis in order to pursue a Workforce Housing strategy. Doing so allows market participants to add value in the existing framework, but also help cities and communities move beyond a flawed system that puts burdens on working families. This whitepaper will look at the housing affordability crisis, especially through the lens of the Workforce Housing segment of the multifamily industry.

Key takeaways are:

- The crisis is nationally pervasive, but most concentrated in the areas of the country that would benefit most from better housing.
- Even "grey collar" renters, the backbone of any workforce, struggle to afford quality multifamily housing.
- The challenge derives from decades of inertia rather than temporary features of the current business cycle.
- The crisis has chaining effects that hamstring individual families and likely constrain national growth and productivity.
- This trend will persist and worsen, particularly in a downturn, unless we as a society become more intentional about solving the housing affordability crisis.

- There are three categories of solutions to the housing affordability crisis as it relates to the multifamily sector: (1) disruptive advancement to construction technology and/or processes; (2) increased density, with improved urban planning; and (3) expanded partnerships between the private and public sectors.

We will conclude with a model for more collaborative and innovative public-private partnerships that better matches the capital and expertise of the private sector with the social needs cities face. The result is a vision for Workforce Housing that not only addresses current market needs, but also solves the root housing crisis that drives the need for Workforce Housing.

THE AFFORDABLE HOUSING CRISIS AND WORKFORCE HOUSING

As the commercial real estate sector passes a record tenth year of economic recovery and stands at the edge of unclear times, two seemingly contradictory trends have become clear. First, the multifamily renaissance has been extremely good for commercial real estate, with historically good rent growth and capital appreciation—and all during a development boom. Second, the crisis in American housing costs has not abated despite the growth in apartment construction. **In fact, the high costs faced by consumers and the dearth of attractive housing options for median income renters have worsened despite the enthusiasm and record inventory growth for the massive apartment industry.**

This environment has made it easier to recognize the distinction between the kinds of housing we are able to build profitably, and the kind of housing most American renters can afford. Historically, multifamily investors have gravitated to the newest, highest rental rate assets in any given market. However, such “luxury rentals” serve only a small fraction of all renter households. Beneath this highly invested subsector is a vast and historically less institutionalized stock of assets, the whole of which we have dubbed Workforce Housing, which targets quality affordable housing for the masses. These assets range widely in vintage and type; accordingly, many high performing Workforce deals will not “pop” on the cover of a widely circulated property offering memorandum from one of the big CRE brokerage firms. It is also the kind of housing that the majority of median income renters can afford. With value-add renovations, it can extend its useful life and its appeal to consumers—filling both a deep social need and offering strong total returns and sustainable yields. Virtus has been pursuing this general strategy for years.

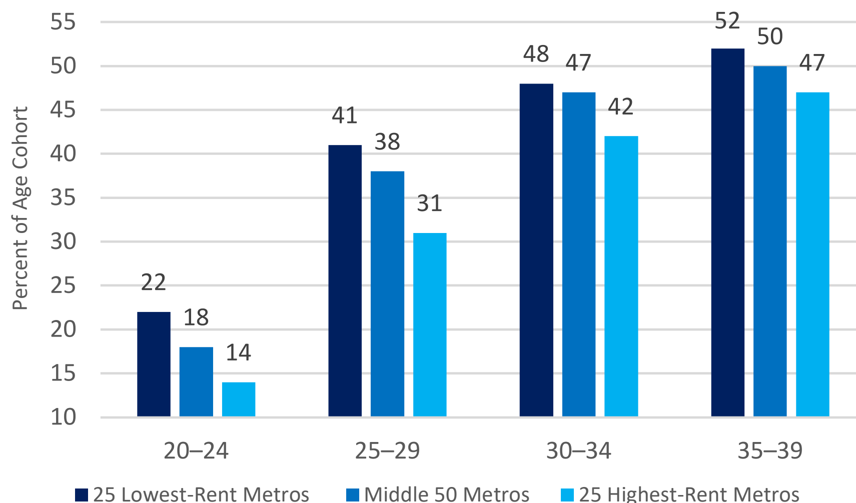
However, there is a limit to the degree the private sector alone can solve the underlying problems that create the opportunity for Workforce Housing. The central problem is a dislocation between what is currently profitable and what makes for healthy communities

long term. Through the rest of this piece, we will spend most of our time describing the scope of the housing crisis and some investable themes that come from that crisis. We will conclude by sketching out the remainder of policies and players we believe are necessary for solving underlying problems rather than merely addressing surface manifestations. **At Virtus, we believe that by staying at the forefront of the affordability issue, we can achieve attractive returns due to existing market inefficiencies, while also understanding and being a participant in how those inefficiencies can be remedied.**

SOCIAL COSTS AND THE IMPACT OF THE AFFORDABLE HOUSING CRISIS

It is important to remember something as central as housing will have effects that permeate throughout entire lives and communities; many of the "effects" below may be associations of correlation as much as causation. However, the relationship between housing costs and other costs is direct enough that we invite readers to consider how the following social problems are interrelated with housing costs:

- **Lower rates of savings, higher personal debt, and lower investment capability.** U.S. households with high rent burdens have substantially less savings compared to more fiscally resilient households, with the Pew Trust estimating that high-rent-burdened households have remained flat at a negligible $10 in aggregate savings. Meanwhile, homeowners (who experience lower overall relative housing costs for a variety of reasons) have grown their median savings from $4,000 to $7,000.
- **Lower ability to make beneficial large ticket purchases.** The average age of car buyers went from 31 in 1981 to 44 in 2019. No doubt, there are several factors delaying auto purchases, but many other industries have had difficulty keeping emerging generations connected to their products, leading to waves of editorials about the Millennial generation "killing" beloved American institutions such as the wedding planning or casual dining sectors. Perhaps the culprit has been misidentified. Near-zero growth in real median incomes, combined with rapidly rising housing and education costs, means today's younger households have less real discretionary income to drive consumer spending.
- **Lower rates of family formation and birthrates.** It may not be romantic to think about family formation as an economic decision, but economic expectations are part of such choices. In fact, internal research by Virtus suggests that rising (vs. static, nominal) rates of family formation are one of the few leading indicators of which metros will have outsized growth in the future. The housing crisis constrains expectations of future growth and seems at least correlated with lower rates of natural population growth, which are currently trending below replacement rates in most developed nations.



Source: JCHS tabulations of US Census Bureau, 2017 American Community Survey 1-Year Estimates and Missouri Census Data Center.

The many externalities of poor housing policy become clearer as a rent-burdened workforce puts increasing strains on Social Security and labor markets. At the macro level, these coalesce into lower economic growth and mobility—both due to the opportunity costs of housing burdens and decreased social cohesion. There is even some evidence it directly constrains GDP by limiting the capacity of high productivity markets to meet job demand. This happens when housing costs do the following:

- **Displace jobs providing crucial social services out of their own communities.** The housing crisis starts with pressure on less economically resilient households and ends in a drought of crucial social services in places they are needed the most. In many areas of California, it is becoming impossible for teachers, certain healthcare professionals, and first responders to find housing in the cities they serve. (See below for more on the emerging "grey collar" workforce). While this is undeniably a hassle for teachers and police officers, it is likely there are also social effects from the dislocation of such crucial roles from their communities.

- **Reduced economic (and geographic) mobility, thus constraining total national growth.** Economic mobility in America has always been tied to geographic mobility, allowing labor to move to opportunity. Poor housing supply constrains the capacity of the nation's urban centers of productivity, thus limiting both overall GDP growth and individual potential. This is a hard trend to put a price on, but that did not stop two researchers who concluded that restrictive land policies in dynamic cities lowered aggregate American growth between 1964 and 2009 by 36% in total.[1]

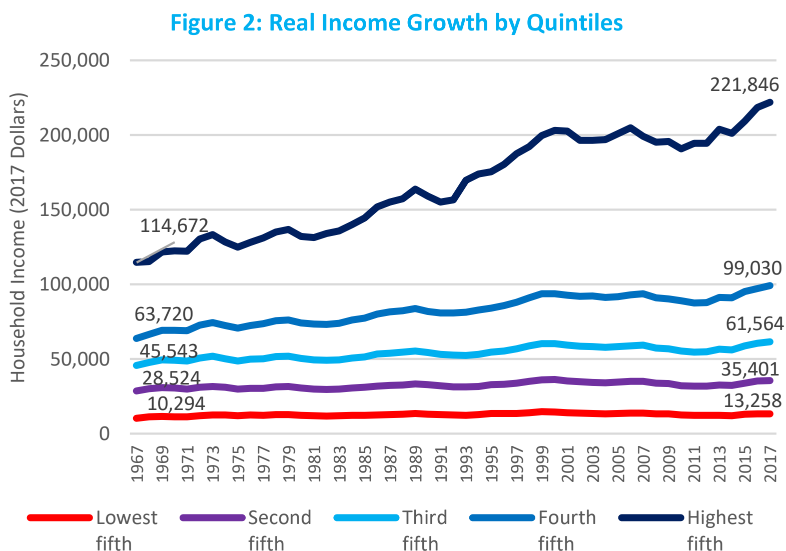
(1) "Housing Constraints and Spatial Misallocation." Chang-Tai Hsieh and Enrico Moretti. American Economic Journal: Macroeconomics 2019, 11(2): 1–39 https://doi.org/10.1257/mac.20170388

MEASURING THE SCALE OF THE CHALLENGE

Since the 2009 Housing Crisis, America's renter households have grown by over nine million households or 25%. Whereas prior decades of renter growth were driven by early family formation among young households, the current trend has a greater share of households exiting homeownership. In fact, over four million of the additional renter households have been from homeowners that can no longer afford homeownership or aging Americans liquidating their homes in order to rent. Sure, there is a small part of the latter cohort who tend to be more affluent that are choosing to rent, but many of these aging Americans are becoming renters by necessity, and not necessarily by choice. As the recovery has prolonged, more of the increase is coming from new households, but most of the current renter boom is attributable to the decline in homeownership from over 69% before the Great Financial Crisis ("GFC") to 64% today, despite 10+ years of economic expansion and record capital markets performance.

If there is one central trend underlying this renter shift, it is the dislocation between income growth and housing cost growth. Income growth has been very uneven for decades, with the top 20% of households experiencing vastly greater growth rates than typical households, whose incomes have been flat in real dollars since 2000.

Figure 2: Real Income Growth by Quintiles



Source: Census Bureau. Historical Income Tables: Households. Table H-1. Income Limits for Each Fifth and Top 5 Percent

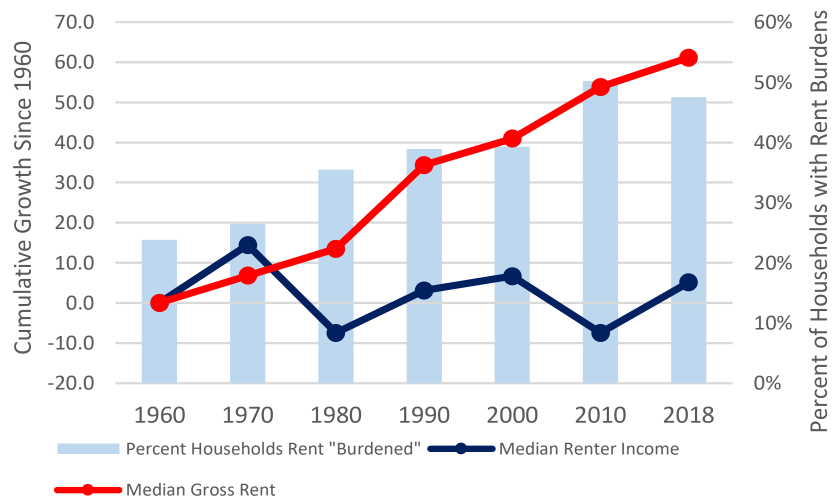
Meanwhile, housing costs have risen much faster than other portions of the Consumer Price Index. As real estate managers, the demand side of the equation is one we must simply understand but cannot control; there are a finite number of possible renters with

increasingly finite funds for housing. The supply side is almost as daunting, but it is one where investors have at least some agency in determining price or positioning. That said, the severity of the housing crisis is such that landlords must be increasingly aware of the ratio between their tenants' incomes and housing costs, or their "rent burden," as much for the solvency of their business plans as for residents' wellbeing.

RENTAL COST BURDENS

Since nominal housing costs vary widely by market, it is useful to compare them by the "cost burden" of a household's gross income to its total housing costs. Typically, renter households with a moderate rent burden are paying over 30% of gross income for housing, and extremely burdened households are paying over 50%. These standards originated in prior decades when a 30% rent burden was considered the upper limit of sound household budgeting, and many multifamily property managers still use the 30% approval standard. **However, the reality is that a 30% rent burden has gone from being a rarity to a new normal in most economically dynamic areas**. The reason is simple: costs have risen while incomes have been relatively stagnant in real dollar since the early 1980s. As Figure 3 shows, the profound dislocation between flat renter incomes and rising rents more than doubled the percent of such households since 1960.

Figure 3: Renter Incomes vs Rent, Growth Since 1960



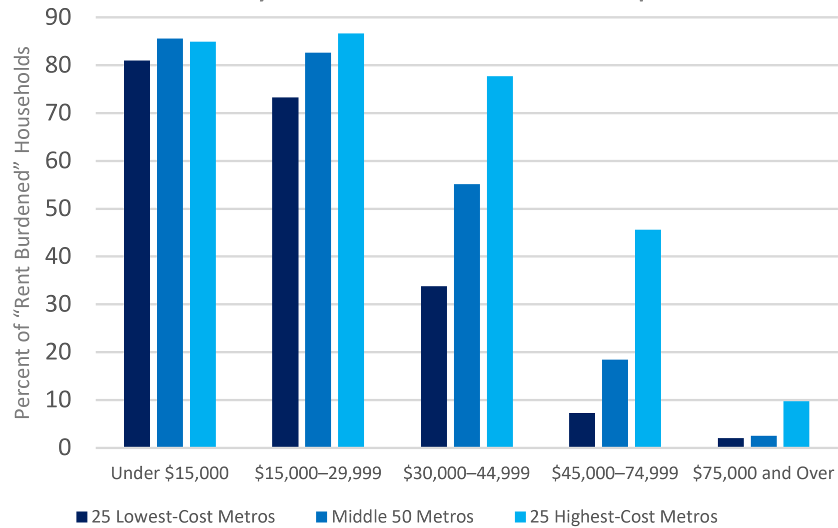
Source: JCHS tabulations of the US Census Bureau, 1960–1990 Decennial Census and 2000–2016 American Community Surveys. Rents, incomes are adjusted for inflation using the CPI-U for all items

There are limits to the appeal of a "captive audience" for housing, one of which is the sustainability of constant rental rate growth propelled entirely by the supply side

fundamentals and not matched by growth in consumer spending power. This is one of the reasons why Virtus has always underwritten Workforce Housing acquisitions to have a margin of safety between rental rates and the median renter incomes (rather than the much more available and widely cited blended cohort of total household median incomes) of the surrounding submarket. We believe that staying below 30% of median renter incomes offers the best positioning for maintaining occupancy and cash flow in the event of a downturn, even though markets are currently asking consumers to bear more. This often aligns with approximately 80% of the total household's Area Median Income ("AMI"). The real estate fundamentals of an area may suggest that continuing rent growth is feasible, but the household budgets of prospective tenants may disagree. This is highly dependent on geography at the macro and micro levels. As a generalization, smaller and lower growth markets are still relatively affordable for moderate income renters. However, in larger and higher growth markets, even households above $60,000 in annual income can be rent-burdened despite seeking the most affordable market-rate housing.

Figure 4: Rent Burden by Income and Market

Even Grey Collar Renters are Burdened in Expensive Markets



Source: JCHS tabulations of US Census Bureau, 2017 American Community Survey 1-Year Estimates and Missouri Census Data Center.

BLUE AND GREY COLLARS, UNITED IN HOUSING BURDENS

Here it is also worth differentiating between the "blue collar" cohort—which has historically been renter-heavy—and the "grey collar" cohort, which formerly had a clearer path to homeownership. Blue collar renters work low to moderately skilled jobs where onsite training is generally expected, job security is relatively low, and wages typically make homeownership infeasible. Unlike low income renters, however, they are not generally eligible for welfare,

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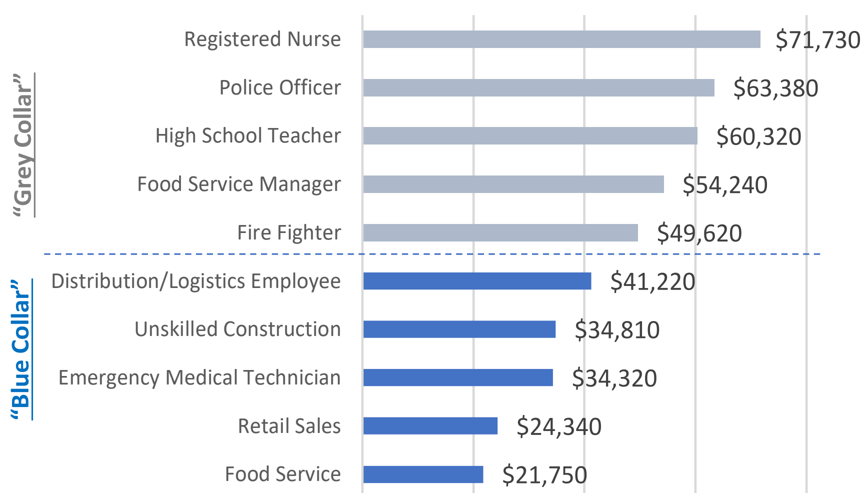
housing aid, or other subsidies. Despite this, they are increasingly "rent-burdened" with housing costs over 30% of gross income. Unlike blue collar renters, grey collar householders generally have college degrees or technical certifications. These types of professionals include nurses and other healthcare professionals, first responders (police, firefighters, EMTs), and military personnel, to name a few. Such households are also increasingly unable to achieve homeownership, especially in high cost metros. However, they display overall greater fiscal health and lower housing burdens than blue collar renters.

Figure 5: Typical Workforce Tenant Incomes



Source: Bureau of Labor Statistics National Wage Data by Area and Occupation

Both cohorts should have affordable and dignified options in an efficient housing marketplace, but it is notable how rapidly the grey collar housing outlook begins to match the blue collar reality in high demand cities. **Grey collar workers have acquired crucial skills, which they deliver to their communities, yet even households at these levels are increasingly living a reality where growth and investment are constrained due to housing burdens.** There are already news reports from major California cities were schools are unable to source enough teachers to fill classrooms—not only from their own zip codes but from adjacent municipalities. This is not surprising in areas like San Jose, where the most innovative, valuable, and rapidly growing companies in the nation are headquartered—and where small near-obsolete ranch style homes can command million-dollar price tags. However, the state of things is progressing such that supposed secondary cities like Denver or Austin, formerly touted as great places to live because of the cost of living, are now increasingly unaffordable for similar households. The reality is most economically attractive

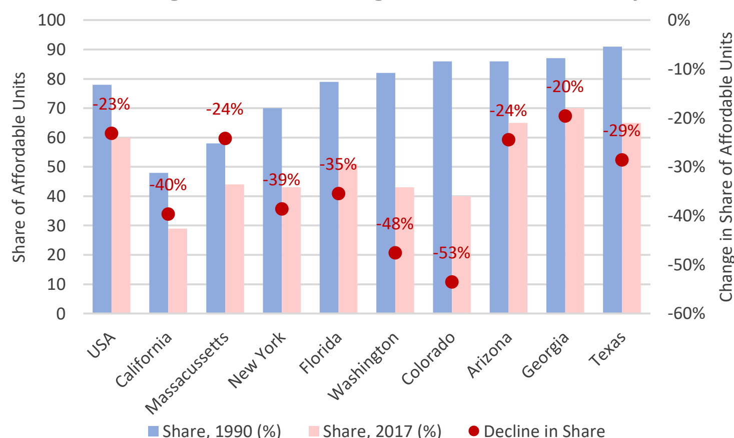
places to live have substantially higher housing burdens than the national average. This means the more one assesses the problem, the worse it generally appears. **Simply put, housing affordability is a ubiquitous national issue and not just localized to a handful of "Gateway" markets.**

THE ROLE OF URBANIZATION

The housing crisis plays out universally both within cities and between them. Readers may agree or disagree with the study previously referenced that found an opportunity cost of 36% of GDP for poor housing policy, but it is undeniable that certain metros have greater economic momentum than others, and that these same cities are where the housing crisis plays out most acutely. This is readily acknowledged for Gateway markets like San Francisco and other "high cost" markets, but the housing crisis is far more pervasive than the handful of Gateway markets. Again, it is the combination of population and topline economic growth that is not matched by equivalent housing or income growth that creates this crisis. This means even purportedly "low cost" cities and states are not immune.

Figure 6: Change in Share Units Priced under $1000

Both High and Low Barrier Regions Have Lost Affordability



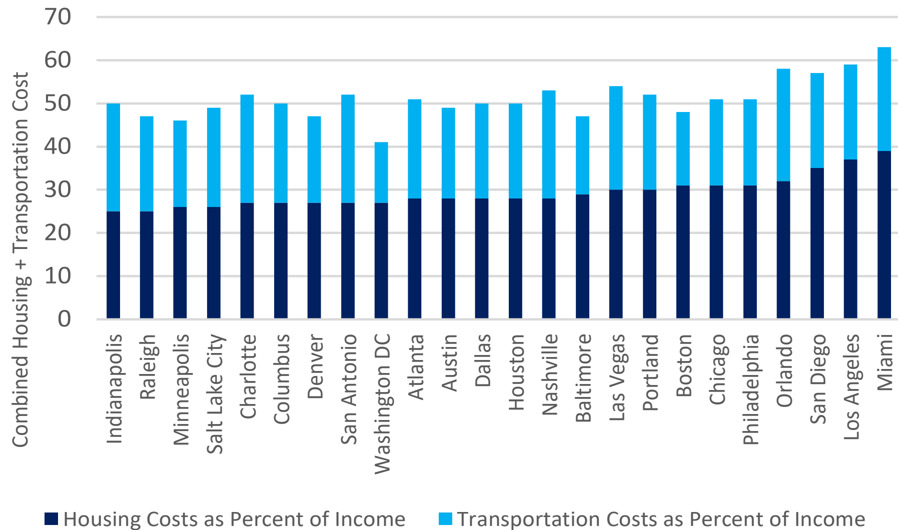
Source: US Census Bureau Decennial Census, American Community Surveys, IPUMS.
Change in units is cumulative sum of within-survey changes.

It is true that high growth cities exist on a continuum of "high barrier" cities (often coastal Gateway markets) and then "low barrier" cities (generally newer, land-rich interior markets). High barrier cities have higher incomes and costs, and they tend to have extremely difficult land entitlement rules that constrain new supply throughout the market, often combined with natural geographic limitations. This leads to high wealth growth within the already affluent cohort, lower population growth, and an imbalanced social composition as it becomes

impossible to keep moderate income households within the community.

Lower barrier cities have lower overall income, and they tend to have more conciliatory entitlement processes. However, they have historically added much of that supply in far flung exurbs that simply impose transportation costs on the low-income renters who cannot afford to live elsewhere. The net result is a similar equivalent “shelter” burden when accounting for the considerable expense that goes into a car-intensive lifestyle. Auto payments, insurance, gas, and maintenance can easily account for 25% or more of the total household budget of a median renter household. This results in a situation where a stereotypically low-cost, albeit high-growth city like San Antonio has a higher combined cost burden of housing and transportation at 52% than Philadelphia at 51%. Ironically, Washington D.C.’s extensive metro system results in a far lower 41% of combined housing and transportation cost, despite having much higher nominal land and shelter costs. In short, cities that fail to add enough rental housing (in both volume and infrastructure) pay for it one way or another—or rather, their inhabitants do.

Figure 7: Housing + Transportation (H+T) as Percent of Income



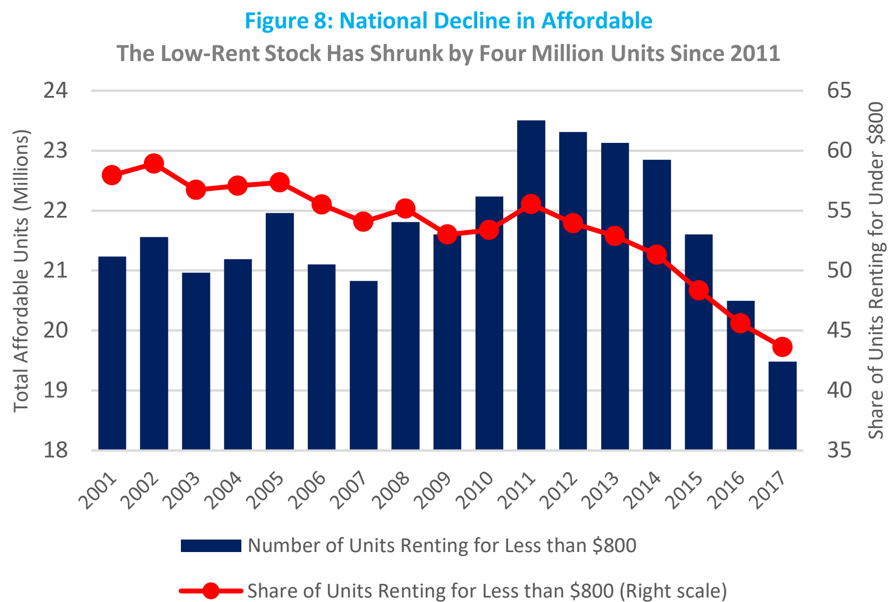
Source: Housing + Transit index via American Community Survey Data.

This situation is also self-reinforcing, in that cities with existing economic “gravity” tend to attract more of it. It is worth noting that all the current darlings of secondary market real estate (places like Austin, Denver, and Raleigh) have been high growth powerhouses for decades now. Therefore, a national average can be misleading; there are plenty of demographically challenged areas with plenty of “affordable” housing, but there simply are no jobs to afford it. Likewise, our nation’s hubs of economic activity have failed to match their

economic and population growth with enough dignified rental housing.

THE IMPACT OF A DECADES-OLD PROBLEM

We have sketched out the basic thread: incomes have stagnated, but housing costs have skyrocketed, especially in the urban growth centers of a 21st century "knowledge economy" more dependent on service employment and technical roles than manufacturing or other declining sectors. How big of a problem is it? First, recall that the total renter cohort grew by nine million households since the GFC. However, according to the most recent update for the Harvard Joint Center for Housing Studies "State of the Nation's Housing" report, we have lost four million units renting for below $800 since 2011. This is important because the nation's median renter household income is roughly $35,000 per year. Assuming a 30% gross income limit on rent, this suggests an $875 monthly housing expenditure. (The actual national median rent figure is roughly $910, again suggesting most renter households are cost-burdened). Thus, losing stock of units priced below $800 is effectively burdening nearly half of the nation's renters.



In higher growth cities (which, again, tend to be the job centers of today's economy), the $800 threshold becomes closer to $1,000. Higher cost cities are losing stock at this level at even higher rates due to their generally more constrained infrastructure and barriers to growth. This can occur by older units pricing themselves out of the affordable spectrum due to rent growth (fostered by lack of supply and competition) or by older properties being demolished

and replaced by more expensive structures that do not increase total unit count, but merely prices. This is one of the worst ironies of the situation: demand is high and growing, rates are increasing beyond sustainable household budgets…and yet it is still not profitable to build more housing for typical renters.

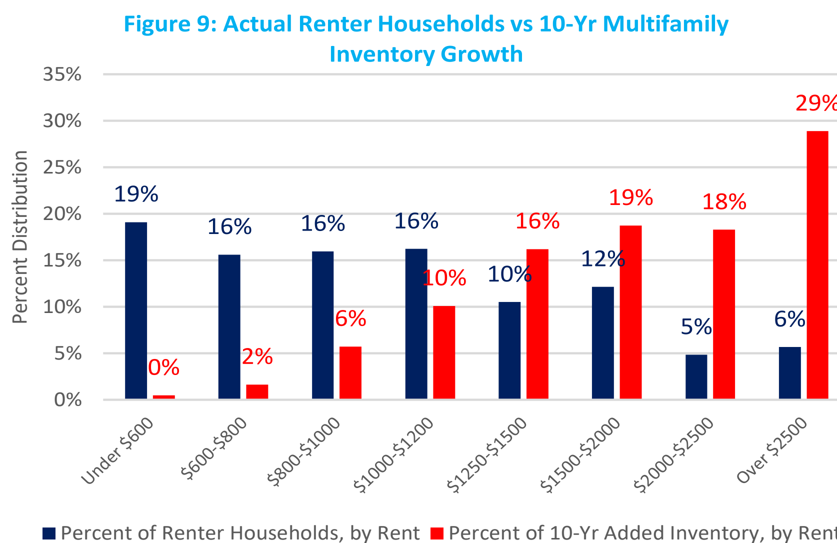
THE DEVELOPMENT VS RENT COST GULF

Now ordinarily, the solution for a product with immense demand leading to high occupancy and rate growth should be simple: build more product. However, the simple fact is most new construction, in both conventional multifamily and single family homes, cannot target households making median incomes. With construction typically at a minimum $150 per foot (for a low-density garden style multifamily development with surface parking) and land values taking upwards of 15% of a project in a major metro, Virtus estimates that the minimum rent needed for a recently constructed rental unit to be profitable is roughly $1400 per month, with higher growth and/or higher barrier markets going up steeply from there. This significant gap between actual rents and profitable construction means that developers are competing for a small slice of the total rental market, while new supply is unable to reach the middle market without subsidies and progressive zoning. Many factors contribute to this state of affairs:

- Stringent zoning practices that discourage creative land use and density, leaving prices for favorably zoned land extremely high.
- Difficulty replicating disruptive manufacturing practices that have reduced the cost of goods in other high-demand sectors, because each construction site is unique and defies easy standardization.
- Minimal investment in construction sciences innovation or advancement.
- Increased labor cost for even unskilled construction workers without an increase in construction efficiency or construction quality.
- More stringent lending practices in the wake of the GFC—both for homeowners and commercial developers.
- Increased demand for construction components as global development proliferates.

Again, the result is that during the recent spate of multifamily construction, the nation lost total inventory of units renting for less than $1,000 in most economically vital markets. What we got were a spate of housing targeting primarily affluent renters. Sure, much of that will

"down cycle" into affordable housing over decades, but in the meantime, America still faces a rental housing shortage.



Source: CoStar Analytics, All Added Inventory of 100+ unit market rate multifamily within 10 years, developments categorized by current effective rental rate.

SOLVING ROOT PROBLEMS INSTEAD OF SYMPTOMS

Hopefully, readers are now acquainted with the origin and scope of the rental housing crisis. Now, how should we solve it? Broadly, there are three overall "trees" of possible strategies. We can try to make construction cheaper; try to increase density and make more efficient use of land and infrastructure; or change the current antagonistic relationship between planning bodies and developers into one of greater collaboration. Unfortunately, no single strategy alone is likely to solve the problem entirely. However, some ideas have more immediate potential than others.

Strategy #1: Make Construction Cheaper. This is the simplest solution to explain; unfortunately, it is also the most difficult to achieve. We touched on reasons why in the last whitepaper: all construction sites are unique and defy the kind of mass standardization that makes most other consumer goods much cheaper. The labor pool also has challenges arising from the "feast or famine" nature of construction activity, which varies wildly over the business cycle. This, of course, leads to significant increases in total project costs and delays in additional housing stock. During feast times full of development, project timelines swell as existing contractors can barely keep up with pipelines. During famine times, when liquidity and capital retreat, it can be difficult for firms to stay afloat, leading to less robust supply of

key trades going into periods of high activity.

Indeed, the start of the recovery post-GFC found developers with heroic expectations that new forms of construction, such as modular and off-site fabrication, among others, would completely disrupt construction delivery in Gateway markets, but instead they are navigating labor shortages and lagged timelines as the business cycle matures. There have been some innovations: cheaper ways of dealing with structured parking; limited examples of more cost-effective techniques during the finish-out stage; and some scattered modular construction success stories. There certainly have been advancements through the years in using more energy efficient materials and installation. These are typically more costly to install, but there is a corresponding reduction in ongoing building operating expenses. **However, these measures have had little impact on changing the dislocation between shelter costs and other consumer goods, which have radically different cost reduction curves.** Virtus continually assesses the leading edge of construction tech, and we believe many approaches will be hugely beneficial once first adopters work out the inevitable snags. However, construction innovation will not be the earliest or only disruption solving the crisis.

Strategy #2: Make Better Use of Available Land. In the last entry in our affordable housing series, we argued that changes in zoning policy are a more fruitful first step in easing housing cost pressures. Instead of building more cheaply, cities should change where and how much housing can be constructed on any given plot. This would change the environment where most city land is zoned for single family homes, leaving investors bidding up the remaining share of lots with more flexible zoning until only luxury multifamily makes economic sense. The chief reason increased density offers such immense potential is because theoretically, it should be much easier to remedy than construction costs or renter incomes. However, the technical challenges of construction merely get replaced by the political challenges of crafting consensus, especially in an era when commercial real estate investors and developers are viewed as villains behind high housing costs. **In our previous paper, we posited that this association is inaccurate and that stringent zoning has done far more to limit the construction of affordable housing than private sector incentives.** Even if this newer attitude slowly gains more credence in public consciousness, the challenges to passing better zoning ordinances are still considerable. For instance, advocates of higher density often find it frustrating to explain that there are many options between exurban sprawl like in Houston and Singapore-like hyper urbanism. Your typical "sprawled" American metro has densities around 3,000 inhabitants per square mile.[2] When we speak of upzoning, it is important to realize the gulf between the effective density of an area like Midtown Manhattan, at over 70,000 inhabitants per square mile, and even leafier neighborhoods in Brooklyn, or older areas of major European cities that attract tourists merely for the setting. Such famously beautiful and livable communities have less than half the effective density and completely

(2) These figures may be surprisingly high for readers used to seeing entire MSA-level population density data. However, such figures contain large amounts of undeveloped municipal land, or else outlying areas. Using micro densities of actual neighborhoods provides a more comparable benchmark of practical urban typologies.

different building typologies—few genuinely tall buildings, but many rowhouses and small multi-unit dwellings. **Suffice it to say, the potential increased density from upzoning many American neighborhoods modestly would do wonders for overall urban density, and all without needing a single skyscraper.**

Changes in zoning will also slowly make it easier to create genuinely innovative housing that is often impossible today due to existing zoning. For instance, micro apartments frequently hit against the binding constraints of allowable units per acre, even if they do not meaningfully increase effective land density compared to multi-bed units. Other strategies like co-living take the approach of reducing redundant amenities in individual units, instead opting to share many areas. These rent by the bed instead of unit, but even such minor innovations can run against zoning ordinances. While micro units offer a more intuitive and easily marketable solution, sharing amenities has the potential to achieve greater overall gains in affordability. It is likely that "typical" renter housing will adopt solutions from both schools of thought, but developers often require zoning changes even to experiment with such strategies.

Strategy #3: Public-Private Collaboration. The last of the three solution categories has to do with direct investment from public entities at either the city or county level. Previous decades saw stagnation in innovative housing strategies at the municipal level, because the belief was "affordable housing" would be dealt with through federal and state level programs, rather than through effective urban planning. The present sees increasingly diverse strategies bordering on chaos. We are seeing the resurgence of rent control in Gateway markets.

Unfortunately, many of the new regulations appear to be a blunt instrument from a knee-jerk reaction to a longstanding housing affordability crisis. There are long-term unintended consequences to increasing a landlord's operating costs while decreasing their ability to increase rental rates. This is exacerbated by draconian caps on rental rates, even if meaningful capital improvements are made to the building and/or individual units. Regulators are effectively paving the way for more housing slums (and slumlords) because no owner is incentivized to invest in the property to maintain it, let alone improve current conditions. Although this may temporarily abate rental rate increases, the quality of the housing stock will decrease materially over time, thus leading to a lack of quality or dignified affordable housing. Alternatively, other cities have made great zoning concessions in special overlay districts, letting transit corridors act as laboratories for alternate urban visions. Some cities are investing directly in public works programs; others are allocating funds for individual households while hoping the private sector can solve the systematic issues.

We believe that cities have roughly two options for solving underlying issues versus surface manifestations: they can either set aside massive budgets to acquire, develop, and manage

housing on municipally owned land, or else they can partner with domain experts who take on that operational risk while committing smaller funds to ensure the projects can target a wider renter group profitably. Virtus believes the budgets and bandwidths of most metros favor the latter solution. We have found a variety of good partnership structures, but generally, they revolve around using municipal financing corps to provide tax incentives for developments to set aside units for lower AMI households. These typically work most effectively in addressing the "missing middle" of housing affordability, especially for grey collar workers, which are crucial to any community. The main distinction is these structures create profitable investments that municipal entities benefit from directly in the form of cash flow and sales proceeds, rather than more ineffable returns like predetermined tax increment financing. This paradigm allows a much greater overall impact per public dollar since it is spread out across many projects (due to private capital) and because initial outlays are recouped in a more tangible manner. This is precisely the kind of innovative thinking that will solve the underlying root of the problem, in contrast to more surface level approaches like rent control that may temporarily stanch the flow of funds from poor households, but will do nothing to change the underlying supply issues that have created the problem. **In fact, clumsy regulation without public investment will likely exacerbate the problem by further reducing the profitability of new development, leading to even more anemic rates of rental housing development. Virtus believes there are far better solutions.**

CONCLUSION

It should be clear that Workforce Housing is both an opportunity and a social challenge, with the "moat of safety" being intertwined with the social problems the rental housing shortage causes or exacerbates. Thus, Virtus believes its focus on quality yet affordable multifamily acquisitions, as well as its public-private partnership strategies, sit at the crucial nexus between savvy investment and activities that increase overall wellbeing by solving inuring social needs. In short, without public assistance (via either zoning concessions or actual public-private partnership investments), the Workforce Housing opportunity is merely an invitation for landlords to raise rates on the shortage of dignified but affordable rental stock in urban America. With public investment, Workforce Housing has the potential to fundamentally change the economics of housing development in a way that helps cities grow more sustainability and foster fiscal solvency and overall wellbeing. We intend to stay at the forefront of innovative urban policy, capitalizing on existing opportunities while also creating structures that reduce the artificial barriers keeping improved housing options off the table for decades.

Moreover, staying at the vanguard of solving the housing crisis will help us understand when

the outsized risk/reward prospects of Workforce Housing get flattened. All "high alpha" paradigms eventually fall victim to their own success; when the Workforce Housing strategy eventually fails to offer outsized returns for the risk, it will only be because America finally has a sufficient supply of affordable rental housing that offers families greater dignity, room to grow, and access to opportunities. Until then, Workforce Housing will stay at the forefront of the Virtus toolkit for cycle resilient real estate.

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ABOUT VIRTUS

Virtus Real Estate Capital, founded in 2003, brings thoughtful stewardship to the practice of real estate investment, delivering non-correlated alpha via cycle-resilient real estate. Over the last 16 years, Virtus has acquired 237 properties for a combined acquisition value of over $4.1 billion and has fully realized 176 property investments. With a strong and established track record, Virtus has proven to be successful in all phases of the market cycle. For more information, please visit virtusre.com.

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