VIRTUS

REAL ESTATE CAPITAL

Affordability

White Paper Vol. 1

What's Really Driving The Housing Affordability Crisis—

And What We Can Do To Solve It

EXECUTIVE SUMMARY

The emergence of rental housing affordability as a public "crisis" is relatively new, at least in the scale of its recognition. This first essay in our series of white papers exploring affordability traces the drivers of this crisis through real estate industry challenges and also to public policies, some of which are caused by well-meaning regulation intended to foster good communities. However, there is no single panacea, and many of the challenges are intertwined. That said, there are broadly three ways to make rental housing more affordable to users:

- **Decreasing Construction Costs:** While there have been great strides in fabrication, built space is inherently cost-intensive, and aspects of it will always stymie the kind of mass standardization and production that gives other consumer goods much steeper cost reductions via innovations. While there are fascinating new methods and technologies on the horizon, we believe construction innovation alone will likely not impact the crisis in a meaningful way in the short and intermediate term.

- **Subsidization and Public Investment:** In this paper we sketch out the existing subsidy framework, which is largely focused on affluent homeowners and extremely low-income renters. However, aside from niche municipal-level programs, the core demographic of the renter cohort is entirely left out of public investment. "Grey collar" workers, like teachers, first responders, government workers, and other crucial professionals are increasingly unable to afford living in the very communities they serve and sustain.

- **Increasing Supply by Removing Zoning Limits on Density or Unit Type:** Most cities have not meaningfully addressed their density limits in high-growth areas with outsized demand, which creates artificial scarcity. This means it is frequently difficult to add units to such areas, with the result being gentrification and displacement, since the only way developers can compete for sites is by maximizing unit revenue (rather than unit count). In addition, such zoning regulations often prevent adoption of innovative approaches like micro-units or co-living options that better utilize space by reducing footprint and increasing shared amenities.

We believe this last facet is the most under-acknowledged piece of the puzzle, yet also possibly the easiest to change and improve, especially as awareness continues to bring new solutions to the conversation as it has in recent years. Past discourse has focused mostly on the private sector's presumed shortcomings as well as the need for more or better subsidies. However, it has become increasingly clear that cities and their planning bodies have contributed to their own problems through inertia and misunderstood incentives in their own regulations. As these same cities begin to more earnestly solve the problem of unaffordable rental housing through regulatory and zoning reforms, they will likely find greater harmony and more fruitful partnerships with private developers and investors in the housing space.

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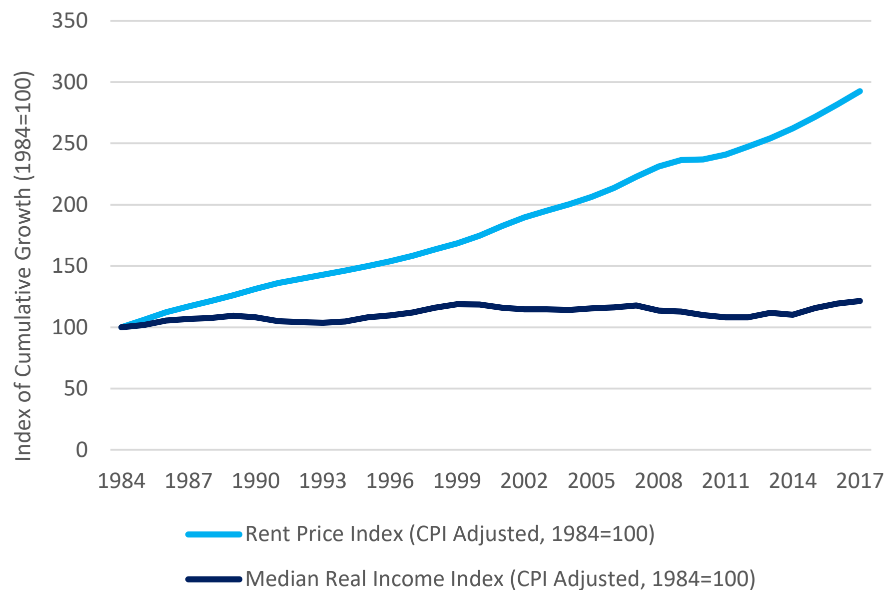
> "The best way to build affordable housing is to do it 30 years ago."

This is a relatively common witticism in urban planning circles, and while it sounds dismissive, it gets at a central truth: the housing crisis in most economically dynamic American cities is not due to a temporary shortage or mis-pricing, but rather a protracted failure that stretches back decades. Recent years have seen the affordable housing crisis receive a greater share of public consciousness, as it becomes apparent that a historically long period of economic growth has paradoxically created historic levels of rent burdens for median-income Americans. But the underlying forces that have produced this crisis are anything but new, and the current situation represents a long buildup of challenges and stagnated policy that has instead served to exacerbate the problem.

Figure 1 – Growth Index: Median Income vs. Rent



Source: U.S. Bureau of Labor Statistics, "Rent of Primary Residence" and "Real Median Income." Retrieved via FRED, Federal Reserve Bank of St. Louis.

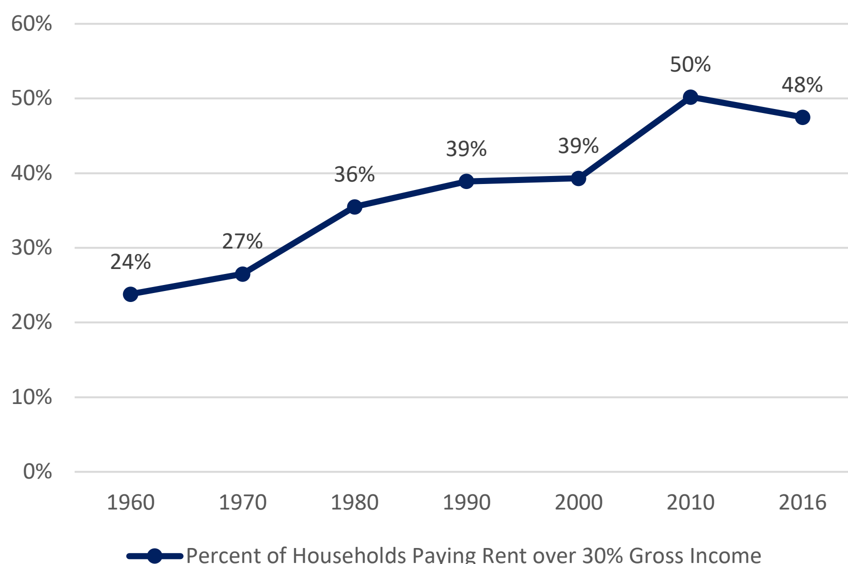
We will enumerate the ongoing issues governing affordability, but first it may be useful to think about what has changed over time. HUD budgets and other public housing efforts have cycled up and down, but most of their efforts have always been focused on poverty-level households, whereas the current housing crisis particularly hurts the "missing middle" of renters who do not qualify for federal assistance. Multiple economic growth periods have infused real estate development markets with capital for building, and equally many downturns have had the opportunity to normalize prices. And finally, political administrations have fluctuated several times over with a variety of different approaches. And yet the housing problems in most major cities continue to worsen regardless of the economic or political environment. The simple fact is, incomes have remained flat while costs have only gone up.

There are myriad reasons for this phenomenon. Some of those reasons are familiar: construction is expensive, and developers must compete to win land auctions by maximizing projected revenue in order to outbid competitors. Neither of these problems are likely to disappear. However, this paper will focus on what we believe to be a much larger and more easily fixable source of the problem: municipal policies actively block housing developers from achieving density levels to match the population growth seen in the most economically dynamic areas. This means housing is least available in the places it is most beneficial, at both the national level and within individual cities themselves.

In other words, the "binding constraint" keeping urban rents too high is neither construction cost itself, nor is it the profit motive of the private sector. Instead, it is the consistent pattern, occurring gradually over decades, of municipal- and neighborhood-level entities that have prioritized the status quo of mid-20th century zoning norms over beneficial change. Importantly, this is true in notoriously development-averse places like San Francisco, but also in lower-barrier markets like Houston and Atlanta. In the former, new housing simply is not added, and median-income residents are either unable to migrate in for jobs or are displaced. In Houston and Atlanta, affordable new construction is pushed out to a sprawling city edge where people trying to save money on rent are forced to spend that money on transportation costs instead.

These are examples of cities that have made it too difficult to add housing where it is needed most: in core areas with significant transit access to employment and public institutions. Again, the protracted nature of an entire city's housing stock means that this gradual problem has built up over time, and only recently crested into public awareness. This means that quick fixes, such as rent regulation measures or even extra subsidies, may offer a temporary reprieve for some renters, but will do nothing to change the underlying housing supply that keeps all costs high (and in the case of rent regulation, they may further exacerbate the problem by disincentivizing improvements to existing stock).

By contrast, in a city with sufficient quality housing, affordability would occur naturally as a more robust development pipeline allows older properties to decay as the most affluent folks gravitate toward the newer, shinier buildings. Indeed, such product exists, but there is simply too little of it; it is not in the right places; and it is impossible to add product that competes with it in the current regime of under-zoned cities with underpowered housing authorities. In this paper, we will touch on most major drivers of overly high housing costs, from construction to zoning. But first, it may be useful to remind or acquaint readers with the pressing scope of the issue.



Source: Harvard Joint Center for Housing Studies tabulations of the U.S. Census Bureau, 1960–1990 Decennial Census and 2000–2016 American Community Surveys.

THE SCOPE OF THE HOUSING CRISIS

Since affordable housing is generally thought of as a "poverty" issue, it is worth emphasizing the impacts on median-income families, especially median-income renters. Historically, 30% of income spent on housing has been an upper limit for budgeting and even approval from landlords. However, that former limit has become something of a "new normal" especially in major cities. In both Los Angeles and Miami, a clear majority of households (over 60% in each city) are paying more than 30% of their income for housing. What should be even more surprising is that this is also true in both Houston and Atlanta, lower barrier cities routinely lauded as cheaper "alternatives" to coastal cities. Half of Houston is at the 30% income burden, and 54% of households in Atlanta are likewise. Essentially, the housing crisis, as measured by historical norms of household budgeting, is pervasive across the country. It

is important to remember these moderately rent-burdened households are not in poverty, nor are they eligible for most forms of public assistance. Instead, they are middle income individuals and families. Teachers, firefighters, and even certain cohorts of healthcare workers and young professionals fall into a grey area where full employment still does not support the cost of housing within or even close to the communities these workers serve. Indeed, the situation becomes even more dire when looking at households that are "severely" cost burdened with rents over half of their gross income. This cohort has grown 42% in size since 2001 to now comprise 17% of all U.S. renter households with the most significant growth seen in urban areas.

The reason for this is quite simple: rent has increased much faster than income. According to the Pew Research Center, median rents since 2001 have increased at over 3% annually *after* adjusting for inflation. Notably, this situation extends back much further than 2001, as Figure 1 on page 3 shows. Incomes have stagnated since the early 80's, while rent has climbed persistently. The reasons for income stagnation vary, and are also beyond the scope of this paper; indeed, for anyone involved in affordable housing, they are simply an assumption that needs solving from the supply side. Unfortunately, the cost of development is hampered by a host of issues discussed below—some of which are unavoidable aspects of construction, but many more of which are very human decisions in planning and financing that have exacerbated the inherent challenges in urban housing.

CONSTRUCTION COSTS

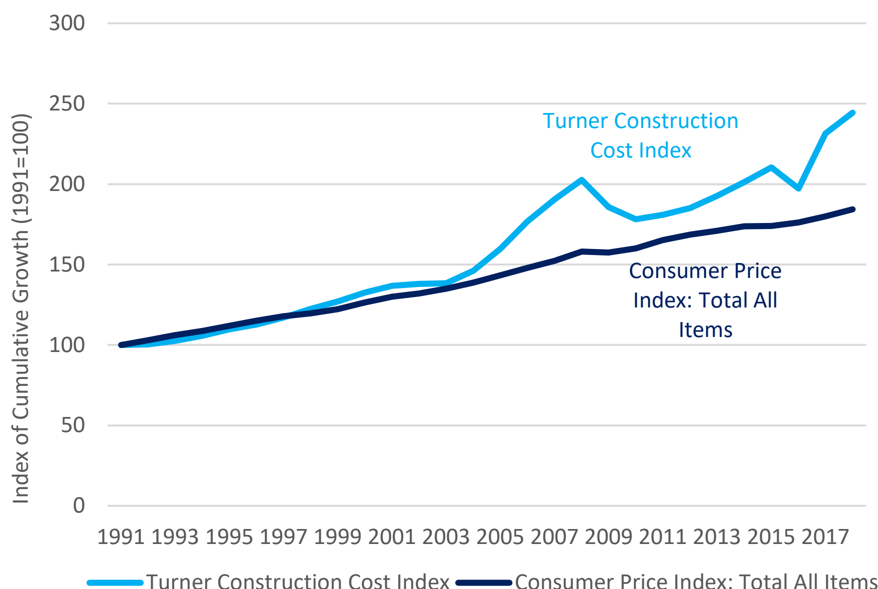
Before we enumerate the failings of zoning and many approval authorities, it is only fair to note that construction is simply very expensive—and it has not gotten cheaper, like many consumer goods. Commodity inputs have grown in cost due to global development, and the construction process remains very human labor-intensive. There have not been significant technological or disruptive advancements in efficiency like seen in many other industries. Moreover, the unique nature of each project has stymied the kind of mass production that makes other consumer products cheap. Computers, cars, and other devices have made incredible strides in affordability because their production can be automated and standardized. While some single family homebuilders have successfully adopted standardization (but not automation), every typical multifamily development is its own prototype. Each project will have different site needs, unit design, and likely, team members. As such, the raw cost of construction itself has gotten more expensive, and without nearly the degree of quality improvements your mobile phone has seen over the same period. There are certainly efforts underway to fix this part of the problem. Modular approaches to building have promised to disrupt construction processes and costs for decades now. Building Information Modeling ("BIM") programs help contractors "pre-build" a digital model of all

components that allows the trades to collaborate with greater precision and avoid costly on-site mistakes. The combination of these two approaches will help nudge construction toward the "cars and computers" type of semi-customizable mass production. It is likely they will have increasing success, but there will always be ineluctable challenges related to the unique nature of sites that will stymie the kind of mass standardization we find in other sectors.

FINANCING

It would be naïve to discuss costs without financing, and here too, both federal and regional policies have historically left renters out in the cold. Of course, if you mention "housing subsidies" most people will immediately think of HUD and rental assistance programs like Section 8. However, the greatest source of federal housing assistance is for homeowners, in the form of the Earned Income Housing Tax Credit on mortgages. Even after tax reform, these costs will total $400 Billion over the next five years, compared to the entirety of renter-based housing subsidies at roughly $72 Billion. That's a 6-to-1 ratio—much greater in footprint than the current 64% homeownership rate, which has been declining since the Great Financial Crisis, despite renters having much lower median-incomes and theoretically standing to benefit from greater assistance. Another way to see it is that 60% of total housing subsidies accrue to households making over $100,000 annually.

Figure 3 – Comparing Construction Costs

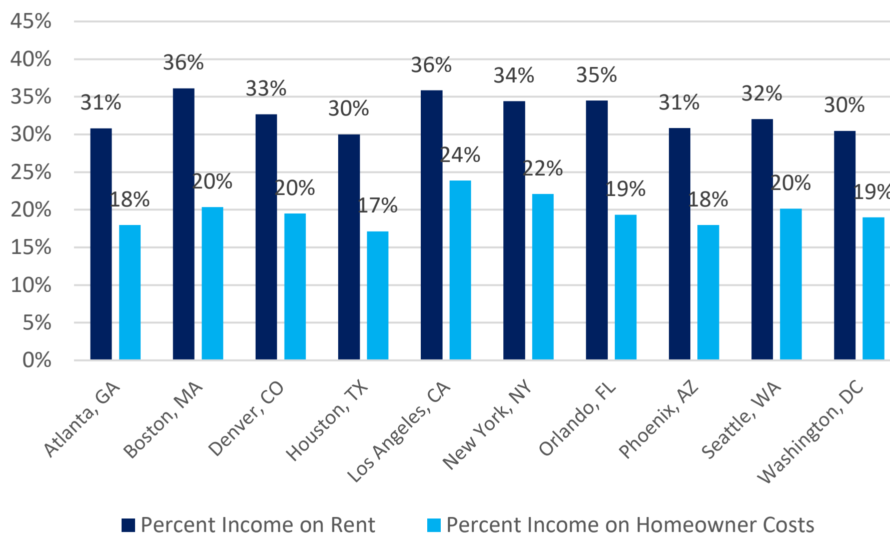


Source: Turner Cost Index via Construction Analytics. CPI Index from OECD via Federal Reserve Bank of St. Louis FRED Database.

What's Really Driving the Housing Affordability Crisis— And What We Can Do To Solve It

In short, housing in America is well subsidized already, but it subsidizes homeownership. Admittedly there may be social benefits for such, and this author will certainly not decry getting some benefit of mortgage interest deductibility and related, but it does leave the renter nation without a corresponding benefit.

These homeowner subsidies also distort the degree of housing burdens that renters experience when all housing costs get blended together. Since homeowners are both more affluent and benefit from greater housing subsidies, they tend to face much lower cost burdens than renters. Thus, a city like Houston can boast a 25% "blended cohort" housing costs, whereas renters specifically are paying 30% (and homeowners are paying only 23% despite having higher incomes). If readers have been surprised at the extent of the challenges lower income renters face, this may be one reason why. Furthermore, the stagnation of median-incomes, combined with issues like student debt and anemic savings, mean households that are currently excluded from homeownership are likely to stay that way for the foreseeable future.



Source: Harvard Joint Center for Housing Studies tabulations of the U.S. Census Bureau, 1960–1990 Decennial Census and 2000–2016 American Community Surveys. Homeowner costs include mortgage, taxes, and maintenance.

And finally, there is one more facet in which the owner/renter divide works against renter families who are already in a more precarious and less subsidized place than homeowners. In addition to facing a much friendlier financing and subsidization framework, homeowners in single family dwellings have massive preferential treatment in most city zoning codes. These codes frequently bar the most efficient forms of housing from most land zoned for single

family housing. In other words, those who cannot afford homeownership are effectively "redlined" from large parts of their home cities not through market forces, but rather formal regulation. The consensus of many major urban areas seems to be that while we like the benefits that teachers, first responders, and service industry workers offer, we do not necessarily care that they are not able to live in the communities they serve. Where, then, are they to go?

THE HIDDEN COST OF TRANSPORTATION ON HOUSING

We have established that federal policies already favor homeowners, and we have begun to sketch out how zoning keeps renters out of areas zoned for single family dwellings—in fact, this can include the vast majority of available land in many cities. The remaining areas suitable for renters are typically as follows: inner core urban areas with outdated housing stock that is being rapidly gentrified into unaffordable housing, and the outlying parts of the city with cheaper land and less restrictive zoning. Renters are increasingly choosing the latter areas—far flung parts of the city that can take over an hour of commuting inward toward employment centers. However, even without accounting for the value of travel time, this living pattern comes with substantial transportation costs. For an affluent family living in a gated exurb, these costs may be negligible; however, for a cost burdened household already spending over the 30% rent-to-gross income mark, transportation costs can easily negate any rent savings. Indeed, the Center for Neighborhood Technology's "H+T" Housing and Transportation Index found a strong inverse relationship between housing and transportation costs.

For households representative of median renter incomes, those who spent under 30% of their income on rent also spent over 12% on transportation, whereas households in the same income band who spent over 30% of income on rent (often in higher rent submarkets closer in) spent approximately half as much on transportation. As such, the H+T Index seeks to normalize these consumer choices by bundling both housing and transportation together for a more comprehensive affordability index. When viewed together, these variables show a much flatter total cost burden for commuting from the center to the edge of a city. Moreover, the pockets of less burdened areas are more correlated with transit access than distance. In effect, households going way out to the exurban edge for affordability are merely reallocating that cost burden to transportation (without accounting for the opportunity cost of time). This means that if you only incentivize affordability in far flung areas, you are not incentivizing affordability at all. This now brings us to zoning.

THE ROLE OF ZONING ON COSTS

Zoning is complicated from the perspectives of both macro policy and the individual sites,

as the emergence and growth of the cottage industries of code consultants and expeditors can attest. There are well-intentioned building code provisions, like mandated setbacks, unit counts, height restrictions, parking ratios, and impervious cover requirements that all collectively shape the way buildings take form. However, the results of zoning as they impact housing costs are fairly simple, and they all converge on one issue: developers are unable to meaningfully add to the number of units on any given urban site, and this means housing in highly demanded areas can only get more expensive.

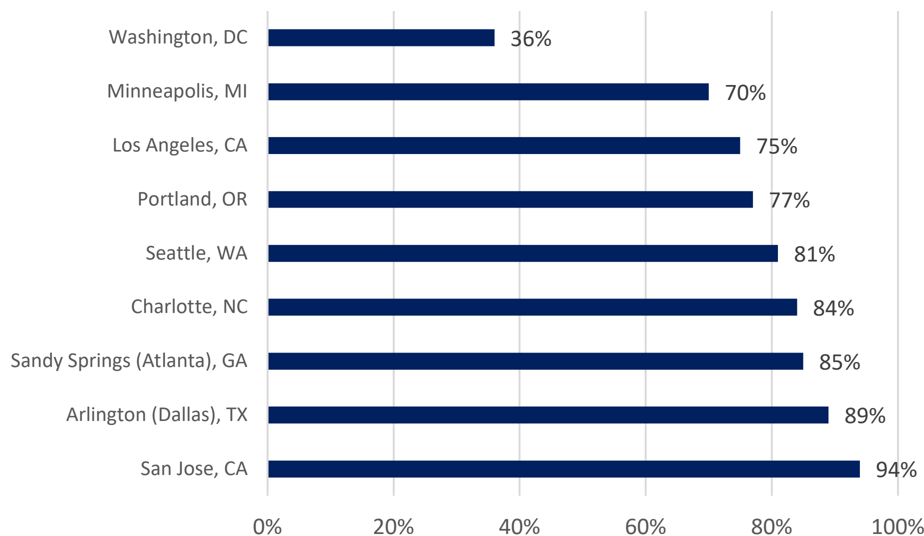
In other words, if an investor buys a lot with 100 existing antiquated units to redevelop, they are often unable to increase that figure because of zoning. This is due to a host of binding constraints: floor area ratios ("FAR"), maximum height restrictions, and outdated parking requirements. As such, any time a developer buys obsolete housing stock in a gentrifying area, the result is a net loss of cheaper units and no meaningful increase in total housing units. Everything becomes more expensive, because we have merely replaced cheap things with expensive ones, and the rental market is squeezed even further. Critically, the inability for developers to compete on supply volume forces them to compete solely on price. Every new development needs to maximize its rent per area simply because there is no way to maximize revenue by increasing the number of units. If, on the other hand, every developer could build 125 units on that same lot, the result would be cheaper housing elsewhere in the market, even if all the new units are still expensive. This is because every new development will be able to add a meaningful amount of housing. The additional supply will influence market forces to drive down rental rates throughout each submarket, or at least slow the growth in rental rates in the highest demand areas.

If readers are skeptical or having trouble seeing how this plays out at a macro level, let's imagine a world where there are no limits on building scale. Every bit of upward economic growth is matched by enthusiastic developments and lenders, leading to higher density and higher unit counts. Now, crucially, imagine this process happening again and again over the coming years. In every upward business cycle, you would have a wave of new apartments where buildings compete for renters, with everyone dropping rents to stay full. (And the beautiful thing about buildings is that even when they start as bad investment ideas, they end up staying there for decades, increasing the total city housing stock with each building boom.) Of course, your city probably does not look anything like that. But greedy developers are not the problem. In our admittedly extreme example, developers would be able to do whatever they liked, and too many firms would try and maximize the value of their land by overbuilding. The result would be cheap housing and bankrupt developers turning over projects to their lenders. The latter is certainly not the objective, but this regulation free utopia would allow market forces to create the proper balance between supply and demand.

You might wonder why we would want the chaos of such deregulation in our sector, which

has been fairly good to multifamily housing investors given the high barriers to development that regulation creates. First, we do not expect that level of anarchy anytime soon, but extreme examples can help illustrate the point we are trying to make. Second, inexperienced people are always going to find ways to go broke being greedy or timing construction wrong, and more prudent investors can find opportunity in their mistakes. However, right now speculators are likely to go bust bidding up auctions and overpaying for dated apartments, since they cannot build new ones profitably. This clearly makes our job just as hard as it would be with more lax zoning. Of course, it is a wild ride for novice investors, and it provides jobs in the financial services sector, but it does not help renters. In a more perfect world, those same speculators would instead go bankrupt building new housing rather than just finding places to park investor money. True, they might not do it out of a sense of altruism or social good, but the result would be affordable housing.

Figure 5 – Percent of Residential Land Zoned for Single-Family



Source: Urban Footprint via *New York Times,* "Cities Across America Question Single Family Zoning."

THE ROLE OF LOCAL POLITICS

Hopefully readers now understand that while affordable housing construction for the median renter is inherently complex, it is regulation and zoning that have contributed to the scope and intensity of the affordable housing crisis. These problems are decades old, but it seems increasingly clear that both government bodies and the public are finally recognizing the policy-driven nature of this problem. Cities everywhere are ramping up density bonus programs, either tied to affordability or offered in transit-heavy neighborhoods. California has been trying to bypass local hang-ups through legislation like SB-50 and subsequent bills

that rezone significant areas at the state level. Oregon is likewise using state powers to bypass local municipalities with legislation to remove single family zoning as a deterrent to innovative housing solutions. These kinds of "bulldozer" legislative approaches scare many people with their sweeping scale. Some of these regulations may appear clumsy and may lead to adverse effects on the charm of storied older neighborhoods caught in their path. This is because they represent a backlash against local regulatory failures, which have caused unmet needs to build and build.

It is likely that more balanced approaches like Transit Oriented Development corridors will be better at preserving the character of urban neighborhoods. Similarly, these approaches can be more effective at reducing artificial limits on supply than mandating rent control, which has led many New York City landlords to refuse to invest in their properties, thus driving down the overall quality of housing. While rent regulation may not deserve to have the door fully closed on it, we believe incentives that increase the supply of good housing are preferable to those that cover only existing structures and constrain value.

In sum, it is incumbent on individual cities to create better policies to help foster more affordable rental housing markets, either through active public support of helpful projects, or at least by getting out of the way of developers seeking to meet decades of pent up demand.

Virtus will continue its Affordability series through deeper explorations of the challenges enumerated here, as well as innovative solutions from both the public and private sectors.

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