## How to increase housing affordability: Understanding local deterrents to building more

By Amrita Kulka



**UK house prices** rose 9.8% in **2021, while** rents increased by 2%. With house prices increasing more than earnings, housing affordability is affecting people with a wide range of incomes across the country.

uilding more housing is, at first glance, a simple policy solution to the housing affordability crisis. Yet house building is lower now than it was at its peak in 1960. Why isn't supply keeping pace with rising demand?

Regulatory constraints form part of the problem. In England for example, new housing requires case-by-case approval and needs to follow rules, such as avoiding greenbelts (no-growth-zones) and keeping to height restrictions.

The relaxation of regulations, then, could encourage building and increase housing affordability. But choosing which measures to relax needs careful thought, as our research on the impact of regulations on house building and prices shows (Kulka, Sood and Chiumenti, 2022).

We focus on Greater Boston in the US, using novel data (Metropolitan Area Planning Centre Zoning Atlas, 2001) that allow us to study the impact of regulations at the property level. In the US, what can be built where is designated in zoning codes: three prominent residential land regulations are density regulations (affecting how many dwellings can be built on an acre), height restrictions and whether apartments are allowed.

Which regulations matter and how do they interact? Our approach centres on the boundaries between differently regulated areas. Imagine a neighbourhood road. Families living on either side of the road send their children to the same school and visit the same shops and restaurants. But the road constitutes a regulation boundary. On one side, there are fewer homes — sometimes only detached single-family homes are allowed on an acre of land — on the other, there are more homes, of different types, built much closer together.

We compare homes on either side of the regulation boundaries to see which regulations affect house building and prices most.

We find that allowing more dwellings on an acre of land, either on its own or in combination with allowing more floors or allowing apartment buildings, is the most successful at increasing the supply of units and reducing rents and house prices.

Areas that allow more density of buildings, either alone or in combination with other regulations, have 27% to 92% more units than neighbouring areas whose regulations restrict building density.

On the other hand, allowing apartments or more floors alone without increasing housing density has little impact. These regulations only change the type of unit but don't substantially change the number of units that can be built (e.g., allowing an additional floor on a detached home without allowing an additional unit).

"Our results show that increasing density is crucial for increasing housing supply and lowering prices. But does easing regulations have different effects in different areas?"

90%
PER UNIT ADDED

REDUCTION IN MONTHLY COSTS IN SUBURBAN TOWNS WHEN HOUSING DENSITY IS INCREASED

We find that relaxing regulations can lower monthly apartment rents by between 2.6% per unit added (\$27), when density is relaxed and more height is allowed and 12.6% per unit added (\$144), when density is relaxed alone.

The monthly cost of owned detached homes decreases even more — by 16.7% (\$425) per additional unit when density is relaxed alone and 9.17% (\$204) when density increases and apartments are allowed. These effects are driven by differences in the composition of homes in areas with relaxed regulation, e.g., smaller units.

Our results show that increasing density is crucial for increasing housing supply and lowering prices. But does easing regulations have different effects in different areas?

We analyse the effect of regulations in different areas by comparing Boston, and the communities immediately around it, with established towns in the city's suburbs.

Figure 1 shows the effects of different regulations on housing supply in these areas. Units increase the most near Boston when allowing both more density and height.

Nevertheless, we also find increases in units in the suburbs.

Figure 2 shows the impact on rents and house prices for these two areas. Adding units in the high-demand centre does not affect prices much but adding units in areas with lower residential density can have a substantial impact — monthly costs fall the most per unit added in suburban towns (up to 9.9%) for renters and owners.

Increasing density and relaxing height reduces rents without reducing house prices, other combinations affect prices and rents.

Next, we simulate a popular policy proposal in both the UK and US: increasing housing density near transit stops.

We consider how relaxing current combinations of regulations affect prices at each transit stop. Wellesley Square station (a 30-minute train ride from Boston) highlights a case in which allowing more density and height can lead to substantial decreases in monthly rents (\$530) with almost no reduction in monthly owner costs (\$15). At nearby Wellesley Hills Station, allowing apartments in combination with more density would make home ownership significantly more affordable by lowering monthly owner costs by \$766.

We show that relaxing regulatory constraints can have a positive effect on housing supply and prices, but it depends on which combination of regulations is relaxed.

Studying regulations in isolation misses important interactions. To increase housing supply and lower prices policymakers should focus on combinations that change the number rather than the type of housing units allowed. Usually, prices fall for both renters and owners.

## About the author

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Figure 1: Effects of regulation on supply across space in Greater Boston



Figure 2: Effects of regulation on prices across space In Greater Boston

