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Sticker Prices, Elastic Supply, and Geography:

A Cross-Metro Housing Affordability Analysis

By Andrew Mikula

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Executive Summary

In 2024, housing in Greater Boston is unaffordable both by historical standards and relative to other parts of the country. Strict land use regulations, discretionary development approval processes, and geographical constraints have all contributed to the region's high home prices and low availability.

By contrast, the continued rapid expansion of the housing supply in many sunbelt metros—like Houston, Phoenix, and Atlanta—has both moderated prices and contributed to the trend of Americans moving there from expensive coastal areas.[1] More complicated is whether supply in such sunbelt metros can keep pace with strong demand as vacant land becomes scarcer, and whether the reliance on greenfield development that helps maintain affordability in such places is transferable to older, topographically constrained metros. If Greater Boston is going to overcome its geographic constraints to build enough housing to keep up with demand, it will need a bolder approach to infill development than exists in places like Houston.

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Meanwhile, Greater Austin has had the fastest-growing housing stock in the country in recent years, but demand shifts have still caused home prices to rise faster there than almost anywhere else in the country. Thus, it will be important for Greater Boston to proactively anticipate a faster pace of housing development and adjust regulations accordingly, as Austin eventually did in 2023 and 2024.

Even in places where it is physically or financially difficult to construct new buildings, reforms to building codes and development review procedures could make it easier to add new units in existing structures. This applies to places like Springfield, Massachusetts, where housing is inexpensive and low-quality due largely to weak demand, but it also applies to dense, desirable, fine-grained urban neighborhoods inside Route 128 seeking to add to the housing stock in a minimally disruptive manner.

Many other U.S. cities have made individual reforms that, taken together, could help Greater Boston achieve more broadly affordable housing in the coming decades. At the same time, no large city has adopted all these reforms at once. Policymakers aiming to improve housing affordability in Greater Boston should focus on making it easier to both construct small multi-family buildings and retrofit older commercial areas with new housing, as well as loosen minimum lot size regulations and parking requirements.

Introduction

As of September 2024, among the 50 largest metropolitan areas in the United States,[2] Greater Boston had the sixth highest Zillow Home Value Index, following four California metros and Seattle (see Figure 1).[3] That same month, the median market-rate monthly rent price in Greater Boston was $2,951, behind only New York and four California metros among large urban areas nationwide, and 44 percent higher than the national median of $2,050.[4] Even after adjusting for the Boston region's higher incomes, in 2022, the ratio of the median single family home price to the median household income in Greater Boston was 8.1,[5] compared to 5.9 in the United States as a whole.[6] And as of April 2024, a typical Boston household would have to spend 64.5 percent of its income in monthly payments and taxes to own a median-priced home.[7]

In 2022, the ratio of the median single family home price to the median household income in Greater Boston was 8.1, compared to 5.9 in the United States as a whole.

For-sale housing has been relatively expensive in the Boston area for decades, but it's also getting more expensive *faster* than in most other large metros nationwide. Between January 2000 and September 2024, the Zillow Home Value Index in Greater Boston grew by 221 percent, faster than 36 of the 50 largest metro areas (see Figure 2).[8] In the nation as a whole, the Home Value Index grew by 194 percent over the same period.

Notably, all but one of the metros for which data is available (New Orleans) had home value appreciation faster than the Consumer Price Index, a common measure of inflation, over that

24-year span. But despite a nationwide housing affordability problem, many other large, growing urban areas with strong economies have kept housing costs substantially lower than they are in Greater Boston.

Meanwhile, according to the Zillow Observed Rent Index, market-rate rents have recently grown more slowly in Boston than in the nation as a whole, although the data are only available since 2015 (see Figure 4). Over that period, rents in Boston (and every other major metro except for San Francisco and San Jose) still grew substantially faster than the consumer price index.

Figure 1: Zillow Home Value Index Price for the 50 Most Populous Metropolitan Areas in the United States, September 2024[9]

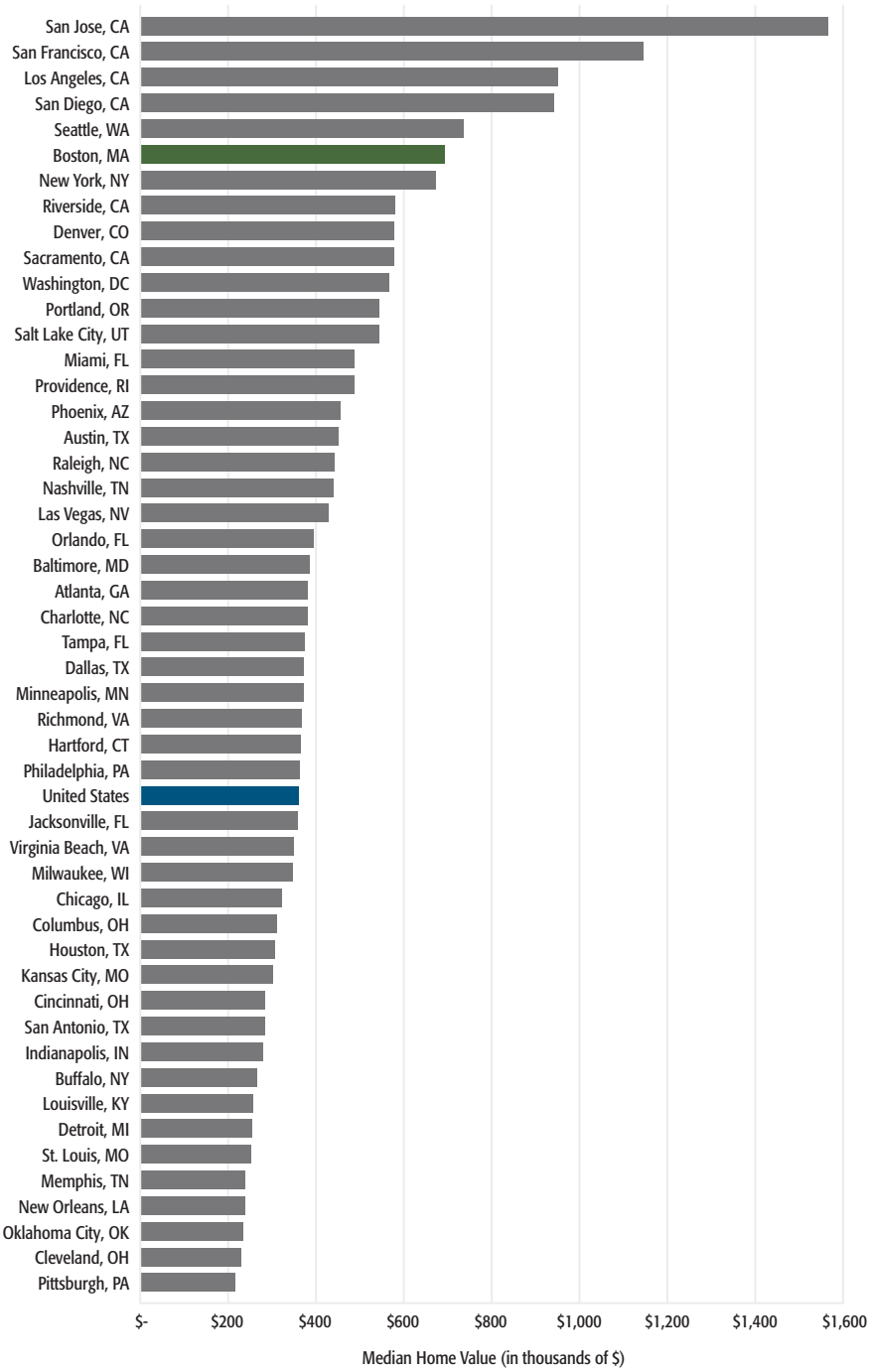
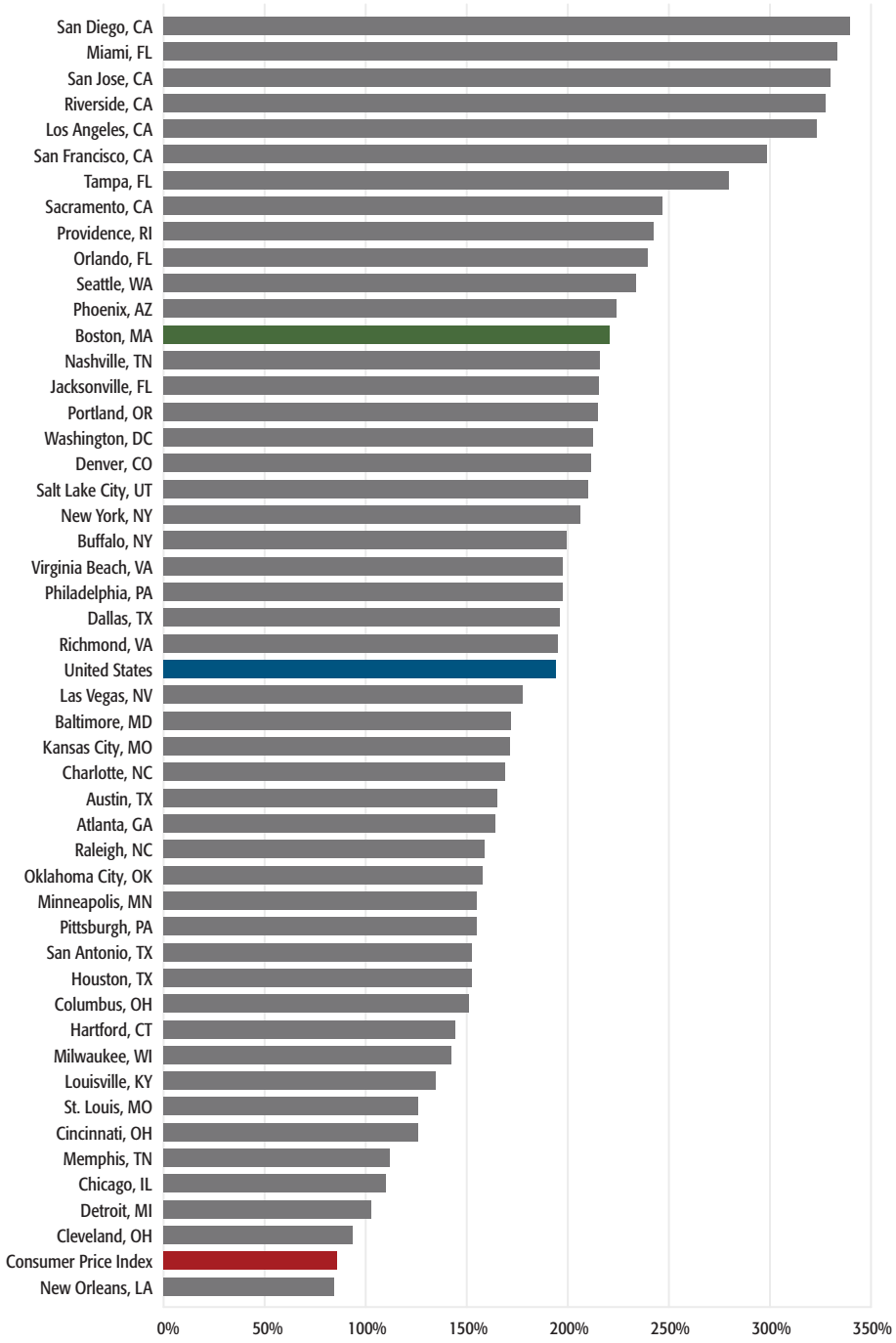


Figure 2: Zillow Home Value Index Appreciation for the 50 Most Populous Metropolitan Areas in the United States and Change in Consumer Price Index, January 2000 to September 2024[10]*



* Indianapolis was excluded due to insufficient data.

Figure 3: Zillow Observed Rent Index for the 50 Most Populous Metropolitan Areas in the United States, September 2024[11]

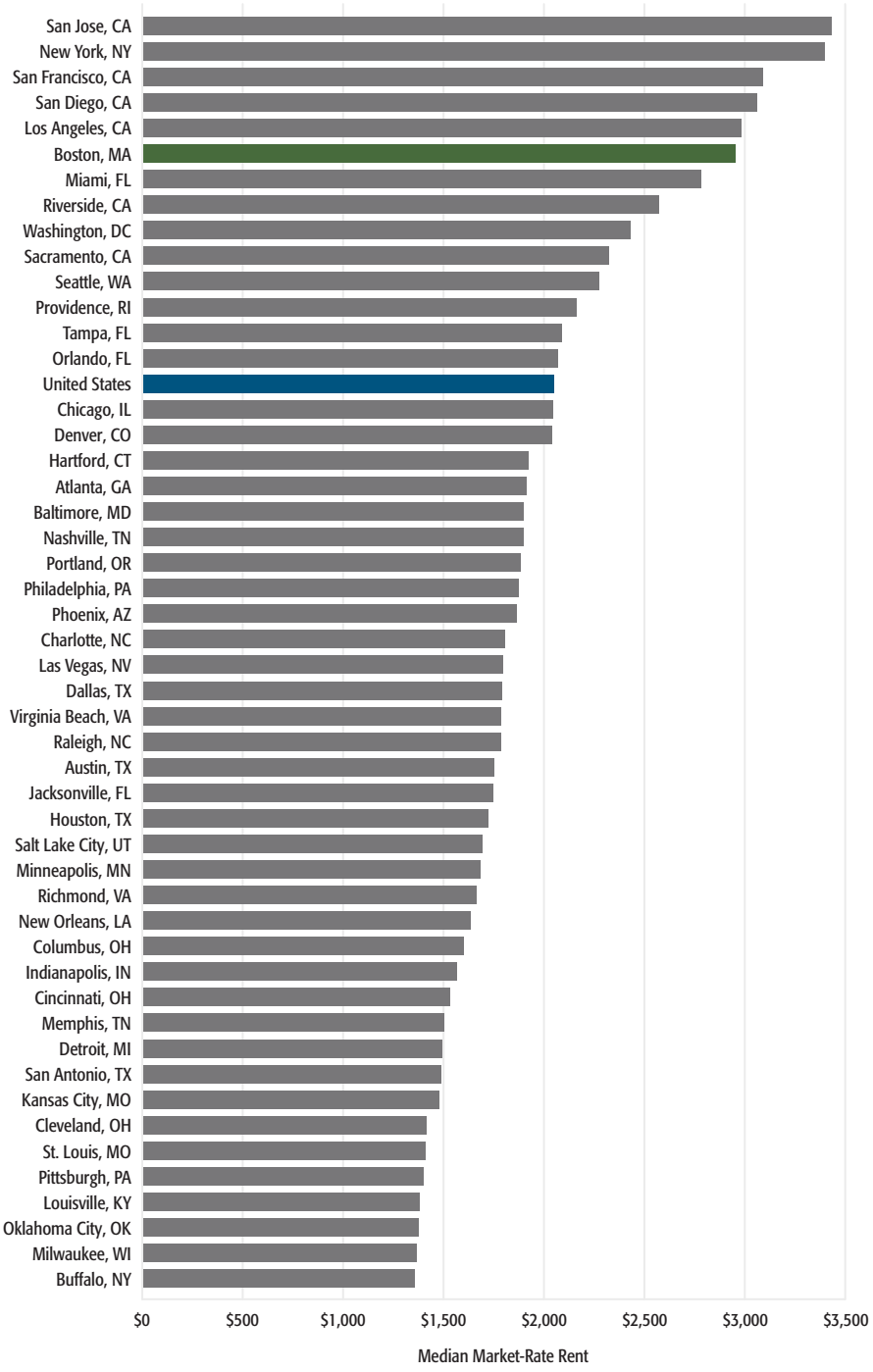
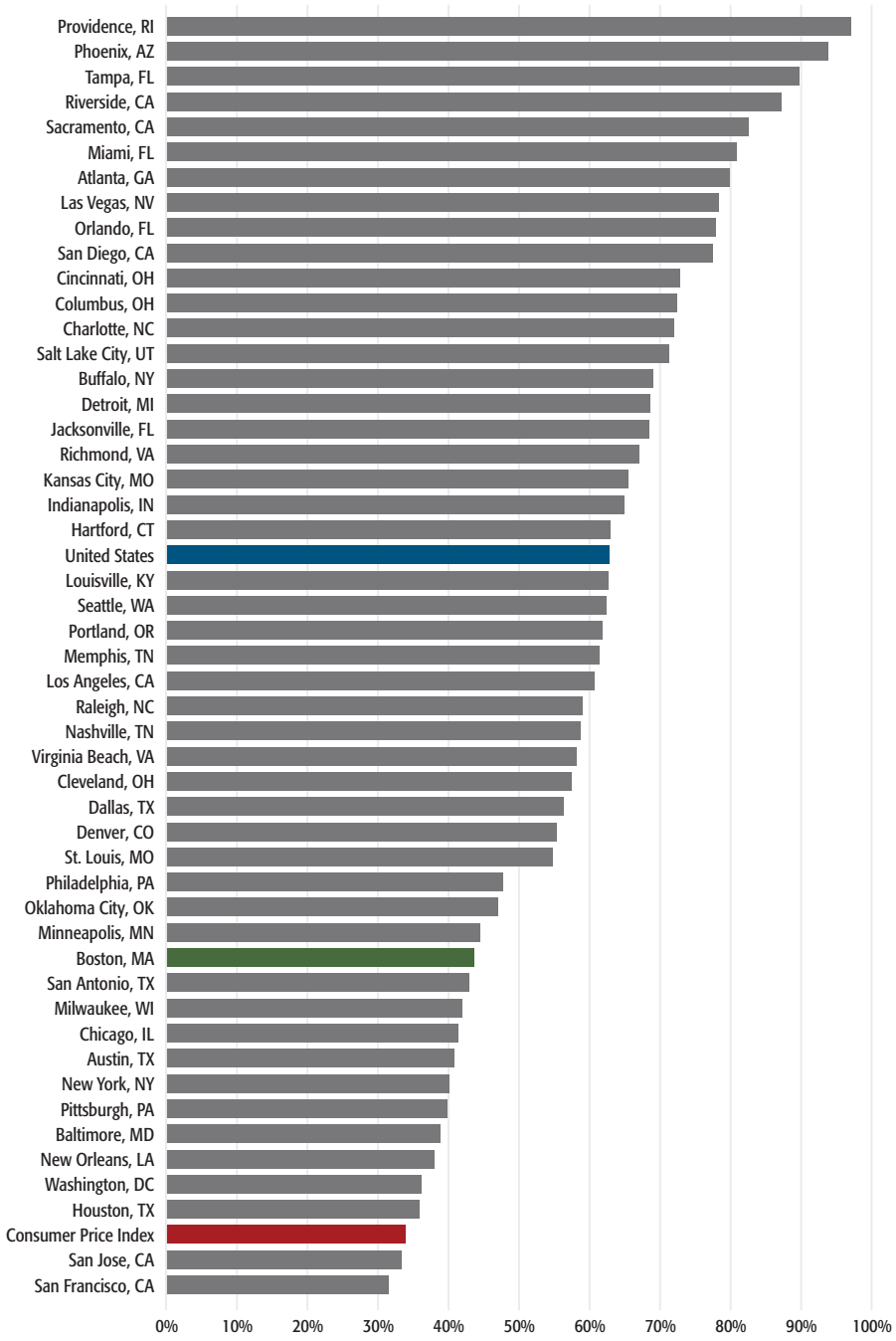


Figure 4: Zillow Observed Rent Index Appreciation for the 50 Most Populous Metropolitan Areas in the United States and Change in Consumer Price Index, January 2015 to September 2024[12]



The goal of this report is twofold: first, to understand how some large American metropolitan areas have maintained a broadly affordable housing stock in the face of strong demand and, second, to understand why housing affordability challenges still sometimes surface in areas with either weak demand or ballooning supply. Both these scenarios offer lessons for Greater Boston as it wrestles with its expensive and outdated housing stock. The paper first examines geographic and regulatory constraints in Greater Boston before discussing land use policies in Houston and other fast-growing sunbelt metros, including whether successful policies in other places can expect to achieve results in different contexts. The idea that housing affordability is primarily related to the

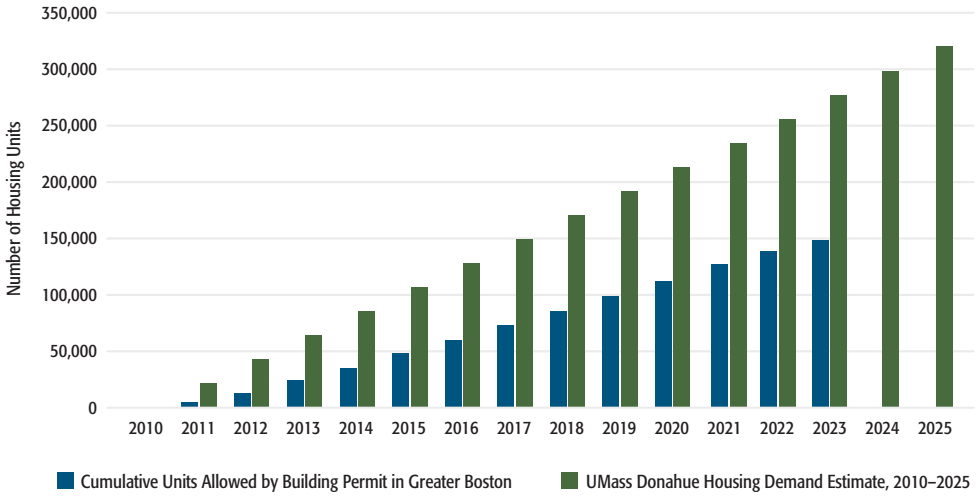
desirability of a given locale, rather than supply-side policies, is also addressed via case studies of Springfield, Massachusetts and Austin, Texas. The paper concludes with an examination of the most promising policies from around the country that could contribute to greater affordability in Boston, and related recommendations.

Boston: Aging, Over-Regulated, and Anti-Development

Large, coastal U.S. cities with booming economies have, as the Bipartisan Policy Center puts it, "not increased the supply of housing to accommodate demand," and Boston is no exception.[13] The UMass Donahue Institute has projected that the five-county Greater Boston region would need 320,000 new housing units between 2010 and 2025 to accommodate the growing number of households.[14] Based on data available through 2023, the region is actually on pace to build about 55 percent of that goal (see Figure 5).[15]

The UMass Donahue Institute has projected that the five-county Greater Boston region would need 320,000 new housing units between 2010 and 2025 to accommodate the growing number of households. Based on data available through 2023, the region is actually on pace to build about 55 percent of that goal.

Figure 5: Cumulative UMass Donahue Institute Housing Demand Estimates and Actual Greater Boston Units Allowed by Building Permit, 2010–2025



There are many nationwide macroeconomic factors that explain the particularly low volumes of new housing in recent years — high interest rates, ballooning construction costs, and a persistent construction worker shortage.[16] But broadly speaking, there are three main reasons why Greater Boston has struggled more than the nation as a whole to build enough housing: regulation, local politics, and geography.

The first reason is perhaps the most intuitive. Greater Boston has some of the strictest local land use regulations in the country, across a wide variety of categories. The original 2006 Wharton Residential Land Use Regulatory Index ranked Greater Boston as having the second strictest local regulatory environment for new housing among metros with a sufficient number of observations.[17] Only nearby Providence ranked higher.

More recently, the Boston area has also ranked in the top 10 metros with the strictest zoning laws in the National Zoning and Land Use Database.[18] Zoning laws specifically control the allowable use, density, and dimensional attributes of new development through measures like the maximum building height, minimum lot size required to build a house, and minimum off-street parking per unit. One 2021 National Bureau of Economic Research (NBER) study even used the term "zoning tax" to describe the "amount by which land prices are bid up due to supply side

A typical quarter-acre lot within 15 miles of Boston comes with a "zoning tax" of $158,000, compared with $30,000 for an equivalent property in Atlanta and $7,000 in Nashville.

regulations."[19] The study estimated that a typical quarter-acre lot within 15 miles of Boston comes with a "zoning tax" of $158,000, compared with $30,000 for an equivalent property in Atlanta and $7,000 in Nashville.[20]

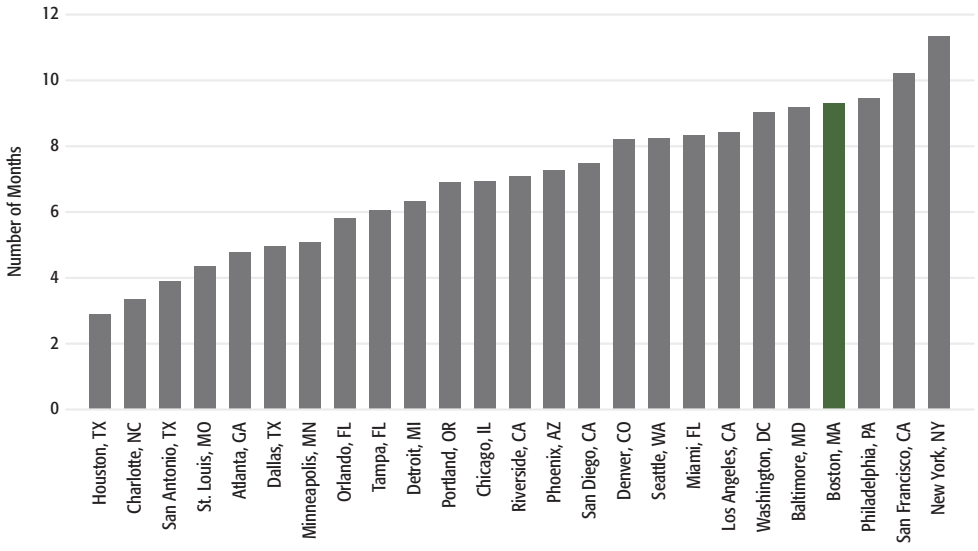
Beyond zoning, environmental regulations can also drive up the cost of building new housing. In Massachusetts, localities are allowed to have septic system regulations and wetlands protections that go far beyond state standards.[21] Detractors have focused their ire in particular on the stricter septic system rules, which, according to Massachusetts Housing Partnership Executive Director Clark Ziegler, "rarely have any environmental or scientific basis."[22] Massachusetts also has one of the nation's most stringent energy efficiency requirements for new buildings,[23] although there is some debate about the extent to which lower operating costs and state-issued tax credits offset the higher upfront costs these requirements create.[24]

Relatedly, discretionary local reviews both delay projects and inject a lot of uncertainty into the process.[25] In Greater Boston, local regulations often require developers of multi-family housing to appear before a Planning Board or other local elected body to apply for a "special permit," which is not just a procedural formality. Such authorizations are frequently rejected for a whole litany of reasons that are hard to predict. In 2021, the Boston Planning & Development Agency rejected a mostly income-restricted 31-unit apartment building on the grounds that it had insufficient parking, despite being located in the heart of Roslindale, within 1,000 feet of a Commuter Rail station and multiple bus lines.[26] Upon appeal, the project was eventually approved in 2023, nearly 2.5 years after it was first proposed.[27]

Such delays are part of a broader pattern. A 2016 Trulia study found that between 1996 and 2016, building permit approvals took an average of 9.3 months in Greater Boston.[28] Of the 100 metros included in the study, only 11 had a longer average approval period, including New York and San Francisco. By contrast, building approvals took less than four months in places like Charlotte, San Antonio, and Oklahoma City (see Figure 6).

Between 1996 and 2016, building permit approvals took an average of 9.3 months in Greater Boston.

Figure 6: Average Approval Period for Building Permit in the Top 25 Most Populous Metros in the U.S., 1996–2016[29]

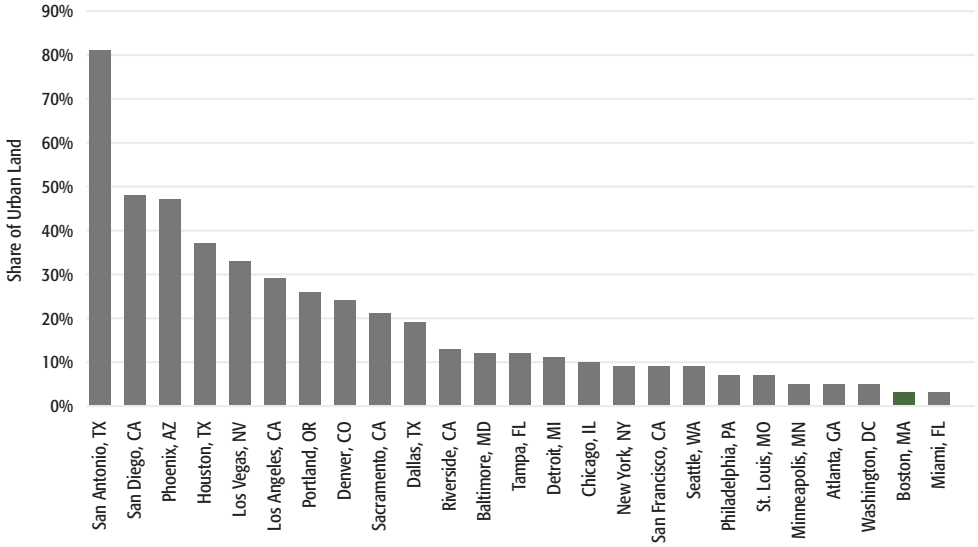


Among the 25 largest urban areas in the United States in 2020, Greater Boston had the second lowest percentage of its land area in the central city after Miami, severely limiting its ability to coordinate land use policy at a regional level.

Some states even have state preemption of local process delays that ensure that most projects are either approved or rejected swiftly. For example, Minnesota prohibits local government agencies from taking more than 60 days to issue or deny a building permit, subdivision request, or variance from local zoning restrictions for a proposed project as long as the permit application is complete.[30] Similarly, Texas gives decision-making authority to a third-party reviewer if a local government "does not take action" on development application documents within 15 days of receipt.[31]

At a higher level, the political boundaries of land also play a role in the extent to which local officials are primarily accountable to property owners immediately surrounding a proposed project or regional housing needs. Among the 25 largest urban areas in the United States in 2020, Greater Boston had the second lowest percentage of its land area in the central city after Miami, severely limiting its ability to coordinate land use policy at a regional level (see Figure 7). Among the cities with the largest shares of urban land in the central city are housing production juggernauts like San Antonio, Phoenix, and Houston.

Figure 7: Central City Land Area as a Percentage of Total Urban Land Among the Top 25 Largest Urban Areas in the United States, 2020[32]



The third factor constraining housing supply growth in Boston more than in the nation as a whole is important, but much less malleable: geography. Technically, 46 percent of the area of the City of Boston is water.[33] And regionally, more than 34 percent of Greater Boston is undevelopable due to wetlands, steep slopes, and other geographic constraints, placing it in the top third in that category among the country's large metros.[34] Empirically, according to a 2008 University of Pennsylvania study, the metros where housing supply is the least responsive to changes in home prices (i.e., the least "supply-elastic") also tend to be among the most land-constrained. In the study, the least supply-elastic metros were Los Angeles (wedged between the Pacific Ocean and several mountain ranges) and Miami (wedged between the Atlantic Ocean and the Everglades). Boston was the fifth least supply-elastic out of the 95 metros studied.[35]

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Such geographic constraints necessitate building more in locations with pre-existing development ("infill"), which is often more expensive for builders than expanding into areas without pre-existing development ("greenfields"). This is because infill creates complications for builders, who must work with or around existing utilities and on small or irregularly shaped lots, and are more likely to find environmental contamination or have to remove existing structures.[36] By contrast, it's relatively common for builders in the south and west to convert hundreds of acres of open land into thousands of new homes at a time, taking advantage of flat geography, the land's relatively untouched state, and economies of scale.[37]

In sum, Greater Boston's housing supply is less able to accommodate regional needs than in other areas of the country largely because of strict regulations, long and uncertain permitting and review processes, and geographic and technical obstacles. In other areas of the country that have grown their housing supply much faster than Boston has, regulations tend to be looser, and politics and geography more development-friendly. But it's worth delving into the details of how these fast-growing and relatively affordable areas have accomplished this, both technically and politically.

Houston: The Market Urbanist's Dream

Take another look at Figure 2 above — specifically, the metropolitan areas with the slowest price growth between 2000 and 2024. Most of them have experienced weak economies, stagnant or declining populations, and high crime rates over the period — cities like New Orleans, Cleveland, and Detroit, whose home prices have approximately doubled in those 24 years. But just slightly above that, with home prices that have risen by a factor of about 2.5, is a large and fast-growing sunbelt metro with a booming economy: Houston.

Houston is the only major city in the United States that doesn't have zoning laws, the set of regulations that directly restrict the density, use, and dimensional attributes of new buildings.[38] While detractors will point out that Houston has minimum parking standards and restrictive covenants that often act in zoning's place, the city still maintains a tolerance for residential density and mixed-use neighborhoods that would be unfathomable in most of New England. For most parcels in the City of Houston, the minimum lot size requirement for a single-family home is 1,400 square feet,[39] compared to 9,000 in parts of Boston[40] and 40,000 in parts of Brookline.[41]

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Houston's lack of zoning makes it relatively easy for a given parcel of land to change use, including allowing lots currently occupied by commercial or industrial activities to accommodate new housing (see Figure 8). While such conversions are fairly common in Greater Boston too, they are rarely allowed by-right. For example, Revere requires that developers receive a special permit from its city council to build multi-family housing in its Central Business zoning district, and prohibits multi-family housing from its industrial districts.[42] The conversions of industrial land to residential that do occur in Greater Boston often have to use Chapter 40B to circumvent local zoning — examples in Needham,[43] Newton,[44] and Andover[45] attest to this. In Houston, such residential conversions rarely require special permits, and it's not necessary to use state processes to waive prohibitive local rules.

Figure 8: Photos Taken from the Same Location of Warehouses in 2011 (Left) and an Apartment Complex in 2022 (Right) on Summer Street in Houston[46]

Houston's development approvals process is also much more streamlined and less discretionary than in Greater Boston. Houston has site plan reviews that check for conformity to administrative rules,[47] but the city's Planning Commission is only granted the power to approve or outright deny proposed new housing if the land is subject to "deed restrictions, separately filed restrictions, or plat restrictions."[48] In most of the city, these hyper-local restrictions, often put in place by homeowners associations or as part of the approvals process for previous subdivisions, simply don't exist,[49] and even where they do they usually have a lifespan of only 25–30 years.[50] In other words, unlike most Boston-area communities, there's no citywide regulation automatically requiring a special permit or public hearing for broad categories of potential developments. This, in turn, helps explain why Houston has the shortest average building permit approval period (2.9 months) among the 25 most populous metros in the country, less than a third of Boston's average (see Figure 6).[51]

By making it easier to increase the supply of housing, Houston's relatively loose building regulations ultimately contribute to low and stable home prices. In 2022, a Federal Reserve Bank of Boston study found that "relaxing density restrictions…is the most fruitful policy reform for

increasing supply and reducing multifamily rents."[52] And other studies have concluded that "local bureaucracy, measured by building approval delays, affect housing supply elasticity" even more so than zoning laws.[53] Greater Houston's housing stock grew by 18.7 percent between 2010 and 2020, compared to 7.9 percent in Greater Boston.[54] In case the connection between supply and affordability is still unclear, a 2021 Freddie Mac analysis found that a 1 percent increase in the per-capita housing supply led to a 0.83 percent decrease in home prices.[55]

Figure 9: Comparison of Expected Annual Household Expenditures among Median-Income Families who Bought a Home in Boston and Houston in 2024[56]

	Boston		Houston	
	Dollar Amount	Share of Median Household Income	Dollar Amount	Share of Median Household Income
Median Household Income	$90,997	100%	$61,649	100%
Expected Housing Costs*	$58,656	64.5%	$28,671	46.5%
Remaining "Spending Money" for Taxes, Healthcare, Food, Transportation, etc.	$32,341	35.5%	$32,978	53.5%
Non-Housing Cost of Living Adjustment Factor	1.3798	-	1	-
Apples-to-Apples Non-Housing Spending Money	$23,439	25.8%	$32,978	53.5%

* Estimate of mortgage payments and property taxes based on median home values, average interest rates, and a 30-year mortgage with a 20% down payment.

Ultimately, despite lower average incomes, a typical middle-class family who bought a home in Houston in 2024 can expect to have more extra spending money than a similar family in Boston, largely because of housing costs (see Figure 9). That said, loosening land use regulations and cutting local bureaucracy alone is unlikely to make housing affordability in Boston resemble that of Houston, and a big reason why is the difference in the cities' development patterns and topography.

Despite lower average incomes, a typical middle-class family who bought a home in Houston in 2024 can expect to have more extra spending money than a similar family in Boston, largely because of housing costs.

Dream or Fantasy?

Not to be discounted in Houston's model for maintaining broadly affordable housing is its land availability. Less than 9 percent of the metro's land area is considered undevelopable due to topographical constraints, placing it in the bottom quarter of major metros in the country in that category.[57] And even though its absence of traditional zoning and streamlined permitting process make it conducive to urban redevelopment, Houston is incredibly reliant on the availability of large tracts of open land in previously undeveloped areas to keep up with housing demand. In fact, just 24.4 percent of Greater Houston's housing stock added between 2010 and 2020 was built inside the city limits,[58] even though the city makes up 36.5 percent of the region's urbanized area.[59] In Greater Boston, 19.6 percent of new housing added between 2010 and 2020 was built in the City of Boston,[60] even though the city accounts for just 2.9 percent of the region's urbanized area.[61] In other words, there's probably more infill development happening in Boston than in Houston as a percentage of each region's total housing stock growth.

Houston's land-intensive pattern of expanding development into previously undeveloped areas (often called "urban sprawl") is cause for concern about the transferability of its housing policies to older, more geographically constrained metros like Greater Boston. In fact, writer and urbanist Daniel Herriges has referred to the wider availability of developable land in sprawling sunbelt metros as a "release valve" that helps obscure what are, broadly speaking, similarly bad policies as exist in the most housing supply-constrained markets in the country.[62]

While Houston does not have traditional zoning, it does have stringent parking requirements for new housing,[63] and many larger developments in Houston are the subject of protests and lawsuits by neighbors. One 134-unit apartment tower, located three miles from downtown on a bus route, was finally allowed to proceed in 2023, 16 years after an earlier version was first proposed.[64] Those 16 years featured multiple rounds of legal action, recession-driven delays, and new city council directives that required buffers between new high-rise buildings and surrounding residences.[65]

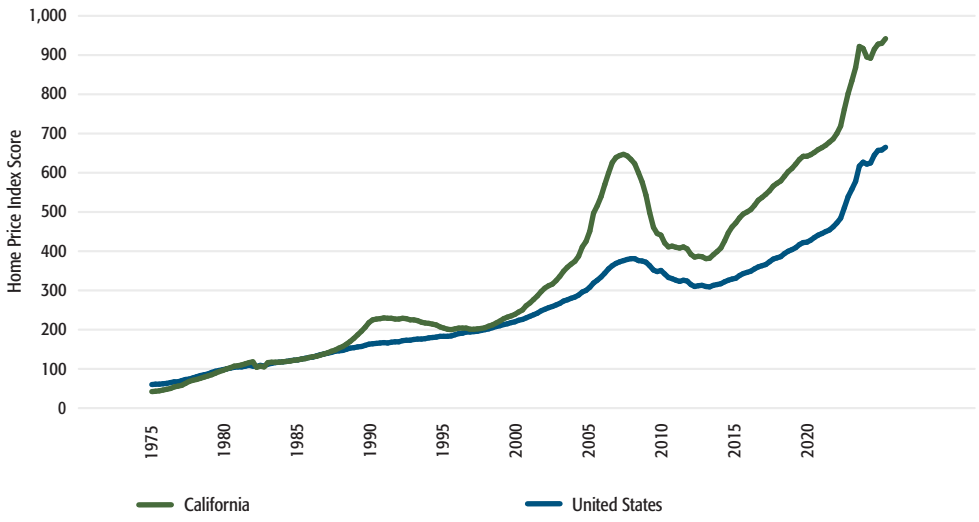
On paper, infill development is still easier for builders in Houston than in Boston, but building on large tracts of flat, open land with few pre-existing neighbors is easier than infill development pretty much everywhere. Needless to say, Greater Houston has a lot more of that open land than Greater Boston. According to LandWatch.com, Greater Boston had 3,603 acres of land listed for sale in August 2024, less than 10 percent of the 36,748 acres listed for sale in Greater Houston.[66]

When land-constrained metros like Boston are overly dependent on Houston-style sprawl, the resulting growth pattern is unsustainable. Some of today's most supply-constrained California metros, like Silicon Valley and Greater Los Angeles, used explosive growth on the urban periphery to meet their housing needs for much of the 20th century. But once the Los Angeles Basin, San Fernando Valley, and most of the land within 10 miles of San Francisco Bay were entirely urbanized, housing development slowed substantially.

When land-constrained metros like Boston are overly dependent on Houston-style sprawl, the resulting growth pattern is unsustainable.

By 2001, renowned demographer William Frey declared that a "shortage of available land threatens how the Golden State will grow."[67] Instead of accommodating new housing in older suburbs, as Frey envisioned, the state simply grew much slower. Since the 1990s, housing stock growth in California has lagged behind national averages,[68] with the predictable result of worsening affordability (see Figure 10).[69]

Figure 10: All-Transactions Housing Price Index* in the U.S. and California, 1975–2024

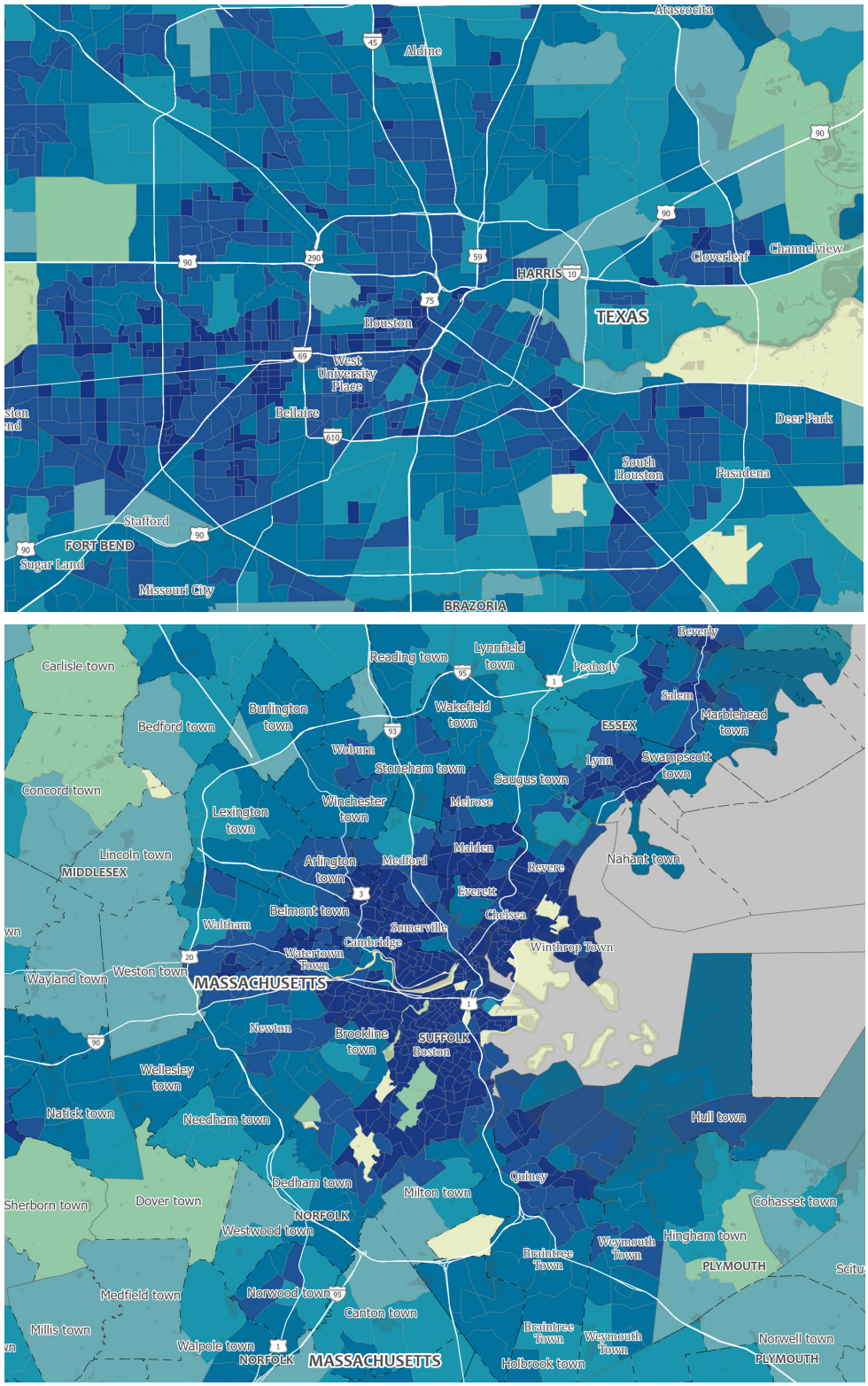


* Indices are normalized to a score of 100 in 1980 to facilitate comparability. Index levels do not indicate relative home prices at a given point in time.

It's hard to know whether land-rich Greater Houston is destined for a similar fate as California anytime soon. But at the municipal level, Houston officials acknowledge the increasing difficulties of "providing a range of housing options for people of all incomes" despite the city's national reputation for affordability.[70] A 2020 study commissioned by the City of Houston on residential development best practices found that "small parcels, old sites, and adhering to the City's development regulations add costs and contribute to the dwindling supply of affordable homes close to jobs, transit, and cultural amenities."[71] Such language could just as easily refer to the City of Boston.

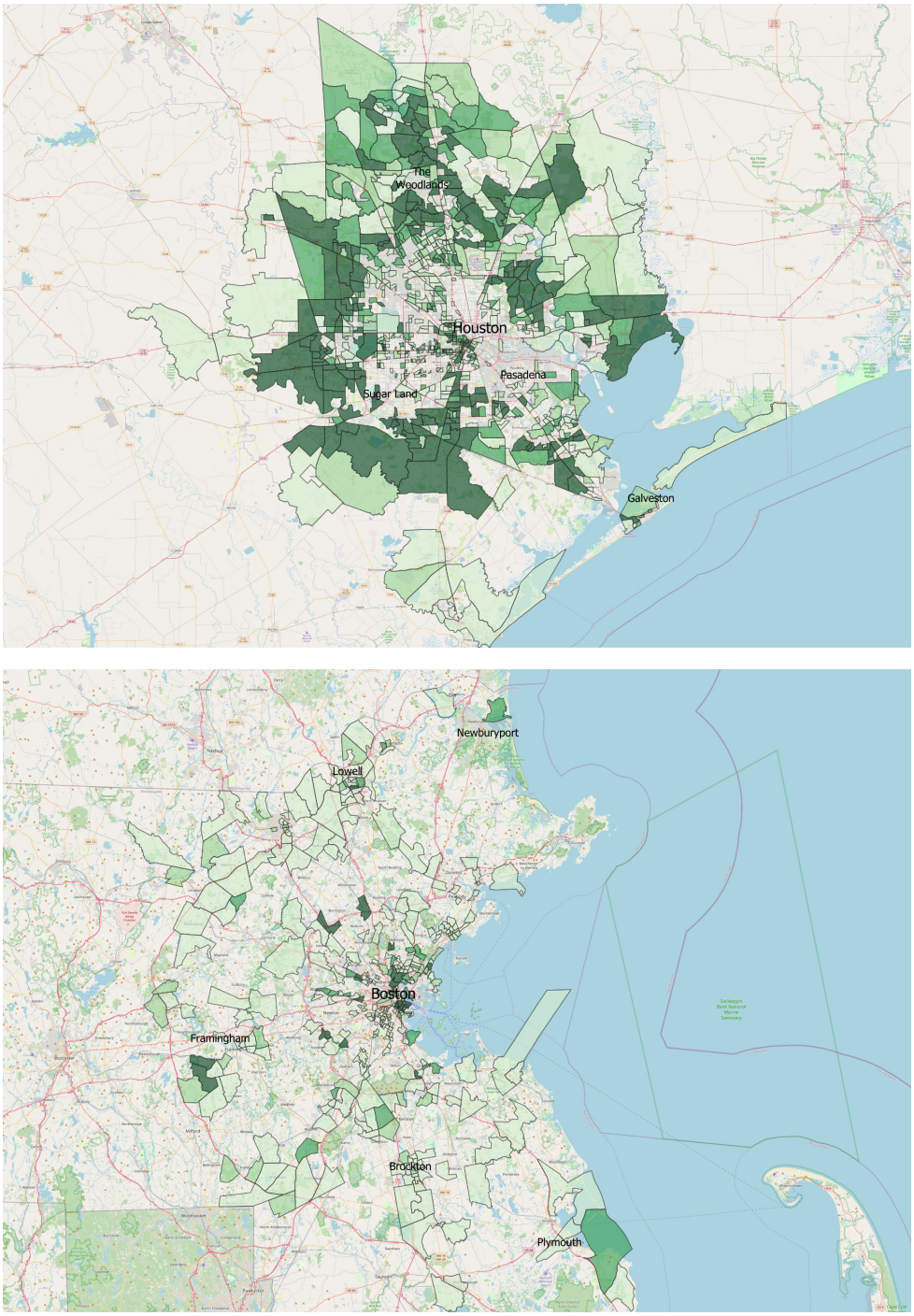
Further, the city of Houston is a microcosm for the region's reliance on urban sprawl. Even within Beltway 8 (between 10 and 15 miles from downtown), the highest population density neighborhoods are not concentrated around the central business district in the same way that they are in the immediate Boston area (see Figure 11).

Figure 11: Population Density Heat Map of Greater Houston and Greater Boston, 2020[72]



All this is to say that policymakers should take caution before applying Houston's approach to housing affordability wholesale to Greater Boston. Looser regulations and streamlined permitting helped give the City of Houston 202,000 more residents in 2020 than it had in 2010, but the vast majority of the region's growth is still in far-flung exurban subdivisions (see Figure 12). A sprawling development pattern proved unsustainable in California, and given Greater Boston's substantial geographic constraints, it likely would be unsustainable here as well.

Figure 12: Map of Census Tracts with at least 10% Population Growth Between 2010 and 2020 in Greater Houston and Greater Boston[73]



Austin: The High-Demand Scenario

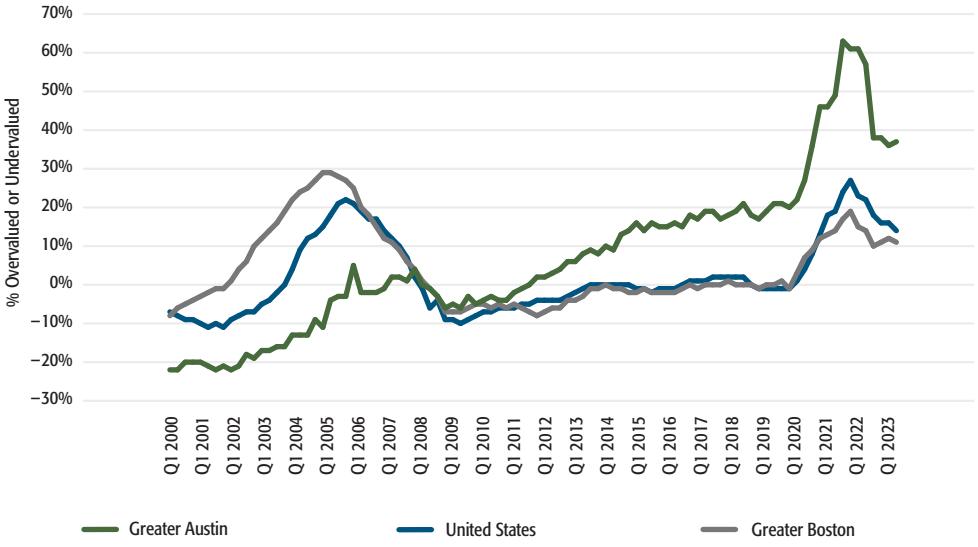
Among the 50 largest metropolitan areas in the United States, Austin, Texas had the fastest housing stock growth rate between 2010 and 2020: 34.0 percent.[74] A ballooning tech sector and a constant influx of students have driven the region's booming economy, a close parallel to Boston. Unlike some other sunbelt cities, such as Phoenix, Las Vegas, and Houston, more than a third of Austin's housing stock growth has occurred within city limits in recent years, as opposed to in newly minted suburbs.[75]

All the same, the volatility of housing demand in such a high-growth region has created a turbulent market for home buyers and sellers alike. In a little over two years following the 2020 COVID-19 lockdowns, Austin experienced a 65 percent increase in median home values that squeezed buyers and attracted a frenzy of investment to the region.[76] In the two years thereafter, the housing market contracted sharply, with new housing unit approvals declining by 62 percent between June 2022 and September 2024[77] and median values tumbling by 19 percent over the same period.[78]

The volatility of housing demand in such a high-growth region has created a turbulent market for home buyers and sellers alike.

Despite the incredible pace at which its housing stock has expanded, Austin has experienced some of the nation's fastest home price growth since the early 2000s.[79] Single-family home values appreciated by 307 percent in the City of Austin between Q1 2000 and Q2 2024, compared to 228 percent in Boston.[80] Metro-wide, the Federal Housing Finance Agency's all-transactions home price index rose by 299 percent in Austin between Q1 2000 and Q2 2024,[81] while the corresponding figure was 217 percent in Boston.[82] While these facts may seem at odds with Figure 2, the reality is that Austin's housing market has been considered "overvalued" since at least 2012, and understanding why offers lessons for affordability in Austin and beyond (see Figure 13).

Figure 13: Moody's Analytics Quarterly Assessment of Home Valuation Relative to Underlying Market Indicators for Greater Austin, Greater Boston, and the United States, 2000–2023[83]



An overvalued housing market is, by definition, one where prices are higher than is sustainable given underlying indicators of both costs (materials, labor, utilities, etc.) and buyers' ability to pay (incomes, rents in the same submarket, etc.).[84] In general, a national environment in which construction costs are increasing by up to 25 percent per year (as they were in 2020 and 2021) is conducive to overvaluation if builders expect costs to continue increasing faster than they are, and then price those cost projections into their units. This phenomenon shows up clearly in the Austin data: construction material price inflation slowed down substantially by the first quarter of 2022,[85] and Austin's housing market overvaluation jumped from 49.0 percent in Q4 2021 to 63.3 percent in Q1 2022.[86]

But the most important underlying causes of home overvaluation in Austin can be traced to local market dynamics, not national cost increases. For example, incomes within a metro area are traditionally a strong predictor of housing prices. But according to one local realtor in Austin, as recently as March 2021, "the majority [of home buyers] are inbounding from other states."[87] To the extent that these newcomers price long-time residents out of buying opportunities, at least until supply catches up, there could be a mismatch between sales prices and the "value" calculations derived from the local socioeconomic profile.

Relatedly, the COVID-19 pandemic greatly increased demand for housing overall, in large part because remote work trends made additional living space more desirable.[88] As of 2022, Austin had the 19th highest concentration of remote workers among the 344 largest cities in the country,[89] and many of them first moved to Austin in the early months of COVID.[90]

As of 2022, Austin had the 19th highest concentration of remote workers among the 344 largest cities in the country, and many of them first moved to Austin in the early months of COVID.

Even before COVID, Austin was a magnet for domestic migrants seeking lower housing costs than they could find on the coasts. The 2020 American Community Survey, using data from 2016 to 2020, found that, on net, 9,802 Californians were moving to Greater Austin annually, almost as many as those coming from elsewhere in Texas.[91] New York and Washington State each sent a net of more than 1,000 residents to Greater Austin per year over the same period.[92] If housing were more widely available and affordable in San Francisco, Silicon Valley, and Los Angeles, then Austin would likely have a lesser influx of new residents and therefore find it easier to accommodate housing demand.

At a lesser scale, an analogous situation applies to Greater Boston and cities like Worcester and Providence, whose real estate appreciation rates have far exceeded even Boston's in recent years.[93] According to IRS data, in 2022 alone, a net of 867 tax filers moved from Greater Boston to Providence County, Rhode Island.[94]

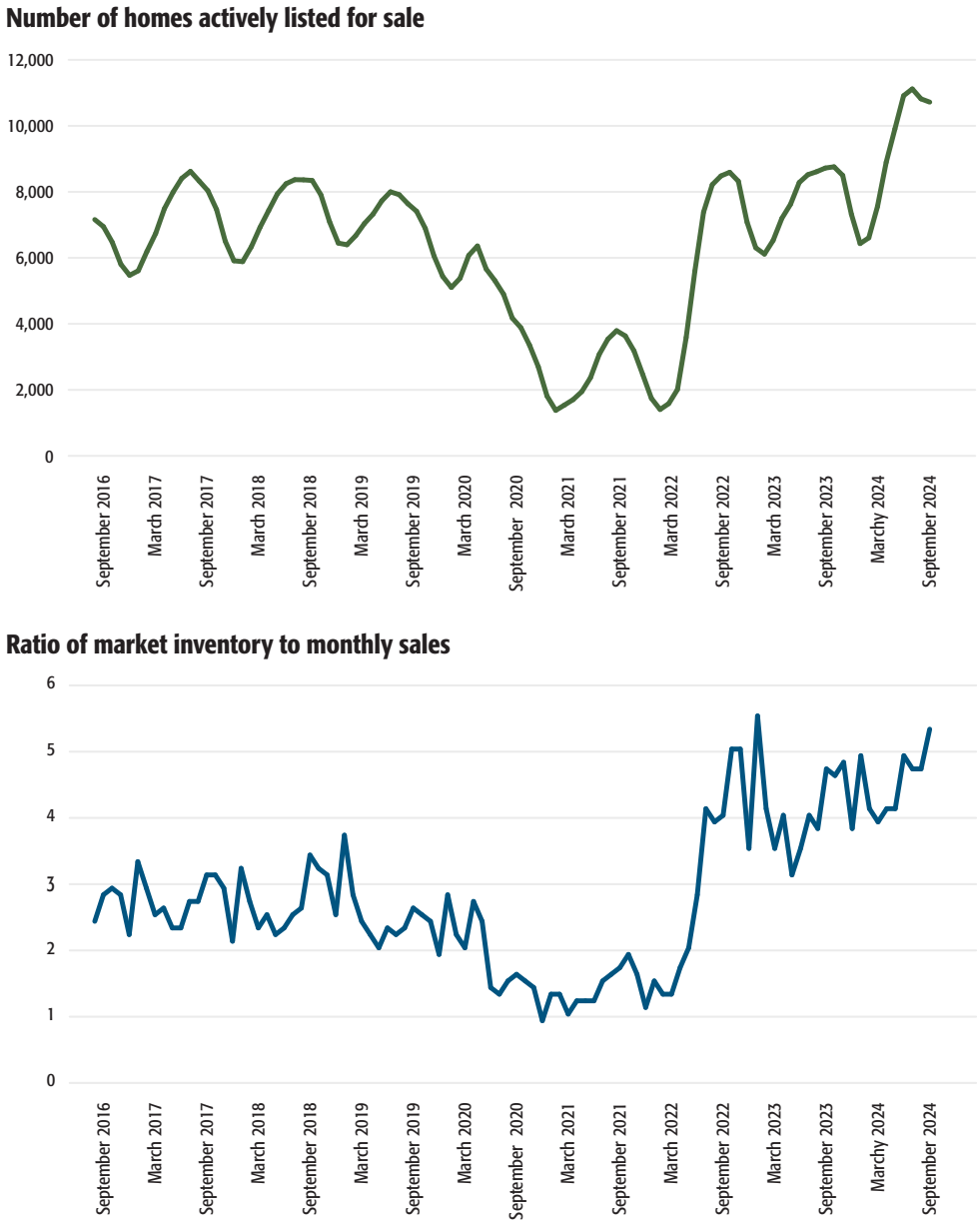
In summary, Austin's housing market has grown continuously more overvalued since the beginning of the 21st century, largely because of an influx of domestic migrants either untethered by remote jobs or escaping high housing costs elsewhere. The city is a striking example of the fact that, in the short term, changes in demand tend to cause home prices to shift more than changes in supply.

That said, many leaders in Austin seem committed to accommodating these demand shifts in the long run. Since the 2022 elections caused significant turnover on its city council, Austin has enacted a series of reforms aimed to make it broadly more feasible to build new housing. In much of the city, these reforms reduced the minimum lot size requirement from 5,750 square feet to 1,800, eliminated minimum parking requirements for new developments, and permitted up to three units to be built on parcels previously reserved only for single-family homes.[95] More targeted reforms include increasing the allowed residential density along a proposed light rail corridor, providing density bonuses to encourage the creation of income-restricted housing, and easing restrictions on constructing high-rise buildings near single-family homes.[96]

Despite the city's rapidly increasing home prices for most of the 21st century, these more recent reforms have led some observers to tout Austin as an exemplary city for housing policy. Orphe Divounguy, a senior economist at Zillow, has said that "we need more Austins around the country in order to keep housing affordable."[97]

In the meantime, the last two years in Austin have demonstrated that demand-driven price shifts work both ways. In 2022, both Meta and Google re-evaluated plans to expand in downtown Austin,[98] and between July 2022 and July 2023 Travis County (which includes Austin) experienced its first net-negative migration rate since 2002.[99] More tech layoffs followed in 2023 and 2024, including 2,700 at Tesla alone, while software company Oracle announced it will move its headquarters from Austin to Nashville.[100] By September 2024, median home values in Austin had declined for 27 straight months,[101] and active home listings and inventory/sales ratios exceeded pre-pandemic norms (see Figure 14).[102]

Figure 14: Active listings and months of supply data for Greater Austin, September 2016–September 2024[103]



In January 2024, real estate investment firm Hines found that Austin was one of three U.S. housing markets where supply was meeting long-term demand, the others being Nashville and New Orleans.[104] Simultaneously, members of the Austin Planning Commission, non-profit executives, and business community members alike have said the city is still not building enough housing to truly meet community needs, especially in terms of affordability.[105] At the very least, Austin's growing pains seem to have led to desirable policy outcomes in the interim.

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Springfield: The Low-Demand Scenario

In the United States, cities that have a mostly pre-war development pattern tend to have a housing stock that's either very expensive or very expendable. Blighted "legacy cities" like Detroit knock down thousands of housing units per year in an attempt to revitalize neighborhoods, improve public health, and discourage crime.[106]

But places with relatively weak demand for new housing can still have a housing affordability crisis. Welcome to Springfield, Massachusetts, the worst of both worlds for cities with an aging housing stock. In 2022, 38.9 percent of Springfield area households paid more than 30 percent of their income in housing costs, compared to 36.2 percent in Greater Boston.[107] All things considered, low incomes in Springfield explain the area's affordability problem more than housing prices do — in fact, the region's median home value was 7.4 percent *below* the national median in 2022,[108] while its median household income was 8.5 percent lower.[109]

In 2022, 38.9 percent of Springfield area households paid more than 30 percent of their income in housing costs, compared to 36.2 percent in Greater Boston.

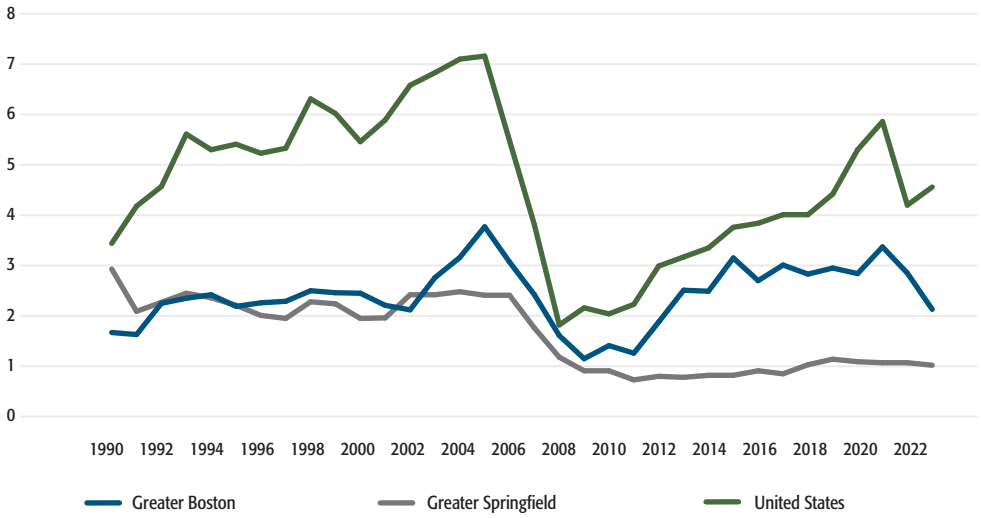
A 2018 housing study conducted by the City of Springfield even suggests that higher home prices would benefit the city by improving housing conditions and decreasing abandonment of the existing stock.[110] That said, it's hard to imagine how many low-income residents would benefit directly from higher prices, especially in majority-renter cities like Springfield and Holyoke.

Further, higher incomes alone would be unlikely to solve the affordability challenges in such places. A 2021 Freddie Mac study found that, all else being equal, a 1 percent increase in per capita incomes led to a 1.5 percent increase in housing prices.[111]

At the same time, it is often either unviable or illegal for the private sector to build much new housing in the Springfield area. As of this writing, Springfield, a city of more than 150,000, hasn't permitted more than 100 new housing units in a year since 2007.[112] Despite most of its housing stock being in apartment buildings,[113] Springfield went 20 years between 2003 and 2023 without approving a new building containing more than two housing units.[114] The most viable business model for developers there seems to involve single-family homes built one or two at a time on the city outskirts, a model that is unlikely to be able to address Springfield's housing challenges at scale.

To see why, consider that the average hard cost (including construction materials, labor, and utilities) to build a new home in the city of Springfield in 2024 is about $170 per square foot, according to recent building permit data.[115] Assuming a similar portion of the total development costs (including land, financing, etc.) are in hard costs in Springfield as in the nation, a builder would need to sell a typical home for about $303 per square foot to achieve a net profit margin of 8 percent, the state average.[116] But the median listing price for a home on the market in Springfield is only about $200 per square foot,[117] a sign that, due to prohibitive costs, market demand alone does not justify new construction as a means of improving housing quality and availability for existing residents. Regionwide, in recent years Greater Springfield has permitted housing at less than half the per capita rate of Greater Boston and less than a quarter the rate of the country as a whole (see Figure 15).[118]

Figure 15: Building Permits Issued Per 1,000 Residents in Greater Springfield, Greater Boston, and the United States, 1990–2023



In practice, existing homes also frequently fall into disrepair, as maintenance costs exceed the rents and/or the ability of the homeowner to pay. Renovating an existing home is usually less expensive than building a new one, making renovations a potentially impactful reform area.[119] Thus, Springfield should focus on directly addressing the adverse regulatory conditions around refurbishing existing buildings, an approach that also holds lessons for Greater Boston.

Existing homes also frequently fall into disrepair, as maintenance costs exceed the rents and/or the ability of the homeowner to pay.

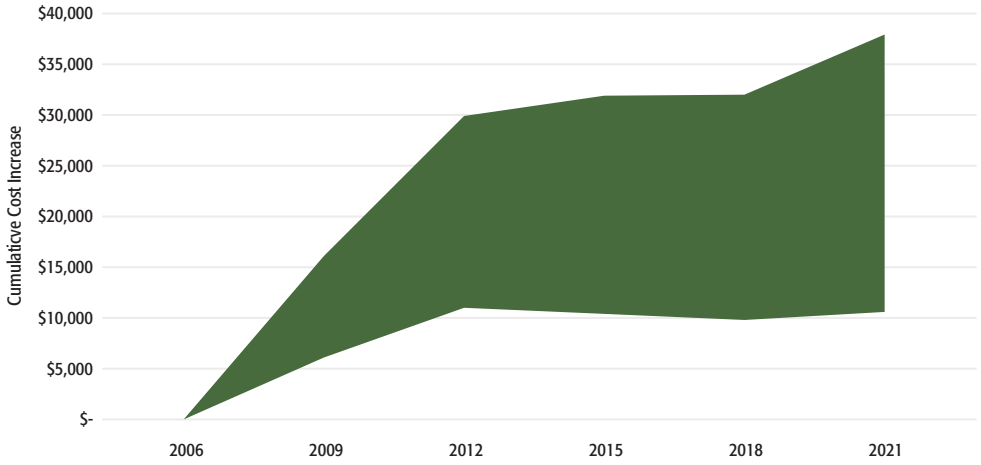
One issue in this regard is that, in Massachusetts, renovations of at least 30 percent of the fair market value of a home trigger a requirement to bring the entire building into conformity with the state building code.[120] For older buildings in Springfield in need of renovation, meeting modern building code requirements could be very expensive and complicated. The National Association of Home Builders has estimated that between 2006 and 2018, changes to the International Residential Code, from which the Massachusetts State Building Code is derived, raised the costs of a typical home by between $10,600 and $37,900 (see Figure 16).[121] For the 74 percent of homes in Springfield that were built before 1970, the costs could be much higher,[122] and national studies have found that resolving a code violation does not increase a home's sale price.[123] Further, the monetary threshold for triggering building code conformity requirements in Springfield is much lower than in Greater Boston for the simple reason that market home values are lower in Springfield.

Making renovations more financially feasible in Springfield could involve tying building code conformity requirements to a large absolute dollar amount, which is then adjusted for inflation, rather than a percentage of the property value. Some observers have even suggested allowing owners of older buildings to opt-in to be permanently subject to older building code standards "in all but the most essential categories of accessibility upgrades and toxin containment."[124]

Some observers have even suggested allowing owners of older buildings to opt-in to be permanently subject to older building code standards.

In Springfield, these kinds of reforms could substantially reduce the cost of turning an abandoned or decrepit home into a modern, livable one. But in Boston, where there is more of a market for expanding the housing stock, they could also make it substantially easier for property owners to bring new residential uses to older, non-conforming buildings. For example, it could reduce the costs to a homeowner of adding an accessory dwelling unit in their basement or detached garage. Small business owners could also find it easier to add a couple of apartments above or behind their storefront, or convert their existing single-use office or home into a live/work arrangement. This approach is well-suited to urban blocks with small parcels and disparate ownership, an arrangement that otherwise makes it difficult and expensive to execute new construction at scale.

Figure 16: Cumulative Estimated Change in Cost to Build a Typical Home in the United States because of Changes to the International Residential Code, 2006–2018[125]



These incremental residential additions or conversions already happen in Springfield too, but they are often subject to substantial permitting delays, fees, and stringent zoning restrictions. One Springfield property owner spent four years obtaining city approval to reconfigure an existing building to add smaller, more affordable units.[126] And two blocks from Springfield Union Station, a proposed residential conversion of a former strip club had "barely even started the permitting phase" a year after it was purchased by a developer.[127]

Greater Springfield also includes many suburban communities, like Hadley and Longmeadow, where new construction is much more financially viable than in the urban core. As in Greater Boston, political resistance to denser development, zoning laws, parking requirements, and other regulatory factors are clearly among the greatest obstacles to improving the availability and affordability of housing in these communities. For example, West Springfield mayor Will Reichelt has described getting approvals for apartment construction from the city council as "an uphill battle" simply because some of the councilors are opposed to denser housing as a whole.[128]

Red tape around development in Springfield is far more than an anecdotal problem. The National Zoning and Land Use Database ranks Greater Springfield as having the nation's 10th most restrictive zoning among metropolitan areas with sufficient data — Boston is #9.[129] Building permit approvals are faster in Springfield on average (6.22 months) than in Boston (9.3 months), but still more than twice as long as in Houston (see Figure 6).[130] Among the nation's 100 largest metros, Springfield has the ninth lowest housing price elasticity, meaning home supply is slow to respond when home prices surge — likely due to a combination of regulatory factors and weak market conditions.[131]

Decades of low housing demand have obscured a fundamental truth about Springfield: it's almost as over-regulated and anti-development as Boston. In the five years that ended in September 2024, home values in the city have increased by more than 67 percent,[132] laying bare a bifurcated housing crisis in which both improving the existing stock and adding new units are incredibly difficult for the typical property owner.

Which Cities Are Getting Housing Affordability Right?

The case studies above — Houston, Austin, and Springfield — have one thing in common: they all illustrate various reasons why the "sticker prices" of housing don't tell the full story of affordability. Houston's geography has contributed immensely to its affordable prices, so its exact model of keeping housing costs low may be neither sustainable nor transferable to older cities. Austin may seem relatively affordable to the many people who have recently moved there from California and elsewhere, but the experience of long-time residents is that home values have more than quadrupled in a generation. Springfield's low wages and weak housing market combine to make it very difficult to improve the availability and quality of homes its residents can afford, especially under current regulatory conditions.

The case studies above — Houston, Austin, and Springfield — have one thing in common: they all illustrate various reasons why the "sticker prices" of housing don't tell the full story of affordability.

Broad-based affordability that is sustainable over time has a few hallmarks: widespread availability of low-cost housing, an elastic supply that can respond quickly to demand shifts, and the ability to overcome geographic constraints and concentrate new housing in infill locations. Essentially no large metro area in the United States excels at all three of these criteria at once. Cities with low sticker prices tend to have either weak demand (like Springfield) or a sprawling and unsustainable development pattern (like Houston). And even cities with an incredibly elastic supply, like Austin, can have high prices due to rapid demand shifts, and are often reactive (rather than proactive) in making reforms that are necessary to accommodate these shifts.

Meanwhile, when U.S. cities concentrate most of their new housing in infill locations, it's often by necessity, after available land for development has become scarce and prices have already gotten out of control. One 2013 EPA study found that the only housing markets in the nation where a majority of new construction was infill were New York, Los Angeles, San Francisco, and San

Jose.[133] In all these metros, at least 40 percent of the land area is undevelopable,[134] and the median home value in 2024 is at least $650,000.[135]

A more forward-looking approach to affordability is possible. In the long run, the primary controllable factor making the housing supply adaptable — and therefore home prices modest — is policy. In this regard, many cities in the U.S. offer strong options for reform, even if none of them are "getting it right" in the aggregate.

As mentioned above, the minimum lot size requirement for a single-family home in most of Houston is 1,400 square feet. Before 1998, it was 5,000, a very typical minimum lot size in the City of Boston's zoning code today.[136] A 1998 ordinance reduced the minimum lot size to 3,500 square feet in some downtown-adjacent Houston neighborhoods, but allowed property owners to build on lots as small as 1,400 square feet if they simultaneously preserved at least 600 square feet per lot as open space.[137] The result is a distinctively Houstonian townhome style, often three stories tall and about 30 feet wide, which has gradually replaced ranch-style bungalows and aging commercial properties on larger lots in the city over the past generation (see Figure 17).

In 2013, Houston expanded the looser lot size requirements citywide, and between 2007 and 2020, more than 34,000 townhomes were built with lot sizes allowed by these reforms.[138] On average, new townhomes replacing older single-family homes have been found to cost 38 percent less than other new single-family homes built in Houston.[139] Despite the broader region's reputation for land-intensive sprawl, Houston's lot size reforms helped some downtown-adjacent neighborhoods grow to be about as built-up as Cambridge, Massachusetts (see Figure 18). Houston also minimized political resistance to these reforms by allowing property owners to opt out of the lower minimum lot size on a block-by-block basis.[140]

On average, new townhomes replacing older single-family homes have been found to cost 38 percent less than other new single-family homes built in Houston.

Figure 17: New townhomes and older bungalows sit side-by-side along Summer Street in Houston, June 2024[141]

Figure 18: Aerial view of the Rice Military neighborhood, about 2.5 miles from Downtown Houston (top), and Inman Square in Cambridge, about 2.5 miles from Downtown Boston (bottom)[142]

Combined with large minimum lot sizes, restrictions on the types of housing allowed in major metros has seriously limited the growth of the housing stock. In most communities in Greater Boston, more than 80 percent of the available land area is zoned exclusively for single-family homes.[143] Other cities, from Austin to Minneapolis[144] to Arlington, Virginia,[145] have amended their zoning codes to allow several homes on each residential parcel of land. Research suggests that this approach is most effective at increasing supply when enacted simultaneously with other reforms that loosen the dimensional requirements around housing and otherwise reduce costs.[146]

To that end, many other places have acted to overcome a common regulatory barrier to infill development that exists even in places like Houston: parking mandates. As of September 2024, at least 88 municipalities in North America have recently eliminated minimum parking requirements in new developments, including Cambridge, Massachusetts.[147] In January 2024, Minnesota lawmakers introduced a bill to prevent localities from enforcing minimum parking requirements.[148] Such reforms can be important for affordability because parking is expensive to provide, especially in infill settings where it often needs to be built in underground garages. At up to $50,000 per

In January 2024, Minnesota lawmakers introduced a bill to prevent localities from enforcing minimum parking requirements.

space, the cost of providing underground parking could easily make the entire project financially unviable, or otherwise necessitate passing steep costs onto tenants or buyers.[149] While parking is often required by lenders or supplied by developers sensitive to the needs of the property's end user, dictating specific amounts of parking in local ordinances is a recipe for oversupply.

There are also examples of places that have reformed the development approvals process to streamline desirable projects. In Los Angeles, Mayor Karen Bass has issued a string of executive orders since 2022 that required city departments to complete administrative reviews of affordable housing developments within 60 days of receipt and waived public hearing requirements for some projects.[150] A 2017 statewide reform in California even expedited the environmental review process for housing in places that have failed to meet state-mandated production targets.[151] More recently, in July 2024, Portland, Oregon consolidated a number of bureaucratic agencies responsible for permitting new development into one, an effort to cut down the "siloization" of city government that often causes process delays.[152]

However, the most ambitious process-based reforms allow developers to skip the line altogether. South Bend, Indiana, for example, has issued a design catalog of small multi-family buildings that come "pre-approved" for builders, as long as they make few or no changes to the catalog's architectural specifications.[153] For cities that find it politically untenable to simply allow multi-family housing by-right, such a design-based approach may be a more appropriate avenue for reform.

Lastly, some cities have reformed their building codes to make it substantially easier to add more units on infill parcels at a modest scale. Under the International Building Code (IBC), structures with at least three units of housing are subject to much stricter building standards than single-family homes and duplexes, which are instead subject to the International Residential Code (IRC). However, in 2021 Memphis, Tennessee revised its building code to apply the IRC standards to buildings with between three and six units in addition to those with one and two.[154] Among other changes, this means that new three-to-six-unit buildings will no longer need to include multiple means of egress on upper floors, fire sprinklers, or separate technical drawings for mechanical, plumbing, and electrical systems.[155] Combined, these changes could reduce construction costs for such small-scale multi-family buildings by tens of thousands of dollars.[156]

In Memphis, Tennessee, new 3-6 unit buildings will no longer need to include multiple means of egress on upper floors, fire sprinklers, or separate technical drawings for mechanical, plumbing, and electrical systems.

In Massachusetts, localities are not allowed to make amendments to state building codes for their own adoption,[157] but there are also state-level precedents for code reforms that are similar to those in Memphis. North Carolina will include all buildings with fewer than five units in the residential code starting in 2025, and state legislators in California have introduced a bill to explore loosening building code standards for structures with up to 10 units.[158] A 2014 white paper published by the Massachusetts Board of Building Regulations and Standards even recommended that Department of Public Safety staff create a separate code for buildings with three-to-six units.[159]

Many other reforms that would increase housing production and limit building costs are possible. Determining which would be most effective in Greater Boston will be a long and iterative process of policy innovation and implementation, but this process should take inspiration from metros that are more affordable and more accommodating of growth.

Recommendations and Conclusion

The recommendations that follow constitute a summary of the reform ideas described above, although within Greater Boston they may manifest slightly differently in a given community.

- **Allow residential uses by-right in commercial and industrial zoning districts.** As land values have risen in Greater Boston and the office market has suffered post-COVID, multi-family residential construction has become more economical in many commercial and industrial areas. This could be a relatively politically palatable framework for greatly expanding the housing stock in otherwise built-out communities. The redevelopment of Everett's Commercial Triangle is a good prototype for converting an industrially zoned area into a mixed-use neighborhood with

new apartments and retail. Office parks, retail strips, and warehouse districts across the region could follow suit if they are allowed to.

- **Eliminate minimum parking requirements in new developments.** In urban areas ripe for redevelopment, where adding parking would entail building expensive underground garages, parking reform may be the single most impactful reform option in this paper. But even in the suburbs, developers and bankers already have strong incentives to provide enough parking in their projects. Additional parking requirements from local governments can make new housing unnecessarily expensive for the buyer and financially unviable for the builder.
- **Allow small multi-family buildings on lots previously zoned solely for single-family homes.** While reforms to commercial and industrial districts will affect a very small area in most municipalities, thus limiting development opportunities, reforms to existing residential districts offer much more flexibility. Importantly, other regulations in these districts around infrastructure and the like will still apply. But if it's legal in a given place to build a 4,000-square-foot single family home, it should also be legal to build a 4,000-square-foot three-unit condo building. This might seem radical to some suburbanites, but rural states like Maine and Vermont have already made similar reforms statewide.[160]
- **Reduce minimum lot sizes to be more in line with other metros around the country.** In 2023, the nationwide median lot size of a new single-family home sold was 7,834 square feet.[161] Most Greater Boston communities don't have *any* residential zoning district with a minimum lot size of 7,834 square feet or fewer.[162] In fact, minimum lot sizes may be largely to blame for the fact that single-family homes made up just 29 percent of new housing units permitted in the region from 2015 to 2023.[163] As more Millennials start and expand families in the coming years, minimum lot size reform in Boston suburbs could be necessary to keep young workers in the region.
- **Allow third-party reviews of building permit applications.** Cities and towns often struggle to keep up with mandatory administrative reviews of major proposals, thus delaying projects substantially.[164] Instead of waiting for staff to catch up, municipalities could allow external city planners and engineers to conduct such reviews and have the developer pay for them. In some states, like New Jersey and Texas, cities are *required* to accept building plan reviews from third parties if there are substantial delays to the permitting process.[165]
- **Reform regulations around building codes to only enforce full code conformity in new buildings.** Millions of Massachusetts residents live safely in non-conforming buildings. But because renovations or additions to such properties often trigger full building code conformity requirements, many options for adding housing incrementally in existing structures are prohibitively expensive. Establishing new code requirements to circumvent this problem would require a lengthy process with plenty of input from life safety experts, but ultimately could facilitate both better living conditions and small-scale, cost-effective additions to the housing stock.
- **Include small multi-family buildings in the residential building code.** The method of construction used for small multi-family buildings—like triple deckers and quadruplexes—has much more in common with that of single-family homes than mid- or high-rise apartment blocks. Building codes that treat such structures as commercial properties often make it cost prohibitive to construct what is otherwise a low-cost, versatile home typology. Massachusetts should follow the lead of Memphis by applying the residential building code to structures with as many as six units.

As more Millennials start and expand families in the coming years, minimum lot size reform in Boston suburbs could be necessary to keep young workers in the region.

None of the reforms listed above are unprecedented. That's why examining the policies and practices of other cities and states is so important. There is something seriously flawed with Greater Boston's housing market, but to understand what requires comparison with others. Places that build more housing, have more flexible land use regulations, and actively encourage infill projects and redevelopment tend to have better results in terms of affordability. There are intervening variables—demand shocks and geographic constraints, for example. But to understand these variables requires a comparison across metropolitan areas too.

Notably, with the exception of the building code recommendations, all these reform items can be adopted by individual cities and towns in Greater Boston. Many of them will be politically contentious, and none will be widely adopted right away. Boston's housing crisis has been decades in the making; much of the price appreciation data presented in this paper's introduction goes back to 2000, a generation ago. Reforms that aim to tackle the region's affordability challenges must be oriented toward the long-term. At stake is nothing less than a new generation's ability to enjoy all the cultural and economic opportunities eastern Massachusetts has to offer.

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About the Authors

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