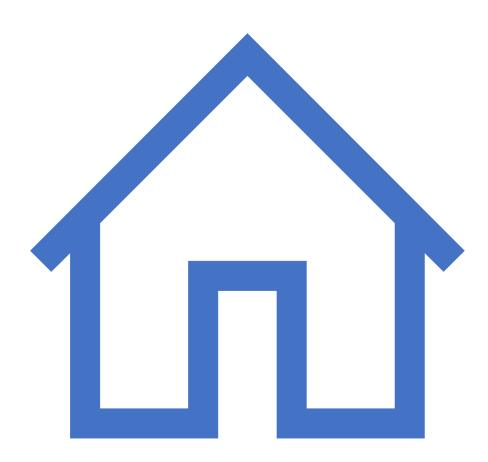
The Housing Shortage: Prepared for Portsmouth

Natch Greyes, Government Affairs Counsel, NHMA



Outline

- The Basics of the Housing Shortage
- The Scope of the Problem
- Demand for Housing has Increased
- The Supply of Housing has Decreased
 - The Existing Home Supply Shortage
 - The New Home Supply Shortage
- The Future of the Housing Shortage

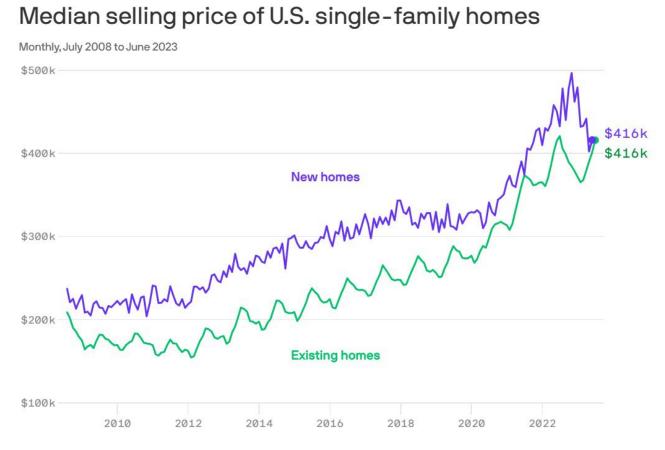
The Basics of the Housing Shortage

- Demand for homes currently outpaces the supply of homes.
- This outsized demand is driving prices higher in accordance with the fundamentals of supply-and-demand economics.
- It is almost impossible to identify a traditional cost-savings that is still viable in current market conditions.



Existing Homes No Longer Represent Cost Savings

- Traditionally, prices for new singlefamily homes have seen a cost premium as compared to existing homes.
- For the last 10 years, that premium has been on average about \$60,000 more than existing home sales, but that gap has collapsed since the pandemic.
- In June 2023, NAR estimates that existing homes median sale price was \$410,200, whereas the U.S. Census Bureau reports that new home sale price was \$415,400.

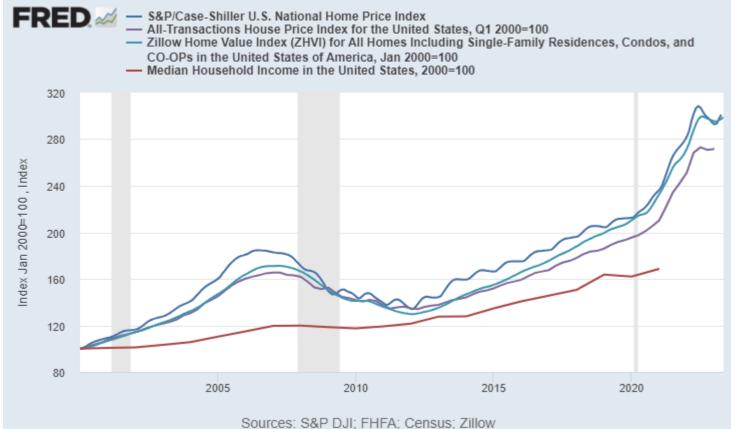


Sources: https://www.axios.com/2023/07/21/new-existing-home-prices ; https://www.nar.realtor/newsroom/existing-home-sales-retreated-3-3-in-june-monthly-median-sales-price-reached-second-highest-amount

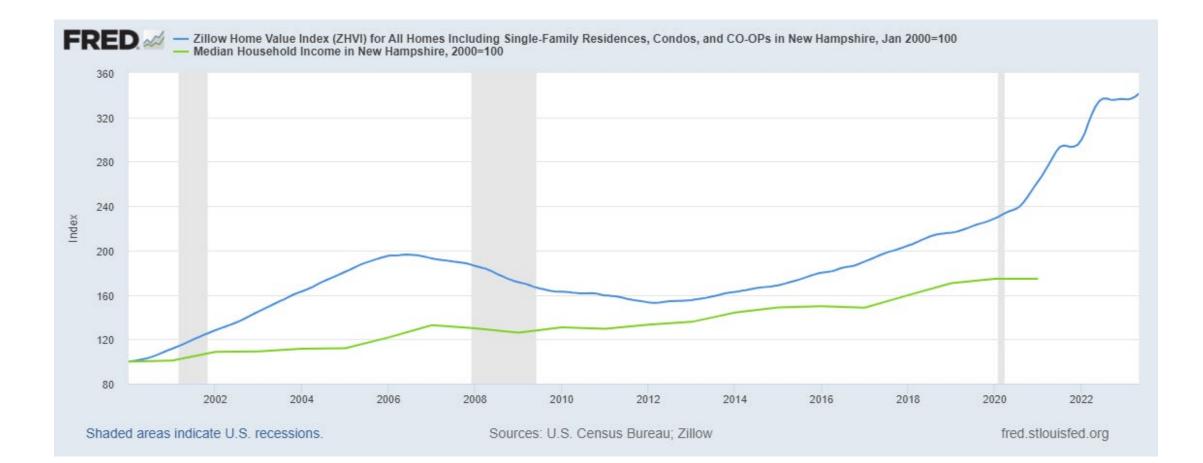
The Scope of the Problem

Home Values Have Been Increasing at Faster Rate Than Income

- The Federal Reserve tracks three different home price indices: the S&P/Case-Shiller U.S. national home price index (produced by Standard and Poor's Dow Jones Indices), the all-transactions house price index for the United States (produced by the U.S. Federal Housing Finance Agency), and the Zillow home value index for all homes including single-family residences, condos, and co-ops in the United States (produced by Zillow).
- All three give slightly different valuations, but all three report that existing home values in January 2021 were between 210-236% of their value in January 2000.
- Meanwhile, Federal Reserve data shows that median household income in January 2021 was 168% of its January 2000 valuation.

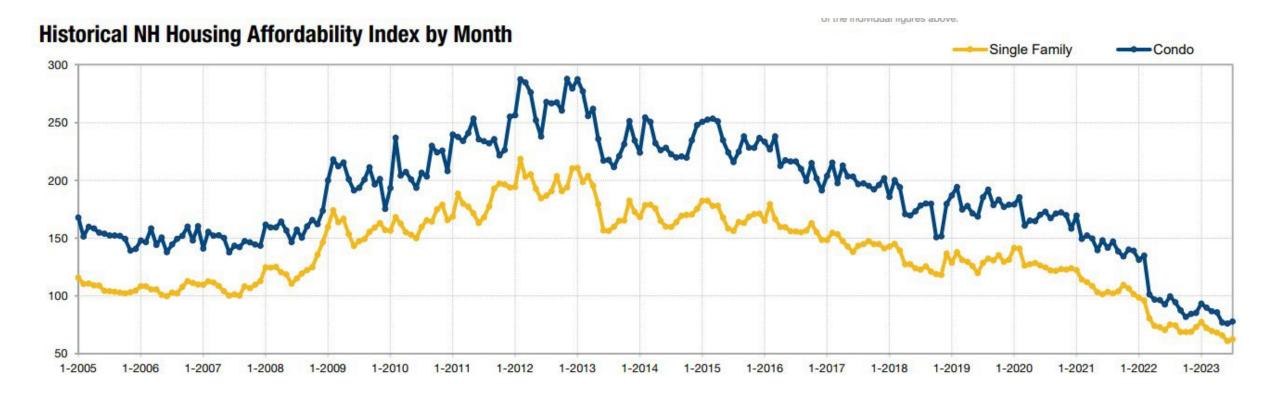


N.H. Home Values vs N.H. Income



Housing Affordability is an Issue for Average Families

The National Association of Realtors and the New Hampshire Association of Realtors' Housing Affordability Index' measures whether a typical family could qualify for a mortgage loan on a typical home based on the most recent price and income data. In 2022, the affordability index dropped below 100, meaning that the typical family can no longer qualify for a mortgage on the typical house.



Current as of August 5, 2023. All data from New Hampshire REALTORS®, Inc. and Northern New England Real Estate Network. Report © 2023 ShowingTime.

Source: https://nhar-public.stats.showingtime.com/docs/mmi/2023-07/x/report?src=page

First-Time Homebuyers are in a Worse Position

Nationally, the index for first-time homebuyers, who typically have lower incomes than average homebuyers, has dropped more rapidly as homes have increased in value, with 2021 being the last time the typical first-time homebuyer could qualify for a mortgage on a typical home.

FIRST-TIME	HOMEBUYEF	R AFFORDABILITY	

					Effective	Effective		Prime			
		Starter	10% Down	Loan	Interest	Int Rate	Monthly	First-Time	Qualifying	First-Time	Composite
Year	Quarter	Home Price	Payment	Amount	Rate	Plus PMI	Payment	Median Income	Income	Buyer Index	Index
2020		255,200	25,520	229,680	3.17	3.42	1,021	54,856	49,008	111.9	169.9
2021		303,500	30,350	273,150	3.01	3.26	1,190	55,775	57,120	97.6	148.2
2022 r		333,900	33,390	300,510	5.40	5.65	1,735	57,138	83,280	68.6	103.8
2022	Ι	316,200	31,620	284,580	3.86	4.11	1,377	55,869	66,096	84.5	128.2
2022	п	350,800	35,080	315,720	5.32	5.57	1,807	56,668	86,736	65.3	98.8
2022	III	338,400	33,840	304,560	5.65	5.90	1,806	57,363	86,688	66.2	100.0
2022	IV r	321,600	32,160	289,440	6.77	7.02	1,930	58,652	92,640	63.3	95.5
2023	Ip	315,500	31,550	283,950	6.41	6.66	1,825	59,227	87,600	67.6	102.1

Source: https://cdn.nar.realtor/sites/default/files/documents/hai-q1-2023-first-time-homebuyer-affordability-2023-05-09.pdf

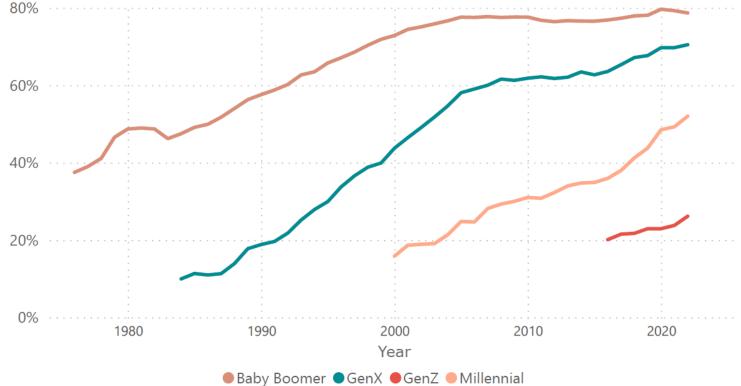
Demand Has Increased

Younger Buyers Are Driving Demand, The Population is Trending Younger, New Hampshire is Growing, And Demand is for Single-Family Homes.

Younger Buyers are Driving Demand

- The Great Recession limited Millennials earnings, overall wealth, and ability to buy a home for many years afterwards, but Millennials started to gain homebuying momentum just before the pandemic, buying roughly 60% of homes that sold over the last several years, making them the biggest piece of the homebuying pie.
- Gen Zers are tracking ahead of their parents' homeownership rate: 30% of 25-year olds owned their home in 2022, higher than the 27% rate for Gen Xers when they were the same age.

Millennials Surpass 50% Homeownership Rate Homeownership rates by generation



Source: https://www.redfin.com/news/gen-z-millennial-homeownership-rate-home-purchases/.

Source: Redfin analysis of Current Population Surveys (ASEC) 1976 to 2022; Data retrieved through IPUMS-CPS

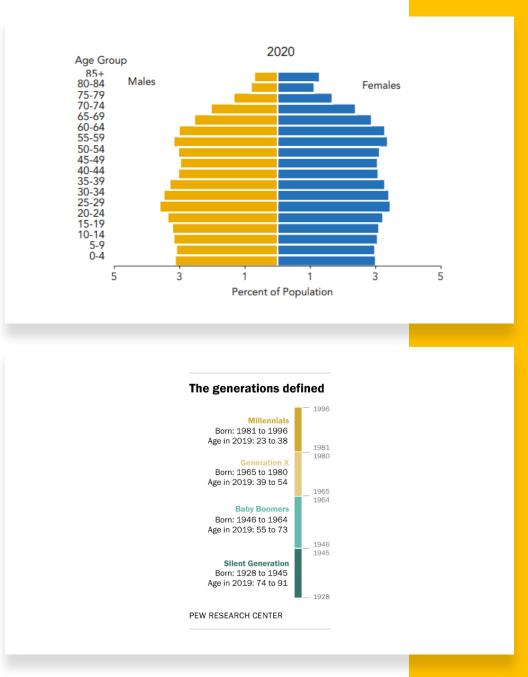


Demographics Demonstrate Higher Demand

- Gen Xers are the "middle child" of generations

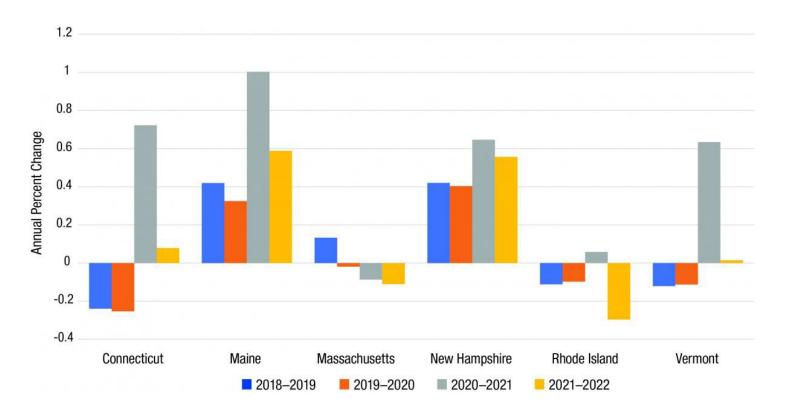
 caught between two larger generations, the Millennials and the Boomers.
- With immigration adding more numbers to this group than any other, the Millennial population is projected to peak in 2033, at 74.9 million.
- Gen Z's population is 68 million and growing, with a projected peak having not yet been formulated.

Source: https://www.pewresearch.org/short-reads/2020/04/28/millennials-overtake-baby-boomers-as-americas-largest-generation/



Population Growth is Also Driving Demand in New Hampshire

- New Hampshire's population grew by 17,700 (1.3%) to 1,395,000 between April 2020, when the 2020 Census was conducted, and July 2022, according to new U.S. Census Bureau estimates.
- Between April 2, 2010 and April 1, 2020, New Hampshire's population grew by 61,600 residents (4.6%) according to the U.S. Census Bureau.



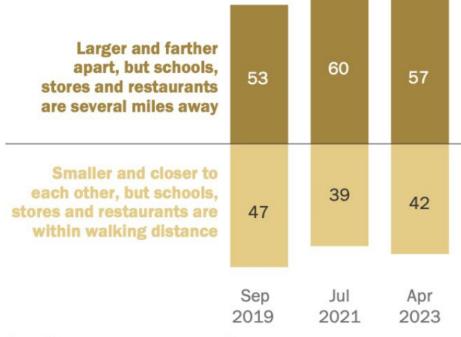
Source: https://carsey.unh.edu/publication/snapshot/migration-continues-to-fuel-NH-Population-Gain

About Half of Americans Want Single-Family Homes

- A majority of Americans (57%) say they would prefer to live in a community where "houses are larger and farther apart, but schools, stores and restaurants are several miles away," according to a Pew Research Center survey conducted March 27-April 2, 2023.
- About four-in-ten (42%) would prefer a community where "houses are smaller and closer to each other, but schools, stores and restaurants are within walking distance."
- The gap has widened since the Pandemic, when responses were more evenly divided. Notably, while a majority of adults ages 30 and older would prefer communities with larger homes over those with more walkability, adults under 30 are somewhat more likely to express the opposite preference.

Majority of Americans prefer to live in a community with houses farther apart

% who say they would prefer to live in a community where the houses are ...



Note: No answer responses not shown.

Source: Survey of U.S. adults conducted March 27-April 2, 2023.

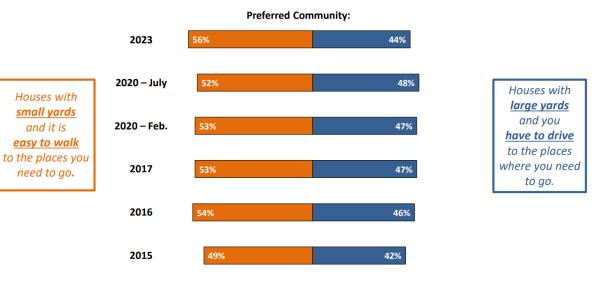
PEW RESEARCH CENTER

Source: https://www.pewresearch.org/short-reads/2023/08/02/majority-of-americans-prefer-a-community-with-big-houses-even-if-local-amenities-are-farther-away/

...But Question Phrasing Matters...

- The National Association of Realtor's 2023 Community & Transportation Preference Survey, conducted at the same time at the Pew Research Survey, found a similar (but opposite) split among Americans.
- NAR's survey agreed with Pew's survey that rural and suburban residents, Boomers, Gen X, and, increasingly, Millennials, prefer single-family homes in drivable communities with longer commutes. Urban residents and Gen Z preferred apartments or townhouses with walkable communities and short commutes.
- However, NAR's survey found that those who were married, those with kids in school, and those who were already homeowners lean toward single-family homes in drivable communities.

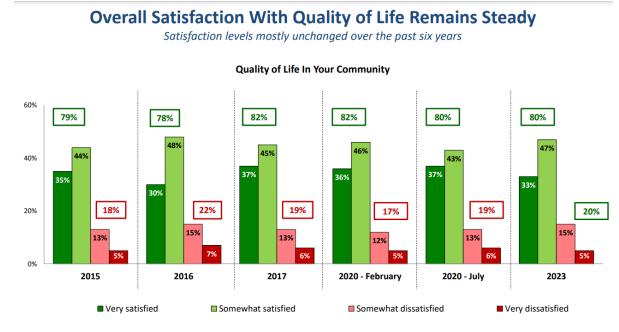
Majority Prefer Houses With Small Yards and More Walkability Over Homes With Large Yards and More Driving



Source: https://cdn.nar.realtor//sites/default/files/documents/2023community-and-transportation-preferences-survey-slides-06-20-2023.pdf

And Americans Satisfied With Their Communities...

- The 2011 Community Preference Survey revealed that, ideally, most Americans would like to live in walkable communities where shops, restaurants, and local businesses are within an easy stroll from their homes and their jobs are a short commute away; as long as those communities can also provide privacy from neighbors and detached, single-family homes. If this ideal is not possible, most prioritize shorter commutes and single-family homes above other considerations.
- Further, that survey revealed that living in a single-family, detached home is important to most Americans. Eight in ten (80%) would prefer to live in single-family, detached houses over other types of housing such as townhouses, condominiums, or apartments.
- In 2023, no similar question was asked, but Americans reported that they were satisfied with life in their current communities, suggesting that preference variables might contribute unequally to survey responses.



Source: https://cdn.nar.realtor/sites/default/files/migration_files/smart-growth-comm-survey-results-2011.pdf ; https://www.nar.realtor/articles/2013-community-preference-survey

Supply Has Decreased

Existing Homes and New Homes

Existing Home Supply Shortage

Mortgage Rate Lock-In Second Homes & Short-Term Rentals

Mortgage Rate Lock-In

- Mortgage Rate Lock-In: The difference in cost between a homeowner's existing mortgage rate and a new mortgage at the prevailing market interest rate.
- Around 2/3 of homes have mortgages.

Millions of Owner-Occupant Households, by Presence of a Mortgage

Without a mortgage

With a mortgage

76.9 75.1 75.5 75.4 74.8 74.9 75.0 74.3 74.3 74.5 74.1 73.8 73.9 23.9 23.9 23.8 23.9 24.1 24.5 28.5 24.9 25.4 26.3 26.7 27.4 27.7 51.6 51.6 50.5 51.2 50.7 50.3 49.3 48.7 47.5 47.2 47.1 48.4 47.3 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

Source: American Community Survey.

URBANINSTITUTE



Mortgage Rate Lock-In

- Nearly 6 out of 10 borrowers now have a fixed-rate mortgage with a rate at or below 4%, significantly below prevailing market interest rates.
- To enjoy the benefit of the value of their low mortgage rate, the borrower must continue to live there, maintain it as second home, let it sit vacant or rent it out.
- The homeowner is only going to be willing to sell their current home, and thus give up their low mortgage rate, if the net benefit of a move is worth at least the difference between their existing mortgage rate and a new mortgage at the prevailing market interest rate.

Mortgage Rate Lock-In Effect Is Significant

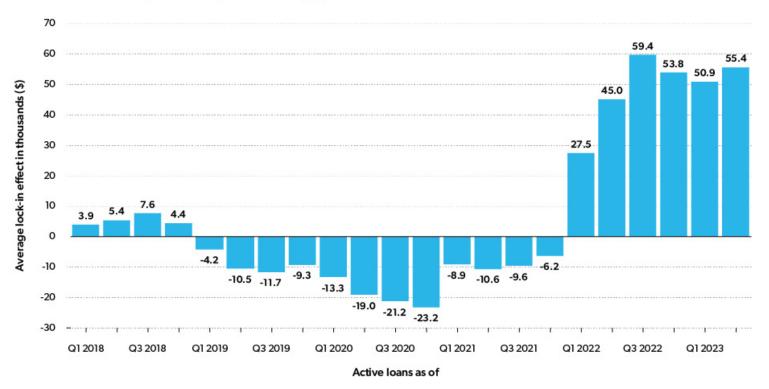
- Freddie Mac has calculated that about 25% of the outstanding unpaid principal balances in Freddie Mac's single-family mortgage portfolio have locked-in savings.
- That translates to a national average mortgage rate lock-in effect for 30-year and 15-year fixed rate loans of \$55,000.
- In comparison, the mortgage rate lockin effect seen in the early 1980s affected only about 5% of mortgages and the average mortgage rate lock-in effect was only \$1,800.

EXHIBIT 4

In a rising interest rate environment, homeowners with a fixed mortgage provided by Freddie Mac have locked in over \$50,000 per household in value

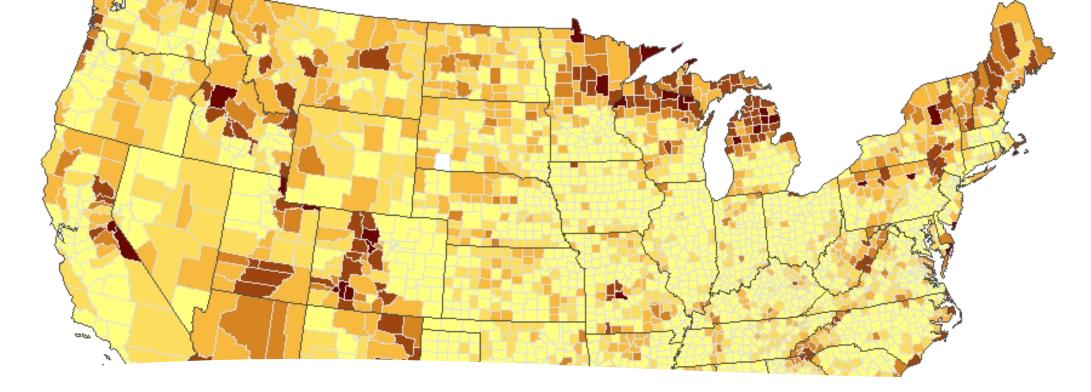
Average mortgage rate lock-in effect

Freddie Mac active 30-year and 15-year fixed mortgages



Note: Lock-in (V) computed by the formula $V = B - \left(\sum_{i=1}^{n} \frac{P}{(1+r)^{n+i}}\right) - \frac{F}{(1+r)^{n+i}}$, where B is the current outstanding mortgage balance, P is the monthly principal and interest payment, r is the current prevaling 30-year/15-year mortgage rate in the PMMS, n is the remaining months left on the mortgage and F is any partial payment due after n periods due to curtailment.

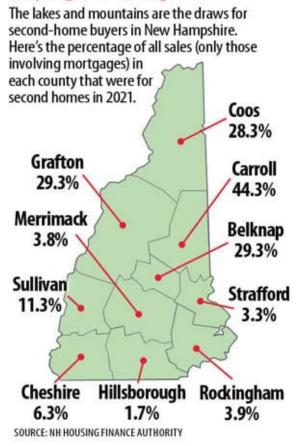
Source: https://www.freddiemac.com/research/forecast/20230724-the-economy-though-volatile-has-shown-resilience-in-the-face-of-rising



Second Home Ownership Impacts Supply

- According to National Association of Home Builder estimates, the total count of second homes was 7.15 million in 2020, accounting for 5.11% of the total housing stock.
- Although 74.6% of New Hampshire homes are owner-occupied according to data compiled by the Federal Reserve, data from the National Association of Homebuilders indicates that about half of New Hampshire's counties qualify as a "high-concentration second home county," meaning 15%-or-more of their existing housing stock qualify as second homes.

Buying another place

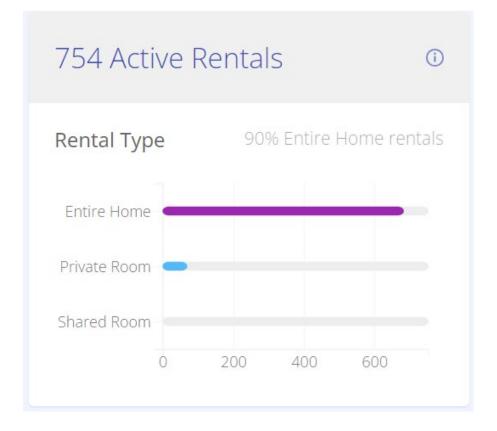


Second Homes Are Not Evenly Distributed

- In 2022, the Union Leader compiled information from the New Hampshire Housing Finance Authority indicating that second homeownership was increasing throughout the state, particularly in vacation destinations.
- 2020 National Association of Home Builders estimates indicate that Hillsborough and Strafford counties have a small percentage of homes that qualify as second homes (less than 5% each) whereas Belknap and Carroll counties see between 30-50% of their housing stock held as second homes.

Short Term Rentals Also Have An Impact on Existing Housing Supply

- New Hampshire Housing recently completed a study on short-term rentals in the state, results of which are not available as of this publication.
- However, AirDNA data on active listings through the AirBnB and VRBO platforms is available for individual communities and can help communities measure their individual impacts.
- For example, Lincoln has an estimated 2,786 total housing units according to the New Hampshire Employment Security, with 754 of those qualifying as active listings on AirBnB and VRBO.



New Home Supply Shortage

The Effects of the Great Recession Material Cost Increases Labor Force Shortages Long-Term Construction Productivity Declines Availability of Financing Had Decreased Land Values Increase Under Certain Circumstances

The Great Recession Affected Both Housing Permits and Starts

- Although housing starts have a near 1:1 correlation with housing permitting, U.S. Census and HUD data suggests that there were more buildings permitted in the latter half of the 2010s than were started.
- For permits, the number of building permits peaked at just over 2.26 million in September 2005. A steady decrease occurred through April 2009, bottoming out at 521,000.
- In other words, less than one quarter of the number of building permits were approved in April 2009 as in September 2005.

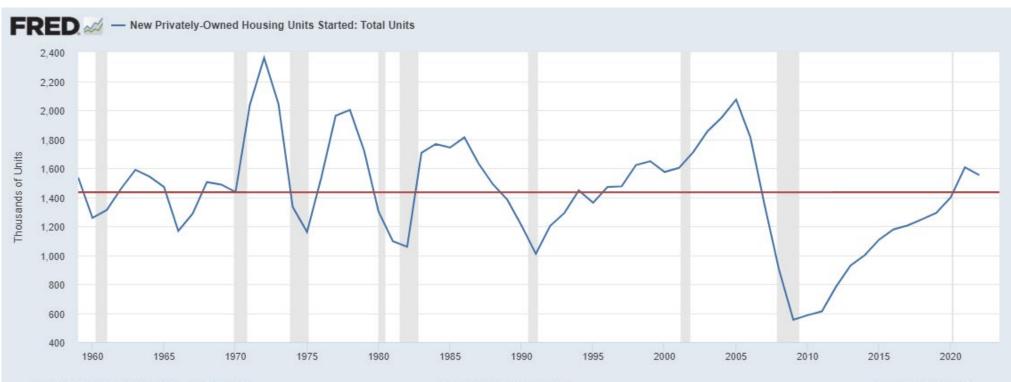


Sources: Census; HUD

Since the Great Recession, Building Starts Have Been Below the Historical Average

- Homebuilding collapsed during the housing market crash preceding the Great Recession, with construction falling from over 2 million homes in 2005 to 550,000 in 2009.
- Since 2012, housing starts have been increasing, but remain significantly below their peak level and research by the Urban Institute & Moody's suggests that new housing construction is below the levels necessary to meet demand.

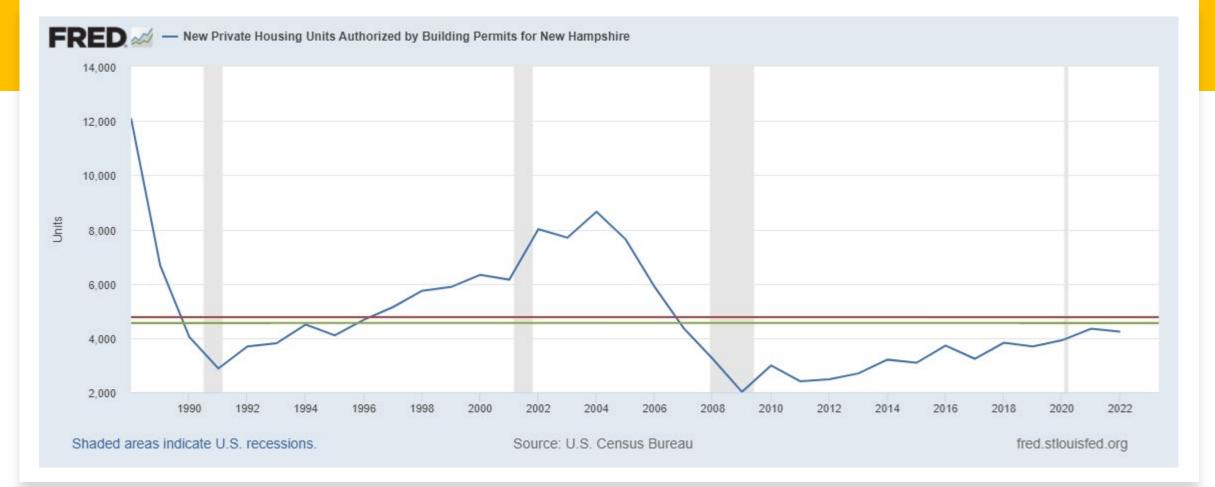
Source: https://www.moodysanalytics.com/-/media/article/2021/Overcoming-the-Nations-Housing-Supply-Shortage.pdf



Shaded areas indicate U.S. recessions.

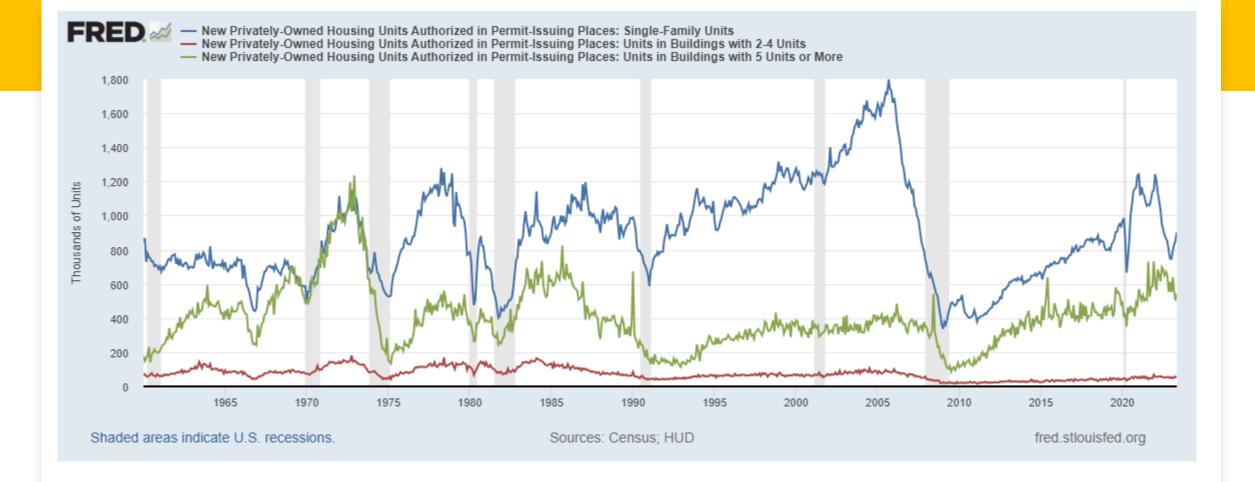
Sources: Census; HUD

fred.stlouisfed.org



New Hampshire Homebuilding Is Slowly Recovering

- New Hampshire has seen a slower homebuilding recovery than nationally, with homebuilding rates still below the historical average.
- The 2023 New Hampshire Housing Needs Assessment estimates that 23,500 additional dwelling units are needed to meet current needs.
- U.S. Census data indicates that, between 2007 and 2022, an estimated 22,910 fewer private housing structure permits (or 19,462 without 1988 data) were built than the historical average of 4,771 units (or 4,556 without 1988 data).



Single Family Homes Are Most Needed

"The main driver of the housing shortfall has been the longterm decline in the construction of single-family homes and that decline has been exacerbated by an even larger decrease in the supply of entry-level single-family homes, or starter homes." - Freddie Mac

Profit Margins Have Driven Construction



After the Great Recession, construction of high-end homes and apartments recovered first, with builders responding to the quicker rebound in demand by well-to-do households and the stronger profit margins, with supply beginning to meet demand by the middle of the 2010s.



However, construction of affordable housing—homes that low and moderate-income households could afford to rent or buy—was been much slower to bounce back, with low- and moderate-income households much slower to recover from the recession. The margins that builders could get from building affordable housing have been too low to incent the investment, with pricing too low to adequately clear the high fixed costs of building.



The primary causes of the affordable housing shortfall, from least to most important, are materials and labor, lending, and land, according to research done by the Urban Institute and Moody's Analytics. Source: https://www.moodysanalytics.com/-/media/article/2021/Overcoming-the-Nations-Housing-Supply-Shortage.pdf

Table 1: What Explains the Housing Shortage?

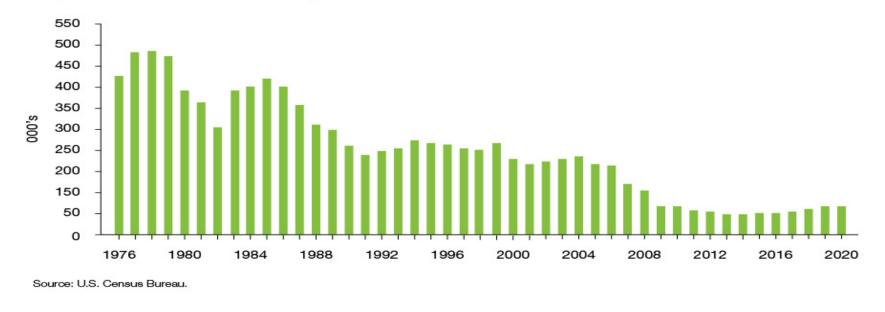
Explaining the vacancy gap – the difference between the actual and equilibrium housing vacancy rate

	Correlation	Univariate pane	el regressions	Multivariate panel regression		
	Coefficient	Coefficient	T-statistic	Coefficient	T-statistic	
Land share of house price	-0.08	-0.50	-12.9	-2.52	-15.9	
AD&C loan standards	-0.20	-0.38	-25.7	-0.40	-12.0	
Construction labor compensation growth	-0.05	-0.04	-1.6	-0.02	-0.8	
Lumber price growth	-0.05	-0.07	-4.1	-0.18	-7.1	

EXHIBIT 2

Number of new homes constructed below 1,400 square feet

Entry-Level home construction collapsed after the Great Recession and never recovered



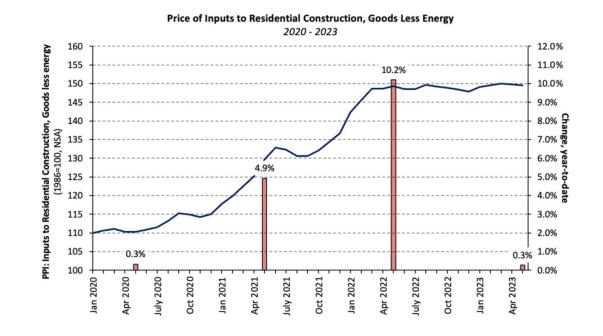
Affordable Housing is 'Entry Level' Housing

- Construction of affordable housing—homes that low-and moderate-income households can afford to rent or buy—which includes but is not limited to "entry-level single-family homes," has dropped since the late 1970s.
- Between 1976 and the mid-1980s, construction of new entry-level single-family homes averaged between 30% and 40% of all new homes completed, but steadily declined throughout the '80s, '90s, '20s, and '10s, with construction of new entry-level single-family homes dropping to less than 20% of all new homes completed by 2020.

Sources: https://www.freddiemac.com/research/insight/20210507-housing-supply ; https://www.moodysanalytics.com/-/media/article/2021/Overcoming-the-Nations-Housing-Supply-Shortage.pdf

Materials Costs Have Skyrocketed Since 2020

- As of June 2023, the Producer Price Index, the prices of inputs to residential construction less energy (i.e., building materials) has gained 0.3%, year-todate, a stark contrast from the 10.2% and 4.9% YTD increases seen in 2021 and 2022, respectively.
- In total, although the PPI including energy has begun to decrease since its high in 2022, the overall index is still 36.0% higher than in January 2020.





Availability of Labor is Key to Capacity to Build

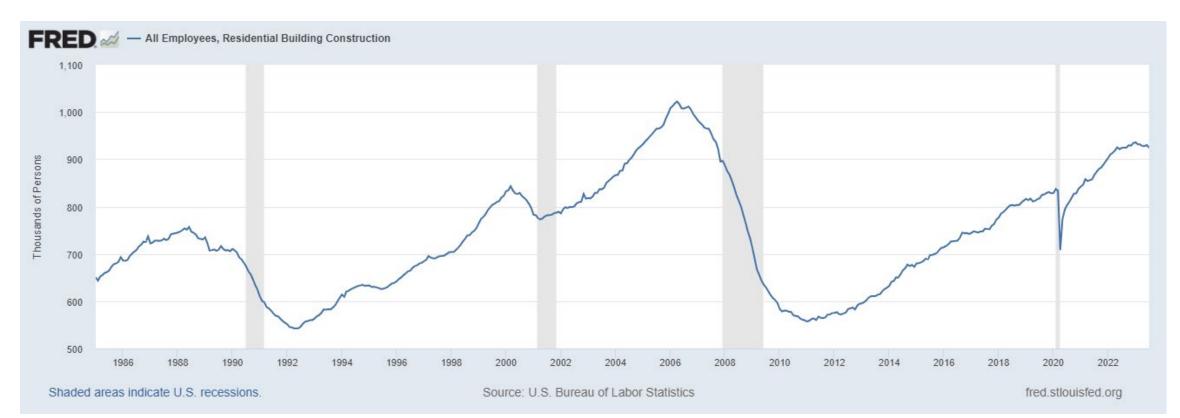
- Employment in the residential building construction industry fell by roughly 465,000 jobs from a peak in April 2006 to a trough in January 2011. (In New Hampshire, while fewer than 5% of total jobs were lost during the Great Recession, more than 30% of construction jobs were lost.)
- Despite job growth in the construction industry since 2011, the construction industry continues to face significant labor shortages, with Bureau of Labor Statistics data suggesting that employment in residential building construction has still not recovered to pre-Great Recession levels.
- For the construction industry as a whole, the monthly job openings rate has fairly consistently been above 4% between March 2021 and March 2023, representing between 300,000 and 400,000 openings per month.

Source: https://www.abc.org/News-Media/News-Releases/entryid/19777/construction-workforce-shortage-tops-half-a-million-in-2023-says-abc

Construction Employment

 "Employment losses [in construction] easily exceeded the declines observed during past recessions ... represent[ing] 19.8 percent of total nonfarm employment losses." - Bureau of Labor Statistics

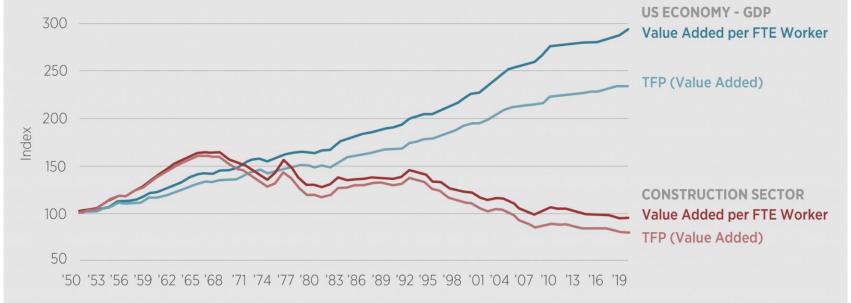
Source: https://www.bls.gov/opub/mlr/2011/04/art4full.pdf



Construction Industry Productivity Has Dropped Over Time

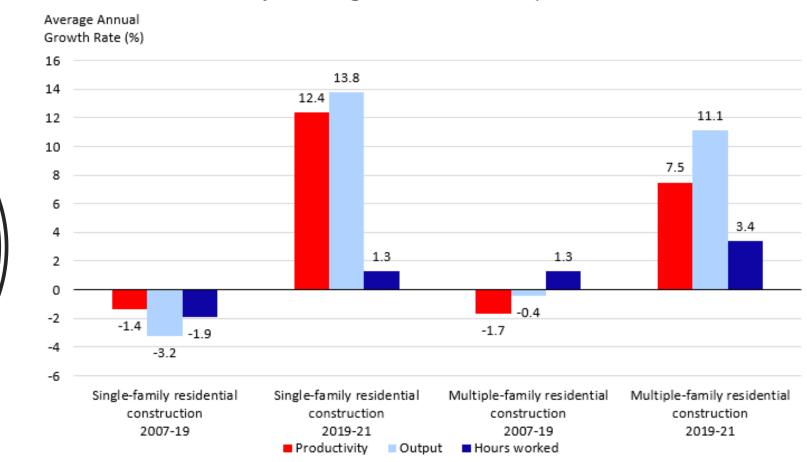
- The Becker Friedman Institute has found that the value added per worker in the construction section has decreased by about 40% in 2020 as compared to 1970.
- BFI research indicates two causes: the construction sector's ability to transform intermediate goods into finished products has deteriorated and rather than construction inputs flowing to areas where they are more productive, the activity share of these areas either stagnates or falls.





Note: This figure shows indexes of US construction sector labor productivity and total factor productivity (TFP) from 1950 to 2020. For comparison, it also plots the same indexes for the overall economy. Throughout the 1950s and well into the 1960s, both measures of construction sector productivity grew steadily. Indeed, they outpaced their whole-economy counterparts during that period. By 1970, however, the construction sector's labor productivity and TFP had both begun to fall. This downturn was not temporary; the decline has continued for the past half-century.

Source: https://bfi.uchicago.edu/insight/research-summary/the-strange-and-awful-path-of-productivity-in-the-us-construction-sector/



Productivity for Housing Construction Industries, Selected Periods

Source: U.S. Bureau of Labor Statistics, Office of Productivity and Technology

Recently

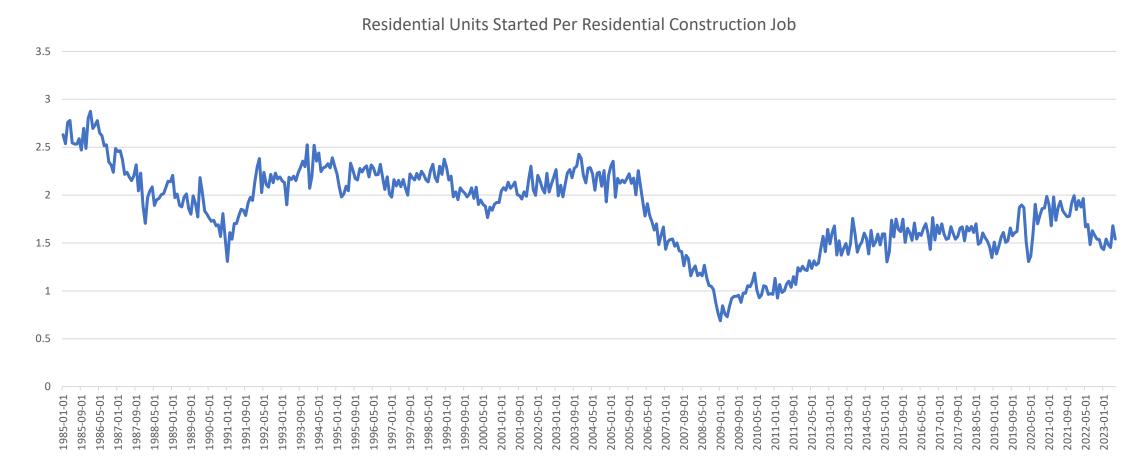
Productivity

Has

Increased

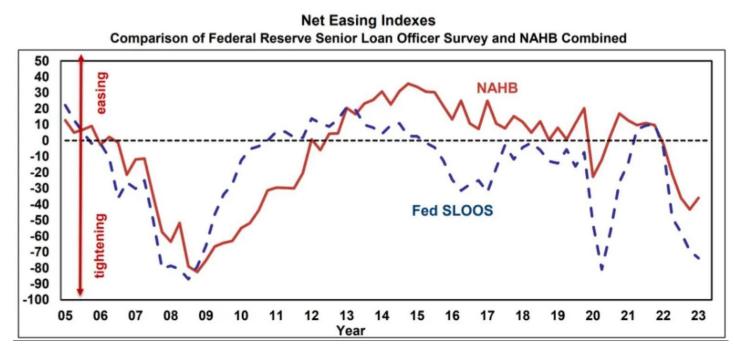
Source: https://www.bls.gov/productivity/highlights/construction-labor-productivity.htm

...But Overall Housing Input is Still Down Per Worker



Lending Has Become Tighter, Driving Up Costs

- The National Association of Home Builders generates a net easing index, similar to the net easing index constructed from the Federal Reserve's survey of senior loan officers, that uses information from builders and developers about changes in credit conditions as compared to the previous quarter.
- Notably, the NAHB net easing index reported credit tightening in the post-Great Recession period - driving higher building costs - and since the Federal Reserve began increasing interest rates in 2022.
- The most common ways in which lenders tightened credit since 2022 has been increasing the interest rate on the loans provided to builders and developers.



Source: https://www.nahb.org/-/media/NAHB/news-and-economics/docs/housing-economics/adc-survey/adc-survey-report.pdf

13.00 12.00 11.00 10.00 9.00 **EFFECTIVE INTEREST RATE** Building 8.00 Interest Rates 7.00 6.00 Have Increased 5.00 Across the 4.00 Board 3.00 2.00 1.00 0.00 Q119 Q118 Q318 Q319 Q120 Q320 Q121 Q321 Q122 Q322 Q123 ----Land Acquisition ---Land Development -----Single-family Construction: Speculative ---- Single-family Construction: Pre-sold

EFFECTIVE INTEREST RATE for land acquisition, land development, and single-family construction -AVERAGE

Source: https://www.nahb.org/-/media/NAHB/news-and-economics/docs/housing-economics/adc-survey/adc-survey-report.pdf

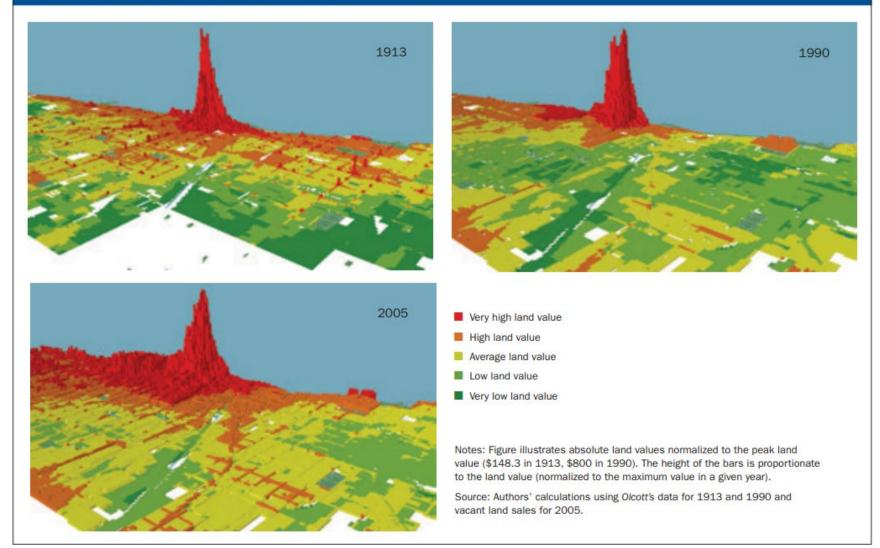
Land Values Appear to Increase If Zoned For Residential Use

- Verifying the effect of zoning on land values has proved extraordinarily difficult for two reasons: (1) the competitive market may already have separated land use; (2) zoning may be flexible, mimicking the competitive market (although probably with a lag).
- Chicago is unique among American cities in having readily available land use and value data stretching back to 1913, before the enactment of zoning in 1923.
- Comparative analysis of Chicago's data proves that residential zoning led to higher land value growth rates than commercial zoning, and that, in line with economic theory, there is a positive correlation between structural density and land values.

Sources: https://www.lincolninst.edu/sites/default/files/pubfiles/2378_1718_Land_Values_in_Chicago_1913-2010_0414LL.pdf ; https://mcdonald.people.uic.edu/ftp/08%202002%20restat%20land%20value%20after%20zoning.pdf



FIGURE 3 Land Value Surfaces in 1913, 1990, and 2005



Source: https://www.lincolninst.edu/sites/default/files/pubfiles/2378_1718_Land_Values_in_Chicago_1913-2010_0414LL.pdf

Zoning's Impact on Housing Supply and Costs is Minimal

- Zoning is often cited as an impediment to housing construction, but there is little evidence that zoning has a significant impact on housing construction.
- A study of local regulations that could affect housing production and availability spanning 1,136 cities across 19 years found that increases in the number of units preceded zoning reform. An overall increase in the number of units occurred regardless of whether the regulations more or less restrictive, but no such increase occurred in cities that never instituted land-use reforms.
- Similarly, in Houston, which famously lacks zoning, market-driven development is the reality. Nevertheless, Houston is experiencing the same affordability problems as the rest of the nation, including New Hampshire.
- In Houston, for example, the median home sales price is \$315,095, but a median renter household can afford a \$143,028 home—representing an affordability gap of \$172,067. In New Hampshire, the median sales price is \$415,000, but a median renter household can afford, approximately, a \$250,000 home representing an affordability gap of \$165,000.

Sources: https://www.urban.org/research/publication/land-use-reforms-and-housing-costs; https://kinder.rice.edu/urbanedge/houston-doesnt-have-zoning-there-are-workarounds; https://kinder.rice.edu/research/2022-state-housing-harris-county-and-houston

Land Use Reforms Have a Small Impact on Housing Units, Regardless of Direction of Reform

- Cities that institute reforms that increase restrictiveness and those that reduce restrictiveness appear to institute land-use reforms in response to observed changes in their housing supply.
- Land-use reforms that loosen restrictions are associated with a statistically significant 0.8% increase in housing supply within three to nine years of reform passage, accounting for new and existing stock.
- However, the increase in housing supply occurs predominantly for units at the higher end of the rent price distribution with no statistically significant evidence that additional lower-cost units became available or became less expensive in the years following reforms.

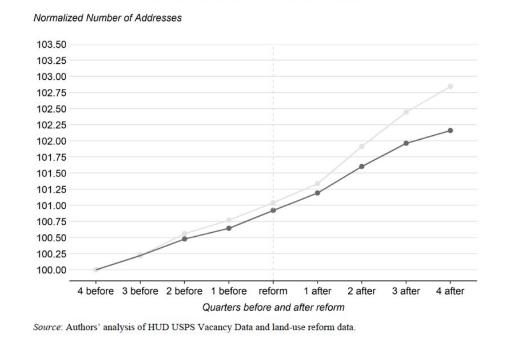


Figure 2: Average number of addresses before and after reforms, normalized

Less restrictive reforms

 More restrictive reforms

Houston is Facing the Same Affordability Problems as the Rest of the Nation, including N.H.



Houston has no zoning and, therefore, does not regulate land use, but it does regulate development using a mixture of ordinances, policies, tactics by neighborhoods, and independent efforts by nonprofits. In other words, market-driven development is the reality in Houston.



Demand for single-family homes, which represents 84% of the overall home sales volume, is driving up prices and keeping inventory low as of 2022, as strong single-family demand spurred a 21% increase in permitting during the pandemic.



Despite growth in new construction permits, developers were unable to fully respond to high housing demand before and during the pandemic because of construction costs and supply-chain problems.

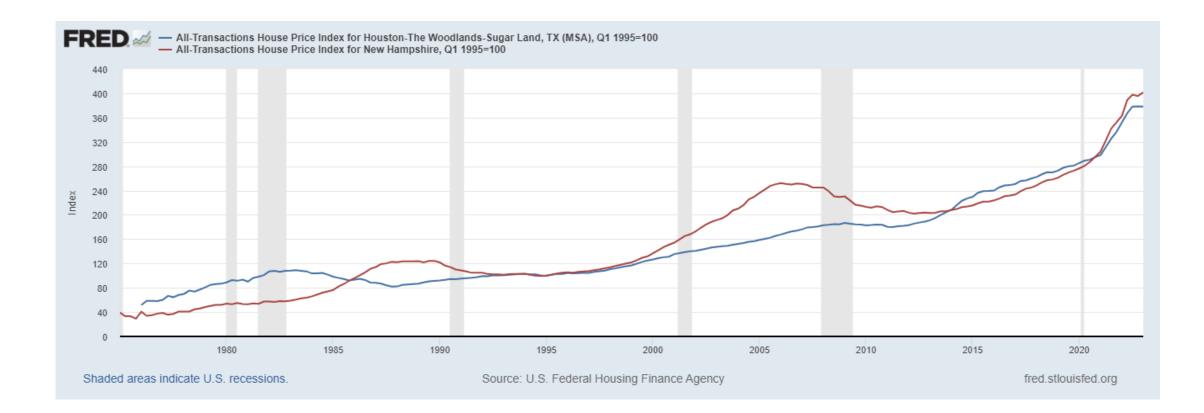


Consequently, the affordability gap - the difference between what median-income households can afford and the median house price - for homebuyers worsened between 2011 and 2021 because of increased housing sales prices and accelerated during the pandemic.

Sources: https://kinder.rice.edu/urbanedge/houston-doesnt-have-zoning-there-are-workarounds; https://kinder.rice.edu/research/2022-state-housing-harris-county-and-houston

Houston vs New Hampshire Home Values

Indexed to 1995, home values in Houston increased at nearly the same pace as home values in New Hampshire, except during the Great Recession.



The Future of the Housing Shortage

There are Significant Barriers to Increasing Supply of Existing and New Homes





Existing home availability is unlikely to increase in the near future, nor are there many policy options for local or state governments to increase existing home availability. New home availability is also unlikely to increase the near future, although some policy options may exist for local and state governments that may help increase new home availability over the long term.

The Future of Existing Home Supply

- If mortgage interest rates continue to increase, the mortgage rate lock-in effect will continue to grow to a larger portion of the homeowning population (above the current ~16.5%) and those experiencing mortgage rate lock-in will continue to see the savings effect increase (above the current average of \$55,000), making it likely that fewer and fewer existing homes will come on the market.
- <u>However</u>, it may be possible to craft state policy solutions that disincentivize ownership of second homes. However, policy makers must be cognizant of the fact that tourism – which, in part, relies on rentals of second homes – is a significant portion of New Hampshire's economy and revenues from tourism, including meals and rooms tax, offset locally raised revenues (*i.e.* property taxes).



The Future of New Home Supply

- New homes are almost certain to remain costlier than they were pre-pandemic due to baked-in inflation affecting material supplies and increased interest rates on lending.
- The largest hurdle, however, is simply the lack of homebuilding since the Great Recession, creating pent-up demand, which, in large part, is helping drive prices higher. (That is easing, to some extent).
- There is no evidence that a nationwide spat of local zoning reforms occurred before or during the Great Recession. Instead, speculative overbuilding immediately before the Great Recession, large and long-lasting layoffs of construction workers, financial instability among the middle-and-lower economic tiers causing decreased demand, an inability to attract new workers, and decreasing worker productivity, appear to be the major drivers for nationwide home supply issues.





New Home Supply Policy Options

- Local, state, and federal incentives that increase the attractiveness of employment in the construction industry would increase the labor pool for homebuilders and developers, incentivizing them to pursue projects with smaller margins, such as entry-level homebuilding.
- Additionally, investment in local planning, including focusing on improving local involvement in master plan creation, could help drive zoning changes in areas seeing increased homebuilding to help make land costs more palpable for new home development.
- Further, direct investment in home building projects could offset some of the increased hard costs, lowering the cost of the completed units.



Additionally, Alterations to Zoning Conceptualization May Alter How Future Housing Looks

- Euclidean zoning, the traditional and most common form of zoning in the United States, is the separation of land uses by type—residential, commercial, retail, industrial, etc. — each into their own zones or areas within a given city.
- Form-based zoning, in contrast, is encourages mixed uses and focuses more on the "form" of buildings and their relation to adjoining spaces and the streetscape.
- For example, if there is an empty lot between two buildings that sit in a downtown area full of shops, form-based regulations would preserve that block's form. These regulations could include height regulations (so that a developer can't build a skyscraper between these two buildings) and width regulations (so that the building doesn't extend out onto the sidewalk). In the same situation, Euclidean zoning might restrict the development to commercial use only.

Pros & Cons of Zoning Changes

- Euclidian prevents incompatible land uses (no skyscrapers in the middle of a residential neighborhood), protects historic neighborhoods (they stay 'frozen in time'), protects open spaces and particular uses (*e.g.* single-family residential, etc.), but encourages urban sprawl (by simplification of uses) and particular uses in particular places (by dictating what can be built where).
- Alterations to existing zoning to allow, e.g., 2-4 dwelling units per lot, increases incentives to build newly-allowed types of housing stock, and subsidiary regulations dictate how well (or not) multi-unit structures are integrated into existing neighborhoods and/or relate to open spaces or alter the "character" of the neighborhood.



Questions?