



Mass Benchmarks

THE JOURNAL OF THE MASSACHUSETTS ECONOMY

Looming Challenges Accompany Statewide Prosperity

Growing and Preserving Affordable Housing for Extremely Low-Income Households in Massachusetts

The Fiscal Impact of New Housing Production in Massachusetts

Housing Challenges in a Local, Tourist-Focused Setting

Massachusetts Housing: A Three-Pronged Crisis

A publication of the University of Massachusetts in cooperation with the Federal Reserve Bank of Boston



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MassBenchmarks, published by the University of Massachusetts in cooperation with the Federal Reserve Bank of Boston, provides timely information about the Massachusetts economy, including reports, commentary, and data about the state's regions and industry sectors that comprise them.

The editors invite queries and articles on current topics involving the Massachusetts economy, regional economic development, and key growth industries from researchers, academic or professional economists, and others. Topical information and a brief biography of the author should be sent to info@donahue.umassp.edu.

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Massachusetts Housing: A Three-Pronged Crisis

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FROM THE PRESIDENT



This issue of *MassBenchmarks* offers a timely look at the state of our state economy and sheds much needed light upon housing challenges facing our Commonwealth. The evidence and insight in this issue underscore growing concerns about the sustainability of an economic expansion that is in its tenth year.

The issue opens with *Notes from the Board*, an assessment of prospects for the state economy that summarizes the consensus view of the members of the *MassBenchmarks* Editorial Board. While the threats to the economic outlook that they highlight are not new—in particular a dwindling labor supply, and the ongoing impact of counterproductive federal trade and immigration policies—the question of how long our economic expansion can last continues to loom large.

A detailed review of the state of the state economy—authored by the UMass Donahue Institute’s Mark Melnik and UMass Amherst Professor Robert Nakosteen—follows. In their analysis, Dr. Melnik and Professor Nakosteen systematically review a number of major economic indicators, all of which raise concerns about the capacity of the Commonwealth to continue its long economic expansion. They conclude on a sobering note that “global economic issues currently cloud prospects for continued growth.”

The issue’s three feature articles focus on housing policy. In the first, Nick Chiumentì, a Policy Analyst at the Federal Reserve Bank of Boston’s New England Public Policy Center, examines policy implications of the expiration of thousands of affordable housing units and their removal from an already inadequate supply of affordable housing in Massachusetts. The second article, authored by Elise Rapoza and Professor Michael Goodman from the Public Policy Center at UMass Dartmouth, explores the fiscal consequences of new housing development for city and town budgets, a major obstacle to new housing development in our region. The final article, authored by Michael McCarthy from the Public Policy Center at UMass Dartmouth and the former Provincetown Town Manager David Panagore, examines the special housing challenges facing our seasonal and resort communities and summarizes the eye-opening findings and implications of a recent comprehensive Public Policy Center analysis of housing conditions in Provincetown.

The issue concludes insightfully with a *Policy Maker Perspective* feature that brings the discussion of housing policy full circle. In it, Clark Ziegler, Executive Director of the Massachusetts Housing Partnership, distills a number of important lessons gleaned from the contents of this issue and reminds us that if we are to successfully address our housing challenges, our policymakers will need to develop solutions to increase our housing supply, promote housing affordability, and prioritize housing equity.

These articles deserve careful review by our policymakers and community leaders. Successfully addressing the issues raised in this issue of *MassBenchmarks* will be a prerequisite for ensuring that Massachusetts’ expansion, while extending much needed economic opportunity to every corner of our Commonwealth.

A handwritten signature in black ink that reads "Martin T. Meehan". The signature is written in a cursive, flowing style.

Martin T. Meehan, President
University of Massachusetts

NOTES FROM THE BOARD

How long can the Commonwealth's economic expansion last? Labor supply and significant policy uncertainties weigh heavily on the state's economic outlook.

The Massachusetts economy has been mirroring the fast-growing national economy and is still growing respectably. However, the economy is also emitting signals that growth may slow because labor markets continue to be tight, global growth is decelerating, and ongoing policy uncertainties at the national level make it difficult for businesses to plan for the future, including decisions on investing in facilities and equipment. While there may be good news in the present, there is potentially bad news down the road.

At the moment, the growth of the state economy, as estimated by the MassBenchmarks Current Economic Index, continues unabated. Even the state's Gateway Cities have experienced a steady decline in their unemployment rates, a welcome sign that the benefits of a period of growth that is now in its tenth year are finally being felt outside of the Greater Boston region. It does appear that employment growth is slowing both regionally and nationally. In Massachusetts, the slowing job growth is at least in part the result of slowing growth in the labor force, which reflects longstanding demographic trends.

A major topic of discussion among Board members concerned the size of the available and underutilized labor force in the Commonwealth. One of the few potential sources of available workers is those who are not in the labor force but want a job and would take one if it were available; and those who are working part-time, but would prefer full-time work if they could find it. We estimate that both groups collectively represent approximately 250,000 Massachusetts workers. However, these potential workers may not have the skills and experience that are well aligned with the needs of the state's employers. In this context, federal policies that serve to limit international immigration are particularly unhelpful and poorly timed.

Considerable policy uncertainty also weighs heavily over the state economic outlook. The Trump administration's trade policies are disrupting complex supply chains, including those utilized by Massachusetts businesses. Recent threats to impose tariffs on all Mexican imports to the U.S. highlight the economic stakes of a protectionist trade policy for the Commonwealth. While much of the attention and concern associated with these policies has been directed, appropriately, to their impact on consumer prices, the state's trade with Mexico includes considerable "cross hauling." Computer and electronic products represent the largest fraction of trade flows with Mexico (58% of imports and 51% of exports), but the Commonwealth's trade portfolio with Mexico is highly diversified. These trade data make it clear that our high-technology products rely significantly, at intermediate stages of production, on components and other inputs that are sourced from Mexico and other international points of origin. Though total merchandise exports represent a small fraction of the state's economic output (less than five percent), the degree to which our high-technology businesses and advanced manufacturers depend on global supply chains highlights the vulnerability of our state's leading export sectors to the vagaries of current national policies on tariffs and trade.

All that said, for the moment at least, the Massachusetts economy looks very healthy. As the national and global economies slow, however, and state businesses find it increasingly difficult to find qualified workers, the question looms of how long the state's economic expansion can last.

*Prepared by Executive Editor Robert Nakosteen
June 21, 2019*

THE STATE OF THE STATE ECONOMY

ECONOMIC CURRENTS



Looming Challenges Accompany Statewide Prosperity

MARK MELNIK AND ROBERT NAKOSTEEN

Key measures attest to Massachusetts' continued economic growth. The state's GDP experienced strong, above-trend growth through the first two quarters of 2018. For many months, state unemployment has remained below 4%. Although unemployment in the Gateway Cities remains higher than in Boston and Greater Boston, improved unemployment rates and prosperity have fanned out from those economic engines. These and other gains, however, are part of a more uncertain picture that includes soaring housing costs, longer commutes, and volatile federal immigration and trade policies.

OVERVIEW

Since the end of the Great Recession in 2009, the national and state economies have expanded more or less consistently. During that time, this journal has happily had no real opportunity to warn of a downturn in economic activity. However, while the data do not necessarily signal trouble ahead, an increase in warnings has signaled a possible weakening of the economy. With that said, it is too early to predict a downturn, but there are tangible, valid concerns. Changing narratives about the immediate future of the economy create uncertainty.

Prominent among these warnings are issues related to China. Its economy is heavily oriented toward fixed investment spending and exports. Less than half of its gross domestic product (GDP), in fact, is dedicated to consumer spending. But the Chinese government is committed to moving its economy toward a more sustainable balance by increasing domestic consumption. This rebalancing act could prove painful and fraught with risk. It will surely slow China's economic growth over the short- to intermediate-term. While the direct impact on Massachusetts would be minimal, commodity producers in the U.S., specifically in agriculture and energy, would be adversely affected. In addition, some heavy manufacturing in the U.S. is being impacted. The bellwether Caterpillar Corporation has experienced significant sales headwinds, at least partially due to a drop in Chinese investment spending. There would also be indirect effects on the state and the nation through a slowing of global growth. The other prominent issue involving, but not limited to China, is the Trump Administration's trade and tariff policies. Supply chains for U.S. companies have become global; their disruption threatens U.S. growth.

Warning signs from Europe are important to watch as well. European Union economic growth, after a period of economic revitalization, appears to be slowing, despite the European Central Bank's policy of holding interest rates below zero. An aging workforce, budgetary and political issues in Italy, and the uncertainty surrounding Brexit are having depressing effects on Europe. Europe remains an important market for U.S. exports, including those from Massachusetts. The slowdown in economic growth in Europe will have both direct and indirect effects on the U.S. and global economies.

Another concern is the mushrooming of corporate debt, much of it "low grade," not far from junk-bond status. Rising interest rates and slowing growth could create significant issues in the U.S. economy's financial sector. The financial crisis a decade ago taught us consequences of an "amplifier" effect transmitted to the rest of the economy. Both job and GDP growth in the U.S. have shown evidence of slowing.

The Federal Open Market Committee of the Federal Reserve System has suspended its policy of pushing up the federal funds rate of interest, as well as its policy of shrinking the size of the Fed's balance sheet. Both of these policy changes have been attributed to downside risks for the U.S. economy.

Despite these concerns, the Massachusetts economy continues to expand. However, the description of this growth needs to be qualified, given the economic and financial clouds forming on the horizon.

STATE OF THE ECONOMY: RECENT TRENDS

According to a number of measures of economic activity, the state continues to experience robust growth. While subject to revision, GDP in the state recently resumed a strong growth in the first quarter of 2019. This resembles the first and second quarters of last year, where growth reached four percent, annualized. These rates are considerably above trend, and follow quarters that exhibited slow or even no growth in GDP.

In terms of job counts, the fastest growing sectors of the economy from 2018 to 2019 were Education and Health Services and Professional and Business Services, gaining 12,900 and 11,000 jobs respectively. The former has long been a stalwart of the Massachusetts economy; the latter accounts for much of the high technology strength of the state economy, including professional, scientific, and technical services.

The state unemployment rate in April was 2.9 percent and has hovered around 3.0 percent since the early fall (Figure 1). The "headline unemployment rate," or the U-3 unemployment rate, does not take into account those who work part-time but would prefer full-time work; nor does it take into account "discouraged workers," or those who have dropped out of the labor force but are willing to work. These individuals are not considered in the calculation of the U-3 unemployment rate.

The U-6 unemployment rate, however, accounts for these workers.

Unsurprisingly, the magnitude of the discouraged unemployed has decreased significantly in recent years, as the economy has expanded. In 2012, Massachusetts had 22,100 discouraged workers. Today, that number is down to 8,000. While that is still a significant number, it is an encouraging sign of overall economic growth. With an ever-tightening labor force, these potential additional workers are increasingly important. Hopefully, they can be drawn back into the active labor force.

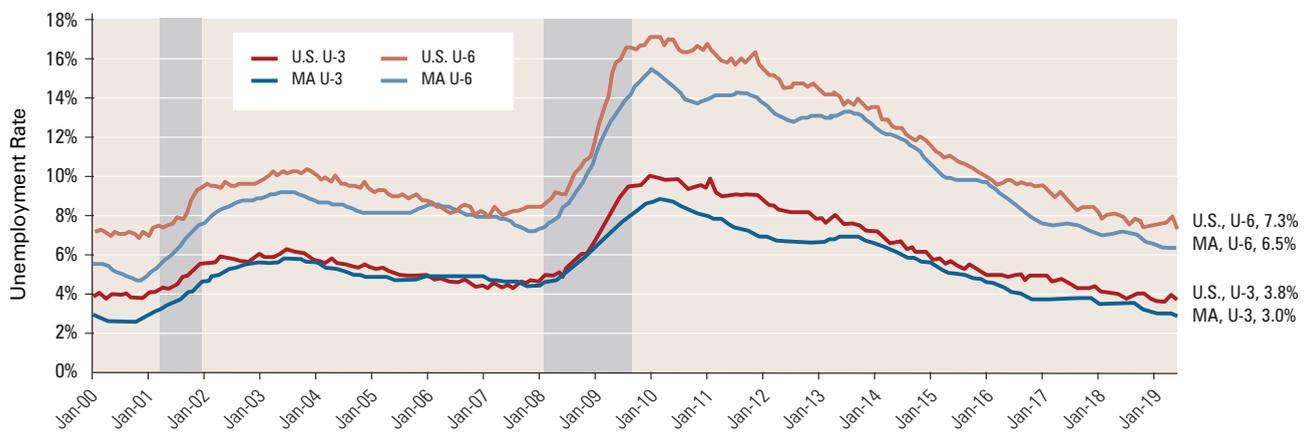
The regional pattern of unemployment, as captured by unemployment rates by city, has continued to improve. The economic vibrancy of the metropolitan Boston area, which experienced the immediate aspects of economic

recovery and expansion, is now spreading throughout the Commonwealth. The year-over-year comparison of city unemployment rates, from April 2018 to April 2019, reveals historic improvement (Figure 2). Gateway Cities in our analysis have higher unemployment rates than Boston, but all are under 5.0 percent at this time. All of these cities have all experienced considerable reductions in their unemployment rates since last year.

LABOR FORCE AND PATTERNS OF MIGRATION

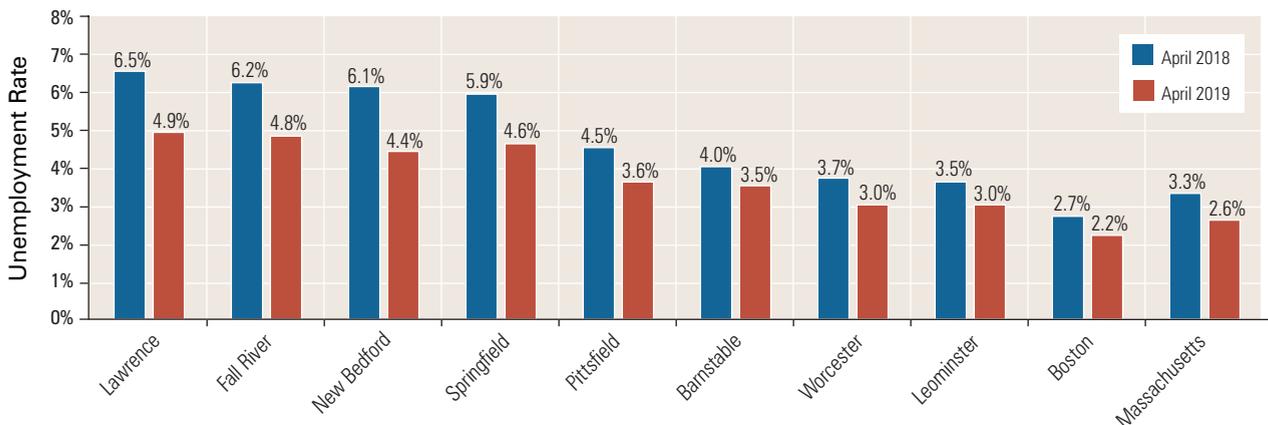
As the state's unemployment rate has continued to fall, it is becoming increasingly difficult to find qualified workers. The state has long had a slow-growing labor force. This inescapable demographic reality has increased the state's dependency on the in-migration of workers.

Figure 1. U-3 and U-6 Unemployment Rates, Massachusetts and the United States January 2000 – March 2019



Source: U.S. Bureau of Labor Statistics, Current Population Survey; Alan Clayton-Matthews' analysis

Figure 2. Unemployment Rates by City, April 2018 and April 2019
Not seasonally adjusted



Source: Massachusetts Executive Office of Labor and Workforce Development, Local Area Unemployment Statistics

Figure 3 demonstrates the striking pattern of migration into the state. In short, Massachusetts, particularly in the technology and hotel and restaurant sectors, is highly dependent on imported workers. Interestingly, the state has long experienced net negative domestic migration in the U.S., save a short period during the last recession. The pattern has reflected the cycles in the economy, complicated by how the state economy has fared relative to the nation. With an unreliable flow of domestic workers into the state, what stands out is the relative stability, as well as the growing magnitude, of international in-migration.

While the entire state economy benefits from in-migrating labor, this source of qualified workers is especially important in the technology sector. Prominent there is the Professional, Scientific, and Technical Services industry, which includes computer systems design, scientific research and development services, engineering services, and testing laboratories, among others. Note in Table 1 that for all other sectors in the Massachusetts economy, approximately 56 percent of workers were born in the state; almost 23 percent were born in another U.S. state; and almost 22 percent were born in another country. For the Professional, Scientific, and Technical Services sector, these numbers are strikingly different: Around 45 percent of workers were born in Massachusetts, almost 35 percent were born in another state, and just over 20 percent were born in another country. In the all-important technology sector, the challenge of attracting and retaining qualified workers has led to a disproportionately high number of workers who were born in

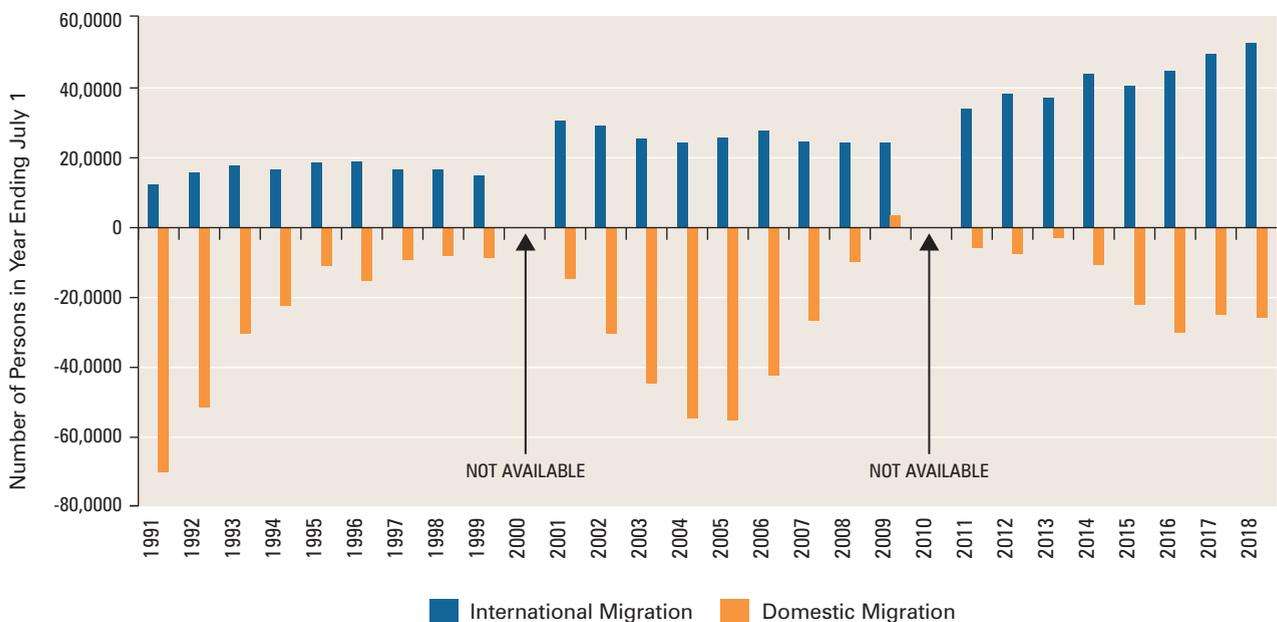
other states. This is likely driven in part by the number of young adults who come to Massachusetts for college and then choose to stay to start their careers in technology sector.

International immigration into the state is also vitally important to Accommodation and Food Services. While the percentage of workers born in Massachusetts is similar to that in other industrial sectors, hotels and restaurants employ a far higher percentage of foreign-born workers, at just over 31 percent.

Increasing restrictions on international immigration, due to policy initiatives at the national level, may impinge on the state’s labor supply. In addition, highly qualified immigrants who have received college degrees in the U.S.—many of them advanced degrees—are increasingly leaving the country after completing their studies. A changing political landscape is also pushing potential foreign-born workers without Green Cards out of the country. In addition, the international pool of workers who have traditionally staffed hotels and restaurants has become increasingly restricted. This will prove especially harmful during the summer months when tourism peaks. Though not nearly as large as either the state’s technology sector or its hotel and restaurant sector, the small agricultural sector will suffer from restrictions on immigrant labor during harvesting season.

The moral of the story is the degree to which the state is dependent on workers born elsewhere. This has policy implications for both the state and nation. For the state, policies that make it easier for workers to move into Massachusetts, and stay, have high importance. Typically,

Figure 3. Net Migration into Massachusetts



Source: U.S. Census Bureau, Population Estimates Branch; Alan Clayton-Matthews’ analysis

workers born elsewhere are more likely to uproot and move on than Massachusetts natives. Their ties to the state are weaker than those born here, and historical evidence suggests that because they lack deep personal roots in the state, they would find it less problematic to move away. There is a life-cycle aspect to this pattern as well. Young

workers, often graduates of one of the state’s many institutions of higher education, start their careers here. As they reach the decision to form a family, purchasing a home becomes a high priority. Given house prices in metropolitan Boston, the choice often comes down to a willingness to endure a grinding commute from communities with lower house prices, versus leaving the state. Thus, policies aimed at quality of life issues, such as adding to the housing supply and the accessibility of affordable housing, as well as policies that improve the commuting infrastructure, would help ease current labor shortages.

Table 1. Massachusetts Civilian Resident Employment by Place of Birth

Professional, Scientific, and Technical Services

Place of Birth	Professional, Scientific, and Technical Services	All Sectors
Massachusetts	45.1%	55.4%
Other States	34.8%	22.9%
Foreign	20.2%	21.7%
Total	100%	100%

Accommodation & Food Services

Place of Birth	Accommodation and Food Services	All Sectors
Massachusetts	53.2%	55.4%
Other States	15.7%	22.9%
Foreign	31.1%	21.7%
Total	100%	100%

Source: IPUMS USA, University of Minnesota, www.ipums.org; Alan Clayton-Matthews analysis

HOUSING MARKET CONDITIONS IN MASSACHUSETTS

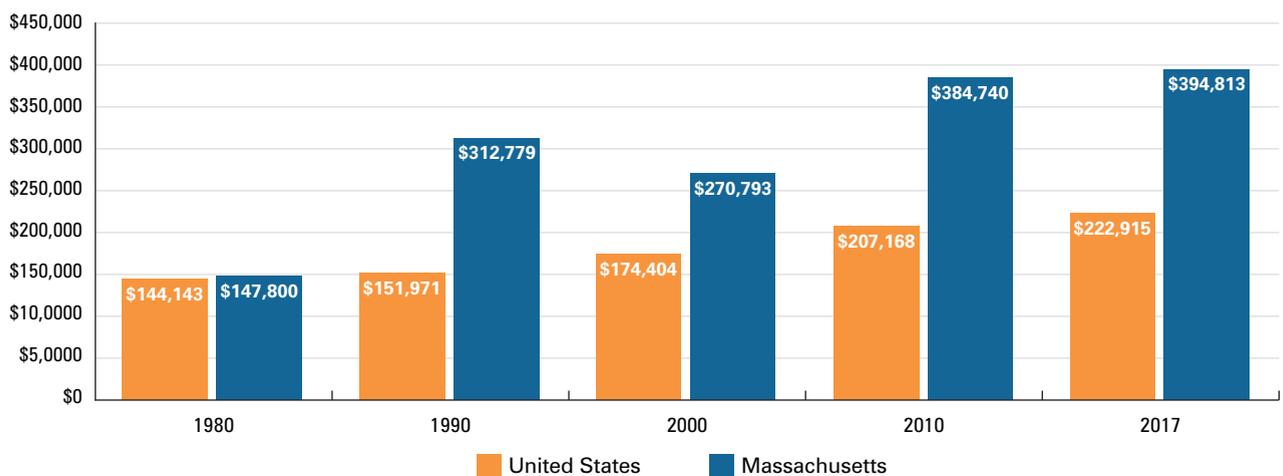
The articles in this issue focus on housing production and affordability. To that end, it seems appropriate to concentrate here on a few high-level indicators in the Massachusetts housing market.

Housing Costs

Massachusetts, especially Greater Boston, has been an expensive place to live for the past 30 years. Until the early 1980s, housing costs in the state were similar to those across the nation. Economic shifts in the U.S., notably deindustrialization, coupled with the economic expansion via the “Massachusetts Miracle” separated housing prices in the state from the rest of the nation. Today, the median value of a home in Massachusetts is 80 percent higher than that for the nation.

We see similar patterns in the state’s rental market compared to the U.S. as well (Figure 4). In 2016, Massachusetts’ rental prices were 20 percent higher than those for the nation. The rental market in Massachusetts has been particularly hot in recent years. Since 2000, rents

Figure 4. Median Value of Owner-Occupied Homes (in 2018 dollars)



Source: Census 1980 SF1, Census 1990 SF1, Census 2000 SF3; 2010 & 2017 1-year American Community Survey; UMDI analysis

have increased 24 percent in the state, while the incomes of renters have fallen three percent.

Housing Production

While housing production in Massachusetts has risen since the end of the Great Recession, driven in part by multifamily construction in and around Boston since 2013, long-term trends show that overall production in the state is quite a bit lower than in previous periods over the last 60 years (Figure 5). Since 1990, Massachusetts has authorized, on average, just under 16,000 new housing units per year, compared to approximately 29,000 annually over the prior 30-year period. The current levels of new construction have been insufficient to help alleviate rising home prices in the state, particularly in Greater Boston.

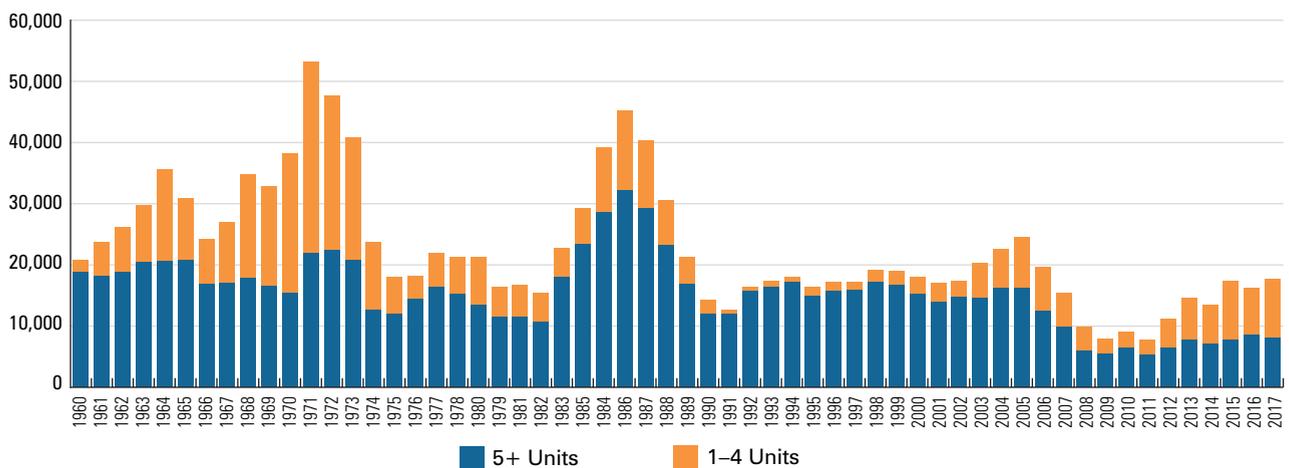
The state’s housing production, though modest by national standards, closely tracks national trends in year-to-year production swings, underscoring just how much the construction industry is driven by national economic forces and policies.

As noted previously, Greater Boston has driven a great deal of the housing production in the state since the end of the Great Recession. In the period prior to the recession most of the housing permits were outside Greater Boston (Figure 6). Since 2013, that pattern has flipped with a much greater share of housing production in and around Boston.

Housing Sales

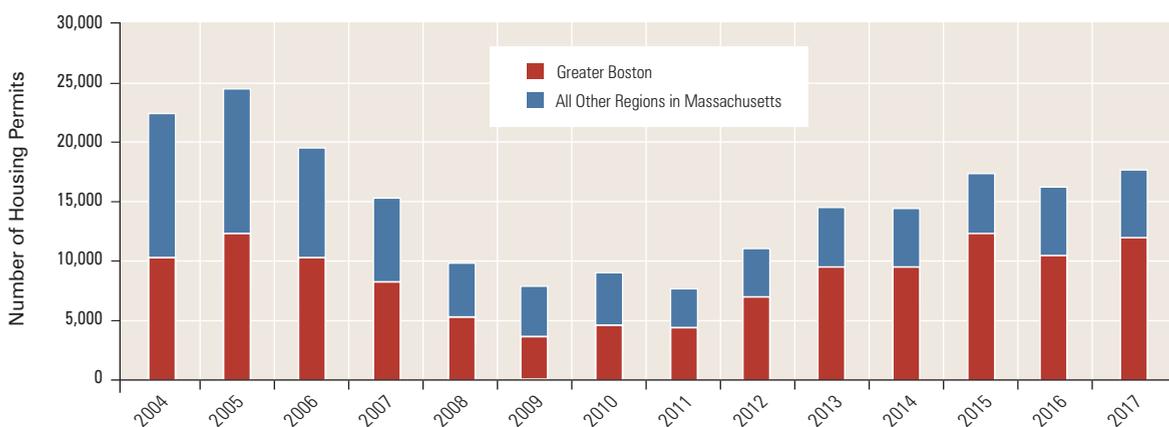
Every region in Massachusetts saw prices rise during the housing bubble and fall as the market collapsed.

Figure 5. Number of New Housing Units Permitted in Massachusetts, 1960 – 2017



Source: U.S. Census Bureau, Building Permit Survey, 1960-2017

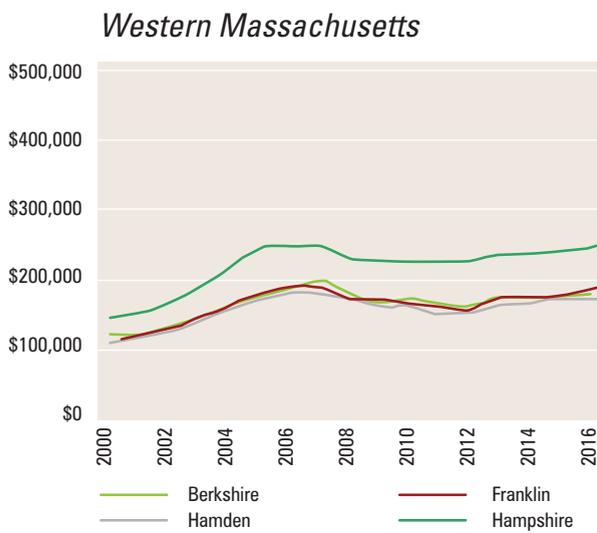
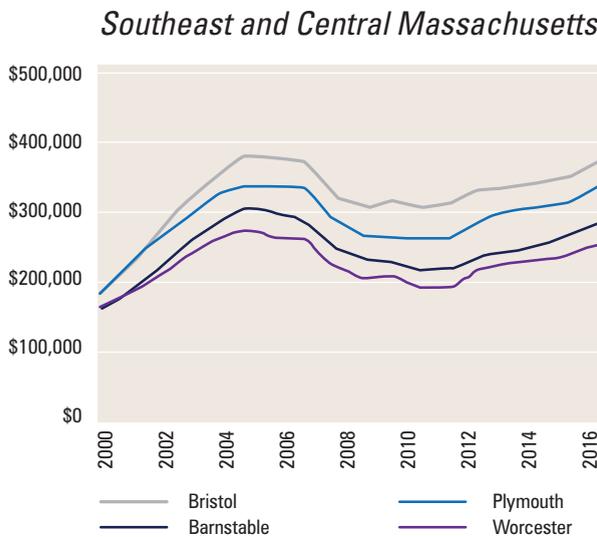
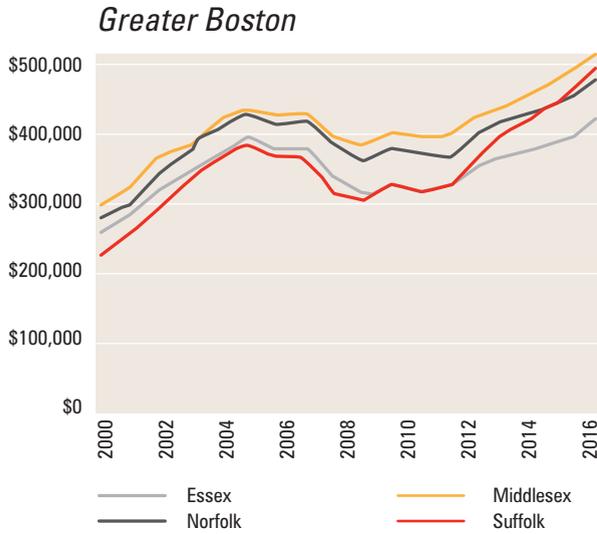
Figure 6. Number of New Housing Units Permitted in Greater Boston and Rest of Massachusetts



Source: U.S. Bureau of the Census, Building Permits Survey; UMDI analysis.

Note: Data represent reported data plus the data imputed for non-reporters and partial reporters. Greater Boston consists of Suffolk, Middlesex, Essex, and Norfolk counties.

**Figure 7. Home Sale Prices by Region
(in 2017 dollars)**



Source: 2000-2017 Massachusetts Association of Realtors (MAR)
Note: Island counties of Dukes and Nantucket are omitted.

However, Greater Boston began its post-recession recovery much sooner than the rest of in the state (Figure 7). Greater Boston’s price escalation, moreover, has also outpaced all other regions in Massachusetts. Home prices in Middlesex, Suffolk, Essex, and Norfolk Counties began to rise in 2010. Also striking is the degree of increase in house prices in Suffolk County. In recent history, Middlesex County has had the highest prices and Suffolk County the lowest in the region. Since the end of the recession, though, prices have skyrocketed in Suffolk past Norfolk and Essex counties and are approaching Middlesex County levels.

Beyond Greater Boston, prices continued to decline or were stagnant until around 2012. The Berkshire and Pioneer Valley regions have enjoyed the lowest housing prices since 2000. They have escaped the dramatic price growth in the rest of the state.

CONCLUSIONS

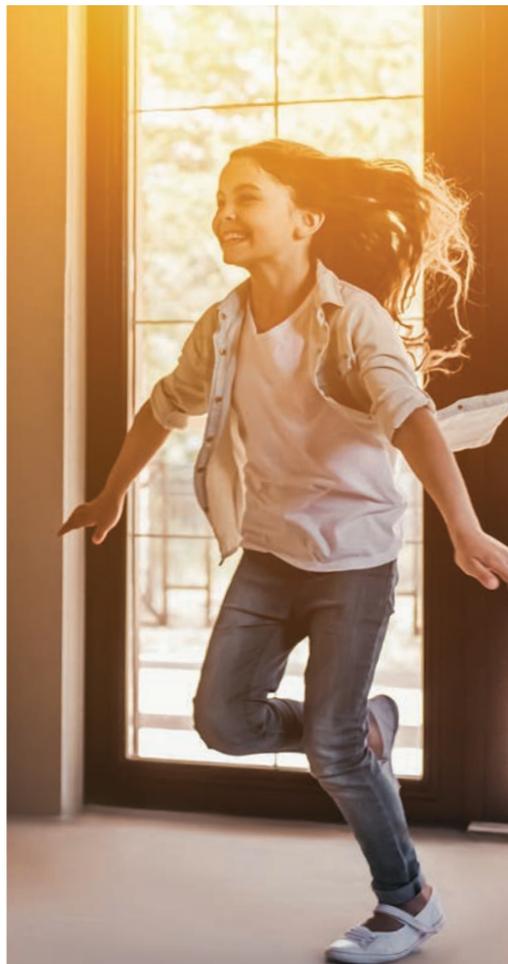
The state economy continues to grow, but on the national level, some of the wind may have left the economy’s sails. The state economy’s health is ultimately influenced by the greater U.S. economy. While a national recession does not seem imminent, a global slowdown is underway, with some signs pointing to a national slowdown as well.

Two crucial issues for the Massachusetts economy, both in the short run and over the long term, are the slowdown in labor force growth, with its corollary connection to international immigration, and the price of purchasing a home, especially in the Greater Boston area. The Trump administration has recently proposed a merit-based immigration policy. This proposal has a long way to go before it becomes law, but would certainly change this discussion. Attracting qualified workers to the state depends, in part, on a continuing flow of international immigrants. Retaining qualified workers in the state is increasingly difficult, due to the high and rising cost of housing.

The next 12 to 18 months will prove telling for the state economy. Without question, domestic and global economic issues currently cloud prospects for continued growth. But the magnitude of national and international factors remains fluid while continuing to evolve. ◀

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Growing and Preserving Affordable Housing for Extremely Low-Income Households in Massachusetts

NICHOLAS CHIUMENTI

Because much of their income goes toward housing costs, extremely low-income (ELI) households have less to spend on health care, food, and other necessities. In Massachusetts, the private market provides very few affordable housing options for ELI households; therefore, they rely on public sector subsidies like rental vouchers. Unfortunately, subsidies for more than 9,000 ELI-occupied affordable housing units—most of them in the state's three largest cities—are set to expire by 2025.

OVERVIEW

Extremely low-income (ELI) households experience precarious financial conditions. For these households, with incomes at or below 30 percent of the area median income (AMI), rental costs are often the largest item in the family budget. In 2016, nearly 80 percent of Massachusetts ELI households were “rent burdened,” meaning they spent more than a third of their income on gross rent (contract rent plus utilities). High monthly rent bills have major consequences for ELI households: families that devote large portions of their income to housing costs have to cut expenses elsewhere, sacrificing spending on health care, food, and other necessities. In addition, ELI households are often tenuously housed, because they risk financial shocks that lead to missed rent payments and, in turn, relocation, eviction, or homelessness. In Massachusetts, ELI households differ in several key ways from the overall renter-household population. As shown in Table 1, ELI households tend to be older: The

median age is 10 years older than that of all renter households. ELI households are also slightly smaller, with an average of just under two people per household. Overall, ELI renters tend to be older single adults, though there is a subset of younger families among these households.

The private market does not provide a sufficient supply of affordable units for ELI households. Due to the high costs of land purchases, construction, and labor, new developments are geared largely to the higher end of the rental market, where developers can attain greater returns on investment.¹ Thus, ELI households have to rely heavily on federal and state subsidies that cover some, or all, of their monthly rent payments. In 2016, 76 percent of the state’s public housing units and 74 percent of the Project Based Section 8 (PBS8) units were occupied by ELI households, and 75 percent of the Housing Choice Vouchers (HCV) were also held by this group.

The state risks losing substantial affordable housing stock occupied by ELI households and subsidized

Table 1. All Renter and ELI Renter Households
Massachusetts, 2011 and 2016

	2011		2016	
	All Renter Households	ELI Renter Households	All Renter Households	ELI Renter Households
Number of Households	924,319	271,833	977,493	274,842
Median Household Size	2	1	2	1
Median Age of Head of Household	43	53	44	54
Mean Household Income	\$49,109	\$11,690	\$56,166	\$11,980
Mean Gross Rent Paid	\$1,098	\$737	\$1,214	\$791
Percent of Households Rent Burdened	49%	76%	49%	79%
Percent of Households Severely Rent Burdened	26%	57%	26%	58%

Source: ACS 5-year estimates for 2011 and 2016; HUD Income Limits for 2011 and 2016.

Table 2. Income Categories and Affordability Definition

Income limits for each category depend on the median income for the area (AMI). These areas are usually metropolitan statistical areas, or counties, but in some cases can be unique areas defined by HUD to encompass a housing market.

Category	Definition	2016 Range for a Family of 4 in Massachusetts
Low Income (LI)	Households with incomes at or below 80% of AMI	Household makes \$47,100 – \$75,800 per year.
Very Low Income (VLI)	Households with incomes between 30% and 50% of AMI	Household makes \$29,450 – \$52,550 per year.
Extremely Low Income (ELI)	Households with incomes at or below 30% of AMI	Household makes \$24,330 – \$31,550 per year.
Affordable and Available to an ELI Household (AA)	Total gross rent does not exceed 30% of maximum ELI threshold. Unit is occupied by ELI Household.	Rent costs between \$7,290 – \$9,465 per year.

Source: Author based on HUD terms.

by either the federal government or the state. By 2025, 9,110 ELI-occupied units could have all of their attached subsidies expire, and that number could increase to 13,331 units by 2035. Preserving these subsidies could cost an additional \$100 million to \$122 million per year by 2025, based on 2016 per-unit rental-assistance-program spending. Failing to preserve these units could lead to a decline in available and affordable (AA) units, defined as having gross rents not exceeding 30 percent of the ELI income level and occupied by an ELI household. Massachusetts has demonstrated a commitment to addressing affordable housing preservation, and there are resources and funding sources at the federal and state levels that, along with private and nonprofit development, would help diffuse the cost across multiple actors.

The findings of this report² also suggest that, as expiring use units (housing units with attached subsidies that are set to end) are becoming a bigger problem in the state, Massachusetts needs to do more than just maintain its supply of AA units; it must increase it. The current supply is insufficient, and the demand for affordable housing is rising. To grow the subsidized affordable-housing inventory at a rate that matches the expected population growth, the state will need to add more than 76,000 units by 2035. Barring a significant increase in spending on affordable housing development, this effort could be aided by tailoring subsidy programs according to local conditions, leading to a more efficient use of resources. Allocating a higher percentage of rental-assistance subsidies to communities with lower median rents

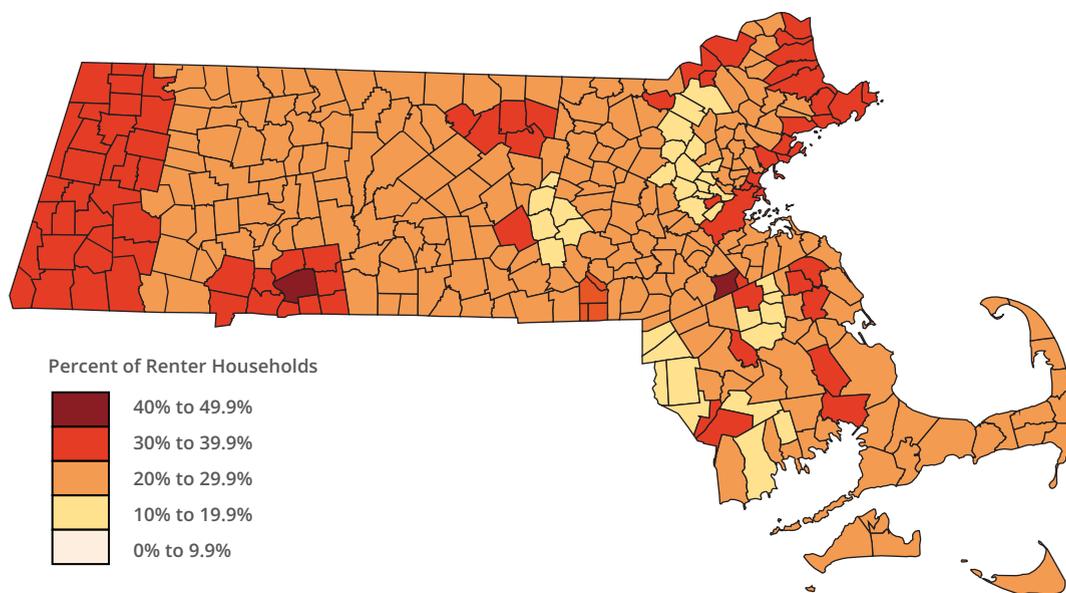
but higher rates of rent burden would better address the problem of low incomes in these localities. Meanwhile, tax credit and other programs designed to build the supply of affordable units could be focused on larger cities and other communities with little or no market-supplied affordable housing.

MASSACHUSETTS’ EXTREMELY LOW-INCOME RENTER HOUSEHOLDS

Between 2011 and 2016, renter households in Massachusetts rose by 53,174, with ELI households accounting for only 6 percent of this increase. The number of very low-income (VLI) households declined during this period. Low-income (LI) households, higher-income households (those making greater than 80 percent of AMI) and student-led households (included in this report as higher-income households) accounted for the vast majority of the added renter households. Although higher-income households were the single largest group of renter households in Massachusetts in both 2011 and 2016, the majority of renter households (57 percent) had incomes of less than 80 percent of AMI and thus qualified for many housing assistance programs.

Although incomes for ELI households are characteristically low, the gross rents that they pay are not equivalently low. In 2016, the average ELI household in Massachusetts, with an annual income of \$11,980 and a monthly gross rent of \$790, spent about 79 percent of its household income on housing costs. In contrast, the average renter household spent about 26 percent of its

Figure 1. Percent of Renter Households Classified as ELI
Massachusetts Cities and Towns, 2016



Source: ACS 5-year estimates for 2016; HUD Income Limits for 2016; HUD Income Limits for 2016

While some areas of the state, particularly in Western Massachusetts, have relatively large ELI populations, the comparatively lower rents seemingly would make living there more advantageous. However, many of these communities saw high rates of rent burden among their ELI populations.

annual household income on gross rent that year. Incidence of rent burden and severe rent burden (spending more than 50 percent of income on gross rent) are much higher for ELI households. While just under half of all renter households were rent burdened in both 2011 and 2016 (see Table 1), more than three-quarters of ELI households were classified as such. Over half of the state’s ELI households were severely rent burdened in 2011 and 2016, compared with just over one-quarter of all renter households.

Three cities—Boston, Springfield, and Worcester—together were home to roughly 30 percent of the state’s ELI renter households in 2016. However, in many smaller and midsized cities and towns, ELI households accounted for a large share of the local renter population,

as shown in Figure 1. Ninety-three cities and towns had more than the statewide average of 28 percent of renter households qualified as ELI. In some communities, more than 40 percent of the local renter households qualified as ELI.

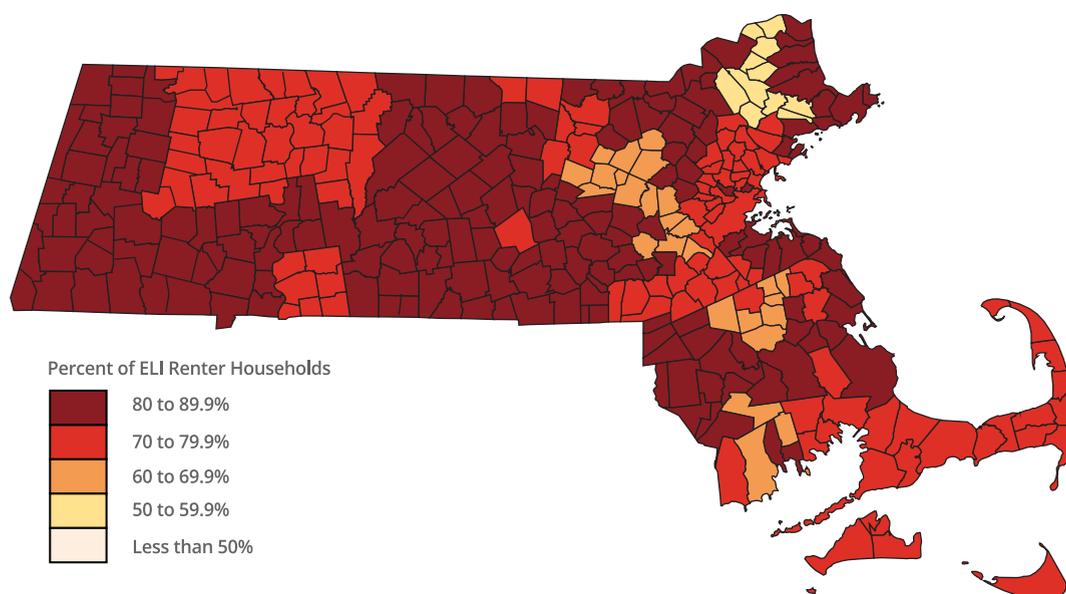
While some areas of the state, particularly in Western Massachusetts, have relatively large ELI populations, the comparatively lower rents seemingly would make living there more advantageous. However, as Figure 2 shows, many of these communities saw high rates of rent burden among their ELI populations. In 2016, communities with lower median rents relative to the statewide median had higher rates of rent burden among their local ELI renter household population, indicating that substantially lower incomes can negate the benefits of lower housing costs.³

SUPPLY OF AFFORDABLE AND AVAILABLE RENTAL UNITS

At the same time that many ELI households are experiencing rent burdens, affordable and available (AA) units in Massachusetts are in short supply. In 2016, there were 48.6 AA units per 100 ELI households in the state, down from 50.2 in 2011. This is less than one AA unit for every two ELI households, or a shortage of just over 141,000 affordable and available units.

The bulk of the state’s AA units are supplied through U.S. Department of Housing and Urban Development (HUD) subsidy programs. In 2016, HUD-funded

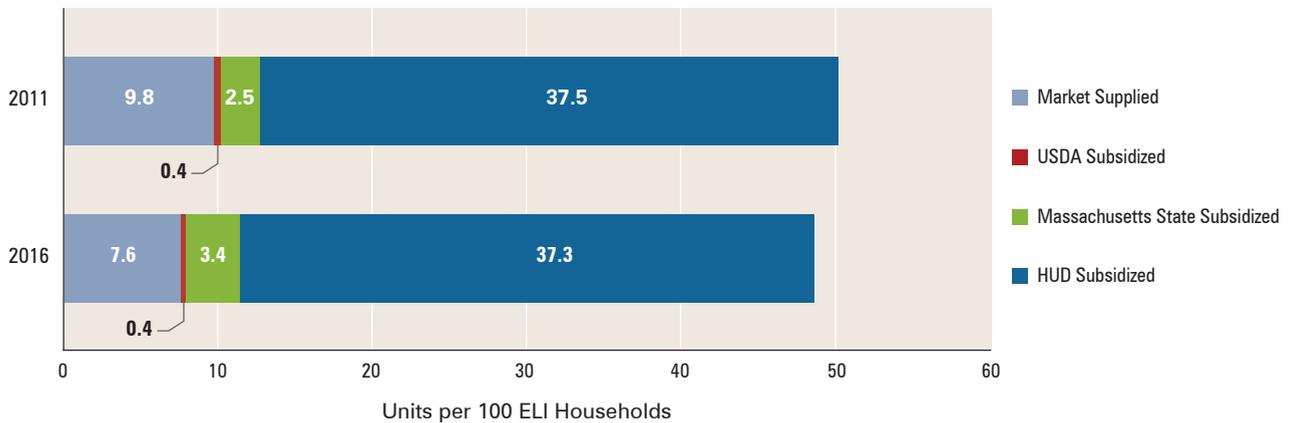
Figure 2. Percentage of Rent-Burdened ELI Households
Massachusetts Cities and Towns, 2016



Source: ACS 5-year estimates for 2016; HUD Income Limits for 2016

Note: Of the 351 cities and towns in Massachusetts in 2016, 289 were uniquely identified and 28 additional combined city and town areas were identified based on shared census tract areas.

Figure 3. Subsidy Sources of Affordable and Available Units per 100 ELI Renter Households
Massachusetts, 2011 and 2016



Source: ACS 5-year estimates for 2011 and 2016; HUD Fair Market Rent and Income Limits for 2011 and 2016; HUD Picture of Subsidized Households for 2011 and 2016; National Housing and Preservation Database active USDA and Massachusetts state subsidized units for 2011 and 2016.

Note: All U.S. Department of Agriculture (USDA) and Massachusetts state-subsidized units occupied by ELI households were assumed to be affordable at the 30 percent threshold.

programs subsidized 76 percent (more than 100,000) of these units. As Figure 3 shows, the number of affordable and available units supplied by HUD changed little between 2011 and 2016. HUD funding provided 37.3 AA units per 100 ELI households in 2016, state-level programs supplied an additional 3.4 units, and U.S. Department of Agriculture (USDA) rural housing programs supplied less than one unit per 100 extremely low income households.⁴ The remaining 7.6 AA units in 2016 are assumed to be market supplied and not connected with any subsidy program. Compared with 2011, the 2016 estimates represent a decrease in market-supplied AA units of just over two per 100 ELI households.

Market-supplied units, while accounting for only 15 percent of the AA units statewide in 2016, make up a sizeable portion of the affordable and available units in smaller communities. This has important implications for policymakers and administrators who want to maximize the impact of program spending. Rental assistance subsidies, such as the federally funded Housing Choice Voucher program, could be more effective in areas of Massachusetts where rents are lower and the number of market-supplied AA units is greater, but the incidence of rent burden is higher. In these communities, rent burden is likely more of an income problem and thus would be better addressed with programs that bridge the gap between low incomes and housing costs. Meanwhile, tax credit and other supply-side programs designed to increase the rental unit supply, such as the Low-Income Housing Tax Credit program, could be focused on areas where rents are higher and market-supplied units are fewer. In these communities, affordability issues more likely stem from an overall lack of rental units, which drives up prices and restricts access for ELI households.

EXPIRING SUBSIDIES FOR AFFORDABLE HOUSING

Massachusetts' inventory of affordable housing units is far from stagnant. Every year, units are subtracted when their private-market rents increase or their subsidies expire (removing the restrictions on rent and occupancy), and landlords increase rents. Units at risk of becoming unaffordable are preserved by extending their attached subsidies. Meanwhile, units are added through the funding of new vouchers, through new construction or rehabilitation of existing units, and when private apartments enter the market at affordable rates.

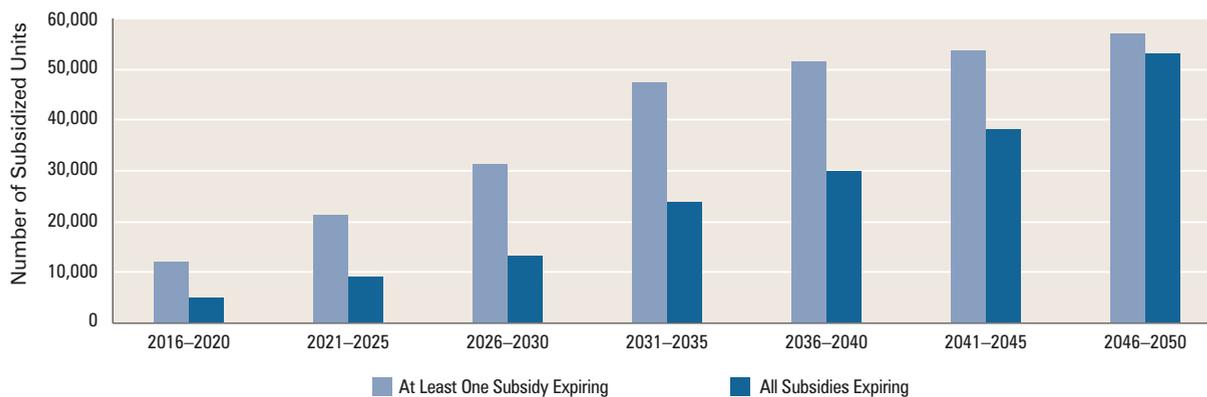
In 2016, the National Housing Preservation Database listed just over 137,000 active subsidized units for Massachusetts; 70 percent were occupied by ELI households. These do not include units subsidized through vouchers that households can bring with them from one rental unit to another, such as those issued through the Housing Choice Voucher program. Between 2006 and 2016, 9,507 units had all of their attached subsidies expire. The owners of these units were thus free to raise rents or accept tenants with higher household incomes. Figure 4 shows the cumulative number of subsidized units occupied by ELI households in 2016 that are at risk of having at least one of their attached subsidies expire by 2050. By 2020, 4,957 units will have all of their attached subsidies expire. By 2025, that total will rise to 9,110. In effect, these units will become private market rate units. The owner of such a unit may still be required to keep the rent low or restrict occupancy to lower-income households; however, an ELI household's ability to afford the unit will have eroded in the absence of these subsidies.

The number of at-risk subsidized units, those with at least one subsidy set to expire, will increase rapidly until

2035, growing at a rate of 9,000 to 16,000 units in each five-year period after 2016. While these units will not become completely unsubsidized (units may still receive longer-term subsidies, such as mortgage insurance), subsidy programs important for ELI households that were active in 2016 will have mostly ended by this time. By 2035, many of the Project-based Section 8 (PBS8) and Low-Income Housing Tax Credit (LIHTC) subsidies that were active in 2016 will have expired, because these subsidies are restricted to 20 years and 30 years. Often,

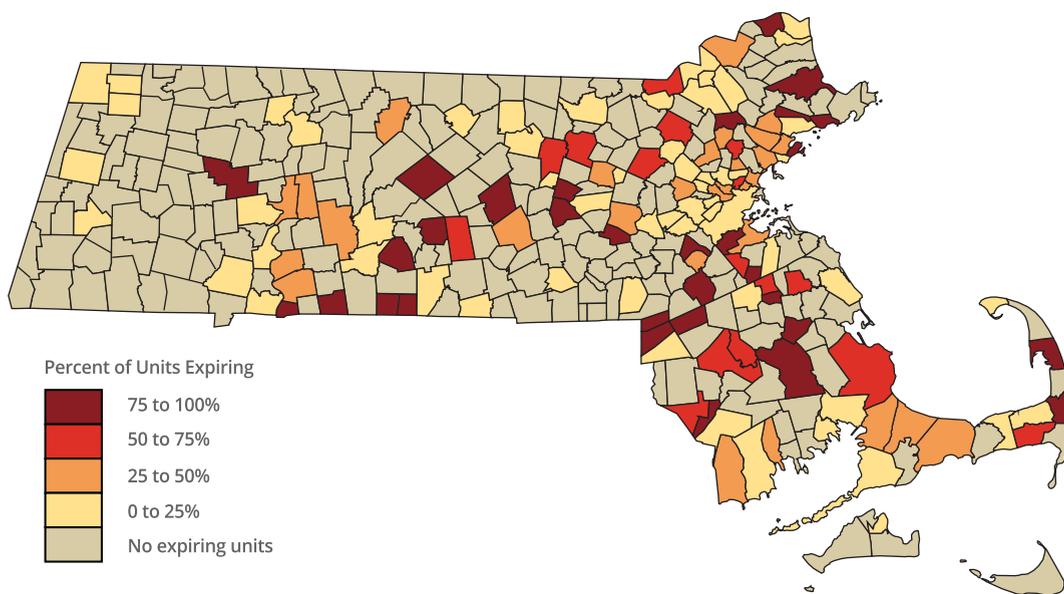
multiple subsidy sources are needed to create affordable units. For example, an ELI household receiving rental assistance from a PBS8 could live in a unit whose owner receives a tax credit through the LIHTC program. The expiration of one of these subsidies would mean an increase in the share of income that the household pays toward rent and could thus render the unit unaffordable. Preserving these units, either by extending contracts or replacing expiring funding sources with new ones, will become an important issue affecting ELI households.

Figure 4. ELI Occupied Units with Expiring Subsidies
Massachusetts, 2016 – 2050



Source: National Housing Preservation Database 2016 active subsidized units in Massachusetts.
Note: Expiring units were active in 2016 and occupied by ELI households. Units with at least one subsidy expiring are based on the earliest date a subsidy attached to the unit ends. Units with all subsidies expired are based on the last date any subsidy attached to the unit ends.

Figure 5. Percent of Subsidized Unit Inventory that Will Expire by 2025
Massachusetts Cities and Towns



Source: National Housing Preservation Database, 2016 active subsidized units in Massachusetts.
Note: Of the 351 cities and towns in Massachusetts in 2016, 289 were uniquely identified and 28 additional combined city and town areas were identified based on shared census tracts. Expiring units are based on the first date a subsidy attached to the unit ends.

The Cost of Preserving Affordable Units

The looming increase in the number of affordable units with expiring subsidies likely will prompt a greater focus on preserving the existing subsidized housing stock, over new construction in the coming years because preserving affordable subsidized units is far cheaper than building new affordable housing from scratch. Still, the price can be steep. For example, of the 9,110 subsidized units set to have all attached subsidies expire by 2025, 6,544 receive PBS8 subsidies. Preserving or replacing these subsidized units could cost an additional \$88.2 million annually by 2025.⁵ The funding to preserve them could come from a variety of state and federal sources as well as the private or nonprofit sectors. The federal government, however, remains an important partner and the biggest source of funding for affordable housing for Massachusetts, mainly through HUD programs. The annual cost of continuing to fund all of the ELI-occupied subsidized units that will expire by 2025 could be \$100 million to \$122 million. By 2050, these expenditures could increase to between \$586 million and \$716 million per year, depending on the level of subsidy provided.⁶ Preserving the current stock of subsidized units poses a growing fiscal problem, as much as an affordable housing problem, and one that Massachusetts likely will be unable to address on its own.

While these cost estimates represent a worst case scenario, in practice, expiring use properties do not become unaffordable immediately after they transition to market rate, and in the case of the units subsidized through the LIHTC program, they can remain affordable for several years after subsidies end.⁷ Property owners who reach the end of their 30-year affordability restriction period can apply for new tax credits to fund capital improvements and renovations. Tax credits will guarantee the continued affordability, as well as quality, of existing stock. Massachusetts acknowledges LIHTC as a valuable tool for preserving existing affordable housing, specifically units occupied by ELI households.⁸ In addition, the state has its own housing tax credit program to complement the federal program.

Recent Massachusetts Initiatives

Massachusetts has several state-funded initiatives, programs and laws related to affordable housing preservation, as well as access to federal dollars that could be used to address this issue. Most recently, 2018 legislation provided for \$675 million, specifically for affordable-unit creation and preservation.⁹ If all of this funding were used for preservation, it would prevent the expiration of subsidies for nearly 4,300 affordable units,¹⁰ which

Table 3. Major Affordable Housing Programs and Policies in Massachusetts

Type	Description	Eligibility
Private Market Sources		
New construction	Unsubsidized rental units may be affordable for many low-income households if the landlord or developer rents at a low price.	No eligibility restrictions.
Existing units		
“Filtering”		
Demand-Side Sources/Rental Assistance		
Housing Choice Voucher (HCV)	Household pays 30% of income toward rent. Tenant can move to a new unit and keep the subsidy.	Household income must be at or below 50% of AMI.
Project Based Section 8 Voucher (PBS8)	Household pays 30% of income toward rent. Tenant cannot move to a new unit and keep the subsidy. Units are restricted for up to 20 years.	
Public Housing (PH)	Household pays 30% of income toward rent. A housing authority or other government agency owns and operates the unit.	Household income must be at or below 80% of AMI.
Massachusetts Rental Voucher Program (MRVP)	Household pays 35–40% of income toward rent. An MRVP voucher can move with a tenant to another unit.	
Supply-Side Sources		
Low-Income Housing Tax Credit (LIHTC)	Reduced tax liability as incentive for developers to lower costs of new or rehabbed units. Units are rent restricted for up to 30 years.	Units must be affordable for households with incomes at or below 50% or 60% of AMI.*
Chapter 40-B (Comprehensive Permit Act)	Massachusetts law giving city and town zoning boards flexibility if 20–25% of a new housing development’s units are made affordable over the long term.	Units must be affordable for households with incomes at or below 80% of AMI.

* Depending on quantity of affordable units

exceeds the number of ELI-occupied units with subsidies at risk of expiring by 2030. The state also has a legislative framework that promotes affordable housing preservation, specifically Chapter 40-T. Passed in 2009, the law requires, among other stipulations, owners of affected properties to notify tenants and the Department of Housing and Community Development (DHCD) when affordable housing restrictions are going to terminate. It also provides a “right of first offer” to the DHCD or a designated third party to purchase an affordable housing property that will be listed for sale. Owners, however, are under no obligation to sell.¹¹ Since its enactment, Chapter 40-T has been credited with helping to preserve more than 10,000 affordable units.

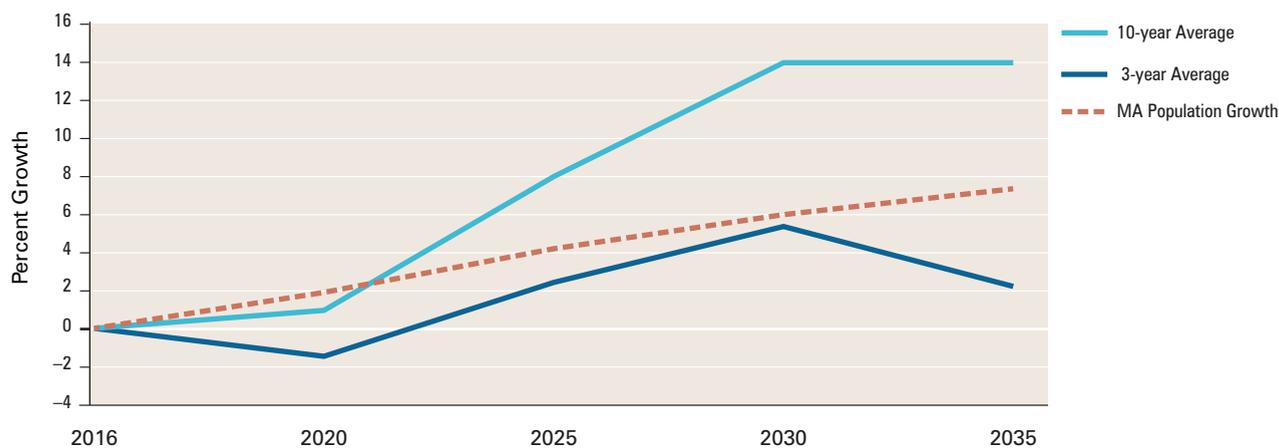
If there are no substantial increases in state or federal funding for affordable housing preservation, the state must determine how to best prioritize its efforts. The geographic concentrations of expiring use properties occupied by ELI households will, in part, dictate which areas of the state receive funding to preserve subsidized units for this population. By 2025, 133 cities and towns in Massachusetts could see some or all of the subsidies on each of their ELI-occupied units expire. Three of those municipalities—Boston, Springfield, and Worcester—account for 46 percent of the housing units with subsidies at risk of expiring. This is not surprising given the concentration of affordable units in these cities, particularly in Boston. However, as Figure 4 shows, many smaller communities with relatively fewer subsidized units are at risk of seeing the subsidies on large portions of their ELI-occupied affordable housing inventory expire by 2025.

FUTURE SUBSIDIZED HOUSING INVENTORY

Notwithstanding the abundance of expiring use properties, and based on past rates of new additions to the subsidized housing inventory, Massachusetts still could see growth in the number of subsidized units, but only through 2030. Massachusetts has historically been successful at growing its subsidized housing inventory, mainly through programs such as the Low-Income Housing Tax Credit and Project Based Section 8. Figure 5 shows the number of subsidized units in Massachusetts based on the three- and ten-year average numbers of units added annually, minus the numbers of units with at least one subsidy expiring. All units were included regardless of the household income of the occupant. Estimates of the average number of new units added annually were constructed to account for the variation from year to year. Estimates are based on the first date that a unit’s subsidies end and thus represent a maximum estimate of expiring use units. Based on the three-year annual average (about 3,600 units added per year from 2014 through 2016), the subsidized housing inventory in the state can be expected to grow to as many as 144,000 by 2030. After this period, the number of units with expiring subsidies will meet or exceed the number of additions, and total inventory will decline.

To grow its subsidized housing inventory at a rate that matches its expected population growth, the state must add an average of 4,024 subsidized units annually, or 76,464 by 2035. This assumes that the ELI household population will grow at a similar rate. These additions would offset expiring use units and sufficiently increase the inventory. The cost of producing or preserving this

Figure 6. Projected Growth of Subsidized Rental Inventory
Massachusetts, 2016 – 2035



Source: National Housing Preservation Database, 2016 active subsidized units in Massachusetts; Population estimates from Renski, Henry, and Susan Strate, Long-Term Population Projections for Massachusetts Regions and Municipalities, 2015, University of Massachusetts Donahue Institute, Hadley, MA.

To grow its subsidized housing inventory at a rate that matches its expected population growth, the state must add an average of 4,024 subsidized units annually, or 76,464 by 2035.

many subsidized units is substantial, and would vary depending on the levels of subsidy. For example, based on LIHTC program costs, by 2035 the cost of adding or preserving these 76,464 units could range from \$12 billion to \$17 billion in new tax credit subsidies over 10 years, based on current cost guidelines for the LIHTC program.¹² This would be a significant loss in tax revenue for the state that may not effectively serve ELI households, because rental costs under this program are often set much higher than what this population can afford. Based on per-unit rental assistance program costs, the cost of adding or preserving these units could range from \$840 million to \$1.03 billion in additional annual expenditure by 2035. While less costly than the LIHTC-based estimate, preservation using rental assistance would require an ongoing commitment to maintain inventory. Furthermore, over the 30 years that the LIHTC restricts affordability, the tax credit program would lower annualized cost. A preferred approach requires balancing the long-term financial commitment with providing affordable housing for ELI households, which is necessarily more expensive.

Growing the state's subsidized housing inventory at the three-year average annual rate through 2035 will equate to about \$10 billion to \$15 billion in new tax credit subsidies, provided over the course of 10 years, or \$766 million to \$937 million per year in new rental assistance funding by that year.¹³ However, this would leave Massachusetts with a shortage of almost 7,000 subsidized units relative to the level needed to match the expected population growth. As the number of units with expiring subsidies increases, maintaining and growing the state's inventory of subsidized housing through 2035 will depend in large part on preserving these units, because they will become harder to replace with additions to the inventory. The true cost of growing subsidized housing inventory, and by extension affordable housing inventory, depends on a variety of factors beyond this analysis, such as the willingness of landlords to accept new subsidy contracts, the cost of purchasing expiring properties or land, and the rising cost of housing in general in the state. However, the total cost likely will be high. Maintaining

and expanding relationships with federal, nonprofit, and private sector partners will be important for ensuring that Massachusetts will be able to maximize the number of resources it has at its disposal and is not left bearing the final cost alone.

CONCLUSION

Preserving existing subsidized units will become increasingly important in Massachusetts. This will impact the supply of affordable housing, not just for ELI households, but for all of the state's low-income renters. While Massachusetts has shown a willingness to making preservation a priority, funding is not limitless, so it is important to use available resources that best address the cause of a household's housing cost burden, whether it is low income or high rent. Indeed, cities and towns with lower rents paradoxically have seen higher rates of rent burden among ELI renter households, indicating that increasing the supply of affordable housing may not be the most effective solution for every community. Balancing access to affordable housing throughout the state with maximizing the number of units saved is also important. Most of the housing units with subsidies set to expire in 2025 are in just three cities; however, a number of smaller communities are at risk of losing all of their subsidized affordable housing inventory by that year. Allocating funds for the preservation of subsidies in these communities will ensure geographically broader access to affordable housing for ELI and other low-income households. ◀

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This article derives from a 2019 Federal Reserve Bank of Boston New England Public Policy Center (www.bostonfed.org/neppc) report titled 'The Growing Shortage of Affordable Housing for the Extremely Low Income in Massachusetts.'

Endnotes

- 1.) Joint Center for Housing Studies of Harvard University (JCHS). 2015. *America's Rental Housing: Expanding Options for Diverse and Growing Demand*. Joint Center for Housing Studies of Harvard University. Cambridge, Massachusetts.
- 2.) Chiumenti, Nicholas. 2019. *The Growing Shortage of Affordable Housing for the Extremely Low Income in Massachusetts*. NEPPC Policy Report 19-1. Federal Reserve Bank of Boston.

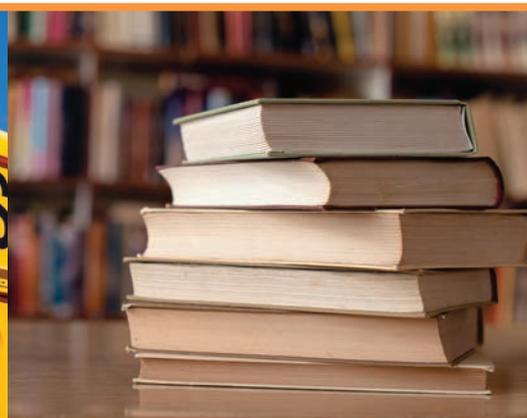
- 3.) In 2016, city and town median gross rents relative to the statewide median were negatively correlated with the percentage of local ELI renter households that were rent burdened. This negative correlation, with a coefficient of -0.311 , was statistically significant at the 5 percent level ($p \leq .05$). Relative rents were expressed as the percentage of local median gross rent relative to the statewide median, and ranged from 65.7 percent to 166.07 percent.
- 4.) Estimates of AA units funded through USDA and Massachusetts state sources include units that received funding from only those sources. HUD AA unit estimates originate from the Picture of Subsidized Household dataset and include any dual-funded units that use HUD funding.
- 5.) Based on the per-unit PSB8 funding level in 2016 of \$13,491 per unit from HUD's Community Assessment Reporting Tool.
- 6.) The lower cost estimate uses the HCV per-unit funding level received in 2016 of \$11,037 per unit. The higher cost estimate uses the per-unit PSB8 funding level in 2016 of \$13,491 per unit in Massachusetts from HUD's Community Assessment Reporting Tool. Only units with all subsidies expiring were used to compute costs.
- 7.) Khaduri, Jill, Carissa Climaco, and Kimberly Burnett. 2012. *What Happens to Low-Income Housing Tax Credit Properties at Year 15 and Beyond?* U.S. Department of Housing and Urban Development. Bethesda, Maryland.
- 8.) Massachusetts Department of Housing and Community Development (DHCD). 2016. *Low Income Housing Tax Credit Programs: Qualified Allocation Plan*. Massachusetts Department of Housing and Community Development. Boston, Massachusetts.
- 9.) Massachusetts' 2018 Housing Bond Bill (H.4536) authorized the financing of \$1.8 billion in housing-related programs, including the expansion of many programs geared toward preservation of current affordable housing stock. This includes the various funds listed as well as an extension of the state's housing tax credit program and funding for modernizing the state's inventory of public housing.
- 10.) This estimate is based on the amount of funding allocated for programs specifically designed to create and preserve affordable housing. It uses the per-unit cap on allowable eligible basis (max that can be claimed per unit) for preservation projects, and the provided formula for computing total allowable tax credit based on the 9 percent credit from DHCD's 2016 Low Income Housing Tax credit Qualified Action Plan.
- 11.) Achtenberg, Emily. 2015. Chapter 40-T at 5: *A Retrospective of Massachusetts' Expiring Use Prevention Law*. Prepared for the Community Economic Development Assistance Corporation (CEDAC) and the Massachusetts Housing Finance Agency (MassHousing). Boston, Massachusetts.
- 12.) Based on the 2016 per-unit cap on allowable eligible basis for preservation projects of \$175,000 (lower estimate) and new production projects of \$250,000 (higher estimate) from DHCD's 2016 Low Income Housing Tax credit: Qualified Action Plan.
- 13.) Costs based on the 2016 per-unit cap on allowable eligible basis for preservation projects of \$175,000 (lower estimate) and new production projects of \$250,000 (higher estimate) from DHCD's 2016 Low Income Housing Tax credit: Qualified Action Plan. Cost estimates based on rental assistance are based on the per-unit funding received for the HCV (\$11,037) and PSB8 (\$13,491) programs, retrieved from HUD's *Community Assessment Reporting Tool*.



The Fiscal Impact of New Housing Production in Massachusetts

ELISE RAPOZA AND MICHAEL GOODMAN

A new study demonstrates that, in the aggregate, development of new housing offers net fiscal benefits to both municipalities and the state. Additional analysis validates a second study which found that increased housing production does not predict enrollment changes in Massachusetts school districts. In the new study, a distinct minority of municipalities did incur net fiscal burdens—burdens that the net new state tax proceeds associated with the development of new housing are more than sufficient to offset.



INTRODUCTION

Since 2010, the Massachusetts economy has grown robustly, led by the state's dynamic innovation economy clustered in greater Boston. During the nine years leading up to 2017, Massachusetts added over 300,000 new residents and employment now exceeds the 2001 peak by almost 300,000 jobs.¹ As the Massachusetts economy grows, so does the demand for more housing. In 2010, the UMass Donahue Institute published a baseline estimate of future housing demand in 2020 as part of the Massachusetts Housing Partnership's (MHP) Foundation for Growth Initiative,² which estimated a supply gap of almost 30,000 homes by 2020, leading to unnecessary price inflation and out-migration.

Slow housing growth in Massachusetts has been well-documented and discussed in housing reports by many experts, including MHP, the Commonwealth Housing Task Force and even the White House.³ Over the past fifty years, housing production in Massachusetts has fallen, particularly construction of multi-unit housing developments. Constraints on new construction include complex and exclusionary permitting processes for multi-family development, threats of lawsuits and organized opposition to new housing projects, and large-lot zoning for single-family homes that limits the number of homes that can be built in one area. Even though housing construction has picked up over the last few years, as evidenced by the increase in building permits between 2013 and 2016,⁴ the state's regulatory environment, high construction costs, and lengthy and uncertain permitting process combine to incentivize high-end housing that yields greater rates of return, but does not help solve the state's affordability problems.

For more than a decade, community and academic leaders from across Massachusetts have identified the need for significantly increased housing production as perhaps the central barrier to economic growth and quality of life in the state. One major argument in opposition to new housing development is the belief that new residents—especially in multi-family housing—will have a negative fiscal impact on the municipality, especially from higher municipal service costs associated with increased school costs due to new students living in new housing units.

In 2016, we published a report⁵ that summarized the literature on the local fiscal impact of new housing development and extended this literature by analyzing the state's fiscal benefits associated with new development. We analyzed the housing units studied in a 2007 UMass Donahue Institute report⁶ to calculate the state revenues (from all sources including income and sales taxes) from residents, adjusting for the estimated income of residents and their associated housing costs. We found

that the new state revenues generated by the new developments previously examined were substantial and more than offset any negative local fiscal impacts, if and when they occurred.

Informed by our previous work on this topic, this study attempts to develop an estimate of the total state revenue potential of new housing projects by accounting for regional variation in project mix and demographics. The results of this analysis demonstrate that, in the aggregate, new housing development provides a net fiscal benefit to both municipalities and the state. This is true even after considering that not all residents of new housing are new residents in the state and after accounting for the additional costs associated with new residents.

Additionally, we conducted an analysis validating a study by the Metropolitan Area Planning Council, which found that increased housing production does not predict enrollment changes in Massachusetts school districts.⁷ Our analysis finds that available school capacity—measured as declining enrollment and a student-teacher ratio below the state average—does not have a statistically significant impact on whether towns permit new housing. If anything, the relationship is in the opposite direction. We find that towns with more school capacity tend to permit less housing.

ESTIMATING THE FISCAL COSTS AND BENEFITS OF NEW HOUSING PRODUCTION

To calculate the net fiscal impact of new housing production on Massachusetts and its cities and towns, the Public Policy Center:

1. Developed a representative, purposive sample of recent housing developments in Massachusetts that accounts for regional variation in project type and demographics⁸
2. Collected detailed information for each development, including number of units by type (market-rate or affordable), unit size (by number of bedrooms), and price
3. Calculated household income estimates for each development based on the type, size, and price of the units
4. Modeled the household spending impacts using an input-output model (IMPLAN)
5. Estimated the associated net new state income taxes using a micro-simulation model⁹
6. Calculated property tax impacts by applying prevailing tax rates to assessed property values
7. Calculated excise tax impacts using town-level data on per vehicle excise taxes and the number of vehicles per household

8. Subtracted the estimated state costs associated with providing MassHealth services to new eligible households
9. Subtracted the state and local costs of providing K-12 education as determined by collecting information on the actual enrollment characteristics of students reported as residing in the examined developments directly from the sampled school districts

Since not everyone who moves into an available housing unit, new or otherwise, is new to the state, we reduced the state-level impacts in proportion to the percent of people moving into a Massachusetts unit from out-of-state (43%).¹⁰ To calculate the *net new* revenue arising from these developments, it was also necessary to estimate the major costs associated with the new residents. We have focused our attention on the costs associated with MassHealth and K-12 school expenditures, since these are the largest population-driven state and local expenditures. Calculating these costs requires knowing how many of the residents in the sample developments are eligible, and likely, to receive their health insurance through MassHealth, and how many of the residents attend local public schools. The estimated income of the residents was used to estimate MassHealth eligibility. Recognizing the importance of obtaining highly accurate student demographics, we surveyed all school districts in the sample to determine the actual number of students living in the sampled developments by cost category.

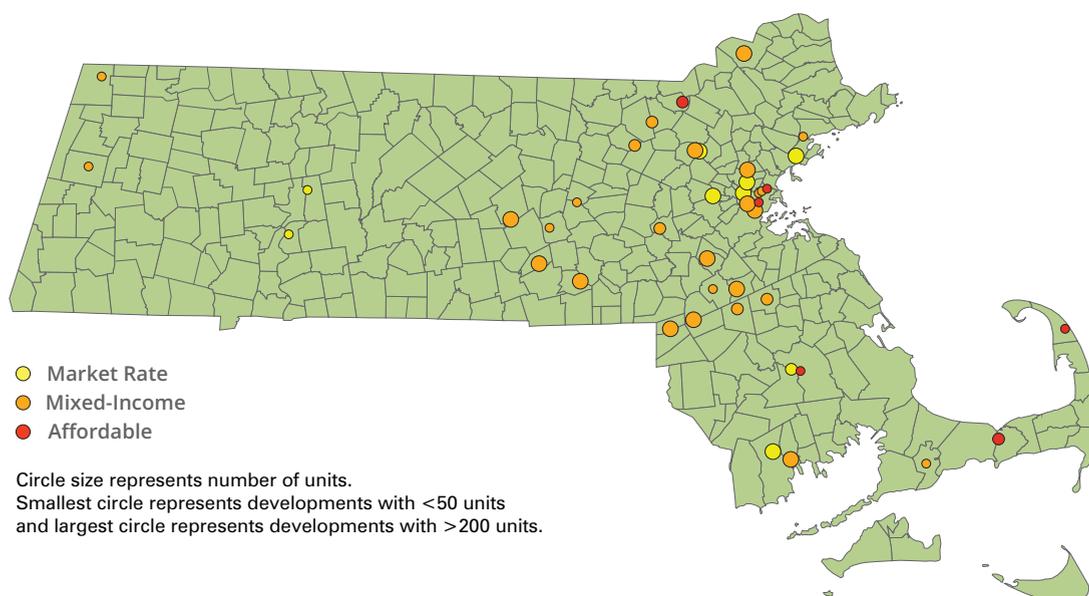
Developments were purposively selected to create a representative mix in a range of community types from every region of the state. The sample consists of 42 housing developments, predominantly rental units (39). In total, there are 6,076 housing units in the 42 sample developments. Importantly for revenue estimates, the sample was stratified to ensure that our income estimates reflect the full range of residents living in all new housing developments in Massachusetts.

THE NET EFFECT OF NEW HOUSING PRODUCTION

In total we estimate that, in the aggregate, the 42 sample developments contributed \$7.7 million in local taxes and fees to municipalities and \$15.6 million to the state in net new state tax revenue in FY18. On a per unit basis, municipalities received \$1,273 and the state received \$2,562. We consider these estimates to be conservative in that they do not systematically consider the drag that an inadequate housing supply can have on the economy overall nor the attractiveness of Massachusetts as a place to live, work, and do business.

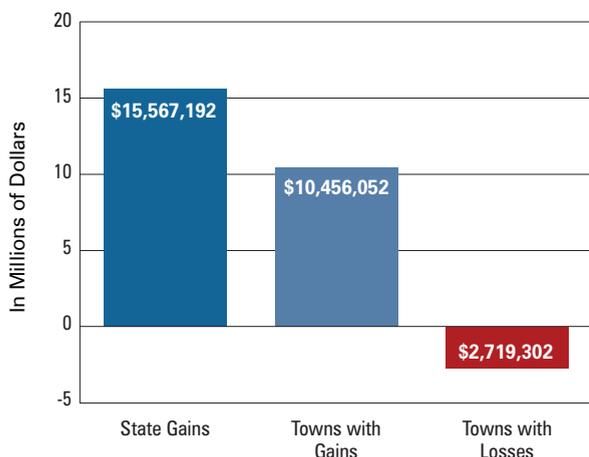
Nevertheless, individual developments of new housing development can and occasionally do present a net fiscal burden for municipalities and/or the state. We estimate that 12 of the 42 (29%) developments had net negative fiscal impacts on the municipality (fiscal costs that exceeded benefits), while 6 of the 42 (14%) had net negative fiscal impacts on the state's tax rolls. To make the

Figure 1. Representative Sample: Location and Size of Housing Developments by Type



Source: Authors' analysis

Figure 2. Net Effect of All 42 Housing Developments in Massachusetts, 2018



Source: Authors' calculations

municipalities that experienced a net fiscal loss financially whole, an estimated \$3.1 million would be required annually, or the equivalent of 20 percent of the state's net new revenue from the sampled developments.

These results make it clear that the net new state tax proceeds associated with the development of new housing are more than sufficient to offset local fiscal shortfalls. The challenge for policymakers is to design a way of providing municipalities with a predictable and reliable source of support in the relatively small number of cases when the local fiscal costs of new housing development exceed their local benefits. Such a policy would reduce the role that fiscal concerns play in local resistance to much new housing development across the Commonwealth. 

IS LOCAL HOUSING PRODUCTION BEING STYMIED BY SCHOOL CAPACITY?

A recent research brief by the Metropolitan Area Planning Council (MAPC) found “no meaningful correlation between housing production rates and enrollment growth” over the six years from 2010 to 2016. The research credits this pattern to demographic changes, such as the aging of the Baby Boom generation and smaller family sizes among younger generations. To extend this analysis, we posed a related but different question. Instead of questioning whether new housing brings more students into a school district, we evaluated whether cities and towns with excess capacity in their schools are more or less likely to permit new housing. If the fiscal concerns raised by the prospect of increasing school enrollment are in fact the primary obstacle to new housing development, we would expect that towns with excess capacity in their schools would be more likely to approve new housing than those without.¹¹

To test whether this bears out in actual development patterns, housing construction permit data and school capacity data were collected for all 351 cities and towns in Massachusetts for the years 2010 to 2015.¹² School capacity was defined as a negative annual average enrollment growth rate during the five years prior and a student-teacher ratio below the state average. Since school data are reported at the district level and not the municipal level, we painstakingly disaggregated regional school districts based on each associated community's share of the school-age population. Vocational schools were excluded from our analysis since students

have a choice whether or not to attend them. It also proved too difficult to predict and allocate.

One difficulty with simply comparing cities and towns that have school capacity to those that do not is that the demand for housing varies, and therefore fewer permits issued do not necessarily reflect community resistance to new development. To correct for this problem, the direction and statistical significance of the effect of school capacity were assessed using a statistical model that controls for other factors. These factors included:

- Presence of rail station (commuter rail or MBTA subway)¹³
- Job Center (Yes/No), defined as being in the top 10% of cities or towns by population and having more jobs located there than employed residents
- A city form of government (Yes/No)
- Housing density (units per Square Mile in 2009)
- Property tax rate
- Percent of municipal revenue from property taxes
- Median household income
- Median rent
- Meets 40B 10% affordability threshold (Yes/No)
- Presence of a 40R district (Yes/No)
- Percent of school funding from Ch. 70 aid

- Perceived school quality¹⁴
- Share of the population that is white, non-Hispanic
- Median age
- State GDP (to account for macroeconomic conditions)

The results indicate that school capacity does not have a statistically significant impact on whether towns permit new housing. In fact, the relationship is in the opposite direction—towns with school capacity tend to permit less housing. So, while municipal officials may argue that school costs prevent them from permitting new housing, cities and towns that tend not to permit new housing are just as likely as other towns, if not more so, to have extra space available in their schools.

We offer a note of caution about the statistical significance of the percent of the population that is white, non-Hispanic. This variable is correlated with housing density, as more densely populated places tend to have more racial diversity. In fact, if the number of housing units per square mile is included in the regression equation, the statistical significance of the white, non-Hispanic population share is reduced to non-significance (see Table 1 and Table 2). This does not rule out concerns about race as an explanation for resistance to new housing production, but it does mean that we cannot disentangle race from density since they are so closely associated. However, this has no bearing on the significance of school capacity. In any of the regression equations or statistical tests that were evaluated, school capacity does not predict housing production.

Table 1. Housing Unit Permitting Regression, Imputed Values ¹⁵
Massachusetts Cities and Towns, 2010 – 2015

	Value	Standard Error	Degrees of Freedom (DF)	t-value	p-value
Presence of Rail	37.66	22.44	333	1.68	0.094
Schools Have Capacity	-3.86	4.54	1674	-0.85	0.396
Job Center (Yes/No)	94.18	33.56	333	2.81	0.005
Presence of 40R District	-95.04	19.66	1674	-4.83	0
Percent White, Non-Hispanic	-249.79	69.09	1674	-3.62	0

Source: Authors' analysis

Table 2. Housing Unit Permitting Regression Including Housing Density, Imputed Values ¹⁶
Massachusetts Cities and Towns, 2010 – 2015

	Value	Standard Error	Degrees of Freedom (DF)	t-value	p-value
Units Per Square Mile	0.04	0.01	332	4.43	0
Presence of Rail	7.23	22.85	332	0.32	0.752
Schools Have Capacity	-3.4	4.54	1674	-0.75	0.454
Job Center (Yes/No)	84.84	32.69	332	2.6	0.01
Presence of 40R District	-90.28	19.49	1674	-4.63	0
Percent White, Non-Hispanic	-94.83	76.38	1674	-1.24	0.215

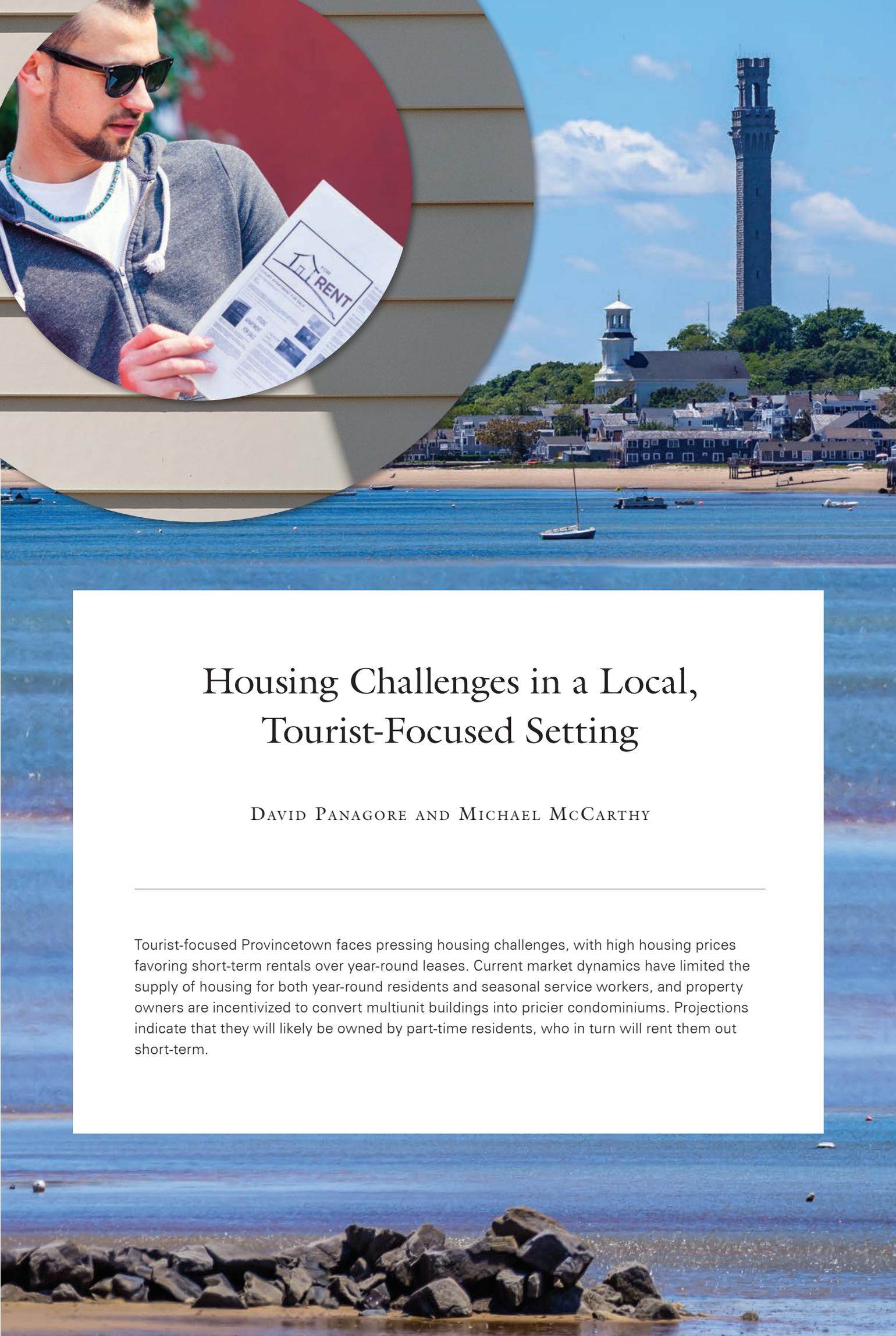
Source: Authors' analysis

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Endnotes

- 1.) U.S. Bureau of Labor Statistics and U.S. Census Population Estimates.
- 2.) *Foundation for Growth: Housing and Employment in 2020*. Technical Report, Prepared for the Massachusetts Housing Partnership Foundation for Growth Initiative, authors Lindsay Koshgarian, UMass Donahue Institute, Alan Clayton-Matthews, Northeastern University, Michael Goodman, UMass Dartmouth and Michael Johnson, UMass Boston, 2010.
- 3.) *Unlocking the Commonwealth: New housing and growth policies to help Massachusetts realize its full potential*. Massachusetts Housing Partnership, November 2014; numerous editions, Greater Boston Housing Report Card 2002-2016, Dukakis Center for Urban and Regional Policy, Boston Foundation; and, Housing Development Toolkit, Executive Office of the President of the United States, September 2016.
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- 6.) Nakajima, E., Modzelewski, K., & Dale, A. (2007). *The fiscal impact of mixed-income housing development on Massachusetts municipalities: A report for Citizens' Housing and Planning Association*. Hadley, Massachusetts: Donahue Institute, University of Massachusetts. Retrieved from http://www.massbenchmarks.org/publications/studies/pdf/UMDI_FiscalImpact.pdf
- 7.) Reardon, T., and Philbrick, S. (2017). *The Waning Influence of Housing Production on Public School Enrollment in Massachusetts*. Retrieved from http://www.mapc.org/wp-content/uploads/2017/10/MAPC_HousingEnrollment_Final.pdf
- 8.) Purposive sampling selects observations into a sample based on predetermined criteria, which are the focus of the study. It is distinct from any type of random sampling in that it is not a probability sample.
- 9.) The microsimulation approach involves using the official state income tax form and calculating the total tax paid for a variety of hypothetical tax filers that represent the range of possible responses in the Massachusetts population. The results are weighted to make the final results representative of the total population. The tax form used is for tax year 2017 and the demographic data were drawn from the 2016 American Community Survey Public Use Microdata Sample. Many thanks to Northeastern University Professor and MassBenchmarks Senior Contributing Editor Alan Clayton-Matthews for his insights into and generous assistance with this component of our analysis.
- 10.) Internal Revenue Service SOI Tax Stats, Individual Income Tax Returns: County-to-County Migration Inflow for Selected Income Items, Calendar Years 2014-2015.
- 11.) While adding to the body of evidence, the MAPC study has a few methodological limitations that are addressed here: (1) Charter schools, regional schools, and vocational schools were not included. (2) The researchers did not test the effect of using imputed vs reported building permit data. (3) They only allowed for a 9 month or 21-month time lag between permit issuance and enrollment change.
- 12.) The enrollment data obtained from the MA Department of Education has many errors in it. Where just one year of data was problematic, the average of the neighboring years was used. Some towns could not be included at all because of extensive missing values or data entry errors. These include Ayer, Bellingham, Grafton, Leicester, Lincoln, West Stockbridge, and Westport.
- 13.) MBTA bus stops were less predictive of permitting than rail, and as a result was not included.
- 14.) School rankings, obtained from School Digger (www.schooldigger.com), were used to measure the perception of school quality as opposed to actual school performance.
- 15.) A random intercept model was used to account for differences between towns that are not measured. Listed variables not shown in Tables 1-2 were found to be statistically insignificant. Since each year of data for a given town is not independent from the prior year, the potential for autocorrelation was accounted for using an AR(1) process. To allow for robust estimation of this model, a linear mixed-effects model was fit using restricted maximum likelihood (REML). Additionally, a sensitivity analysis was performed to test whether the results differed depending on whether imputed or reported permitting data were used. We found that this did not alter the main findings. The results using the reported values in place of imputed values were not substantially different.
- 16.) The results using the reported values in place of imputed values are not substantially different.



Housing Challenges in a Local, Tourist-Focused Setting

DAVID PANAGORE AND MICHAEL MCCARTHY

Tourist-focused Provincetown faces pressing housing challenges, with high housing prices favoring short-term rentals over year-round leases. Current market dynamics have limited the supply of housing for both year-round residents and seasonal service workers, and property owners are incentivized to convert multiunit buildings into pricier condominiums. Projections indicate that they will likely be owned by part-time residents, who in turn will rent them out short-term.

LOSS OF YEAR-ROUND HOUSING UNITS TO SEASONAL USE

Over the past several decades, Provincetown has undergone a dramatic reallocation of its housing stock. As Figure 1 below demonstrates, both Provincetown and the Outer Cape region (Provincetown, Truro, Eastham, and Wellfleet) saw an increase in the share of housing units reserved for seasonal use from 2009 to 2016. In Provincetown, this repurposing of housing units occurred alongside a decrease in the year-round population, which dropped by 13 percent from 2000 to 2016.

Currently, the majority of housing in Provincetown and in the neighboring communities of the Outer Cape

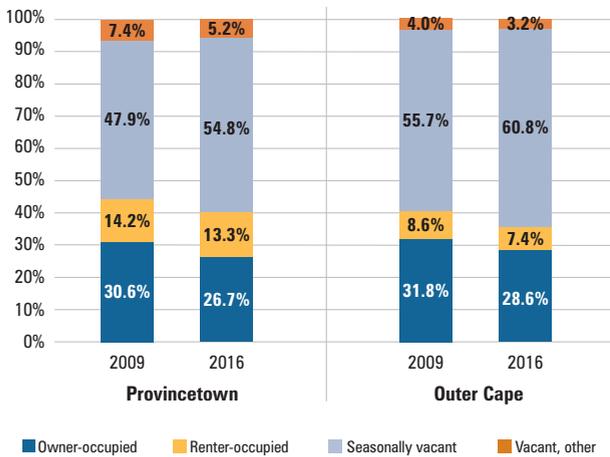
is seasonally vacant. A common theme during interviews with community stakeholders was increased scarcity of year-round housing available for potential year-round workers and residents. Interviewees noted that the difficulty in finding affordable, year-round housing in Provincetown for families has resulted in the withdrawal of prospective applicants for important town jobs and created staffing challenges for businesses that wish to remain open year-round.

CONVERSION OF RENTAL APARTMENTS INTO CONDOMINIUM UNITS

Condominiums are now the most common residential property type in Provincetown. They currently account for 55 percent of all housing units, and in 2016, condominiums accounted for 81 percent of all residential real estate transactions. Analysis of data from the Provincetown Assessor’s Office revealed that, increasingly, multiunit buildings are being converted into condominiums. Of the 660 units reclassified as condominiums from FY2007 to FY2018, just under half (49.5 percent) were converted from multifamily housing. This means, for example, that a building that once comprised three year-round rental units is now three separate ownership condominiums that are infrequently occupied and effectively “off the market” for year-round use.

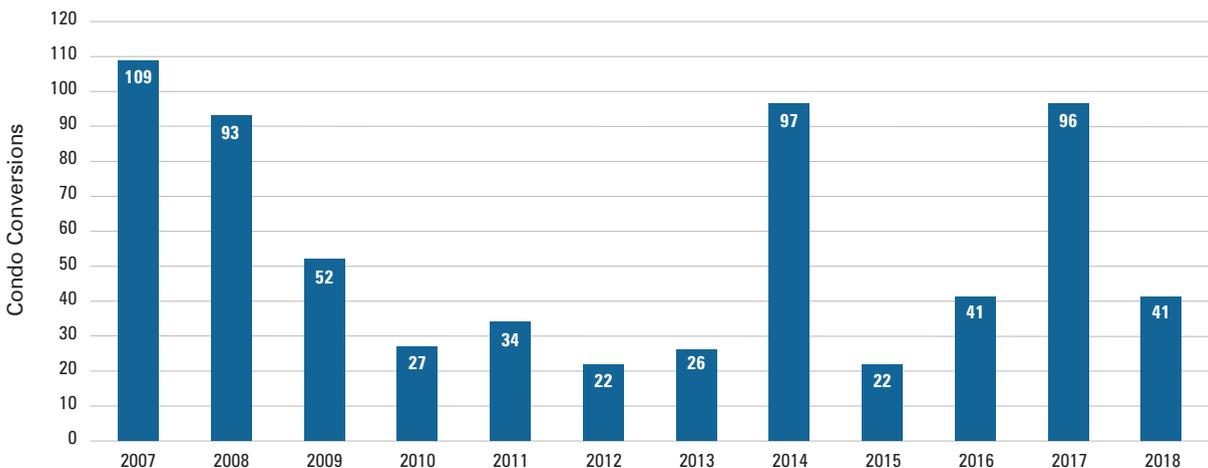
Provincetown saw recent spikes in condominium conversions in FY2014 and FY2017 (see Figure 2 below). Local stakeholders consistently attributed the spike in conversions in those years to the highly visible community-wide discussion associated with Town Meeting proposals to regulate the condominium conversion process during the same period. While all stakeholders interviewed acknowledged the negative impacts of the

Figure 1. Change in Use of Provincetown and Outer Cape Housing Units, 2009 – 2016



Source: American Community Survey 2005-2009 & 2012-2016 Tables DP04, B25001, and B25004; Authors’ calculations

Figure 2. Condominium Conversions in Provincetown, FY2007 – FY2018



Source: Provincetown Assessor’s Office; Authors’ calculations

unrestrained condominium conversions on the supply of year-round rental housing, contrary perspectives voiced concern about the impact on private property values. The proposed bylaws were vigorously debated but not enacted.

Interviewees expressed concern that condominiums are being purchased as second homes, which remain vacant in the off-season and when not in use by the owner. Indeed, currently 71 percent of all condominium properties in Provincetown are owned by people or entities with out-of-town mailing addresses, a proxy for residency.

PROFITABILITY OF SHORT-TERM SEASONAL RENTALS COMPARED TO YEAR-ROUND LEASES

Provincetown has not avoided the recent proliferation of short-term rentals through services such as Airbnb and HomeAway. Because there are no requirements that owners register their short-term rental properties, it was not possible to confirm the exact number of short-term rentals on the market in Provincetown.

However, given the market for short-term rentals, it would not be surprising if property owners were to use their units for this purpose rather than maintain them as year-round rentals. For instance, the estimated average rental rate for an Airbnb in Provincetown is \$254 per night and most rentals are two-bedroom units.¹ Assuming that property owners are able to rent their Airbnb unit every week during May through September (20 weeks), at the average nightly rate of \$254, they would generate as much as \$34,493 in rental income.² This compares very unfavorably to the median rent commanded by a year-round two-bedroom rental, which we estimate to be \$1,033 to \$1,300 per month or \$12,396 to \$15,600 per year.³ This translates to a potential gain of \$18,893 annually for keeping a unit as a short-term rental rather than having it available year-round for one tenant. Even if the unit is otherwise vacant or available for owner use 50 percent of the time during the peak season and vacant the balance of the year, the rental income from the short-term rental still may exceed the annual rental income of the typical rental unit.

AFFORDABILITY

Housing affordability in general is a challenge for many households across Massachusetts. On Cape Cod and in Provincetown in particular, the cost of housing has risen to levels that make ownership unobtainable given the income of the typical household. The median sales price for Provincetown homes is above \$500,000, which creates both a barrier to purchasing for many households and an incentive to sell for residents who have otherwise continued to keep/stay in town. It would be a significant

challenge for a Provincetown rental household to transition into homeownership.

The price-to-income ratio—derived by dividing the annual median sales prices into the annual median household income—demonstrates how many “years” of annual median household income would suffice to purchase a home at the median sales price. Historically, the cost of a home in the U.S. has been 2.6 times, or required 2.6 years of, the annual median household income. In Massachusetts, the median price of all homes was 4.8 times that of the median annual household income in 2016, meaning that the typical household would need nearly five years of income to buy a home at the median sales price outright. In Provincetown, the price for a single-family home is the equivalent of 23.4 times the median annual household income. Since 2000, the price-to-income ratio for single-family homes in Provincetown has more than doubled, and over the same period, the ratio for condominiums has increased by 84 percent.

Figure 3. Price-to-Income Ratio, Provincetown



Sources: Warren Group TownStats; 2000 Census; 2005-2009 ACS Table B19013; 2012-2016 ACS Table B19013

POLICY SOLUTIONS

Using the data and findings of this research, the town is seeking to educate the community and the state on the specifics of a generally known crisis, and to inform the game plan for a detailed housing program, including product and funding. The conclusion of this study makes clear that just to maintain its current market conditions and stock of year-round housing, the community will need to build roughly 300 units in the next 5 years. While not likely, the community has undertaken a series of initiatives.

In addressing this situation, the town is actively pursuing a variety of strategies. It laid out all of the available

tools and options in a Housing Playbook. It then partnered with UMass Dartmouth to produce detailed information. The next step will be to activate a detailed housing program, based on evidence from the previous work. The town controls a 1.25 acre parcel on which it hopes to construct between 30 to 50 units of below-market housing. In addition to this direct action, the town has examined land use regulations, including zoning, as a means for securing more housing for year-round residents.

Provincetown has actively adopted many commonly utilized housing strategies while creatively pursuing several new to Massachusetts. As mentioned above, the town twice pursued and failed to adopt a bylaw to regulate the conversion of residential properties into condominiums. Recently, it successfully adopted an inclusionary housing bylaw that requires one out of every six housing units constructed to be provided at below market rates. The bylaw also includes incentives such as density and dimensional bonuses to encourage the production of the below-market units. Developments of fewer than six units provide a payment to the town's housing fund. The town also adopted accessory dwelling unit zoning allowing year-round rental housing for "as of right" use, requiring only a building permit. In addition to such zoning actions, the town has sought special legislation from the state to provide monetary and tax incentives. In 2016, the town was granted the right to create a Year Round Market Rate Rental Housing Trust, which allows it to expend local revenues on market-rate housing units, which due to the conditions noted above, comprise a rapidly diminishing market. In furtherance of this activity, the town has since acquired a 26-unit former timeshare development and is converting it to market-rate apartments for those earning less than 200 percent of the Area Median Income. This effort will require an annual subsidy from the town to maintain rents in the

\$1,300 to \$3,200 range. In addition, the town sought and received the authority to extend the residential property tax exemption to any property owner who is renting to a year-round resident, currently at 25 percent or an average property tax deduction of approximately \$3,000.

Even with these efforts, success remains an open question, and so the question of the definition of success is yet to be established. In summary, Provincetown's efforts and experimentation are a model for other communities and its market conditions a cautionary tale that other communities not yet at their tipping point should heed. ◀

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Endnotes

- 1.) Based on the average nightly cost calculated by the vacation rental aggregating service AllTheRooms. Retrieved from: <https://www.alltherooms.com/p/airbnb/usa/massachusetts/provincetown>.
- 2.) $[(\$254 \times 7 \text{ days}) \times 20 \text{ weeks}] - 3 \text{ percent Airbnb service fee} = \$34,493 \text{ per season.}$
- 3.) 2012-2016 ACS, Table B25031, Median Gross Rent by Bedrooms.



Massachusetts Housing: A Three-Pronged Crisis

CLARK ZIEGLER

Issues of supply, affordability, and equity all contribute to an ongoing housing crisis in Massachusetts. Among U.S. metro areas with knowledge-based industries, metro Boston ranks near the bottom in housing production and near the top on development costs. Due to the latter, production of new affordable housing units has scarcely increased over the past decade. And largely decentralized authority over land use regulations, by 351 cities and towns, does little to foster uniform housing equity standards.

The articles in this issue are a great illustration that the “housing crisis” in Massachusetts comprises at least three crises: housing supply, housing affordability, and housing equity.

Inadequate housing supply is a threat to the economy—especially at a time when the state is at or near full employment—because it constrains growth in the labor force. Housing starts per capita in Massachusetts are less than half of their levels in the 1960s, 70s, 80s, and nearly 40 percent below the national average.

As a non-economist, it seems like a miracle to me that Massachusetts and Greater Boston have achieved such robust job growth since the Great Recession without adverse consequences from our high-cost, undersupplied housing market. Young people entering our job market must increasingly live with their parents, pay high rents for the privilege of living with roommates, or tolerate miserable daily commutes to get the housing that they can afford. Among the 20 top-competitor U.S. metro areas that we have identified with a similar concentration of knowledge-based industries, metro Boston ranks near the bottom on housing production, near the top on housing costs, and experiences net losses of population from domestic migration. It’s crystal clear from the data that only foreign in-migration has kept our economy afloat and kept us from losing population.

The big question is: What it will take for public policy changes to break this pattern? Our last two major housing recessions were driven by credit practices that distorted housing supply (through reckless construction lending in the late 1980s) and distorted housing demand (through reckless subprime mortgage lending in the early 2000s). Just when we were at the top of those cycles, and political leaders felt we were reaching the breaking point on housing cost increases, the Commonwealth experienced a housing bust, obviating pressure to take action. The situation now feels very different. Credit standards are now very prudent, both for housing developers and home buyers, and vacancy rates are exceedingly low. We appear to have a structural gap between housing supply and demand, and while the next recession may temper growth in housing costs, it is hard to see how it will substantially bring them down.

The next major crisis that we face is affordability. There is a fundamental disconnect between household incomes at the lower end of the distribution and the cost and availability of housing. Federal policy has long identified households paying more than 30 percent of their monthly income as “cost burdened” and those paying more than 50 percent as “severely cost burdened.” By that standard there are more than two hundred thousand low-income, severely burdened renter households

Cities and towns in Massachusetts do not equally share the responsibility for allowing new housing production needed to meet demand, or for allowing the development of subsidized low-income housing that is needed to address the state’s affordability needs.

in Massachusetts, including 185,000 with extremely low incomes (ELI), below 30 percent of median.

The dilemma is that we are nowhere close to closing this gap with public subsidies. As a result of robust state housing programs dating back to the 1950s, we do a better job meeting ELI housing needs than most other places in the U.S. Massachusetts ranks 14th among states and metro Boston ranks 3rd among major metro areas, according to a recent analysis by the National Low Income Housing Coalition. Unfortunately, though, we are moving at a snail’s pace in further closing this gap. As a result of budget cuts and rising rents, the number of households receiving state rental assistance is half of what it was in the late 1980s. Despite increased capital spending on affordable housing by governors Patrick and Baker, and despite legislative efforts to create and expand a state tax credit for low-income housing development, the number of new affordable units produced each year has barely grown over the last decade because increased resources have been absorbed by rising development costs. The state’s annual production of new low-income housing, including units produced with support from the federal low-income tax credit, is equivalent to well under 1 percent of the number of severely cost-burdened households.

At its core, the housing affordability gap is really a symptom of income inequality and low-wage rates that are insufficient to support a decent quality of life. That is where the long-term solutions lie. It is a national problem with limitations on how much any one state—including an affluent state like Massachusetts—can do. We do control our local land use regulations, though, which is the greatest impediment to increased housing production. And there is a body of research showing that increased housing production at any price point helps reduce housing cost pressure on low-income households. In the

meantime, I think Nick Chiumenti is right on target in suggesting that we critically examine where existing housing subsidies are targeted in order to maximize public benefits.

The third housing crisis is one of equity. Cities and towns in Massachusetts do not equally share the responsibility for allowing new housing production needed to meet demand, or for allowing the development of subsidized low-income housing that is needed to address the state's affordability needs. As a result, most new housing development in the entire Commonwealth is concentrated in a small number of cities and towns and increasing rents are fueling gentrification and displacement in a relatively small number of urban neighborhoods. That pattern is unsustainable.

One of the most common arguments against new rental housing in suburban communities is that the children living in the new housing will overburden local school budgets. Elise Rapoza and Mike Goodman have done an excellent job debunking that myth by collecting and analyzing student-level data and modeling state and local revenue collections related to the occupancy of new housing. Less than a third of the housing developments in their sample had negative local fiscal impacts and at an order of magnitude that was generally not significant. The combined state and local fiscal impacts of the new housing development were overwhelmingly positive and the additional state revenue generated by the new housing was five times the amount needed to compensate for any negative local impacts.

The Rapoza/Goodman research points the way to some adjustments in how state revenue is shared with the cities and towns in metro Boston that are most receptive to new housing and therefore contributing more than their peer communities to the health of the state economy. Yet even if the school cost issue is resolved, experience tells us that many other local objections to new housing will remain. The most benign explanation is that residents in most communities are naturally resistant to change and to new housing development of any kind. The more troubling explanation is that residents do not want new housing built which, in their minds, will attract residents of different races, ethnicity, or class. That bias is exposed when residents express little objection to senior housing or single family homes on large lots and vociferous objection to construction of apartments suitable to families with children.

This dilemma is one of the state's own making because—unlike most of the U.S.—our land use regulation is vested in relatively tiny units of local government. The 351 cities and towns in Massachusetts, with a median population of less than 11,000 residents, each

have their own zoning codes, subdivision regulations, septic system regulations, and wetlands protection rules. There is no regional or state review to ensure that these local regulations advance legitimate planning or environmental objectives; that they are not simply crafted to slow housing growth and limit development to large single-family homes. It's an open question, then, whether we can sustain a healthy 21st century economy in Massachusetts while continuing to give cities and towns effective veto power over new housing development. ◀

May 20, 2019

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