



The Greater Boston Housing Report Card 2016

The Trouble with Growth

How Unbalanced Economic Expansion Affects Housing



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*We dedicate this Greater Boston Housing Report Card
in memoriam
to our dear friend and colleague
Karl “Chip” Case*

Letter

Dear Friends,

Every year, the *Greater Boston Housing Report Card* provides a wealth of information that is pored over by those working in the housing and community development field. This 14th edition, prepared by Barry Bluestone and his team at Northeastern University's Dukakis Center, is no exception. It presents a tremendous amount of research and analysis, not only about housing, but about shifting demographics and the ripple effects of other trends that reach the realm of housing.

The good news in this report is that our city is booming and we seem to be successful in attracting and retaining a talented young workforce for our area's burgeoning innovation economy. When the Boston Foundation first began publishing the Report Card and other research 15 years ago, a major concern was the brain drain that was taking place, with young, talented workers choosing to leave Boston for cities where there was more opportunity. That is no longer our central problem. In fact, this report projects continued population growth through at least 2030.

As early as seven years ago, the Report Card predicted that unless there was a concerted effort to increase housing production, more and more households would be priced out of the Greater Boston housing market, or would end up paying an exorbitant share of their incomes to cover rent or mortgage costs. This new report shows that prediction to have been right on the mark—and it should be taken very seriously by all of us who are concerned about our city's future. Even though a number of nonprofit and for-profit developers have been addressing the need for more housing, we simply are not keeping up with the demand—and housing is becoming less and less affordable.

The bad news in this report is that those who are most profoundly affected by this phenomenon are families living in poverty. The report includes a special section that draws attention to the growing rates of family poverty in Greater Boston. The alarm that was sounded in a Boston Indicators Project report published five years ago, *The Measure of Poverty*, should ring louder than ever. Income inequality in Boston is the highest or among the highest of all metropolitan areas in America. And more than 160,000 Greater Boston families are living in poverty. In addition, foreclosure petitions are climbing again and threaten to continue to rise for the foreseeable future.

We at the Boston Foundation believe that information has the power first to open eyes and then to energize a response. Poverty cannot be allowed to continue to diminish the economic prospects of the most vulnerable people in our community. Affordable housing is as critical to opening the doors of opportunity as other important areas of community life.

This report is sobering, but it provides a solid foundation for future action. I invite you to read it, absorb it and then take action in whatever way you can.



Paul S. Grogan
President and CEO
The Boston Foundation

Executive Summary

Nearly every year that the Dukakis Center has published its annual Housing Report Card, we have concluded that Greater Boston needs more—and more appropriate—housing to keep the market even marginally affordable for low-income residents, working families and a growing segment of the middle class. The unifying theme of this, our 14th edition, is that in spite of a strong commitment to making housing more affordable in the region and despite a variety of imaginative efforts put forward by the Commonwealth and the City of Boston, housing supply is not keeping up with the housing demand of a growing population and, as a result, housing is less affordable than ever.

Moreover, with our projection of continued population growth through at least 2030, led by large increases in the number of Millennials and seniors, an enormous expansion in housing construction will be necessary to come anywhere close to meeting housing demand. Thus, with all due respect to the impressive endeavors put forward to date, the Commonwealth and the Greater Boston region will need to implement large-scale innovative approaches to building the housing we need.

As usual, we have refreshed our data on the state of the Massachusetts economy and Greater Boston's housing volume, sales, prices, rents and permitting and updated our review of state and local housing policy. In addition, we have introduced two methodological innovations that shed clearer light on our economic and housing challenges: We have added to the mix a more accurate cost of living adjustment that, when taken into account, indicates that our regional poverty rate is much higher than official thresholds suggest (some 57,000 families higher), and we have included population growth projections through 2030 that, because they are expected to escalate, will bring even greater pressure to bear on the housing market in the years to come. One of our key findings, however, concerns the more immediate future. Throughout the region, permitting is down, particularly in the inner core communities of Boston, Cambridge and Somerville, and it is notably weak for the type of housing

most needed by our young adults and aging Baby Boomers: multi-family units. Ironically, permitting is slightly elevated for the one form of housing that will likely have less future demand: single-family homes.

Each year, we also include a special chapter that highlights a particular dynamic or trend, and this report covers the alarming growth of housing insecurity and homelessness among families with children. The numbers collected by the state Department of Housing and Community Development, which show a slight drop in families requiring Emergency Assistance, tell only part of the story. Waiting lists for family housing vouchers are growing, families are spending longer periods of time in shelters, and those who have vouchers remain in the same or similar demographic communities, reducing access to employment networks and educational opportunities that are more likely to lead to economic mobility. All of our findings—combined with the real cost of living in Greater Boston—bear out the conclusion that the number of families marginalized by the housing market will only climb unless we find more appropriate and effective policies and fund these interventions at all levels of government.

The Greater Boston Economy and Demographic Trends

The demand for housing in the region is intimately tied to the robust growth of its economy and an anticipated rise in population. On both scores, we expect the five counties of Greater Boston to see continued expansion in the future. Since at least 2009, the annual rate of growth in the Massachusetts economy has been faster than that of the nation as a whole, with expected growth in 2016 exceeding 2.5 percent. As such, since 2009 the number of jobs in the Commonwealth has increased by nearly 338,000, driving the current unemployment rate to just 3.9 percent—close to what economists believe is “full employment.” The Commonwealth's job growth is mainly due to the strength of the economy in the five counties of Greater

Boston, where between 2009 and December 2015, the number of jobs increased by 261,000 or 12.2 percent.

The news on statewide wage levels is more mixed. For the third year in a row, real average wages have increased and by the end of 2015 were 5.4 percent higher than in 2009. Unfortunately, however, wage growth has been highly unequal, with the bottom 20 percent of jobholders experiencing nearly a 5 percent decline in their hourly wage since 2009 while those in the 80th percentile of the wage distribution received nearly all of the gains.

Greater Boston's strong economy is attracting new residents, and this in-migration is taking place at an accelerating rate. Between 2010 and 2015, the population of Suffolk County increased by nearly 8 percent, more than double the rate of the Commonwealth as a whole. The population of Norfolk County increased by 5.5 percent, while Essex and Middlesex increased by 4.4 percent and 3.8 percent, respectively. Due in part to this in-migration, Greater Boston's population is becoming steadily more diverse racially and ethnically. Back in 1990, 88 percent of the population was white; today that number is closer to 75 percent. Greater Boston's population is also aging. In 1990, half the region's population was 33.4 years or older. By 2014, the median age was 38.5, and this upward skewing of age (shared throughout New England) is beginning to affect housing preferences.

Meanwhile, the student population continues to grow, placing ever more pressure on the region's housing market. Of the nearly 158,000 undergraduate and graduate students enrolled on campuses in Boston alone, more than 83,000 live off-campus in private homes somewhere in Greater Boston. Most of the growth is among graduate students, young adults who are living with roommates in single-family homes, duplexes, and triple-deckers. More than 90 percent of the 60,000 graduate students in Boston live off-campus, exerting acute pressure on rents.

Of great concern is the rate of poverty in the region. Adjusting for the nearly 38 percent higher cost of living in Greater Boston compared with all other metro areas, the proportion of families in poverty is now more than 16.2 percent (compared with an *official* poverty rate of 10.6 percent). Instead of 106,000 families in poverty, the adjusted threshold suggests something closer to 163,000.

The adjusted data also confirms that income inequality in the metro Boston region is the highest or at least among the highest of all metro areas in the United States. While compared to the overall U.S. population, a higher proportion of the region's population falls below our adjusted poverty threshold, Greater Boston *also* has a much higher proportion of families with incomes above \$150,000: 26.3 percent in the region vs. only 13.1 percent in the nation. The inner core of the region is becoming more and more a community of "haves" and "have-nots" with those in the middle finding it ever more difficult to remain there due to high and rising housing costs.

Home Sales in Greater Boston

We project that by the end of 2016, Greater Boston will see new records in single-family home and condominium sales, despite a continued drop in homeownership rates—a trend shared with the rest of the country. Single-family home sales in the region should exceed 34,100 this year, the third year in a row of increased sales and more than 50 percent higher than in 2011. Such record sales nearly equal the highest annual sales level since the beginning of this century. Moreover, single-family home sales were highest in both some of the least expensive communities and some of the wealthiest. Brockton, with a median sales price of \$243,000, had more single-family home sales than any other community in Greater Boston. Newton ranked fourth in sales, despite having a median selling price in excess of \$1.1 million. Similarly, condo sales should reach more than 19,000 this year, the fifth year in a row of increased sales and 55 percent higher than in 2009.

Somewhat paradoxically, homeownership rates in Greater Boston are declining while single-family and condo sales are rising in the region. Averaging more than 64 percent from 2005 through 2013, Greater Boston's homeownership rate is down to 58.5 percent today reflecting a nationwide trend. The regional drop in homeownership likely reflects a number of factors, including a delay in home purchases among cash-strapped, indebted Millennials and possibly a decline in homeownership among seniors who may be selling their large homes and renting smaller apartments. Among 20–34 year olds, the homeownership rate is down from 40.7 percent in 2000 to 30.2 percent in 2014. Even for 35–44 year olds, the rate has declined

over this period, from 67.2 to 58.9 percent. This decline in homeownership, if it continues, could have an adverse impact on the assets of Millennials as they age and possibly on the stability of communities where high proportions of homeownership tend to promote civic engagement.

Housing Production in Greater Boston

In light of the growing economy and rising population, demand for housing will remain exceptionally strong. The question is whether there is any chance that housing supply will catch up with demand in the near future. While there is some good news in the data, most of the numbers are not encouraging.

Across the entire region, the number of permits for new housing units rose sharply from a little more than 4,700 in 2009 to nearly 14,000 in 2015. Unfortunately, our best estimate for all of 2016 reveals a sharp fall in permitting—down to no more than 11,400, a drop of 18 percent. What might explain this is that just as the market for luxury housing is now nearly saturated, developers have not found a way to build affordable housing for working families. As a result, they are pulling fewer permits. The most discouraging sign is that virtually all of the decline in permitting is for multi-family housing with five or more units—the very housing type that, if expanded, would take pressure off duplex and triple-decker structures suited to working families. In the five-plus multi-family category, permits are down from 9,042 in 2015 to 6,140 in 2016, a one-year drop of 32 percent.

Data on *completed* apartment units in Greater Boston show a similar decline from nearly 7,000 units constructed in 2015 to only about 4,600 in 2016. What has increased are permits for single-family housing, which are actually up to more than 4,550—the highest number since 2006. The one good piece of news is that the number of Massachusetts communities permitting no multi-family housing has dropped from 308 cities and towns in 2012 to only 114 municipalities in 2016. The 2004 *Smart Growth Zoning Overlay District* law (Chapter 40R), which got off to a rocky start due to the Great Recession, is helping to produce new housing in Greater Boston. As of this year, more than 3,350 units of housing have been constructed, with another

1,445 units awaiting site plan approval. A total of 424 units were completed in 2016 alone. Of the total units completed, 92 percent are rental and nearly half (48%) are affordable.

It turns out that the general drop in permits is almost exclusively due to sharp reductions in the cities of Boston, Cambridge, Chelsea and Watertown. In Boston, new permits are down 29 percent, from 4,813 in 2015 to 3,408 in 2016. In Cambridge, they are down by a whopping 69 percent, while in Watertown and Chelsea they are down by 74 and 35 percent, respectively. As for multi-family housing with five or more units, Boston will issue no more than 2,800 permits for such housing in 2016 vs. nearly 4,600 in 2015—a near 40 percent reduction. The losses in Cambridge and Chelsea also reflect sharp declines in multi-family apartment and condo housing permits.

Although most of the decline in the issuance of permits has occurred in Boston, Cambridge and a few other inner core communities, there is some good news on permit *applications* in the City of Boston where developers have one year to actually pull permits from the date of permit approval. While the number of permits issued by the city for new housing units plummeted in 2016, the number of applications for permits has risen sharply since 2014. For the current year, we project total permit applications for over 5,800 units of housing compared with less than 2,900 two years ago.

That permit applications are up is partly due to the fact that the city administration is committed to radically reducing the time it takes to obtain a housing permit. As late as 2014, it took on average more than 15 months to obtain a single-family home permit. Today the wait time is down to just 2.5 months. For a more complex multi-unit development, the wait time is down from 14 months to 4 months. The increase in applications and the decrease in wait times portend more permits being issued in the near future and therefore more construction. But we will have to see whether these applications actually materialize into permits and then into construction.

What is actually being produced, however, raises a red flag. Between 1996 and 2003, the number of permits issued by Boston for affordable new units represented nearly 40 percent of all permits. By 2004 through 2010, the percentage was down to less than 26 percent. For the latest period—2011–2016—the percentage is

down to only 18 percent. Once again, this points to the extreme difficulty of constructing housing units that can be profitably built and sold or rented at affordable prices.

Foreclosures

Despite a strong economy, foreclosure petitions are up for the fourth straight year. By the end of this year, we expect nearly 4,500 petitions will have been extended. This is nearly three times the number in 2013 and suggests that despite the overall health of the economy, there are still many families struggling to pay their mortgages.

Along with the rise in petitions, the number of homes lost to foreclosure deed has also increased for the fourth year, rising above 1,540, compared with fewer than 740 in 2013.

Home Prices and Rents in Greater Boston

As in previous report cards, we have collected data on home prices and rents to measure their direction and magnitude. This year we found that on average across Greater Boston, home prices rose again in 2016 at a rate of nearly 5 percent, according to the Case-Shiller single-family home price index. The median price of a single-family home in Greater Boston, according to the Warren Group, is up to more than \$425,600, surpassing the previous 2005 peak of \$405,000.

Nonetheless, while the recovery in home prices is now complete, we have not seen the kind of price acceleration we witnessed during the 1988–1999 housing cycle. Back then, by this time in the cycle, single-family home prices were 20 percent higher than the previous peak. In this cycle, they are only 2 percent higher. This is true despite the fact that the single-family home vacancy rate is still only about 1 percent in the region, half the rate needed to stabilize prices. Such relatively sluggish price acceleration, even with low vacancy rates, may reflect the fact that, with Millennials delaying marriage and children, and student debt undermining savings and the ability to obtain mortgages, there is less demand in the single-family market than during the last housing cycle. For all these reasons, we expect

that single-family prices will continue to rise, but quite moderately. Unlike a decade ago, we do not foresee another housing crisis with single-family home prices skyrocketing and then imploding.

Condo prices may resume rising more rapidly in the next few years, but not as much as the extraordinary 145 percent increase between 2009 and 2015. The median price for a condo unit appears to have actually softened in 2016, falling from \$406,000 to \$391,000. This decrease may reflect an overbuilding of luxury units and the need to discount their price a bit.

Meanwhile, duplex and triple-decker prices continue to explode in the region. By June of 2016, the median triple-decker price exceeded \$500,000—more than double the price in 2009. In just three years, the typical triple-decker has appreciated 27 percent. There is virtually no doubt that this is due to the extraordinarily high demand for these units by graduate students and other young professionals who can afford high rents by doubling up their living arrangements, making this type of property extremely valuable as an investment asset.

Like the regional distribution of income, single-family home prices are diverging rapidly across Greater Boston. In some of the toniest communities, such as Brookline, Newton, Arlington, Lexington, Milton and Belmont, prices are up a minimum of 29 percent since 2005. Cambridge leads all others with a median price 2.4 times higher than the median back then. In contrast, a large number of communities in distant suburbs still have a long way to go before median prices return to their 2005 levels. In communities including North Andover, Avon and Townsend, single-family home prices are still no more than 85 percent of their previous highs.

Rents in Greater Boston have continued to soar, and will continue to do so as long as the population increases and the supply of new rental units remains weak. Asking rents reached an all-time high in 2016 at \$2,169 per month—28 percent higher than in 2009 and 48 percent higher than in 2000. Not surprisingly, in the inner core cities in and around Boston, average market rent is even higher and rising faster. By early 2016, the average monthly rent was \$2,957, a whopping 59 percent higher than in 2009. This price rise is not likely to diminish anytime soon because vacancy rates for rental units as a whole have remained lower than at

any time since 2001. At 3.4 percent in the second quarter of 2016, the vacancy rate was well below the 5.5 percent rate needed to stabilize rents. Nationwide, only two metro areas—San Francisco and New York—have rents higher than Greater Boston, a dubious honor that is wreaking havoc among those who live in or on the edge of poverty.

Family Homelessness and Housing Insecurity

In this edition of the housing report card, we paid special attention to homeless families with children and those facing an insecure housing future in Greater Boston. We found that most of those who are in HUD housing programs have limited income supplied by Social Security, disability programs, unemployment insurance and family contributions. Very few are on traditional family welfare programs while 26 percent are wage earners but earn so little they qualify for subsidized housing. Those households living in subsidized housing tend to be older. Nearly 42 percent are headed by someone 62 or older; another 22 percent are headed by someone between the ages of 51 and 61, and 72 percent are women. About a third of those in HUD subsidized housing are families with children and most heads of these households are single women.

Of all those served by HUD housing programs, 44 percent benefit from housing choice Section 8 vouchers; 31 percent live in housing paid for by Section 8 project based vouchers; and 18 percent live in public housing projects. Suffolk County has the highest proportion of HUD subsidized housing units—17 percent. The four other Greater Boston counties range from 4 percent (Norfolk) to 7 percent (Essex). Yet a majority of persons living in poverty—as defined by official thresholds that do not include our local cost-of-living adjustment—are *not* served by HUD housing programs, with the exception of Suffolk County where the percentage of the poor not benefiting from HUD programs is “only” 31 percent.

That housing subsidies are not meeting the extent of need is further borne out by waiting list data. Formal waiting lists to get into HUD subsidized housing are very long and in Essex, Middlesex and Plymouth Counties getting longer. Today, a family averages more than four years on a HUD housing program waiting

list in Essex County and 43 months in Middlesex County. Even in Suffolk County, it takes an average of more than two full years to move from application for housing to placement.

Although Emergency Assistance data gathered by the state Department of Housing and Community Development show that the number of families receiving such assistance has dropped, family homelessness appears to be growing. In Boston alone, where a point-in-time census is conducted each year, family homelessness rose by 25 percent between 2010 and 2014, dropping only slightly since, even as individual homelessness has declined. Despite attempts to move more poor families to permanent housing, the average length of a family stay in an Emergency Assistance shelter or motel in Massachusetts is up to 324 days in 2016 from 195 in 2014. It is also important to bear in mind that capturing data on the homeless is notoriously difficult, and that the picture provided by the state is therefore incomplete.

Finally, a majority of those who do receive housing vouchers end up in the same communities where they were homeless, or in communities demographically similar. In other words, they are usually placed in neighborhoods with concentrated poverty and thus little access to employment pathways or improved exposure to educational and “social capital” opportunities for their children.

Housing Policy in the Commonwealth and in Boston

The Commonwealth and the City of Boston have long targeted affordable housing as both a critical ethical matter and as a necessity for retaining a well-trained, educated workforce to sustain economic growth. From the passage of Chapter 40B in 1969 requiring new affordable housing in all communities across the state to the Chapter 40R incentives for smart growth zoning, the Commonwealth has used its legislative power to encourage housing development. The City of Boston and several other communities have used inclusionary zoning to set aside affordable units or payment-in-lieu fees in order to do the same.

Now we have an additional set of policies intended to increase housing supply in order to moderate

home price appreciation and reduce the housing-cost burdens that afflict at least half the renter households in Greater Boston and a quarter of homeowners. The Baker-Polito administration has used more than \$31 million in state and federal low-income housing tax credits to leverage \$218 million in equity to create or preserve more than 1,400 units of affordable housing. In addition, the administration is awarding more than \$59 million in federal HOME funds and state capital funds for these projects. In 2016, the administration also unveiled a five-year capital budget plan that includes a \$1.1 billion commitment to increasing housing production. All in all, federal and state funding for housing programs has risen from \$608 million in 2013 to \$717 million in 2016, an 18 percent increase.

In another commendable move taken this summer, the Massachusetts Senate passed far-reaching housing legislation that would provide cities and towns with new tools for planning, zoning and permitting with the explicit goal of encouraging re-zoning for more housing in general and more affordable housing in particular. The Massachusetts House will need to take up this legislation with all due speed in its next session.

In the City of Boston, the Walsh administration has redoubled efforts to meet its housing production goal of 53,000 new units by 2030. City land is being made available to developers of middle-class housing. A new Office of Housing Stability has been created to help prevent displacement of residents from their homes. A new workforce housing tax credit has been proposed for the city and the Governor has been asked to allow local control for such a measure.

In addition, a number of nonprofit institutions have increased their housing activity, including the Massachusetts Housing Partnership, which offers planning assistance to communities, a new mortgage product for first-time homebuyers, and rental housing financing to provide long-term, fixed-rate financing for multi-family housing.

What Is to Be Done?

A new analysis of the barriers to housing development conducted at the Turner Center at the University of California, Berkeley has provided further evidence to pinpoint the most important factors that discourage the production of housing. These include high target rates of return demanded by developers given the difficulty of producing housing that is affordable to working families, long and arduous permitting requirements, and demands for substantially higher inclusionary zoning housing requirements.

Meeting Greater Boston's housing needs today and into the future will require radical new thinking—across public, private and nonprofit sectors—about zoning policy and opportunities to reduce the cost of housing construction so that reasonable target rates of return can be realized on market-rate and affordable workforce housing.

What will also be necessary is imaginative rethinking of the kinds of housing we need to produce consistent with the rapidly changing demography of the region. This should include placing priority on housing for young working adults and seniors, and possibly the adoption of new construction techniques such as panelized and modular units.

Fortunately, in addition to state and local government, a number of developers, architects and institutions in Greater Boston are committed to finding answers to our housing challenge. Now is indeed the time to speed up the process of housing innovation so that the region can move from concept to construction and finally meet our housing needs.

CHAPTER ONE

Introduction

Last year's *Greater Boston Housing Report Card* began with some very good news about the Massachusetts economy. Growth in real output for the sixth year in a row outpaced U.S. GDP growth. For the seventh straight year, total non-farm employment increased, and statewide unemployment had fallen to 4.7 percent, the lowest rate since 2007. The five counties of Greater Boston—Essex, Middlesex, Norfolk, Plymouth and Suffolk—were at the very heart of this economic boom with more than 48,000 new jobs generated in 2014 alone.¹

There was also good news about housing production in Greater Boston. For existing homeowners in the region, single-family home prices finally returned to their 2005 level. The number of permits issued for new housing in 2015 was higher than at any time during the past decade and permits for buildings with five or more apartment or condo units reached a new peak not seen since at least 2000. Indeed, permits for units in these larger housing complexes now comprised more than two-thirds of all permits issued, continuing a shift away from single-family home construction to units that could meet the needs of young Millennials and aging Baby Boomers.

In this, the 14th edition of the report card, we have more good news about the economy, but discouraging trends to report about vacancy rates, rents and the future of housing production in the region. According to the latest data available, rents continued to rise sharply while the number of permits for new production now appears to be plummeting—suggesting less new housing construction in the near future in sharp contrast to recent years. What is likewise discouraging has been an apparent radical shift back toward the production of single-family homes and a disconcerting reduction in the number of permits issued for multi-family housing. All of this comes despite concerted attempts by the City of Boston and the Commonwealth to boost housing production to meet the needs of an ever-expanding workforce.

In this year's report, we begin by tracking the economy of Massachusetts and Greater Boston and taking a

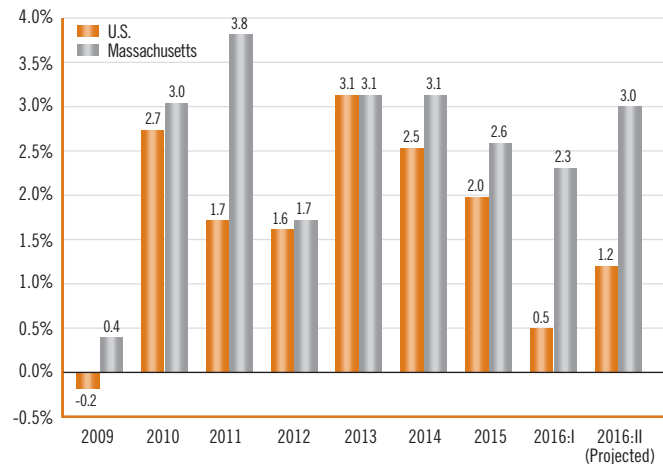
glimpse at the evolving demographics of the five counties of the region. We then follow the trends in home sales, housing production and foreclosures; consider the latest data on home prices and rents; focus new attention on the problems of family homelessness; and finally comment on new housing policy and review the latest data on public spending on housing in the Commonwealth.

The Massachusetts Economy

Since 2009, Massachusetts has enjoyed annual percentage increases in real output that equal or outpace the rest of the United States. Last year, the Commonwealth's growth rate of 2.6 percent was nearly a third higher (30%) than the nation's. This year, Massachusetts is on pace to grow its economy even faster and at a rate nearly *three times* that of the United States. By the second quarter of 2016, the economy was expanding at 3 percent annually (see **Figure 1.1**).²

FIGURE 1.1

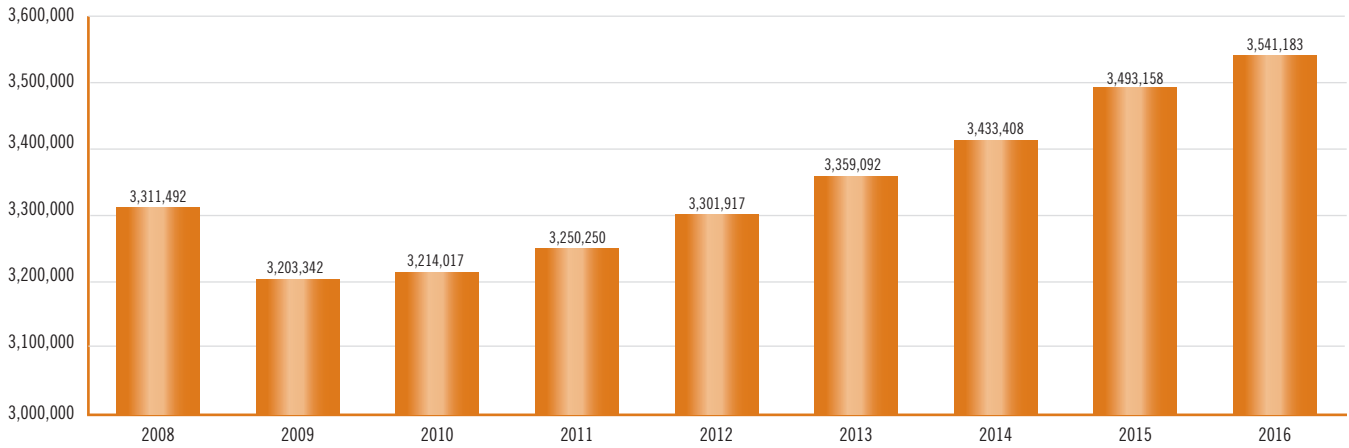
Growth in Real Output Massachusetts vs. U.S. 2009–2016 Q2



Source: Mass Benchmarks; World Bank

FIGURE 1.2

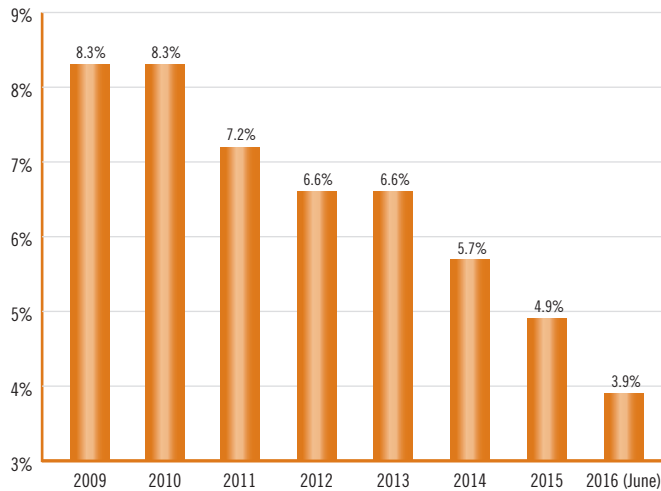
Total Non-Farm Employment Seasonally Adjusted Massachusetts, 2008–2016 (June)



Source: Mass Benchmarks; World Bank

FIGURE 1.3

Massachusetts Civilian Unemployment Rate 2009–2016 (June)



Source: U.S. Bureau of Labor Statistics

With such rapid growth, employment has continued to expand in the Commonwealth as **Figure 1.2** demonstrates.³ By June of this year, seasonally-adjusted total non-farm employment had reached 3,541,000, an increase of more than 48,000 jobs in a span of just 12 months. With the number of jobs in the state increasing every year since 2009, the Commonwealth today

boasts an employed workforce that has expanded by nearly 340,000 in just seven years.

With such strong employment growth, the state’s unemployment rate has continued to decline, and as of August 2016 it stood at only 3.9 percent, less than half the rate in 2010 (see **Figure 1.3**) and the lowest rate in more than 15 years (July 2001).⁴ Such a rate is considered by most economists to be close to real full employment.

With such a record of achievement, *Governing* magazine ranked Massachusetts #1 among all 50 states in overall economic performance in 2016.⁵ Our traditional competitors were far behind. California was ranked #5, North Carolina #7, New York #29 and Connecticut #42. The ranking was based on six variables from the Bureau of Labor Statistics. These included (1) the current state unemployment rate, (2) the improvement in the state unemployment rate over the past year, (3) per capita state GDP in 2015, (4) the percent change in real state GDP between 2014 and 2015, (5) the percent change in state personal income per capita from the third quarter of 2015 to the first quarter of 2016, and (6) the percent growth in job creation in 2016. By virtually all of these measures, Massachusetts turned in a stellar performance. Perhaps not surprisingly, despite a small retreat from earlier this year, the business confidence index prepared by Associated

FIGURE 1.4

Real Average Weekly Wage, Private Industry Massachusetts, 2001–2015 Q3 (Real 2015 \$)



Source: Mass Benchmarks; World BankSource: Massachusetts Department of Labor and Workforce Development, ES202 Data

Industries of Massachusetts (AIM) revealed continued optimism about the state’s economy for the near term.⁶ The AIM survey of the state’s employers in September of this year found that nearly 39 percent of responding firms reported adding staff during the past six months while only 19 percent reduced employment. Over the coming six months, 37 percent of business respondents expect to be hiring additional staff while only 10 percent expect to downsize.⁷

With such a strong economy and low unemployment, there has been upward pressure on wages as many employers are now competing for workers and are forced to offer higher wages to attract and retain them. As such, real average weekly earnings (AWE) in the private sector continued to rise, although at a modest pace.⁸ By the third quarter of 2015, real AWE stood at \$1,267, which is 1.9 percent higher than in the previous year (see **Figure 1.4**).⁹

While this growth in *average* (mean) weekly earnings is encouraging, the average hides a more discouraging picture when it comes to the distribution of wage gains. New data from the Economic Policy Institute and updated by the Massachusetts Budget and Policy Center show that the inflation-adjusted *median* hourly wage in the Commonwealth actually declined by 3.8 percent from \$22.03 to \$21.19 between 2009 and 2015.¹⁰ Lower-wage workers, those at the 20th

TABLE 1.1

Inflation-Adjusted Hourly Wage Distribution Massachusetts, 2009–2015

	2009	2015	% Change
20th Percentile	\$12.56	\$11.97	–4.70%
Median Wage	\$22.03	\$21.19	–3.80%
80th Percentile	\$38.24	\$38.54	+0.78%

Source: Massachusetts Budget and Policy Center

percentile, experienced even a larger decline in real wages (–4.7%) (See **Table 1.1**). What accounted for the increase in the average real wage in Massachusetts was a small 30 cent increase for those workers in the 80th percentile of the earning distribution. Hence, inequality in earnings continues to increase, making the cost of living plight for low-wage workers and working families that much worse.

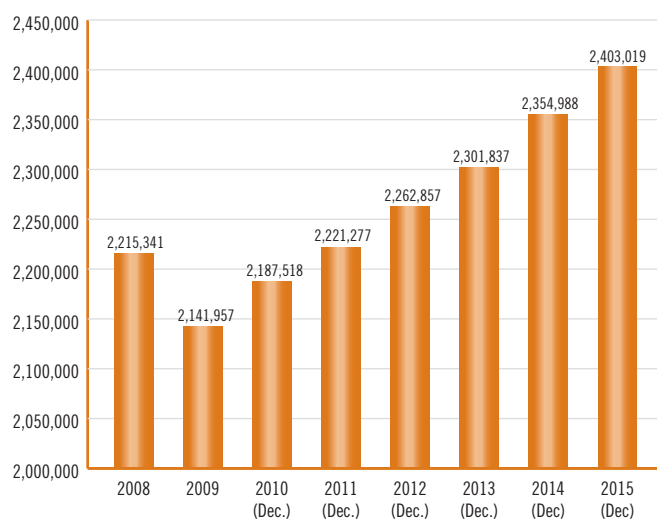
The Greater Boston Economy

Employment growth across the state has also been highly unequal. *Virtually all of the increase in employment since 2008 occurred in the five counties of Greater Boston.* Between December 2014 and December 2015, employment in Essex, Middlesex, Norfolk, Plymouth

and Suffolk counties increased by 48,000, equal to the increase in statewide employment (see **Figure 1.5**). Indeed, this is now an old pattern. Between 2008 and 2015, Greater Boston experienced an increase of 187,700 jobs while the balance of the state lost more than 6,000 jobs. The continuing pressure on the housing market in Greater Boston versus the rest of the state reflects the geographic diversity of the state’s economy.

FIGURE 1.5

Five-County Greater Boston Total Non-Farm Employment, 2008–2015 (December)



Source: U.S. Bureau of Labor Statistics

Greater Boston Demographic and Economic Profile

Not surprisingly, a strong economy attracts new residents—and apparently at an accelerating rate. In the decade between 2000 and 2010, the population of Massachusetts increased by nearly 200,000, as **Table 1.2** reveals.¹¹ In just the half decade since then, the population has grown by even more—nearly 250,000. An increasing share of the population growth is occurring in Greater Boston where the job growth has been situated. Between 2000 and 2010, two-thirds (66.6%) of the state’s population growth took place in Greater Boston; over the past five years this share jumped to nearly 86 percent. During this latest five-year period, the population in Suffolk County—dominated by Boston—increased by nearly 8 percent, more than double the population growth rate in the Commonwealth as a whole and five times the rate for the region outside of Greater Boston. People usually prefer to live near where they work, if they can afford it. Such rapid population growth in Greater Boston—based on its strong economy—accounts for the strong housing demand side of the home price and rent equation. Without housing supply to match, home prices and rents have been rising rapidly in the region and are likely to continue to do so as long as the region’s economy remains strong.

More detail on Greater Boston’s population is found in **Table 1.3**.

TABLE 1.2

Population Statistics

	Massachusetts	Essex	Norfolk	Middlesex	Plymouth	Suffolk	Balance of State	5-County/State	5-County
2000	6,349,097	723,419	1,465,396	650,308	472,822	689,807	2,347,345	63.0%	4,001,752
2010	6,547,629	743,159	1,503,085	670,850	494,919	722,023	2,413,593	63.1%	4,134,036
2015	6,794,422	776,043	1,585,139	696,023	510,393	778,121	2,448,703	64.0%	4,345,719
2000–2010	198,532	19,740	37,689	20,542	22,097	32,216	66,248	66.6%	
2010–2015	246,793	32,884	82,054	25,173	15,474	56,098	35,110	85.8%	
% Chg 2000–2010	3.1%	2.7%	2.6%	3.2%	4.7%	4.7%	2.8%		
% Chg 2010–2015	3.8%	4.4%	5.5%	3.8%	3.1%	7.8%	1.5%		

Source: U.S. Census, *American Factfinder*

TABLE 1.3

Demographic Profile of the Five-County Greater Boston Region

	1990	2000	2010	2014	% Change 1990–2000	% Change 2000–2010	% Change 2010–2014
Total Population	3,783,817	4,001,752	4,134,036	4,228,787	5.8%	3.3%	2.3%
Age							
Percent 0–24	33.7%	32.5%	32.0%	31.4%	-1.3%	-1.4%	-2.0%
Percent 25–44	34.7%	32.6%	27.7%	27.7%	-2.1%	-14.9%	-0.1%
Percent 45–64	18.7%	22.1%	27.1%	27.2%	3.4%	22.4%	0.5%
Percent 65 and Older	12.8%	12.8%	13.2%	13.7%	0.0%	2.9%	3.8%
Median Age ^a	33.4	36.1	38.3	38.5	8.2%	6.1%	0.4%
Household Size							
Number of Households	1,412,190	1,532,549	1,598,451	1,611,938	8.5%	4.3%	0.8%
Average Household Size	2.68	2.61	2.59	2.62	-2.5%	-1.0%	1.4%
Average Household Size, Owner-Occupied Units	2.86	2.75	2.70	2.73	-3.9%	-0.7%	1.1%
Average Household Size, Renter-Occupied Units	2.22	2.16	2.18	2.23	-2.5%	2.9%	2.2%
Percent of Households with One Person	26.4%	28.2%	28.9%	28.8%	1.9%	2.2%	-0.2%
Race/Ethnicity							
Percent White	88.1%	82.0%	77.2%	75.6%	-6.1%	-7.8%	-2.1%
Percent Black	6.2%	6.6%	7.9%	8.4%	0.4%	27.1%	6.0%
Percent Asian	3.1%	4.9%	6.9%	7.4%	1.9%	51.2%	7.8%
Percent Hispanic (Any Race)	4.9%	6.9%	9.7%	10.4%	2.0%	50.5%	7.5%
Household Income							
Median Household Income (Nominal) ^a	\$40,160	\$55,108	\$68,802	\$75,144	37.2%	36.4%	9.2%
Median Household Income (2010 \$) ^a	\$67,002	\$69,782	\$68,802	\$69,214	4.2%	-0.8%	0.6%
Median Homeowner Income (Nominal) ^a	\$51,682	\$71,437	\$93,484	\$101,925	38.2%	42.7%	9.0%
Median Homeowner Income (2010 \$) ^a	\$86,225	\$90,460	\$93,484	\$93,883	4.9%	3.8%	0.4%
Median Renter Income (Nominal) ^a	\$26,245	\$34,207	\$39,208	\$42,831	30.3%	25.2%	9.2%
Median Renter Income (2010 \$) ^a	\$43,787	\$43,316	\$39,208	\$39,451	-1.1%	-8.9%	0.6%

Sources: U.S. Census Bureau, 1990 Census of Housing, General Housing Characteristics, Massachusetts; U.S. Census Bureau, 1990 Census of Population, General Population Characteristics, Massachusetts; U.S. Census Bureau, 1990 Census of Population and Housing, Summary Social, Economic, and Housing Characteristics, Massachusetts; U.S. Census Bureau, 1990 Census of Housing, Detailed Housing Characteristics; U.S. Census Bureau, 2000 Profile of General Demographic Characteristics; U.S. Census Bureau, 2010 Profile of General Population and Housing Characteristics; U.S. Census Bureau, 2009–2014 American Community Survey. All data are collected at the county level for Essex, Middlesex, Norfolk, Plymouth and Suffolk counties.

Note (a) These are averages (weighted according to the proper unit of analysis) of the median statistics in Essex, Middlesex, Norfolk, Plymouth and Suffolk counties.

Aging: As the table suggests, since 1990 the region's population has been aging. Back then, half the region's population was 33.4 years old or older. By 2014, half the population was at least 38.5 years old. Back in 1990, 31.5 percent of the population was 45 years old or older; today nearly 41 percent of the population falls in this age range. Nonetheless, despite an aging population with many empty-nesters, the average size of Greater Boston households in 2014 was back up to 2.62 members, somewhat higher than in 2000 or 2010. This

may reflect an increase in multi-generational households among the older generation and an increase in the number of unrelated individuals living with roommates among younger cohorts.

Racial/Ethnic Diversity: Greater Boston's population is increasingly diverse in terms of race and ethnicity. Back in 1990, more than 88 percent of the region's residents were white; today the percentage is closer to 75 percent with the Asian and Hispanic populations more than doubling.

TABLE 1.4

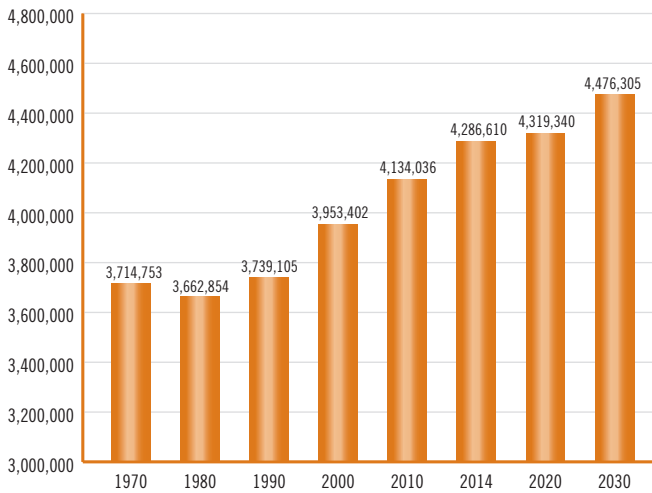
Housing-Cost Burden, Greater Boston

	1990	2000	2009–2014
Renter-Occupied Households Paying More than 30% of Income on Rent	41.7%	39.2%	50.0%
Owner-Occupied Households with Mortgages Paying More than 30% of Income on Housing	28.3%	26.7%	35.0%

Source: U.S. Census Bureau

FIGURE 1.6

Greater Boston Population 1970–2010, 2010–2030 Projected



Source: U.S. Census 1970–2014; MAPC 2020–2030 Stronger Region Projection (Adjusted)¹³

Household Income: Despite the strong economy and some increase in average weekly earnings, household incomes in real terms are stagnating. Between 1990 and 2000, median homeowner income increased by 4.9 percent followed by a 3.8 percent increase in the following decade. But between 2010 and 2014, it has increased by a mere 0.4 percent. Median renter income declined by 1.1 percent during the 1990s, followed by a near 9 percent drop during the following decade. For the first time in years, real median renter income is up, but only by 0.6 percent between 2010 and 2014.

Rising Housing-Cost Burdens: Essentially, as home prices recover and rents continue to spiral upward, a large proportion of Greater Boston households remains cost burdened despite some increase in household incomes. This is shown clearly in **Table 1.4**.

Based on Decennial Census data for 1990 and 2000, the proportion of renters who were paying more than 30 percent of their gross income on rent declined from roughly 42 percent to 39 percent. Since 2000, the proportion has increased to half of all Greater Boston renter households. Among owner-occupied households with mortgages, the proportion paying more than 30 percent of their income on principle, interest and taxes increased from less than 27 percent in 2000 to 35 percent, according to the latest Census estimates from the U.S. Census’s American Community Survey.

Greater Boston Projected Population Growth, 2010–2030

As previous *Greater Boston Housing Report Cards* have shown, the region has been facing a serious housing shortage for a decade or more. This is directly responsible for the steady increases in home prices and rents that have made so many families and households housing-cost burdened.

Projected population growth suggests the problem will only get much worse, unless a great deal of new housing is developed. **Figure 1.6** provides Census data for the Five-County Greater Boston Region for 1970 through 2010 with Five-County Adjusted Stronger Region (SR) projections through 2030 from the Metropolitan Area Planning Council (MAPC), along with the latest Census data for 2014.¹² As the figure shows, the population of Greater Boston is projected to increase to more than 4,475,000 by 2030, an addition of 340,000 people since the 2010 Census.

Within the region, the 2030 projection suggests that 203,000 or nearly 60 percent of the increase in population will occur within inner core cities and towns (see **Table 1.5**). This includes the communities of Arlington, Belmont, Boston, Brookline, Cambridge, Chelsea, Everett, Malden, Medford, Melrose, Newton, Revere, Somerville, Waltham, Watertown and Winthrop. The population in the outer suburbs is expected to increase by only 35,000.

TABLE 1.5

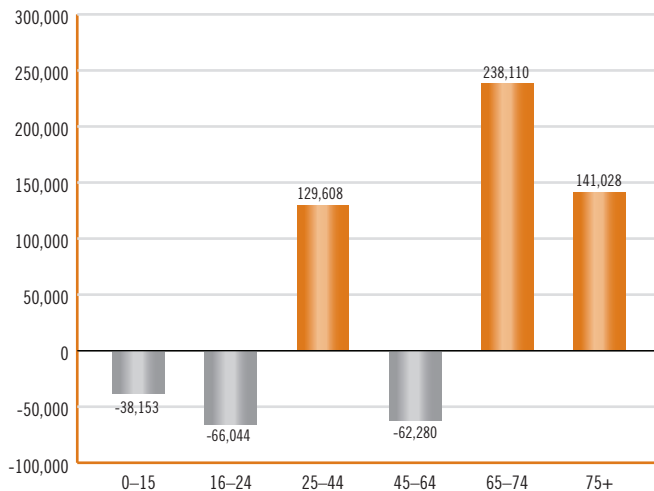
Projected Growth in the Population and Labor Force, Greater Boston, 2010–2030

Greater Boston Geographic Area	Population Growth	Percentage Population Growth
Inner Core	203,000	+14.9%
Regional Urban Centers	104,000	+9.7%
Suburbs	35,000	+2.1%
5-County Greater Boston Region	342,000	+8.4%

Source: U.S. Census Bureau (2010); MAPC Projection (2010–2030)

FIGURE 1.7

Greater Boston Projected Population Growth by Age Cohort, 2010–2030



Source: U.S. Census 1970–2014; MAPC 2020–2030 Stronger Region population projections

That Greater Boston’s population increase is expected to be concentrated in the inner core communities is largely the result of the demographic composition of that growth. As **Figure 1.7** confirms, projected additions to the Greater Boston’s population between 2010 and 2030 are dominated by two age cohorts—those aged 25 to 44 and those 65 plus. These are the groups most likely to choose to live in urban areas with many local amenities and services. As such, it will be particularly important to expand housing production in these inner core communities.

Household Growth

Housing demand, of course, is based not on population growth per se, but on the growth in the number of households. Based on the population growth projection shown in **Figure 1.6**, we have estimated the number of households that will likely be living in Greater Boston by 2030, with the expectation that the average number of persons per household will continue to decline slightly—in line with data from the recent past—from 2.64 in 2010 to 2.59.

Table 1.6 provides these household growth estimates. Accordingly, the number of households in Greater Boston will increase between 2010 and 2030 by nearly 164,000. Essentially, this means that if housing supply is to meet housing demand, the region is going to have to find a way to produce 164,000 more housing units or an average of nearly 8,200 per year.

Nearly 29 percent of these new housing units (47,200) will be needed in Suffolk County, a number close to the 53,000 that Mayor Walsh has targeted for Boston. But in addition, Essex County will need an additional 26,300 units; Middlesex an additional 55,900, Norfolk an additional 23,400, and Plymouth an additional 12,500. Overall, this will mean increasing the housing stock in Greater Boston by more than 10 percent.

TABLE 1.6

Projected Number of Households in Greater Boston

	Essex	Middlesex	Norfolk	Plymouth	Suffolk	Greater Boston
2010	282,768	569,917	255,039	163,992	289,503	1,561,219
2030	309,065	625,769	278,502	176,455	336,692	1,725,146
2010–2030	26,297	55,852	23,463	12,463	47,189	163,927
% Increase	9.3%	9.8%	9.2%	7.6%	16.3%	10.5%

Source: Dukakis Center estimates based on MAPC Stronger Region Population Projections

A New Look at Poverty and Income Inequality in Greater Boston

That such a large number of households are housing-cost burdened is a consequence of a large proportion of the region's population living in poverty. According to U.S. Census Bureau American Community Survey (ACS) data for 2010–2014, approximately 10.6 percent of the families in Greater Boston—or more than 106,000 families—had incomes that left them below the 2014 official U.S. poverty threshold of \$23,850 for a family of four. The official family poverty rate ranged from 6.4 percent in Norfolk County to nearly 22 percent in Suffolk County (see **Table 1.7a**).

But even these large numbers underestimate the real poverty status of Greater Boston because the official federal government poverty statistics going back to 1964 have never accounted for differences in the cost of living across metro areas. To remedy this problem, we have adjusted the official national poverty thresholds for three-person and four-person families and households using a cost of living calculator that measures differences in the prices of standard goods and services across all U.S. metro areas.¹⁴ According to the calculator, in 2014 the composite cost of living for the Boston metro area had an index value of 137.7 relative to an index of 100.0 for all metro areas.

Based on this index, we increased the poverty thresholds by 37.7 percent and calculated the percentage of families and households with incomes under these

TABLE 1.7A

Poverty and Adjusted Poverty Rates for Greater Boston, 2014

	Families (4-Person Family)				
	Total Families	Percent Under Official Poverty Threshold (\$23,850)		Percent Under Adjusted Poverty Threshold (\$32,841)	
	Number	Percent	Number	Percent	Number
Essex	191,407	12.0%	23,015	18.5%	35,397
Middlesex	373,715	8.2%	30,671	13.1%	48,926
Norfolk	170,211	6.4%	10,976	10.5%	17,942
Plymouth	128,955	8.2%	10,571	14.0%	18,092
Suffolk	143,588	21.7%	31,113	30.1%	43,185
Greater Boston Total	1,007,876	10.6%	106,346	16.2%	163,542

Source: U.S. Census Bureau, Info USA Cost of Living Calculator

TABLE 1.7B

Poverty and Adjusted Poverty Rates for Greater Boston, 2014

	Married Couple Families (4-Person Families)				
	Total Married Couple Families	Percent Under Official Poverty Threshold (\$23,850)		Percent Under Adjusted Poverty Threshold (\$32,841)	
	Number	Percent	Number	Percent	Number
Essex	138,192	5.4%	7,397	9.4%	13,047
Middlesex	297,070	4.1%	12,149	7.5%	22,233
Norfolk	136,142	3.2%	4,368	6.3%	8,581
Plymouth	98,261	3.4%	3,335	7.1%	6,943
Suffolk	81,020	9.2%	7,492	15.1%	12,258
Greater Boston Total	750,685	4.6%	34,741	8.4%	63,062

Source: U.S. Census Bureau, Info USA Cost of Living Calculator

new thresholds, yielding the adjusted poverty statistics shown in the last two columns of Tables 1.7a-d.

Table 1.7a shows that among all four-person families in Greater Boston, roughly one-sixth (16.2%) fall below our adjusted poverty threshold—compared with the 10.6 percent under the official poverty line. Instead of 106,000 families in poverty, the adjusted value is more than 163,000. Both the official poverty rate and the adjusted rate vary substantially across the five counties of the region. According to the adjusted threshold, 10.5 percent of Norfolk County families are impoverished. The proportion in Suffolk County is nearly three times greater (30.1%).

Restricting our sample to *married couple families*, the proportion in poverty is much lower. But **Table 1.7b** reveals that the proportion and the number under the adjusted poverty threshold is nearly double that in

the official statistics. For non-family households (and using a three-person threshold), the poverty rates are much higher. The official rate is 30 percent; the adjusted rate is 40 percent. Altogether, the number of non-family households in poverty across the region is nearly 237,000 using the cost-of-living adjustment (see **Table 1.7c**).

Finally, if we combine all families and all non-family households, we arrive at poverty statistics for all households in the region (see **Table 1.7d**). According to the official poverty line, the percentage of impoverished households is 17.7 percent. The adjusted number is 25 percent—fully one-quarter of all households. In this case, more than 400,000 of the 1.6 million households in Greater Boston have incomes that fall below the adjusted poverty threshold. No wonder the proportion of cost-burdened households is so great.

TABLE 1.7C

Poverty and Adjusted Poverty Rates for Greater Boston, 2014

	Non-Family Households (3-Person Households)				
	Total Non-Family Households	Percent Under Official Poverty Threshold (\$19,790)		Percent Under Adjusted Poverty Threshold (\$27,251)	
	Number	Percent	Number	Percent	Number
Essex	95,489	33.3%	31,758	45.5%	43,436
Middlesex	210,094	26.4%	55,420	36.3%	76,258
Norfolk	88,464	27.4%	24,250	37.9%	33,516
Plymouth	51,704	31.1%	16,062	43.1%	22,295
Suffolk	147,043	34.1%	50,104	41.8%	61,473
Greater Boston Total	592,794	30.0%	177,594	40.0%	236,977

Source: U.S. Census Bureau, Info USA Cost of Living Calculator

TABLE 1.7D

Poverty and Adjusted Poverty Rates for Greater Boston, 2014

	All Families + All Non-Family Households				
	Total Households	Percent Under Official Poverty Threshold		Percent Under Adjusted Poverty Threshold	
	Number	Percent	Number	Percent	Number
Essex	286,896	19.1%	54,773	27.5%	78,833
Middlesex	583,809	14.7%	86,091	21.4%	125,183
Norfolk	258,675	13.6%	35,226	19.9%	51,458
Plymouth	180,659	14.7%	26,634	22.4%	40,388
Suffolk	290,631	27.9%	81,217	36.0%	104,658
Greater Boston Total	1,600,670	17.7%	283,940	25.0%	400,520

Source: U.S. Census Bureau, Info USA Cost of Living Calculator

TABLE 1.8

Greater Boston: Rich and Poor Families

	Greater Boston	United States
Families below adjusted poverty threshold	16.2%	11.5%
Families with income greater than \$150,000	26.3%	13.1%
Families between adjusted poverty threshold and \$150,000	57.5%	75.4%

Source: U.S. Census; Dukakis Center Adjusted Poverty Threshold Statistics

These adjusted poverty statistics also provide further demonstration of how unequal family incomes are in Greater Boston. In **Table 1.8** we compare the percentage of Greater Boston families below the adjusted poverty threshold and those with incomes of \$150,000 or more. The proportion of Greater Boston families under the cost-of-living adjusted poverty rate is actually higher than the rate for the United States as a whole—16.2 percent vs. 11.5 percent. At the other end of the income spectrum, the proportion of families with annual incomes of \$150,000 or more is double the U.S. percentage. Accordingly, we have fewer families with incomes between these extremes. Nationally, about 75 percent of all families have incomes above the poverty level but below \$150,000; in Greater Boston that figure is less than 58 percent. This disparity helps account for the fact that more families can afford the high prices of housing in the region even as more families are extremely cost burdened.

Summing Up

Greater Boston is benefiting from both a rapidly improving economy and a rapidly increasing population drawn here by our strong labor market. In contrast to regions where the economy is weak and the population is declining, the region is doing quite well. But as we have stressed in one *Greater Boston Housing Report Card* after another, this is only a double blessing if housing supply keeps up with housing demand and household incomes keep up with the rising cost of housing. Because they have not, and incomes are more unequal in the region than almost anywhere else in the country, housing-cost burdens for many families have risen sharply and remain elevated—despite what otherwise appears to be a buoyant regional economy.

Finding ways to accommodate population growth with adequate housing has become a major objective of state and local government. Even with the improvements noted last year in issued permits and construction, however, housing supply lags behind demand. A combination of restrictive zoning practices, high land acquisition costs and high construction costs makes it difficult for developers to construct the housing needed by working families and low income households. And as the next chapter shows, Greater Boston may be entering a new era of even less housing production—which can only exacerbate the region’s housing crunch.

CHAPTER TWO

Home Sales, Housing Production and Foreclosures in Greater Boston

With Greater Boston's strong economy and growing population, it would be fair to assume that home sales are increasing in Greater Boston and that developers are planning to construct more housing. One might also expect to see fewer foreclosures as a result of higher employment levels and rising household incomes. As this chapter will demonstrate, home and condo sales indeed increased in the region in 2016, but there is new—and quite discouraging—evidence that the number of permits issued for future construction has plummeted and that the number of foreclosures has continued to increase. In this chapter we take a close look at the region's latest statistics on each of these measures of housing activity.

Home Sales Volume

With the bursting of the region's housing bubble in 2007 followed by the Great Recession through the summer of 2009, single-family home sales plunged in Greater Boston as they did throughout the nation.¹ By 2011, sales were down 36 percent from their 2004 peak (see **Figure 2.1**). Since then, single-family home sales

have generally risen year-over-year and this was the case again in 2016 with a projected 7 percent increase in sales. If our projection—based on data for January through June of this year—is correct, 2016 will see the largest number of single-family home sales in Greater Boston since 2004, making it the second highest sales year in this century.

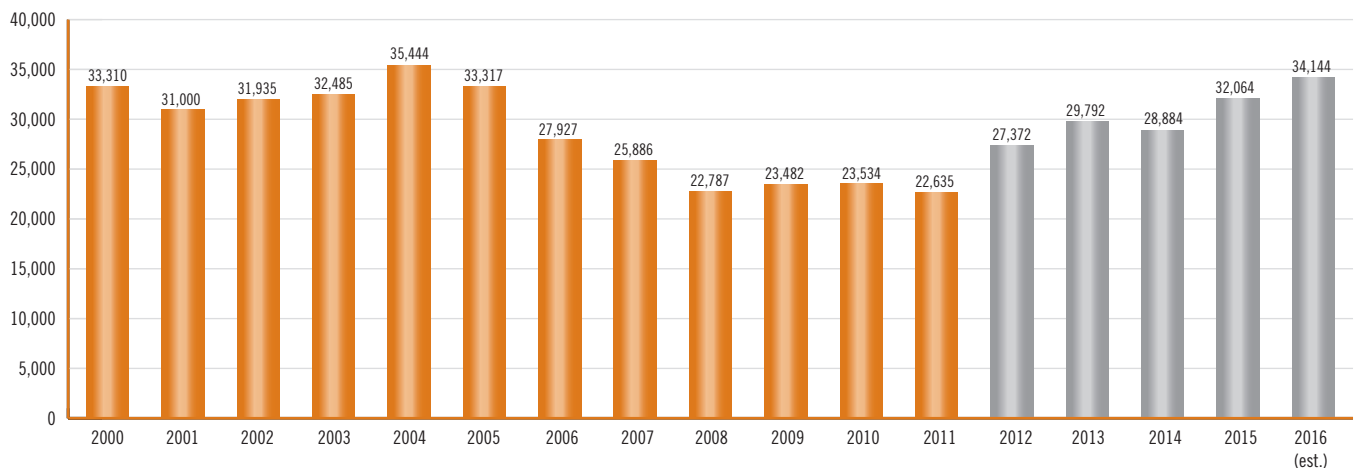
Condominium sales in 2016 are projected to increase as well, marking the fifth straight year of improved sales, as **Figure 2.2** demonstrates. With 19,000 projected condo sales in 2016, total sales will be nearly 7 percent higher than in 2015. This is the highest total since 2007.

Sales of homes in two-unit and three-unit structures have been relatively constant since 2008, and we expect that by the end of this year this will prove to be the case again. We project about 3,500 sales in duplexes and about 1,400 triple-decker unit sales (see **Figure 2.3**).

Based on data for all of 2015 and the first half of 2016 from the region's premier real estate research and publishing firm, The Warren Group, we have estimated what the full-year 2016 sales of single-family

FIGURE 2.1

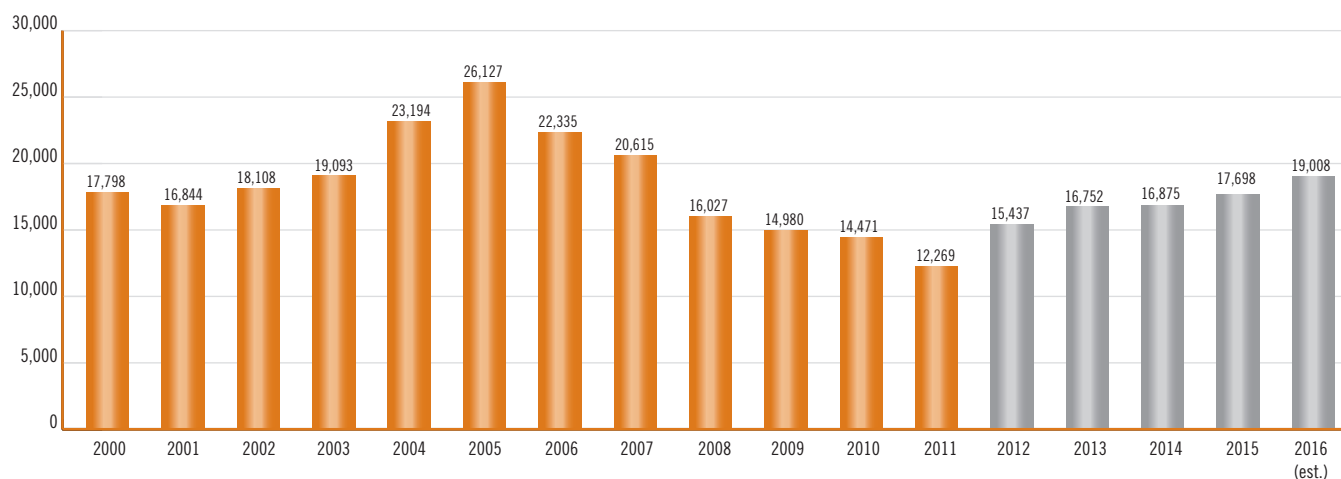
Annual Number of Sales of Single-Family Homes in Five-County Greater Boston Region, 2000–2016 (Est.)



Source: The Warren Group

FIGURE 2.2

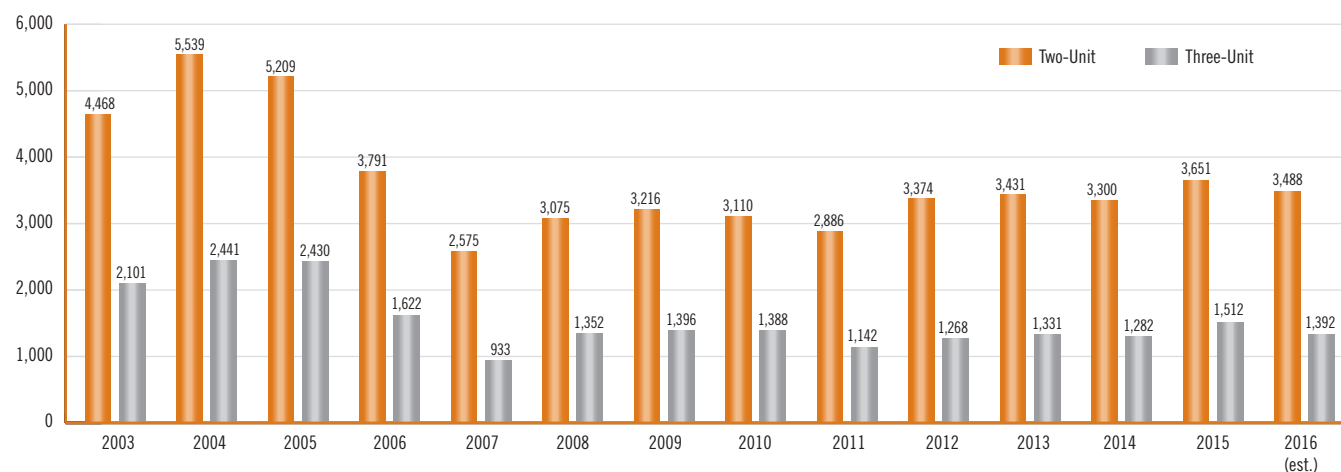
Annual Number of Sales of Condominiums in Five-County Greater Boston Region, 2000–2016 (Est.)



Source: The Warren Group

FIGURE 2.3

Annual Number of Sales of Homes in Two-Unit and Three-Unit Structures in Five-County Greater Boston Region, 2000–2016 (Est.)



Source: The Warren Group

homes and condominiums might be in cities and towns throughout Greater Boston.² **Table 2.1a** provides the results for the ten communities in the region with the highest projected single-family home sales for 2016. The city of Brockton maintains its first-place status with anticipated single-family home sales of more than 1,160. This city south of Boston has ranked in the top three for single-family sales since at least 2010. With a median sales price of \$243,000 in July 2016, it is one of most affordable communities in Greater Boston.

Plymouth ranks second with expected sales of 890. The median single-family home price in that community is \$344,000. The city of Lynn just north of Boston with a median sales price of \$290,000 ranks third, up from 11th place in 2012. Reflecting the underlying unequal distribution of income in the region, the city of Newton is expected to rank 4th in 2016 despite its median single-family home price of more than \$1.1 million. As recently as 2014, this wealthy Boston suburb ranked #1 in annual sales as a result of high

TABLE 2.1A

Municipal Leaders in Single-Home Sales in Greater Boston, 2010–2015 (Estimate)

	Number of Sales (Ranking in Parentheses)						
	2016 (Est.)	2015	2014	2013	2012	2011	2010
Brockton	1,162 (1)	772 (1)	619 (3)	660 (2)	659 (2)	552 (2)	624 (1)
Plymouth	893 (2)	713 (2)	624 (2)	617 (4)	582 (3)	512 (3)	501 (3)
Lynn	781 (3)	602 (5)	473 (6)	418 (9)	394 (11)	356 (9)	434 (5)
Newton	686 (4)	670 (3)	634 (1)	691 (1)	671 (1)	582 (1)	578 (2)
Framingham	647 (5)	657 (4)	604 (4)	627 (3)	498 (5)	408 (6)	452 (4)
Weymouth	686 (6)	579 (7)	461 (7)	500 (6)	450 (7)	340 (10)	368 (10)
Haverhill	627 (7)	470 (10)	352 (16)	357 (16)	346 (16)	325 (11)	150 (71)
Lowell	612 (8)	490 (9)	473 (6)	425(8)	419 (8)	411 (4)	412 (6)
Quincy	577 (9)	592 (6)	547 (5)	576 (5)	507 (4)	394 (7)	388 (8)
Methuen	557 (10)	506 (8)	388 (11)	352 (22)	370 (14)	304 (17)	310 (21)

Source: The Warren Group

TABLE 2.1B

Municipal Leaders in Sales of Condominiums in Greater Boston, 2010–2015 (Estimate)

	Number of Sales (Ranking in Parentheses)						
	2016 (Est.)	2015	2014	2013	2012	2011	2010
Boston	1,996 (1)	1,785 (1)	1,632 (1)	1,827 (1)	1,864 (1)	1,575 (1)	1,622 (1)
South Boston	779 (2)	709 (3)	708 (3)	721 (3)	692 (3)	527 (3)	568 (3)
Cambridge	772 (3)	710 (2)	751 (2)	937 (2)	918 (2)	790 (2)	817 (2)
Somerville	584 (4)	400 (8)	471 (5)	430 (5)	450 (5)	340 (5)	413 (6)
Dorchester	557 (5)	415 (7)	447 (6)	374 (10)	352 (7)	340 (5)	515 (5)
Quincy	553 (6)	421 (6)	327 (9)	328 (11)	340 (8)	198 (14)	300 (9)
Brookline	548 (7)	557 (4)	483 (4)	540 (4)	635 (4)	476 (4)	561 (4)
Salem	535 (8)	381 (9)	314 (11)	315 (13)	269 (13)	202 (13)	254 (12)
Jamaica Plain	534 (9)	453 (5)	401 (7)	411 (6)	368 (6)	302 (6)	364 (7)
Lowell	424 (10)	353 (11)	311 (12)	263 (15)	234 (15)	221 (11)	276 (11)

Source: The Warren Group

demand by the growing ranks of well-paid professional workers in the region.

As **Figure 2.1b** shows, condominium sales, not surprisingly, have been concentrated in the cities of Boston, Cambridge and Somerville, where multi-unit housing is more common. If our estimation method is correct, Boston will set a new seven-year record for condo sales with nearly 2,000 trading on the market. Within Boston, condo sales are now highest in South Boston,

Dorchester and Jamaica Plain. Cambridge and Somerville are also expected to have record years with more than 770 and 584 condo sales, respectively, followed by Quincy, Brookline, Salem and Lowell.

These are all promising statistics, but as we are about to see, other data suggest some menacing storm clouds on the horizon.

Homeownership

In last year’s report, we noted that the homeownership rate in the Boston metropolitan area was falling sharply. From 2008 through 2013, the rate held nearly steady at 65.5 to 66.5 percent. But in 2014, it dropped to 62.9 percent and then 59.2 percent in 2015 (see **Figure 2.4**). According to the U.S. Census Bureau the homeownership rate in the Boston metro region fell further to 58.5 percent during the first two quarters of 2016. Will this trend continue? And what does it signify?

Greater Boston is hardly alone in terms of lower rates of owner-occupied housing. According to *The State of the Nation’s Housing 2016*, released by Harvard University’s Joint Center for Housing Studies, “The U.S. homeownership rate has tumbled to its lowest level in nearly a half-century.”³ Nationwide, this is true across most age groups except for households headed by those 70 or older and the decline is particularly severe among 30–44 year-olds, traditionally those in the prime first-time home buying years.

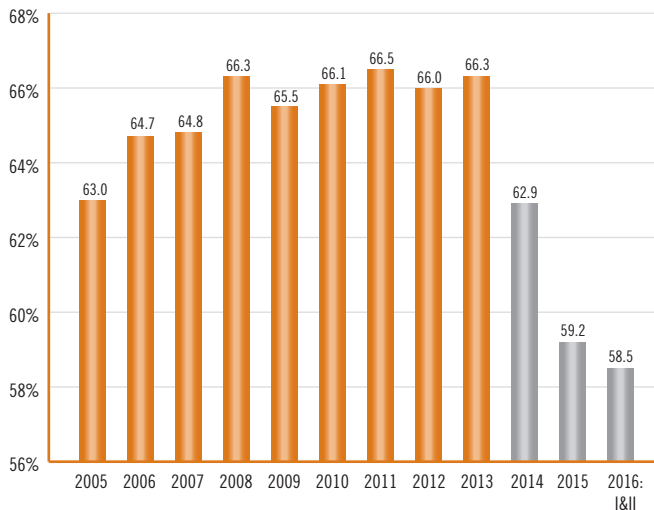
What might be responsible for this trend? One factor, according to the Joint Center, has been the loss of homes by those who have faced foreclosure. Since 2006, more than 19,000 households have lost their homes to foreclosure in the five counties of Greater Boston, leading to a transition from owning to renting.⁴

A second factor is the increased scrutiny of potential homeowner finances by mortgage companies following the housing debacle a decade ago. Again, according to the Joint Center, no longer is mortgage credit available to applicants with subprime credit scores (below 620) and there has been a sharp retreat in mortgage lending to applicants with scores of 620–660. As such, homeownership rates are falling back to levels that prevailed before the era of easy credit and “no-doc” mortgages in the early part of last decade that contributed to the high rate of foreclosures in the first place.

A third factor has to do with the falling incomes of younger workers who, in the past, have led the ranks of first-time home buyers. Nationwide, the real incomes of 25–34 year-olds have dropped by 18 percent since the early 2000s and by 9 percent for 35–44 year-olds. This loss of income, combined with the expense of massive college loan and credit card debt, has forced many younger families to rent rather than to buy their own homes.⁵ Later marriages and postponed childbearing may also be contributing to the slide in homeownership. As **Table 2.2** demonstrates, the homeownership rate for 25–34 year-olds in Greater Boston has declined from nearly 41 percent in 2000 to 36 percent in 2010 to only a little more than 30 percent, as reported in the 2011–2014 *American Community Survey*. Among 35–44 year-olds, the decline has also

FIGURE 2.4

Homeownership Rate Boston Metro Area 2005–2016 (Q1 & Q2)



Source: U.S. Census Bureau, “Quarterly Vacancy and Homeownership Rates by State and Region”

TABLE 2.2

Homeownership Rate for Prime Age Households 2000–2014

	Age 25–34	Age 35–44
2000	40.7%	67.2%
2010	36.2%	65.0%
2011–2014	30.2%	58.9%

Source: U.S. Census Bureau (2000, 2010); American Community Survey (2011–2014)

accelerated, falling from just over 67 percent in 2000 to 65 percent in 2010 to less than 59 percent according to the latest data.⁶

New research suggests where Millennials—aged 18 to 34—are living. According to Census data for 2015, 37 percent of Massachusetts Millennials now live with their parents, the ninth highest rate in the United States. Nationwide, in 2014 more than a third lived with their parents, and another 13 percent lived with relatives other than their parents. The total, 48 percent, was virtually double the 24 percent living with a spouse in a home they either rented or owned.⁷

Whether these young households will ever catch up to their elders in terms of homeownership is a major question. Given that older generations have generally benefited from an increase in home values and therefore their net assets, younger generations may find that the lack of homeownership affects their long-term asset accumulation for older age.⁸ If they are fortunate in having homeowner parents who bequeath their homes to them or pass on their value, these younger households may still benefit from legacy homeownership in the long run.

There is also the question of whether declining homeownership rates, if sustained, will have a detrimental impact on neighborhoods and communities. Circumstantial evidence suggests that communities with low

homeownership rates tend to have lower levels of social cohesion and political and civic engagement.⁹ Thus, while lower homeownership may lead to lower foreclosure rates in the future—a beneficial outcome—the economic and social consequences of rapidly falling homeownership rates may contribute to more troubled prospects for younger generations and for the communities where they live.

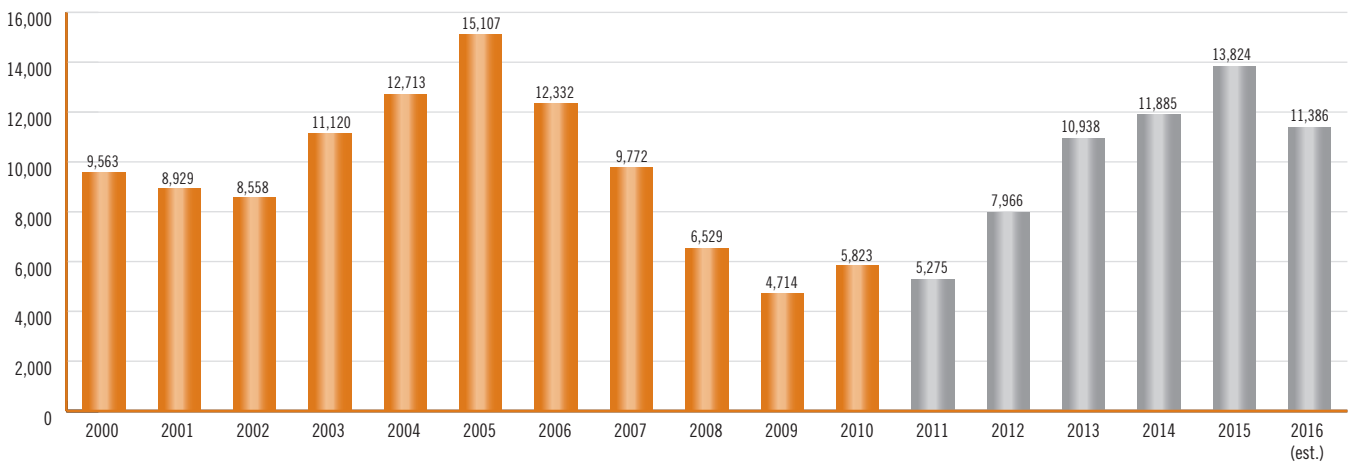
Housing Permits

For the past four annual *Greater Boston Housing Report Cards*, we have been encouraged by the increase in housing permits issued in the region. From a low of just 4,714 in 2009, the pace of permitting has picked up nearly every year so that by 2015, city and town housing authorities had approved permits for more than 13,800 new units (see **Figure 2.5**). Not surprisingly, with so much permitting new housing construction got under way in many communities. Moreover, as **Figure 2.6** reveals, the surge in permitting was dominated by plans for larger housing complexes with five or more units in contrast to past years when most permits were for single-family homes.

New data for the first six months of 2016 and extrapolated for the full year suggest a significant retreat in new permitting, reversing what has been nearly a six-year trend. Our best estimate is that only about 11,400 permits for new

FIGURE 2.5

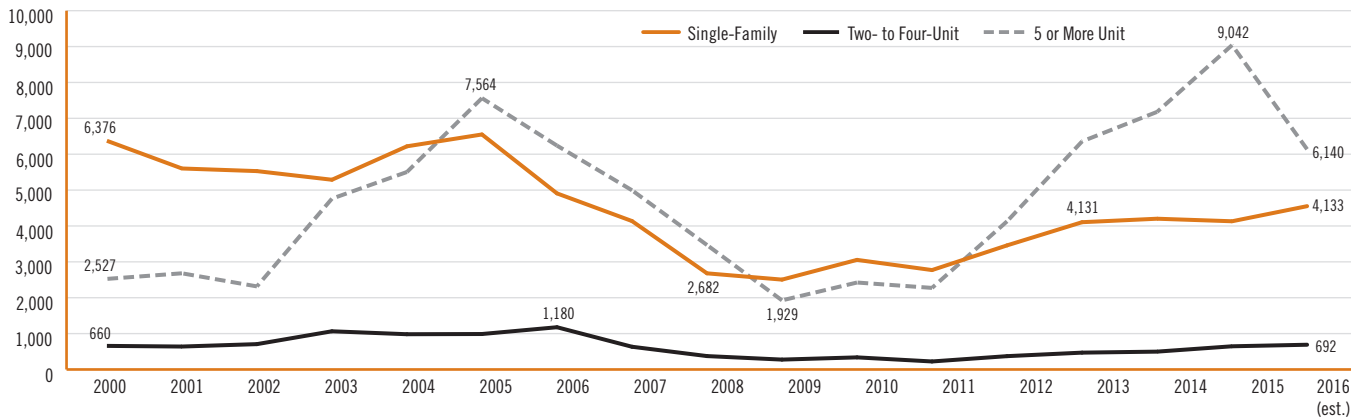
Total Housing Permits Issued in Five-County Greater Boston Region, 2000–2016 (Est.)



Source: U.S. Census Bureau, Building Permits Survey for Essex, Middlesex, Norfolk, Plymouth and Suffolk counties

FIGURE 2.6

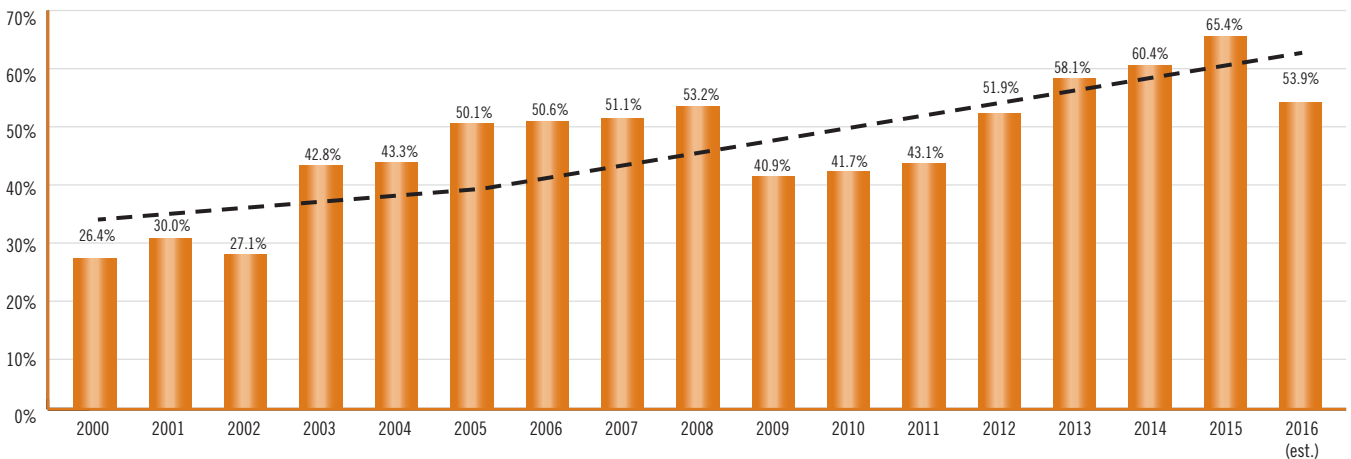
Number of Housing Unit Permits in Five-County Greater Boston Region, by Structure Type, 2000–2016 (Est.)



Source: U.S. Census Bureau, Building Permits Survey for Essex, Middlesex, Norfolk, Plymouth and Suffolk counties

FIGURE 2.7

5+ Unit Housing Unit Permits as a Percent of All Housing Permits Greater Boston, 2000–2016 (Est.)



Source: U.S. Census Building Permit Survey for Essex, Middlesex, Norfolk, Plymouth and Suffolk counties

housing units will be issued in Greater Boston by the end of this year, down nearly 18 percent from 2015. This is fewer than the number of permits in 2006, a year in which the economy was still experiencing the effects of a collapsing housing market.

If this forecast proves accurate, then we will likely see a sharp reduction in new housing starts over the next few years—making it more difficult to meet the ambitious housing goals that have been set for Boston and the rest of the region. Moreover, if 2016 marks the beginning of a longer term downward trend in housing permits, as we saw in the last housing cycle

(2000–2009), then it is virtually assured that all bets on meeting the region’s housing goals are off.

What is of equal or greater concern is the sharp reduction in permits for multi-unit apartments and condominiums—despite the fact that many more Massachusetts communities now have zoning regulations that allow the production of multi-family housing. Back in 2014, 301 of the 351 municipalities in the Commonwealth did not permit even a single unit of multi-unit housing; in 2016 the number was down to 114.¹⁰ Nevertheless, if the estimates prove accurate, the total number of permits for single-family homes

TABLE 2.3

Single-Family and Multi-Family Building Permits in Greater Boston 2000–2016 (est.)

Year	Total Units	% Change from Prior Year	Units in Single-Family Structures	% Change from Prior Year	Units in 2–4 Unit Structures	% Change from Prior Year	Units in 5+ Unit Structures	% Change from Prior Year
2000	9,563		6,376		660		2,527	
2001	8,929	-6.6%	5,604	-12.1%	642	-2.7%	2,683	6.2%
2002	8,558	-4.2%	5,531	-1.3%	709	10.4%	2,318	-13.6%
2003	11,120	29.9%	5,290	-4.4%	1,067	50.5%	4,763	105.5%
2004	12,713	14.3%	6,222	17.6%	985	-7.7%	5,506	15.6%
2005	15,107	18.8%	6,552	5.3%	991	0.6%	7,564	37.4%
2006	12,332	-18.4%	4,910	-25.1%	1,180	19.1%	6,242	-17.5%
2007	9,772	-20.8%	4,139	-15.7%	636	-46.1%	4,997	-19.9%
2008	6,529	-33.2%	2,682	-35.2%	376	-40.9%	3,471	-30.5%
2009	4,714	-27.8%	2,507	-6.5%	278	-26.1%	1,929	-44.4%
2010	5,823	23.5%	3,057	21.9%	340	22.3%	2,426	25.8%
2011	5,275	-9.4%	2,773	-9.3%	226	-33.5%	2,276	-6.2%
2012	7,966	51.0%	3,461	24.8%	374	65.5%	4,131	81.5%
2013	10,938	37.3%	4,107	18.7%	472	26.2%	6,359	53.9%
2014	11,885	8.7%	4,204	2.4%	500	5.9%	7,181	12.9%
2015	13,824	16.3%	4,133	-1.7%	649	29.8%	9,042	25.9%
2016 (est.)	11,386	-17.6%	4,554	10.2%	692	6.6%	6,140	-32.1%
Percentage Change								
2000–2005		58.0%		2.8%		50.2%		199.3%
2005–2009		-68.8%		-61.7%		-71.9%		-74.5%
2009–2010		23.5%		21.9%		22.3%		25.8%
2010–2014		104.1%		37.5%		47.1%		196.0%
2014–2016 (est.)*		-4.2%		8.3%		38.4%		-14.5%

Source: U.S. Census Building Permit Survey for Essex, Middlesex, Norfolk, Plymouth and Suffolk counties

*The annualized estimates of 2015 housing permits were calculated by multiplying the number of permits issued through July by 12/7.

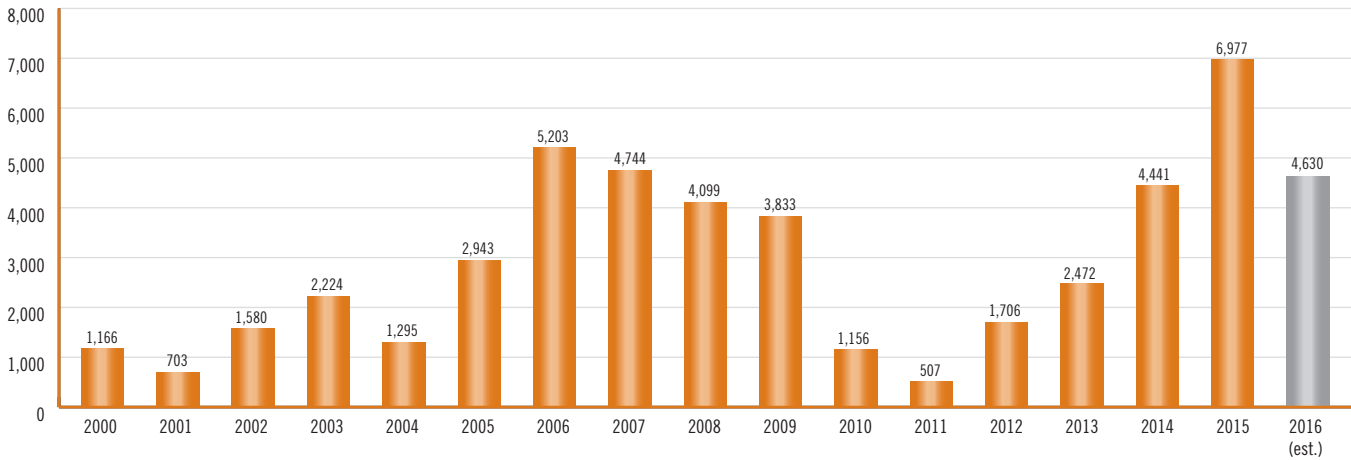
will actually be slightly higher in 2016 than 2015 while the total number of permits for 5+ unit buildings will be down by nearly a third (32.2%)—from more than 9,000 permits to only 6,140 (see **Table 2.3**). So despite the continuing shift in demographics toward younger and older households—many of whom are opting for multi-unit housing—future production of such housing looks to be in jeopardy. In 2016, we project that only 54 percent of all new housing permits will be for units in 5+ unit buildings, lower than the average rate between 2003 and 2015 and significantly lower than the 65 percent of last year (see **Figure 2.7**).

Housing Construction

Permits are only the second stage in the housing development process. Developers first have to apply for a permit and only after receiving one can they move ahead to construction. There can be a long delay between a permit application, the issuing of a permit, and finally the construction of housing—some applications are dropped. Data on the number of new apartments completed each year in the Boston metro region are collected by Reis, Inc., a national real estate market research and analysis firm.¹¹ **Figure 2.8** provides the number of new units going back to 2000.

FIGURE 2.8

New Completed Apartment Units, Boston Metro Area 2000–2016 (Est.)



Source: Reis.com

Housing construction boomed during the middle of the last decade. From only 703 apartment units completed in 2001, the region saw more than 5,200 units come on line in 2006. Then with the housing meltdown, construction declined to a new low of just 507 units in 2011. Then, as the economy recovered and the population increased, developers came back into the market and set new records for construction. In 2015, nearly 7,000 apartments were completed in the region.

But in 2016 it appears that there has been a relative lull in new construction despite near record low housing vacancy rates. By the end of this year, Reis believes that only about 4,630 units will have been built in the Boston metro market, down a full third (–33.6%) from the previous year and only slightly more than in 2014.

Whether this reduction in construction is temporary or more permanent will rely on the answers to two key questions. Have developers built most of the high-end luxury housing the market can absorb? Will developers figure out a way to build housing for working families and middle-income households so that construction heats up again?

Housing Production by Type and Location

Our estimates for new housing permits vary substantially across Greater Boston cities and towns as shown in **Tables 2.4a-c**. A number of communities, according

to our projections, will experience large increases in the number of housing permits this year. Billerica, for example, issued permits for a total of 261 units between 2011 and 2015. But this year alone, we project the town will issue more than 800 permits, the vast majority for housing in apartment or condominium complexes with five or more units. Burlington is also expected to set a new record for permits with the overwhelming majority in multi-unit housing developments. Of the 15 Greater Boston communities issuing the largest number of permits, eight of them are setting at least six-year records. In other cities and towns (mainly Boston suburbs), permits for single-family housing are booming. Plymouth, Hopkinton, Dracut, Lakeville, Framingham, Brockton, Weymouth and Wrentham are all expected to set new six-year records for single-family permits.

What is dragging down the total number of permits in Greater Boston is the apparent collapse in permits in the city of Boston itself. Between 2011 and 2015, the number of permits issued in the city increased each year, culminating in more than 4,800 permits last year—up from just 785 in 2011. But we now estimate that for all of 2016 the total will come in at just about 3,400—nearly 30 percent less than the 2015 record.¹² For large multi-unit developments, permits will be down even more—nearly 40 percent from last year’s record of 4,572. Something of the same phenomenon can be seen in Cambridge. Between 2012 and 2015 more than 2,200 housing permits were issued for this

TABLE 2.4A

Municipalities Permitting the Most New Housing Units, 2011–2016

2016 Rank Most Permits	Municipality	2016 (Est.)	2015	2014	2013	2012	2011	Change in Total Units 2011–2016	Change in Total Units 2015–2016
1	Boston	3,408	4,813	3,993	2,561	1,776	785	2,623	-1,405
2	Billerica	816	43	48	45	91	34	782	773
3	Burlington	630	226	56	49	43	18	612	404
4	Plymouth	302	241	236	241	185	149	153	61
5	Newton	290	27	67	123	68	74	216	263
6	Dracut	252	49	49	96	44	33	219	203
7	Framingham	212	284	77	27	19	14	198	-72
8	Hopkinton	180	128	104	113	110	37	143	52
9	Lynn	174	20	59	26	26	5	169	154
	Melrose	174	40	3	61	80	8	166	134
10	Cambridge	166	535	285	995	392	34	132	-369
11	Chelsea	144	223	385	332	165	113	31	-79
12	Middleborough	142	201	139	123	87	52	90	-59
13	Everett	134	164	437	432	108	68	66	-30
14	Methuen	124	116	123	124	113	38	86	8
15	Watertown	102	389	13	468	14	220	-118	-287

Note: 2016 estimates derived by taking permitting numbers through June and multiplying by 2.

Source: U.S. Census Bureau, Annual New Privately-owned Residential Building Permits for Places in Massachusetts

TABLE 2.4B

Municipalities Permitting the Most New Single-Family Units, 2011–2016

2016 Rank Most Permits	Municipality	2016 (Est.)	2015	2014	2013	2012	2011
1	Plymouth	302	237	236	239	185	149
2	Hopkinton	180	128	104	59	36	33
3	Methuen	116	114	119	122	98	38
4	Needham	100	99	106	104	73	43
5	Dracut	94	41	47	48	44	31
6	Wellesley	92	95	66	66	69	41
7	Lexington	86	87	99	82	97	59
	Lakeville	86	19	23	17	22	32
8	Framingham	80	69	63	23	15	14
9	Acton	70	55	87	83	59	62
10	Tewksbury	68	76	75	42	42	27
11	Brockton	66	61	53	45	30	21
12	Kingston	62	59	69	69	35	20
13	Duxbury	60	67	37	25	32	25
14	Weymouth	58	25	32	55	54	46
	Wrentham	58	46	46	47	31	18
15	Concord	52	54	43	42	35	35

Note: 2016 estimates derived by taking permitting numbers through June and multiplying by 2.

Source: U.S. Census Bureau, Annual New Privately-owned Residential Building Permits for Places in Massachusetts

TABLE 2.4C

Municipalities Permitting the Most New Units in 5+ Structures, 2011–2016

2016 Rank Most Permits	Municipality	2016 (Est.)	2015	2014	2013	2012	2011
1	Boston	2,784	4,572	3,654	2,361	1,571	692
2	Billerica	768	0	0	0	0	0
3	Burlington	594	180	0	0	0	0
4	Newton	248	0	0	0	0	0
5	Melrose	170	26	0	52	71	0
6	Dracut	158	0	0	48	0	0
7	Chelsea	144	222	385	332	156	108
8	Lynn	142	0	48	0	0	0
9	Cambridge	138	493	254	979	359	20
10	Everett	124	154	421	413	89	54
11	Canton	96	208	115	95	68	38
12	Swampscott	88	132	184	0	0	0
13	Stoughton	80	0	21	0	16	0
14	Watertown	78	361	7	451	0	214
15	Quincy	74	197	108	100	80	71

Note: 2016 estimates derived by taking permitting numbers through June and multiplying by 2.

Source: U.S. Census Bureau, Annual New Privately-Owned Residential Building Permits for Places in Massachusetts

308 municipalities did not permit any multifamily housing in 2012, 308 municipalities did not permit any multifamily housing in 2013, 301 municipalities did not permit any multifamily housing in 2014, 113 municipalities did not permit any multifamily housing in 2015, 114 municipalities did not permit any multifamily housing in 2016, 2 municipalities did not permit any housing in the first two quarters of 2016

city, an average of more than 550 per year. In 2016 we project a total of about 160 permits will be issued by year's end.

How can we explain these permitting trends? In Boston especially, a large proportion of recent production has been high-end luxury condominiums. Many developers believe this market is becoming saturated and are therefore slowing the production of such new housing. Given the high cost of new housing development, particularly in cities where land prices are extremely high, developers are not able to shift to producing housing that is affordable for working families. The cost of producing that housing precludes sale or rental prices that working families and middle-income households can afford.

So that leaves the suburbs as pretty much the only location where new housing development is feasible. Communities like Billerica and Burlington have become choice locations for the development of middle-income housing and developers are beginning to take advantage of this new housing dynamic.

Unfortunately, as we will see in the next chapter, this means that there may not be any significant reduction in condo prices and rents in the inner core cities for years to come.

Housing Production in the City of Boston

The decline in new unit building permits in the city of Boston is significant enough for a more in-depth analysis of this phenomenon.¹³ **Table 2.5** provides additional data on how much of the overall decline in 2016 Greater Boston permitting is due to the sharp fall-off in Boston itself. In 2015, the city issued nearly 35 percent of all new permits issued in the five-county region. A year later, Boston accounted for less than 30 percent. As such, the city was responsible for nearly 58 percent of the reduction in permitting over the past year.

As for larger apartment and condominium complexes, Boston issued more than half (50.6%) of all permits for this type of unit in 2015. A year later, Boston was

responsible for only 45.4 percent of these units. That meant that *three-fifths* (61.6%) of the one-year fall-off in larger housing development permits were in the city itself.

But, as noted earlier, permits are only one part of the housing development chain. First a developer has to *apply* for a building permit, then he or she has to wait to receive a building permit, and finally the developer has to complete construction of the permitted units. One encouraging sign in Boston is the sharp reduction in the time it takes for a developer to receive a permit. **Table 2.6** reveals the average time in days between an application and an issued permit. As late as 2014, it took on average more than 470 days—more than 15 months—to receive a permit for one single-family home. By 2016, the wait time was down to 74 days. Permits for larger multi-family developments took, on average, 425 days in 2014. Today, the wait time is less than 120 days.

Moreover, as the wait time for permits came down, the number of permit applications in Boston has increased. **Figure 2.9** provides data for the last three years on applications, permits and completed units. Note that while units permitted in Boston were down in 2016, the number of permit applications was much higher in 2016 than in either of the previous two years. In fact the number of applications expected by the end of this year should exceed 5,800, 45 percent higher than in 2015 and twice the number in 2014. If these applications turn into permits in a timely manner, there will almost surely be an increase in permits in the city in 2017 and subsequent years.

On the other hand, 2016 will likely see an acute decline in the number of housing units actually completed in Boston by the end of the year, as we saw earlier for the entire Boston metro area. In 2015, more than 4,300 units were built, double the number in 2014. This year we expect that fewer than 2,700 units will be ready for occupancy. Looking back at **Figure 2.8**, it appears that 70 percent of the decline in completed housing units between 2015 and 2016 occurred in Boston itself.

The real question, then, is whether the spurt in applications will lead to a significant uptick in permits and eventually more construction. At this point, it is hard to tell what the future trend in housing production will be in Boston. We do know it will be necessary to continue to complete at least an average of 2,600 units a year through 2030 to meet the city’s goal of

TABLE 2.5

Permits: Boston vs. Greater Boston

	All Units		5+ Units	
	2015	2016	2015	2016
Greater Boston	13,824	11,386	9,041	6,138
Boston	4,813	3,408	4,572	2,784
City of Boston as % of Greater Boston	34.8%	29.9%	50.6%	45.4%
Greater Boston less City of Boston	9,011	7,978	4,469	3,354
City of Boston Decline as % of Greater Boston Decline	57.6%		61.6%	

Source: U.S. Census Bureau, Annual New Privately-Owned Residential Building Permits for Places in Massachusetts

TABLE 2.6

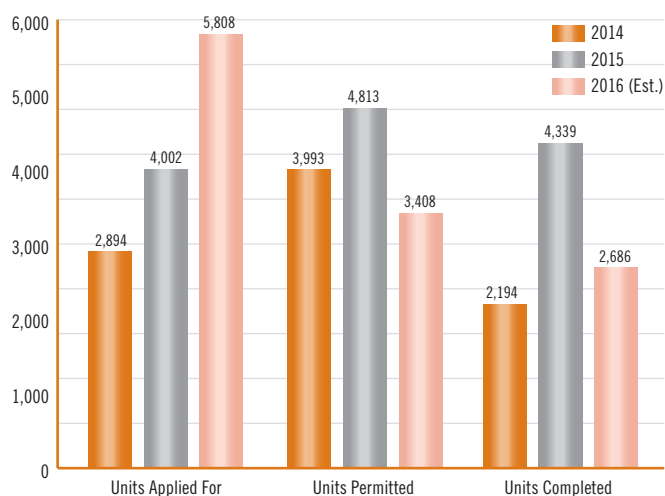
Average Application to Permit Wait Time (in Days) by Housing Type, 2014–2016 (September)

	2014	2015	2016
Single Family Home	472	218	74
Two-Unit	453	232	94
Three-Unit	485	189	53
Four Unit	551	321	115
Multi-Family	425	221	119

Source: City of Boston Department of Neighborhood Development (DND)

FIGURE 2.9

Housing Unit Permit Applications, Housing Units Permitted and Housing Units Completed City of Boston, 2014–2016 (Est.)



Source: City of Boston Department of Neighborhood Development (DND)

Note: 2016 estimates are derived by taking the average ratio of total annual number of permits, applications, or completed units in a given year to total number of permits, applications, or completed units between January and September in a given year and applying it to the total number of permits, applications, or completed units between January and September 2016.

53,000 additional units by that time. As of October of this year, the total number of housing units either completed or under construction was nearly 18,800—123 percent of the 2014–2016 target.¹⁴ If the amount of construction increases again to a rate at least as high as the average over the past three years, the city’s housing production goal can be met.

Affordable Housing Production in Boston

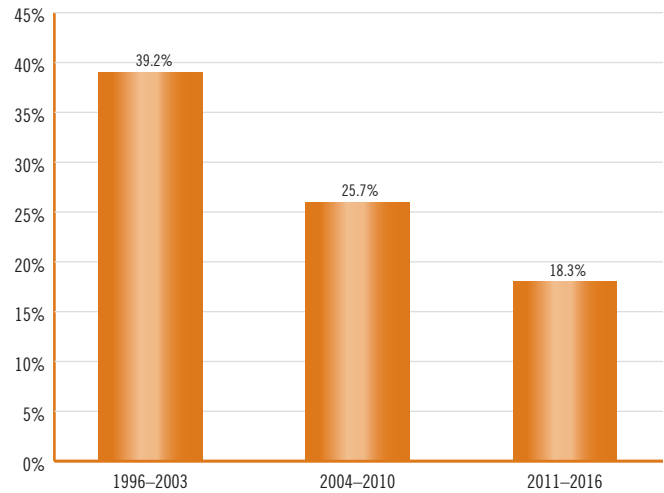
While all types of housing should be welcome in Boston, the real challenge is to build housing that is affordable for low-income households and working families. The city’s Department of Neighborhood Development (DND) keeps a scorecard of housing production and updates it every quarter.¹⁵ According to its 2016 Q2 report, 9,799 housing units became ready for occupancy since the beginning of 2014 and another 7,406 were in construction. Together, these represent close to one-third of the units needed to fulfill the city’s 2030 goal.

The city is also proud of the fact that it is on track to meet its production targets for low-income households. With 362 units completed to date or in the pipeline for “extremely low-income households” whose income is under 30 percent of the area median income (AMI), the city continues to come close to its annual target. The same is true for “low-income families” whose income is under 60 percent of AMI. Nearly 1,400 hundred units have been completed, are under construction, or have been permitted to meet this target. Development of these units for those with incomes under 60 percent of AMI benefits from a number of federal and state subsidies that make their construction financially feasible.

Nevertheless, with development costs rising and subsidies for housing limited, the proportion of affordable housing units in total production has been falling since 2003. **Figure 2.10** provides estimates of the proportion of all housing permits in the City of Boston pulled by developers for “affordable units.” In the period 1996 to 2003, more than 39 percent of all permits were for affordable units. In the following period, 2004–2010, the proportion was down to less than 26 percent, and since 2011 the proportion has fallen to only about 18 percent.¹⁶

FIGURE 2.10

Affordable New Unit Permits as a Percentage of All New Permits, City of Boston 1996–2016 (Est.)



Source: City of Boston Department of Neighborhood Development (DND)

Even more difficult is producing housing for “middle income” households. For these households with incomes between 60 and 120 percent of AMI, a total of more than 3,700 units has been produced or permitted to date, but this is only 68 percent of the production target.

What has been permitted, under construction, or completed since the beginning of 2014 is mostly housing for upper-middle-income and wealthier households. Less than 5,500 of the more than 17,000 units permitted since 2014 are for low-income or middle-income families. That means that more than two-thirds (68%) of Boston’s housing pipeline to date has been built for higher income families and households who presumably can afford the extremely high prices and rents that permeate the region’s housing market.

It is clear that Boston continues to face the challenge of creating housing stock that benefits working households along with everyone else who strives to live in the city.

Student Housing Production in Boston

The DND also reports some progress in the permitting of undergraduate dormitory units since 2014.¹⁷ Between then and June of 2016, permits have been issued for 3,170 additional dorm units. While a welcome addition, this still represents only 72 percent of the city’s target for such housing. Moreover, there has been no increase in the number of housing units built by universities or for them by private developers for graduate students, of whom more than 90 percent live off-campus.

Of nearly 158,000 undergraduate and graduate students enrolled in Boston-based universities and colleges, more than 83,000 live off-campus in private homes somewhere in the Greater Boston region.¹⁸ Of these, nearly 35,000 are living within the city of Boston and more than 17,000 students of these currently occupy single-family, two-family, three-family, or condo units within the city of Boston. Given the limited increase in the supply of this type of housing in the face of such student demand, it is not surprising that apartment rents have increased sharply in the city.

Between 2013 and 2015, total student enrollment in the 24 institutions of higher education with programs in the city of Boston increased by nearly 2,300. Only 499 of these were undergraduates while there were nearly 1,800 additional graduate students. As **Table 2.7** demonstrates, of the more than 97,000 *undergraduates* in Boston, 43 percent are living in on-campus residence halls while the remaining 57 percent live off-campus. The real pressure on the Boston housing market is coming from graduate students. Of the more than 60,600 graduate students, only 5,504 are housed on-campus. That leaves more than 90 percent living off-campus somewhere in Greater Boston.

The Role of Chapter 40R in Housing Production

In successive Greater Boston Housing Report Cards, we have been keeping track of housing production developed under Chapter 40R, which provides monetary incentives from the state to communities that create “Smart Growth Zoning Overlay Districts.”¹⁹ Chapter 40R and its companion legislation Chapter

TABLE 2.7

Students Living On-Campus vs. Off-Campus in Greater Boston

	Total Number	On-Campus	Off-Campus	Percent Off-Campus
Undergraduates	97,172	42,035	55,137	57%
Graduates	60,645	5,504	55,141	91%
Total	157,817	47,539	110,278	70%

Source: City of Boston Department of Neighborhood Development (DND)

40S, which provides additional state assistance to 40R communities whose school costs increase as a result of making additional housing available, were passed in 2004 and 2007, respectively. The timing was such that with the housing recession in full effect, there was little housing construction under this new legislation. Since 2010, however, more communities have adopted 40R and more developers have taken advantage of it.

With new housing construction in a number of 40R communities in just the past year, the total now completed equals 3,354 units, an increase of 424 units over 2015 or 14 percent (see **Table 2.8**). Of these newly completed units, 206 have one bedroom, 200 have two bedrooms, and 24 are three-bedroom apartments. Of the total number of units produced to date under 40R, 92 percent are rental apartments and nearly half (48%) are HUD affordable.²⁰ Indeed, the number of affordable units in 40R projects increased by 23 percent in the past year. As such, this innovative legislation continues to add to the Commonwealth’s stock of affordable housing for low-income and working families—precisely what the framers intended.

Moreover, the pipeline of 40R projects continues to look reasonably strong. According to the Massachusetts Department of Housing and Community Development, more than half a dozen communities including Danvers, Methuen, Salem, Rockland, Grafton, South Hadley and Brockton have recently received planning grants to develop 40R districts or otherwise seriously explore a specific 40R proposal. More recently approved districts that are working on specific housing plans include South Hadley, Newburyport and Swampscott. All told, by mid-2016 site plans had been approved for 1,465 additional 40R housing units, all of which have building permits pending.

TABLE 2.8

Housing Units Constructed in Chapter 40R Smart-Growth Districts by Community in Massachusetts

City/Town	District	Bedrooms					Total Units**	Own	Rent	Affordable Units	
		Studios / Lofts	1 BR	2 BR	3 BR+	4 BR				Number Aff.	Percent Aff.
Amesbury	Gateway (Amesbury)		99	136	5		240		240	60	25%
Belmont	Oakley Neighborhood				17	2	19	17		3	16%
Boston	Olmsted Green		75	68	16	0	159		159	159	100%
Bridgewater	Waterford Village										
Brockton	Downtown (Brockton)			2			2		2	2	100%
	Downtown (Brockton)	5	4	16			25		25	14	56%
	Downtown (Brockton)		63	45	5		113		113	71	63%
	Downtown (Brockton)										
	Downtown (Brockton)										
Chelsea	Gerrish Ave	53	5	40	20	2	120	26	94	55	46%
Chicopee	Chicopee Center						0				
Dartmouth	Village @ Lincoln Park		8	24	4		36		36	36	100%
	Village @ Lincoln Park										
Easthampton	Downtown (Easthampton)		11	30	9		50		50	50	100%
	Queset Commons	10	26	14			50		50	13	26%
Easton	Queset Commons										
	Queset Commons										
Fitchburg	SGOD (Fitchburg)		21	76	8		105		105	27	26%
	SGOD (Fitchburg)		29	58	9		96		96	39	41%
Grafton	Fisherville Mill										
Haverhill	Downtown (Haverhill)	193		112			305		305	61	20%
	Downtown (Haverhill)		11	46			57		57	33	58%
	Downtown (Haverhill)										
Holyoke	Downtown (Holyoke)			5			5	3	2	0	0%
	Downtown (Holyoke)	6	24	24			54		54	54	100%
Kingston	1021 Kingston's Place										
Lakeville	Lakeville Station		55	149			204		204	100	49%
Lawrence	Arlington/Malden Mills		17	58			75		75	72	96%
	Arlington/Malden Mills	4	16	36	6		62		62	62	100%

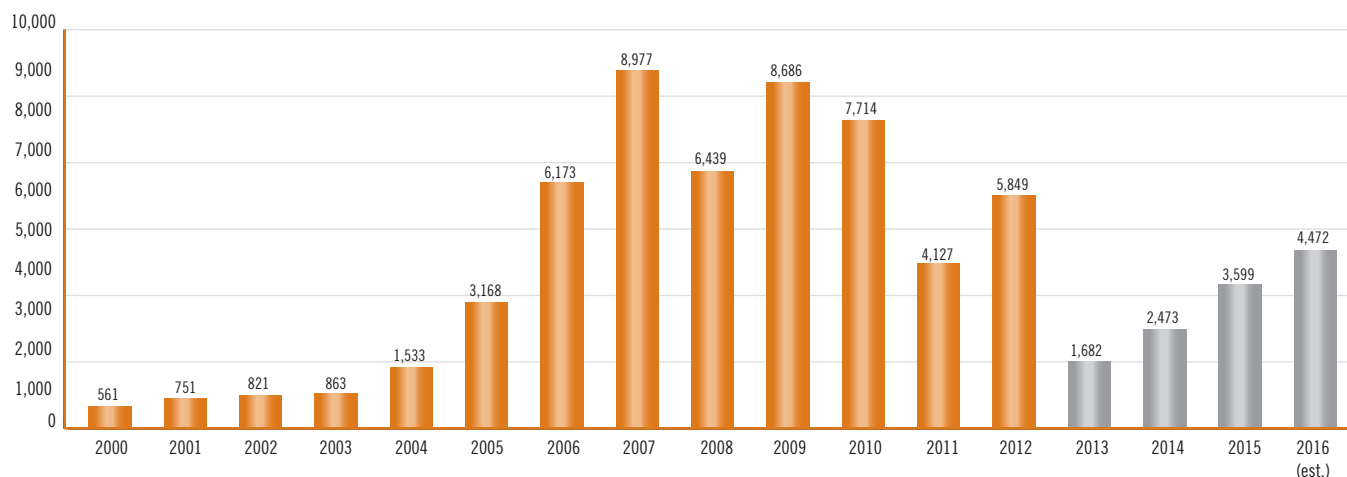
City / Town	District	Bedrooms					Total Units**	Own	Rent	Affordable Units	
		Studios / Lofts	1 BR	2 BR	3 BR+	4 BR				Number Aff.	Percent Aff.
Lowell	Downtown (Lowell)		33	19			52		52	26	50%
	Downtown (Lowell)	4	20	44	2		70		70	57	81%
Ludlow	SGOD		63	12			75		75	66	88%
Lunenburg	Tri-Town Landing		21	66	12		99		99	93	94%
	Tri-Town Landing						32		32	32	100%
Lynnfield	SGOD (Lynnfield)		108	72			180		180	45	25%
Marblehead	Pleasant Street										
Marblehead	Vinnin Square										
Natick	Paperboard		54	84			138		138	28	20%
Newburyport	SGOD										
North Andover	Osgood Landing										
North Reading	Berry Center		238	168			406		406	102	25%
Northampton	Village Hill/State Hospital		19	25	18		62	22	40	32	52%
	Village Hill/State Hospital	71	12				83		83	43	52%
Norwood	Guild St.										
	St. George Ave.		10	3	2		15	15		3	20%
Pittsfield	SGOD (Pittsfield)		16	51			67		67	67	100%
	SGOD (Pittsfield)		19	20	6		45		45	43	96%
Plymouth	Cordage Park										
Reading	Downtown (Reading)		23	30			53		53	11	21%
	Gateway (Reading)		94	106			200	200		40	20%
Sharon	Sharon Commons										
South Hadley	S. Hadley Falls SGOD										
Swampscott	Vinnin Square										
Westfield	Southwick Rd.										
		346	1,194	1,639	139	4	3,354	283	3,069	1,599	48%
		10%	36%	49%	4%	0.12%		8%	92%	48%	

Source: Massachusetts Department of Housing and Community Development, September 2016

* The annualized estimates of 2015 housing permits were calculated by multiplying the number of permits issued through July by 12/7.

FIGURE 2.11

Annual Number of Foreclosure Petitions in Single-Family Homes in Five-County Greater Boston Region, 2000–2016 (Est.)



Source: U.S. Census Bureau, Building Permits Survey for Essex, Middlesex, Norfolk, Plymouth and Suffolk Counties

Foreclosure Activity in Greater Boston

When the housing crisis hit, beginning in late 2005, foreclosure petitions and completed foreclosures (deeds) for single-family homes in Greater Boston exploded. The number of petitions to foreclose increased by a factor of ten between 2003 (863) and 2007 (8,977), as **Figure 2.11** shows. The number of actual foreclosures increased by a factor of 120, rising from just 25 in 2003 to over 3,000 four years later (see **Figure 2.12**). While petitions and deeds remained at high levels through 2009, the number began to recede in subsequent years. By 2013, the number of petitions had fallen to less than 1,700 and the number of deeds to only a little more than 700.

But since then both petitions and deeds have been on a steady increase. We estimate that by the end of this year nearly 4,500 petitions will have been issued and more than 1,500 more households in Greater Boston will have lost their homes to foreclosure. That is near a tripling of petitions since 2013 and almost a doubling of deeds.

Part of this trend may be explained by a delay by banks and mortgage companies in carrying out foreclosures, in some cases because the sheer number overwhelmed their ability to process such a large caseload. However, it is also possible that while the economy has

continued to improve in Greater Boston, the unevenness of income growth has left too many families and households unable to meet their mortgage obligations. This could be responsible for the large increase in new petitions. And because of the steep rise in petitions, we can only expect that the number of completed foreclosures will increase again next year and perhaps for a number of years to come.

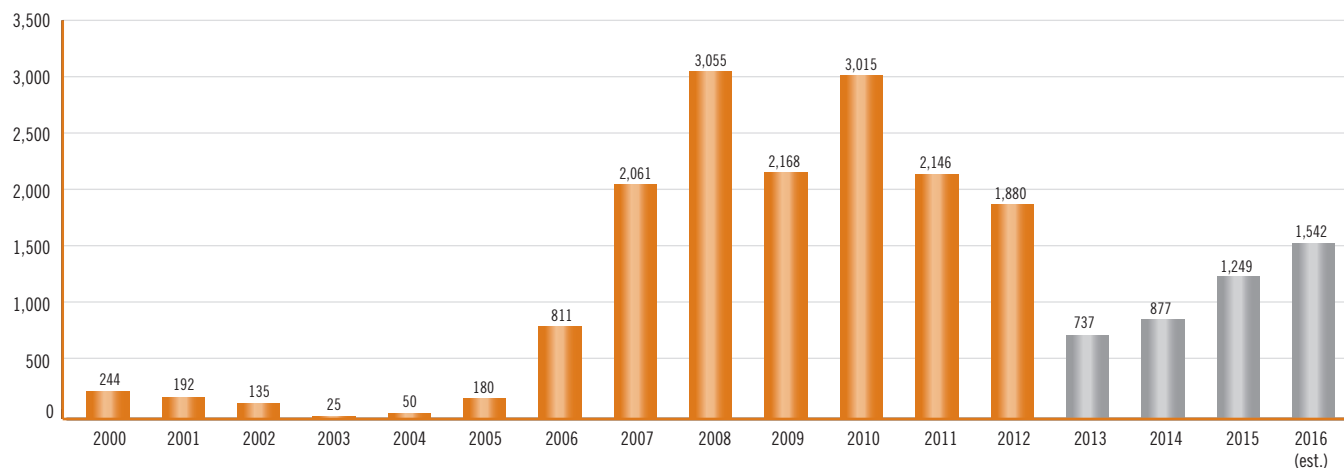
Conclusion

The good news in this year's report is that the number of single-family home sales and condo sales in Greater Boston continued to rise, at least modestly. We project that by the end of this year, the number of single-family sales will eclipse the 2015 record by about 7 percent, despite a weakening in sales at the end of the summer. Condo sales will also be up by about 7 percent. In both cases, the number of sales is more than 50 percent higher than in 2011.

On the other hand, despite the rise in sales, the region's homeownership rate—like that around the country—has continued to decline, reaching just 58.5 percent this year, down from the 66 percent range that prevailed from 2008 through 2013. Much of this decline is due to a sharp reduction in homeownership among younger families and households who are postponing home purchases either because of high prices,

FIGURE 2.12

Annual Number of Foreclosure Deeds in Single-Family Homes in Five-County Greater Boston Region, 2000–2016 (Est.)



Source: The Warren Group

high personal debt, or a shift toward later marriage and delayed childbearing. Whether this will affect home sales in either direction in years to come is yet to be determined.

What is most discouraging in this year’s report are four findings:

- A decline in the issuance of permits for new housing construction—especially in core cities and for multi-unit developments—with the notable exception of 40R permitting
- A shift back toward more permits for single-family homes and away from apartment and condominium construction
- An inability to meet targets for student housing construction
- A continued increase in foreclosure activity

Whether these phenomena are temporary or they suggest new trends will be something we eagerly anticipate investigating in next year’s report.

CHAPTER THREE

Home Prices and Rents in Greater Boston

The dynamics of home prices and rents depend on a great number of factors and, consequently, there is often little consensus about their direction or magnitude.

On the one hand . . .

- With a *stronger economy* and rising household incomes, there is good reason to believe home prices will *rise* as a result of an increase in housing demand.
- With a *growing population*, the demand for housing will increase, again putting *upward pressure* on home prices and rents.
- A *limited supply* of new single-family homes, condominiums and rental apartments will presumably lead to *higher* prices and rents, as well.
- *Low mortgage rates* will presumably lead to more housing demand and therefore *upward pressure* on home prices.

On the other hand . . .

- With *delayed family formation and childbearing*, home prices might *fall* as home buying is postponed and demand is thus reduced.
- An *aging population* might also signal a *decline* in prices as the supply of existing homes on the market increases.
- Widespread increased individual or family *indebtedness* can lead to *lower* home prices as a result of

potential buyers not entering the market due to difficulty in procuring mortgage financing.

- But a *shift from home buying to renting* should put *upward* pressure on rents as the demand for rental housing increases.

As it turns out, all of these factors are in play in the Greater Boston housing market and therefore it is difficult to predict with any accuracy the trend in home prices or rents. **Table 3.1** summarizes these factors and the impact they could have on housing affordability. Greater Boston’s strong economy and rising household incomes, population growth, low mortgage rates and limited supply of new homes have all contributed to rising home prices. But household indebtedness, delays in marriage and childbearing and an aging population tending toward downsizing from homes to condominiums or apartments are keeping single-family home prices from rising faster.

The strong economy puts upward pressure on rents, as does widening income inequality, which makes it difficult or impossible for many low- and moderate-income families to save enough to buy homes and thus keeps them in the rental market even as they reach middle age. While delayed marriage and childbearing lowers demand for homeownership, it automatically leads to a higher demand for rental units, putting additional upward pressure on rents. Depending on how much new apartment supply is coming on the market, rents could rise, stabilize, or perhaps even fall.

TABLE 3.1

Factors Affecting Home Prices and Rents

Upward Pressure on Home Prices	Downward Pressure on Home Prices	Upward Pressure on Rents	Downward Pressure on Rents
Strong Economy		Strong Economy	
Rising Household Income	Household Indebtedness	Increased Income Inequality	
Population Growth	Delayed Marriage/Childbearing	Delayed Marriage/Childbearing	
	Aging Population		
Limited Supply of New Homes		Limited Supply of New Apartments	Increased Supply of New Apartments
Low Mortgage Rates			

Source: Dukakis Center for Urban and Regional Policy

Home Prices in Greater Boston

The interaction of all of these factors is responsible for the trend in prices we have observed in Greater Boston for the past three decades. **Figure 3.1**, based on the Case-Shiller Home Price Index, provides the best representation of annual single-family home price changes since 1987.¹

While single-family home prices declined from 2006 through 2011 (with the exception of a slight bump-up in 2010), the median price for such homes has increased each year since 2012. The annual index rose by 6.7 percent in 2013 followed by a rise of 7.0 percent in 2014, suggesting that there might be another housing bubble in the making similar to that in the late 1990s and the first half of the 2000s. However, data for 2015 and now for 2016 indicate that while home prices continue to rise, they are now rising at a slower rate: 4.3 percent in 2015 and 4.9 percent in 2016. Greater Boston’s strong economy and population growth continue to put upward pressure on home prices. But the aging of its population, delayed marriage and childbearing, tightened credit regulations, and the high indebtedness of younger households—due largely to college debt—has put a damper on home purchases and therefore on home prices. These factors should prevent another housing bubble of the sort we experienced from 1997 through 2005.

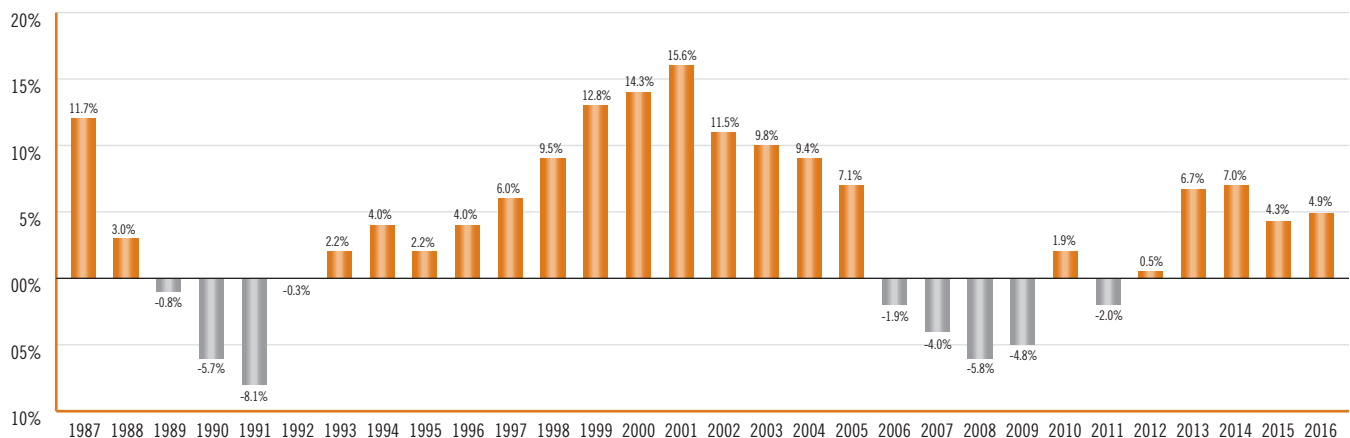
Confirmation of the diverging trend in home prices between the earlier home price cycle (1989-1999) and the current cycle (2005–2016) can be found in **Figure 3.2**. In both cycles prices fell for 43 months before bottoming out. But in the first cycle, prices began to rise in the 44th month and continued to rise each year for the next seven years. In the current cycle, prices stabilized at their low point in 2008 and showed no increase over the next three years before prices finally began to increase again. Still, by the middle of 2016, prices were only 2 percent higher than in 2005. In the earlier cycle, after an equivalent number of months, prices were 20 percent higher than at the beginning of the cycle. As such, the current housing market is not anywhere near as “overheated” as the one that existed from 1997 through 2005.

Home Vacancy Rates and Housing Prices

Home vacancy rates can help explain these divergent trends. The home vacancy rate measures the percentage of homes that are not occupied and presumably available for sale. As such, it is a reasonable measure of the relationship between housing supply and demand. When the vacancy rate is high, there is a surplus of homes on the market and prices tend to be soft or to fall. When the vacancy rate is low, demand is so strong that prices usually rise.

FIGURE 3.1

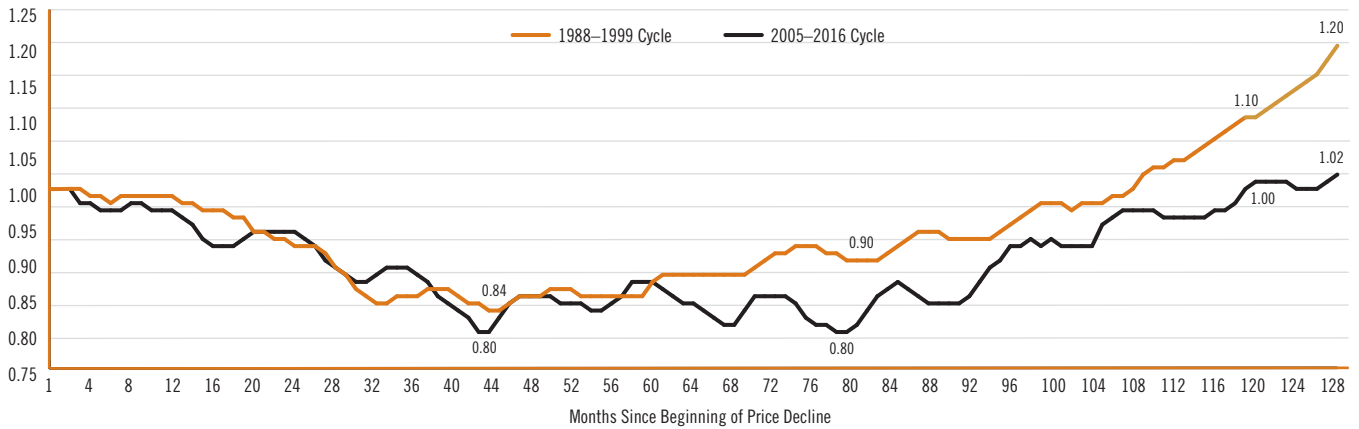
Annual Percent Change in Case-Shiller Single-Family House Price Index, Greater Boston Metropolitan Area, 1987–2016



Source: Case-Shiller Single-Family Home Price Index—annual 1987–2011; 2012–2016 (June to June)

FIGURE 3.2

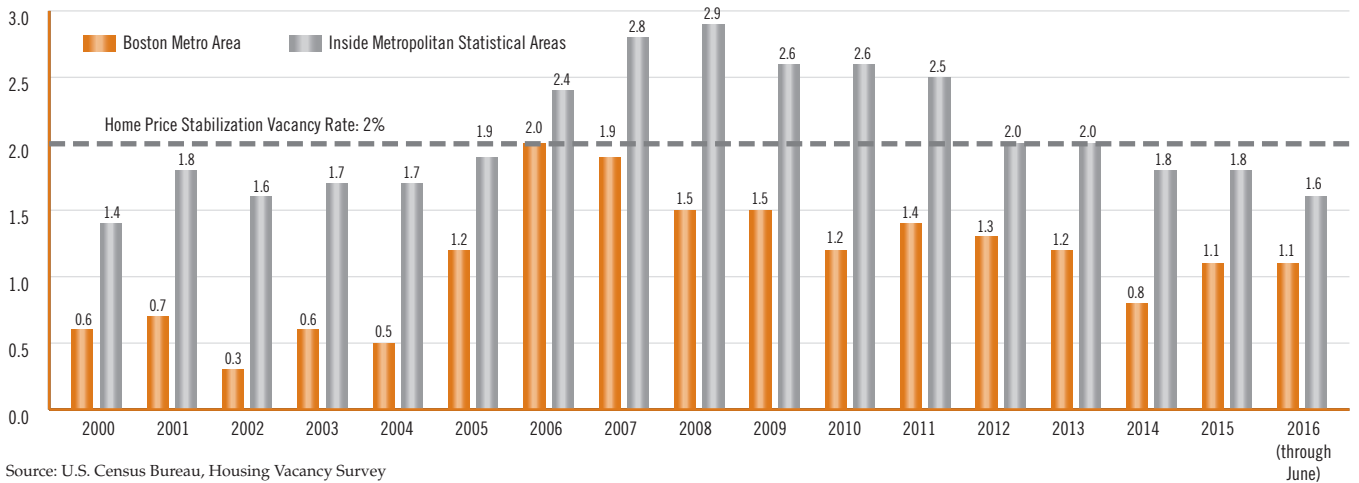
Greater Boston Housing Cycles, 1989–1999 vs. 2005–2016, Case-Shiller Single-Family Home Price Index (Seasonally-Adjusted)



Source: Case-Shiller Single-Family Home Price Index

FIGURE 3.3

Homeowner Vacancy Rates, Greater Boston vs. U.S. Metro Areas, 1990–2016



Source: U.S. Census Bureau, Housing Vacancy Survey

According to a number of analyses, home prices tend to stabilize when a region’s vacancy rate is near 2 percent.² At rates below 2 percent, home prices tend to increase. It is not surprising, therefore, that the Case-Shiller home price index for Greater Boston has been rising over the past six years as the vacancy rate has remained well below 2 percent (see **Figure 3.3**). As the figure reveals, the vacancy rate in the Boston metro area has been lower than the average across all U.S. metro areas since at least 2000, and 2016 is no exception. This notwithstanding, the current vacancy rate

in Greater Boston is still well above the extremely low rates that prevailed in the early years of the last decade and helped propel the explosion in home prices we experienced back then.

Figure 3.4 provides annual data on actual single-family home price levels in Greater Boston.³ In 2015, home prices finally exceeded the previous peak set in 2005 at the height of the housing bubble. In 2016, prices are up again by another 4 percent so that the median price of a single-family home, according to the Warren Group,

FIGURE 3.4

Annual Median Price of Single-Family Homes in Five-County Greater Boston Region, 2000–2016



Source: The Warren Group

FIGURE 3.5

Annual Median Price of Condominiums in Five-County Greater Boston Region, 2000–2016



Source: The Warren Group

was more than \$425,000 in the second quarter of the year. Since 2009, the median price has now increased by more than a quarter—25.5 percent.

Condominium Prices

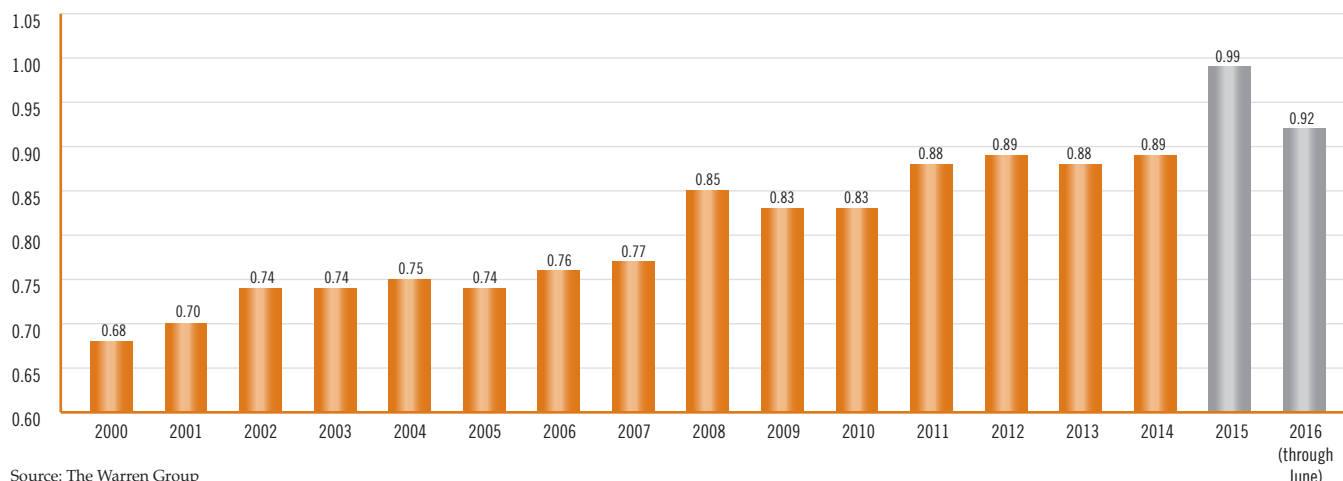
Last year we reported an explosion in condo prices culminating in a median price of nearly \$406,000, just one percent less than the median price of a single-family home in Greater Boston. We attributed this to the building boom in luxury multi-unit condo

developments, particularly in the City of Boston. Between 2009 and 2015 alone, condo prices had increased by 45 percent compared with a 21 percent appreciation in single-family home prices.

After such a run-up in condo prices, data from the Warren Group suggests there has been a pause in price appreciation (see **Figure 3.5**). Indeed, the median price of a condo throughout Greater Boston appears to have declined in price by about \$15,000 or 3.7 percent. As a result, the ratio of condo prices to single-family home

FIGURE 3.6

Ratio of Condominiums to Single-Family Home Prices in Five-County Greater Boston Region, 2000–2016



prices has declined to .92 from .99 in 2016, as shown in **Figure 3.6**. This could be the result of the larger supply of condos that have come on the market in the past year along with the possibility that new condo sales have been in outlying communities where prices are lower—reducing the overall median. Even with this softening of condo prices, the regional median price for condos is still 40 percent higher than it was in 2009.

Diverging Price Appreciation

While single-family home prices in Greater Boston on average are 5.1 percent higher than they were at the peak of the last housing price cycle in 2005, price appreciation has been highly uneven across the region’s cities and towns, as **Table 3.2** demonstrates. No community has seen its single-family home prices appreciate more than Cambridge, where by the middle of this year the median price was an extraordinary 2.4 times the median price of a decade ago. But a number of Boston suburbs (including Brookline, Somerville, Newton, Arlington, Lexington, Milton, Belmont, Watertown, Winchester, Bedford and Needham) have also experienced substantial price increases of anywhere between 25 to 53 percent. Many of these were already among the priciest communities in the region.

On the other hand, there are a large number of communities where single-family home prices are still lower than in 2005. Those that have seen the least appreciation include Middleborough, West Bridgewater,

Brockton, North Andover and Rockland. All of these still have prices that are no higher than 85 percent of the earlier median price peak. **Map 3.1** provides a visual depiction of the diverging price pattern in the five counties of Greater Boston. Note that all of the central core cities and towns have experienced price appreciation since 2005 (with the exception of Everett (.99) and Chelsea (.97)). For the most part, the further one travels from the region’s core, the greater the chance that you will find single-family home values that have not fully recovered from the housing price meltdown of a decade ago. Most of these are communities where it is still possible for middle-income families to find housing that is more affordable to them.

Table 3.3 provides similar data on condo prices. Several communities have seen an explosion in condo prices since 2005, presumably the result of the addition of luxury or near-luxury new developments where little multi-family housing was previously available. These include the more upscale towns of Sudbury, Holliston, Weston, Townsend and Lynnfield, all of which have experienced at least a doubling in condo prices in the past decade. The median price of condos in Boston, Cambridge, Brookline and Somerville was more than 1.5 times higher than in 2005.

In other parts of the region, condo prices have only partially recovered from the 2005 peak. The median price of a Brockton condo in mid-2016 was less than 60 percent of the 2005 price. The same was true for Lawrence. **Map 3.2** shows this divergence in condo

TABLE 3.2

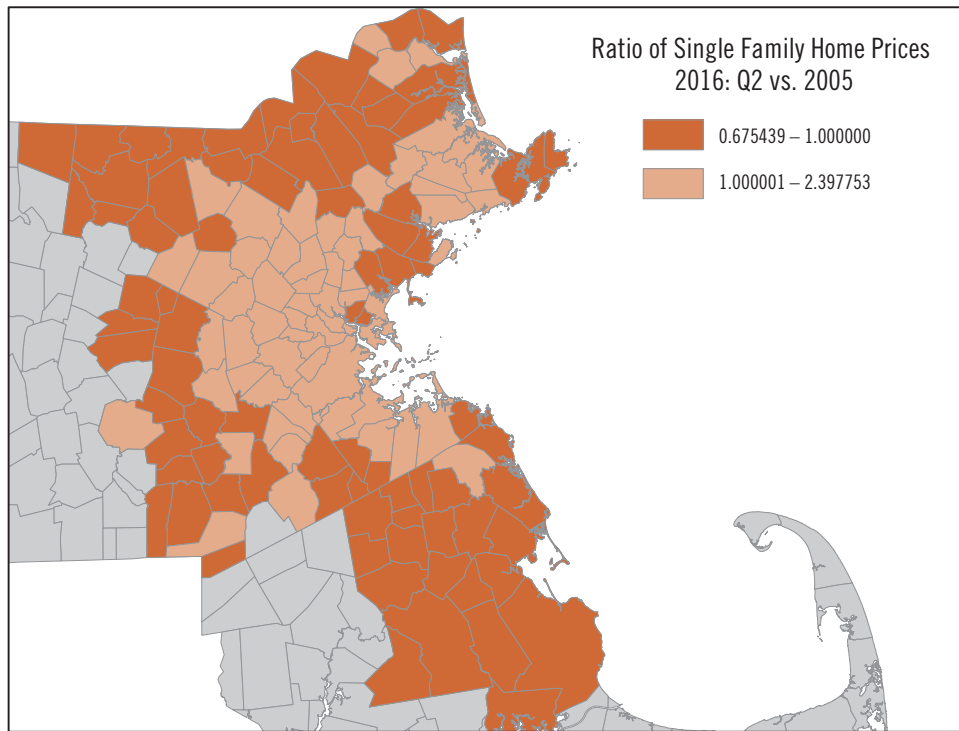
Ratio of Single-Family Home Prices 2016: Q2 vs. 2005

0.65 to 0.85		0.91 to 0.95				Over 1.10	
0.68	Dunstable	0.91	Pepperell	0.99	Peabody	1.10	Medfield
0.79	Plympton	0.91	Swampscott	0.99	Danvers	1.10	Wenham
0.80	Middleborough	0.91	Westford	0.99	Rockport	1.10	Wakefield
0.82	Holbrook	0.92	Lawrence	0.99	Framingham	1.10	Weston
0.83	West Bridgewater	0.92	Maynard	0.99	Ashland	1.11	Stoneham
0.83	Townsend	0.92	Stoughton	0.99	Plainville	1.11	Topsfield
0.84	Randolph	0.93	Whitman	0.99	Gloucester	1.11	Hingham
0.84	Avon	0.93	Marlborough	0.99	Walpole	1.11	Norwell
0.84	Brockton	0.93	Franklin	1.00	Kingston	1.12	Wrentham
0.84	Rowley	0.93	Haverhill	1.00	Halifax	1.13	Braintree
0.84	North Andover	0.94	Littleton	1.00	Cohasset	1.13	Essex
0.84	Marshfield	0.94	Duxbury	1.00	North Reading	1.14	Westwood
0.85	Rockland	0.94	Boxborough	1.00	Tewksbury	1.14	Natick
0.85	Ayer	0.94	Sudbury	1.00	Boston	1.15	Hopkinton
0.85	Georgetown	0.94	Scituate	1.00	Lincoln	1.15	Burlington
		0.95	Dracut	1.00	Weymouth	1.15	West Newbury
		0.95	Holliston	1.00	Ipswich	1.15	Sharon
		0.95	Newbury			1.17	Waltham
		0.95	Lynn			1.18	Reading
		0.95	Carver			1.22	Medford
		0.95	Sherborn			1.22	Melrose
		0.96 to 1.00		1.01 to 1.09		1.23	Concord
0.86 to 0.90		0.96	Hudson	1.01	Winthrop	1.24	Manchester
0.86	Amesbury	0.97	Lakeville	1.01	Malden	1.24	Wellesley
0.86	Bellingham	0.97	Andover	1.01	Norwood	1.25	Needham
0.86	Nahant	0.97	Chelsea	1.02	Hull	1.25	Bedford
0.86	Wareham	0.97	Millis	1.02	Chelmsford	1.25	Winchester
0.86	Shirley	0.97	Norfolk	1.02	Billerica	1.27	Watertown
0.87	Hanson	0.97	Pembroke	1.03	Merrimac	1.29	Belmont
0.88	Abington	0.97	Foxborough	1.04	Marblehead	1.33	Milton
0.88	Medway	0.98	Dover	1.04	Revere	1.35	Lexington
0.88	Lowell	0.98	Salem	1.04	Beverly	1.35	Arlington
0.88	Methuen	0.98	Hanover	1.04	Hamilton	1.45	Newton
0.89	Salisbury	0.98	Saugus	1.04	Dedham	1.48	Somerville
0.89	Canton	0.98	Groveland	1.05	Wilmington	1.53	Brookline
0.90	East Bridgewater	0.99	Everett	1.05	Lynnfield	2.40	Cambridge
0.90	Groton	0.99	Tyngsborough	1.07	Acton		
0.90	Stow			1.07	Middleton		
0.90	Boxford			1.08	Quincy		
0.90	Carlisle			1.08	Newburyport		
0.90	Bridgewater			1.09	Wayland		
0.90	Plymouth			1.09	Woburn		

Source: The Warren Group

MAP 3.1

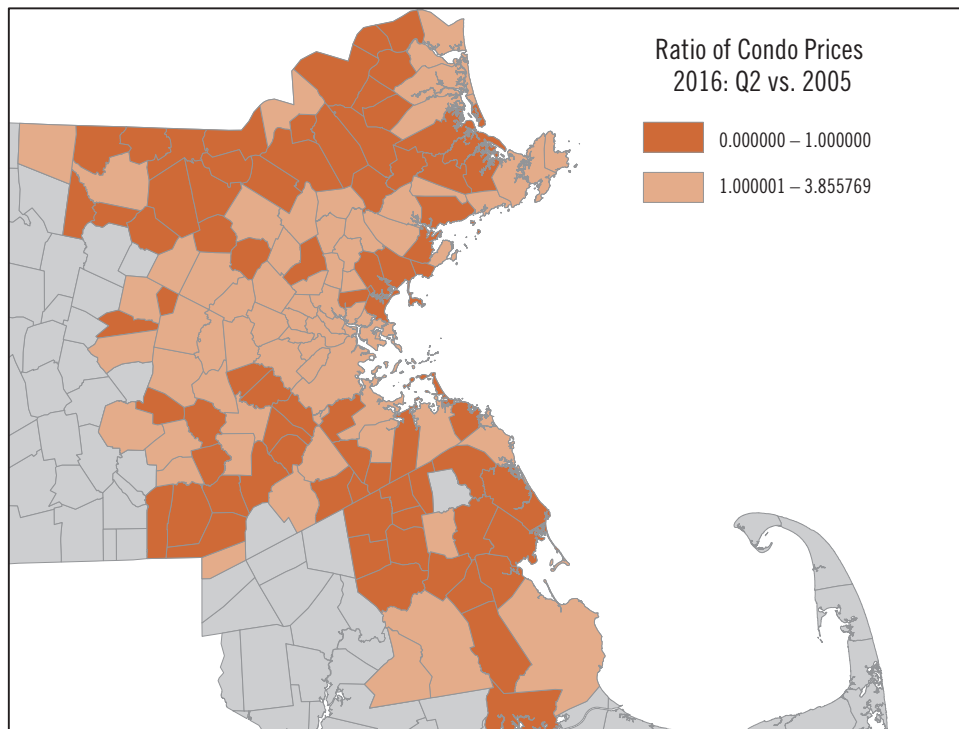
Ratio of Single-Family Home Prices 2016: Q2 vs. 2005



Source: The Warren Group

MAP 3.2

Ratio of Condo Home Prices 2016: Q2 vs. 2005



Source: The Warren Group

TABLE 3.3

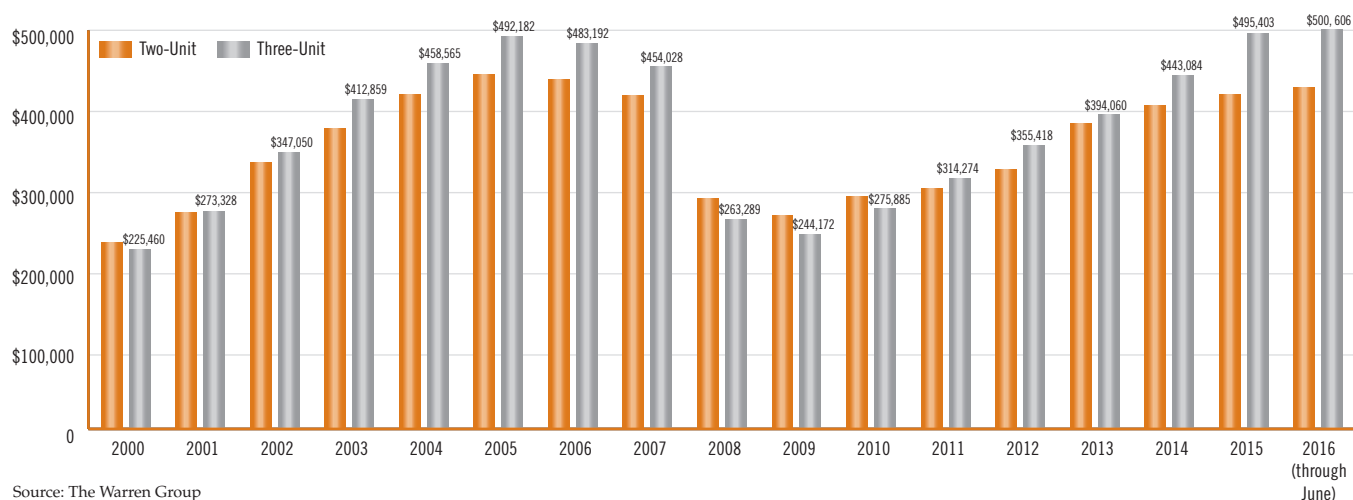
Ratio of Condo Prices 2016: Q2 vs. 2005

0.40 to 0.65		0.86 to 0.90		1.01 to 1.09			
0.41	Marshfield	0.87	Amesbury	1.01	Groton	1.26	Newton
0.57	Brockton	0.87	Shirley	1.01	Wilmington	1.27	Arlington
0.58	Lawrence	0.88	Ashland	1.01	Peabody	1.27	Gloucester
0.65	Pepperell	0.88	Duxbury	1.02	Stoneham	1.27	Marblehead
		0.88	Walpole	1.02	Newbury	1.33	Watertown
		0.88	Bridgewater	1.03	Scituate	1.35	Wakefield
		0.88	Weymouth	1.03	Rockport	1.37	Medford
		0.88	Franklin	1.04	Wenham	1.38	Belmont
		0.88	Tyngsboro	1.04	Acton	1.38	Newburyport
		0.89	Ayer	1.04	Braintree	1.38	Middleboro
		0.89	Dedham	1.05	Danvers	1.41	Lakeville
		0.90	Stoughton	1.05	Salisbury	1.42	Billerica
				1.06	Concord	1.42	Winchester
				1.07	Methuen	1.43	Natick
				1.08	Canton	1.43	Hanson
						1.44	Hingham
						1.51	Manchester
						1.51	Melrose
						1.54	Boston
						1.54	Hopkinton
						1.55	Foxboro
						1.55	Cambridge
						1.57	Brookline
						1.57	Lexington
						1.60	Medfield
						1.63	Somerville
						2.14	Lynnfield
						2.15	Townsend
						2.47	Weston
						3.46	Holliston
						3.86	Sudbury
0.66 to 0.85		0.91 to 0.95		Over 1.10			
0.67	Bedford	0.91	Swampscott	1.10	Plainville		
0.70	Milton	0.91	Ipswich	1.10	Framingham		
0.70	Hull	0.93	North Andover	1.10	Burlington		
0.72	Whitman	0.93	Merrimac	1.12	Quincy		
0.73	Pembroke	0.94	Millis	1.13	Medway		
0.73	East Bridgewater	0.94	Revere	1.14	Dover		
0.76	Saugus	0.94	Beverly	1.14	Lincoln		
0.76	Georgetown	0.95	Lynn	1.15	Stow		
0.76	Norfolk			1.17	Sharon		
0.77	Needham			1.17	Chelsea		
0.79	Lowell			1.17	North Reading		
0.80	Andover			1.17	Marlborough		
0.80	Holbrook			1.20	Plymouth		
0.80	Halifax			1.22	Everett		
0.81	Bellingham			1.22	Waltham		
0.82	Abington			1.22	Rowley		
0.82	Wrentham			1.23	Wayland		
0.84	Groveland			1.24	Winthrop		
0.84	Chelmsford			1.26	Reading		
0.84	Haverhill						
0.85	Boxboro						
0.85	Dracut						
0.85	Maynard						

Source: The Warren Group

FIGURE 3.7

Annual Median Price of Two-Unit in Five-County Greater Boston Region, 2000–2016 (Through June)



Source: The Warren Group

prices. Like single-family home prices, condo prices have appreciated faster in the urban core and generally slower in the outer suburbs. The exceptions are the seacoast communities just north of Boston—Lynn, Beverly, Revere, Ipswich and Swampscott—which have all experienced condo prices in 2016 that are slightly lower than 2005 prices.

again triple-decker prices rose, reaching a new all-time high of more than \$500,000 per individual unit (see **Figure 3.7**). No doubt the continued influx of Millennials to the region and especially to the inner core continues to fuel demand that far outstrips supply. Housing that was once the province of working families is now out of reach for many of them.

Duplex and Triple-Decker Prices

In last year’s *Greater Boston Housing Report Card*, we noted a spectacular increase in the price of duplex and triple-decker units, particularly the latter.⁴ Between 2009 and 2015 alone, the selling price of a single unit in a triple-decker had increased by 95 percent. We noted that what was driving these extraordinary price increases was the demographic shift in the region toward smaller households including undergraduate and graduate students and other young professionals who were pairing up, tripling up, or perhaps even quadrupling up in three- and four-bedroom duplexes and classic triple-deckers. The demand was now so high for this housing stock that investors were bidding up the price to take advantage of skyrocketing rents or to flip such units as condos at super-inflated prices.

It would seem that at some point these prices would hit a peak and retreat somewhat like they did after 2007. But this is not the case, at least in 2016. Once

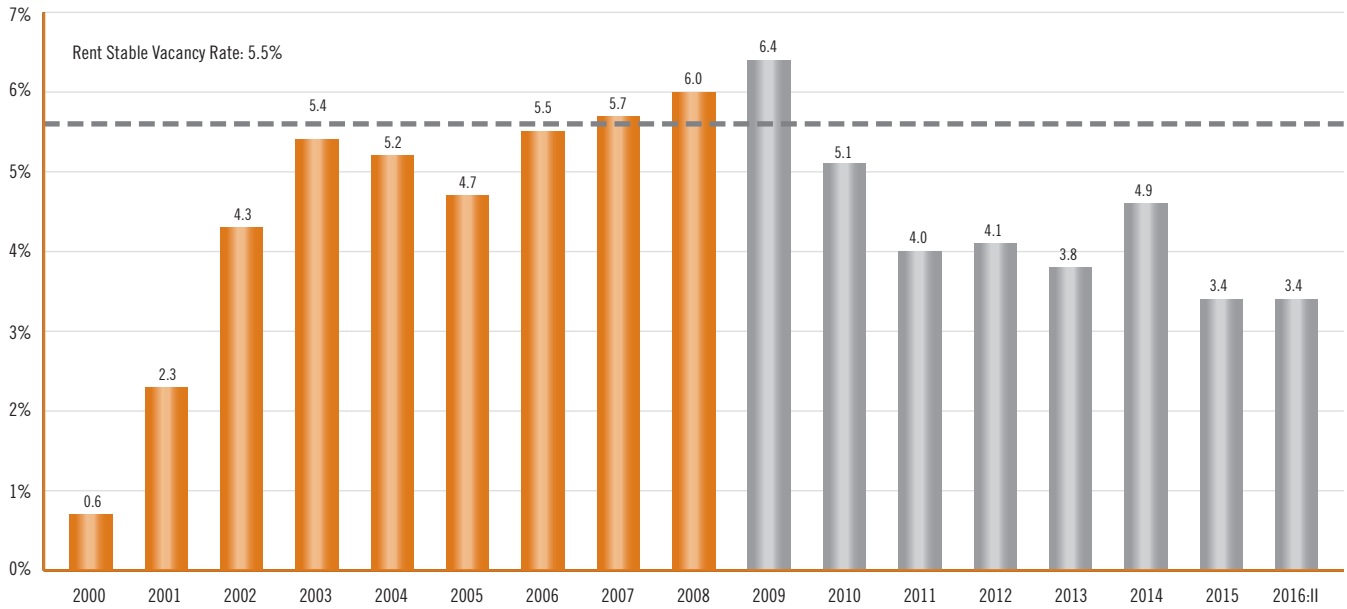
The Boston Rental Market

Duplexes and triple-decker unit prices have continued to rise because the rental vacancy rate in Greater Boston remains at a level lower than at any time since the beginning of this century, as shown in **Figure 3.8**. This creates a “sellers’ market” where prices—or in this case, rents—can be raised without much fear of having an unrented apartment. Through the second quarter of 2016, the vacancy rate remained at 3.4 percent, the same as in 2015. As we learned from a statistical analysis presented in the *2013 Greater Boston Housing Report Card*, when the rental vacancy rate falls below 5.5 percent in the region, rents tend to rise and they rise faster the lower the vacancy rate.⁵ Above 5.5 percent, rents tend to stabilize and even can fall.

Indeed, this is precisely what has happened in Greater Boston as shown in **Figure 3.9**. The estimated average asking rent for apartments in the region reached an all-time high in 2016. At \$2,169, rents were up by

FIGURE 3.8

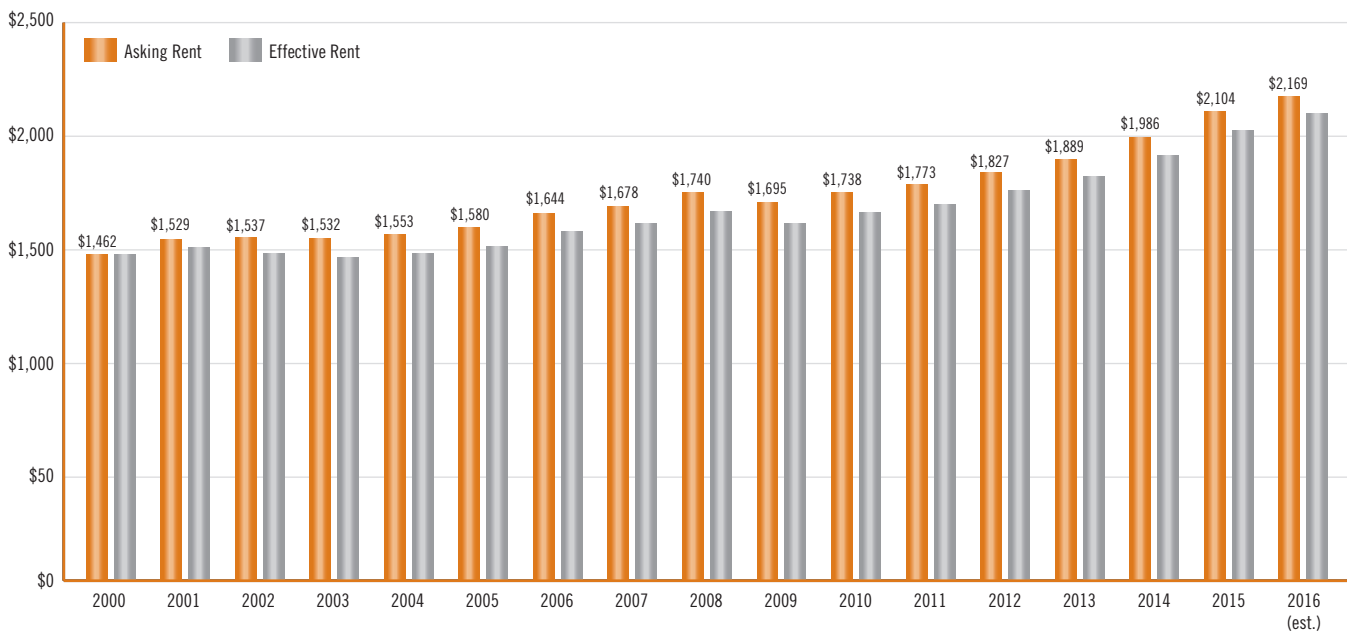
Greater Metro Boston Rental Vacancy Rate 2000–2016:II



Source: US Housing Vacancy Survey Historical Data

FIGURE 3.9

Average Monthly Asking Rents and Effective Rent Boston Metro Area, 2000–2016 (Est.)



Source: Reis.com

nearly 3.1 percent over 2015 and were 25 percent higher than in 2010. The only time that rents actually decreased over the past decade was in 2009, when the vacancy rate peaked at 6.4 percent, well above the 5.5 percent rent stabilized threshold. Effective rents in 2016, taking into account any and all discounts, also

reached an all-time high in the region at \$2,093, a monthly discount of just 3.5 percent. Back in 2009, the effective rate discount was nearly 6 percent.

Rents in Greater Boston’s inner core—the ten-mile region in and around the city—are even higher than in Greater Boston as a whole, as shown in **Figure 3.10**. By the first half of 2016, the average rent for an apartment was \$2,957, up 59 percent since 2009, and 36 percent higher than the Boston metro average asking rent. On an annual basis this translates into a rent payment of more than \$35,000. To put this in perspective, according to U.S. Census data for 2014, nearly 31 percent of all families in Boston had a total annual income that fell short of the average yearly rent in the city—as did more than 43 percent of non-family households.⁶ Regardless of the progress being made in the development of new rental housing in Boston and the region, demand keeps surging ahead of supply, leading to near record low vacancy rates and all-time record rents. As such, as **Figure 3.11** demonstrates, the Boston metro area now has the third-highest effective rents in the country, topped only by New York and San Francisco.

FIGURE 3.10

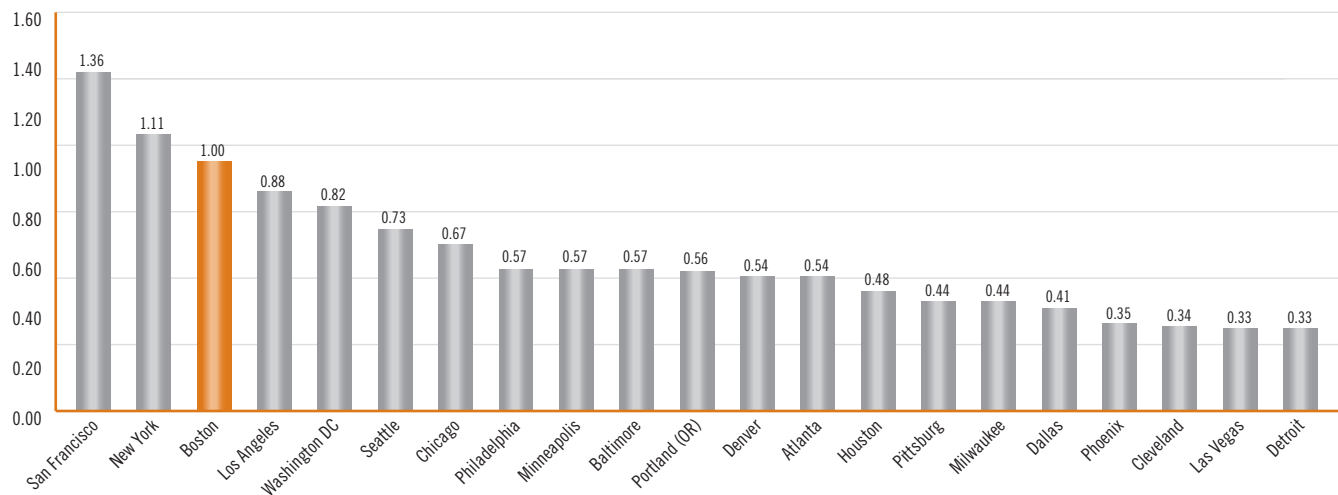
**Average Market Rent, Inner Boston Core
2009–2016:II**



Source: Reis.com

FIGURE 3.11

**Average Monthly Effective Rents in Selected U.S. Metro Areas
(Indexed to Boston), 2016: Q2**



Source: Rent Jungle

What Does the Future Hold for Home Prices, Condo Prices and Rents?

Given the strength of the Greater Boston economy, the growth in the ranks of Millennials and seniors, and a housing supply that lags behind housing demand, what might we expect to be the trend in home and condo prices and apartment rents in the region?

Figure 3.12 provides some historical evidence that might help answer this question. Between 2000 and 2004, the median condo price in the region surged by 63 percent followed by a 48 percent surge in the single-family median price. In contrast, average apartment rents increased by only 6.2 percent. This period, of course, coincided with the housing boom when millions of households nationwide, including many in Greater Boston, were being enticed into homeownership by relatively low mortgage rates and easy credit. As a result, the homeownership rate reached new historical highs. The shift from renting to ownership left rental vacancy rates somewhat higher and therefore put a damper on rent increases.

In the following period, 2004–2009, the housing bubble would burst, resulting in price cuts for both condos and single-family homes. With rising foreclosures, a large number of former homeowners were forced into rental housing, driving vacancy rates down and leading to increasing apartment rents. While home prices were *falling* by 12 percent and condo prices by nearly 3 percent, apartment rents *increased* by more than 9 percent.

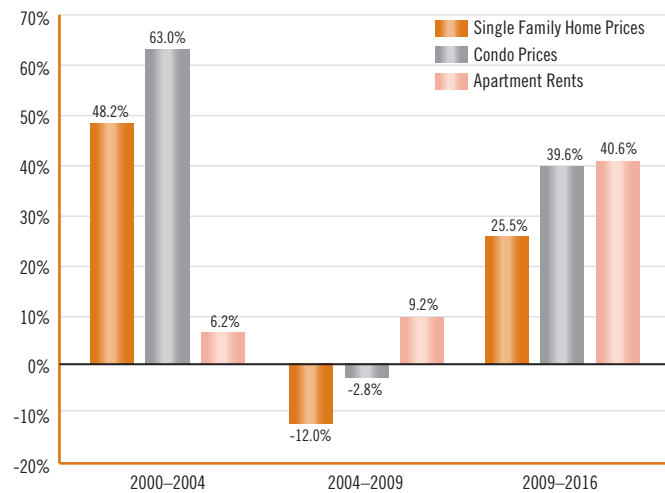
Finally, in the period since 2009 Greater Boston has experienced a strong economy and population growth, particularly among Millennials and seniors, and a demographic trend toward delayed marriage and child-bearing. The result is a recovery of single-family home prices but an even greater surge in condo prices, with apartment rents in Greater Boston up nearly 41 percent since 2009 and rents in the inner core Boston communities increasing the fastest of all—nearly 60 percent.

While it is always treacherous to try to predict the future in such volatile markets that depend on so many factors, we believe these data taken together suggest a near future that looks something like this:

- Single-family home prices will continue to rise modestly—mainly due to demographic shifts.

FIGURE 3.12

Percentage Change in Housing Prices Single Family Price vs. Condo Price vs. Apartment Rent Greater Boston, 2000–2016



Source: The Warren Group, Reis, Inc.

- Condo prices can be expected to increase more rapidly than single-family home prices as an increasing number of aging Baby Boomers choose to move to condos after putting their current single-family homes on the market.
- Rents will continue to surge as a result of a strong economy that attracts young workers to Greater Boston who prefer to rent or cannot afford homeownership.
- Rents in the inner core Boston communities will remain more than a third higher than the average rent in all of Greater Boston, reflecting the extraordinary demand for urban apartments.
- With demand for moderate-priced housing continuing to outstrip housing supply, despite all of the current efforts to expand this housing stock, working families in Greater Boston will continue to face a tough housing market with high housing-cost burdens and, in many cases, the need to move farther from the inner core region to more distant suburbs.

The only way to ward off these outcomes is to redouble efforts at building more housing at affordable prices to meet the new demographics of Greater Boston.

CHAPTER FOUR

Family Homelessness, Housing Insecurity, and Children's Need for Social Stability

In May 2016, the Federal Reserve Bank released a study that drew attention to the fragility of most Americans' finances.¹ It found that nearly two-thirds of those surveyed in 2015 would be unable to withstand a three-month financial disruption—even by borrowing—and that a stunning 47 percent would be forced to borrow or sell belongings to meet a \$400 emergency. What is worse is that most of the respondents lived in less expensive locales than Greater Boston where, as we saw in Chapter 1, the cost of living is nearly 40 percent higher than that of all U.S. metro areas.

As we saw in Chapter 2, between 2009 and 2014 the Greater Boston homeownership rate declined by nearly 8 percentage points and the proportion of renters increased commensurately. This shift toward renting has put enormous pressure on the rental housing market, leading to the rising rents we disclosed in the last chapter. Combined with stagnating incomes, it is not surprising that half of Greater Boston renters pay more than 30 percent of their income on housing. And the worrisome decline in housing construction permits this year—with by far the most slippage in multi-unit structures—strongly suggests that Greater Boston is not going to build its way out of soaring housing costs anytime soon. As a result, the housing cost-burdened are in danger of slipping into housing insecurity, and the housing insecure are at risk of homelessness. As we shall see, the number of families with children who are threatened by or have fallen into homelessness has risen dramatically over the past five years.

Who are our subsidized family housing programs serving, how well are they meeting the needs of their users and those of the greater community, and where might improvements be made—in both concept and service structure?² Essentially, what do we know about the affordable housing resources we have now and what more do we need to do to meet the region's housing needs for low-income households?

Housing-Subsidized Households

Although many assume that recipients of subsidized housing benefits are also dependent on welfare programs, U.S. Department of Housing and Urban Development (HUD) data suggest otherwise. **Figure 4.1** provides county-specific percentages of head of household income sources among those receiving HUD housing assistance in 2015. On average across all five counties, only 4 percent of these households relied on traditional welfare programs as their principal source of income. Meanwhile, 26 percent of household heads were wage earners, and almost 68 percent received the majority of their income from sources other than welfare or wages, including Social Security, disability programs, unemployment insurance and family contributions.

Subsidized household heads are also predominately seniors and women—which accords with the large proportion of income classed as “other” (and includes Social Security). **Figure 4.2** shows that nearly 42 percent of these households receiving HUD housing assistance are headed by people age 62 or older, followed by 35 percent between the ages of 25 and 50, nearly 22 percent between 51 and 60 years, and a tiny percentage below age 25. HUD data also indicate that nearly 72 percent of Greater Boston subsidized households are headed by women—a figure that has remained more or less unchanged since at least 2010. A plurality of these households are headed by whites (41%), followed by blacks (25%), white Hispanics (18%), Asian/Pacific Islanders (7%), black Hispanics (3.7%), and a sprinkling of others (3.6%)—proportions that also have not changed significantly since 2010.³ Finally, nearly a third of HUD-subsidized households in Greater Boston include one or more children, ranging from 26 percent in Middlesex County to 35 percent in Plymouth County as pictured in **Figure 4.3**.

Three federal HUD programs, administered through the state Department of Housing and Community Development (DHCD), provide most of the

FIGURE 4.1

Majority Income Sources for HUD Housing Program Participants by County 2015



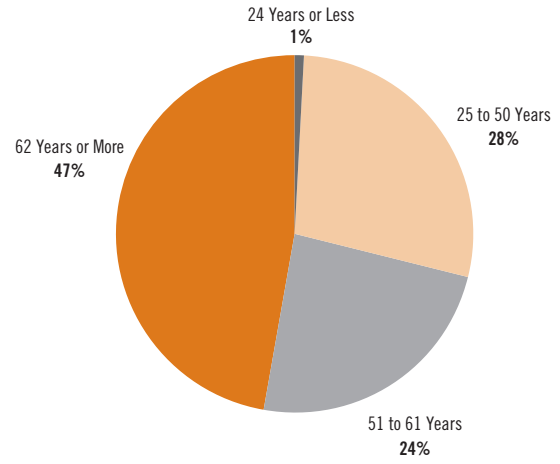
Source: HUD, Picture of Subsidized Households, 2015

Commonwealth’s subsidized housing for families in danger of homelessness or upon moving out of transitional homeless status: public housing, Section 8 project-based housing (which subsidizes property owners directly), and the Section 8 housing choice voucher program (or “tenant-based” subsidies). The state offers its own smaller programs, the largest being the Massachusetts Rental Voucher Program (MRVP), which is a little more than one-third the size of HUD’s voucher program. DHCD administers approximately 20,500 federal rental assistance vouchers and 7,700 state rental vouchers.⁴ MRVP, one of the only state voucher programs in the country, has received rising support in recent years and has been instrumental in reducing the number of homeless families living in motels. This chapter concentrates on HUD programs because of the federal programs’ size and level of data capture.

Figure 4.4 provides a breakdown of HUD subsidy programs in Greater Boston. The housing choice voucher program is by far the largest with 44 percent of all housing-subsidized households in this category, followed by the project-based voucher program (31%) and public housing (18%). Statewide figures track closely with those of Greater Boston.

FIGURE 4.2

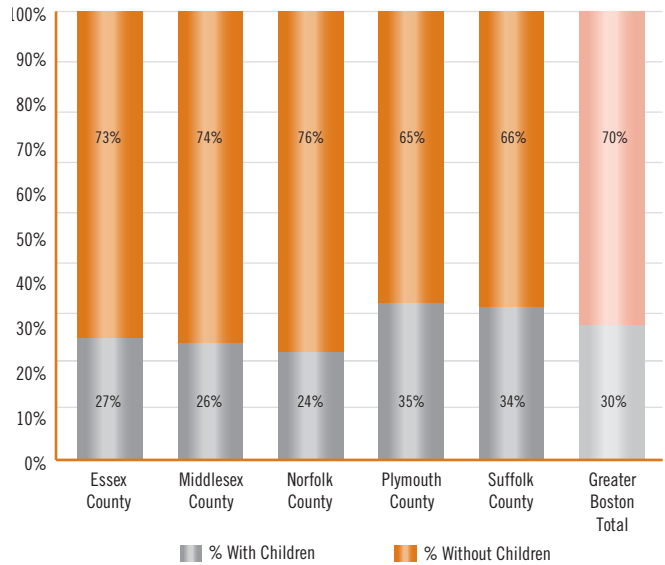
Percentage of Heads of Household in Subsidized Housing by Age Group 2015



Source: HUD, Picture of Subsidized Households, 2015

FIGURE 4.3

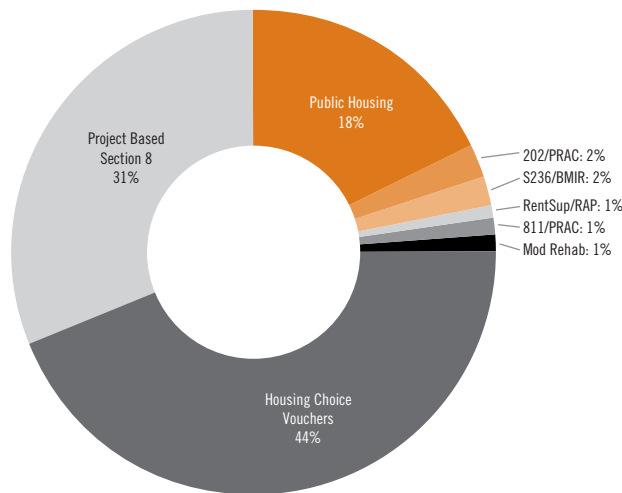
Distribution of Households with Children in HUD Subsidized Households by County, 2015



Source: HUD, Picture of Subsidized Households, 2015

FIGURE 4.4

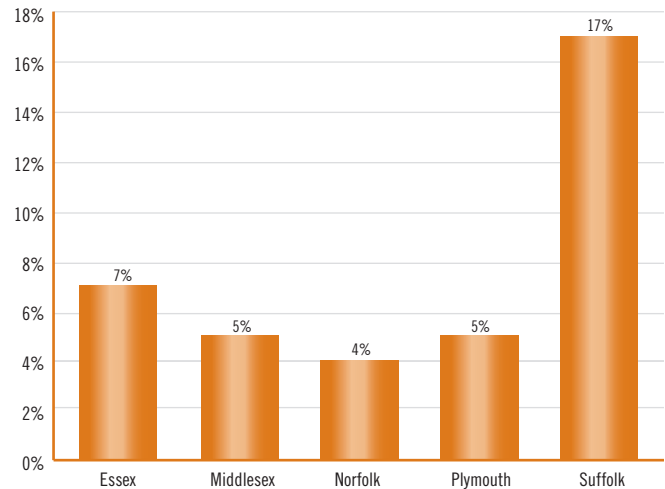
Percentage of Households Served by HUD Subsidies by Program in Greater Boston, 2015



Source: HUD, Picture of Subsidized Households, 2015

FIGURE 4.5

Percentage of Total Housing Units in HUD Housing Programs by County, 2015



Source: HUD, Picture of Subsidized Housing, 2015

Figure 4.5 reveals that 45 percent of the federally subsidized housing in Greater Boston lies in Boston’s own Suffolk County, where 17 percent of all housing is subsidized in some fashion. This should come as no surprise since, statewide, poverty is still concentrated in cities and in particular neighborhoods within cities (about which we have more to say below), even as rural and suburban poverty have been on the rise.⁵

The Lack of Housing for Low-Income Households⁶

The situation for the housing insecure is grim and shows no signs of abating. As **Figure 4.6** shows, more than half of those living in poverty (as defined by the U.S. Census) in four of the five counties comprising Greater Boston do not receive assistance from HUD housing programs, and these numbers have barely moved since 2013. In the fifth county, Suffolk, the number of impoverished not served by HUD has risen by five percentage points, to 31 percent. Here it is important to bear in mind that housing assistance is not an entitlement program like Social Security, unemployment compensation, food stamps and agricultural price support programs. Rather, HUD programs maintain a finite level of support in the form of public

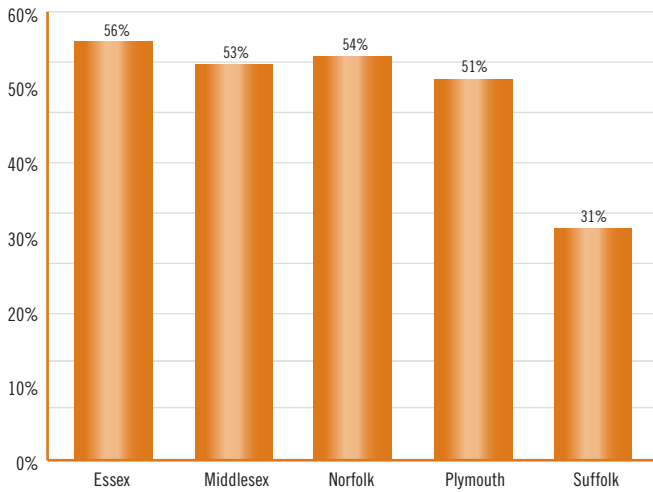
housing units (of which new construction has dried up) and a fixed number housing vouchers. Except in some cases where priority may be given to local residents or victims of domestic violence or fire, access is given on a first-come, first-served basis. Unlike the state-funded program, the two voucher systems have barely expanded their number since 2003, with the exception of two programs targeted to vets and special needs families under the Veterans Administration Supported Housing Program and the Family Unification Program. As a result, a large and growing number of eligible families in need must wait until someone already receiving assistance gives up the voucher—voluntarily or involuntarily.

A strong deterrent to even applying for housing support is likely the long—and growing—waiting lists most applicants face. **Figure 4.7** makes clear that between 2010 and 2013 average wait times for housing placement were already consistently high in all five counties, at a little more than two years each. In 2014 matters improved slightly for the two most urbanized counties of Norfolk and Suffolk, which saw wait times drop by three months in 2015.

By contrast, average wait times in the counties furthest from the core suddenly soared, which could be partly attributable to as-yet unmet demand for senior housing

FIGURE 4.6

Percentage of Persons Living in Poverty That Are NOT Served by HUD Housing Programs, 2015



Source: U.S. Census, American Community Survey, 2010–2014, Table S1701; HUD, Picture of Subsidized Housing, 2015

among retiring Baby Boomers ready to leave their single-family homes. Since 2013, average wait times *nearly doubled* in Essex County, rising to 50 months or *more than four years* in 2015, while average wait times in Middlesex County jumped by 59 percent (from 27 to 43 months) between 2013 and 2015. Plymouth County saw the number fly up from 28 to 42 months in 2014,

and then come down a bit to 35 months in 2015—still almost three years.

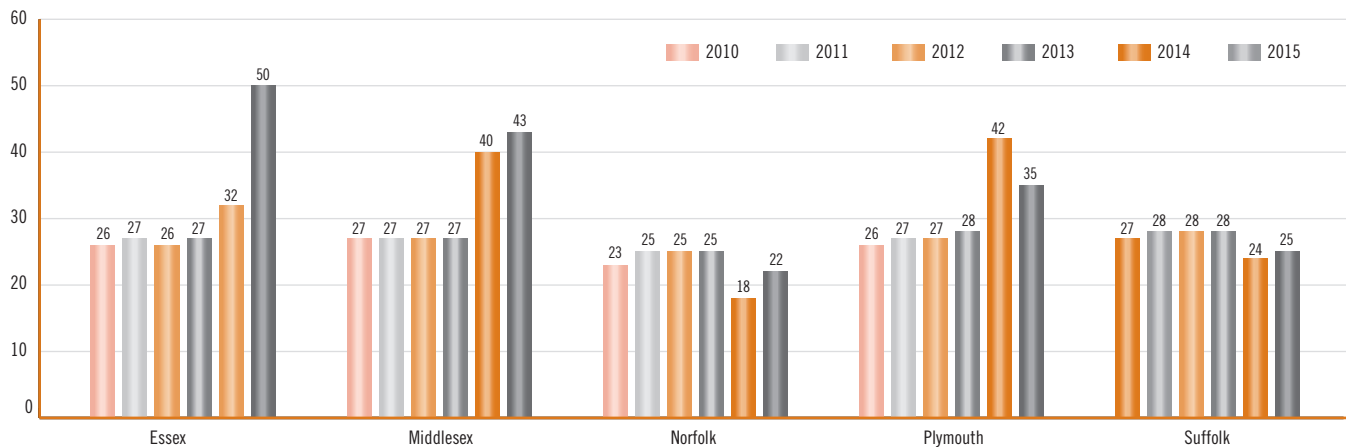
Local and regional programs that administer housing subsidies sometimes report even longer wait times for subsidized housing. The Metropolitan Boston Housing Partnership (MBHP), which handles housing choice vouchers for more than 30 communities, is currently issuing vouchers to households that applied in July 2006—more than ten years ago. MBHP internal records also show that their own waiting list has nearly tripled between July 2005 and April 2016 (from 12,069 to 34,437 applicants), which is a slightly larger proportion than the statewide jump during the same period (39,988 to 109,248).⁷ Whatever way you look at it, the need for subsidized housing that is affordable to households with the lowest incomes both in Greater Boston and statewide is not being met, and the situation is exacerbated by rapidly rising housing costs.

Family Homelessness

Although the state Department of Housing and Community Development (DHCD) keeps records on the programs it administers, including homeless family shelters or “Emergency Assistance” (EA), accurate data on the homeless is notoriously difficult to come by. Two data-gathering efforts intended to supplement the state’s make clear that family homelessness has

FIGURE 4.7

Average Number of Months on a HUD Housing Program Waiting List by County, 2010–2015



Source: HUD, Picture of Subsidized Households, 2015

TABLE 4.1A

Boston Point-In-Time Homeless Locations, 2010–2015 Number of Families*

Location of Families	2010	2011	2012	2013	2014*	2015*	% Change
Congregate Shelters	281	254	281	354	511	500	77.9%
Scattered Site Shelters	520	502	512	534	608	585	12.5%
Families in Motels in Boston	120	135	159	151	176	123	2.5%
Domestic Violence Programs	77	61	70	54	51	62	-19.5%
Homeless Youth with Children	5	7	5	6	8	7	40.0%
Hospital/Medical Facilities	3	4	1	2	3	6	100.0%
Detox Facilities	15	26	27	25	29	27	80.0%
Transitional Housing	137	93	111	108	157	142	3.6%
TOTAL	1,158	1,082	1,166	1,234	1,543	1,452	25.4%

Source: Boston Public Health Commission Annual Homeless Census

* Data for years 2010–2013 were collected in December of each year. Data for 2014 were collected in February of 2015, and data for 2015 were collected in January of 2016.

TABLE 4.1B

Boston Point-In-Time Homeless Locations, 2010–2015 Number of Individuals in Families*

Location of Families	2010	2011	2012	2013	2014*	2015*	% Change
Congregate Shelters	630	569	669	810	1,190	1,144	81.6%
Scattered Site Shelters	1,825	1,851	1,804	1,812	2,057	2,074	13.6%
Families in Motels in Boston	312	339	422	448	474	365	17.0%
Domestic Violence Programs	179	147	140	125	104	135	-24.6%
Homeless Youth with Children	10	15	10	12	15	15	50.0%
Hospital/Medical Facilities	3	4	1	5	9	7	133.3%
Detox Facilities	32	51	60	57	55	57	78.1%
Transitional Housing	330	259	309	272	377	368	11.5%
TOTAL	3,321	3,235	3,415	3,541	4,281	4,165	25.4%

Source: Boston Public Health Commission Annual Homeless Census

* Data for years 2010–2013 were collected in December of each year. Data for 2014 were collected in February of 2015, and data for 2015 were collected in January of 2016.

TABLE 4.1C

Boston Point-In-Time Homeless Locations, 2010–2015 Number of Individual Adults*

Location of Families	2010	2011	2012	2013	2014*	2015*	% Change
Unsheltered Homeless/Street Count	182	181	193	180	139	167	-8.2%
Emergency Shelters	1,380	1,301	1,381	1,530	1,763	1,805	30.8%
Detox Facilities	655	653	694	747	614	625	-4.6%
Hospital/Medical Facilities	207	216	218	253	235	207	0.0%
Mental Health Facilities	259	273	293	268	150	134	-48.3%
Transitional Housing	791	761	762	685	509	341	-56.9%
Single Adults in Family Programs	0	0	20	23	6	24	2,400.0%
Homeless/Runaway Youth	12	27	36	28	40	61	408.3%
TOTAL	3,486	3,412	3,597	3,714	3,456	3,364	-3.5%

Source: Boston Public Health Commission Annual Homeless Census

* Data for years 2010–2013 were collected in December of each year. Data for 2014 were collected in February of 2015, and data for 2015 were collected in January of 2016.

been rising and at a much faster rate than individual homelessness. According to the most recent point-in-time homeless census conducted by the Boston Public Health Commission in February 2016, summarized in **Tables 4.1a–4.1c**, family homelessness in the city jumped more than 25 percent between 2010 and 2015, from 1,158 families to 1,452 (although it dropped slightly by 6 percent since 2014), while the number of persons in homeless families increased from 3,321 to 4,165. To put that number in perspective, Boston’s individual homelessness actually fell by 3.5 percent, at least partially due to state and federal “Housing First” programs intended for individuals with high service needs and Veterans Administration programs for homeless veterans.

The other supplementary data-gathering effort is being undertaken by Horizons for Homeless Children (HHC) on a statewide basis. Beginning with a 2015 pilot project, HHC began reviving the intermittent work it had begun in 2003 to survey homeless families across a broader spectrum of shelters than those administered by the state DHCD for the purpose of improving and expanding service programs—educational, play space and family support—that enhance children’s stability and improve their life chances. Using DHCD Bed Registry and Hotel data alone, they show that more than 7,500 children 18 years old and younger were living in state-funded Emergency Assistance housing as of February 2016, a 250 percent jump since 2003. They also show that almost half of those children are under six years old; some 83 percent are younger than 13. HHC’s survey is important because we do not have an accurate statewide count of homeless families or, more specifically, children, many of whom are in need of special services geared to their developmental needs.

In view of homeless children’s acute need for greater stability, and due to the need for greater cost effectiveness than temporary EA and transitional services can provide, the Commonwealth launched two programs designed to keep families sheltered. HomeBASE (2011) provides limited rental and household assistance to eligible homeless families, along with stabilization and job-search services once they secure housing. Residential Assistance for Families in Transition (RAFT) provides short-term rental assistance to sustain families through passing crises such as job losses or health emergencies without losing their homes. As rents and housing prices began rising rapidly between July

2010 and November 2014, the number of families who applied for EA increased 85 percent, forcing the state to use scarce resources on temporary shelters and costly motel rooms.⁸

These two programs have experienced positive results, preventing families from becoming homeless and re-housing those who do enter shelter. According to the DHCD’s EA 2016 fourth-quarter legislative report, the number of Massachusetts families receiving emergency assistance dropped by 16 percent between June 2015 and June 2016; families staying in overflow motels dropped a staggering 65 percent—its lowest level since 2008 when the program launched—and it is on course to reach zero by the end of 2018, as planned.⁹ That is both fiscal good news and a small step toward improving the prospects of homeless children and their families. However, the shift does not take into account the number of families turned away from shelters, mainly due to not meeting income eligibility requirements. In August 2016, for example, fewer than half of applicants were placed in EA, or 417 of 892.¹⁰ Because of the high rejection rate, some caseworkers informally discourage countless others—including many whose meager incomes are too high—from even applying.¹¹

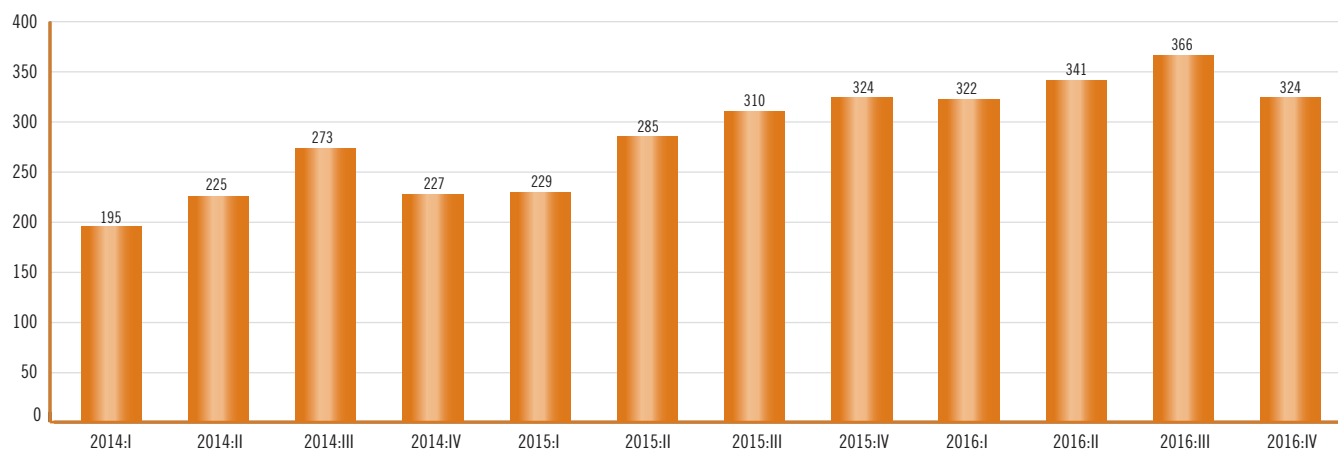
DHCD’s documentation of a downward trend in EA shelter family occupancy also does not take into account the lengthening duration of stays by families in emergency shelters. **Figure 4.8**, which covers fiscal years 2014–2016, shows that time spent in shelters has been trending upward at least since 2014 and has not fallen below 300 days since the second quarter of 2015. So although state records show that the number of families entering the shelter system is diminishing, the fact that families are staying for longer periods is consistent with data suggesting that family homelessness has not declined and is likely rising. At least in Greater Boston, more families would qualify for EA if the state had in place an eligibility threshold based on the *real* cost of living in the region, as we explained in Chapter 1.

From Housing Choice to Economic Mobility

With its two thoughtful diversion and prevention programs, state housing choice voucher program, and family right to shelter law—the first and only statewide law in the country to date—the Commonwealth

FIGURE 4.8

Average Length of Family Stay in EA Shelters or Motels/Hotels Statewide FY 2014–2016 (Days)



Source: Department of Housing and Community Development (DHCD) Quarterly Emergency Assistance Report

is widely considered a homeless policy national leader. Yet with the third-highest rents among U.S. metro areas, Greater Boston is sorely challenged. Nationwide, most housing experts regard housing choice voucher programs, which went into effect beginning in 1975, as a big improvement over public housing due to their greater flexibility for both tenants and landlords and their potential to deconcentrate poverty.¹²

By at least one important measure of success, however, the program shows signs of perpetuating economic stagnancy: by moving housing-insecure families from one impoverished neighborhood to another. The Metropolitan Boston Housing Partnership (MBHP) manages family housing choice vouchers for more than 30 communities across Suffolk, Middlesex and Norfolk counties—the region’s most urbanized counties. Their records uncover several patterns. **Table 4.2** lists the top ten destinations by ZIP code for housing choice voucher holders, which constitute 70 percent of overall destinations. The largest proportion of destinations, nearly 47 percent, is in Mattapan, Roxbury and the four ZIP codes of Dorchester.

Table 4.3 shows the top ten origination ZIP codes for each of the top ten destinations. What is striking about every one of these tables is the geographical proximity of the originations and destinations of voucher users, with many voucher users landing within the same ZIP code from which they moved. The trouble with this pattern is that, in most cases, it keeps low-income

TABLE 4.2

Top Ten Destinations by Zip Code for MBHP Family Voucher Choice Placement 2000–2016

Zip	Town	Number of Families Moved to Zip Code	Percent of Overall Destinations	Rank
02124	Dorchester Center	1,857	15.8%	1
02125	Dorchester	984	8.4%	2
02121	Dorchester	971	8.3%	3
02122	Dorchester	837	7.1%	4
02126	Mattapan	816	6.9%	5
02119	Roxbury	719	6.1%	6
02151	Revere	598	5.1%	7
02136	Hyde Park	569	4.8%	8
02150	Chelsea	515	4.4%	9
02169	Quincy	441	3.8%	10

Source: Metropolitan Boston Housing Partnership (MBHP)

families in neighborhoods of concentrated poverty, with all their attendant limitations.¹³

It is also the case, as **Table 4.4** makes clear, that voucher users tend to remain in demographically similar—if not always the *same*—communities. For example, more than 85 percent of voucher users who

TABLE 4.3

Top Ten Originations by Zip Code for Each Destination

Dorchester Center (02124)

Zip Code	Percent of Overall Originations	Town/Neighborhood Name
02124	24.1%	Dorchester Center
02121	10.8%	Dorchester
02119	8.4%	Roxbury
02125	8.0%	Dorchester
02126	7.4%	Mattapan
02122	5.4%	Dorchester
02301	2.8%	Brockton
02130	2.3%	Jamaica Plain
02120	2.1%	Roxbury Crossing
02131	1.7%	Roslindale

Dorchester (02122)

Zip Code	Percent of Overall Originations	Town/Neighborhood Name
02124	14.3%	Dorchester Center
02121	11.5%	Dorchester
02125	11.5%	Dorchester
02122	11.0%	Dorchester
02119	7.9%	Roxbury
02126	6.2%	Mattapan
02136	4.2%	Hyde Park
02130	2.9%	Jamaica Plain
02118	1.7%	Boston
02131	1.7%	Roslindale

Dorchester (02125)

Zip Code	Percent of Overall Originations	Town/Neighborhood Name
02124	19.0%	Dorchester Center
02125	16.9%	Dorchester
02119	9.7%	Roxbury
02121	6.7%	Dorchester
02126	5.1%	Mattapan
02122	4.8%	Dorchester
02301	2.1%	Brockton
02118	1.9%	Boston
02127	1.8%	Boston
02130	1.8%	Jamaica Plain

Mattapan (02126)

Zip Code	Percent of Overall Originations	Town/Neighborhood Name
02124	20.1%	Dorchester Center
02126	12.1%	Mattapan
02119	8.7%	Roxbury
02121	8.5%	Dorchester
02125	7.4%	Dorchester
02122	3.8%	Dorchester
02130	3.4%	Jamaica Plain
02131	2.8%	Roslindale
02136	2.7%	Hyde Park
02118	2.6%	Boston

Dorchester (02121)

Zip Code	Percent of Overall Originations	Town/Neighborhood Name
02124	18.4%	Dorchester Center
02121	12.8%	Dorchester
02125	9.7%	Dorchester
02119	9.0%	Roxbury
02126	4.4%	Mattapan
02122	3.5%	Dorchester
02136	2.8%	Hyde Park
02118	2.7%	Boston
02135	2.6%	Brighton
01902	2.4%	Lynn

Roxbury (02119)

Zip Code	Percent of Overall Originations	Town/Neighborhood Name
02119	19.7%	Roxbury
02124	12.2%	Dorchester Center
02121	8.5%	Dorchester
02125	8.1%	Dorchester
02130	7.5%	Jamaica Plain
02126	4.0%	Mattapan
02122	3.8%	Dorchester
02118	3.5%	Boston
02136	2.2%	Hyde Park
01902	1.9%	Lynn

Source: Metropolitan Boston Housing Partnership (MBHP)

TABLE 4.3 CONTINUED

Top Ten Originations by Zip Code for Each Destination

Revere (02151)

Zip Code	Percent of Overall Originations	Town/Neighborhood Name
02151	25.6%	Revere
02150	16.4%	Chelsea
02128	8.7%	Boston
01902	8.4%	Lynn
02152	4.0%	Winthrop
02149	3.2%	Everett
01905	2.7%	Lynn
02145	2.2%	Somerville
02126	1.7%	Mattapan
02184	1.7%	Braintree

Chelsea (02150)

Zip Code	Percent of Overall Originations	Town/Neighborhood Name
02150	49.9%	Chelsea
02128	7.2%	Boston
02148	5.0%	Malden
02125	3.7%	Dorchester
02124	3.5%	Dorchester Center
02149	3.3%	Everett
02119	2.7%	Roxbury
02122	2.3%	Dorchester
02151	1.9%	Revere
02723	1.9%	Fall River

Hyde Park (02136)

Zip Code	Percent of Overall Originations	Town/Neighborhood Name
02124	12.3%	Dorchester Center
02136	9.7%	Hyde Park
02126	9.3%	Mattapan
02119	9.0%	Roxbury
02125	8.8%	Dorchester
02131	8.1%	Roslindale
02121	6.0%	Dorchester
02130	4.9%	Jamaica Plain
02128	2.8%	Boston
02122	2.5%	Dorchester

Quincy (02169)

Zip Code	Percent of Overall Originations	Town/Neighborhood Name
02169	20.2%	Quincy
02124	8.2%	Dorchester Center
02121	5.4%	Dorchester
02125	5.4%	Dorchester
02368	3.4%	Randolph
02126	3.2%	Mattapan
02119	2.9%	Roxbury
02184	2.9%	Braintree
02127	2.5%	Boston
02170	2.5%	Quincy

Source: Metropolitan Boston Housing Partnership (MBHP)

end up in Dorchester, Mattapan and Roxbury are black and Hispanic. The only exception is Dorchester ZIP code 02122 (with larger white and Asian populations), where the proportion of black and Hispanic voucher users is 73 percent. Likewise, 53 percent of voucher holders who landed in heavily Hispanic Chelsea were Hispanic, while about half of voucher holders who ended up in predominately white Quincy and Revere were primarily white and partly Asian.

Undoubtedly, a number of factors account for this demographic clumping in the use of housing choice vouchers, including user preference, access to services

and jobs and housing availability. It is clear, though, that this distribution pattern limits pathways out of socio-economic stagnation, particularly for the children of families who have low incomes and precarious housing situations.

Programs intended to help stabilize the tumult of housing insecurity and homelessness among children and teens (such as low-income access to medical and educational services, protection from the effects of adult addiction and domestic violence, and school transportation provided for homeless students under the McKinney-Vento Act) make essential contributions

TABLE 4.4

Top Ten Destinations by Top Five Race/Ethnic Groups for MBHP Family Voucher Choice Placement, 2000–2016

Zip Code	Town / Neighborhood	Number of Families Moved	Rank	% Black Non-Hispanic	% Black Hispanic	% White Hispanic	% White Non-Hispanic	% Asian	% Other
02124	Dorchester Center	1,857	1	72.1%	4.6%	13.2%	5.2%	3.6%	1.4%
02125	Dorchester	984	2	58.0%	7.8%	19.1%	8.9%	5.3%	0.8%
02121	Dorchester	971	3	66.8%	6.4%	19.5%	6.1%	0.5%	0.7%
02122	Dorchester	837	4	59.4%	4.2%	11.4%	12.9%	10.5%	1.7%
02126	Mattapan	816	5	74.3%	8.1%	11.6%	5.1%	0.0%	0.9%
02119	Roxbury	719	6	63.4%	6.3%	22.7%	6.4%	0.6%	0.7%
02151	Revere	598	7	16.6%	4.7%	28.1%	46.5%	2.3%	1.8%
02136	Hyde Park	569	8	60.5%	4.6%	25.5%	9.3%	0.0%	0.2%
02150	Chelsea	515	9	17.9%	4.1%	52.0%	24.9%	0.2%	1.0%
02169	Quincy	441	10	33.8%	3.2%	10.4%	45.1%	5.4%	2.0%

Source: Metropolitan Boston Housing Partnership (MBHP)

to families trapped in the low end of our hourglass economy. For those fortunate enough to move off years-long waiting lists to finally acquire housing vouchers, having a “choice” in housing is an important—if also unstable—supplement to the old model of relying almost exclusively on public housing.

But housing choice should involve more than circulating through the same or similar neighborhoods; it should also provide location-based opportunities for educational advantages, upward mobility, and access to “social capital.” As policymakers work to wrestle down the effects of Greater Boston’s red-hot housing market on the poorest of our families, it is not enough to call on HUD or the state to release more housing vouchers (as essential as that is) or to put in place more services to mitigate the long-term effects of housing instability on children (as important as they are). In addition, more must be done to ensure that program policies help break the cycle of socio-economically concentrated poverty through improved analysis of its sources, better and more coordinated data capture, and expansion of housing opportunities throughout the Greater Boston region.

CHAPTER FIVE

Public Policy and Public Spending on Housing in the Commonwealth

The City of Boston and the Commonwealth have long played an important role in encouraging the production of affordable housing dating back to the 1930s and the Great Depression. Time and time again, the state and the city have created new approaches to encourage, require, incentivize and finance housing for low-income and working households. Most of these programs have succeeded in meeting at least part of the housing challenge.

In this chapter we will take a historic tour of these programs, examine how they have been updated and funded in recent years, and propose policy improvements that are responsive to today's distinct housing market challenges.

A Brief History of Housing Programs in Massachusetts

Back on October 1, 1935, the *Boston Housing Authority* (BHA) was established by Boston Mayor Fred-eric Mansfield and the Boston City Council, taking advantage of a Depression-era Massachusetts General Law that allowed cities and towns to establish housing authorities.¹ The first BHA housing projects were opened between 1938 and 1942.² After a pause in development during World War II, there was a proliferation of new public housing projects in Boston and a number of other Massachusetts cities. Today, the BHA runs 70 developments serving almost 26,000 residents in more than 12,600 public housing units.³ These include, among others, one in Back Bay (St. Botolph Apartments for the elderly and disabled), three in Charlestown, six each in Brighton and South Boston, eight in Roxbury and ten in Dorchester.

In 1966, the Massachusetts Legislature created the Massachusetts Housing Finance Agency, now known as MassHousing, as an independent public authority charged with increasing affordable rental and for-sale housing in the Commonwealth. Since making its first loan in 1970, the agency has provided more than \$19 billion in financing for the construction

and preservation of affordable housing. It has also launched an array of programs to assist in the development of affordable housing, including the management of the Demonstration Disposition Project which provided funds for the renovation of HUD-foreclosed properties; the first-ever partnership between a housing finance agency and a university (Northeastern) to build Davenport Commons, a combination student and affordable housing development; and the creation of a Priority Development Fund to provide gap financing for developers and planning assistance grants for municipalities.⁴

In 1969, in an extraordinary display of courage, the Massachusetts Legislature and Governor Francis Sargent enacted *Chapter 40B*, the comprehensive permit act that reduced barriers created by local municipal building permit approval processes that stymied developers from building affordable housing. Its goal was to encourage the production of affordable housing in communities throughout the Commonwealth by providing developers a “comprehensive permit” allowing them to build more dense developments in communities with less than 10 percent affordable housing—overriding local zoning laws. Since the passage of 40B, more than 58,000 homes have been created for working families, seniors and people with disabilities all across the state because of this law. Nearly half of these have been developed by nonprofits.⁵

In 2000, Boston created its Inclusionary Development Policy (IDP) requiring developers who are seeking some form of zoning relief for buildings with ten or more units—or building on city-owned land—to set aside a percentage of units as affordable to moderate- and middle-income households. In addition to including units on site, under some circumstances developers can create the units off-site or contribute to a fund that helps create affordable units.

As of May of this year, under the inclusionary zoning policy, nearly 2,300 income-restricted housing units have been completed in the city or are currently under construction.⁶ Of these about 550 are new affordable

TABLE 5.1

Inclusionary Zoning Development in the City of Boston through May 2016

	Total New Units	Affordable New Units	Affordable New Owner Units	Affordable New Rental Units	Low Income (<60% AMI)	Middle Income (>60% AMI)
Complete	14,267	1,509	460	1,049	93	1,416
In Construction	5,600	764	94	670	5	759
TOTAL	19,867	2,273	554	1,719	98	2,175

Source: Boston Redevelopment Authority

owner-occupied units, with more than 1,700 new affordable rental units. As **Table 5.1** shows, the affordable units developed under inclusionary zoning represent a little more than 11 percent of the total units in these developments with the overwhelming majority (2,175) reserved for “middle-income” households and about 100 for low-income families.

In 2004, the *Smart Growth Zoning Overlay District Act (Chapter 40R)* was enacted, encouraging communities to create dense residential or mixed-use smart growth zoning districts with a high percentage of affordable housing units, to be located near transit stations, in areas of concentrated development such as existing city and town centers, and in other highly suitable locations. Upon state review and approval of a local overlay district, communities become eligible for payments from a Smart Growth Housing Trust Fund, as well as other financial incentives. As we noted in Chapter 2, more than 3,300 units of housing have been developed under 40R statewide, nearly half of which are affordable for working households.

In 2005, Chapter 40R’s companion legislation, *Chapter 40S*, was enacted to ensure that communities adopting 40R can cover the costs of educating any school-age children who move into such districts. Qualifying communities can be reimbursed for the net cost of educating students living in new housing in smart growth districts. With the passage of 40S, the number of projects in communities adopting 40R has increased from a handful to 44 in 2016.

So we have a long history of working on the affordable housing challenge in the Commonwealth and in Boston. But as we have seen throughout this report, home prices and rents continue to rise and affordability is as serious a problem as ever.

MassHousing

MassHousing, the state agency created as a housing finance agency, has been redoubling its efforts in a number of critical ways—many aimed at meeting the needs of the Commonwealth’s aging demographic.⁷ It is now partnering with developers and owners to finance adaptable, affordable senior housing with sustainable funding for supportive services and cost-effective ways to improve quality of life and health outcomes. By fostering partnerships between leaders in the Commonwealth’s housing and health care industries, the agency is working to leverage existing funding sources to achieve better, more cost-effective outcomes for our growing senior population.

Together with the Department of Housing and Community Development (DHCD) and the Baker administration, MassHousing has led the effort to preserve affordable housing that is in danger of returning to market rate. MassHousing and DHCD have each committed \$50 million to preserve affordability for low-income residents in properties where rent restrictions will expire between now and 2019. MassHousing is working proactively to negotiate tenant protections and renewed use restrictions with owners wherever feasible.

In 2016, MassHousing funded a \$100 million workforce housing program encouraging production of housing for those not served by the market or existing low-income programs. It has also been working with HUD and the U.S. Treasury to develop an HFA loan product to provide low-interest HUD-insured multi-family loans pursuant to a streamlined process. In the next few months, MassHousing expects to announce a joint funding program with DHCD to finance and subsidize the production of “community scale” developments of five to 20 units in small cities and towns.

In addition, it is working to preserve the affordability of thousands of low-income units using taxable debt and no state subsidies, leveraging low interest rates to stabilize properties where necessary.

Also in 2016, the agency launched Operation Welcome Home, a home mortgage loan program providing flexible 100 percent financing to make homeownership a reality for veterans not served by existing programs.

On an ongoing basis, MassHousing helps approximately 3,000 low- and middle-income families (up to 165% AMI) buy and stay in their own homes through favorable mortgage financing, homeownership counseling and high-touch loan servicing, resulting in rates of long-term default and foreclosure far below other government loan programs. Since 2004, MassHousing borrowers making down payments of less than 20 percent of purchase price receive MIPlus mortgage insurance, which pays the homeowner's principal and interest for six months should they become unemployed. So far, approximately 900 homeowners have used this benefit to stay in their homes rather than face foreclosure. MassHousing is able to provide this benefit using the strength of its mortgage insurance fund.

New Approaches to Meeting the Housing Challenge

Over the past two years, both the Commonwealth and the City of Boston have redoubled their efforts at meeting the housing challenge. This includes a spate of new development awards offered by the state for the development, renovation and preservation of affordable rental housing; passage of a new statewide workforce housing trust fund; and proposed statewide legislation for zoning reform. In Boston, the mayor and his Department of Neighborhood Development have set housing targets and provided developers with a smoother path toward construction. All three of these new initiatives are needed and welcome.

Affordable Housing Development Awards

In August of this year, the Baker-Polito administration announced new development awards to create or preserve 1,420 housing units across the Commonwealth in 26 new projects. The awards include more than \$31 million in state and federal low-income housing tax credits that will generate more than \$218

million in equity for these projects. In addition, the administration is awarding more than \$59 million in federal HOME funds and state capital funds for these projects. The administration also unveiled a five-year capital budget plan that includes a \$1.1 billion commitment to increasing housing production, which represents an 18 percent increase in funding for mixed-income and affordable housing production.⁸

Workforce Housing Trust Fund

At the end of July 2016, the Massachusetts House and Senate authorized as part of its Economic Development Bill the creation of a Workforce Housing Trust Fund (WHTF). The program's goal is to provide sufficient funding to make market-rate residential developments feasible in both existing buildings and in new construction projects in Gateway Cities—the 24 cities identified by the state as midsize urban centers that anchor regional economies but face social and economic challenges—13 of which are in Greater Boston. The new law increases the Housing Development Incentive Program (HDIP) tax credit from 20 to 25 percent. The Commonwealth Executive Office of Housing and Economic Development has set aside \$25 million over and above the current HDIP program cap of \$10 million for piloting this new program.⁹

Historic Bill to Reform the State's Housing and Zoning Laws

In June 2016, the Massachusetts Senate passed *S. 2311, An Act to Promote Housing and Sustainable Development in the Commonwealth*, which would provide cities and towns with new tools for planning, zoning and permitting. It will also help increase the production of housing for all ages and incomes, with provisions to preserve open space. The bill includes provisions that will:

- Require communities to increase “multi-family” zoning
- Allow homeowners to create “accessory dwelling units” on their property
- Reform special permit regulations, which are a common approval process, so that approval will no longer require a supermajority vote
- Provide variance reforms making it easier for property owners to make improvements
- Allow developers longer, more reasonable time periods to use their permits

- Reform the appeals process so as to reduce frivolous lawsuits and lengthy court battles over development
- Encourage cities and towns to implement affordability requirements through inclusionary zoning
- Provide more training opportunities for local planning and zoning board members
- Encourage cluster zoning to preserve open space and discourage sprawl

While the House took no action on this legislation in the current session, housing advocates are prepared to work hard in the next session to gain House approval and the Governor’s signature on what could be the most important change in zoning laws since the adoption of Chapter 40B in 1969.

Public Spending on Housing in the Commonwealth

The Commonwealth has two sources of funds to assist homeowners, renters and developers of housing. One is from its own revenue, the other from a variety of federal programs. A large proportion of the state’s funds used for housing are annual operating funds; the remainder includes capital or trust funds used for investment in public housing and to subsidize affordable housing construction. All of these funds are processed through the state’s Department of Housing and Community Development. Traditionally, DHCD operating funds have been used largely to provide rental assistance and public housing subsidies, and to pay for administration of the agency. Since FY2010, operating funds for homelessness programs have also been administered by DHCD. As a result, efforts to address homelessness and the overall need for affordable housing are increasingly integrated. DHCD also manages capital funds that preserve and create new affordable housing. These funds are authorized every five years through the passage of a housing bond bill. The most recent, for \$1.4 billion, was passed in late 2013.

Federal funds for housing are made available directly to a number of local agencies, such as Massachusetts’ larger cities and local public housing authorities. But DHCD also receives and distributes federal funds for a number of subsidy programs including the Section 8 rental voucher program, new housing development and rehabilitation assistance, energy aid and various

neighborhood stabilization programs. While DHCD received a temporary increase in funds due to the 2009 American Recovery and Reinvestment Act (ARRA), the Budget Control Act of 2011 (“sequestration”) and partisan gridlock has made it difficult in recent years for HUD to increase funding. Nevertheless, DHCD had \$965 million in resources in FY2016, and potentially will have \$1 billion in FY2017.

Operating Funds for Housing and Homelessness

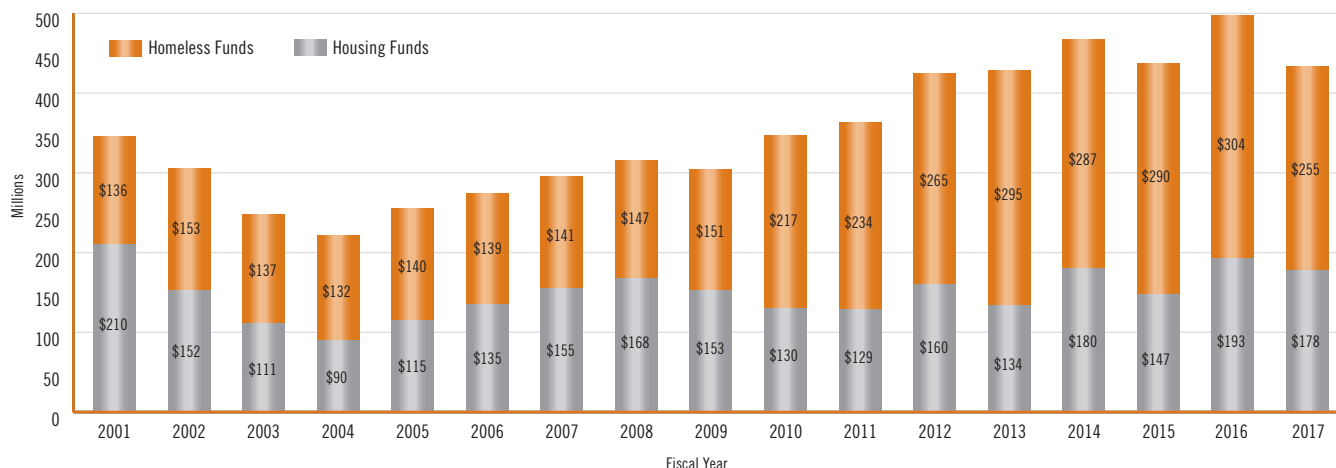
From FY1990 to FY2001, DHCD operating funds for housing declined by an inflation-adjusted 54 percent. From FY2001 to FY2004, housing operating funds were slashed an additional 57 percent, falling to \$90 million, well below the FY1990 record of over \$390 million. While a portion of this funding, such as for the Housing Innovations Fund, was shifted from the operating account to the capital account during this period, funding still declined rapidly. Operating funds increased each year from FY2005 to FY2008 before being slashed again in the wake of the Great Recession in FY2009 (see **Figure 5.1**). Since FY2010, the level of inflation-adjusted operating funds for housing programs (excluding funds for homeless programs) has vacillated between \$129 million and \$198 million per year. Fiscal year 2016 marked the high water mark in terms of funding since 2001.

Up until FY2010, the Department of Transitional Assistance oversaw operating funds for homelessness programs. With the exception of FY2002 (a recessionary year), homelessness funding was relatively stable from FY2001 to FY2007, ranging from \$135 million to \$140 million annually. With the FY2008 onset of the Great Recession, costs for the state’s homelessness programs increased, led by the Emergency Assistance (EA) program, which provides emergency shelter for families. As Massachusetts has a “right to shelter” law for eligible families (not individuals), EA costs escalated as the recession worsened. Even with an improving economy since the end of the Great Recession, funding for homelessness programs has continued to increase so that by FY2016, the total devoted to such programs by the state reached \$304 million in inflation-adjusted dollars, double the level in 2009.

DHCD assumed the oversight of the homelessness programs in FY2010, more than doubling the operating funds it managed. Bringing housing and homelessness programs under one agency has provided

FIGURE 5.1

Real Operating Funds For Housing and Homelessness (Inflation Adjusted) FY2001–FY2017



Source: The Massachusetts Budget Dashboard; Massachusetts Budget and Policy Center

an opportunity for integrating the two efforts, and has been crucial as the state attempts to respond to increased demand by families for the EA relief.

DHCD’s integrated approach is beginning to bear some fruit, although as we saw in Chapter 4, waiting lists and the duration of shelter stays continue to escalate. Based on DHCD record keeping, from October 2014 to April 2016 the number of homeless families has declined 7 percent from 4,171 to 3,861 families, and the state has had success in placing families in shelter spaces and congregate housing rather than in motels. At the December 2013 peak, 2,134 families were still housed in motels, a number that dropped to only 256 families by October 2016.¹⁰ In another attempt to reduce the need for EA, DHCD also has committed additional resources to the Massachusetts Rental Voucher Program (MRVP) based on new state funding. The state’s contribution to these vouchers has increased from \$44 million in FY2013 to \$92.5 million in FY2016. For FY2017 there is an 8 percent decline to \$85.3 million, as the state addresses a softening in the state’s tax receipts. Despite these attempts to reduce reliance on EA, DHCD spent a record \$199.5 million on the program in FY2016. For FY2017, \$155.5 million has been budgeted for EA, and a supplemental appropriation has already been proposed. Overall, if the supplemental appropriation does not pass, FY2017 operating

funds will be down 13 percent from FY2016, declining from \$497 million to \$433 million.

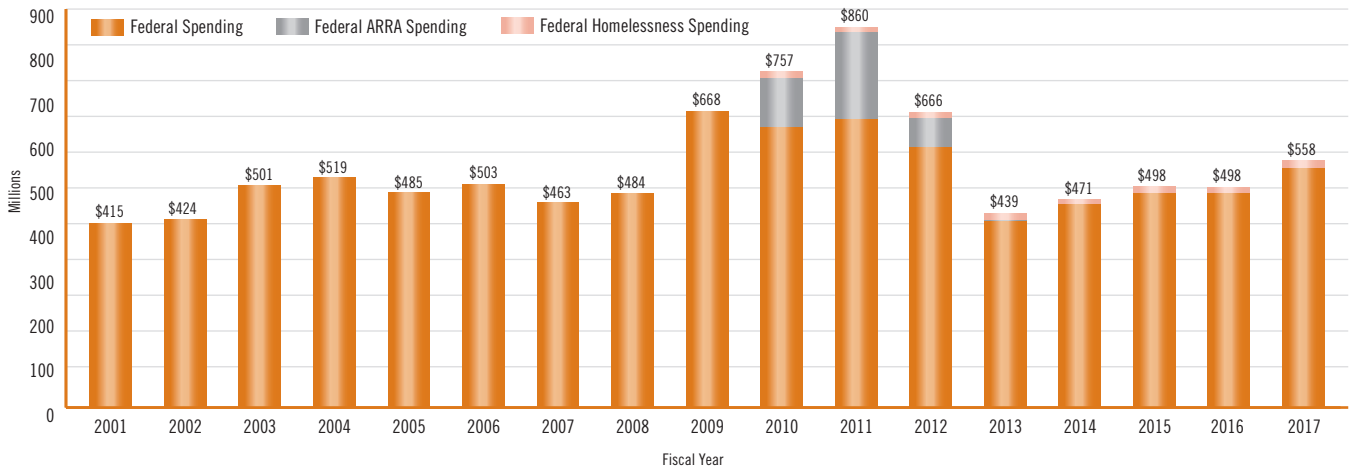
Federal Spending through DHCD

Through the 1990s, inflation-adjusted federal spending through the Massachusetts DHCD was relatively stable. From FY2001 to FY2009, federal spending increased every year, with the exception of FY2005 and FY2007 (see **Figure 5.2**). As a result of these increases, federal funds to DHCD peaked in FY2009, at \$668 million. American Recovery and Reinvestment Act funds contributed to a further expansion of the state’s housing efforts, with \$112 million in funding in FY2010 and \$196 million in FY2011. As a result, total federal funding to DHCD for housing peaked at \$860 million in FY2011.

However, once the ARRA funds were depleted and the federal implementation of “sequestration” took place, federal funds to DHCD declined to \$440 million in FY2013. Federal funding to Massachusetts recovered 7.1 percent from FY2013 to FY2014, to \$471 million, but over the next two years, funding has been relatively flat. For FY2017, some changes are expected in a number of federal programs. The McKinney Emergency Shelter Grants program is expected to get an additional \$3.8 million, boosting federal spending on homelessness by 25 percent. Other housing programs

FIGURE 5.2

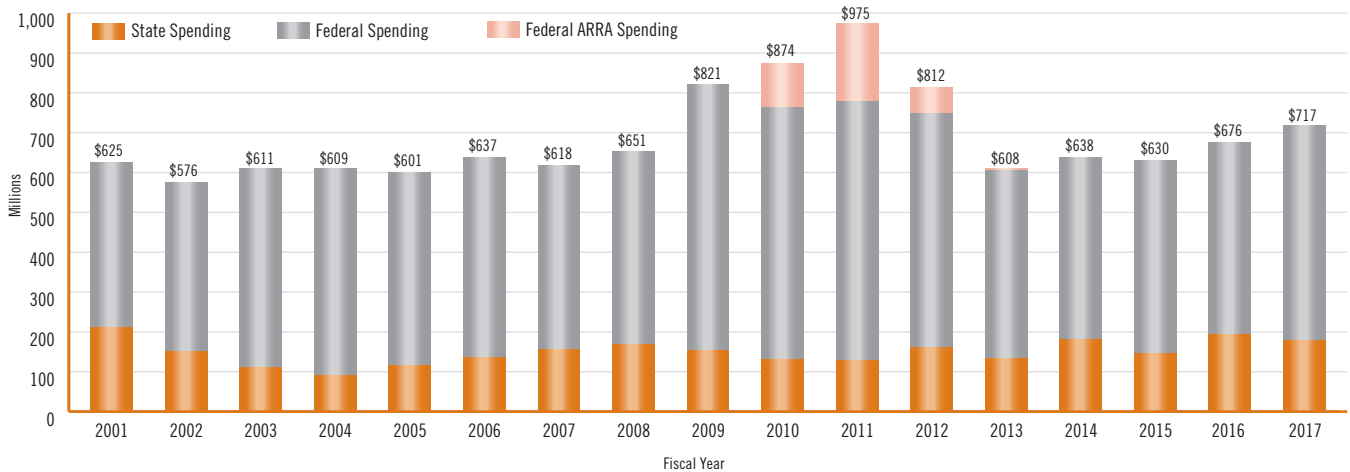
Total Real Federal Spending (FY2016 \$) FY2001–FY2017



*Note: Before FY2010, homelessness funds were managed by DTA, and are not included.

FIGURE 5.3

Total Real DHCD Spending (FY2016 \$), Including Federal Share and ARRA FY2001–FY2017 (Excluding Homeless Program Funds)



Source: The Massachusetts Budget Dashboard, and the Massachusetts Budget and Policy Center

are expected to get increases, including a \$40 million increase for the Federal Housing Voucher Program, \$14.7 million for the Housing Choice Voucher and VASH programs (providing vouchers for veterans). Cuts are also likely coming, however, such as \$6.6 million to the Section 8 New Construction Program thus defunding the entire program, and a \$5.4 million cut in HOME Investment Partnerships.

Figure 5.3 shows changes in total Massachusetts DHCD funding from FY2001 to FY2017 (in FY2016 dollars), excluding spending on homelessness. While federal cash infusions in FY2010 and FY2011 pushed total funding close to the \$1 billion threshold, cuts in FY2013 brought funding back down to \$608 million. There were small increases in funds in FY2014 (4.9 percent), a small decline in FY2015 (1.2 percent), but

increases of 7.3 percent in FY2016, and an expected increase of 6 percent in FY2017, should bring funding for housing to \$717 million next year, the highest level since FY2013.

New Housing Policy in the City of Boston

Meanwhile, since being elected mayor in 2014, Mayor Marty Walsh has been a champion for affordable housing. *Housing a Changing City: Boston 2030*, a comprehensive housing plan introduced in October 2014, established the goal of producing 53,000 new units of housing in the city over the next 15 years. Notably, 20,000 of those units are to be middle-class affordable, and 8,000 will be low-income affordable. The plan includes 18,500 new dorm beds to reduce the impact of students on the housing market. To meet this ambitious housing goal, the city has taken a number of important steps:

- *Neighborhood Homes Initiative* (May 2015). One million square feet of city-owned land is being made available to smaller contractor/builders to build middle-class affordable one- and two-family homes. The program's first homes are now in construction.
- *Inclusionary Development Policy Update* (December 2015). IDP is now applying market-appropriate rules to different market areas—with the highest cash-in-lieu requirements in luxury market areas, and lower requirements in lower-priced markets.
- *Office of Housing Stability* (Summer 2016). This new division of the city's Department of Neighborhood Development (DND) is dedicated to preventing displacement wherever possible. OHS's initial outreach has been to tenants in properties that have recently changed hands (often a triggering event for rent increases by a new owner), and to tenants in foreclosed properties.
- *Acquisition Opportunity Program* (May 2016). This new program funds nonprofit and for-profit developers to acquire properties as they come on the market. City funds are used to ensure that exiting tenants are not displaced and that the property becomes a permanent part of the affordable housing supply.
- *Workforce Housing Tax Incentive* (Jan 2016). The city proposed local home rule legislation that would

allow the city to abate property taxes for the first five years of new developments that are affordable to the middle class. The legislation was adopted by Governor Baker and turned into a statewide initiative as part of the Municipal Modernization Bill that was signed into law in July 2016.

- *Strategic Planning Areas*. The city has begun reworking development rules in areas that are close to transit and have significant amounts of underutilized land and commercial uses. Under the new rules, increased density will be made available to developers in these areas. Two areas already have draft plans: Jamaica Plain/Roxbury and South Boston/Dorchester Avenue.
- *New Homelessness Strategy*. The city has put together an Action Plan to End Chronic and Veterans Homelessness by 2018.
- *Density Bonus Program*. A pilot Density Bonus Program has been launched as part of the Jamaica Plain/Roxbury Strategic Planning Area. Under this program developers can build to higher densities than local zoning prescribes in exchange for higher inclusionary affordable housing.
- *Conservation Preservation Act*. Mayor Walsh and members of the Boston City Council have endorsed a referendum on the November 2016 ballot that, if passed, would permit an increase in the CPA fee providing the city with additional funding for conservation and the production of affordable housing.

Time will only tell how successful these efforts will be, but the production data we reviewed in Chapter 2 suggests some progress is already being made to increase housing production in line with the city's ambitious 53,000 unit goal established in 2014.

Massachusetts Housing Partnership

Besides the public sector efforts undertaken by the Commonwealth, MassHousing and the City of Boston to meet housing goals, the Massachusetts Housing Partnership (MHP) has played a constructive role, as well. MHP is a statewide public nonprofit affordable housing organization that works in concert with the Governor and the state DHCD to help increase the supply of affordable housing in Massachusetts. It was

established in 1966 to increase the state’s overall rate of housing production and to work with cities and towns to demonstrate new and better ways of meeting the Commonwealth’s need for affordable housing. In 1990, the state legislature took that premise to heart, becoming the first and only state in the nation to pass an interstate banking act that requires companies that acquire Massachusetts banks to make funds available to MHP for affordable housing.¹¹

MHP addresses challenges to the production of affordable housing by offering:

- Community Assistance – Supporting local officials, housing authorities and community nonprofits in their efforts to develop affordable housing
- ONE Mortgage – Partnering with lenders to offer the state’s most affordable program for low- and moderate-income first-time home buyers
- Rental Financing – Using private sources of capital to provide long-term, fixed-rate financing for multi-family housing

In 2015 and 2016, MHP provided training and technical assistance reaching 96 cities and towns in Greater Boston. Among the best examples of MHP’s early-stage community assistance is the successful rezoning of a commercial area in Needham to promote mixed use and allow 250 units of higher density multi-family housing.

Since 1990, MHP’s ONE Mortgage has helped nearly 19,800 low- and moderate-income families purchase their first homes and has delivered more than \$3.4 billion private mortgage financing. Over the same period, MHP has financed more than 22,000 rental apartments, using upwards of \$1 billion in private bank capital as well as Fannie Mae and FHA lending products. In the past two years, MHP has closed financing for 2,381 units of new rental housing in the Greater Boston region alone including projects in Dorchester, Roxbury, Revere, Brookline and Wayland.

Factors Determining Whether New Housing Will Be Produced

The Turner Center for Housing Innovation at the University of California Berkeley has recently produced a Housing Development Dashboard, an online tool that uses a great deal of data to determine

the likelihood that a particular housing development project will be undertaken.¹² The dashboard has six key factors and works best for properties of 50 units or more.

Market Factors

- Target rate of return on the project
- Landowner willingness to sell
- Local rents and costs

Local Government Factors

- Fees or affordable housing requirements
- Local planning decisions
- Additional planning approvals

Based on data for the Greater Boston housing market, we can use the Turner Center factors to rate the probability of housing development in the region.

In the Boston metro region there are five factors outlined in the Turner Dashboard that now are conducive to producing additional new housing in Greater Boston. These are as follows:

1. Bank Loan Interest Rate: *At 4 percent, nearly 80 percent probability of development. At 6 percent, 60 percent probability of development. Above 8 percent, probability falls toward zero.*

With bank interest rates now well below 4 percent, bank financing is not a major barrier to housing development.

2. Basic Permitting Time: *Above six months, the probability of development falls precipitously. Above ten months, it falls to zero.*

As late as 2014 in the city of Boston, the average time it took to receive a building permit varied from 14 months for multi-family developments to 18 months for four-unit structures. Clearly such wait times contributed to fewer housing units. By 2016, Boston had reduced its average wait times to no more than four months, helping to lead to the uptick in new housing development.

3. Expected Rent Increase: *Below 2 percent per year, little probability of development. At or above 3 percent expected yearly increase, probability rises rapidly to near 100 percent.*

Large annual increases in rents have contributed to the surge in housing development, especially for luxury units.

4. *Expected Construction Cost Increase: Below 2 percent per year, near 100 percent probability of development. At or above 3 percent yearly increase, probability falls below 50 percent.*

Based on the development cost survey included in last year's *Greater Boston Housing Report Card*, per square foot development costs increased from \$242 in the period between 2004 and 2008 to \$274 between 2011 and 2015. This represents an average annual increase of only 1.7 percent. While the overall cost of development is often prohibitively expensive, the rate of inflation in development costs is apparently not a barrier to construction in Greater Boston.

5. *Parking: At zero parking spaces per unit, near 100 percent probability of development. Above one space per unit, probability falls precipitously.*

Reduced parking requirements now being considered by a number of communities encourage development.

Unfortunately, there are an additional seven factors that are serving to discourage new housing development in Greater Boston. These are as follows:

1. *Target Return: The probability of housing development falls precipitously when the developer's target rate of return exceeds 11 percent.*

According to investment advisors, for private real estate funds currently in the market the greatest proportion are targeting net internal rates of return (IRR) of 14-15.9 percent. At least 40 percent of current real estate funds target at least a 16 percent IRR while fewer than 18 percent have a target of 11.9 percent or less.¹³ As such, there are a limited number of developers—with most of these in the nonprofit world—who are willing to develop housing in Greater Boston if the expected IRR is not well above the 11 percent. This factor alone could explain the lack of housing investment in all but luxury developments.

2. *Local Rents: There is little probability of development if expected monthly rent falls below \$3.50/square foot of unit/month.*

What this means is that a brand-new, small unit of 850 square feet must command a rent of roughly \$2,975 a month to be worth developing, a rent too high for most working people.

3. *Low-Rise Construction Costs: If the all-in cost of development is above \$250/gross square foot of building, development falls precipitously.*

According to the detailed cost analysis carried out for last year's *Greater Boston Housing Report Card*, total development cost now runs over \$273 per square foot on average, reducing the ability to build affordable housing for middle-income families.

4. *Affordable Unit Percentage: Any percentage reduces development probability to 60 percent, but percentage has little impact beyond that.*

While inclusionary zoning may be effective for the development of some affordable units, the downside of this regulation may be fewer new housing developments in the region.

5. *Affordability Level: At 80 percent affordability, there is only a 40 percent probability of development. At 120 percent affordability, a 60 percent probability.*

These probabilities suggest why it is so difficult to build sufficient new housing for low-income households.

6. *Height: Above five stories, steel construction raises costs and the probability of development falls to zero.*

This suggests why the only high-rise residential buildings in Boston have high-end luxury units. If housing is to be built for middle-income families, these units will have to be "stick-built" on platform structures.

7. *Average Unit Size: Below 850 square feet, probability of development falls below 60 percent. Above 850 square feet, probability is about 75 percent.*

This factor may contribute to the difficulty of building smaller housing units, unless they are specifically targeted to particular demographic groups.

All in all, this analysis advises that more housing development is possible if public policy is aimed at continuing to streamline the regulatory process, thus speeding up permitting; keeping development costs from rising faster by making more land available for housing and finding new methods to reduce construction costs; and making sure that workforce housing developments are free from required inclusionary zoning so as not to increase the cost to the developer. Targeting smaller housing units to younger residents and perhaps seniors ready to give up their large family homes may also make it possible to develop complexes that will appeal to these demographic groups. Given the difficulty of building new housing in Greater Boston that is affordable by working families, we will likely have to engage in “housing jujitsu” — creating desirable housing choices for those who now live in existing housing units so that these units, such as duplexes and triple-deckers, can be repurposed for the working families for whom they were originally constructed.

Millennial Village Housing

Such targeting of housing to graduate students, medical interns and residents and other younger residents of Boston is the concept behind Millennial village housing now being discussed by architects, a number of young entrepreneurs, several college presidents and some developers in Greater Boston. The original concept was put forward in the *2010 Greater Boston Housing Report Card* and was aimed primarily at housing graduate students and reducing demand pressure on the existing private housing market.¹⁴ Since then, the idea has been expanded to a much broader group of 20 to 34 year-olds.

Under the original multi-university graduate student village plan, this housing would have had many of the following attributes:

- Several universities and colleges would collaborate on marketing a high-density graduate student residential facility that would be centrally located near public transit, include commercial and retail space, and have common areas that could house seminar/meeting rooms and recreational space.
- Each village would be developed by a private sector developer with the universities and colleges participating in marketing the facility to their own

graduate students as well as providing a joint master lease agreement for a given number of units. The facility would remain on the city’s or town’s tax rolls.

- Each village could include efficiency units, one-, two- and even some three-bedroom units, including units for married couples with young children. Units could also differ in terms of amenities so that some smaller units could be aggressively priced while others could be more upscale.
- Each village could include commercial retail space that might include a small supermarket, a drycleaner or drugstore.
- Each village could have an underground garage with perhaps one space per three to five units, but include a Zipcar facility with vehicles ranging from Smart Cars to vans.
- Each village could include regular programming of seminars, lectures, film festivals and so on for residents and others sponsored by the collaborating universities and colleges to help bring residents of the village together and to open the village to participation in events by the wider community.
- If these villages also were open to graduate students *after* graduation for three to five years, it might serve to retain young professionals in the area, a major goal of state and local policy.
- Given that graduate students generally do not leave the city during the summer, most of the residents would be 12-month residents with little need for sub-leasing. With aggressive marketing by the universities, near 100 percent occupancy could be expected throughout the year.

The combination of a convenient location, attractive and affordable apartments, a large array of amenities, the ability to live with students from other schools, and other “village-like” attributes might make this type of development a top residential choice among graduate students when they come to Boston and serve to help universities attract graduate students from other regions of the country and from abroad.

Most importantly, such a housing alternative could help move young residents out of the older housing stock in the region, opening up duplexes and triple-decker units which could become more affordable for working families in Greater Boston.

Designing More Effective Policy to Combat Family Homelessness and Housing Insecurity

As we noted in Chapter 4, declining homeownership and rising rents in Greater Boston, combined with much higher costs of living than the national median, have resulted in alarming levels of housing insecurity and homelessness among families with children. With federal, state and charitable funding, public and private entities have struggled to meet these families' challenges—not only for housing but also for medical, social, educational, child care, transportation and protective services for needs that vary by age and health. Much of this work is funded and tracked through the state Department of Housing and Community Development. The agency has done an admirable job of expanding its pool of emergency shelters and reducing the number of costly, inadequate motel rooms that have filled the shelter system gap since 1983. The Commonwealth has also wisely increased funding of its housing choice voucher program (MRVP)—indeed, the state is one of only a few that have their own voucher programs—as well as its innovative HomeBASE and RAFT programs.

But there is room for improvement. Here are some steps the Commonwealth and the City of Boston could take to reduce homelessness and housing insecurity.

While DHCD does a decent job of collecting the data it is required to gather through reporting mandates and the like, its efforts are limited only to the programs under its purview. As such, it is extremely difficult to gain an accurate, evidence-based picture of the full breadth and complexity of family homelessness and housing insecurity, and the extent to which the needs of those who have fallen into these wrenching situations are being met. We therefore strongly recommend that data gathering be enhanced in the following ways:

- DHCD should expand the scope of its data collection beyond the shelters and motels it funds to include private shelters (such as FamilyAid Boston) and faith-based community rooms. If this ongoing project cannot be funded directly, perhaps it should proceed as a supplementary public-private venture.
- The DHCD data-gathering net should be expanded to include reasons EA applications were denied. This information in the aggregate would help policy

makers and service workers to better target funding and programs.

- Although the Commonwealth commendably offers its own housing choice voucher program, MRVP data should be collected in a way that is consistent with HUD data so that program administrators, policy makers, and other analysts can more readily gain an understanding of overall housing voucher use and need.
- The agency might also track, perhaps in concert with the Department of Transitional Assistance, what becomes of children when they leave or age out of the system—from either subsidized housing or the shelter system as a means of evaluating the efficacy of both housing programs and related social services.
- DHCD should also maintain data on EA waiting lists and formalize the pre-application screening process to include reporting on how many potential applicants are advised not to apply for EA, and why. Without these numbers, it is impossible to know how many people are so housing cost-burdened that they tried to apply for EA. This objective measure of subjective states of desperation would provide a more accurate sense of the scope of family insecurity and homelessness.
- Another form of accuracy is absolutely essential to program scope and efficacy: Eligibility thresholds for EA (and perhaps housing choice vouchers as well) should reflect the actual cost of living throughout Greater Boston. Using our cost-of-living calculations described in Chapter 1, the number of impoverished households in the region is approximately 116,580 higher than standard government calculations indicate.

It is no wonder, then, that waiting lists for housing choice vouchers are so long that, as with EA, many families with children are not even bothering to apply—or so anecdotal evidence suggests. Federal and state government should pursue three policy changes to address this unmet need:

- Increase the availability of vouchers to a number commensurate with the full scope of the need.
- Require all local housing authorities and nonprofits to report their waiting list numbers on a regular basis, so that policy makers can work from a realistic picture of the volume of need.

- As with EA applications, require housing voucher administrators, such as local housing authorities and nonprofits, to formalize the pre-application screening process to include reporting on how many potential voucher applicants are advised not to apply, and why.

Finally, as we saw in Chapter 4, most housing choice voucher users end up circulating within the same or similar communities, demographically speaking, without geographic pathways to social and economic mobility. It is not clear to what extent these population concentrations based on poverty, race and ethnicity are the result of individual preferences to be near established family and friends; individual need to be near transportation, jobs and services; limits on available voucher housing; or unacknowledged structural coercion that made its way into the system. It is clear, though, that this form of circular settlement requires careful study, and then policy interventions that make it possible for those voucher holders who want to move into neighborhoods or communities with better schools and access to a greater range of services and social networks can do so.

It has become increasingly common for housing advocates to claim that housing should be regarded not only as a right, but as much a part of infrastructure as public transit, roads, sewer systems and energy services. This is especially the case in strong-market metro areas like Boston, where rental prices are the third highest in the country and gentrification threatens to deepen decades-long regional inequities. One way to do that, pioneered in Washington State, is to define housing as “infrastructure,” which would allow infrastructure bond financing to be used to invest in housing. Another way is to institute a universal housing voucher system in which anyone is eligible for funding for appropriate housing rental vouchers above 30 percent of their wages. Neither of these approaches is inconsistent with building more of the right kind of housing to take the pressure off the market, and they might well be necessary until economic and population growth come into balance with the availability of housing.¹⁵

CHAPTER SIX

Summary and Conclusions

We have covered a great deal of ground in this, the 14th edition of the *Greater Boston Housing Report Card*, so it is useful to summarize the main points in each chapter and provide concluding thoughts about what we have learned.

The demand for housing in the region is intimately tied to the growth of its economy and the expected growth in population. On both scores, the five counties of Greater Boston have seen strong growth and we expect to see continued expansion in the future.

The Massachusetts Economy

- Since at least 2009, the annual rate of growth in the Massachusetts economy has been faster than that of the nation as a whole, with expected growth in 2016 exceeding 2.5 percent.
- As part of that, since 2009 the number of jobs in the Commonwealth has increased by nearly 338,000, driving the current unemployment rate to just 3.9 percent—close to what economists believe is “full employment.”
- For the third year in a row, real average wages have increased and by the end of 2015 were 5.4 percent higher than in 2009.
- Unfortunately, however, wage growth has been highly unequal, with the bottom 20 percent of jobholders experiencing nearly a 5 percent decline in their hourly wage since 2009 while those in the 80th percentile of the wage distribution received all of the gains.
- The Commonwealth’s job growth is mainly due to the strength of the economy in the five counties of Greater Boston, where between 2009 and December 2015 the number of jobs increased by 261,000, or 12.2 percent.

Greater Boston’s Demographic and Economic Profile

A strong economy attracts new residents, and in Greater Boston this in-migration is taking place at an accelerating rate.

- Between 2010 and 2015, the population of Suffolk County increased by nearly 8 percent, more than double the rate of the Commonwealth as a whole. The population of Norfolk County increased by 5.5 percent while Essex and Middlesex increased by 4.4 percent and 3.8 percent, respectively.
- Greater Boston’s population is aging. Back in 1990, half the region’s population was 33.4 years or older. By 2014, the median age was 38.5.
- Greater Boston’s population is becoming steadily more diverse racially and ethnically. In 1990, 88 percent of the population was white; today the number is closer to 75 percent.
- Adjusting for the nearly 38 percent higher cost of living in Greater Boston compared with all other metro areas, the number of families in poverty is now more than 16.2 percent (compared with an *official* poverty rate of 10.6 percent). Instead of 106,000 families in poverty, the adjusted threshold suggests something closer to 163,000 in poverty.
- While a higher proportion of the region’s population falls below this adjusted poverty threshold compared to the U.S. population as a whole, Greater Boston also has a much higher proportion of families with incomes above \$150,000: 26.3 percent in the region vs. only 13.1 percent in the nation.
- The result is that Greater Boston is now ranked as having one of the most unequal—if not the most unequal—distribution of family income across all U.S. metro areas.

Home Sales in Greater Boston

We project that by the end of 2016, we will see new records in single-family and condominium sales volume in Greater Boston, despite a continued drop in homeownership rates.

- Single-family home sales in the region should exceed 34,100 this year, the third year in a row of increased sales and more than 50 percent higher than in 2011. Such sales activity nearly equals the highest annual sales level since the beginning of this century.
- Similarly, condo sales should reach more than 19,000 this year, the fifth year in a row of increased sales and 55 percent higher than in 2009.
- Single-family home sales were highest in both some of the least expensive communities and some of the wealthiest. Brockton, with a median sales price of \$243,000, had more single-family home sales than any other community in Greater Boston. Newton ranked fourth in sales, despite having a median selling price in excess of \$1.1 million.

Homeownership

Homeownership rates are down across the country and the same appears to be true in Greater Boston. Averaging more than 64 percent from 2005 through 2013, the rate is down to 58.5 percent today. This likely reflects a number of factors including a delay in homeownership among Millennials and possibly a decline in homeownership among seniors who are now considering selling their large homes and renting smaller apartments. Among 20-34 year-olds, the homeownership rate is down from 40.7 percent in 2000 to 30.2 percent in 2014. Even for 35-44 year-olds, the rate has declined over this period from 67.2 to 58.9 percent.

Housing Production in Greater Boston

In light of the growth in the economy and rising population, the demand for housing will continue to be exceptionally strong. The question is whether there is any chance that housing supply will catch up with demand in the near future. While there is some good news in the data, most of the data are not encouraging.

- Across the entire region, the number of permits for new housing units rose sharply from a little more than 4,700 in 2009 to nearly 14,000 in 2015. Unfortunately, our best estimate for all of 2016 reveals a sharp drop in permitting—down to no more than 11,400—a drop of nearly 18 percent.
- What might explain this is that just as the market for luxury housing is now nearly saturated, developers have not found a way to build affordable housing for working families and as a result they are pulling fewer permits.
- The most discouraging sign is that virtually all the decline in permitting is for multi-family housing with five or more units. In this category, permits are down from 9,042 in 2015 to 6,140 in 2016, a one-year drop of 32 percent.
- Single-family housing permits are actually up to more than 4,550—the highest number since 2006.
- Data on actual completed apartment units show a similar decline from nearly 7,000 units constructed in 2015 to only about 4,600 in 2016.
- It turns out that the drop in permits is almost exclusively due to sharp reductions in Boston, Cambridge, Chelsea and Watertown. In Boston, new permits are down 29 percent from 4,813 in 2015 to 3,408 in 2016. In Cambridge, they are down by a whopping 69 percent, while in Watertown and Chelsea they are down by 74 and 35 percent, respectively.
- As for multi-family housing with five or more units, Boston will issue no more than 2,800 permits for such housing in 2016 vs. nearly 4,600 in 2015—a near 40 percent reduction. The losses in Cambridge and Chelsea also reflect sharp declines in multi-family apartment/condo housing permits.
- The one good piece of news is that the number of Massachusetts communities permitting no multi-family housing has dropped from 308 cities and towns in 2012 to only 114 municipalities in 2016.

Housing Production in Boston

As noted, most of the decline in permitting has occurred in Boston, Cambridge and a few other communities. But there is some good news on the permit application side.

- While the number of permits issued for new housing units plummeted in 2016, the number of applications for permits has risen sharply since 2014. For all of the current year, we project total permit applications for over 5,800 units of housing compared with fewer than 2,900 two years ago.
- Increased permitting comes partly from the city administration's commitment to radically reducing the time it takes to obtain a housing permit. As late as 2014, it took on average more than 14 months to obtain a permit for a single-family home. Today the wait time is down to just 2.5 months. For a more complex multi-unit development, the wait time is down from 14 months to four months.
- The increase in applications and the decrease in wait times portend more permitting in the near future and therefore more construction. But we will have to see whether these applications actually materialize into permits and then into construction.
- What is actually being produced raises another red flag, however. Between 1996 and 2003, the number of permits issued by Boston for affordable new units represented nearly 40 percent of all permits. By 2004 through 2010, the percentage was down to less than 26 percent. For the latest period (2011–2016) the percentage is down to only 18 percent. Once again, this points to the extreme difficulty of profitably building housing units that can be sold or rented at affordable prices.

Student Housing

Students living off-campus in Greater Boston continue to put immense pressure on rents. While there has been an increase in dorm beds in the city, the number of students living off campus is huge.

- Of the nearly 158,000 undergraduate and graduate students enrolled on campuses within the city of Boston, more than 83,000 live off-campus in private homes somewhere in Greater Boston.
- Of these, more than 35,000 are living within the city of Boston in single-family, two-family, three-family, or condo units.
- The real pressure on the region's housing market comes from the more than 60,000 graduate students in Boston. More than 90 percent of them are living off-campus.

- Moreover, the growth in the region's student body is mostly in the graduate student ranks, not among undergraduates. As such, the increase in student enrollments is coming predominantly among those who tend to live off-campus and is therefore adding to the enormous upward pressure on rents.

The Role of Chapter 40R

The 2004 Smart Growth Zoning Overlay District law (Chapter 40R) continues to help produce new housing in Greater Boston. As of this year, more than 3,350 units of housing have been constructed in 26 communities in Massachusetts with another 1,445 units awaiting site plan approval. A total of 424 units were completed in 2016 alone.

- Of the total units completed, 92 percent are rental.
- Of the total units completed, nearly half (48%) are affordable.

Foreclosure Activity in Greater Boston

Despite a strong economy, foreclosure petitions are up for the fourth straight year. By the end of this year, we expect nearly 4,500 petitions will have been extended. This is nearly three times the number in 2013 and suggests that despite the overall health of the economy, there are still many families struggling to pay their mortgages.

Along with the rise in petitions, the number of homes lost to foreclosure deed has also increased for the fourth year, rising to over 1,540 compared with fewer than 740 in 2013.

Home Prices and Rents in Greater Boston

In each successive report card, we have collected data on home prices and rents to measure their direction and magnitude. We have done this again in 2016.

- Overall, home prices rose again in 2016 at a rate of nearly 5 percent according to the Case-Shiller single-family home price index.

- Nonetheless, while the recovery in home prices from their previous peak in 2005 is now complete, we have not seen the kind of price acceleration we witnessed during the 1988-1999 housing cycle. Back then, by this time in the cycle, single-family home prices were 20 percent higher than the previous peak. In this cycle, they are only 2 percent higher.
- This may reflect the fact that with Millennials delaying marriage and children, and student debt undermining the ability to obtain mortgages, there is less demand pressure in the single-family market than during the last housing cycle.
- This is true despite the fact that the single-family home vacancy rate is still only about 1 percent in the region, half the rate needed to stabilize prices.
- According to the Warren Group, the median price of a single-family home in Greater Boston was up to more than \$425,600, surpassing the previous 2005 peak of \$405,000.
- After rising by an extraordinary 145 percent between 2009 and 2015, the median price for a condo unit appears to have softened in 2016, falling to \$391,000. This may reflect something of an overbuilding of luxury units and the need to discount their price a bit.
- Like the distribution of income, single-family home prices are diverging rapidly in the region. In some of the toniest communities such as Brookline, Newton, Arlington, Lexington, Milton and Belmont, prices are up a minimum of 29 percent since 2005. Cambridge leads all others with a median price today 2.4 times the median back then.
- In contrast, a large number of communities in distant suburbs from Boston still have a long way to go before median prices return to their 2005 levels. In communities including North Andover, Avon and Townsend, single-family prices are still no more than 85 percent of their previous highs.
- Duplex and triple-decker prices continue to explode in the region. By June of 2016, the median triple-decker price exceeded \$500,000—more than double the price in 2009. In just three years, the typical triple-decker has appreciated 27 percent. There is virtually no doubt that this is due to the extraordinarily high demand for these units by graduate students and other young professionals who are joining up with roommates to rent them and

therefore making these properties valuable as an investment asset.

- Vacancy rates for rental units as a whole have remained at a level lower than at any time since 2001. At 3.4 percent in the second quarter of 2016, the vacancy rate was well below the 5.5 percent rate needed to stabilize rents.
- Asking rents in Greater Boston reached an all-time high in 2016 at \$2,169 per month—28 percent higher than in 2009 and 48 percent higher than in 2000.
- While the median price of a single-family home has increased by 25.5 percent since 2009, the median price of a rental unit has increased by even more.
- In the inner core cities in and around Boston, average market rent is even higher than the median and rising faster. By early 2016, the average monthly rent was \$2,957, a whopping 59 percent higher than in 2009.
- Nationwide, only two metro areas—San Francisco and New York—have rents higher than Greater Boston.

What does all this mean for the future? Single-family prices should continue to rise, but quite moderately. Condo prices will continue to rise more rapidly. And rents will continue to soar as long as the population increases and the supply of new rental units remains weak.

Family Homelessness and Housing Insecurity

In this edition of the housing report card, we paid special attention to homeless families with children and those facing an insecure housing future in Greater Boston. This is what we found.

- Most of those who are in HUD housing programs have limited income supplied by Social Security, disability programs, unemployment insurance and family contributions. Very few are on traditional family welfare programs while 26 percent are wage earners but earn so little they qualify for subsidized housing.
- Those households living in subsidized housing tend to be older. Nearly 42 percent are headed by someone 62 or older; another 22 percent are headed by someone between the ages of 51 and 61.

- About a third of those in HUD subsidized housing are families with children.
- Of all those served by HUD housing programs, 44 percent benefit from housing choice Section 8 vouchers; 31 percent live in housing paid for by Section 8 project based vouchers; and 18 percent live in public housing projects.
- Suffolk County has the highest proportion of HUD subsidized housing units—17 percent. The four other Greater Boston counties range from 4 percent (Norfolk) to 7 percent (Essex).
- A majority of persons living in poverty are *not* served by HUD housing programs, with the exception of Suffolk County where the percentage of the poor not benefiting from HUD programs is “only” 31 percent.
- Formal waiting lists to get into HUD subsidized housing are very long and in Essex, Middlesex and Plymouth counties getting longer. Today, a family averages more than four years on a HUD housing program waiting list in Essex County and 43 months in Middlesex County. Even in Suffolk County, it takes an average of more than two full years to move from application for housing to placement.
- Eligibility requirements do not factor in the real cost of living in Greater Boston communities. If that were taken into account, formal waiting lists would be even longer.
- Despite attempts to move more poor families to permanent housing, the average length of a family stay in an Emergency Assistance shelter or motel in Massachusetts is up to 324 days in 2016 from 195 days in 2014.
- Finally, those who do receive vouchers end up in communities similar to those where they were homeless. Thus, they end up placed in neighborhoods that have concentrated poverty and therefore little improved opportunity for job placement or for the children’s exposure to educational and “social capital” opportunities.

Housing Policy in the Commonwealth and in Boston

Both the Commonwealth of Massachusetts and the City of Boston have long targeted housing as a critical ethical issue so as to provide decent housing for all its residents, as well as an economic issue necessary to maintaining economic expansion and retaining and attracting a well-trained and educated workforce. From the passage of Chapter 40B in 1969 to require new affordable housing in all communities across the state to the Chapter 40R incentives for smart growth zoning, the Commonwealth has used its legislative power to encourage housing development. The City of Boston and several other communities have used inclusionary zoning to set aside affordable units or payment-in-lieu fees in order to do the same.

Now we have a new set of policies to increase housing supply to the point where it matches housing demand in order to moderate home price appreciation and reduce the rent burdens that afflict at least half the renter households in Greater Boston. To do this, a number of steps have been taken.

- The Baker-Polito administration has used more than \$31 million in state and federal low-income housing tax credits to leverage \$218 million in equity to create or preserve more than 1,400 units of housing. In addition, the administration is awarding more than \$59 million in federal HOME funds and state capital funds for these projects.
- In 2016, the administration also unveiled a five-year capital budget plan that includes a \$1.1 billion commitment to increasing housing production.
- The Massachusetts Senate passed far-reaching housing legislation that would provide cities and towns with new tools for planning, zoning and permitting with the explicit goal of encouraging re-zoning for more housing in general and more affordable housing in particular. The Massachusetts House will need to take up this legislation in its next session.
- Total federal and state funding for housing programs has increased from \$608 million in 2013 to \$717 million in 2016, an 18 percent increase.
- In the City of Boston, the Walsh administration has redoubled efforts around the production of housing to meet its goal of 53,000 new units by 2030. City land is being made available to developers of

middle-income housing. A new Office of Housing Stability has been created to help prevent displacement of residents from their homes. A new workforce housing tax credit has been proposed for the city and the Governor has been asked to allow local control for such a measure.

- In addition, a number of nonprofit institutions have increased their housing activity including Massachusetts Housing Partnership, which offers planning assistance to communities, a new mortgage product for first-time homebuyers, and rental housing financing to provide long-term, fixed-rate financing for multi-family housing.

What Is Necessary to Assure Adequate Housing in Greater Boston?

A recent analysis of the barriers to housing development conducted at the Turner Center at the University of California Berkeley has provided new evidence of the most important factors that discourage the production of housing. These include:

- High target rates of return demanded by developers, which make it difficult to produce housing that is affordable to working families
- Long and arduous permitting requirements
- Demands for substantially higher inclusionary zoning housing requirements

To meet Greater Boston's housing needs today and into the future will require radical new thinking about zoning policy and opportunities to reduce the cost of housing construction so that reasonable target rates of return can be realized on workforce housing.

What will also be necessary is a radical rethinking of the kinds of housing we need to produce consistent with the rapidly changing demography of the region. This includes a priority on housing for Millennials and seniors and possibly the adoption of new construction techniques including panelized and modular units. Fortunately, there are an increasing number of developers, architects and institutions in Greater Boston committed to finding answers to our housing challenge. Now we must speed up the process of housing innovation so that the region can move from concept to construction.

Endnotes

Chapter 1

1. See Barry Bluestone, James Huessy, Eleanor White, Charles Eisenberg and Tim Davis, *The Greater Boston Housing Report Card 2015: The Housing Cost Conundrum* (Boston, MA.: The Boston Foundation, November 2015), Chapter 1.
2. Data on Massachusetts and U.S. Gross Domestic Product are from Alan Clayton-Matthews, “Massachusetts Current and Leading Economic Indices,” *MassBenchmarks*, August 2016.
3. Data on Massachusetts employment has been compiled from the U.S. Bureau of Statistics and the Massachusetts Department of Labor and Workforce Development.
4. See Deirdre Fernandes, “Mass Unemployment Rate at Lowest Point Since 2001,” *The Boston Globe*, September 15, 2016, p. 1.
5. See Louis Jacobson, “The Best of Times, the Worst of Times: A Ranking of State Economies,” *Governing Magazine*, August 22, 2016.
6. The monthly Business Confidence Index, initiated by AIM’s Board of Economic Advisors in July 1991, is based on a survey of AIM member companies across Massachusetts, asking questions about current and prospective business conditions in the state and nation, as well as in respondents’ own operations. On the Index’s 100-point scale, a reading above 50 indicates that the state’s employer community is predominantly optimistic, while a reading below 50 points to a negative assessment of business conditions. See *Associated Industries of Massachusetts*, “Business Confidence Index,” September 6, 2016.
7. *Ibid.*, p. 2.
8. Massachusetts real wage estimates were calculated on the basis of nominal wages as reported in the ES-202 files of the Massachusetts Department of Labor and Workforce Development using the U.S. Consumer Price Index (CPI) for cities for all items to account for annual inflation.
9. These wage data were released before the September report from the U.S. Census Bureau that trumpeted the fact that “middle class Americans finally got a raise in 2015 . . . and it was a big one.” According to these latest data, inflation-adjusted median household income nationwide jumped by 5 percent, or nearly \$3,000, between 2014 and 2015, the first meaningful increase since 2007.

What this suggests is that finally, after years of an expanding economy and declining unemployment, there is enough competition in the U.S. labor market to force employers to compete for workers by offering higher wages and more weekly hours. This helped reduce the nation’s poverty rate from 14.8 percent to 13.5 percent.

While this is indeed good news, it requires context. Because wage stagnation and falling household incomes have occurred over such a long period, real median family income is still \$1,400 less in 2015 than in 1999, more than a decade and a half ago. See Deirdre Fernandes and Evan Horowitz, “Incomes Leap for First Time in 8 Years,” *The Boston Globe*, September 14, 2016, p. 1.
10. See Massachusetts Budget and Policy Center, *2016 State of Working America*, August 2016.
11. Data for county and state population estimates were calculated on the basis of the 1990, 2000 and 2010 Decennial Censuses and the 2010–2014 population estimates from the American Community Survey (ACS). See American Factfinder <http://factfinder/census.gov>.
12. The MAPC region is somewhat larger than the Five-County Greater Boston region since it includes portions of Bristol and Worcester Counties. Altogether, MAPC tracks 164 communities. The Five-County Greater Boston region includes 147 municipalities. We have adjusted the MAPC population estimates to the Five-County region by subtracting the Worcester and Bristol county estimates from the total. The Five-County region represents approximately 93 percent of the population of the MAPC “Metro Region.”
13. The MAPC 2010–2030 published population projections for the five counties of Greater Boston differ slightly from the “adjusted” projections presented here. The Census population estimate for 2010 is 1.2 percent higher than the MAPC figure for this year – perhaps as a result of a Census re-estimate since the completion of the 2010 Census. Based on this small difference, small adjustments were made to the 2020 and 2030 projections. The adjusted 2020 estimate is 1.1 percent higher than the MAPC estimate. The 2030 estimate is within .02 percent of the MAPC projection. These small differences are well within forecast errors.

14. The cost of living calculator has been developed by C2ER based on data for a set of categories of consumer expenditures with weights assigned to relative costs for the expenditure patterns of professional and executive households. The data for 2014 are found in <http://www.infoplease.com/business/economy/cost-living-index-us-cities.html>.

According to this measure, groceries, which make up 13 percent of the composite index, cost 13.9 percent more in Boston than nationally. The cost of utilities, which comprise 10 percent of the composite index, are nearly 36 percent higher than the nation; transportation 7.1 percent higher, health care 4 percent higher, and miscellaneous goods and services, clothing, restaurant meals, etc. 30 percent higher. The real outlier for Boston, not surprisingly, is housing costs. Accounting for 29 percent of the composite index, the cost of housing is 75 percent higher than the national average.

Chapter 2

1. According to the U.S. National Bureau of Economic Research (NBER)—the official arbiter of U.S. recessions—the Great Recession in the United States began in December 2007 and ended in June 2009, extending over 19 months. The Great Recession was instigated by the financial crisis of 2007–08 and the subprime mortgage meltdown of 2007–2009.
2. To estimate full-year 2016 sales data, we took the total 2015 sales in each city and town and multiplied it by 1 + the percentage increase in sales between the first six months of 2015 and the first six months of 2016. To the extent that the change in sales during the first six months of the year reflects likely sales activity for the full year, these estimates should be close to the final sales figures for 2016. The data on sales are from the Warren Group.
3. See Joint Center for Housing Studies of Harvard University, *The State of the Nation's Housing 2016*, August, 2016, p. 2.
4. See Barry Bluestone, James Huessy, Eleanor White, Charles Eisenberg and Tim David, *Greater Boston Housing Report Card 2015*, "Annual Number of Foreclosure Deeds of Single-Family Homes in Five-County Greater Boston Region, 2000–2015," Figure 2.9, p. 29, and 2016 estimates from the Warren Group.
5. Joint Center for Housing Studies of Harvard University, *The State of the Nation's Housing 2016*, *op.cit.*, pp. 2–3.
6. Comparable numbers for the United States suggest that what is happening to homeownership in Greater Boston is part of a nationwide trend. Between 2006 and 2015, the overall homeownership rate has dropped from 69 percent to 64 percent. Among 25 to 29 year-olds, the decline has been even more precipitous: from 42 percent to 32 percent. Those 30 to 34 years old have seen their homeownership rates decline over this period by a full ten percentage points, from 56 percent to 46 percent with a similar double-digit decline for 35–39 year-olds from 66 percent to 55 percent. See Susan Wachter and Arthur Acolin, "Owning or Renting in the U.S.: Shifting Dynamics of the Housing Market," *Penn Institute for Urban Research*, May 2016, Table 1.
7. See Matt Rocheleau, "Millennials Are Still Living at Home with Their Parents, According to Newly Released Census Data," *The Boston Globe*, September 16, 2016. According to the U.S. Census Bureau, New Jersey leads all states with 46.9 percent of 18–34 year olds living with their parents. Connecticut was second with 41.6 percent, followed by New York with 40.6 percent. Nationally, the average was 34.1 percent. See U.S. Census Bureau, *New American Community Survey Statistics For Income, Poverty and Health Insurance Available For States and Local Areas* September 15, 2016, Release Number: CB16-159.
8. One possibility is that younger individuals and families have decided to accumulate assets in other forms, particularly financial assets rather than a home purchase. But data from the Federal Reserve Board's 2013 *Survey of Consumer Finance*, shows that assets outside of housing are down sharply from pre-Great Recession levels as well, and this is true for all age groups. See Dean Baker, "Homeownership Drop Is Bad News, but Not for the Reason You Think," *The New York Times*, August 2, 2016.
9. See Gary V. Engelhardt, Michael D. Eriksen, William G. Gale and Gregory B. Mills, "What Are the Social Benefits of Homeownership? Experimental Evidence for Low-Income Households," Electronic copy available at: <http://ssrn.com/abstract=1752381> and "Social Benefits and Costs of Homeownership," *Affordable Housing Issues*, Shimberg Center for Affordable Housing Studies, Volume XI, No. 3., April 2000.
10. See U.S. Census Bureau, *Annual New Privately-Owned Residential Building Permits for Places in Massachusetts*.
11. The geographic area of the Boston Metropolitan Statistical Area (MSA) is larger than the Greater Boston region used in this report, the latter of which includes the five counties of Essex, Middlesex, Norfolk, Plymouth and Suffolk. The Boston MSA officially known today by the U.S. Census Bureau is called the "Boston-Cambridge-Newton, MA-NH Statistical Area" and includes in addition to the five Greater Boston counties two counties in New Hampshire: Rockingham and Strafford. Reis, Inc. uses this definition of region in compiling their housing data. The two New Hampshire counties add approximately 420,000 residents to the Greater Boston region population total.

12. For each *Greater Boston Housing Report Card*, we have relied on the U.S. Census Bureau’s data on “Annual New Privately-Owned Residential Building Permits.” We have used this data source for 2016 as well. However, given the dramatic reduction in permit activity in the city of Boston, we have calculated the number of residential permits from the actual list of permits issued by the city’s Inspectional Services Department. For unknown reasons, the actual number of permits in the ISD database and the number reported by the U.S. Census differ for each of the years we have tracked since 2011. However, the trends are nearly the same and both sources reveal a sharp reduction in permits in 2016 (based on Census data through June and ISD data through August). In the case of the latter, the number of permits issued increased substantially between 2012 and 2015, but our projection for all of 2016 suggests a 57 percent year-over-year reduction—somewhat lower than the 70 percent reduction in the Census data, but nonetheless a sizeable decline in permit activity.

	Census	ISD
2016 (Est.)	1,496	1,845
2015	4,955	4,256
2014	2,841	3,892
2013	2,561	2,335
2012	1,776	1,519
2011	785	1,795
Total	14,414	15,642

In addition, the number of permits on record at the city’s Department of Neighborhood Development (DND) also suggests a difference from both the Census numbers and ISD. In 2015, for example, DND reports a total 4,813 permits, a little less than the Census estimate and more than 500 above the ISD number. Much of this difference may simply lie in when permits are recorded and reported. Clearly with an estimated 3,408 permits issued by the end of this year, the DND estimate is more than twice as high as the Census estimate and 85 percent higher than ISD’s.

13. It is important to note that the City of Boston’s Department of Neighborhood Development (DND) keeps its own permitting records using a method that is more conservative than the U.S. Census. DND uses a counting rule that any permit that has not been acted on (e.g., pulling construction-related permits like excavation, gas and plumbing) within a year gets removed from the count as an inactive permit. It is only reactivated if at some point in the future, a Certificate of Occupancy is issued. As such, the historical series for permits in Boston comes closer to a count of actual housing starts than the Census data. Source: Personal correspondence from Kevin McColl, Policy Adviser, Department of Neighborhood Development, October 6, 2016.
14. Kevin McColl, Senior Advisor to the Chief of Housing, City of Boston, Speech before KFM Forum, October 18, 2016.
15. See Mayor Martin J. Walsh, “Housing a Changing City Boston 2030, Q2 Report,” September 2016.
16. These data were supplied to the Dukakis Center by staff at the City of Boston Department of Neighborhood Development, October 6, 2016.
17. “Housing a Changing City: Boston 2030, Q2 Report,” *op.cit.*, p. 2.
18. See Department of Neighborhood Development, City of Boston, “Student Housing Trends: 2015–2016 Academic Year.” Of the 24 institutions of higher education with programs operating within the city, Northeastern University accounts for most of the growth in student population between 2013 and 2015. In that time period, Northeastern saw its enrollment increase from 29,755 students to 31,981, an increase of 7.5 percent while the overall increase across all 24 institutions was just 1.5 percent including Northeastern.
19. Our thanks to William Reyelt of the Massachusetts Department of Housing and Community Development (DHCD) for assembling these Chapter 40R statistics for us each year.
20. HUD affordable housing refers to units that a household earning 80 percent of area median income can afford without having to pay more than 30 percent of their annual gross income.

Chapter 3

1. The Case-Shiller Home Price Indices provided by *Standard and Poor* are considered the best measures of U.S. residential real estate prices, tracking changes in the value of residential real estate both nationally as well as in 20 metropolitan regions. By tracking changes in the prices of the same homes, the index avoids the problem of other measures that can conflate changes in prices with changes in the types and sizes of homes being sold in a given housing market. However, the Case-Shiller Index is only available for entire metro areas and therefore cannot be used to track prices in individual municipalities. See <http://us.spindices.com/index-family/real-estate/sp-case-shiller>.
2. For a discussion of the relationship between vacancy rates and home prices and rents, see Barry Bluestone, Mary Huff Stevenson and Russell Williams, *The Urban Experience: Economics, Society, and Public Policy* (New York: Oxford University Press, 2008), pp. 417-421.
3. The price level data are derived from data from the Warren Group which keeps track of actual home and condo sales in each city and town in Massachusetts. The Case-Shiller index is considered a somewhat more accurate measure of changes in home prices since it is based on repeat sales of the same single-family home. Some of the year-to-year changes in the Warren Group prices can be due to the fact that in one period, larger, more expensive homes are being sold while in another it is smaller, less expensive homes. In this case, the price level reflects both changes in price but also changes in types of dwellings on the market. This is particularly a problem in towns and cities with a small number of sales every year, but over the entire Greater Boston region one expects that this “quality difference” more or less averages out from year-to-year.
4. See Barry Bluestone, James Huessy, Eleanor White, Charles Eisenberg and Tim Davis, *The Greater Boston Housing Report Card 2015: The Housing Cost Conundrum*, The Boston Foundation, November 2015.
5. See Barry Bluestone, Eleanor White, Noah Hodgetts, Michael Gleba, Nancy Lee, Monika Kondura and Tim Davis, *The Greater Boston Housing Report Card 2013: What Follows the Housing Recovery?* The Boston Foundation, October 2013, Figure 3.11, p. 47.
6. See U.S. Census Bureau, *American Factfinder*, City of Boston, Annual Income, 2014.

Chapter 4

1. Federal Reserve Bank Board of Governors, “Report on the Economic Well-Being of U.S. Households, 2015” (May 2016), p. 22.
2. For a good overview of the complexities of family homelessness in Massachusetts and the constellation of housing and service programs (or lack thereof) in place to address them, see Citizen’s Housing and Planning Association, *On Solid Ground: Building Opportunity, Preventing Homelessness*, February 2015.
3. HUD, *Picture of Subsidized Households, 2015*. The data on women, race and ethnicity have been weighted based on population in each county.
4. For the statewide federal rental assistance voucher number, See DHCD, “Moving to Work Program Annual Plan for Fiscal Year 2017,” Resubmitted to HUD June 29, 2016, Approved by HUD 7/20/16, p. 4. MRVP numbers are from DHCD as of June 30, 2016.
5. According to the DHCD, between 2012 and 2013, 28 percent of all Massachusetts families applying for shelter originated from Boston, followed by 10 percent from Springfield, 7 percent from Worcester, and 5 percent from Brockton.
6. The U.S. Census and HUD use different terminology and thresholds to define the most economically disadvantaged households in the United States. The Census uses the official “poverty threshold” first developed in 1964, which varies by family size and composition and is simply updated yearly by the Consumer Price Index to account for inflation. The Census poverty thresholds do not vary across metro areas despite large differences in area cost of living. In calculating a household’s income to compare with the official poverty threshold, the Census uses money income before taxes and does not include capital gains or noncash benefits (such as public housing, Medicaid, and food stamps).
HUD used a system that ties income thresholds to local area median income (AMI). Each designation refers to a percentage of area median income (AMI) where low-income = 80 percent of AMI, very low-income = 50 percent of AMI; extremely low-income = 30 percent of AMI. Only those households (adjusted from a family of four) designated very low- and extremely low-income are eligible for public housing or Section 8 vouchers.
7. MBHP “Section 8 Waiting List” page, accessed 9/27/16 <http://mbhp.org>; “Section 8 Waitlist Historical Data,” chart provided by MBHP.

8. Note that by “costly,” we do not mean that these are high-end motels but that motel use (on average approximately \$90 a night, usually without kitchen facilities) is more expensive than other forms of shelter. For an overview of HomeBASE, which notes that “overwhelming” demand as soon as the program was launched in 2011 prompted the legislature to change eligibility requirements, leading to a dramatic rise in the use of motels to supplement the emergency shelter system, see Metropolitan Boston Housing Partnership, *Safe at Home: The Families of HomeBASE*, May 2013. For a brief history and two annual reviews of the RAFT program, see Metropolitan Boston Housing Partnership’s two RAFT in Review reports, published in September 2014 and September 2015.

Number of Families in EA Shelters and Hotels/Motels

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
July	2,651	3,684	3,646	3,386	4,710	4,523
August	2,742	3,746	3,770	3,625	4,787	4,550
September	2,865	3,540	3,787	3,907	4,816	4,545
October	2,909	3,397	3,784	4,171	4,825	4,451
November	2,739	3,320	3,800	4,341	4,749	4,414
December	2,781	3,317	3,751	4,441	4,629	4,214
January	2,925	3,366	3,619	4,457	4,594	4,102
February	3,058	3,435	3,453	4,433	4,550	4,036
March	3,116	3,453	3,245	4,403	4,511	3,933
April	3,194	3,480	3,241	4,489	4,525	3,861
May	3,317	3,562	3,270	4,548	4,543	
June	3,497	3,605	3,315	4,648	4,524	

Source: DHCD

Note: Methodology for calculating shelter caseload changed in FY2015 from an average daily number to contracted units (minus vacancies) to an end-of-month count of occupied shelter units using DHCD’s bed registry.

9. Department of Housing and Community Development, Emergency Assistance Program Fourth Quarterly Report [to the legislature], (August 4, 2016), p. 1.
10. See DHCD, EA Monthly Report, Cumulative Data, August 2016.
11. In addition to meeting income eligibility requirements, applicants must also fall into one of four categories: 1) having moved around so often in others’ homes that it constitutes a threat to health and safety, which is by far the largest category; 2) domestic violence; 3) ejection from a living situation, such as extended family; or 4) dwelling has been deemed unfit for human habitation. For full account of eligibility requirements, see part one of Ruth

Bourquin, 2015 Emergency Assistance Advocacy Guide, Massachusetts Law Reform Institute, October 2015.

12. See Matthew Desmond, *Evicted: Poverty and Profit in the American City* (New York: Crown Publishers, 2016), pp. 301-303. More broadly, Desmond’s ethnographic study argues that voucher housing programs have led to instability and further downward mobility in part because users are so low-income that they use up most of their wages in rent anyway, leaving little left for food, energy, and other necessities, making it difficult to meet housing standards, and in part because landlords are incentivized to be ruthless in their enforcement of said standards—often to the point of regular eviction.
13. A similar geographical pattern is in effect with directly subsidized housing. See David Scharfenberg, “In Greater Boston, a Lopsided Geography of Affordable Housing,” *The Boston Globe*, September 2, 2016.

Chapter 5

1. See Lawrence J. Vale, *From the Puritans to the Projects: Public Housing and Public Neighbors* (Cambridge, MA: Harvard University Press, 2000) and Lawrence J. Vale, *Reclaiming Public Housing: A Half Century Struggle in Three Public Neighborhoods* (Cambridge, MA: Harvard University Press, 2002).
2. Lawrence J. Vale, *From the Puritans to the Projects*, op. cit., p. 161.
3. See Boston Housing Authority (<http://www.bostonhousing.org/>).
4. See http://www.masshousing.com/portal/server.pt/community/about_masshousing/221/history.
5. See <http://www.protectaffordablehousing.org>.
6. See Boston Development Authority, “What Is ‘Inclusionary Development’ and How Can I Learn More?” January 26, 2016.
7. Information on MassHousing programs was supplied by Eric Gedstad, Communications Director of the agency.
8. See “Baker-Politio Administration Announces Affordable Housing Development Awards,” Office of the Governor, August 16, 2016.
9. See Concord Square Planning & Development, Inc., “Massachusetts Workforce Housing Trust Fund as passed in the Economic Development Bill—House 4569,” July 31, 2016.
10. Massachusetts Department of Housing and Community Development homeless family case data, as of October 8, 2016.

11. For more on the Massachusetts Housing Partnership, see <http://www.mhp.net/about-us>.
12. For information on the Turner Center for Housing Innovation at UC Berkeley, see <http://turnercenter.berkeley.edu>.

This model draws inspiration from the very effective *New York Times* Buy Rent Calculator put together by Mike Bostock, Shan Carter and Archie Tse. Key assumptions are drawn from numerous discussions with developers, contractors and architects, as well as recent real estate feasibility studies done in San Francisco, Oakland and El Cerrito by AECOM, Seifel Consulting and Strategic Economics. Some basic assumptions for affordable condo purchase price calculations are drawn from the San Francisco Mayor’s Office of Housing’s Inclusionary Housing Program. Structure and basic assumptions are also drawn from various real estate classes at UC Berkeley — taught by Bill Falik, Dennis Williams and Carol Galante.

13. For information on target rates of return see www.prequin.com/blog/0/5868/target-irrs-of-re-funds.
14. See Barry Bluestone, Chase Billingham, Jessica Casey, Anna Gartsman, Eleanor White and Tim Davis, *The Greater Boston Housing Report Card 2010: Taking Stock in a Perilous Time*, The Boston Foundation, Chapter 4, October 2010.
15. On designating housing as infrastructure, see Kalima Rose and Teddy Ky-Nam Miller, *Healthy Communities of Opportunity: An Equity Blueprint to Address America’s Housing Challenges* (PolicyLink; Kresge Foundation: 2016), p. 28. On the workings and advantages of universal voucher programs, see Matthew Desmond, *Evicted: Poverty and Profit in the American City* (New York: Crown Publishers, 2016), pp. 303-313.

Appendix A Municipal Scorecard

Municipality	Production and Sales								
	Total Housing Units (2010 Census)	Units Permitted in 2015	Units Permitted 2016 (Estimate)	% Change 2015 to 2016 (Estimate)	Number of Single Family Home Sales 2015	Number of Single Family Home Sales 2016 (Estimate)	Percent Change in Number of Single Family Sales, 2015–2016 (Estimate)	Median Single Family Home Selling Price 2005	Median Single Family Home Selling Price 2015
Abington	6,377	15	28	86.7%	153	172	12.4%	\$349,900	\$300,000
Acton	8,530	59	70	18.6%	219	228	4.1%	\$542,000	\$530,900
Amesbury	7,110	20	32	60.0%	165	170	3.0%	\$350,000	\$320,000
Andover	12,423	47	32	-31.9%	377	364	-3.4%	\$588,750	\$576,000
Arlington	19,974	188	100	-46.8%	355	308	-13.2%	\$501,000	\$634,500
Ashland	6,609	17	74	335.3%	136	130	-4.4%	\$416,250	\$386,000
Avon	1,769	10	4	-60.0%	58	60	3.4%	\$320,000	\$260,000
Ayer	3,462	43	24	-44.2%	71	88	23.9%	\$335,000	\$315,000
Bedford	5,368	108	26	-75.9%	162	138	-14.8%	\$520,000	\$646,000
Bellingham	6,365	40	48	20.0%	202	166	-17.8%	\$320,000	\$280,000
Belmont	10,184	298	46	-84.6%	171	132	-22.8%	\$720,000	\$907,000
Beverly	16,641	10	10	0.0%	381	352	-7.6%	\$386,500	\$385,000
Billerica	14,481	43	816	1,797.7%	398	400	0.5%	\$372,500	\$358,000
Boston	272,481	4955	3408	-31.2%	1124	1036	-7.8%	\$657,115	\$592,138
Boxborough	2,073	255	4	-98.4%	55	56	1.8%	\$585,950	\$565,000
Boxford	2,757	5	14	180.0%	114	114	0.0%	\$650,000	\$582,500
Braintree	14,302	16	14	-12.5%	337	312	-7.4%	\$385,000	\$387,000
Bridgewater	8,336	26	26	0.0%	186	204	9.7%	\$387,500	\$332,250
Brockton	35,552	67	70	4.5%	772	912	18.1%	\$275,000	\$220,000
Brookline	26,448	80	30	-62.5%	192	158	-17.7%	\$1,120,000	\$1,587,500
Burlington	9,668	226	630	178.8%	215	210	-2.3%	\$412,500	\$451,000
Cambridge	47,291	535	166	-69.0%	100	96	-4.0%	\$667,500	\$1,225,000
Canton	8,762	209	96	-54.1%	215	204	-5.1%	\$511,250	\$479,000
Carlisle	1,758	9	2	-77.8%	67	88	31.3%	\$876,563	\$799,000
Carver	4,600	7	18	157.1%	140	96	-31.4%	\$340,000	\$291,750
Chelmsford	13,807	60	22	-63.3%	341	336	-1.5%	\$373,700	\$373,000
Chelsea	12,621	223	144	-35.4%	40	52	30.0%	\$323,250	\$305,000
Cohasset	2,980	29	42	44.8%	110	124	12.7%	\$765,500	\$743,500
Concord	6,947	54	72	33.3%	190	194	2.1%	\$725,000	\$883,500
Danvers	11,135	17	16	-5.9%	279	242	-13.3%	\$405,000	\$405,000

Appendix A Municipal Scorecard, continued

Municipality	Production and Sales (cont.)			Foreclosure Activity					
	Median Single Family Home Selling Price Through June 2016	Percent Change in Median Single Family Sales Price, 2005–June 2016	Percent Change in Median Single Family Sales Price, 2015–June 2016	Petitions to Foreclose, 2015	Petitions to Foreclose, 2016 (Estimate)	Foreclosure Deeds 2015	Foreclosure Deeds 2016 (Estimate)	Percent Change in Petitions to Foreclose, 2015–2016 (Estimate)	Percent Change in Foreclosure Deeds, 2015–2016 (Estimate)
Abington	\$308,500	-11.8%	2.8%	38	40	13	18	5.3%	38.5%
Acton	\$577,500	6.5%	8.8%	10	6	3	2	-40.0%	-33.3%
Amesbury	\$300,000	-14.3%	-6.3%	20	20	7	12	0.0%	71.4%
Andover	\$568,500	-3.4%	-1.3%	8	16	7	0	100.0%	-100.0%
Arlington	\$676,000	34.9%	6.5%	3	12	0	0	300.0%	0.0%
Ashland	\$412,500	-0.9%	6.9%	11	26	7	8	136.4%	14.3%
Avon	\$267,450	-16.4%	2.9%	12	10	3	12	-16.7%	300.0%
Ayer	\$285,500	-14.8%	-9.4%	10	10	6	6	0.0%	0.0%
Bedford	\$650,000	25.0%	0.6%	3	8	1	0	166.7%	-100.0%
Bellingham	\$274,900	-14.1%	-1.8%	38	64	22	18	68.4%	-18.2%
Belmont	\$928,500	29.0%	2.4%	0	8	0	0	800.0%	0.0%
Beverly	\$401,000	3.8%	4.2%	30	14	13	12	-53.3%	-7.7%
Billerica	\$380,000	2.0%	6.1%	52	82	26	14	57.7%	-46.2%
Boston	\$657,496	0.1%	11.0%	159	208	37	68	30.8%	83.8%
Boxborough	\$550,000	-6.1%	-2.7%	2	2	0	2	0.0%	200.0%
Boxford	\$585,000	-10.0%	0.4%	7	16	1	2	128.6%	100.0%
Braintree	\$435,000	13.0%	12.4%	26	40	5	12	53.8%	140.0%
Bridgewater	\$349,500	-9.8%	5.2%	40	42	16	20	5.0%	25.0%
Brockton	\$229,900	-16.4%	4.5%	280	336	94	132	20.0%	40.4%
Brookline	\$1,708,500	52.5%	7.6%	3	6	0	4	100.0%	400.0%
Burlington	\$475,000	15.2%	5.3%	12	22	3	4	83.3%	33.3%
Cambridge	\$1,600,500	139.8%	30.7%	3	4	1	0	33.3%	-100.0%
Canton	\$457,500	-10.5%	-4.5%	9	20	3	2	122.2%	-33.3%
Carlisle	\$789,050	-10.0%	-1.2%	5	4	0	0	-20.0%	0.0%
Carver	\$322,500	-5.1%	10.5%	43	44	15	14	2.3%	-6.7%
Chelmsford	\$379,900	1.7%	1.8%	19	26	10	8	36.8%	-20.0%
Chelsea	\$312,500	-3.3%	2.5%	10	14	3	12	40.0%	300.0%
Cohasset	\$765,000	-0.1%	2.9%	1	8	2	2	700.0%	0.0%
Concord	\$889,000	22.6%	0.6%	4	14	0	2	250.0%	200.0%
Danvers	\$400,000	-1.2%	-1.2%	22	36	14	8	63.6%	-42.9%

Appendix A Municipal Scorecard, continued

Municipality	Production and Sales								
	Total Housing Units (2010 Census)	Units Permitted in 2015	Units Permitted 2016 (Estimate)	% Change 2015 to 2016 (Estimate)	Number of Single Family Home Sales 2015	Number of Single Family Home Sales 2016 (Estimate)	Percent Change in Number of Single Family Sales, 2015–2016 (Estimate)	Median Single Family Home Selling Price 2005	Median Single Family Home Selling Price 2015
Dedham	10,191	14	12	-14.3%	305	258	-15.4%	\$404,500	\$405,000
Dover	1,969	16	30	87.5%	85	116	36.5%	\$1,057,500	\$976,000
Dracut	11,351	49	252	414.3%	277	322	16.2%	\$314,000	\$286,500
Dunstable	1,098	13	10	-23.1%	38	26	-31.6%	\$570,000	\$474,000
Duxbury	5,875	175	92	-47.4%	206	212	2.9%	\$615,500	\$580,000
East Bridgewater	4,906	32	14	-56.3%	129	130	0.8%	\$328,400	\$289,000
Essex	1,600	17	10	-41.2%	41	46	12.2%	\$485,000	\$519,000
Everett	16,715	164	134	-18.3%	114	98	-14.0%	\$350,000	\$307,500
Foxborough	6,895	46	34	-26.1%	182	184	1.1%	\$399,900	\$380,000
Framingham	27,529	284	212	-25.4%	657	520	-20.9%	\$384,000	\$358,000
Franklin	11,394	37	30	-18.9%	280	282	0.7%	\$433,455	\$398,450
Georgetown	3,044	14	14	0.0%	110	100	-9.1%	\$450,000	\$405,000
Gloucester	14,557	33	54	63.6%	213	204	-4.2%	\$389,000	\$370,000
Groton	3,989	19	16	-15.8%	124	124	0.0%	\$472,000	\$431,500
Groveland	2,439	8	6	-25.0%	80	72	-10.0%	\$386,750	\$354,500
Halifax	3,014	14	10	-28.6%	90	60	-33.3%	\$330,000	\$258,500
Hamilton	2,880	5	4	-20.0%	97	104	7.2%	\$525,000	\$494,000
Hanover	4,852	10	14	40.0%	170	166	-2.4%	\$450,000	\$450,000
Hanson	3,589	44	26	-40.9%	113	122	8.0%	\$362,450	\$310,000
Haverhill	25,657	105	92	-12.4%	470	462	-1.7%	\$320,000	\$280,000
Hingham	8,953	23	30	30.4%	289	258	-10.7%	\$665,000	\$729,000
Holbrook	4,274	4	6	50.0%	131	138	5.3%	\$324,450	\$262,000
Holliston	5,087	39	46	17.9%	192	212	10.4%	\$447,500	\$429,000
Hopkinton	5,128	128	180	40.6%	193	186	-3.6%	\$559,000	\$577,200
Hudson	7,998	23	24	4.3%	190	168	-11.6%	\$356,000	\$326,000
Hull	5,762	9	8	-11.1%	143	150	4.9%	\$379,000	\$339,000
Ipswich	6,007	20	16	-20.0%	147	106	-27.9%	\$517,500	\$434,000
Kingston	5,010	59	62	5.1%	170	152	-10.6%	\$383,900	\$363,000
Lakeville	4,177	19	86	352.6%	136	132	-2.9%	\$359,500	\$296,853
Lawrence	27,137	18	18	0.0%	223	242	8.5%	\$247,000	\$210,000

Appendix A Municipal Scorecard, continued

Municipality	Production and Sales (cont.)			Foreclosure Activity					
	Median Single Family Home Selling Price Through June 2016	Percent Change in Median Single Family Sales Price, 2005–June 2016	Percent Change in Median Single Family Sales Price, 2015–June 2016	Petitions to Foreclose, 2015	Petitions to Foreclose, 2016 (Estimate)	Foreclosure Deeds 2015	Foreclosure Deeds 2016 (Estimate)	Percent Change in Petitions to Foreclose, 2015–2016 (Estimate)	Percent Change in Foreclosure Deeds, 2015–2016 (Estimate)
Dedham	\$422,000	4.3%	4.2%	30	20	7	4	-33.3%	-42.9%
Dover	\$1,031,429	-2.5%	5.7%	1	8	1	0	700.0%	-100.0%
Dracut	\$297,000	-5.4%	3.7%	55	54	14	22	-1.8%	57.1%
Dunstable	\$385,000	-32.5%	-18.8%	2	2	3	0	0.0%	-100.0%
Duxbury	\$577,500	-6.2%	-0.4%	15	14	7	2	-6.7%	-71.4%
East Bridgewater	\$294,000	-10.5%	1.7%	29	30	11	6	3.4%	-45.5%
Essex	\$549,990	13.4%	6.0%	1	6	0	0	500.0%	0.0%
Everett	\$345,000	-1.4%	12.2%	17	28	11	8	64.7%	-27.3%
Foxborough	\$388,500	-2.9%	2.2%	20	30	11	6	50.0%	-45.5%
Framingham	\$380,500	-0.9%	6.3%	45	58	18	30	28.9%	66.7%
Franklin	\$405,000	-6.6%	1.6%	26	50	7	10	92.3%	42.9%
Georgetown	\$384,000	-14.7%	-5.2%	17	16	6	8	-5.9%	33.3%
Gloucester	\$386,000	-0.8%	4.3%	21	32	7	6	52.4%	-14.3%
Groton	\$423,200	-10.3%	-1.9%	13	20	3	4	53.8%	33.3%
Groveland	\$380,000	-1.7%	7.2%	7	6	6	6	-14.3%	0.0%
Halifax	\$329,750	-0.1%	27.6%	19	8	6	6	-57.9%	0.0%
Hamilton	\$547,000	4.2%	10.7%	5	4	1	0	-20.0%	-100.0%
Hanover	\$440,000	-2.2%	-2.2%	21	18	5	6	-14.3%	20.0%
Hanson	\$315,000	-13.1%	1.6%	20	34	16	12	70.0%	-25.0%
Haverhill	\$299,000	-6.6%	6.8%	71	56	27	46	-21.1%	70.4%
Hingham	\$740,000	11.3%	1.5%	20	26	3	2	30.0%	-33.3%
Holbrook	\$265,000	-18.3%	1.1%	24	42	17	16	75.0%	-5.9%
Holliston	\$423,450	-5.4%	-1.3%	15	16	4	6	6.7%	50.0%
Hopkinton	\$642,000	14.8%	11.2%	12	26	4	6	116.7%	50.0%
Hudson	\$340,000	-4.5%	4.3%	23	20	7	8	-13.0%	14.3%
Hull	\$385,000	1.6%	13.6%	24	34	9	16	41.7%	77.8%
Ipswich	\$520,000	0.5%	19.8%	9	18	2	8	100.0%	300.0%
Kingston	\$382,500	-0.4%	5.4%	22	24	6	14	9.1%	133.3%
Lakeville	\$347,000	-3.5%	16.9%	18	22	13	8	22.2%	-38.5%
Lawrence	\$228,000	-7.7%	8.6%	54	62	18	32	14.8%	77.8%

Appendix A Municipal Scorecard, continued

Municipality	Production and Sales								
	Total Housing Units (2010 Census)	Units Permitted in 2015	Units Permitted 2016 (Estimate)	% Change 2015 to 2016 (Estimate)	Number of Single Family Home Sales 2015	Number of Single Family Home Sales 2016 (Estimate)	Percent Change in Number of Single Family Sales, 2015–2016 (Estimate)	Median Single Family Home Selling Price 2005	Median Single Family Home Selling Price 2015
Lexington	12,019	87	86	-1.1%	437	362	-17.2%	\$705,000	\$925,000
Lincoln	2,617	5	6	20.0%	57	56	-1.8%	\$1,155,000	\$945,000
Littleton	3,477	53	42	-20.8%	112	104	-7.1%	\$452,500	\$428,250
Lowell	41,431	58	46	-20.7%	490	522	6.5%	\$274,900	\$241,750
Lynn	35,776	20	174	770.0%	602	612	1.7%	\$290,000	\$260,500
Lynnfield	4,354	24	22	-8.3%	163	96	-41.1%	\$560,000	\$575,000
Malden	25,161	10	12	20.0%	258	228	-11.6%	\$365,000	\$359,700
Manchester	2,394	10	2	-80.0%	67	38	-43.3%	\$725,000	\$783,500
Marblehead	8,838	5	10	100.0%	285	248	-13.0%	\$581,500	\$590,000
Marlborough	16,416	27	26	-3.7%	259	282	8.9%	\$359,950	\$325,000
Marshfield	10,940	35	34	-2.9%	305	302	-1.0%	\$432,000	\$389,000
Maynard	4,447	15	36	140.0%	125	134	7.2%	\$357,450	\$335,000
Medfield	4,237	74	54	-27.0%	180	136	-24.4%	\$617,500	\$662,750
Medford	24,046	12	18	50.0%	337	250	-25.8%	\$399,900	\$450,000
Medway	4,613	31	16	-48.4%	152	158	3.9%	\$436,570	\$379,900
Melrose	11,751	40	174	335.0%	270	260	-3.7%	\$428,950	\$500,000
Merrimac	2,555	26	28	7.7%	84	76	-9.5%	\$372,500	\$334,839
Methuen	18,340	116	124	6.9%	506	418	-17.4%	\$328,000	\$278,250
Middleborough	9,023	201	142	-29.4%	177	200	13.0%	\$339,900	\$297,000
Middleton	3,045	27	46	70.4%	73	80	9.6%	\$582,500	\$543,000
Millis	3,158	13	20	53.8%	88	94	6.8%	\$386,500	\$354,500
Milton	9,700	5	16	220.0%	305	308	1.0%	\$475,000	\$565,000
Nahant	1,677	0	0	0.0%	44	28	-36.4%	\$557,750	\$522,500
Natick	14,121	30	44	46.7%	363	358	-1.4%	\$459,450	\$521,000
Needham	11,122	99	100	1.0%	412	400	-2.9%	\$663,750	\$840,000
Newbury	2,936	19	12	-36.8%	88	80	-9.1%	\$452,500	\$440,000
Newburyport	8,264	24	20	-16.7%	221	202	-8.6%	\$456,175	\$514,000
Newton	32,648	27	290	974.1%	670	596	-11.0%	\$760,000	\$1,028,000
Norfolk	3,121	57	38	-33.3%	139	142	2.2%	\$505,000	\$480,000

Appendix A Municipal Scorecard, continued

Municipality	Production and Sales (cont.)			Foreclosure Activity					
	Median Single Family Home Selling Price Through June 2016	Percent Change in Median Single Family Sales Price, 2005–June 2016	Percent Change in Median Single Family Sales Price, 2015–June 2016	Petitions to Foreclose, 2015	Petitions to Foreclose, 2016 (Estimate)	Foreclosure Deeds 2015	Foreclosure Deeds 2016 (Estimate)	Percent Change in Petitions to Foreclose, 2015–2016 (Estimate)	Percent Change in Foreclosure Deeds, 2015–2016 (Estimate)
Lexington	\$950,000	34.8%	2.7%	17	16	2	2	-5.9%	0.0%
Lincoln	\$1,157,500	0.2%	22.5%	1	4	1	0	300.0%	0.0%
Littleton	\$423,750	-6.4%	-1.1%	16	18	3	12	12.5%	300.0%
Lowell	\$242,500	-11.8%	0.3%	120	142	40	42	18.3%	5.0%
Lynn	\$275,000	-5.2%	5.6%	126	160	44	48	27.0%	9.1%
Lynnfield	\$587,000	4.8%	2.1%	10	28	4	4	180.0%	0.0%
Malden	\$370,000	1.4%	2.9%	29	56	6	10	93.1%	66.7%
Manchester	\$900,000	24.1%	14.9%	2	0	0	4	-100.0%	400.0%
Marblehead	\$595,500	2.4%	0.9%	12	12	0	12	0.0%	1200.0%
Marlborough	\$336,000	-6.7%	3.4%	40	44	9	16	10.0%	77.8%
Marshfield	\$365,000	-15.5%	-6.2%	44	68	12	10	54.5%	-16.7%
Maynard	\$330,000	-7.7%	-1.5%	12	14	5	4	16.7%	-20.0%
Medfield	\$676,500	9.6%	2.1%	6	8	3	0	33.3%	-100.0%
Medford	\$487,500	21.9%	8.3%	22	28	6	6	27.3%	0.0%
Medway	\$385,000	-11.8%	1.3%	15	18	6	8	20.0%	33.3%
Melrose	\$523,250	22.0%	4.7%	10	14	1	4	40.0%	300.0%
Merrimac	\$381,389	2.4%	13.9%	11	4	6	8	-63.6%	33.3%
Methuen	\$290,000	-11.6%	4.2%	81	86	26	38	6.2%	46.2%
Middleborough	\$273,250	-19.6%	-8.0%	53	80	25	22	50.9%	-12.0%
Middleton	\$622,750	6.9%	14.7%	3	10	3	2	233.3%	-33.3%
Millis	\$375,000	-3.0%	5.8%	11	10	6	4	-9.1%	-33.3%
Milton	\$632,500	33.2%	11.9%	25	30	4	6	20.0%	50.0%
Nahant	\$479,250	-14.1%	-8.3%	3	8	0	0	166.7%	0.0%
Natick	\$526,000	14.5%	1.0%	13	24	9	8	84.6%	-11.1%
Needham	\$829,500	25.0%	-1.3%	9	16	3	4	77.8%	33.3%
Newbury	\$428,750	-5.2%	-2.6%	8	6	2	0	-25.0%	-100.0%
Newburyport	\$494,000	8.3%	-3.9%	10	20	1	4	100.0%	300.0%
Newton	\$1,100,000	44.7%	7.0%	19	24	2	4	26.3%	100.0%
Norfolk	\$490,000	-3.0%	2.1%	10	18	3	2	80.0%	-33.3%

Appendix A Municipal Scorecard, continued

Municipality	Production and Sales								
	Total Housing Units (2010 Census)	Units Permitted in 2015	Units Permitted 2016 (Estimate)	% Change 2015 to 2016 (Estimate)	Number of Single Family Home Sales 2015	Number of Single Family Home Sales 2016 (Estimate)	Percent Change in Number of Single Family Sales, 2015–2016 (Estimate)	Median Single Family Home Selling Price 2005	Median Single Family Home Selling Price 2015
North Andover	10,964	243	22	-90.9%	292	286	-2.1%	\$581,250	\$499,000
North Reading	5,633	20	32	60.0%	174	160	-8.0%	\$480,000	\$472,700
Norwell	3,675	23	34	47.8%	156	132	-15.4%	\$548,000	\$548,511
Norwood	12,479	56	24	-57.1%	227	248	9.3%	\$404,000	\$411,000
Peabody	22,220	24	38	58.3%	413	328	-20.6%	\$385,000	\$365,000
Pembroke	6,552	21	22	4.8%	207	166	-19.8%	\$350,050	\$330,000
Pepperell	4,348	15	24	60.0%	107	140	30.8%	\$365,000	\$310,000
Plainville	3,482	58	34	-41.4%	85	64	-24.7%	\$379,000	\$332,000
Plymouth	24,800	241	302	25.3%	713	694	-2.7%	\$350,000	\$319,000
Plympton	1,043	4	22	450.0%	43	24	-44.2%	\$400,000	\$380,000
Quincy	42,838	208	86	-58.7%	592	470	-20.6%	\$375,000	\$390,000
Randolph	12,008	15	16	6.7%	304	276	-9.2%	\$350,000	\$284,900
Reading	9,617	102	26	-74.5%	261	222	-14.9%	\$438,000	\$512,000
Revere	22,100	53	24	-54.7%	199	192	-3.5%	\$340,000	\$320,000
Rockland	7,051	11	10	-9.1%	163	168	3.1%	\$320,000	\$270,000
Rockport	4,223	11	10	-9.1%	76	72	-5.3%	\$445,000	\$475,000
Rowley	2,253	3	0	-100.0%	61	50	-18.0%	\$466,250	\$449,900
Salem	19,130	11	8	-27.3%	222	230	3.6%	\$353,500	\$341,500
Salisbury	4,550	34	30	-11.8%	74	76	2.7%	\$335,000	\$307,500
Saugus	10,775	11	18	63.6%	301	246	-18.3%	\$375,000	\$335,000
Scituate	8,035	49	34	-30.6%	303	256	-15.5%	\$525,000	\$490,000
Sharon	6,456	10	8	-20.0%	203	222	9.4%	\$455,000	\$506,000
Sherborn	1,495	3	2	-33.3%	67	98	46.3%	\$750,000	\$743,452
Shirley	2,427	18	18	0.0%	59	50	-15.3%	\$340,000	\$310,000
Somerville	33,720	604	62	0.0%	105	78	-25.7%	\$428,500	\$625,000
Stoneham	9,458	10	8	-20.0%	197	204	3.6%	\$420,000	\$450,000
Stoughton	10,787	21	90	328.6%	262	262	0.0%	\$353,750	\$310,000
Stow	2,526	6	12	100.0%	70	88	25.7%	\$493,750	\$460,500
Sudbury	5,951	28	24	-14.3%	261	216	-17.2%	\$737,000	\$675,000

Appendix A Municipal Scorecard, continued

Municipality	Production and Sales (cont.)			Foreclosure Activity					
	Median Single Family Home Selling Price Through June 2016	Percent Change in Median Single Family Sales Price, 2005–June 2016	Percent Change in Median Single Family Sales Price, 2015–June 2016	Petitions to Foreclose, 2015	Petitions to Foreclose, 2016 (Estimate)	Foreclosure Deeds 2015	Foreclosure Deeds 2016 (Estimate)	Percent Change in Petitions to Foreclose, 2015–2016 (Estimate)	Percent Change in Foreclosure Deeds, 2015–2016 (Estimate)
North Andover	\$490,000	-15.7%	-1.8%	20	30	8	10	50.0%	25.0%
North Reading	\$480,000	0.0%	1.5%	20	12	3	10	-40.0%	233.3%
Norwell	\$610,000	11.3%	11.2%	12	14	6	2	16.7%	0.0%
Norwood	\$410,000	1.5%	-0.2%	21	42	2	10	100.0%	400.0%
Peabody	\$380,000	-1.3%	4.1%	53	80	19	14	50.9%	-26.3%
Pembroke	\$340,000	-2.9%	3.0%	47	36	14	18	-23.4%	28.6%
Pepperell	\$331,250	-9.2%	6.9%	16	20	5	8	25.0%	60.0%
Plainville	\$376,000	-0.8%	13.3%	12	12	3	4	0.0%	33.3%
Plymouth	\$316,000	-9.7%	-0.9%	161	176	52	70	9.3%	34.6%
Plympton	\$316,000	-21.0%	-16.8%	8	8	3	4	0.0%	33.3%
Quincy	\$406,000	8.3%	4.1%	64	66	13	10	3.1%	-23.1%
Randolph	\$292,500	-16.4%	2.7%	73	114	26	28	56.2%	7.7%
Reading	\$519,000	18.5%	1.4%	14	14	3	14	0.0%	366.7%
Revere	\$350,000	2.9%	9.4%	31	60	10	16	93.5%	60.0%
Rockland	\$271,276	-15.2%	0.5%	30	34	16	18	13.3%	12.5%
Rockport	\$440,000	-1.1%	-7.4%	8	6	2	2	-25.0%	0.0%
Rowley	\$392,500	-15.8%	-12.8%	5	4	0	2	-20.0%	200.0%
Salem	\$345,000	-2.4%	1.0%	29	32	9	22	10.3%	144.4%
Salisbury	\$299,450	-10.6%	-2.6%	13	12	8	6	-7.7%	-25.0%
Saugus	\$367,900	-1.9%	9.8%	35	52	6	14	48.6%	133.3%
Scituate	\$496,000	-5.5%	1.2%	24	20	8	10	-16.7%	25.0%
Sharon	\$525,000	15.4%	3.8%	8	18	3	8	125.0%	166.7%
Sherborn	\$714,000	-4.8%	-4.0%	4	4	2	2	0.0%	0.0%
Shirley	\$293,000	-13.8%	-5.5%	10	10	5	4	0.0%	-20.0%
Somerville	\$635,000	48.2%	1.6%	6	8	1	0	33.3%	-100.0%
Stoneham	\$465,125	10.7%	3.4%	15	10	4	2	-33.3%	-50.0%
Stoughton	\$327,000	-7.6%	5.5%	43	58	13	18	34.9%	38.5%
Stow	\$443,000	-10.3%	-3.8%	4	4	1	0	0.0%	0.0%
Sudbury	\$694,700	-5.7%	2.9%	8	18	4	2	125.0%	-50.0%

Appendix A Municipal Scorecard, continued

Municipality	Production and Sales								
	Total Housing Units (2010 Census)	Units Permitted in 2015	Units Permitted 2016 (Estimate)	% Change 2015 to 2016 (Estimate)	Number of Single Family Home Sales 2015	Number of Single Family Home Sales 2016 (Estimate)	Percent Change in Number of Single Family Sales, 2015–2016 (Estimate)	Median Single Family Home Selling Price 2005	Median Single Family Home Selling Price 2015
Swampscott	5,888	139	98	-29.5%	195	152	-22.1%	\$516,150	\$450,000
Tewksbury	10,848	76	80	5.3%	294	274	-6.8%	\$380,000	\$365,000
Topsfield	2,175	3	6	100.0%	85	84	-1.2%	\$531,240	\$507,000
Townsend	3,385	20	20	0.0%	128	96	-25.0%	\$288,950	\$252,150
Tyngsborough	4,206	37	24	-35.1%	119	102	-14.3%	\$384,950	\$360,000
Wakefield	10,500	12	16	33.3%	242	214	-11.6%	\$430,000	\$455,500
Walpole	9,040	25	32	28.0%	252	262	4.0%	\$462,500	\$465,000
Waltham	24,926	43	54	25.6%	390	382	-2.1%	\$437,000	\$469,500
Wareham	12,256	26	40	53.8%	387	402	3.9%	\$270,000	\$215,000
Watertown	15,584	389	102	-73.8%	102	100	-2.0%	\$465,000	\$559,500
Wayland	5,021	78	26	-66.7%	195	200	2.6%	\$600,000	\$689,250
Wellesley	9,189	95	92	-3.2%	396	328	-17.2%	\$971,250	\$1,177,250
Wenham	1,430	8	6	-25.0%	61	60	-1.6%	\$521,950	\$519,000
West Bridgewater	2,669	15	16	6.7%	80	88	10.0%	\$350,000	\$297,250
West Newbury	1,580	23	14	-39.1%	58	44	-24.1%	\$480,000	\$528,500
Westford	7,876	45	24	-46.7%	240	218	-9.2%	\$515,000	\$482,500
Weston	4,008	25	6	-76.0%	151	126	-16.6%	\$1,200,000	\$1,350,000
Westwood	5,431	23	20	-13.0%	193	190	-1.6%	\$608,000	\$655,000
Weymouth	23,480	102	58	-43.1%	579	522	-9.8%	\$345,000	\$330,000
Whitman	5,522	24	28	16.7%	122	152	24.6%	\$315,450	\$274,500
Wilmington	7,808	46	20	-56.5%	245	262	6.9%	\$385,000	\$410,000
Winchester	7,986	45	44	-2.2%	269	228	-15.2%	\$735,500	\$918,000
Winthrop	8,320	82	50	-39.0%	101	108	6.9%	\$380,000	\$382,000
Woburn	16,309	43	36	-16.3%	353	272	-22.9%	\$390,000	\$405,000
Wrentham	3,869	48	62	29.2%	149	124	-16.8%	\$406,000	\$430,000

Appendix A Municipal Scorecard, continued

Municipality	Production and Sales (cont.)			Foreclosure Activity					
	Median Single Family Home Selling Price Through June 2016	Percent Change in Median Single Family Sales Price, 2005–June 2016	Percent Change in Median Single Family Sales Price, 2015–June 2016	Petitions to Foreclose, 2015	Petitions to Foreclose, 2016 (Estimate)	Foreclosure Deeds 2015	Foreclosure Deeds 2016 (Estimate)	Percent Change in Petitions to Foreclose, 2015–2016 (Estimate)	Percent Change in Foreclosure Deeds, 2015–2016 (Estimate)
Swampscott	\$470,000	-8.9%	4.4%	10	28	2	6	180.0%	200.0%
Tewksbury	\$380,000	0.0%	4.1%	39	50	11	16	28.2%	45.5%
Topsfield	\$589,350	10.9%	16.2%	5	10	3	4	100.0%	33.3%
Townsend	\$240,500	-16.8%	-4.6%	21	14	9	22	-33.3%	144.4%
Tyngsborough	\$379,900	-1.3%	5.5%	8	22	6	10	175.0%	66.7%
Wakefield	\$472,000	9.8%	3.6%	16	12	3	2	-25.0%	-33.3%
Walpole	\$460,000	-0.5%	-1.1%	22	28	10	6	27.3%	-40.0%
Waltham	\$510,000	16.7%	8.6%	24	28	4	10	16.7%	150.0%
Wareham	\$232,000	-14.1%	7.9%	90	68	48	74	-24.4%	54.2%
Watertown	\$589,000	26.7%	5.3%	6	8	2	0	33.3%	-100.0%
Wayland	\$652,500	8.8%	-5.3%	10	2	6	0	-80.0%	-100.0%
Wellesley	\$1,207,500	24.3%	2.6%	9	4	1	2	-55.6%	100.0%
Wenham	\$572,500	9.7%	10.3%	2	0	1	0	-100.0%	-100.0%
West Bridgewater	\$290,000	-17.1%	-2.4%	8	22	3	8	175.0%	166.7%
West Newbury	\$553,000	15.2%	4.6%	3	4	2	0	33.3%	0.0%
Westford	\$469,000	-8.9%	-2.8%	14	16	5	2	14.3%	-60.0%
Weston	\$1,320,000	10.0%	-2.2%	4	4	0	2	0.0%	0.0%
Westwood	\$695,000	14.3%	6.1%	9	6	1	2	-33.3%	100.0%
Weymouth	\$346,000	0.3%	4.8%	81	74	39	26	-8.6%	-33.3%
Whitman	\$292,500	-7.3%	6.6%	29	34	10	20	17.2%	100.0%
Wilmington	\$402,000	4.4%	-2.0%	31	38	13	8	22.6%	-38.5%
Winchester	\$920,000	25.1%	0.2%	8	10	0	0	25.0%	0.0%
Winthrop	\$383,750	1.0%	0.5%	12	14	2	0	16.7%	-100.0%
Woburn	\$424,250	8.8%	4.8%	23	38	7	4	65.2%	-42.9%
Wrentham	\$455,000	12.1%	5.8%	16	18	5	6	12.5%	20.0%

Sources: Data on the number of sales and median sales prices, along with data on foreclosure petitions, auctions and deeds, were provided by the Warren Group. Foreclosure data represent the number of foreclosures on single-family, 2-family, 3-family, 4 or more family, and condominium properties.

Data on building permits are taken from the U.S. Census Building Permit Survey.

2016 estimates for home sales were calculated based on number of sales through the end of the second quarter of 2016 multiplied by 2.

2016 estimates for permit data were calculated based on the sum of all permits in a given town through June multiplied by 2.

NOTES:



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