
Millis Housing Production Plan

Funding provided by the Commonwealth of
Massachusetts Planning Assistance Toward
Housing Program and the District Local Technical
Assistance Program

November 2019

Prepared for

Town of Millis
Veterans Memorial Building
900 Main Street
Millis, MA 02054

<http://www.millis.org>

Contact: Michael Guzinski, Town Administrator
Telephone: 508.376.7040 ext. 101
Email: mguzinski@millisma.gov

Prepared by

Metropolitan Area Planning Council
60 Temple Place, 6th Floor
Boston, MA 02111
Telephone: 617.451.2770

www.mapc.org



Contents

Demographics5

Housing Stock..... 20

Housing Affordability 37

Physical and Natural Constraints..... 48

Regulatory Constraints 54

Appendix A 68

Appendix B..... 69

Appendix C 71

Millis Housing Production Plan Health Addendum 71

Prepared for the Town of Millis..... 71

June 2016 Millis Housing Production Plan Health Addendum 71

 The links between Housing & Health 72

Millis Profile 73

 Key Summary: 73

 Key Demographic Factors 73

 Health Metrics 74

 Top Housing Related Health Priorities 74

 Stakeholder Engagement..... 74

 Housing Related Health Metrics in Millis 76

 Children and Youth 76

 Senior health 77

 Housing Determinants..... 77

 Recommendations 80

Primary Data Source Description 82

Comprehensive Housing Needs Assessment

An analysis of local demographic data and housing stock reveals key characteristics and trends in Millis that help explain housing need and demand. In order to understand how the Town compares to its neighbors, Millis data is compared to the SouthWest Advisory Planning Committee (SWAP), which includes Bellingham, Dover, Franklin, Hopkinton, Medway, Milford, Millis, Norfolk, Sherborn, and Wrentham, as well as two neighboring municipalities Medfield and Holliston, and the Commonwealth. Please see Figure 1 for a map. Ultimately, this section provides the framework for the housing production goals and strategies to address local housing concerns included later in this document.

Key Findings

MAPC projects that between 2010 and 2030 the total population in Millis will decline by approximately 8%, however the number of households will increase 5%, due in part to a projected decrease in household size. As a result, additional housing production will be needed. This assessment addresses the housing need and demand by age, income, household type, and household size. Overall, the population in Millis is projected to age, with the share of householders aged 60 years and older growing from less than one-third of total householders in 2010 to nearly one-half of householders in 2030. As the share of seniors grows, Millis will need to consider options for changing housing preferences among that cohort, as well of younger householders entering the market. MAPC projects that Millis will need 81 new multifamily units and 37 new single family units between 2010 and 2020. In addition to considerations on type of units, Millis will need to consider affordability in the town. According to the U.S. Census Bureau, an estimated one-third of households are cost-burdened, meaning they spend more than 30% of their income on housing, and nearly half of the cost-burdened households spend more than 50% on housing. Currently 3.8% of housing in Millis is included in the Subsidized Housing Inventory, which is short of 10% statutory minimum.

Data Sources

This comprehensive housing needs and demand assessment for Millis includes a variety of data sources that reflect historic, current, and forecasted population trends. Data sources include the U.S. Census Bureau, the U.S. Department of Housing and Development (HUD), the Massachusetts Department of Education, the Warren Group, and the Metropolitan Area Planning Council (MAPC).

The decennial Census reflects a full count of the population on April 1 of the year in which the census is taken and reflects the most accurate population and widely available data in the United States. The Census Bureau's Population Estimates Program (PEP) utilizes current data on births, deaths, and migration to calculate population change since the most recent decennial census and produce a time series of estimates of population, demographic components of change, and housing units.¹

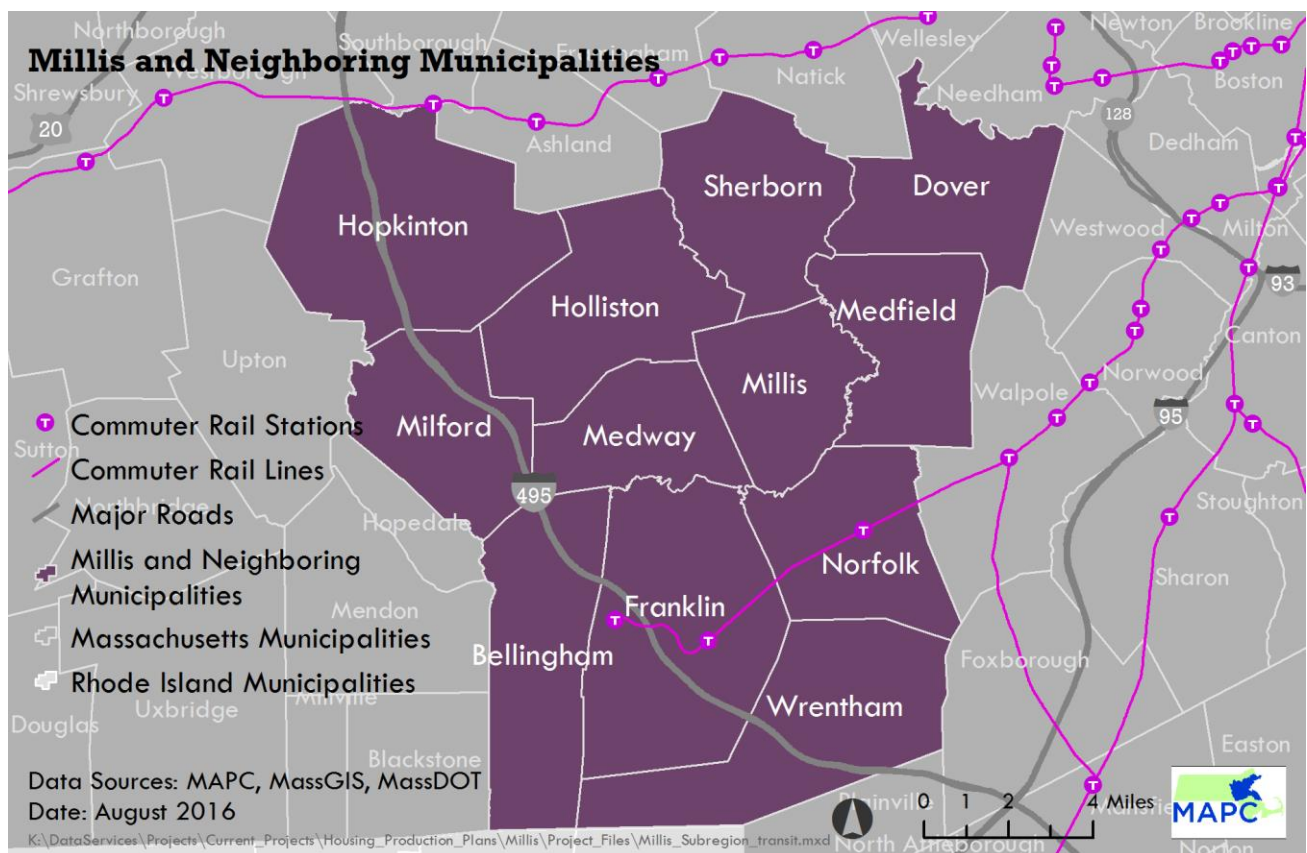
¹ <https://www.census.gov/popest/about/index.html>

The American Community Survey (ACS) is a national survey that uses continuous measurement methods. In this survey, a series of monthly samples produce annual estimates.² ACS estimates are released as five-year averages. ACS estimates are considered appropriate when the margin of error is less than 10%.

The HUD Consolidated Planning/Comprehensive Housing Affordability Strategy (CHAS) dataset is a special tabulation of ACS data, most recently based on ACS 2008-2012 estimates. This dataset is utilized primarily to cross-tabulate household cost-burden status with household type and income status.

MAPC prepared population and housing demand projections for 164 cities and towns within the Metropolitan Boston area. Both sets of projections include two scenarios: a Status Quo scenario based on continuation of recent trends in migration, housing occupancy, and location preference; and a Stronger Region scenario that assumes increased attraction and retention of young workers and slightly increased preference for urban settings and multi-family housing. The Status Quo scenario found that continuation of current levels of in-migration and housing production would lead to a declining workforce and economic stagnation over the coming decades. In contrast, the increased migration rates of the Stronger Region scenario could fuel a job growth increase of 7% between 2010 and 2030. As a result, MAPC recommends use of the Stronger Region scenario as the basis for housing planning.

Figure 1: Regional Context Map for Millis and Neighboring Municipalities



² <https://www.census.gov/programs-surveys/acs/methodology.html>

Demographics

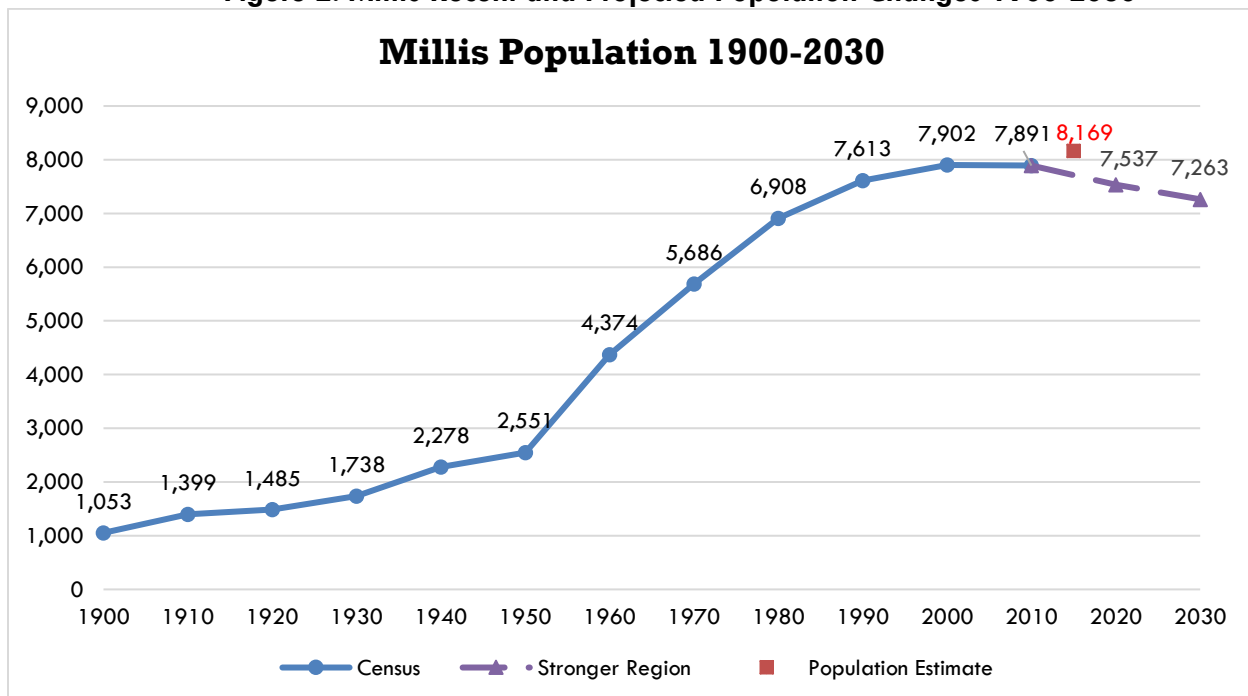
This Housing Production Plan is grounded in a thorough examination of Millis's demographic composition. An analysis of the current population, household composition, race and ethnicity, and educational attainment are some indicators that provide insight into existing housing need and demand. Projections of the Town's future residential composition are also used to inform housing planning efforts.

Population

The Millis population increased each decade through the 20th century, but remained relatively stable from 2000 to 2010, declining less than 1% from 7,902 residents in 2000 to 7,891 residents in 2010, as shown in Figure 2. MAPC projects that decline will continue, at a steeper rate, between 2010 and 2020 and between 2020 and 2030. The projected population in 2020 is 7,537 residents and 7,263 residents in 2030, declines of -4.5% and -3.6% respectively.

In 2015 the U.S. Census Bureau estimated a population of 8,169 residents in Millis (8,144 in 2017). This estimate diverges from MAPC's projected decline. The difference between the Census estimate and MAPC projections can be explained by different assumptions about household size, which are discussed in the Household Composition section.

Figure 2: Millis Recent and Projected Population Changes 1900-2030



In addition to a changing population size, MAPC projects a changing population composition by age between 2010 and 2030. Overall, the population is expected to age, as shown in Figure 3. The 5-19 year old cohort is projected to decrease from 22% of the total population in 2010 to only 15% of the

population by 2030. Likewise, the 35-49 year old and 50-64 year old cohorts will decrease overall. The 20-34 year old cohort will increase slightly from 14% of the population in 2010 to 15% in 2030. The population over 65 years old will increase from 13% of the population to 28%.

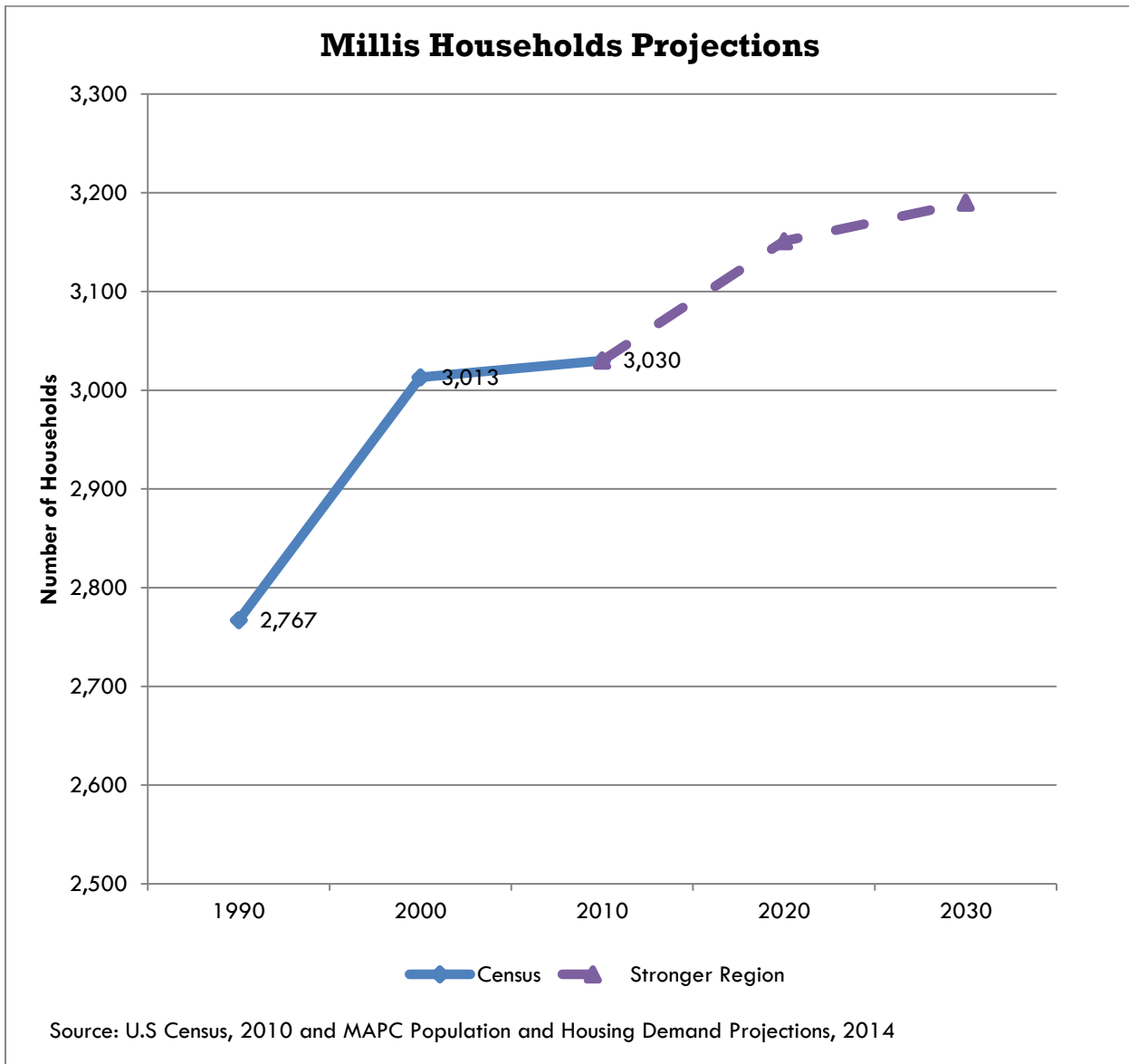
Figure 3: Millis Population by Age, 1990-2030



Household Composition

More than population, the number and type of households (and their spending power) within a community correlate to unit demand; each household resides in one dwelling unit, regardless of the number of household members. As of the 2010 Census, Millis is home to 3,030 households (3,100 according to 2013-2017 ACS data), or an average of 2.59 persons per household. As Figure 4 shows, the total number of households increased by 246 households – 8.9% – from 1990 to 2000 and then by 17 households – less than 1% – from 2000 to 2010. Going forward, projections show a continued increase in households in the Stronger Region scenario, based on demographic projections. By 2030, Millis is projected to have added 160 households, a 5% increase from 2010. Due to continued declines in household size, the number of households is expected to grow faster than population. This corresponds to trends in the broader MAPC region and the Commonwealth.

Figure 4: Millis Households Projections 2010-2030



Household Size

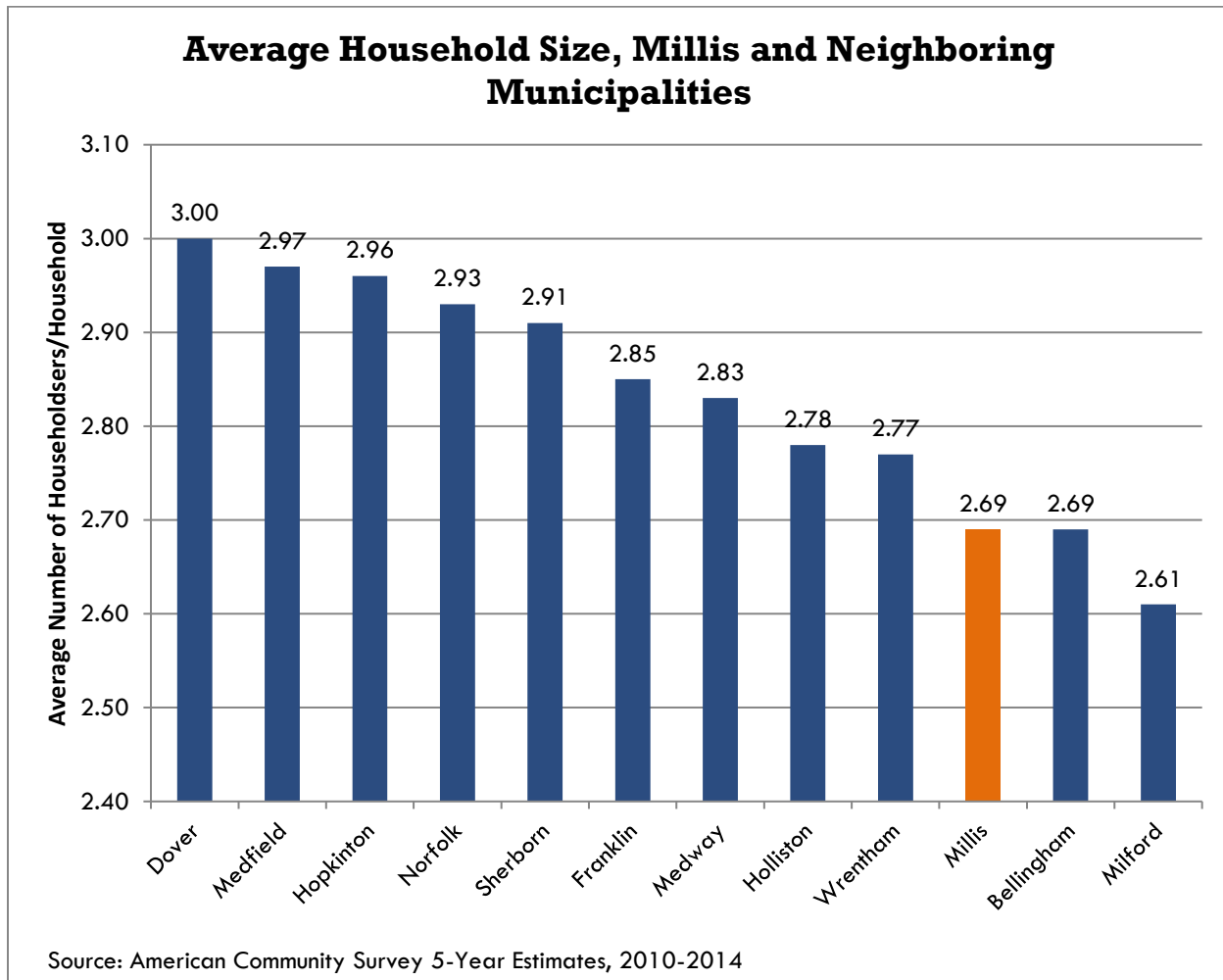
Between 2000 and 2010 average household size, the number of persons per housing unit, decreased slightly from 2.62 persons per housing unit in 2000 to 2.59 in 2010. As shown in Figure 5, owner-occupied households in Millis have a higher average household size compared to renter-occupied households. The average household size of owner-occupied households in 2010 was 2.75, whereas the average renter-occupied household is 1.96 persons. MAPC projects that overall household size will decrease to 2.38 in 2020 and 2.26 in 2030.

Figure 5: Millis Average Household Size by Tenure, 2000-2010

Year	Overall Household Size	Owner-Occupied Household Size	Renter-Occupied Household Size
2000	2.62	2.81	1.99
2010	2.59	2.75	1.96
2020	2.38	--	--
2030	2.26	--	--
Source: U.S. Census 2000, 2010, and MAPC Population and Housing Demand Projections, 2014			

Although MAPC predicts a decreasing average household size, the American Community Survey (ACS) 5-Year Estimates for 2010-2014 show an increase in average household size at 2.69 for Millis. (The 2013-2017 ACS data shows an average household size of 2.61 for all households; 2.76 for owner-occupied households; and 1.91 for renter-occupied households. These figures are within the margin of error for the 2010-2014 data). This difference helps to explain why the Census Population Estimate for 2015 shows an increase in total population in Millis, while MAPC projections for 2010-2020 show a decrease in total population. Figure 6 shows that compared to its neighboring municipalities, Millis is tied for the second-lowest household size.

Figure 6: Average Household Size, Millis and Neighboring Municipalities



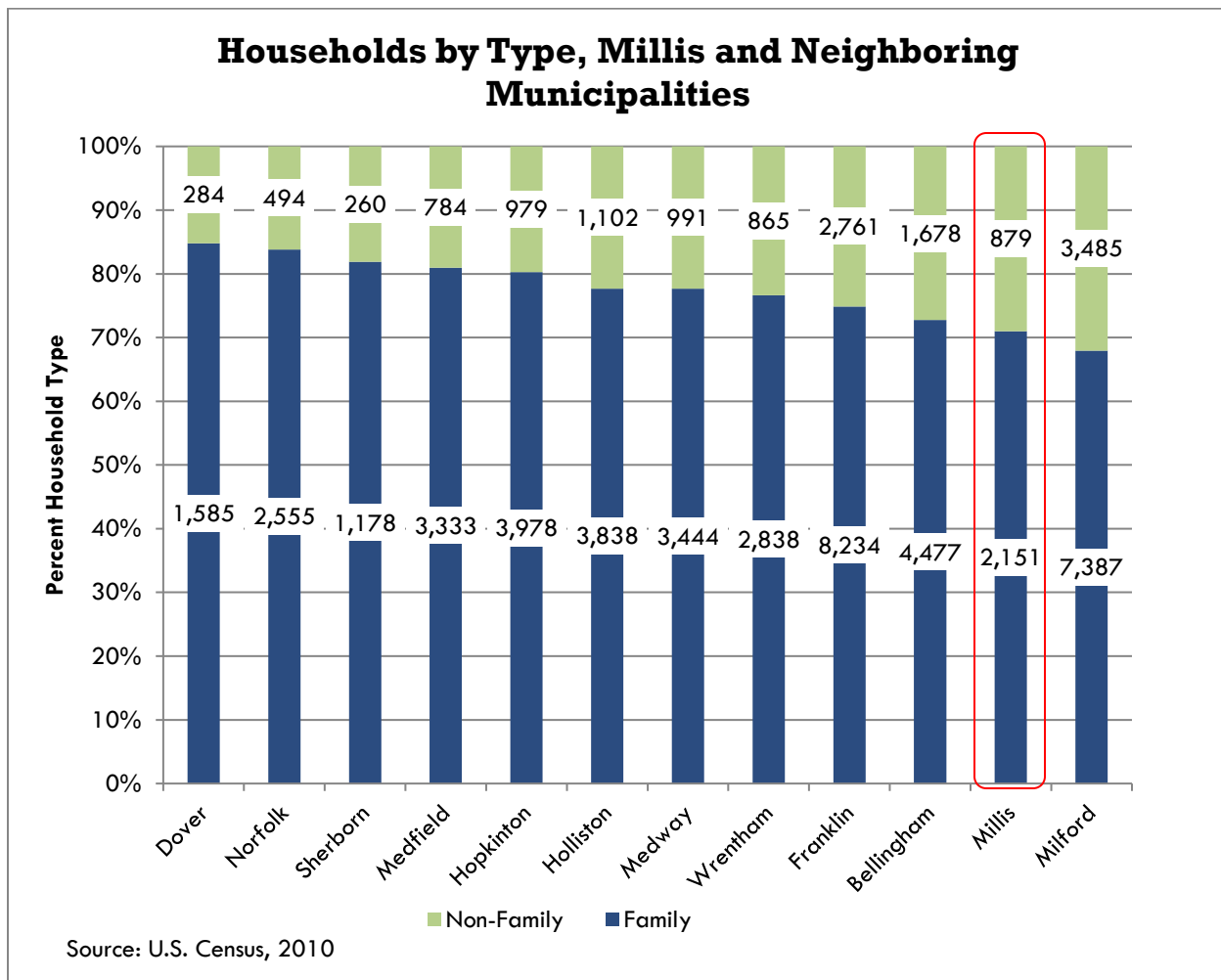
Household Types

Different household types typically have different housing needs and preferences. For example, a married couple with children may require a larger dwelling unit than an individual living alone. As householders age or retire, they may wish to downsize from a larger housing to a smaller one that requires less maintenance or is more affordable on a fixed-income. Younger people may want a small unit to live in or one with several bedrooms so that they can live with roommates. A municipality's composition of household types can indicate how well suited the existing housing inventory is to residents.

The 3,030 households in Millis can be divided into families and non-families. The former includes any household with two or more related (by blood or marriage) persons living together, and the latter includes single person households and pairs or groups of unrelated people living together.

In Millis, approximately 70% of households are family households. Compared to neighboring municipalities, as shown in Figure 7, Millis has the second lowest percentage of family households.

Figure 7: Households by Type, Millis and Neighboring Municipalities

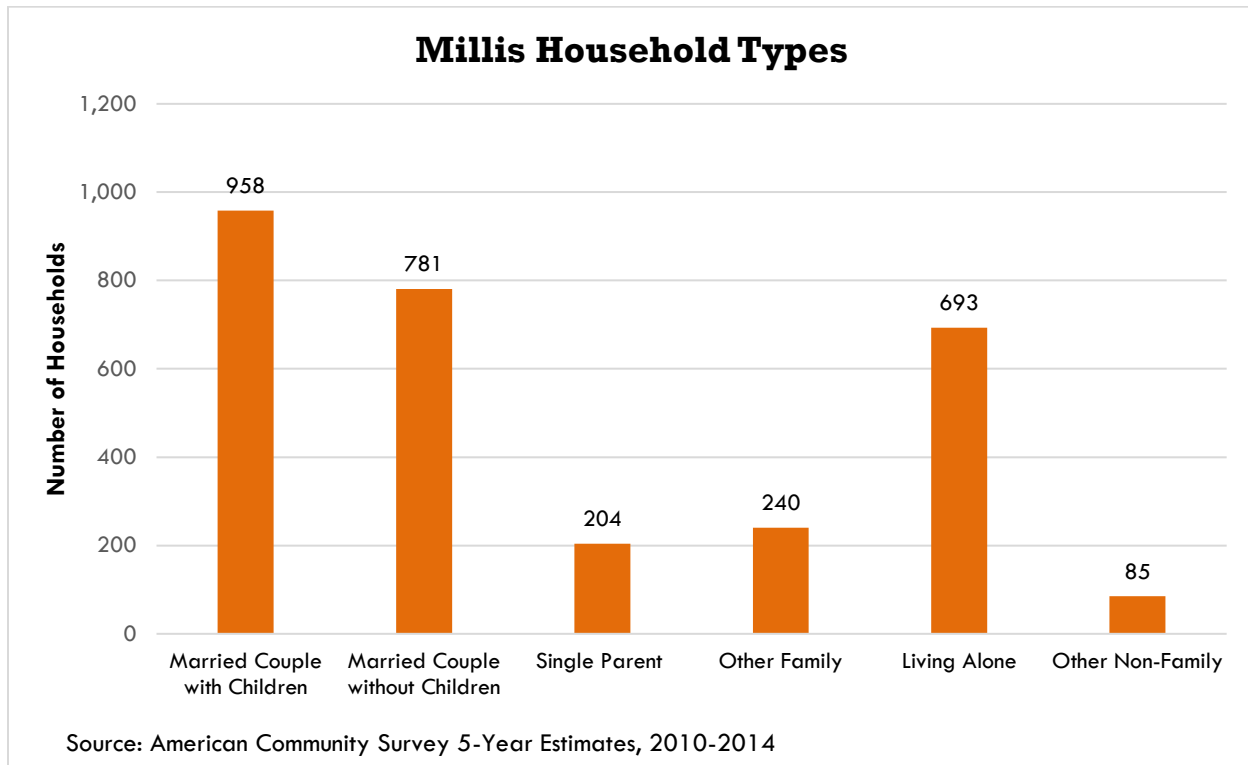


As Figure 8 shows, individuals living alone account for the majority of non-family households in Millis (693 out of 778, based on ACS 2010-2014 data).

Married couple households account for 58% of total households. Households with children (married couple and single parent) account for 39% of total households. Only 8% of households fall into the other-family category and 3% fall into the other-non family category.

Data from the 2013-2017 ACS show that 78% of the households are married couples, 7% with a female householder, 3% with a male householder, and 13% were non-family households.

Figure 8: Millis Households by Type³



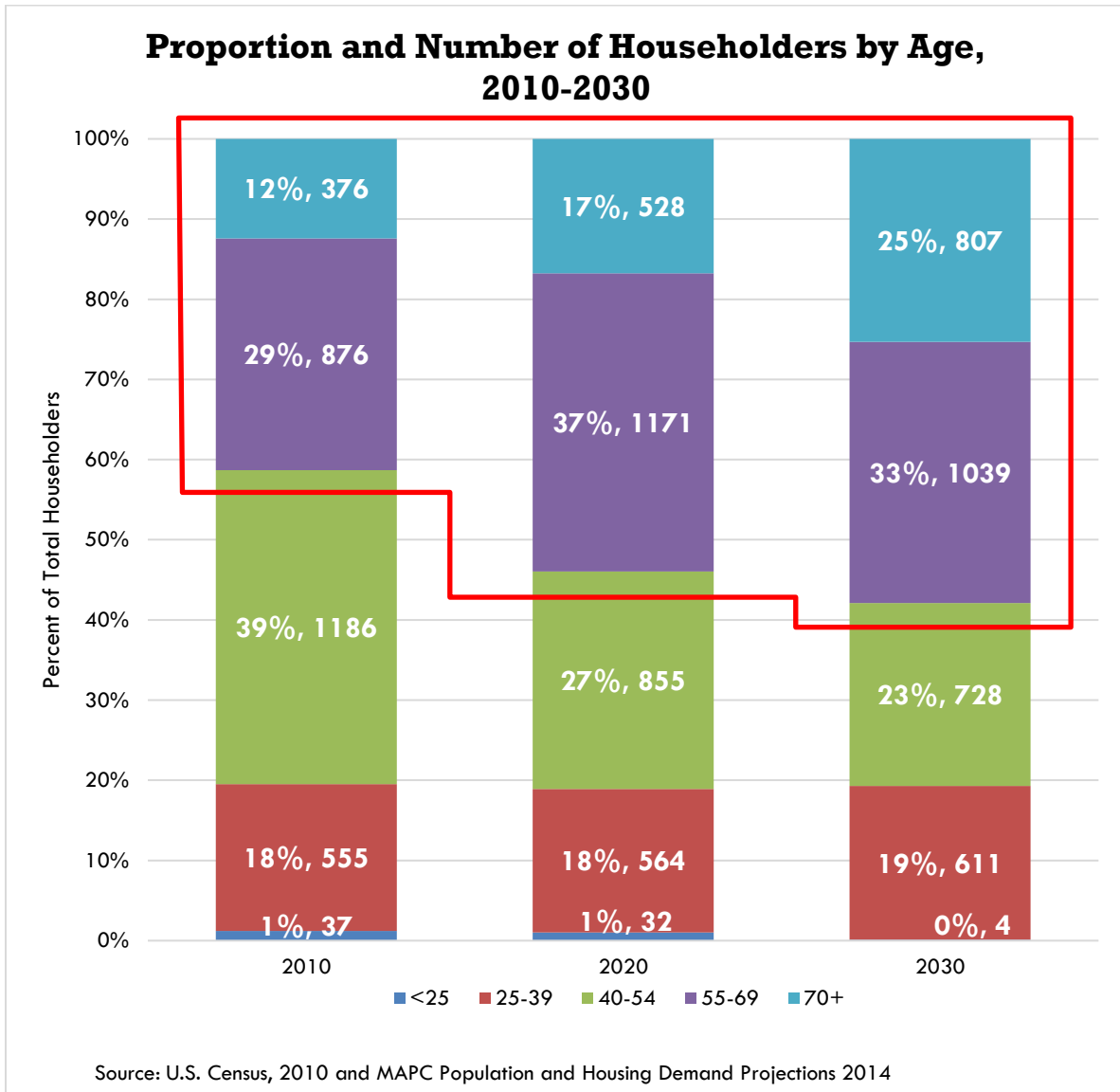
Head of Householder by Age

In addition to household type, the age of the heads of households can indicate demand for particular unit types and sizes. As shown in Figure 9, the share of young adult householders aged 25-39 remained the same (18%) between 2010 and 2020 and will only increase overall by 1% to 19% by 2030. The middle-aged cohort (those between the ages of 40-54) will decrease from 39% in 2010 to 27% in 2020, and is projected to decline to 23% by 2030. The baby boomers aged 55-69 who are likely to be downsizing and/or retiring are projected to reach peak growth in 2020 at 37% of the households compared to 29% of the households in 2010. These households are projected to decline slightly by 4% from that peak level in 2020 to 33% of the households in 2030. However, a net increase of 4% from 2010 to 2030 remains in this baby boomer cohort. Lastly, the greatest increase amongst the age of the heads of households is projected to occur with the elderly aged 70 and over⁴. These households are projected to grow from 12% in 2010 to 17% in 2020, and continue to grow to 25% by 2030. The projected increase between 2010 and 2030 is more than double the number of households. In sum, the growth of baby boomer and elderly householders will likely result in a reevaluation of their needs for potentially smaller sized housing units, as well as for housing with assisted living and limited-mobility arrangements.

³ The total number of 2,961 households in Figure 8 is based on ACS 2014 data versus the 3,030 households in Figure 7 which is based on Census 2010.

⁴ The 2013-2017 ACS data indicates that 611 heads of households in Millis are 65 years of age or more. This figure is higher than what is shown for the 2010-2014 ACS data, but it includes people 65 and over rather than 70 and older.

Figure 9: Proportion and Number of Householders by Age, 2010-2030



Race and Ethnicity

Between 2000 and 2010 the Millis population became slightly more diverse with increases in residents of all racial backgrounds, except White, non-Latino. As shown in Figure 10, the largest increase was among Asian, non-Latino (includes Pacific Islander) residents, from 1.1% of the total population in 2000 to 3.0% in 2010. The majority of Millis Residents in 2010 were White, non-Latino.

Figure 10: Millis Race and Ethnicity, 2000-2010

Millis	Percent of 2000 Population	Percent of 2010 Population	Population Count Difference, 2000-2010
White, non-Latino	96.2%	92.7%	-283
Black, non-Latino	0.7%	0.7%	1
Native American, non-Latino	0.1%	0.3%	10
Asian, non-Latino, includes Pacific Islander	1.1%	3.0%	148
Other race, non-Latino	0.2%	0.3%	7
Two or more races, non-Latino	0.8%	1.3%	44
Latino	0.9%	1.7%	62
Source: U.S. Census, 2000, 2010			

Education

Enrollment

Although enrollment in Millis public schools has increased overall since the 1994-95 school year, enrollment has been declining since 2011-12, as shown in Figures 11 and 12. This decline since 2011 is consistent with MAPC's population projections. Given the projected decline in Millis's population in the 5-19 year old age cohort (as shown in Figure 3), it is likely that this decline will continue through 2030.

According to data from the MA Department of Elementary and Secondary Education, enrollment in Millis' three schools is 1,223 for the 2018-2019 academic year, which continues the projected decline illustrated in Figure 12 below which shows enrollment at 1,362 students in the 2015-2016 academic year.

Figure 11: Millis Public School Enrollment, 1996-2016

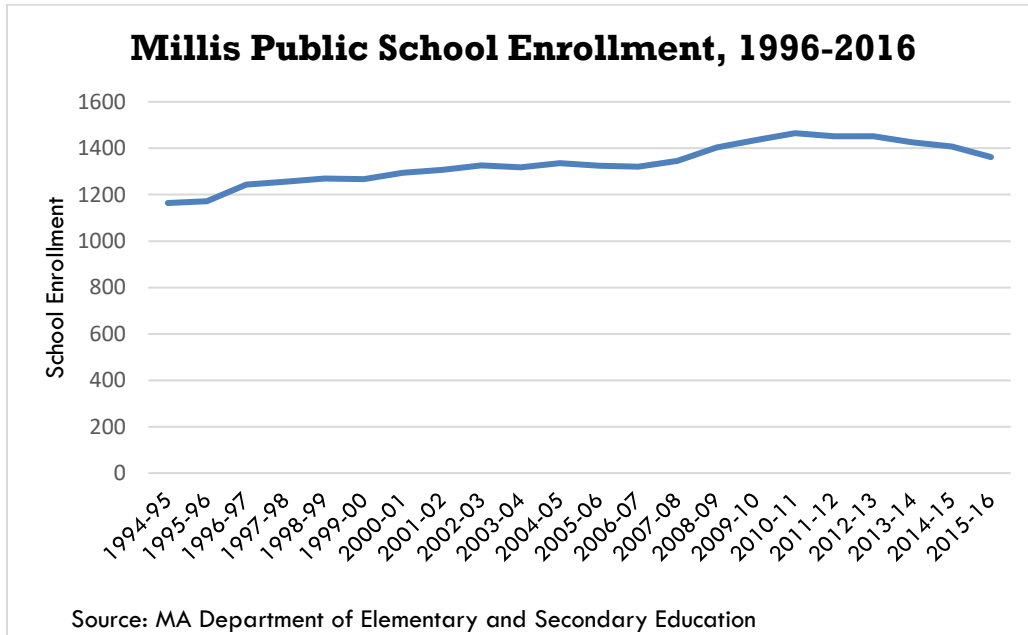


Figure 12: Millis Public School Enrollment Details 1994-2016

School Year	Number of Students	Change from Previous Year	Percent Students of Color	Percent Low-Income Students
1994-95	1,164		3.0%	5.7%
1995-96	1,172	0.7%	3.7%	6.7%
1996-97	1,243	5.7%	3.5%	7.2%
1997-98	1,256	1.0%	2.9%	5.8%
1998-99	1,270	1.1%	3.4%	6.7%
1999-00	1,267	-0.2%	3.2%	6.1%
2000-01	1,294	2.1%	4.3%	7.4%
2001-02	1,307	1.0%	5.3%	10.4%
2002-03	1,326	1.4%	5.0%	10%
2003-04	1,318	-0.6%	5.4%	9%
2004-05	1,336	1.3%	6.1%	11.5%
2005-06	1,325	-0.8%	8.1%	10%
2006-07	1,320	-0.4%	7.2%	13%
2007-08	1,346	1.9%	6.7%	12.4%
2008-09	1,404	4.1%	5.7%	12.1%
2009-10	1,435	2.2%	4.7%	15.7%
2010-11	1,465	2.0%	6.3%	15.8%
2011-12	1,452	-0.9%	9.2%	16.6%
2012-13	1,451	-0.1%	10.6%	16%
2013-14	1,425	-1.8%	10.5%	17.3%
2014-15	1,407	-1.3%	10.2%	n/a
2015-16	1,362	-3.3%	10.4%	n/a

Source: Massachusetts Department of Elementary and Secondary Education

Educational Attainment

Among Millis residents 25 years of age and older, it is estimated that one-half have completed a bachelor's degree or higher. As shown in Figure 13, Millis is slightly above the state-wide rate of 40% of population with a bachelor's degree or higher. Approximately one-quarter of the Millis population have completed some college or earned an associate's degree. The 2013-2017 ACS indicates that 97.5% of the population has a high school diploma or higher and 53.3% have a Bachelor's degree or higher.

Figure 13: Educational Attainment, Millis, Subregion and State

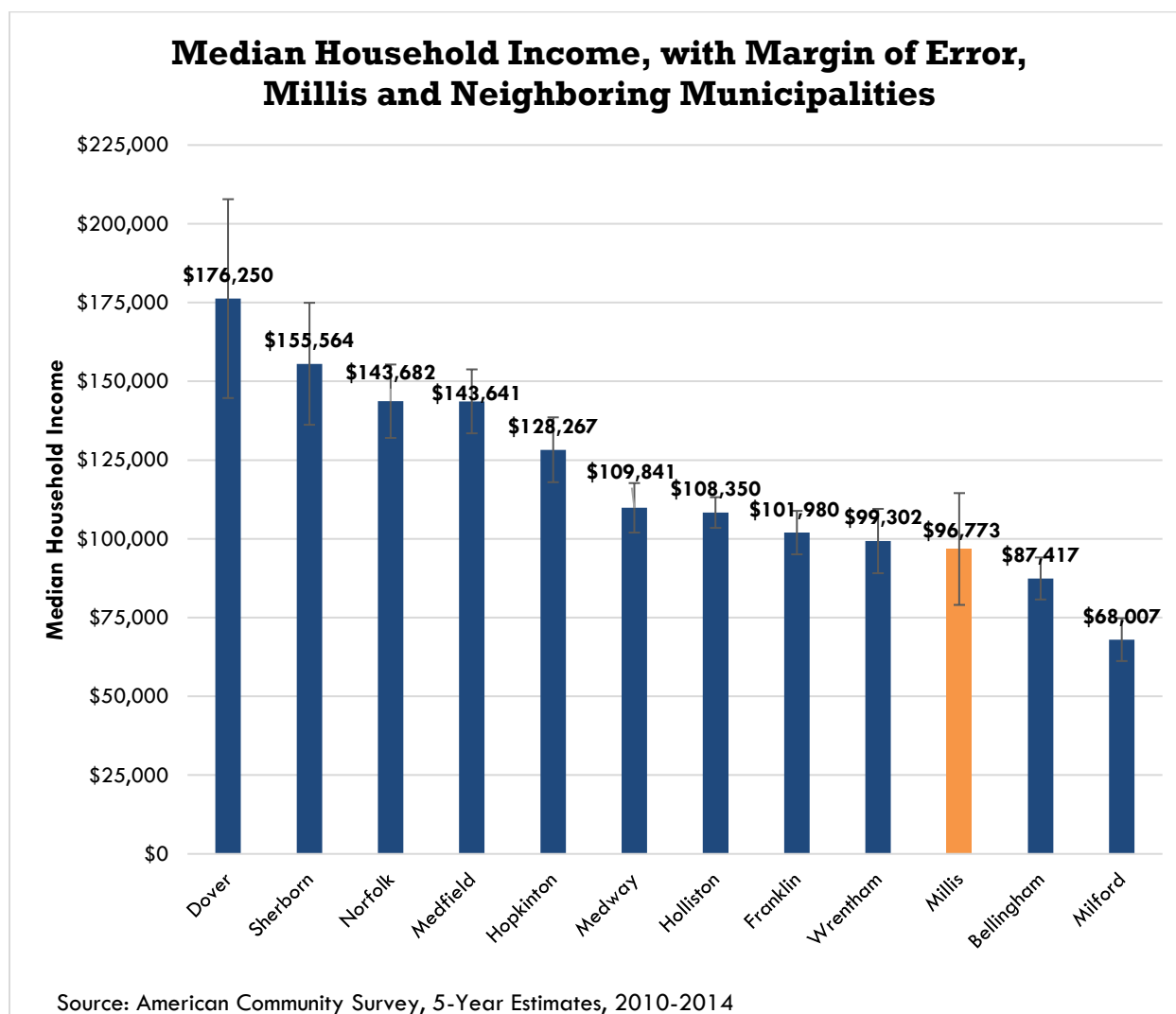
	Less than High School	High School Diploma	Some College	Associate's Degree	Bachelor's Degree or More
Millis	4%	23%	16%	10%	47%
Massachusetts	10%	26%	16%	8%	40%
Norfolk County	6%	21%	15%	8%	50%
SWAP	6%	23%	15%	9%	47%
Source: American Community Survey 5-Year Estimates, 2010-2014					

Household Income

Household income is an important determinant of how much a household can afford to pay for their dwelling unit, either to rent or own, and whether that household is eligible for housing assistance.

According to the American Community Survey 5-Year Estimates, 2010-2014, median household income in Millis is $\$96,773 \pm \$17,740^5$ ($\$100,230$ in 2017 – within the margin of error; non-family median household income is $\$39,889$). Compared to neighboring municipalities, Millis is among the lowest median income municipalities, as shown in Figure 14. The median family income is an estimated $\$106,895 \pm \$17,014$ and the median non-family income is $\$47,244 \pm \$4,187$. As shown in Figure 8, the majority of Millis non-family households are individuals living alone.

Figure 14: Median Household Income, Neighboring Municipalities



⁵ This estimate has a coefficient of variation of 18% and should be used with some caution. In addition, the median household income estimate for Dover (Figure 14) should be viewed with caution. It also has a coefficient of variation of 18%. Estimates are considered reliable with coefficients of variation less than 15%.

As shown in Figure 15, of Millis' 2,961 households, 18% earn less than \$40,000 (25% earn less than \$50,000 per 2017 ACS data), and 25% could be described as middle class households earning between \$40,000 and almost \$75,000 (25% earn between \$50,000 and \$100,000 per 2017 ACS data). Nine-percent (9%) earn between \$75,000 and almost \$100,000 (39% of the households have incomes ranging from \$100,000 and \$200,000 according to 2017 ACS data), and the remaining and largest grouping income bracket is comprised of 48% of the Town's remaining households earning \$100,000 and over (or 12% that earn more than \$200,000). Consistent with Millis having the second lowest median household income of the neighboring communities, Millis has the third smallest percentage of households earning \$100,000 and over, and is tied for having the fourth highest percentage (18%) of households earning under \$40,000 when compared to neighboring communities.

Figure 15: Household Income Distribution

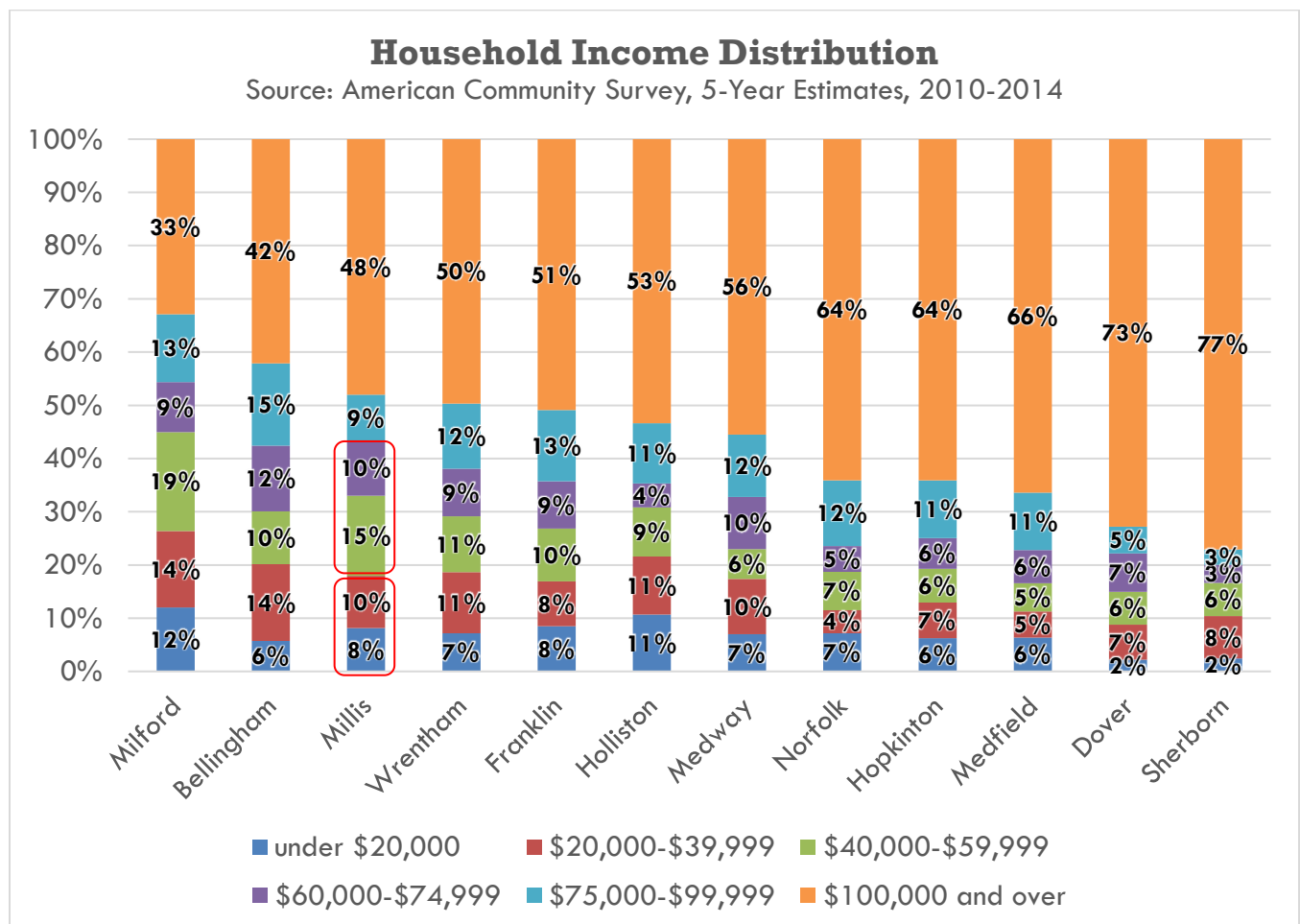
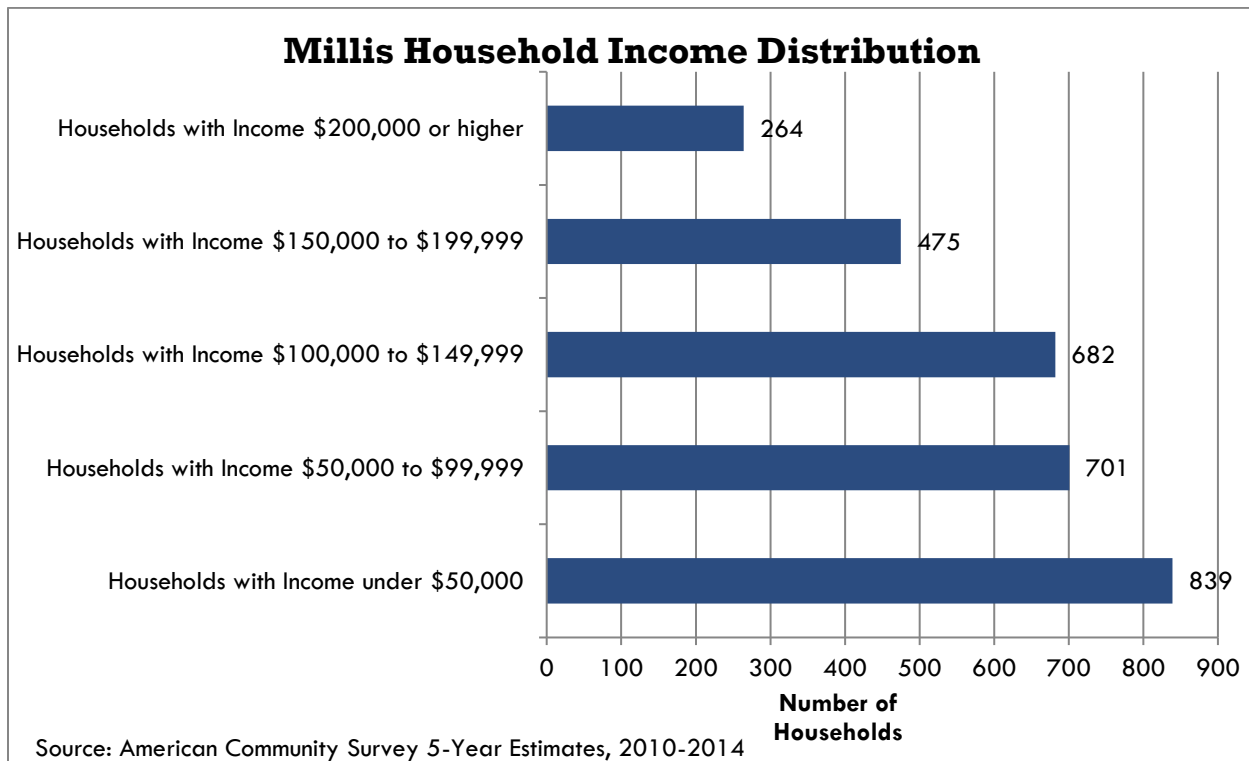


Figure 16: Household Income Distribution Details

Communities	under \$20,000	\$20,000- \$39,999	\$40,000- \$59,999	\$60,000- \$74,999	\$75,000- \$99,999	\$100,000 and over	Total Households
Sherborn	35	115	90	49	41	1,111	1,441
Dover	42	126	118	137	96	1,390	1,909
Millis	241	290	447	305	257	1,421	2,961
Wrentham	280	447	410	349	478	1,940	3,904
Norfolk	229	137	229	155	394	2,041	3,185
Medway	317	470	254	444	530	2,515	4,530
Bellingham	352	888	612	762	952	2,596	6,162
Holliston	536	549	464	226	568	2,685	5,028
Medfield	262	201	217	257	441	2,728	4,106
Hopkinton	326	349	331	300	566	3,347	5,219
Milford	1,288	1,533	1,994	1,003	1,368	3,520	10,706
Franklin	931	927	1,092	974	1,473	5,595	10,992

Figure 17: Millis Household Income Distribution



Housing Stock

Type and Age

The majority of Millis housing units are single-family homes, comprising nearly 80% of housing units in the town, as shown in the Figure 18 estimates. 2013-2017 ACS data shows that 84% (2,611) of the 3,228 housing units are owner-occupied and 16% (489) are renter-occupied. Compared to neighboring municipalities, Millis has the third-lowest percentage of housing stock in single-family homes, with only Franklin and Milford having a more diverse array of housing unit options. Smaller multifamily housing, two-family and 3-4 units, comprise an estimated 13% of the Millis housing stock, and larger multifamily housing options (10 or more units) account for approximately 8% of the total stock. Across the neighboring municipalities, multi-unit/multi-family housing is limited.

Figure 18: Housing Units by Type, Millis and Neighboring Municipalities

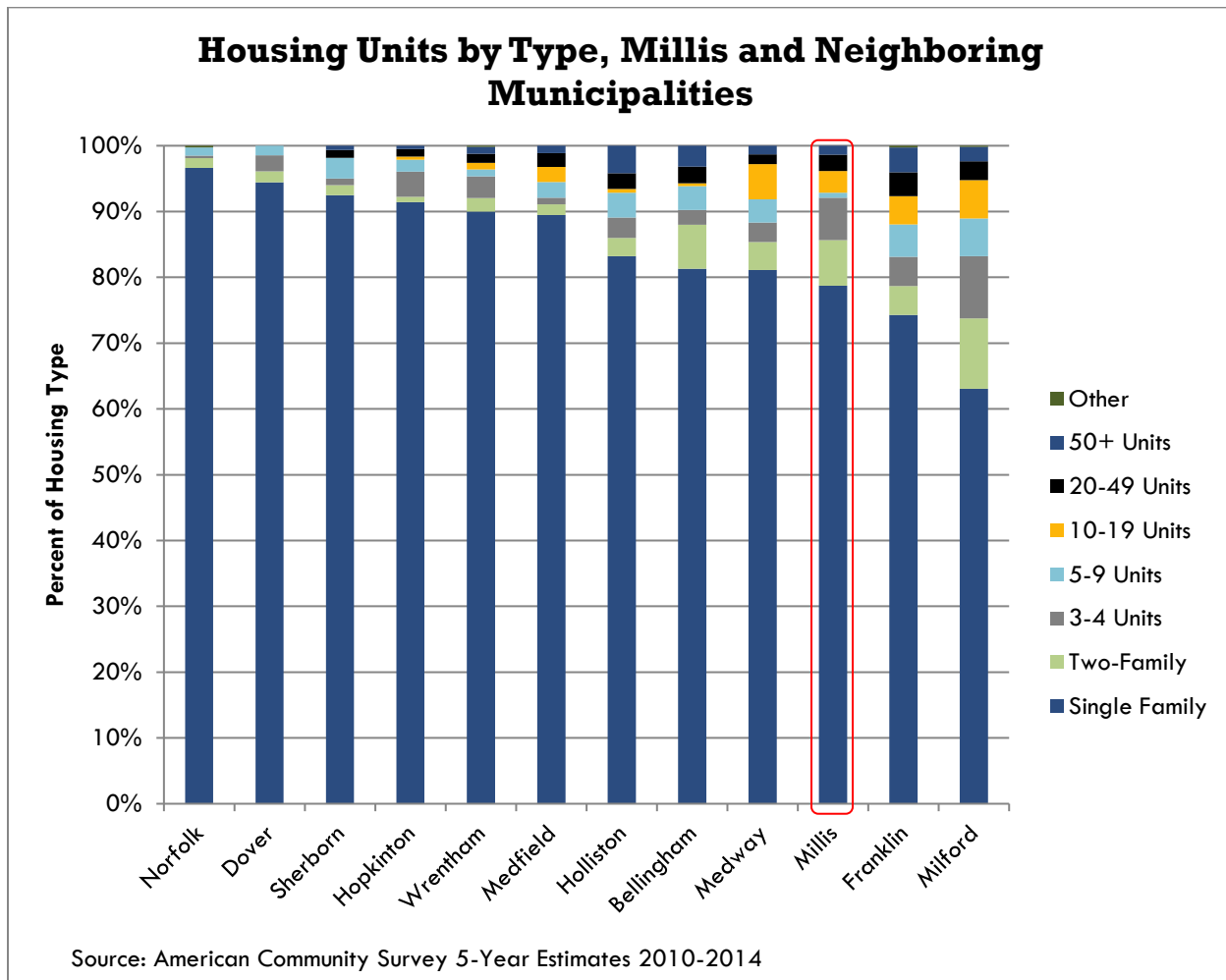


Figure 19 shows that approximately two-thirds of Millis' housing stock was built after 1960, which reflects the population growth trend identified earlier. Sixty-eight percent of Millis' 2010 population is attributed to population growth between 1960 and 2000, and grew at an average rate of 28% each decade during that period, as can be seen in Figure 20. Compared to its neighboring municipalities, the Millis housing stock is on par overall with its surrounding communities in terms of the distribution of the age of its housing stock. In terms of more recent housing production, 9% percent of its units were built in the year 2000 or after compared to 14% for Hopkinton on the high end of the spectrum and 5% for Holliston at the other end. Similarly, 26% of its units were built between 1980 and 1999 compared to 40-45% for Wrentham, Hopkinton, Norfolk and Franklin on the high end, and 16-17% for Holliston and Sherborn on the lower end. See Figure 21.

Figure 19: Housing Units by Year Built, Millis and Neighboring Municipalities

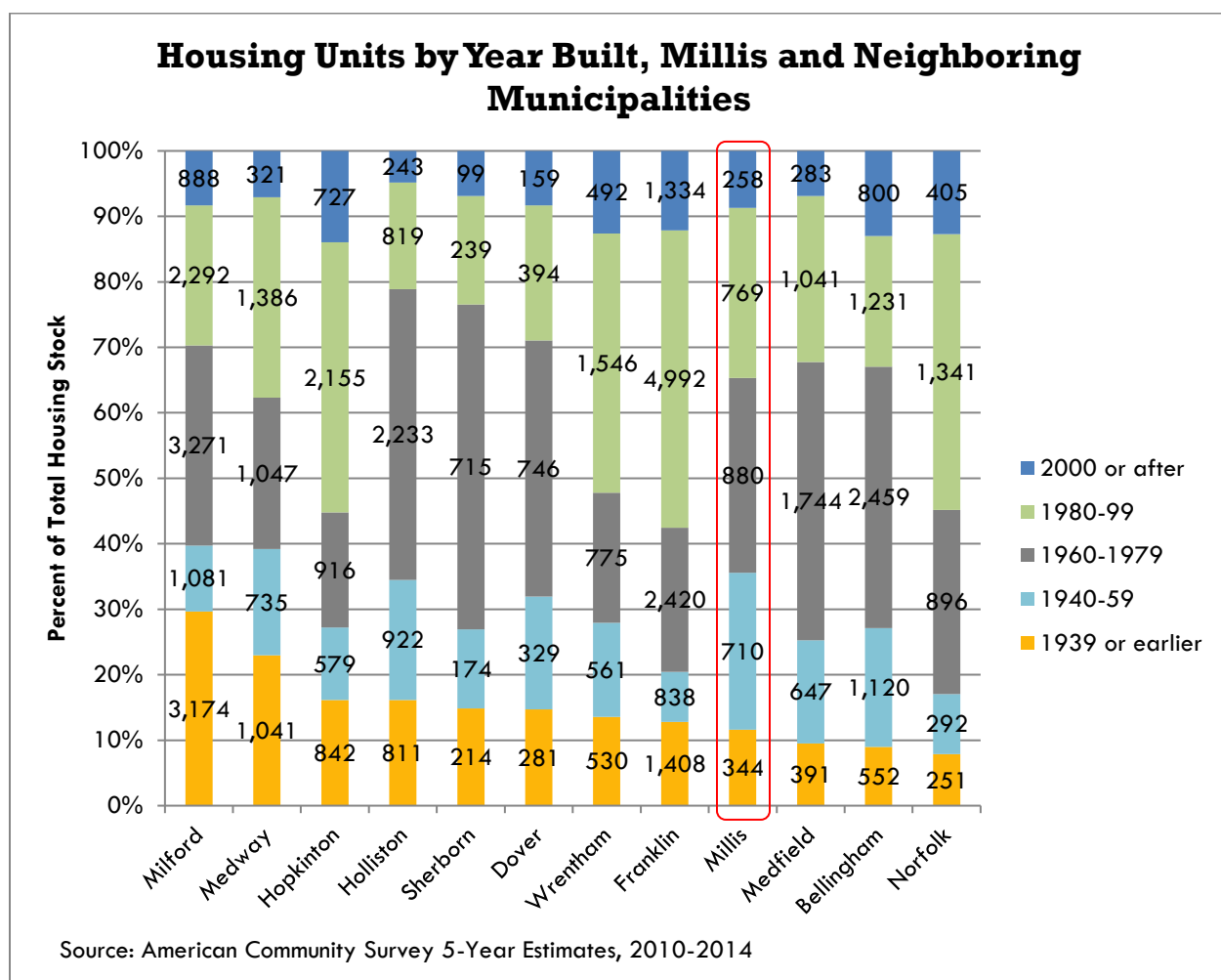
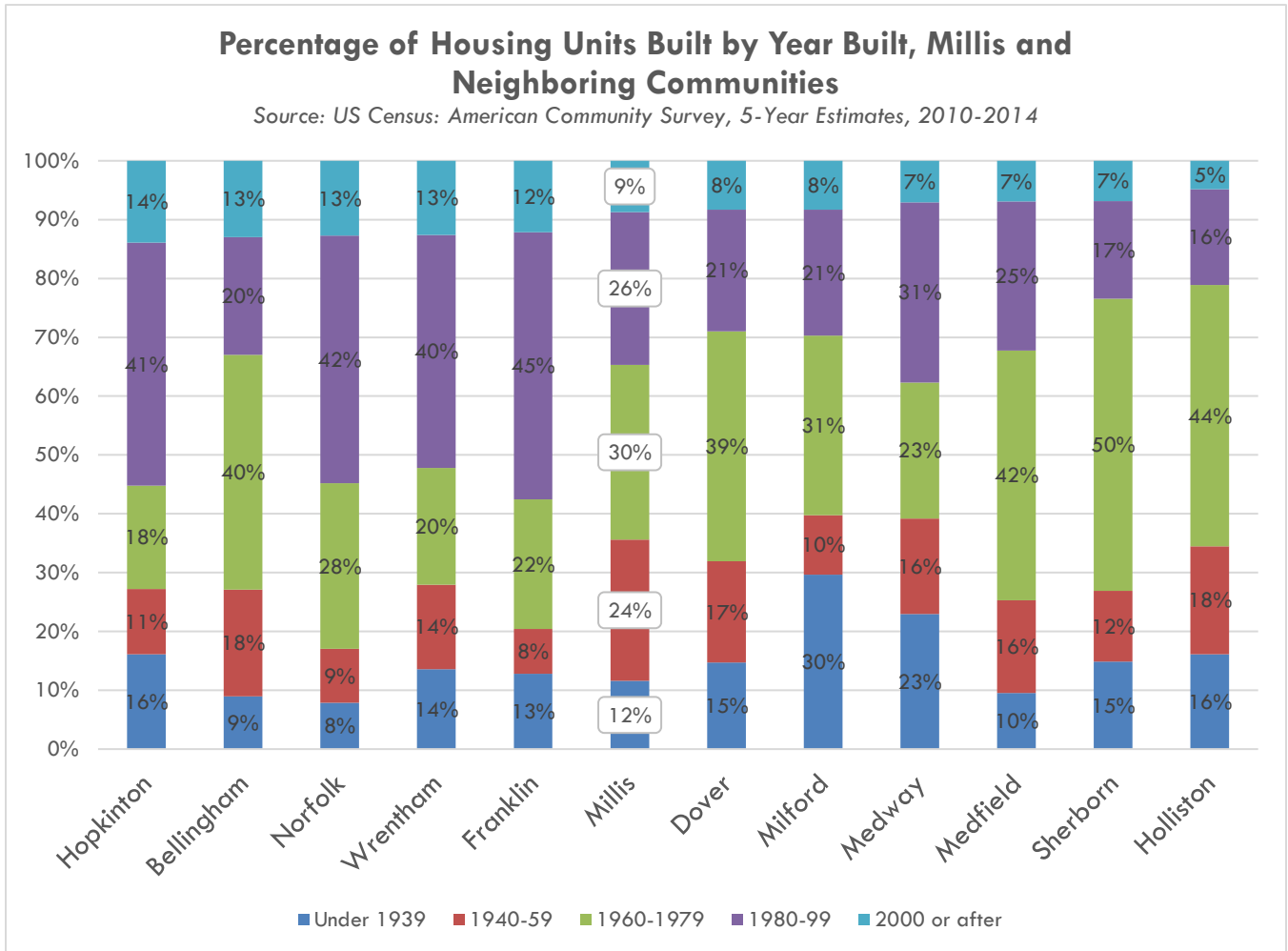


Figure 20: Historical Millis Population Change by Decade

Historical Population, Millis				
Year	Population	% Change Previous Decade	# Change	% of 2010 Population
1890	786	—	—	10%
1900	1,053	34%	267	3%
1910	1,399	33%	346	4%
1920	1,485	6%	86	1%
1930	1,738	17%	253	3%
1940	2,278	31%	540	7%
1950	2,551	12%	273	3%
1960	4,374	72%	1,823	23%
1970	5,686	30%	1,312	17%
1980	6,908	22%	1,222	15%
1990	7,613	10%	705	9%
2000	7,902	4%	289	4%
2010	7,891	-0.1%	-11	0%
Source: United States Census records				

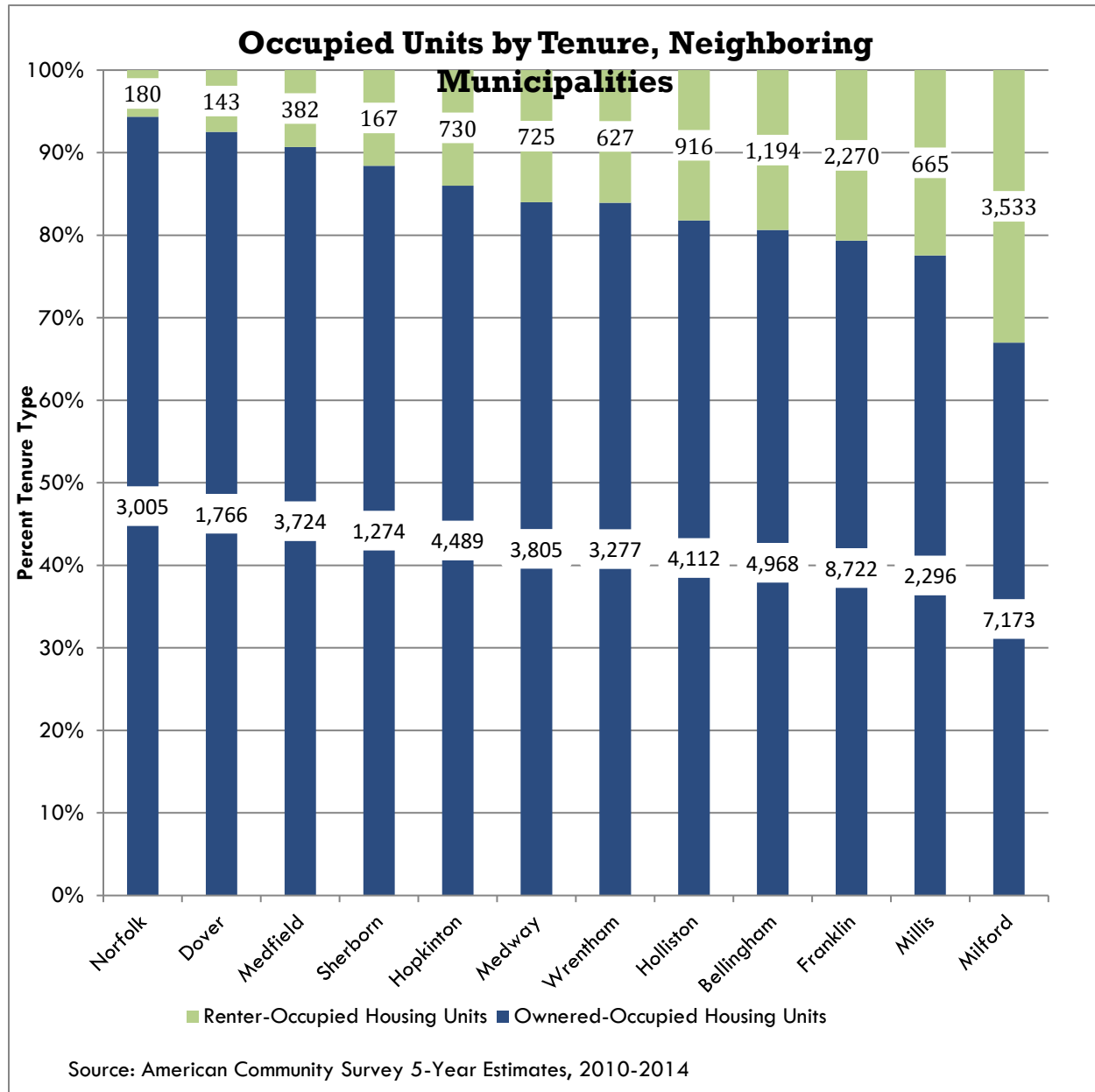
Figure 21: Percentage of Housing Units by Year Built



Tenure

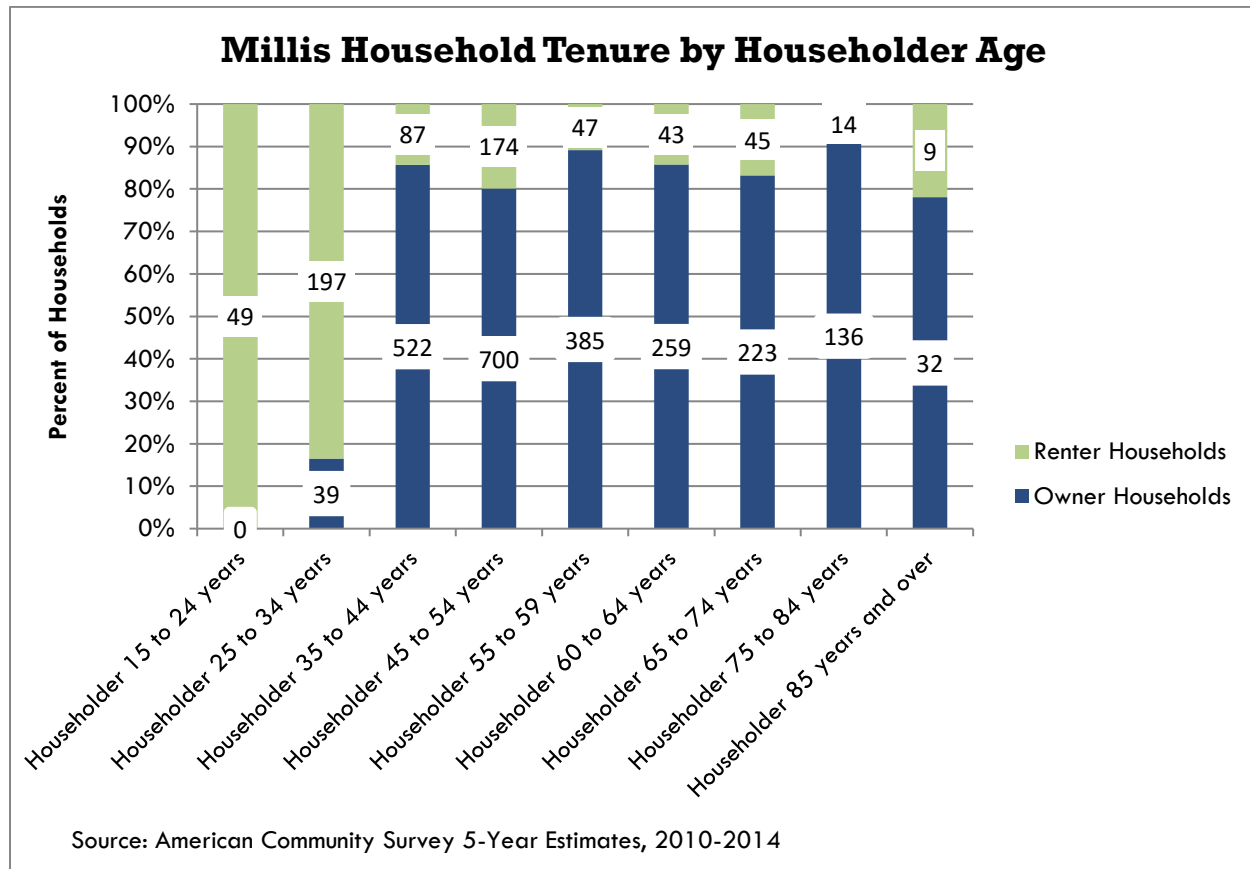
More than three-quarters of Millis housing units are owner-occupied (84% according to 2017 ACS data). As shown in Figure 22, compared to its neighboring municipalities, Millis has the second lowest rate of homeownership at 78%, which is not a low homeownership rate. Given that ten other neighboring communities have even higher rates of homeownership – and conversely lower rental opportunities (6% to 21%) –there are limited rental opportunities across the region.

Figure 22: Occupied Units by Tenure, Millis and Neighboring Municipalities



As Figure 23 shows, Millis householders between 15 and 34 years old are the most likely to be renters (83% to 100%), whereas those 35 and older are more likely to be owners (78% to 90%).

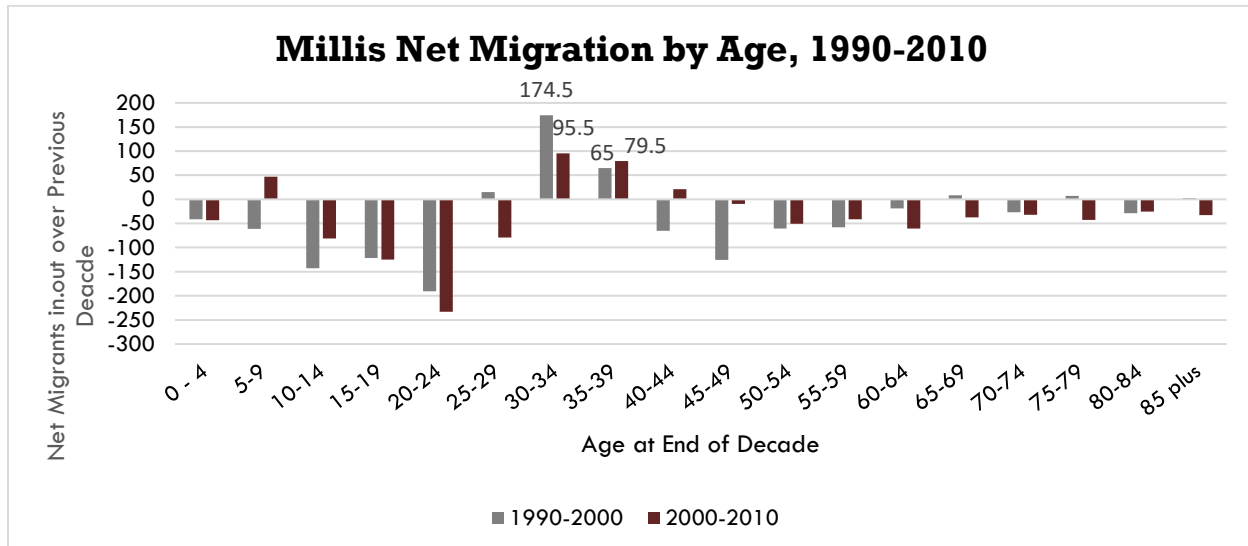
Figure 23: Millis Household Tenure by Householder Age



Migration

Another aspect of housing stock availability is migration in and out of a municipality. Figure 24 shows the net Migration for Millis, by age, between 1990 and 2000, as well as 2000 and 2010. The Millis population had a negative net change across most age groups in both decades, with only the 30-34 and 35-39 age cohorts experiencing positive net migration in both decades.

Figure 24: Millis Net Migration by Age, 1990-2010



According to the American Community Survey 5-Year Estimates, $90.9\% \pm 4.7\%$ of Millis residents lived in their same house one year ago, or only 9.1% changed houses by moving out of or to Millis. This suggests limited new housing opportunities in the Millis market.

Vacancy

According to the 2010-2014 American Community Survey 5-Year estimates, housing vacancy in Millis is between 0 and 2%, indicating a tight housing market. Vacancy in Millis is lower than the Commonwealth rate of approximately 10%.

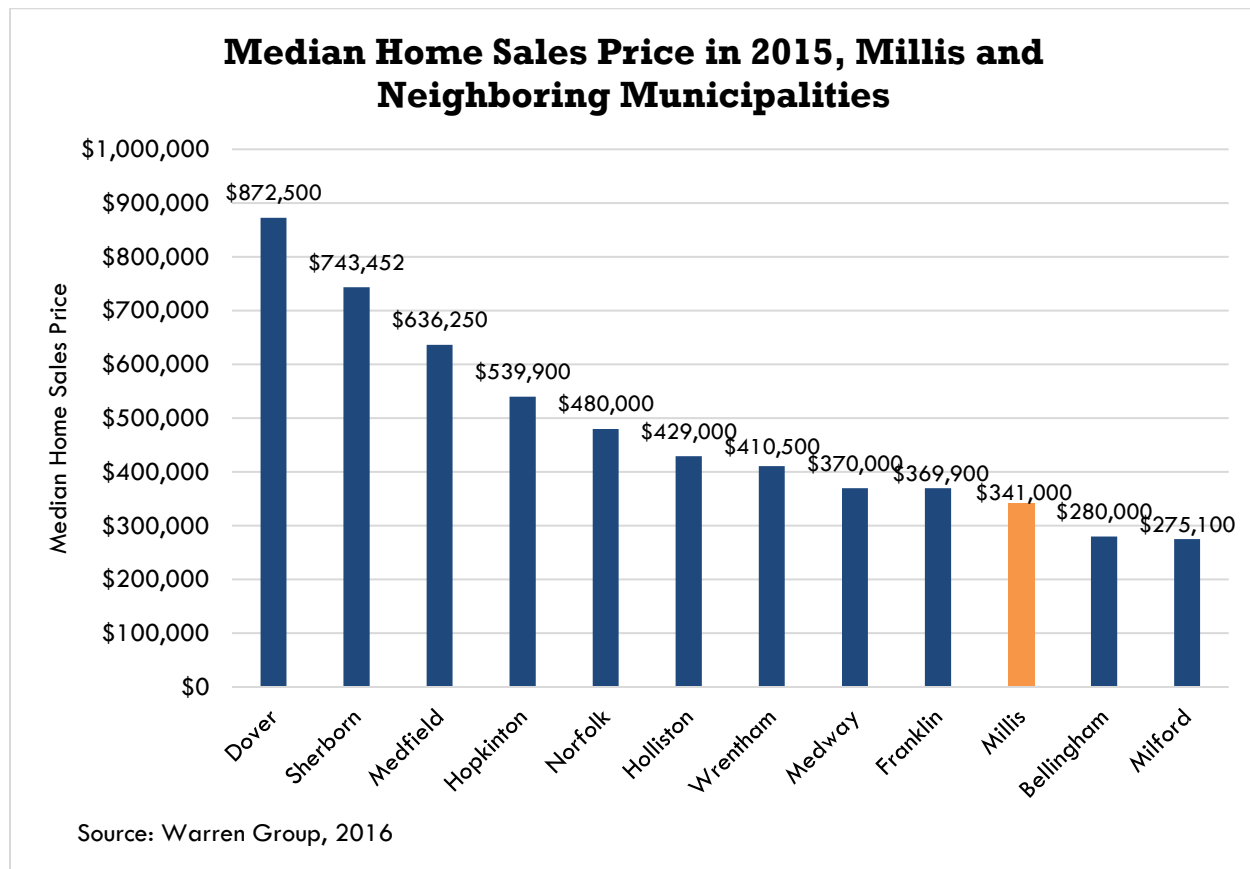
Housing Market

Housing costs within a community reflect numerous factors, including supply and demand. If the latter exceeds the former, then prices and rents tend to rise. Depending on the income levels of the population, these factors can significantly reduce affordability for both existing residents and those seeking to move in.

Sales Prices and Volumes

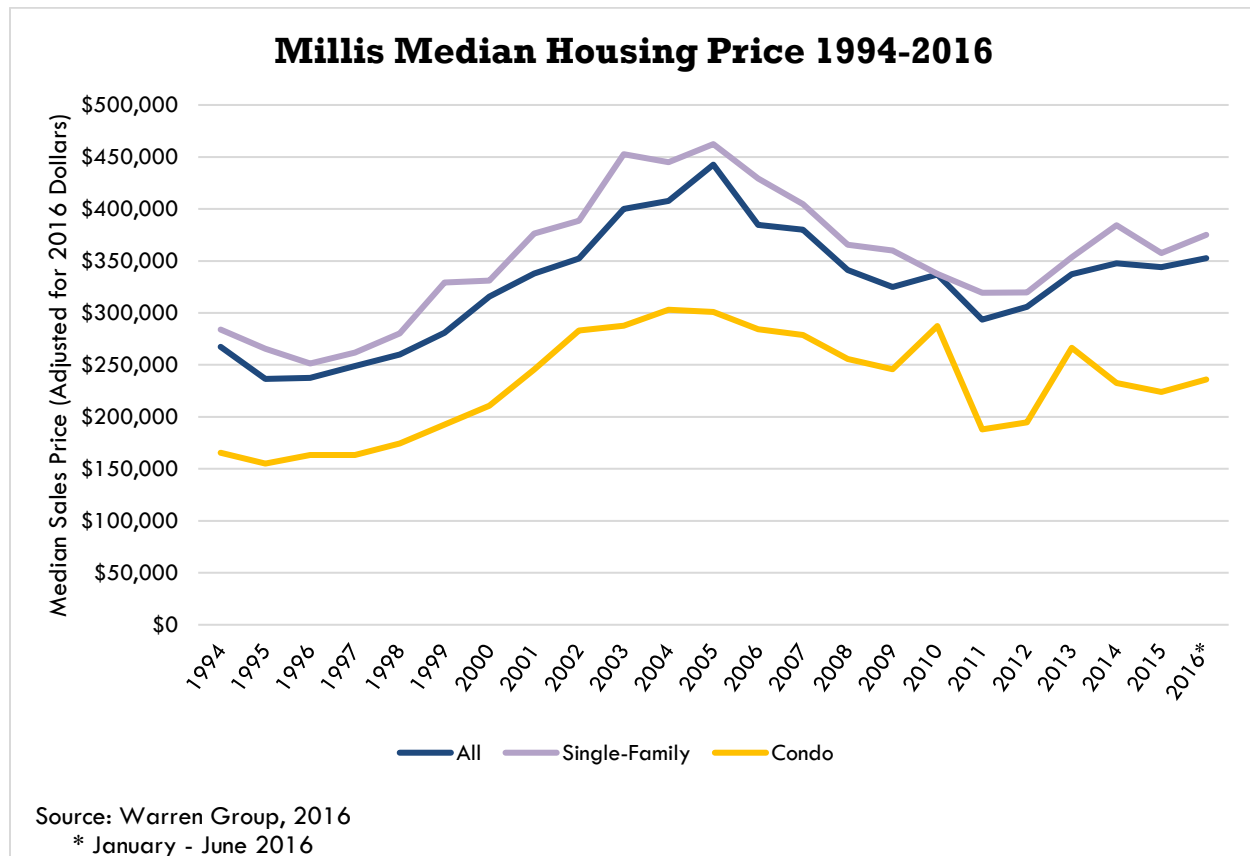
The median home sales price in 2015 in Millis was \$341,000 and increased to \$409,500 in 2019 according to Warren Group data. As shown in Figure 25, Millis had the third-lowest median home sales price in 2015 compared to neighboring municipalities. Median sales prices ranged from \$275,100 in Milford to \$872,500 in Dover in 2015.

Figure 25: Median Home Sales Price Millis and Neighboring Municipalities, 2015



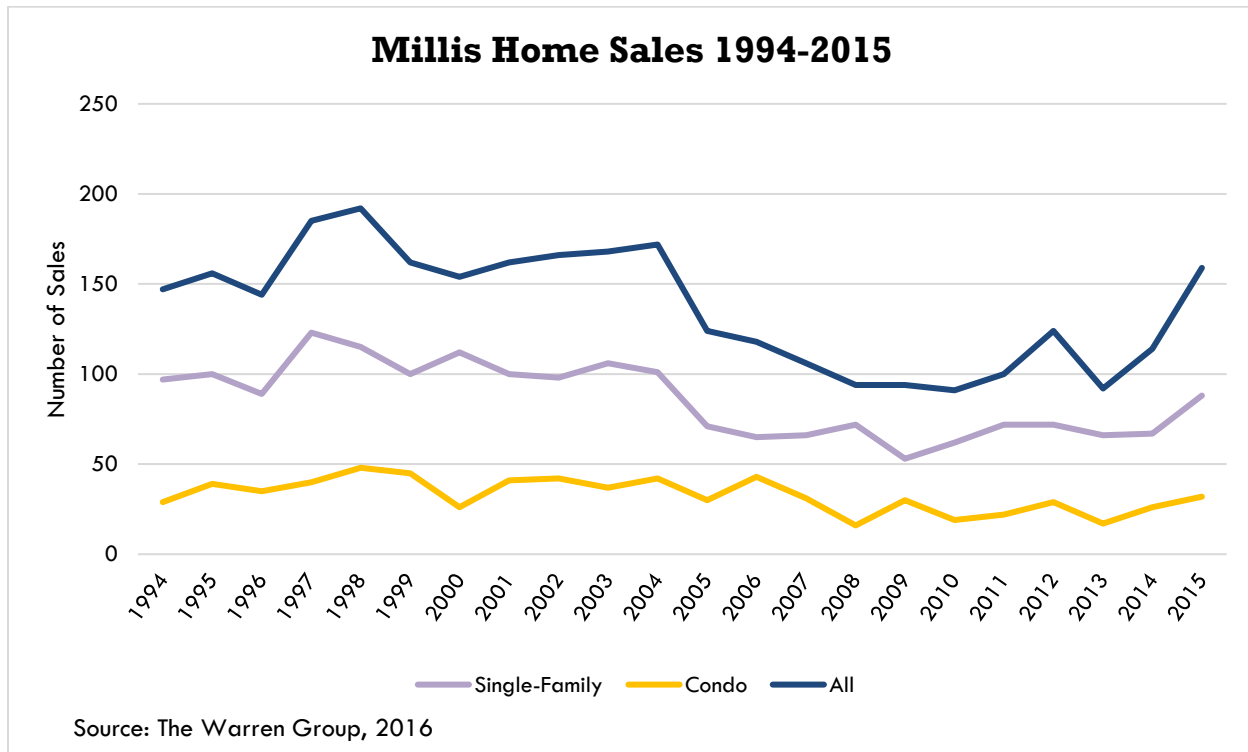
Millis housing prices were on the rise during the 1990s, reaching a peak in 2005 with single-family home median sales price of \$462,353. Housing prices began to fall in 2005 and through The Great Recession (December 2007-June 2009), as shown in Figure 26. Housing prices have not reached the pre-Recession highs, but have shown increases since 2010/2011.

Figure 26: Millis Median Housing Price 1994-2016



Housing sale volumes also showed a decline during the Great Recession, as shown in Figure 27. Annual condo sales ranged from 16 to 48 sales per year between 1994 and 2015, with an average of 33 sales per year and a median of 32 sales per year. Single family homes sales ranged from 53 per year to 123 per year, with an average of 86 sales per year and a median of 88 sales per year.

Figure 27: Millis Home Sales 1994-2015



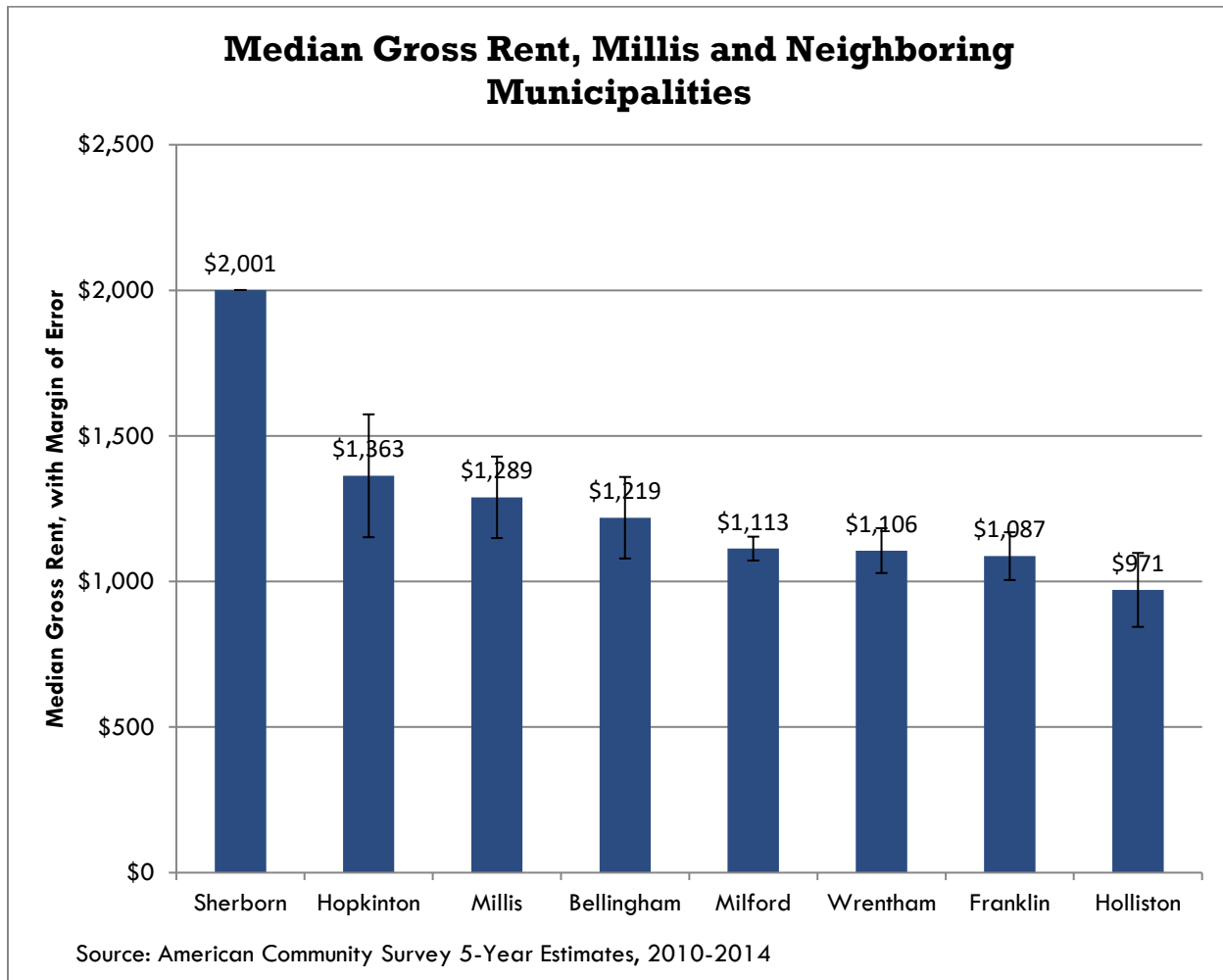
In the first six months of 2016, there have been 73 total sales, of which 47 are single family units and 13 are condo units.

Rent

According to the American Community Survey 5-Year Estimates, 2010-2014, median rent in Millis is \$1,289 ± \$140 (\$1,557 ± \$142 according to 2017 ACS data. Compared to some of its neighboring municipalities, median gross rent in Millis is higher than most, but roughly \$700 less than the highest median gross rent in the area (Sherborn), as shown in Figure 28.⁶ The gross rent estimates, represent the monthly cost of contract rent and utilities and fuels if paid by the renter. ACS estimates are the result of monthly sampling and represent the median of rent costs across the spectrum of housing types – and are not necessarily reflective of current market rents.

⁶ Estimates for the municipalities of Dover, Norfolk, Medfield, and Medway are excluded from Figure 28 because their coefficients of variation exceed 30% and are not reliable estimates.

Figure 28: Median Gross Rent, Millis and Neighboring Municipalities



ACS estimates from 2012-2016 (the most recent estimates available) indicate that the median gross rent in Millis is \$1,564 per month. Approximately 5% of renter households pay less than \$1,000 per month; 41% pay between \$1,000 and \$1,499 per month; 51% pay between \$1,500 and \$1,999 per month; and 3% pay in excess of \$2,000 per month.

To better understand the current rental market in Millis, Figure 29 summarizes rental listings from November 2015 to May 2016 from MAPC's Rental Listing Database.⁷ The Database collects online listings from Craigslist and Padmapper. Millis listings from this six-month period reveal a median rent of \$1,614 for all units, a median rent of \$1,242 for one-bedroom units, and \$1,521 for two-bedroom units, and \$1,918 for three-bedroom units. Figure 29 shows the rent ranges for the Millis listings. A review of rental availability in September 2019 on websites such as Zillow and Trulia showed a range of \$1,500 a month for a one-bedroom unit to \$2,500 for a four-bedroom unit.

⁷ The Database is under development. Listings do not include those shared by word of mouth, nor do they include final lease data on negotiated rental rates.

Figure 29: Millis Rental Market Nov. 2015-May 2016

Number of Bedrooms	Monthly Rent Price Range (Adjusted for CPI)
0	\$1,521
1	\$1,109- \$1,412
2	\$1,110- \$1,817
3	\$1,615- \$2,300
4	\$1,654- \$2,220
Source: MAPC Rental Listings Database, 2016	

Housing Units Permitted

According to the Census Building Permit Survey, Millis issued 65 permits for privately-owned residential housing units between 2010 and 2014. Of those permits, 51 were for single-family units and 14 multi-family units, as shown in Figure 30. The survey defines two-family dwellings as subcategory of multifamily residential housing. All of the 14 multi-family units produced in Millis from 2010 to 2014 were two-family dwelling units. Across the neighboring municipalities, most building permits were issued for single-family units. Of 1,950 permits issued in Millis and neighboring municipalities between 2010 and 2014, only 365 were for multi-family units.

Figure 30: Building Permits by Type, Millis and Neighboring Municipalities 2010-2014

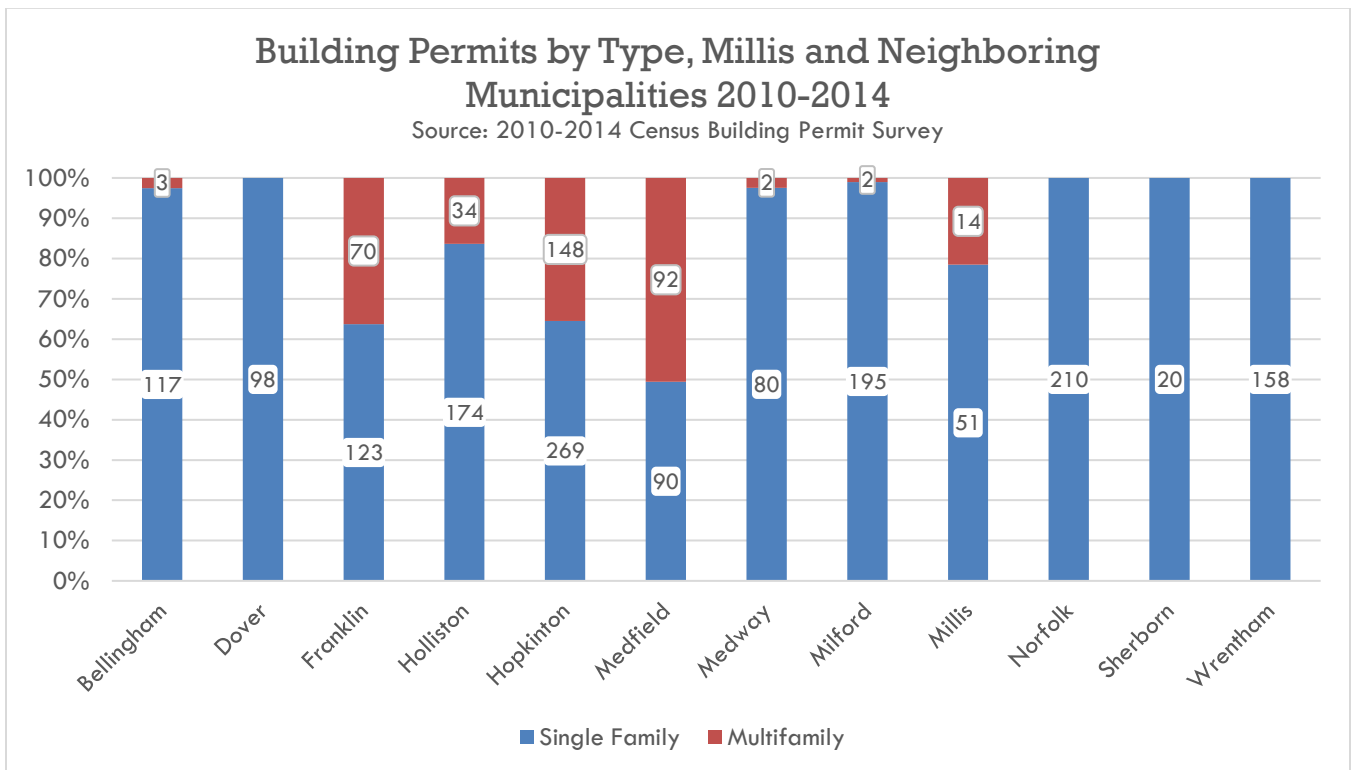
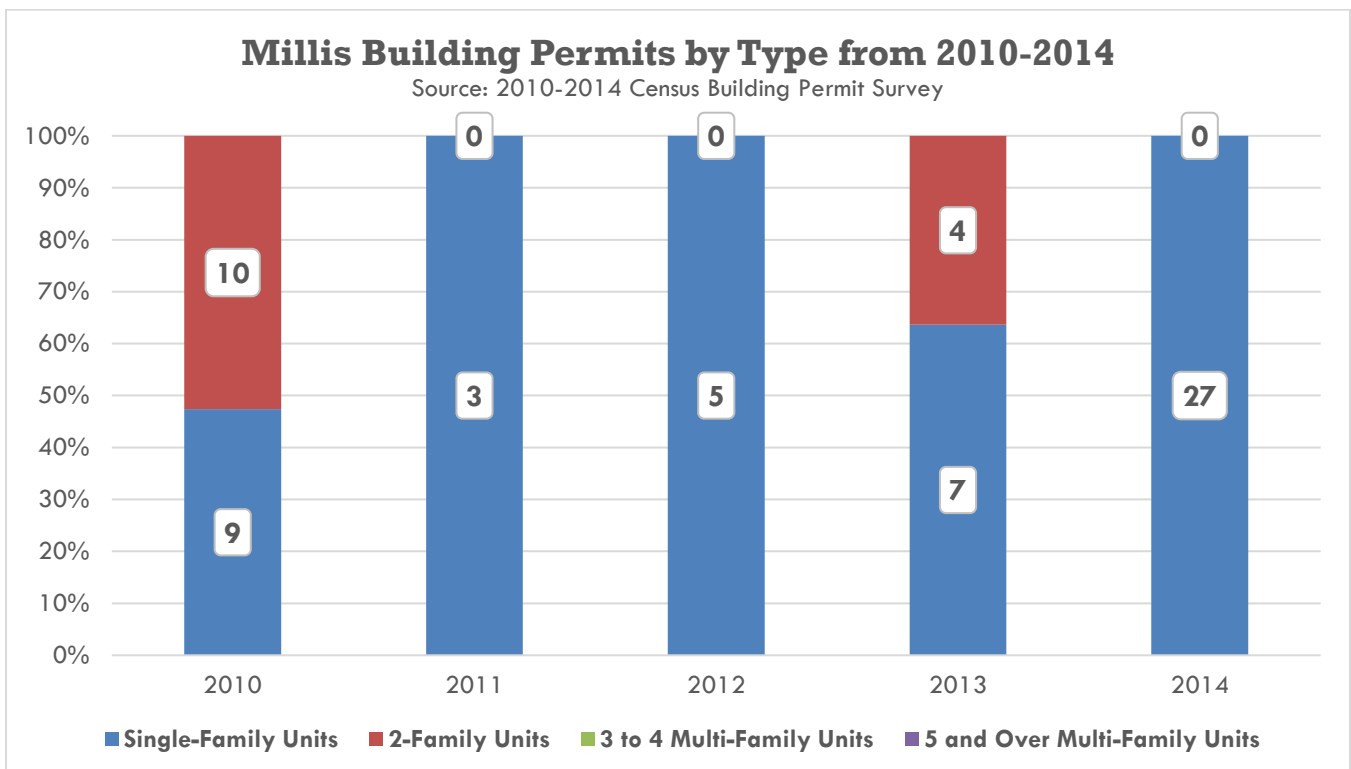


Figure 31: Millis Building Permits 2010-2014 Showing No Multifamily Production Over 2-Unit Dwellings



Recent and Future Development

Development Pipeline

Figure 32 lists ongoing or future residential development projects that are currently in the development pipeline in Millis. Between 2018 and 2030, the Town will see 730 new units of housing if these projects are fully built-out. A significant majority of them (522 units) will be dedicated as senior housing or assisted living units. Aside from a small five unit multi-family project, the remainder of the projected new housing units will be market-rate single-family homes. Currently, there are no 40B projects formally before the Millis Zoning Board of Appeals or state housing subsidy providers such as MassHousing or the Massachusetts Housing Partnership.

Figure 32: Ongoing and Future Residential Development

Project		Single Family Units	Townhouse Multifamily units	Large Multifamily Units	Total Housing Units
Glen Ellen Country Club Housing: senior housing		108	216	0	324
Hickory Hills Residential Subdivision		34	0	0	34
Woodlands Open Space Preservation Subdivision		44	0	0	44
Ridge Street Open Space Preservation Subdivision		43	0	0	43
34-36 Exchange Street		0	5	0	5
Dover Estates		4	0	0	4
Dover Road Residences (assisted living)		0	107	0	107
26-28 Spring Street		10	0	0	10
Acorn Place Senior Residential Community		0	48	0	48
Apple Rock Estates		13	0	0	13

Southend Farm		52	0	0	52
Rockville Meadows Senior Residential Community		0	43	0	43
227 Causeway Street (under review)		3	0	0	3

Source: 2019 MAPC MassBuilds Development Database; Millis Town Website (http://www.millis.org/Pages/MillisMA_BComm/Planning/index); Millis Planning Board

Projected Housing Demand

Figure 33 shows how many new housing units will be needed and how many units will be vacated in Millis between 2010 and 2020, broken down by age cohort and based on each cohort's age in 2010. Increases in demand are the result of new households forming, people moving into the community, or increasing preference for certain types of housing. Decreases in demand are the result people moving out of the community, mortality, or decreased preference for a given housing unit type.

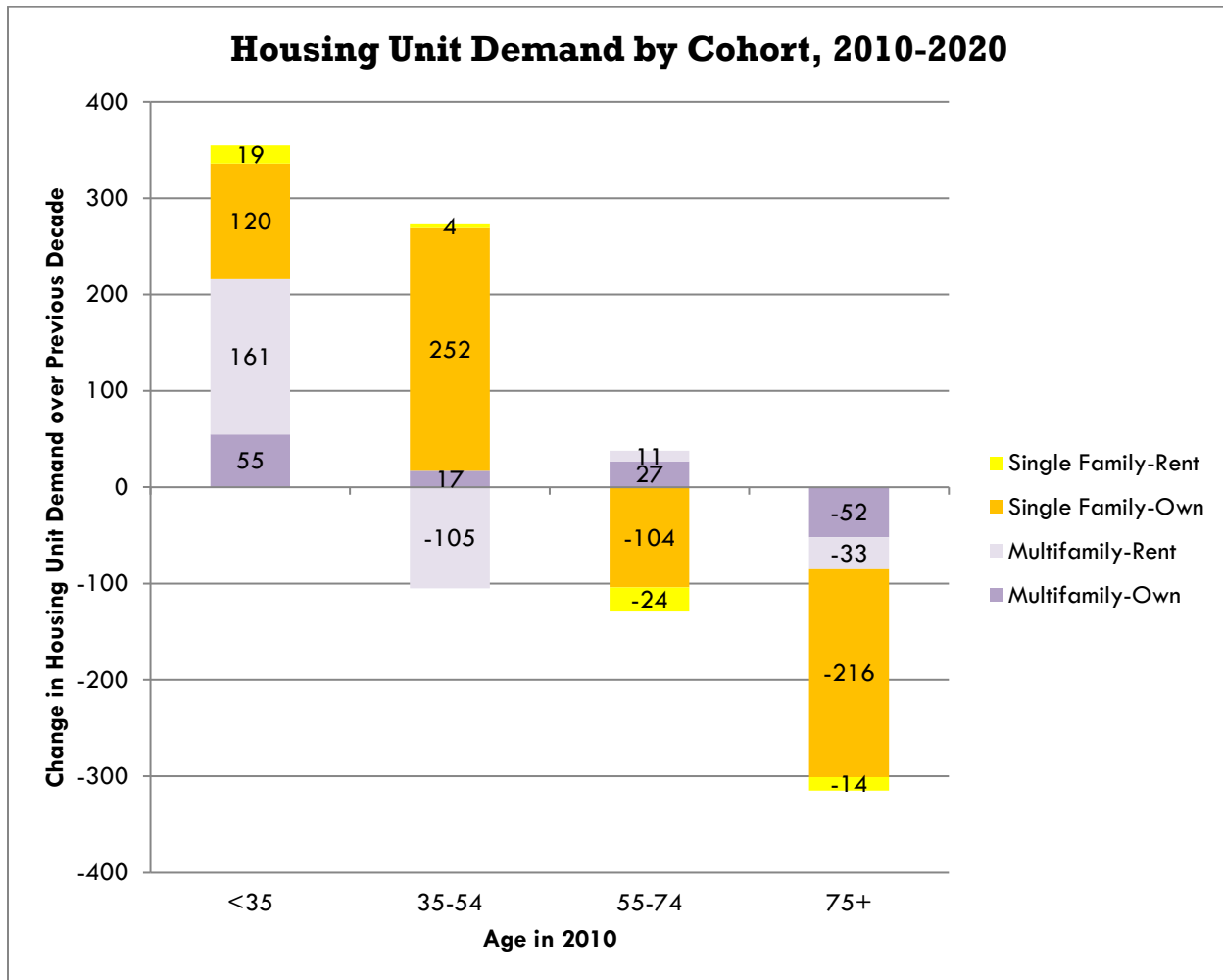
Figure 34 shows four unit types: multi-family ownership, multi-family rental, single-family ownership, and single-family rental. The projected change in demand by unit type and age cohort is shown on the chart. Those who were ages 15-34 in 2010 will demand housing for all unit types in 2020, when they will be ages 25-44. Those who were 35-44 in 2010 will demand both single and multi-family units for homeownership, as well as single-family rental units, in 2020 when they are 45-64, and they will be releasing multi-family rental units back into the housing supply. Those who were 55-74 will be releasing single family units into the housing supply in 2020 when they are 65-84, and demanding multi-family rental and ownership units. Those who were 75 and over in 2010 will be 85 and over in 2020 and will be releasing units of all types back into the market, due to mortality, moving out, or change in status from householder to dependent.

In sum, in 2020 there will be demand for an estimated:

- 47 more multi-family homeownership units and 34 more multi-family rental units, for a net demand of 81 multi-family homes.
- 52 more single-family homeownership units and 15 fewer single family rentals, for a net demand of 37 single-family homes.

The total number of new units demanded will be about 118 units. As the town encourages housing production, it should also encourage an appropriate mix of both single-family and multi-family units – particularly units that will serve households headed by those who will be 25-64 in 2020.

Figure 33: Millis Net Housing Unit Demand by Cohort, 2010-2020



Over the last couple of years, Millis building permits exceeded the MAPC's projected demand for single family housing, however Millis has issued few permits needed to meet the multi-family housing (rental and ownership) demand for non-senior adults and families.

The above figure describes the net changes in housing demand and households, which is critical to understanding housing production needs. It is also important to understand the total number of housing units by type as projected for 2020, represented in Figure 34. Maintenance of the existing housing stock is important in addition to new housing production.

Figure 34: Millis Projected Housing Units Needed 2020

	Total Projected Housing Units, 2020 (Millis, MA)	Net Projected Housing Unit Demand, 2020 (Millis, MA)
Multi-family Own	530	47
Multifamily Rent	600	34
Single Family Own	2,027	52
Single Family Rent	123	-15
Total	3,280	118

Housing Affordability

Key Findings

In the previous sections, Millis' population, housing stock, and market conditions were examined. The intersection of the two — demand (people) and supply (housing units) — as well as policy, planning, and funding, ultimately determines housing affordability in a given community. In this section, the affordability of Millis' housing stock to its residents is assessed.

- Millis' median household income is \$96,773 ± \$17,740⁸ (\$100,230 based on 2013-2017 ACS data – within the margin of error).
- 6.8% of all people live below the poverty level⁹ (4.4% based on 2013-2017 ACS data).
- Millis does not meet the State-mandated 10% target of affordable housing according to the most recent Subsidized Housing Inventory and is at 3.8%.
- 35.1% of Millis households are cost burdened, almost half of which are considered severely cost-burdened.

Households Eligible for Housing Assistance

One measure of affordable housing need is the number of households eligible for housing assistance in a community. Federal and state programs use AMI, along with household size, to identify these households. Figure 35 below shows U.S. Department of Housing and Urban Development (HUD) income limits for extremely-low- (below 30% of AMI), very-low- (30-50% of AMI), and low-income (50-80% of AMI) households by household size for the Boston-Cambridge-Quincy Metropolitan Statistical Area (MSA), which includes Millis. Typically, households at 80% of AMI and below qualify for housing assistance, though there are some exceptions based on household size and program funding.

Because HUD's regulations are in part based on household size, it is important to understand how Millis's income distribution as a percent of AMI corresponds with this variable. Even though the metropolitan AMI

⁸ This estimate has a coefficient of variation of 18% and should be used with some caution. In addition, the median household income estimate for Dover (Figure 14) should be viewed with caution. It also has a coefficient of variation of 18%. Estimates are considered reliable with coefficients of variation less than 15%.

⁹ Source: ACS 2015 - 5-Year Estimates

for a family of four people is \$113,300 in FY19, the low income limit is set below 80% of AMI because of high housing costs in the area.

Figure 35: FY2019 Affordable Housing Income Limits

FY2016 Income Limit Category	Extremely Low (30%) Income	Very Low (50%) Income	Low (80%) Income
1 Person	\$24,900	\$41,500	\$62,450
2 Person	\$28,450	\$47,400	\$71,400
3 Person	\$32,000	\$53,350	\$80,300
4 Person	\$35,550	\$59,250	\$89,200
5 Person	\$38,400	\$64,000	\$96,350
6 Person	\$41,250	\$68,750	\$103,500
7 Person	\$44,100	\$73,500	\$110,650
8 Person	\$46,950	\$78,250	\$117,750

The most relevant and current information available is Comprehensive Housing Affordability Strategy (CHAS) data. CHAS datasets allow cross tabulation between household type and income status, as well as housing cost burden, which is addressed later in this chapter. Household type is determined by number of people occupying a unit, family status, and age. HUD identifies five household types:

- 62 years and older, family households (2 or more related persons, ages 62 or over)
- 62 years and older, non-family households (1 or more persons, non-related, ages 62 and over)
- small related households (2 persons, neither 62 years of age or over, or 3 or 4 persons)
- large related households (5 or more persons)
- all other households (singles, non-related living together)

According to CHAS 2008-2012 estimates, 630 Millis households are categorized as low income. Moreover, among the low-income households, 230 are considered extremely low income, as shown in Figure 36.

Data from the 2013-2017 ACS shows that 4.4% of the Town's population live below the poverty line.

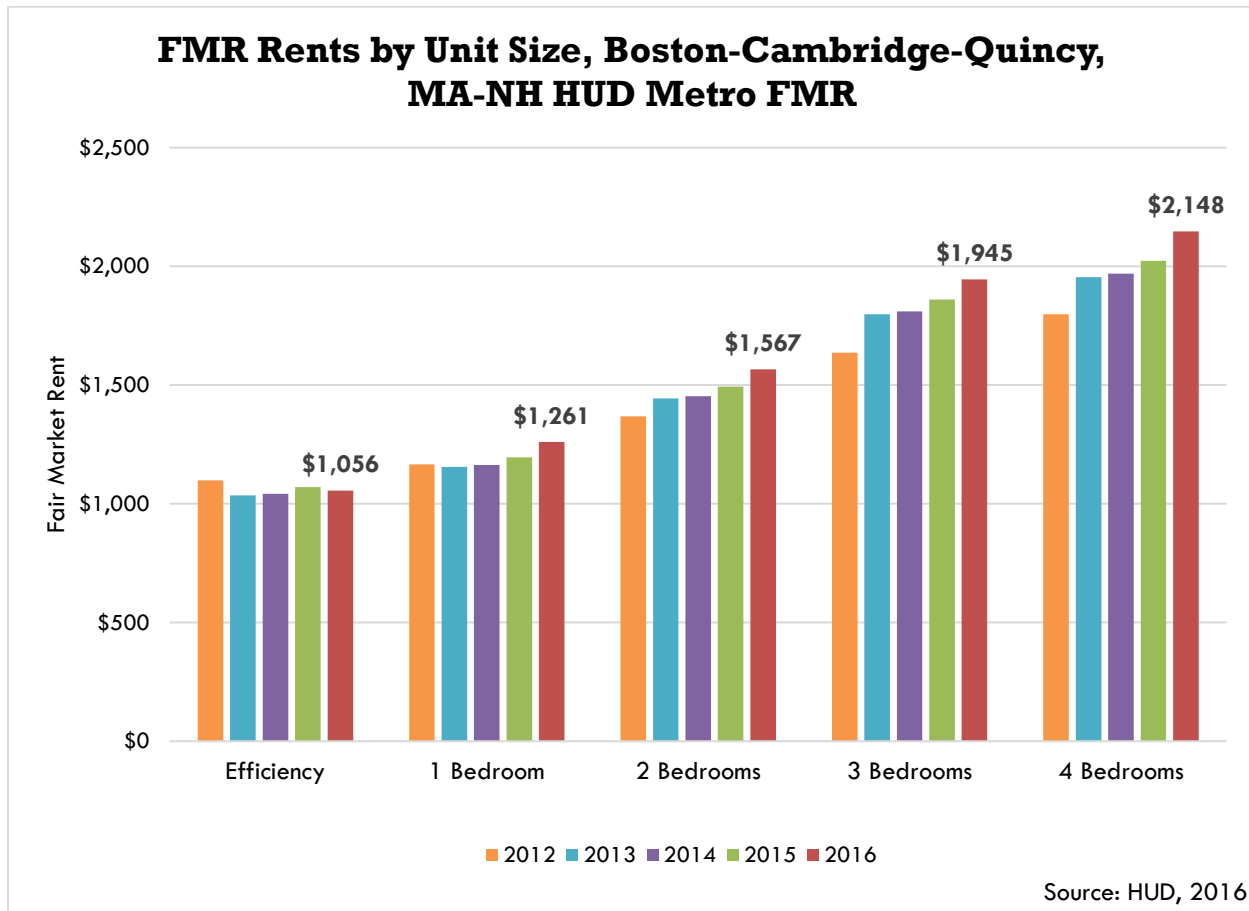
Figure 36: Households by Type and Income as a Percent of AMI

	Total Households	<30% AMI (Extremely Low)	30-50% AMI (Very Low Income)	50-80% AMI (Low Income)	>80% AMI
62+ Years Old, Family	425	30	70	30	295
62+ Years Old, Non-Family	185	40	30	15	100
Large Family	210	0	10	0	200
Small Family	1615	110	40	80	1,385
Other	595	50	40	85	420
Total	3,030	230	190	210	2,400
Source: CHAS 2008-2012					

Fair Market Rents

Figure 37 below illustrates Fair Market Rents, or maximum allowable rents (not including utility and other allowances) determined by HUD for subsidized units in the Boston Metropolitan Statistical Area, which includes Millis. The upward trend reflects the annual adjustment factor intended to account for rental housing demand. Given the constraints on the Greater Boston rental housing market, rising rent is unsurprising and points to the need for more rental housing at multiple price points. The median gross rent in Millis, according to the 2017 ACS estimates, \$1,557 ± \$142, is lower than the Fair Market Rents for 2-, 3-, and 4-bedroom units.

Figure 37: FMR Rents by Unit Size, Boston-Cambridge-Quincy, MA-NH HUD Metro FMR



Current MGL Chapter 40B Subsidized Housing Inventory

Under M.G.L. Chapter 40B, affordable housing units are defined as housing that is developed or operated by a public or private entity and reserved for income-eligible households earning at or below 80% of AMI. Units are secured by deed restriction to ensure affordability terms and rules. All marketing and placement efforts follow Affirmative Fair Housing Marketing guidelines per the Massachusetts Department of Housing and Community Development (DHCD).

Housing that meets these requirements, if approved by DHCD, is added to the Subsidized Housing Inventory (SHI). Chapter 40B allows developers of low- and moderate-income housing to obtain a Comprehensive Permit to override local zoning and other restrictions if less than 10% of a community's housing is included on the SHI or if less than 1.5% of the municipality's land area is dedicated to affordable housing.

Subsidized Housing Inventory

According to the most recent listing by DHCD (September 2017), the Subsidized Housing Inventory rate in Millis is 3.75%. Millis has 118 SHI units: 100 rental (87 of which are affordable in perpetuity) and 21 for ownership, in addition to 10 DDS Group Homes units.

Because the SHI is determined using the total number of housing units from the most recent decennial Census (the denominator), the number of SHI units (the numerator) must increase as the number of market rate units increases in order to preserve—never mind exceed—the current proportion. Of course, if affordable units are lost, then the SHI drops.

Further, because M.G.L. Chapter 40B allows 100% of units in rental projects developed by a comprehensive permit, where at least 20-25% of units are deed-restricted for households earning at or below 80% of AMI, to count towards the SHI (including the 75% that are market rate), the actual number of affordable units in a given community is lower than the inventory indicates.

Foreclosures

Foreclosures in Millis and the region surged over the last decade. In Millis, foreclosures decreased from 40 in 2007 to 6 in 2012, as shown in Figure 38. It is important to track this information because as homes become foreclosed, households are forced to relocate, often increasing demand for affordable housing options.

Figure 38: Millis Home Foreclosures 2007-2012

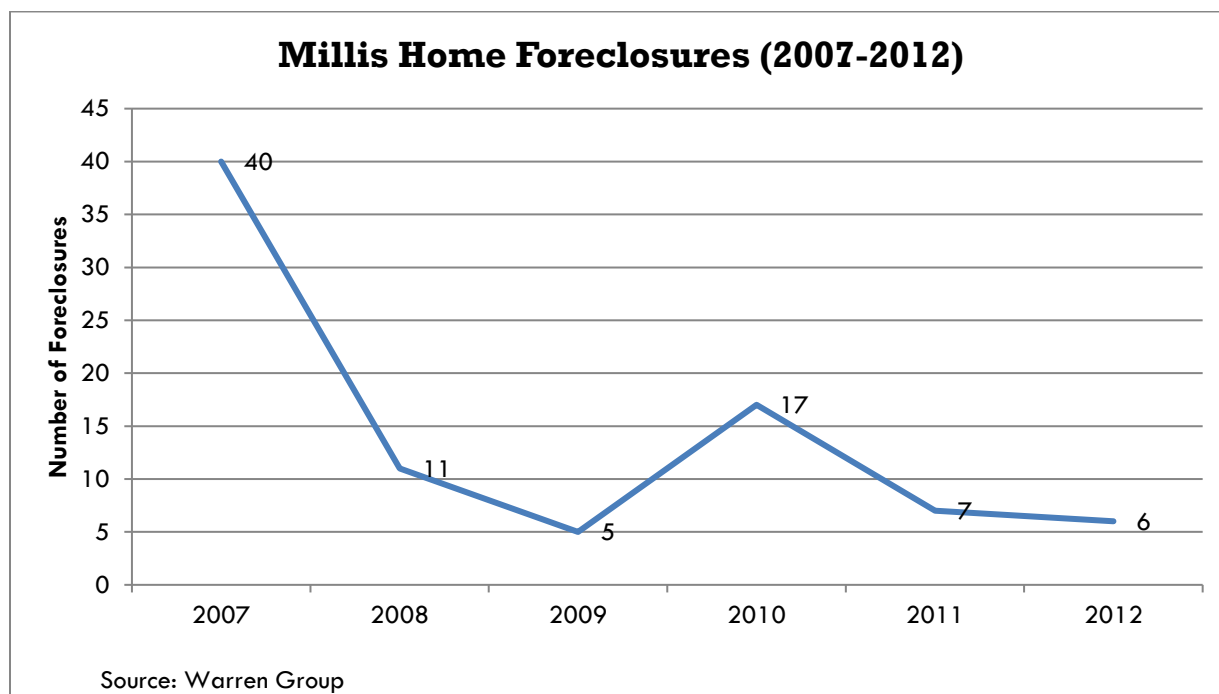
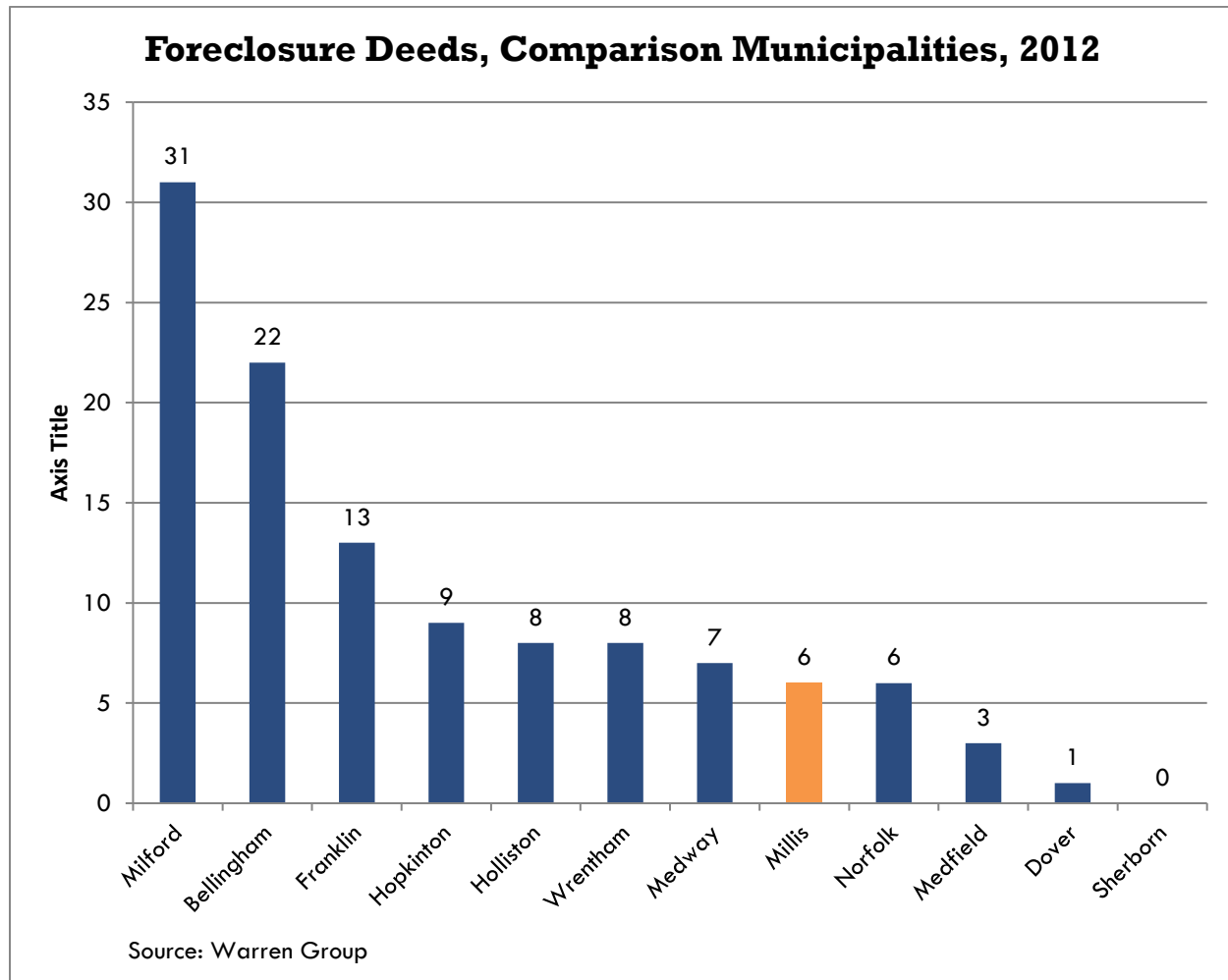


Figure 39 shows that compared to neighboring municipalities, Millis (as well as Norfolk) had the fourth-lowest number of foreclosures in 2012.

Figure 39: Foreclosure Deeds, Millis and Neighboring Municipalities, 2012

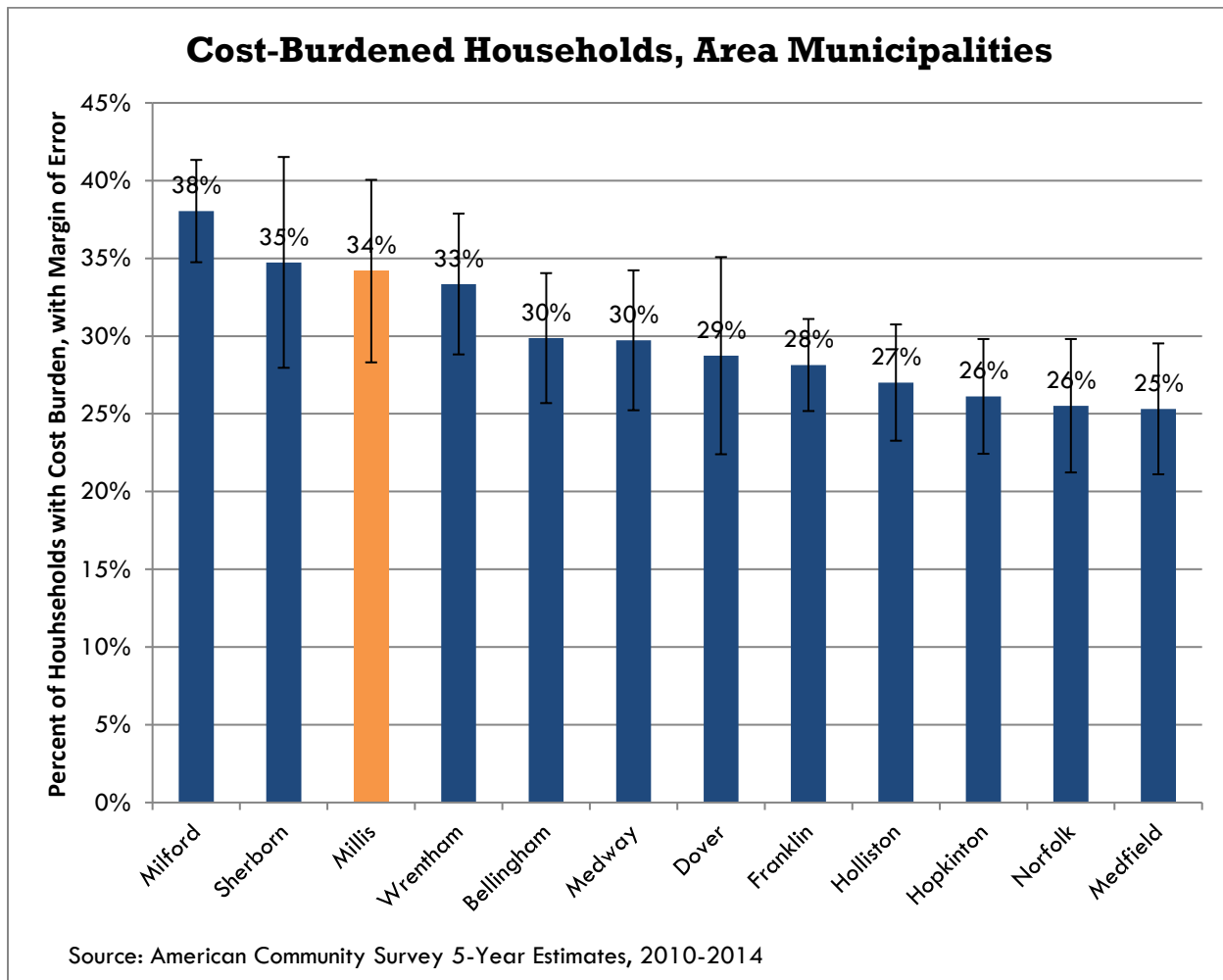


Housing Cost Burden

Another method to determine whether housing is affordable to a community's population is to evaluate households' ability to pay their mortgage or rent based on their reported gross household income. Households that spend more than 30% of their gross income on housing are considered to be housing cost burdened, and those that spend more than 50% are considered to be severely cost burdened.

HUD considers a rate of 30% or higher cost-burdened households and 15% severely cost-burdened households to pose a significant issue for a community. According to the most recent American Community Survey Estimates, 2010-2014, Millis has one of the highest rates of cost burden among neighboring municipalities, with an estimated 34% of all households experiencing cost-burden as shown in Figure 40. The 2013-2017 ACS shows a slight increase to 35.1% or a total of 1,088 households. Almost half of the total are severely cost-burdened (528 households).

Figure 40: Cost-Burdened Households, Millis and Neighboring Municipalities



The rate of cost-burdened households is slightly higher among Millis owner-occupied households than renter-occupied households (35% versus 32%), as shown in Figure 41. However, the rate of severely cost-

burdened renter-occupied households is well above the 15% threshold at 19%, which is a HUD indicator that there is a significant issue with the overall well-being of the community.

Figure 41: Millis Cost-Burdened Households by Tenure

Cost Burden			Severe Cost Burden	
	Count	Percent	Count	Percent
Owner-Occupied	764	70.2%	400	36.8%
Renter-Occupied	324	29.8%	128	11.8%
Source: 2013-2017 ACS				

CHAS data offers further information on affordable housing need by household type and by income level (low, very low, extremely low, and middle income, or those earning between 80-120% of AMI). CHAS cost burden data is reported using the same HUD household type classifications introduced above. In Millis, over half of the “other households” (non-family, under 62 years of age) are cost burdened, as shown in Figure 42 and nearly one-third of “other households” are severely cost burdened. Nearly one-third of small family households and one-third of 62 years and older non-family households are cost burdened. Large family households experience the lowest rate of cost burden at 21%. Among 62+ years old non-family households, nearly one-quarter are severely cost burdened.

Figure 42: Millis Cost-Burdened Households by Household Type

Household Type	Household Type Total	Cost Burden (inclusive severe)		Severe Cost Burden	
		Count	Percent	Count	Percent
62+ Years Old, Family	425	125	29%	55	13%
62+ Years Old, Non-Family	185	60	32%	45	24%
Large Family	210	45	21%	15	7%
Small Family	1615	495	31%	155	10%
Other	595	315	53%	180	30%
Total	3030	1040	34%	450	15%

Source: CHAS 2008-2012

Households of any income level can become cost burdened for any number of reasons, but it is important to consider rates of cost burden among low-income households specifically, as shown in Figure 43. These households experience high rates of cost burden in Millis, nearly three-quarters of all low-income households are cost burdened. Large and small families, and households designated as other, have the highest rate of cost burden in Millis. Small family and other households have the highest rates of severe cost burden, exceeding 50%.

Figure 43: Millis Cost-Burdened Low-Income Households by Household Type

Household Type	Household Type Total	Cost Burden (inclusive severe)		Severe Cost Burden	
		Count	Percent	Count	Percent
62+ Years Old, Family	130	70	54%	40	31%
62+ Years Old, Non-Family	85	45	53%	30	35%
Large Family	10	10	100%	0	0%
Small Family	230	190	83%	130	57%
Other	175	150	86%	95	54%
Total	630	465	74%	295	47%

Source: CHAS 2008-2012

An analysis of cost burden among low-, very-low-, and extremely-low-income households provides further insight. Notably, severe cost burden is most serious among extremely-low-income households, as might be expected. Extremely low and very low income small family households are 100% cost burdened.

Figure 44: Cost-Burden for Low, Very Low, Extremely Low Income Households, by Household Type, Millis

	Extremely Low Income			Very Low			Low Income		
	Households	Cost Burden	Severe	Households	Cost burden	Severe	Households	Cost Burden	Severe
62+ Years Old, Family	30	50%	50%	70	79%	36%	30	0%	0%
62+ Years Old, Non-Family	40	75%	75%	30	50%	0%	15	0%	0%
Large Family	0	0%	0%	10	100%	0%	0	0%	0%
Small Family	110	100%	59%	40	100%	63%	80	50%	50%
Other	50	80%	80%	40	100%	100%	85	82%	18%
Total	230	85%	65%	190	84%	47%	210	52%	26%

Source: CHAS 2008-2012

Middle-Income Housing Problems

CHAS data also indicates the extent to which middle-income households (those earning 80-120% of AMI) suffer from housing problems. A household is said to have a housing problem if it has one or more of the following problems:

1. housing unit lacks complete kitchen facilities,
2. housing unit lacks complete plumbing facilities,
3. household is overcrowded (more than one person per room)
4. household is cost burdened.

For Millis's middle-income households, approximately half experience at least one housing problem at each of the income levels in Figure 45.

Figure 45: Housing Problems for Millis Households at 80%-120% of AMI

Income	Total Households	With 1 or more housing problems	Percent
less than 30% HAMFI ¹⁰	330	310	94%
30-50% HAMFI	220	175	80%
50-80% HAMFI	505	335	66%
80-100% HAMFI	300	140	47%
Greater than 100% HAMFI	1,720	70	4%
Source: CHAS 2012-2016			

Affordability Gap

Another way to measure housing affordability in a given community is to compare the median home sale price and rent to that which a household at the community's median income can afford. If there are more households at a given income level than housing units affordable to them, there is an affordability gap.

In Millis, the median household income is \$96,773 \pm \$17,740 (\$100,230 based on 2013-2017 ACS, and still within the margin of error); the median sales price of single-family homes is \$441,000 and \$265,000 for a condo in 2019¹¹, and the median gross rent is \$1,557¹². A typical family household with this income can afford ownership housing priced at a maximum of \$443,417 or a rental rate of \$2,419 a month¹³. Therefore, Millis has a slight ownership housing affordability surplus (instead of a gap potentially due to the large margin of error for income data) of \$2,417 for a single-family home, and a rental housing affordability surplus of \$862 per month. The median sales price of Millis' single-family homes is affordable to households earning the area median income. Even more so, the median

¹⁰ Housing Urban Development Area Median Family Income

¹¹ Source: 2019 Warren Group, and Banker and Tradesman Data

¹² Source: 2013-2017 ACS

¹³ Maximum affordable ownership price calculated using Zillow Affordability Calculator, based on a down payment of \$20,000, private mortgage insurance, \$250 in monthly debts, and a 30-year fixed rate of 3.875%. Rental rate calculated at 30% of income, or \$30,069 a year.

condominium sales price of \$265,000 is well within reach of the median households and offers an alternative to renting.

The affordability gap measurement typically under-estimates housing affordability problems in a community because it assumes a perfectly efficient housing market wherein households are evenly distributed among housing units they can afford. In reality, some households occupy units they cannot afford and some occupy units priced well below what they can afford. Affordable housing units only reduce the cost-burden rate among low-income households if they are occupied by these households. If, instead, higher-income households occupy lower-cost units or vice-versa, then cost-burden rates remain high among low-income households even in markets with an adequate supply of affordable housing.

Development Constraints and Limitations

In Millis, residential development is influenced by various factors pertaining to the natural and built environments; regulatory and municipal barriers; capacity limitations; and the broader planning context. At public forums hosted for the purposes of advancing this HPP, attendees identified the following potential barriers to housing development and affordability:

- Natural & Built Environment
 - Car-dependent town with lack of alternate transit modes
- Regulatory & Municipal Barriers
 - Outdated zoning
- Capacity Limitations
 - Limited financial resources for affordable housing creation
 - No Town Planner, although the Town recently appointed an Interim Economic Development/Planning Director (the Town hopes to post the position soon pending funding for a full-time position)
 - Lack of public awareness of housing needs and issues

Building on these concerns, this section provides an overview of Millis' land use development patterns, environmental constraints, and municipal infrastructure limitations that may impact the creation of affordable housing.

Physical and Natural Constraints

Developable Land

A close look at the developed and undeveloped land of Millis, provided by the Metropolitan Area Planning Council (MAPC) Data Services Department, revealed that 3,726 acres of the town are coded Residential, with 2,788 developed acres and 938 vacant acres (approximately 75% of Millis' residentially zoned land is developed). Based on the BioMap2 report for Millis, the total land area is 7,848 acres, of which 28.9% or 2,268 acres is protected open space.¹⁴

There are a number of potentially developable sites that have been identified for residential development during the planning process. These are described in more detail under Goal 4 in the Affordable Housing Goals and Strategies section of this plan.

There are two MassDEP Tier 2 brownfield sites. One is located at the Millis Library at 961 Main Street and the other at 63 Grove Street, but those sites should not impact the future development of housing in Millis.

¹⁴ http://maps.massgis.state.ma.us/dfg/biomap/pdf/town_core/Millis.pdf

Municipal Infrastructure (School Capacity, Water/Sewer Capacity)

Although school enrollment is projected to decline over the next few years, there is an existing overcrowding issue. The projected student enrollment decrease will ease some of the current space utilization issues; however it will not be enough to relieve the overcrowding that exists in the schools. In 2001, due to overcrowding at Clyde Brown Elementary School, the fifth grade was moved to the Middle School which is upstairs in the High School building and shares all common areas such as gymnasium, cafeteria, library and auditorium with the High School. This exacerbates the space and facilities constraints in the Middle School/High School building as well. The Town received a grant from the Massachusetts School Building Authority to upgrade and expand the Clyde Brown School in order to alleviate those problems. The school opened in September 2019.

Approximately 83% of Millis is on public water and 63% is on public sewer. Millis' water supply and infrastructure is capable of meeting current and future demands, especially given the future population projections that show a decline in population. Its six wells have a safe yield of 4.6 million gallons per day (MGD), although the Town is currently permitted to withdraw 0.99 MGD. The average day demand ranges from 0.66 to 0.84 MGD.

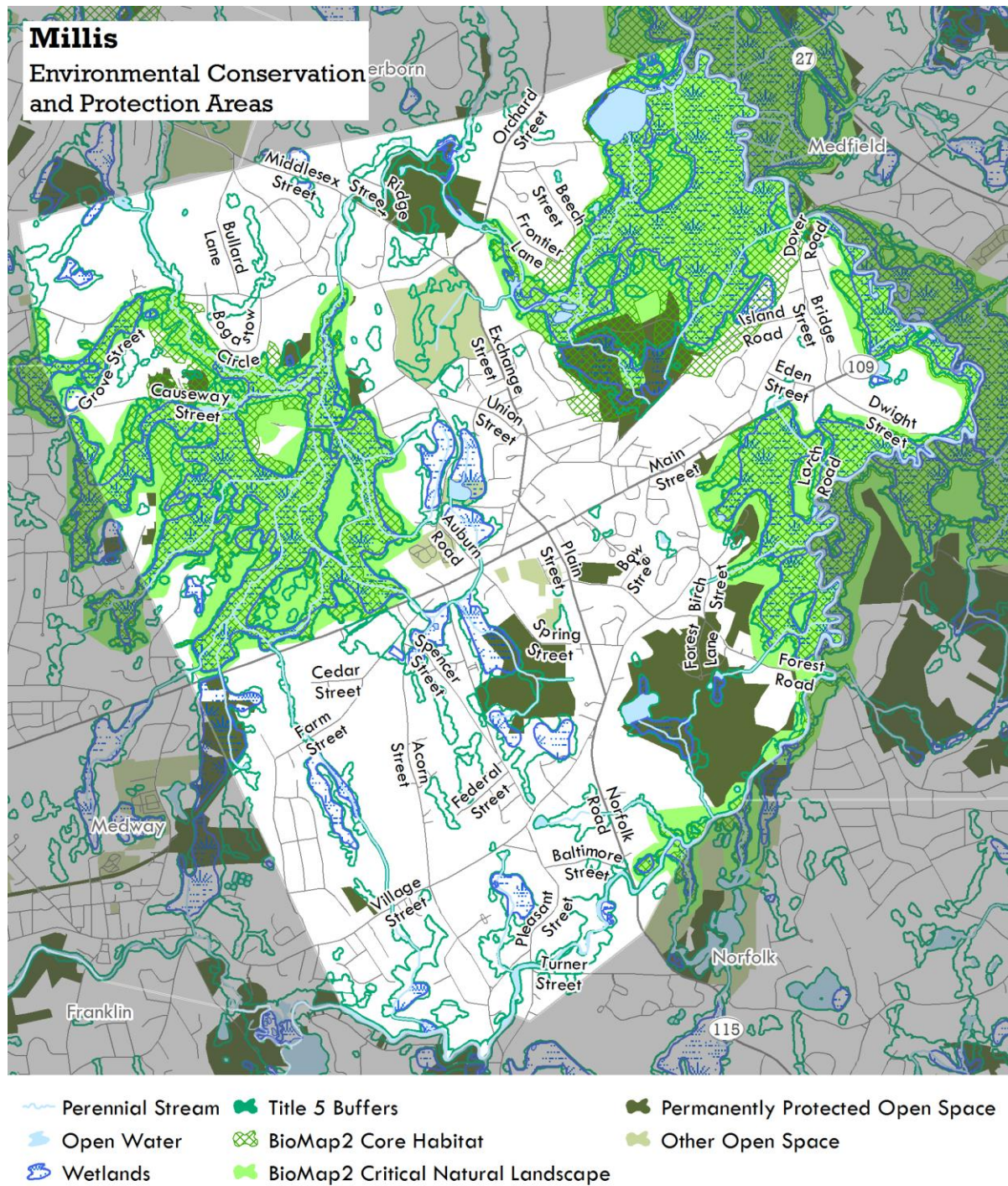
There are two major development projects and a negotiated sale of water that will impact the Town's infrastructure capacity. The Glen Ellen Senior Residential Community project, a 324 unit, over-55 housing development is under construction and will require approximately 80,000 gallons per day (gpd) of both water and sewer capacity. The Dover Road Residences project was recently granted a special permit for the construction of a 110 bed facility. The Town has the capacity to provide water and sewer for these projects as well as the others currently in the pipeline. However, after those projects are connected to the sewer system, the Town has very little additional sewer capacity available for future growth which can be a limiting factor in terms of new commercial and residential development.

The Town has not been able to maintain and improve its roadways with the Chapter 90 funding available. A recent Proposition 2½ override dedicated to roadway improvement funding failed two years ago.¹⁵

Figures 46 – 48 show Environmental Conservation and Protection Areas, Flooding and Hazard Areas, and Protected Water Sources, respectively.

¹⁵ James F. McKay, Director/Chief of Operations, Public Works/Highway Department

Figure 46: Environmental Conservation and Protection Areas



The information on this map is for planning purposes only.
Sources: MAPC, MassGIS, MassDOT, USGS, MassDEP, NHESP
Date: August 2016

Document Path: K:\DataServices\Projects\Current_Projects\Housing_Production_Plans\Millis\Project_Files\Conservation_Report.mxd

Figure 47: Flooding and Hazard Areas

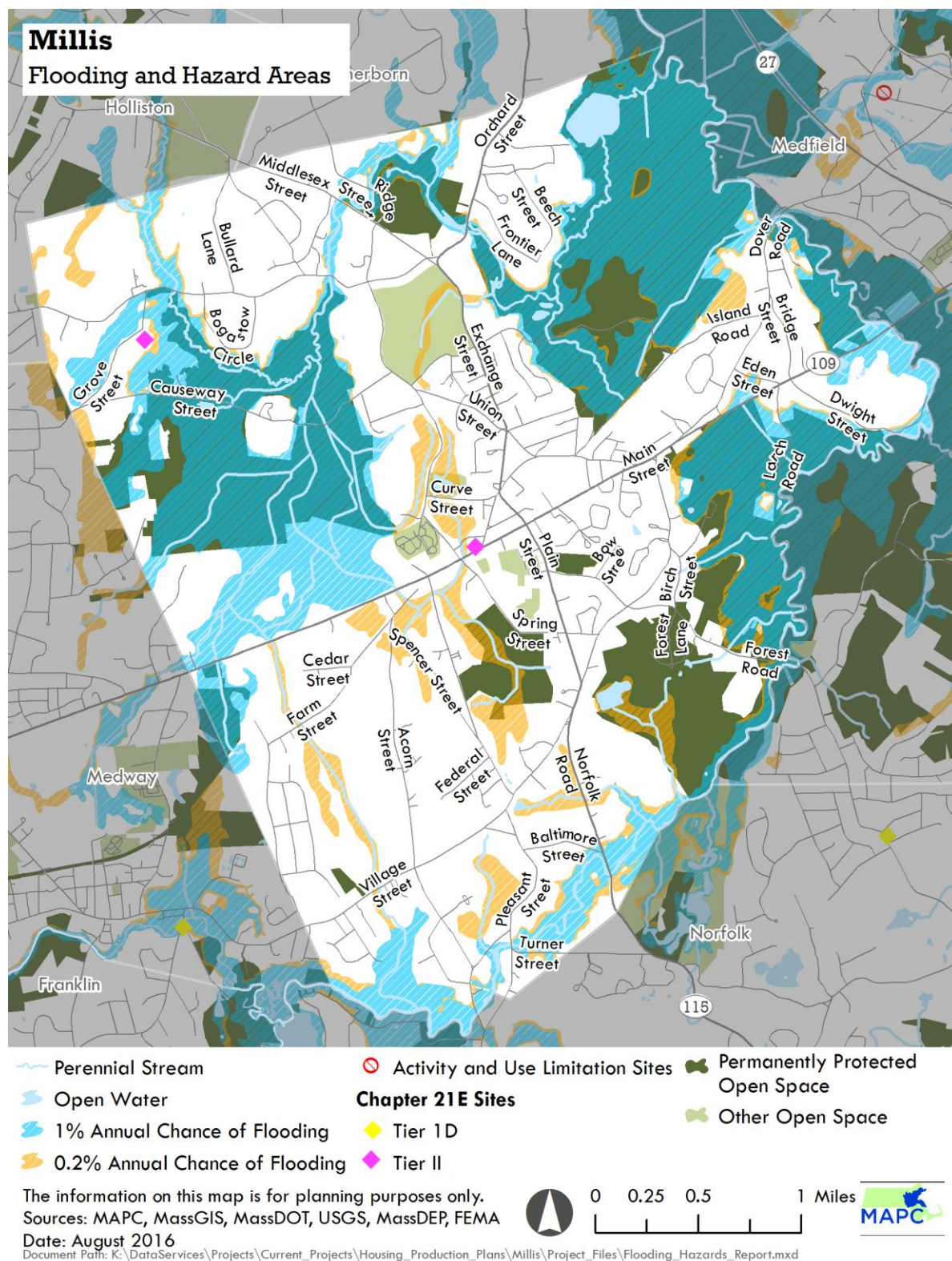
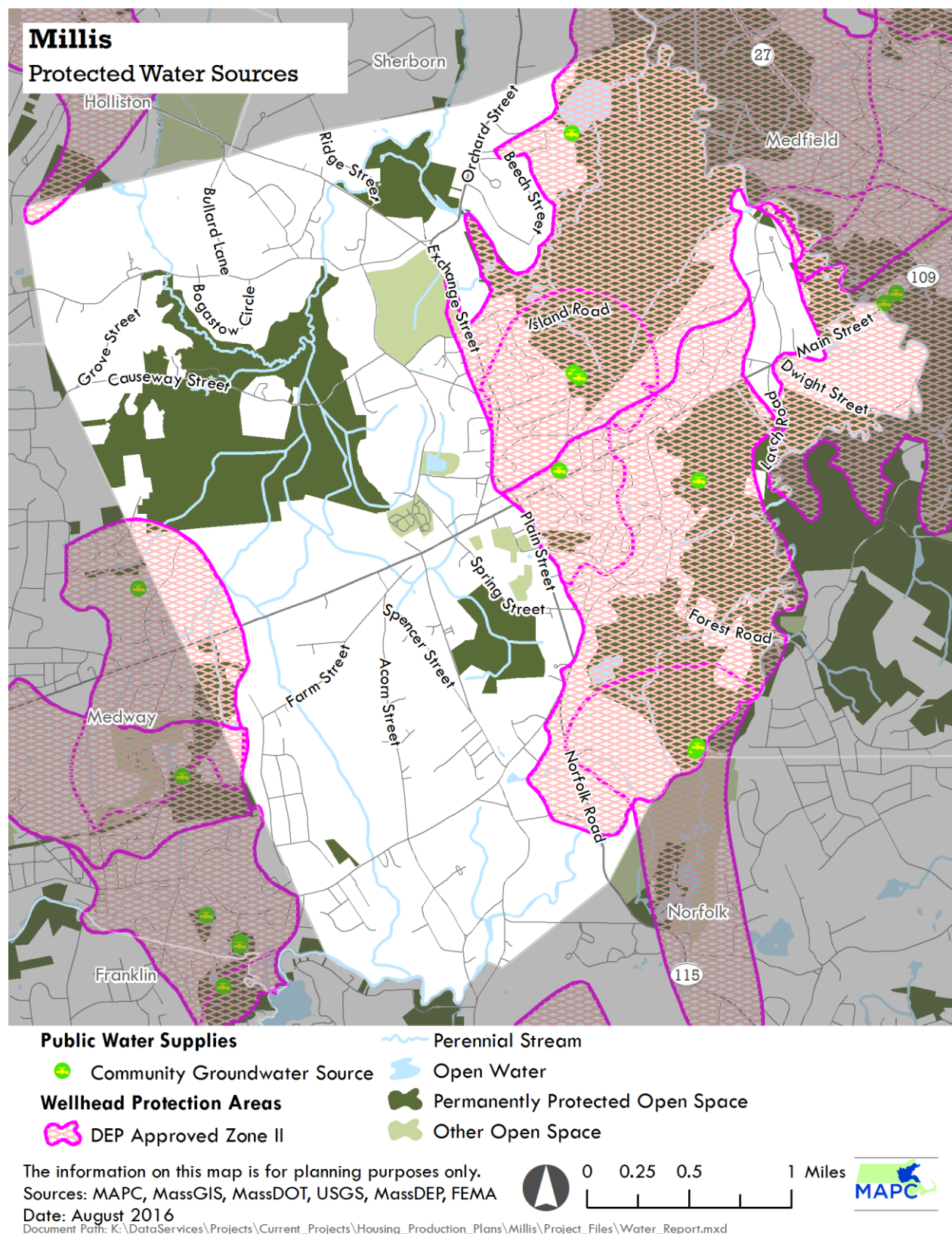


Figure 48: Protected Water Sources



Housing Resources

Millis Housing Authority

The Millis Housing Authority (MHA) manages three projects that provides housing for the Town's low-income citizens. Kennedy Terrace contains 40 one bedroom apartments for elderly and disabled residents and King Terrace provides an additional 33 units. There are ten apartments (eight 2-bedrooms and two 3-bedrooms) for families at the Daniels St. site. MHA has a management agreement with the Foxborough Housing Authority, which also includes Medfield and Ashland.

The Millis Housing Authority manages twenty active Housing Choice Vouchers. Relying on data obtained from Affordable Housing Online¹⁶, 32% of voucher holders reside in a home with zero or one bedroom, 37% with two bedrooms and 32% with three or more bedrooms. 16% of voucher recipients are considered overhoused, meaning they occupy a rental unit larger than their family size requires. The average voucher holder has received housing benefits for 10 years and 4 months. According to 2016 fourth quarter Picture of Subsidized Households data (most recent available data), the average voucher household contains 2.1 persons and has a household income of \$16,374 per year. 100% of households were very low income (VLI) and 84% were extremely low income (ELI). 21% of households had wages as a major source of income, 5% of households had welfare (TANF, General Assistance or Public Assistance) as their primary source of income, and 74% of households had other income (Social Security, Disability or Pension) as their major source of income. The average monthly tenant contribution to rent by Millis Housing Authority voucher holders in 2016 was \$411 and the average monthly HUD expenditure per voucher holder was \$1,145. The average utility allowance across all voucher recipients is \$129.

In 2019, the MHA has a waiting list of 218 for the elderly housing units and 256 for ADA accessible units. Most of these people are likely to want to stay in Millis. The waiting list for the family units was closed for two years and was recently re-opened and there are now 987 families on that list. This includes people who are on waiting lists for numerous housing authorities around the state.

South Shore Habitat for Humanity

South Shore Habitat for Humanity is a faith-based, non-profit organization dedicated to delivering simple, decent, affordable homes to people in need in 35 cities and towns south and southwest of Boston. While no homes have been built in Millis as of yet, Habitat recently met with the Millis Community Preservation Committee about potential development of homes on town-owned sites.

¹⁶ <https://affordablehousingonline.com/housing-authority/Massachusetts/Millis-Housing-Authority/MA154>

Regulatory Constraints

Zoning

The Town's Zoning By-Law¹⁷ allows multi-family dwellings¹⁸ only by special permit via its Planning Board in the Residential-Village (R-V), Residential-Village-Commercial (R-V-C) and the Commercial-Village-Two (C-V-2) zoning districts (see Figure 49). The regulations for the R-V and C-V-2 zoning districts do not indicate a maximum unit threshold in Table 2 – Area Regulations of the zoning by-law. The R-V suggests that there is minimum 5-acre lot area for developments with a maximum of 22 dwelling units, and that each additional dwelling unit beyond the 22 requires an additional 10,000 square feet of lot area. The regulations for the R-V-C district indicate that the base density for multifamily developments (with a required minimum 5-acre lot) is a maximum of a 4 units per acre. The C-V-2 indicates that the base density is 0.20 FAR. Other regulations that affect the number of units in a development include the height limit, and dimensional requirements. The maximum building height is 35 feet and 2 ½ stories in the R-V district, 35 feet and 2 ½ to 3 stories in the C-V district, and 30 to 35 feet and 2 to 3 stories in the C-V-2 district. The maximum building coverage of the lot is 35% for R-V, 35% for R-V-C with certain requirements, and 50% for C-V-2 with certain requirements. Of the three future development projects in the pipeline listed in Figure 32 that have residential components, two of the three have very sizeable multifamily components ranging from 170 to 216 dwelling units.

Other than multifamily residential, other residential uses are limited to the following:

- (a) detached single-families solely in residential R-T, R-S, R-V, and R-V-C districts;
- (b) two-families by-right in R-V and by special permit in residential R-V-C and commercial C-V-2 districts;
- (c) artist live/work studio/residences by special permit only in residential R-V-C and commercial C-V and C-V-2;
- (d) elderly housing solely by special permit in all districts except residential R-T and industrial I-P and I-P-2;
- (e) mobile homes by special permit only in residential R-T, R-S and R-V;
- (f) conversion of any existing structure to multifamily is allowed only by special permit¹⁹ in R-V-C;
- (g) accessory family units by special permit only in residential R-T, R-S, R-V, and R-V-C districts; and
- (h) residential dwelling units as part of a mixed-use development by special permit only in residential R-V-C and commercial C-V and C-V-2, subject to zoning by-law provisions in Section XIII.P (Millis Center Economic Development Opportunity Overlay District development provisions) and Section XIII.Q (village center special development provisions).

¹⁷ Last amended May 9, 2016 (http://www.millis.org/Pages/MillisMA_BComm/Planning/MillisZoningBylaws5-9-16.pdf)

¹⁸ See Millis Zoning By-Law Section XIII.B.

¹⁹ Subject to the numerous Multi-Family Development Special Permit Conditions listed in Section XIII(B).

Figure 49: Summary of Residential Use Regulations by Select Districts

	Residential Town R-T	Residential Suburban R-S	Residential Village R-V	Residential Village Center R-V-C	Commercial Village C-V	Commercial Village Two C-V-2	Village Business VB
Residential Use	Intent & Purpose? <ul style="list-style-type: none"> Least dense, single-family min. 60,000-SF lots Appropriate typologies? SFR only? 	Intent & Purpose? <ul style="list-style-type: none"> Moderately dense 25,000-SF lot single family lots Appropriate typologies? SFR only? 	Intent & Purpose? <ul style="list-style-type: none"> Second-most dense residential Appropriate typologies? SFR, 2F, elderly, MFR? 	Intent & Purpose? <ul style="list-style-type: none"> Most dense residential Appropriate typologies? SFR, 2F, elderly, conversion, MFR, artists, mixed? 	Intent & Purpose? <ul style="list-style-type: none"> Least dense commercial/mixed-use Appropriate typologies? Elderly, artist, mixed? 	Intent & Purpose? <ul style="list-style-type: none"> Moderately dense commercial/mixed-use Appropriate typologies? 2F, elderly, MFR, artist, mixed? 	Intent & Purpose? <ul style="list-style-type: none"> Most dense commercial-only Appropriate typologies? None? Strictly commercial.
Detached single family	P	P	P	P	N	N	N
Accessory family	SP	SP	SP	SP	N	N	N
Two-family	N	N	P	SP	N	SP	N
Elderly housing	N	N	SP	SP	SP	SP	N
Conversion	N	N	N	SP	N	N	N
Multi-family dwellings	N	N	SP	SP	N	SP	N
Artist live/work	N	N	N	SP	SP	SP	N
Mixed-use/residential	N	N	N	SP	SP	SP	N

Multifamily Zoning & Development Analysis

The following highlights barriers and opportunities to the development of housing in Millis.

- None of the zoning districts have any “intent and purpose” descriptive language to accompany their establishment. It would be highly advisable to create an intent and purpose section in order to provide a reason for the district by describing the scale, density and/or character for the various types of residential and commercial districts. This would help to understand appropriateness for lower versus higher density residential as well as the intensity of the commercial districts and their appropriateness for mixed-use and potential types of residential components.
- Two families are not allowed in RS and RT residential districts, which seem to be strictly single-family by-right residential districts (with a special permit option for accessory family units). These two districts cover large swaths of the Town’s territorial extent (see Figure 50). Potentially allowing two-family dwellings within the same districts could facilitate modest, low-density housing production. Under the existing zoning, two-family dwellings are only allowed by-right in a single zoning district (Residential Village) which represents a fairly small area of the Town’s total area as shown in Figure 51. As shown in the building permit data, Millis has only produced 14 two-family dwelling units (out of a total of 65 permits) from 2010 to 2014, and ten of those were in 2010. The zoning regulations do allow two-family dwellings by special permit in the R-V-C and C-V-2 zoning districts but that represents an additional permitting hurdle as well as the size of those

districts are significantly smaller than the already small R-V zoning district where they are allowed by-right.

- Multifamily dwellings are not allowed to be permitted and constructed by-right anywhere in Millis. This represents a barrier to increasing needed housing in general, as well as a barrier to allowing a variety of housing types without the need for special review and permitting hurdles. Multifamily dwellings are allowed by special permit only in the RV and RVC districts (the two most dense residential ones), and the CV2 zoning district (the moderately dense commercial/mixed-use zone). It is worth noting that standalone multifamily dwellings and mixed-use/residential buildings (with presumably upper-story multifamily dwellings) are not allowed at all in the most intensive commercial district (VB). There is an opportunity to increase needed housing by allowing mixed-use/residential developments with upper-story multifamily dwellings in this VB district. While standalone multifamily dwellings are not allowed in the least intense commercial district (CV), upper-story multifamily dwellings as part of mixed-use/residential developments are allowed by special permit. Ideally, these residential uses would be allowed by-right in these districts in order to facilitate housing production, and create opportunities for residents to walk short distances to potential jobs and services.
- Additionally, the production of needed housing units could be increased by simultaneously allowing by-right the following diverse housing types that currently require a special permit: (a) accessory family units in the RT, RS, RV and RVC residential zoning districts; (b) artist live/work units RVC, CV, CV2, and potentially VB zoning districts; and (c) elderly housing RV, RVC, CV, and CV2 districts. Doing so would to serve the needs of more residents at different stages in their lives.
- Section VIII(A) Table 4 requires one parking space for a one-bedroom dwelling unit, and two parking spaces for two-bedroom dwelling units and greater.

Figure 50: Majority of Land Outside Red Boundary is Low Density RT and RS Zoning (Exclusively Single Family)

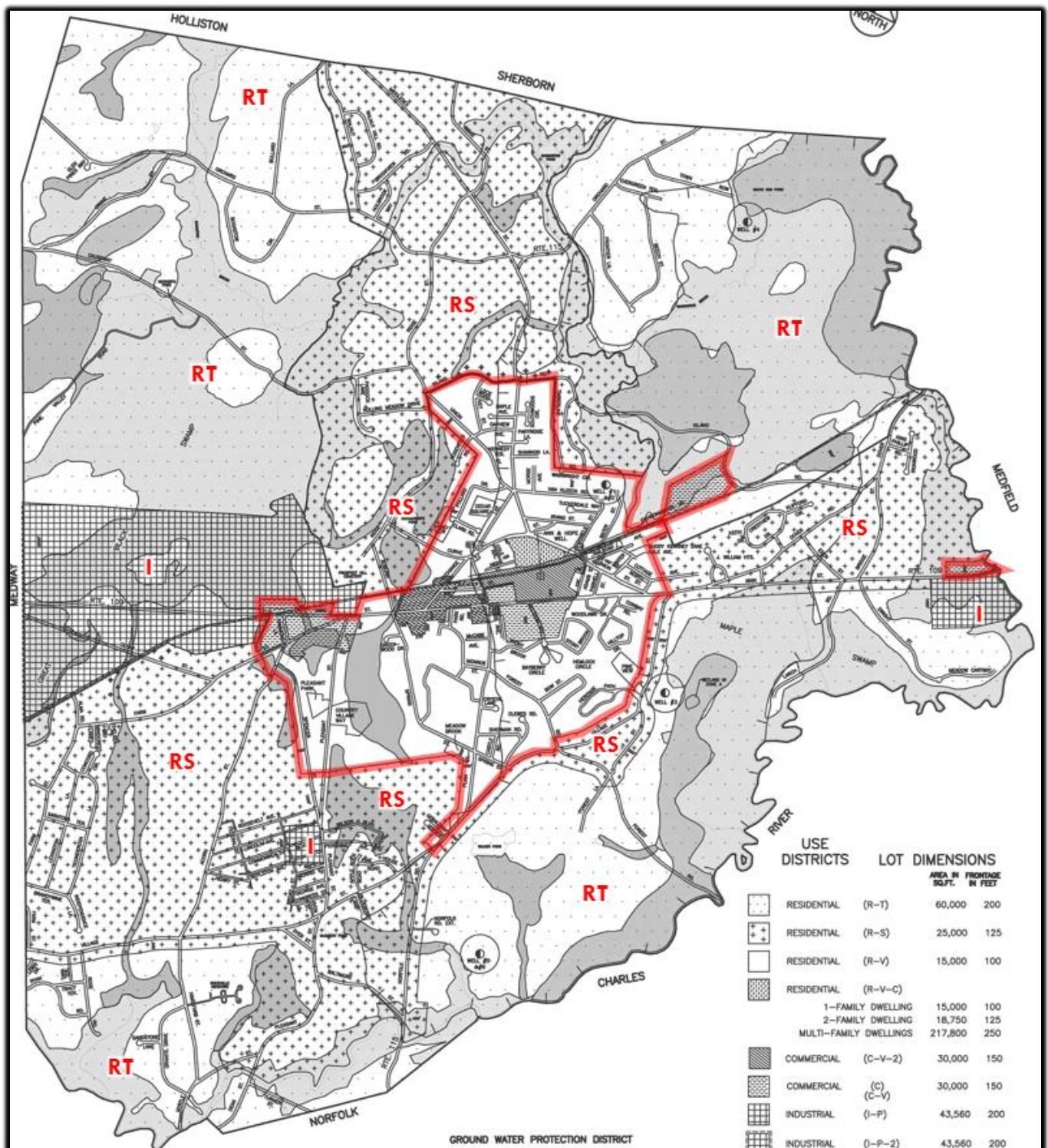
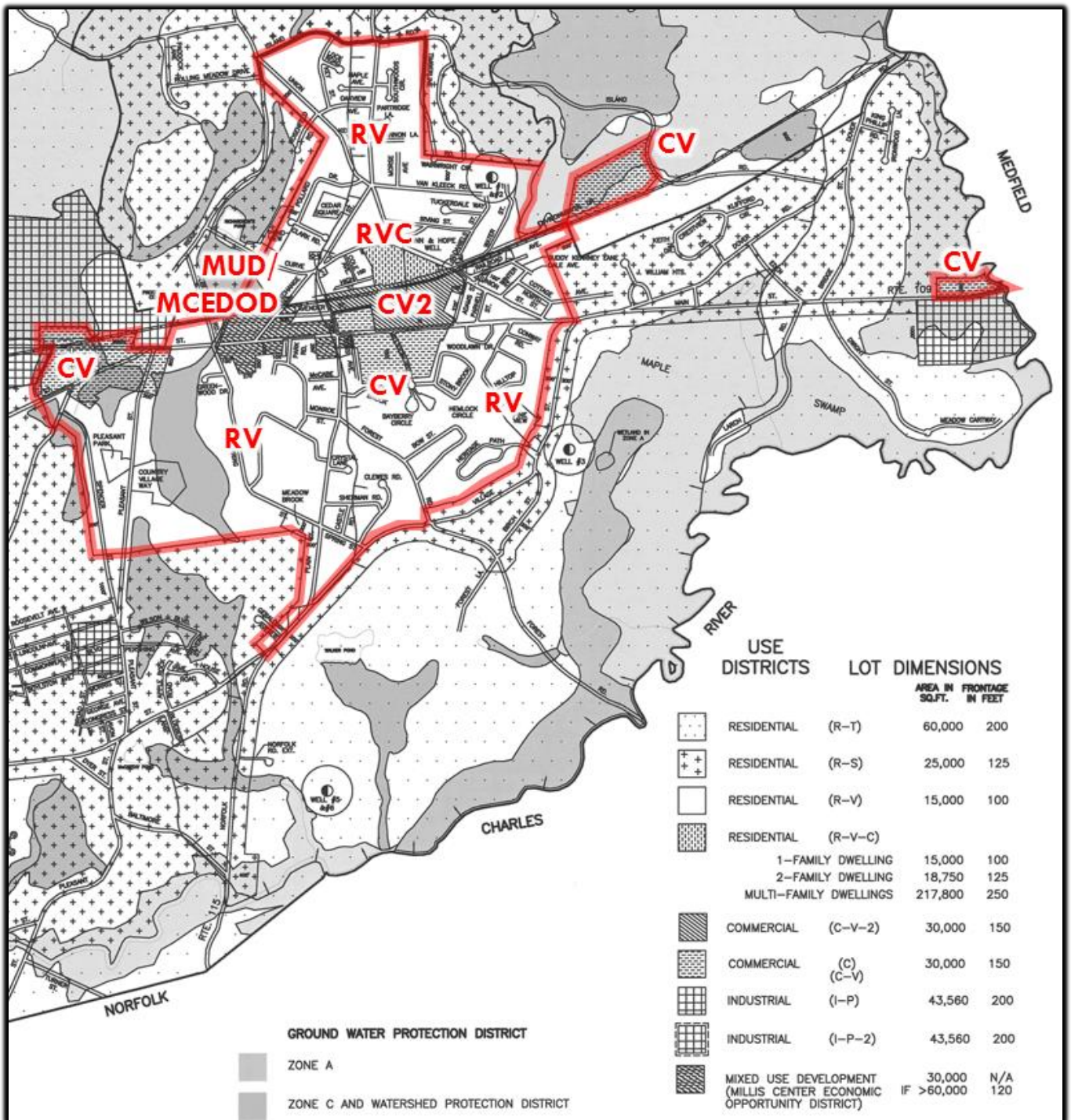


Figure 51: Excerpt of Town of Millis Zoning Map – last amended 11.2.2015



Source 1 Town Website at http://www.millis.org/Pages/MillisMA_BComm/Planning/ZoningMap11-2-15.pdf

Affordable Housing Goals and Strategies

The ideas shared at the public meetings, as well as the analyses of housing needs and of development constraints, indicate the need for more affordable and deed-restricted housing in Millis to meet the identified needs of low- and middle-income and cost-burdened populations. Towards that end, the town will need to think creatively about how to maximize development potential. Given this, MAPC worked with the Town to develop a set of housing goals and strategies that will serve as a proactive guide for building a more diverse and affordable housing stock that will meet current and future demand.

Goal 1: Create opportunities to develop a diverse and affordable housing stock to meet the needs of a changing demographic profile in the town.

Goal 2: Encourage affordable housing development to achieve, exceed and maintain the Chapter 40B 10% goal.

Goal 3: Review and revise the Zoning By-law to remove barriers and create more incentives toward the production of affordable housing.

Goal 4: Identify sites that are most appropriate to accommodate Millis's projected growth in housing.

Goal 5: Leverage existing funding sources to meet existing and future housing needs.

Goal 6: Ensure that staffing and commissions have capacity to implement HPP and support to prospective affordable housing developments.

Goal 1: Create opportunities to develop a more diverse housing stock to meet the needs of a changing demographic profile in the town.

The Town should encourage and proactively plan for affordable housing development to achieve, and maintain the Chapter 40B 10% goal including promotion of a mix of housing types to accommodate smaller households for all age groups, full-accessibility, and lower-cost rental and ownership housing that is consistent with local and regional needs and feasible within the local housing market.

Strategies:

- **The Town should establish a Housing Partnership Committee which could advocate for housing policies that implement this HPP and oversee the creation of an Affordable Housing Trust Fund.**
- **Create a Municipal Affordable Housing Trust Fund (M.G.L. c. 44 §55C) to proactively plan and fund new affordable housing in Millis.**

By establishing an Affordable Housing Trust Fund, the Town would have the capability to collect funds that can be used to promote, develop and preserve affordable housing. A trust fund can be established that is separate from the general municipal budget and can be dedicated specifically to affordable housing. It is a practical mechanism for accepting, managing and spending funds specifically designated to support the creation and preservation of affordable housing.

Affordable Housing Trust activities can include the following:

- Provide financial support for the construction of affordable homes by private developers (non-profit or for-profit);
- Rehabilitate existing homes to convert to affordable housing;
- Increase affordability in new housing development projects;
- Develop surplus municipal land or buildings;
- Preserve properties faced with expiring affordability restrictions;
- Create programs to assist low- and moderate-income homebuyers;
- Create programs to help low- and moderate-income families make health and safety repairs;
- Educate and advocate to further affordable housing initiatives.²⁰

Action Plan

- Establish a Housing partnership Committee and create an Affordable Housing Trust Fund through a local bylaw as a standing committee in Millis and appoint members.

- **Provide seniors and persons with disabilities with greater housing options in Millis.**

The housing needs and demand assessment identified a significant number of senior households in need of potential housing assistance due to cost burdens and related issues with maintaining their homes. There is an extensive waiting list for senior housing and there are only 73 units of housing for low-income seniors and people with disabilities available through the Millis Housing Authority. The Town should encourage the development of new housing that is adaptable or fully accessible to people with disabilities, including seniors, and integrate or connect community supportive housing services into new development. The Town should coordinate with the Council on Aging, the Millis Housing Authority, and other local senior advocates to help households in need get the support they deserve through local programs or improved living conditions. This should include fuel assistance, weatherization, and related programs. Additional information on these issues can be found in the health addendum to this plan.

- **Encourage retrofits and conversions of the existing housing stock to support and assist with aging in place, as well as the development of accessible and adaptable units in new developments.**

Action Plan

- Review the zoning bylaw and subdivision regulations to ensure that they can accommodate the needs of senior citizens and persons with disabilities.

- **Support aging in place/community initiatives.**

- Promote existing State and regional programs that will assist with weatherization, rehabilitation, modifications and other home repairs.
- Build and maintain working partnerships with human and health care service providers to better integrate linkages with older-adult housing developments as they are constructed.

²⁰ Massachusetts Housing Partnership, Municipal Affordable Housing Trusts, July 2013

Action Plan

- Coordinate services between the Millis Housing Authority and the Council on Aging and on a regular basis to address the needs of the Town's elderly and disabled residents.

Goal 2: Encourage affordable housing development to achieve, exceed and maintain the Chapter 40B 10% goal.

In order to address unmet housing need and be compliant with Chapter 40B, Millis officials must establish and work to achieve production targets. The goals listed in the table below are based upon the total number of year-round homes as listed in the 2010 decennial Census (3,148) and MAPC's projection for the year 2020 of 118 additional units (3,266). The "cumulative state-certified affordable units" row is based upon the SHI as of September 2017 and a rate of increase of 0.5% and 1% of total units, which is required for municipalities to have their plan certified by DHCD, and could provide the Town with more leverage in its review of any future comprehensive permits for Chapter 40B development. For Millis, the 0.5% and 1% goals are 16 and 32 respectively.

The Town seeks to increase its inventory of State-certified affordable units at a pace generally consistent with the following production schedule. If the Town continues at the pace outlined in the schedule, it will reach 6.1% by 2024.

Figure 52: Millis Affordable Housing Production Goals, 2019-2024

	2019	2020	2021	2022	2023	2024
Total year-round homes	3,148	3,172	3,196	3,220	3,244	3,266
Cumulative state-certified affordable units*	118	134	150	166	182	199
10% requirement	315	317	320	322	324	327
Chapter 40B gap	197	183	170	156	142	128
Required units for relief at 0.5% of total units	16	16	16	16	16	17
Required units for relief at 1.0% of total units	32	32	32	32	32	33

*Based on 2017 SHI plus 0.5% rate of increase. Source: US Census Bureau, 2010 Census and MAPC MetroFuture projections for 2020.

Action Plan

- Affirm commitment to housing production goals as stated in the Housing Production Plan
- Annually review HPP goals and strategies through its expiration
- Regularly measure housing production, identify areas for continued improvement and celebrate achievements²¹

²¹ UMass Donahue Institute Population Estimates Program (UMDI-PEP) has a program called the Housing Unit Review. The Institute can annually review the housing components used by the Census Bureau for their estimates, and to replace incorrect or estimated data for each municipality with updated, corrected, or actual data through the HUR Survey. MAPC also updates its projections on a regular basis.

Goal 3: Review and revise the Zoning By-law to remove barriers and create more incentives toward the production of affordable housing.

Strategies:

- **Review the Zoning By-law to identify barriers to mixed use development and multi-family residential.**

Generally speaking, local zoning by-laws can create barriers to fair access to housing, often unintended. Typically, this happens through policies that do not encourage certain types of residential development or by creating a complicated permitting process through site plan review and special permits. By reviewing and revising the Zoning By-law, an opportunity exists where the Town can proactively facilitate a more integrated and diverse housing stock. The Town should identify where by-right development of a diverse housing stock can be encouraged in areas that are transit-accessible, including mixed commercial and multi-family housing uses that allows for higher density housing in areas where the infrastructure can support such density.

Action Plan

- Review zoning regulations and explore changes that would encourage redevelopment and infill as a result of the lack of undeveloped residentially zoned land.
- Multifamily dwelling units are not allowed by right in Millis. The Town should determine where such development can be allowed by right and reduce the minimum lot size from the required five acres currently in the by-law. The height restriction of 2½ stories (two stories of living space) is a disincentive to the development of multifamily projects. Additionally, the Town should consider lifting the limitation for the number of three-bedroom apartments in order to appeal more to young families.
- Consider an inclusionary zoning by-law that would require a percentage of units to be deed-restricted affordable in developments above an established threshold.
- Amend the Accessory Family Unit provisions of the zoning by-law to allow them by right where appropriate and consider allowing people not related to the homeowner to reside in the apartment.
- Reduce the minimum parking requirement for dwelling units with two or more bedrooms.
- Clarify where mixed-use developments are allowed and what can be permitted in such developments. There appears to be a couple of different types of mixed use developments which are not entirely consistent with the definition. Mixed use developments are allowed in the V-B district pursuant to Section XIX in accordance with the listing of specific uses in the Section V Use regulations. However, mixed use developments and residential uses are not allowed in the V-B district per the Use Regulations.
- Consider allowing affordable housing development on qualified pre-existing non-conforming lots (ones that may not meet dimensional requirements of the zoning by-law but can be buildable based upon newly established standards for smaller lots).
- Consider zoning provisions that could diversify the housing stock to provide for housing options that are appropriate for rentals and starter homes such as cottage-style housing in pocket neighborhoods, townhomes, and duplexes (i.e. options that fall between single-family and multi-family developments).
- Consider a 40R Starter Home district (state provides financial incentives in exchange for zoning a district that has smaller, denser, more affordable housing by right). Eligible Millis

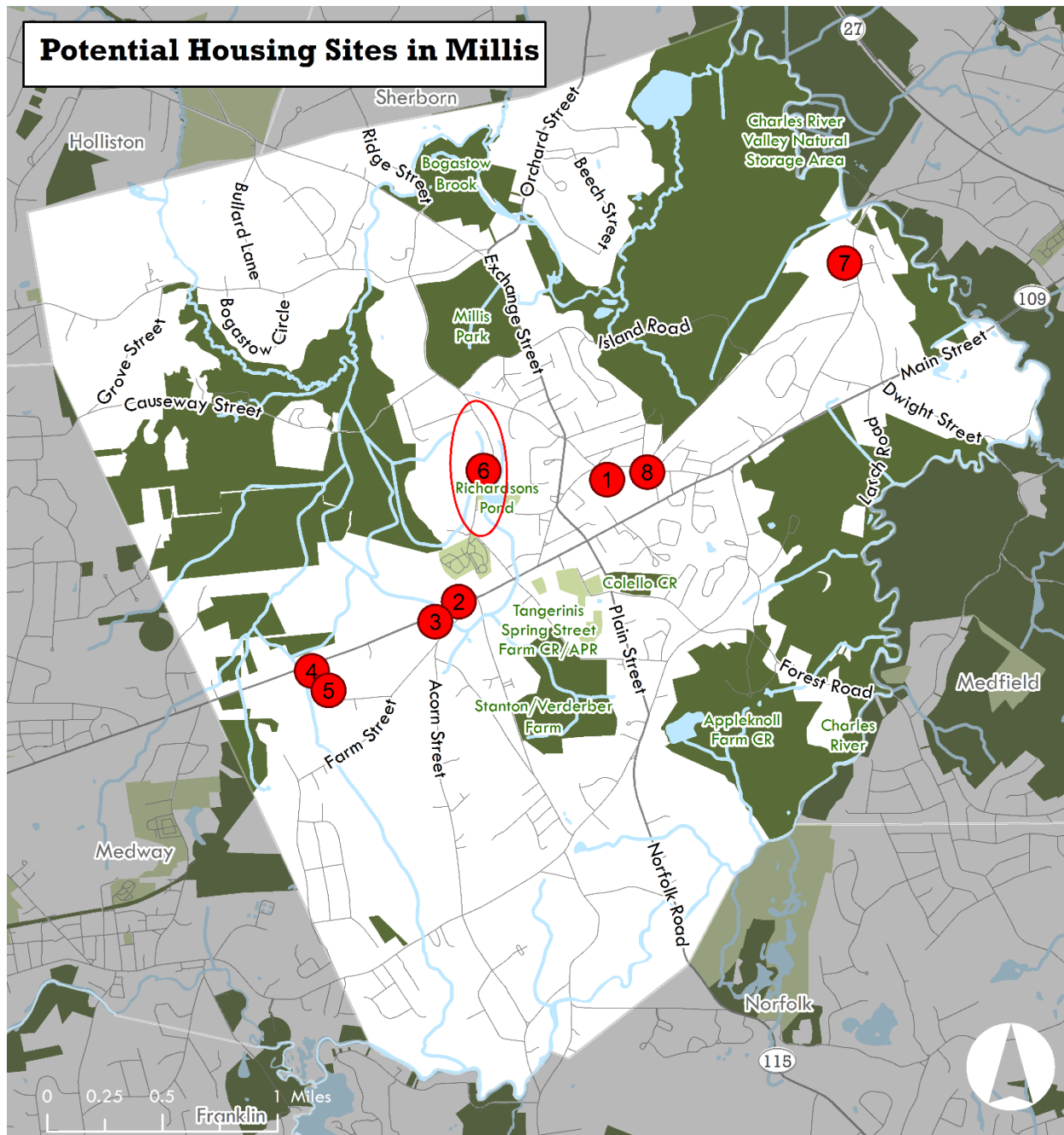
locations may include locations that pedestrians frequently use, such as an elementary or high school; a municipal office building, public library, post office, public safety facility, or other civic facility; or a neighborhood commercial or business area with retail businesses.

Goal 4: Identify sites that are most appropriate to accommodate Millis's projected growth in housing.

During the public process and in consultation with the Town, a number of potential sites have been identified. See Figure 53 below for specific locations.

- The old Bob's Restaurant site on Main Street that was destroyed by a fire in 2017.
- The GAF plant site on Curve/Union Street
- Cement plant site on 1400 block of Main Street
- The Millis salvage yard on the 1400 block of Main Street
- Ridge Street
- Site on Hammond Land and Main Street
- BASF site on Dover Road (although site remediation may be required)
- The Cliquot site on Union Street

Figure 53: Housing Development Opportunity Sites



Potential New Housing Sites

Perennial Stream

Open Water

State Route

Non-numbered route

Permanently Protected Open Space

Other Open Space

- 1.) GAF plant site on Union Street
- 2.) The old Bob's Restaurant site
- 3.) Site on Hammond and Main Street
- 4.) Cement plant site at 1400 Main St
- 5.) Millis Salvage Yard at 1400 Main St
- 6.) Ridge Street (from Auburn to Rolling Meadow)
- 7.) BASF site at 140 Dover Rd
- 8.) Cliquot site on Union Street



The information on this map
is for planning purposes only.
Sources: MAPC, MassGIS, MassDOT
Date: June 2019

Document Path: K:\DataServices\Projects\Current_Projects\Housing_Production_Plans\Millis\Project_Files\Base_Map_Report - Copy.mxd

Goal 5: Leverage existing funding sources to meet existing and future housing needs.

The Town should encourage and proactively plan for affordable housing development to achieve, and maintain the Chapter 40B 10% goal including promotion of a mix of housing types to accommodate smaller households, full-accessibility, and lower-cost rental and ownership housing that is consistent with local and regional needs and feasible within the local housing market.

The Massachusetts Community Preservation Act (CPA) was adopted by the Town of Millis in 2006. A one percent property tax surcharge has been adopted to be used in accordance with the CPA to promote open space preservation and creation of recreation opportunities, creation of community housing, and preservation of historic buildings and landscapes.

Strategies:

- **Create a Municipal Affordable Housing Trust (M.G.L. c. 44 §55C) to proactively plan and fund new affordable housing in Millis.**

By establishing an Affordable Housing Trust, the Town would have the capability to collect funds (including CPA funds) that can be used to promote, develop and preserve affordable housing. A trust fund can be established that is separate from the general municipal budget and can be dedicated specifically to affordable housing. It is a practical mechanism for accepting, managing and spending funds specifically designated to support the creation and preservation of affordable housing.

Affordable Housing Trust activities can include the following:

- Provide financial support for the construction of affordable homes by private developers (non-profit or for-profit);
- Rehabilitate existing homes to convert to affordable housing;
- Increase affordability in new housing development projects;
- Develop surplus municipal land or buildings;
- Preserve properties faced with expiring affordability restrictions;
- Create programs to assist low- and moderate-income homebuyers;
- Create programs to help low- and moderate-income families make health and safety repairs;
- Educate and advocate to further affordable housing initiatives.

CPA funds can be used in a number of creative ways to provide assistance for first-time homeowners or to preserve existing affordable housing stock. Examples include using CPA funds to purchase land on which affordable housing units could be built; providing loans for property improvements for low to moderate income qualified Millis residents; providing grants for down payment assistance for income eligible homebuyers to purchase a single family home; and providing rental assistance.

Action Plan

- Establish an Affordable Housing Trust through a local by-law as a standing committee in Millis and appoint members.

Goal 6: Ensure that staffing and commissions have capacity to implement HPP and support to prospective affordable housing developments.

Strategies:

- **Encourage coordination between Town Boards and Committees to ensure housing needs are met.**

In order to raise awareness of Millis' housing needs and garner the necessary support to address them, the Town should hold regular informational forums with local board and commission members about potential housing development projects and strategies to advance housing goals. Such educational opportunities will increase understanding of what is involved in diversifying Millis' housing stock to meet the demonstrated needs for affordable housing. Moreover, these sessions will increase communication, build consensus around action plans, and help in coordinating permit reviews for proposed projects.

Action Plan

- Disseminate information to all town boards, commissions, departments, and elected officials about housing needs and demand in Millis, housing goals, strategies to achieve them, and the housing development process.
- Hold quarterly all land-use board meetings.
- Work with partners to schedule training sessions and workshops on fair housing and financing.

- **Adopt rules and regulations for the Zoning Board of Appeals to guide their review of proposed 40B projects.**

Zoning Boards of Appeal are encouraged to adopt rules and regulations that govern the procedures for the review of 40B projects in accordance with the state regulations (760 CMR 56.00 et seq.) published by DHCD. Adoption of local regulations will assist the ZBA in understanding 40B and will work to ensure consistency in the review and permitting process. There are resources available to assist the ZBA in conducting reviews of proposed projects. Additionally, there are technical assistance resources that the Town could utilize when a 40B proposal is submitted to the Town.

Action Plan

- Adopt procedural rules and regulations for the ZBA review of 40B projects.
- Apply to the Massachusetts Housing Partnership Chapter 40B Technical Assistance Program. Funding can be used to assist the ZBA in:
 - Procuring peer review consultants;
 - Advising the ZBA, other municipal boards and committees, city or town staff, and the public on Chapter 40B requirements and policies;
 - Researching technical questions at the ZBA's request;
 - Coordinating the project review schedule;
 - Gathering comments from city or town staff;
 - Attending work sessions;
 - Drafting the ZBA's decision, and so forth.²²
- Hire peer review consultants in accordance with M.G.L. c. 44, § 53G.

²² See the Chapter 40B Handbook for Zoning Boards of Appeal, Massachusetts Housing Partnership, March 2017

- When reviewing 40B projects, utilize the Handbook: Approach to Chapter 40B Design Reviews prepared by The Cecil Group, January 2011.²³
- **Educate and bring community awareness to housing issues and activities to better coordinate and gain support for new housing development in areas best suited for new unit creation.**
 It is important to ensure that Millis residents are aware of various programs on home financing and rehabilitation, as well as any changes or updates to them, eligibility, and how people can take advantage of those resources. The Town should clearly articulate the unmet housing needs and demand for new housing outlined in this plan to public and private partners and to the general public. Issues related to the needs of lower-income residents, housing density and design, the preservation of Millis' character, and other real or perceived community impacts must be recognized and addressed. For additional information on strategies that can be applied in Millis, the Housing Policy Massachusetts Toolbox provides clear steps to gaining support and addressing fears of new development, specifically around affordable housing initiatives, including strategies for community engagement and dispelling misperceptions: http://www.housingpolicy.org/toolbox/index_MA.html. The Town might utilize the local media to conduct outreach and make residents aware of housing-related issues, educational materials, and upcoming learning and discussion opportunities.

Action Plan

- Work with community partners and provide educational materials via local media to raise awareness about affordable housing facts and activities.
- Disseminate information to all Town boards, commissions, departments, and elected officials about fair housing laws.
- Hold trainings for town staff and board members on M.G.L. Chapter 40B and fair housing laws.
- Promote workshops for residents on existing housing rehabilitation, financing, and financial assistance programs.
- Hold an annual housing forum to discuss progress towards housing goals and to celebrate successes.

²³ See <https://www.housingtoolbox.org/writable/files/resources/40B-Design-Reviews.pdf>

Appendices

Appendix A

DHCD Affirmative Fair Housing Marketing Guidelines

The Commonwealth of Massachusetts has a compelling interest in creating fair and open access to affordable housing and promoting compliance with state and federal civil rights obligations. Therefore, all housing with state subsidy or housing for inclusion on the SHI shall have an Affirmative Fair Housing Marketing Plan. To that end, DHCD has prepared and published comprehensive guidelines, revised in May 2013, which all agencies follow in resident selection for affordable housing units.

In particular, the local preference allowable categories are specified:

- *Current Residents.* A household in which one or more members is living in the city or town at the time of application. Documentation of residency should be provided, such as rent receipts, utility bills, street listing, or voter registration listing.
- *Municipal Employees.* Employees of the municipality, such as teachers, janitors, firefighters, police officers, librarians, or town hall employees.
- *Employees of Local Businesses.* Employees of businesses located in the municipality.
- Households with children attending the locality's schools, such as METCO students.

The full guidelines can be found here: <http://www.mass.gov/hed/docs/dhcd/hd/fair/afhmp.pdf>.

Appendix B

DHCD, MHP, MassHousing, MassDevelopment, and CEDAC Bedroom Mix Policy

INTERAGENCY AGREEMENT

Regarding Housing Opportunities for Families with Children

This Interagency Agreement (this "Agreement") is entered into as of the 17th day of January, 2014 by and between the Commonwealth of Massachusetts, acting by and through its Department of Housing and Community Development ("DHCD"), the Massachusetts Housing Partnership Fund Board ("MHP"), the Massachusetts Housing Finance Agency (in its own right and in its capacity as Project Administrator designated by DHCD under the Guidelines for Housing Programs in Which Funding is Provided By Other Than a State Agency, "MassHousing"), the Massachusetts Development Finance Agency ("MassDevelopment") and the Community Economic Development Assistance Corporation ("CEDAC"). DHCD, MHP, MassHousing, MassDevelopment and CEDAC are each referred to herein as a "State Housing Agency" and collectively as the "State Housing Agencies".

Background

A. DHCD's 2013 Analysis of Impediments to Fair Housing Choice ("AI") includes action steps to improve housing opportunities for families, including families with children, the latter being a protected class pursuant to fair housing laws, including the federal Fair Housing Act, as amended (42 U.S.C. §§ 3601 *et seq.*) and Massachusetts General Laws Chapter 151B. In order to respond to development patterns in the Commonwealth that disparately impact and limit housing options for families with children, such steps include requiring a diversity of bedroom sizes in Affordable Production Developments that are not age-restricted and that are funded, assisted or approved by the State Housing Agencies to ensure that families with children are adequately served.

B. The State Housing Agencies have agreed to conduct their activities in accordance with the action steps set forth in the AI.

C. This Agreement sets forth certain agreements and commitments among the State Housing Agencies with respect to this effort.

Definitions

1) "Affordable" - For the purposes of this Agreement, the term "Affordable" shall mean that the development will have units that meet the eligibility requirements for inclusion on the Subsidized Housing Inventory ("SHI").

2) "Production Development" - For purposes of this Agreement "Production Development" is defined as new construction or adaptive reuse of a non-residential building and shall include rehabilitation projects if the property has been vacant for two (2) or more years or if the property has been condemned or made uninhabitable by fire or other casualty.



Agreements

NOW, THEREFORE, DHCD, MHP, MassHousing, MassDevelopment and CEDAC agree as follows:

Bedroom Mix Policy

- 1) Consistent with the AI, it is the intention of the State Housing Agencies that at least ten percent (10%) of the units in Affordable Production Developments funded, assisted or approved by a State Housing Agency shall have three (3) or more bedrooms except as provided herein. To the extent practicable, the three bedroom or larger units shall be distributed proportionately among affordable and market rate units.
- 2) The Bedroom Mix Policy shall be applied by the State Housing Agency that imposes the affordability restriction that complies with the requirements of the SHI.
- 3) The Bedroom Mix Policy shall not apply to Affordable Production Developments for age-restricted housing, assisted living, supportive housing for individuals, single room occupancy or other developments in which the policy is not appropriate for the intended residents. In addition, the Bedroom Mix Policy shall not apply to a Production Development where such units:
 - (i) are in a location where there is insufficient market demand for such units, as determined in the reasonable discretion of the applicable State Housing Agency; or
 - (ii) will render a development infeasible, as determined in the reasonable discretion of the applicable State Housing Agency.
- 4) Additionally, a State Housing Agency shall have the discretion to waive this policy (a) for small projects that have less than ten (10) units and (b) in limited instances when, in the applicable State Housing Agency's judgment, specific factors applicable to a project and considered in view of the regional need for family housing, make a waiver reasonable.
- 5) The Bedroom Mix Policy shall be applicable to all Production Developments provided a Subsidy as defined under 760 CMR 56.02 or otherwise subsidized, financed and/or overseen by a State Housing Agency under the M.G.L. Chapter 40B comprehensive permit rules for which a Chapter 40B Project Eligibility letter is issued on or after March 1, 2014. The policy shall be applicable to all other Affordable Production Developments funded, assisted, or approved by a State Housing Agency on or after May 1, 2014.




Millis Housing Production Plan Health Addendum

**Prepared for the Town of Millis
June 2016**

Millis Housing Production Plan Health Addendum

The goal of this document is to provide a brief evidence base for how housing impacts health along with a profile of those health statistics to increase the strength of the 2016 Millis Housing Production Plan as a tool to meet the housing needs of the community. The Health Addendum will be divided into three parts: the evidence based links between housing and health, the Town’s profile, and recommendations to address any issues that are highlighted in the data or through stakeholder engagement.

The links between Housing & Health

 Quality & Universal Design Housing that is not clean, safe, adequately maintained, ventilated, or free from pests and contaminants, such as mold, lead, and carbon monoxide, is an important contributor to rates of injury, asthma symptoms, cancer, neurotoxicity, cardiovascular disease, depression, and poor mental health. Poor housing quality is also the strongest predictor of emotional and behavioral problems in low income children, mediated primarily by parental stress. Lack of universal design may lead to injury amongst the elderly in addition to preventing aging in place. ²⁴	 Stability & Affordability When householders pay more than 30% of their gross income on housing, they become “cost burdened” and become housing unstable. Choosing between housing payments and other expenses is linked to cutbacks on basic essentials such as food, medical care, and utilities and increased stress, a well-established cause of detrimental biochemical changes to the brain and body that decrease resilience, age people more rapidly, and decreased resistance to disease. Children in unstable housing are also at risk of malnutrition and developmental delays that can have lifelong health consequences. When householders spend more than 50% of their income on housing, the severe cost burden can lead to overcrowded, substandard, or unsanitary housing environments, and eventually eviction or homelessness. ²⁵
 Location Easy access to public transportation, green space, quality schools, good jobs, healthy foods, and medical care can help reduce the incidence and/or severity of chronic disease, injury, respiratory disease, poor mental health, and even mortality. ¹	

Sources: Adapted from Megan Sandel, Pew Charitable Trusts Healthy Housing Indicators, and Human Impact Partners, 29th street/San Pedro Street Area Health Impact Assessment (2009).

²⁴ Krieger, James, and Donna L. Higgins. "Housing and health: time again for public health action." American journal of public health 92.5 (2002): 758-768.
²⁵ Cutts, Diana Becker, et al. "US housing insecurity and the health of very young children." American Journal of Public Health 101.8 (2011): 1508-1514.

Millis Profile

The risk of social isolation for the elderly, lack of transportation to services and basic amenities, and aging-supportive housing design are three major dimensions of housing the town should focus on. Housing quality is overall very strong as is nearly every element of location.

The Top 3 Housing and Health Priority Areas:

1. Risk of Social Isolation for Elderly
2. Lack of Transportation to Services and Basic Amenities
3. Aging-supportive housing design

Key Summary:

Current rates of chronic diseases, hospitalizations, and health behaviors overwhelmingly paint a very healthy picture for Millis amongst the general population as well as seniors.²⁶ It is preventing future health problems that must be the priority in Millis.

Overall Millis is a safe community with some health assets, whose primary issues are access and isolation from other people and services, particularly for the aging population.

Key Demographic Factors

Income, race and education are amongst the most important demographic predictors of lifetime health outcomes; all of which are low risk in Millis. Millis is overwhelmingly White (96.0%). The only other group that constitutes more than 1% of the population is the Asian population, which makes up 2.8% of the Town.²⁷ The median household income in Millis (\$96,773) is roughly in the lower middle end for its region, which ranges from \$68,007 in Milford to \$155,564 in Sherborn⁴ and the overall poverty rate is low, with only 5.04%⁴ of families in poverty while for the elderly (65+) is nearly null at 1.5%.³

Vulnerable populations

Vulnerable populations include those who are low-income, linguistically or otherwise isolated, populations with disabilities, the very young, and the elderly. As summarized above, Millis is overwhelmingly white and middle income with very little poverty and according to 5 year ACS data. Roughly 22% of all non-English speaking households or 2.4% of Millis's total households speak English less than "very well", which is also very low. By limiting a household's ability to understand and communicate in English, linguistic isolation²⁸ can be a barrier to the receipt of medical and social services and can make these households more vulnerable during emergency situations.

MAPC's population projections show that the school age population (ages 0-19) is expected to decline from 27% to 19% by 2030 while its share of older householders over the age of

²⁶ Massachusetts Healthy Aging Collaborative Millis Profile. https://mahealthyagingcollaborative.org/wp-content/themes/mhac/pdf/community_profiles/towncode010.pdf

²⁷ 5 year ACS estimates from 2010-2014

²⁸ Linguistic isolation" is dependent on the English-speaking ability of all adults in a household. A household is linguistically isolated if all adults speak a language other than English and none speaks English "very well." Adult is defined as age 14 or older, which identifies household members of high school age and older.

65 is projected to increase from 12% to 27% by 2030. **This report will therefore focus on residents who are 65 or older as the primary vulnerable group.**

Health Metrics

Hospitalizations, prevalence of chronic diseases, and health behaviors illustrate the current health status of Millis residents. These data are primarily useful for establishing a baseline of how the Town is doing with respect to housing-related health issues while demographic and health-related housing indicators such as housing quality will help project out what the health of residents may look like in the future.

Summary

Overall, Millis is a reasonably health community with rates of health conditions similar to that of the state or better for all conditions and risk factors listed in the tables on pages 6-7.

Top Housing Related Health Priorities

- Risk of Social Isolation and impact on extreme heat event response amongst the elderly
- Lack of Transportation to services
- Aging-supportive housing that facilitates aging in place for adults of all capabilities

Stakeholder Engagement

MAPC convened a team of stakeholders from Hospitals, Community Health, Local Health, Elder Services, and the Town Planning to discuss health and housing issues in Millis. This meeting served as a forum for discussion about Town-specific issues, and also highlighted potential opportunities for collaboration. It will serve as a launching point for future involvement of health stakeholders in this and other housing processes in addition to providing stakeholder feedback for this particular document.

Representatives from the following groups were present at the meeting: Salmon VNA & Hospice, MetroWest Health Foundation, Health and Social Services Consortium (HESSCO), Community Health Network Area (CHNA) 7, Milford Regional Hospital, CHNA 6, Representative David Linsky's Office, and Millis's Council on Aging, Health Department, Department of Public Works, Building Inspection, Board of Health, and the Town's Administration Staff. No representatives from youth organizations or the school system were able to join.

Interpreting Data in This Document

All data shown here is meant to supplement the data presented in the main housing production plan.

Millis Numbers

Due to the way that health data are collected, all data for Millis are estimates generated through statistical modeling for the Town itself. The only exception to this are data for health care utilization amongst seniors, which are directly measured by the health insurance source for the data.

School Performance

Housing instability and lack of affordability has been linked to school performance and behavioral problems primarily in small children but also amongst adolescents. Although these data are still only preliminarily linked and not directly associated with MCAS scores (and therefore should be interpreted only as a possibly monitoring tool rather than clear causal evidence), they are the only source of publicly available data for school performance across school districts and therefore why we are using these figures here.^{29j}

Performance

All interpretations about whether or not the Town is performing better, worse, or no differently than the state average are based on statistical significance.

Statistical significance in this case was derived by either the Massachusetts Department of Public Health or the Massachusetts Healthy Aging Collaborative, and is based on 95% confidence intervals. This approach is used because the Town numbers represented below are the midpoint of a statistically-derived range estimated derived from larger geographies. For specific information on how these were calculated, please visit:

<https://mahealthyagingcollaborative.org/data-report/explore-the-profiles/data-sources-and-methods/#data>

Data Sources

Descriptions and links to data sources are included as Appendices to this document. The full comprehensive housing metrics from the Massachusetts Healthy Aging Collaborative, the MetroWest Regional Community Health Assessment and Environmental Public Health Tracking Data Reports are included as appendices.

²⁹ Mueller, Elizabeth J., and J. Rosie Tighe. "Making the case for affordable housing: Connecting housing with

health and education outcomes." *Journal of Planning Literature* 21.4 (2007): 371-385.

Housing Related Health Metrics in Millis

Data on the prevalence of chronic diseases, health behaviors, and hospitalizations generally support the idea that Millis is a reasonably healthy community, with the exception

	<i>Health Metric</i>	<i>Millis</i>	<i>State</i>	<i>Performance</i>
Quality	Consume or more vegetables a 5 day ⁱ	29.1%	24.9%	No difference
	Obesity Prevalence ⁱⁱ	23.4%	22.6%	No difference
	Current Tobacco Smokers	10.9%	9.1%	No difference
	Estimated Asthma Prevalence ⁱⁱⁱ	8.7%	10.1%	No difference
Quality & Location	Age Adjusted Asthma Hospitalizations per 10,000 people	21.3	73.9	Better
	Age Adjusted COPD ³⁰ Hospitalizations per 10,000 people	17.8	23.3	Better
Affordability & Stability	% over 65 who did not see a doctor due to cost	2.5%	3.7%	No difference
	% without a personal doctor ⁱⁱⁱ	8.1%	10.6%	No difference
	No check up in the last year ⁱⁱⁱ	26.0%	23.3%	No difference
All	Satisfied with Life	98.5%	95.8%	Better
	Age Adjusted Substance Abuse Emergency Department Visits per 10,000 people	16.4	33.9	Better
	Excessive Drinking	7.94%	9.2%	No difference
	Cardiovascular Disease Hospitalizations per 10,000 people	109.1	139.4	Better
	Diabetes Prevalence	7.95%	32.1%	Better
	Self-Reported Poor Mental Health	9.1%	11.1%	No difference
	Age Adjusted Mental Health Emergency Department Visits per 10,000 people	158.7	238	Better
	Age Adjusted 1 year Mortality Rate ⁱⁱⁱ	4.5%	4.7%	No difference
	Overall age adjusted mortality rate per 10,000 people, 2008-2012 ^{iv}	68.7	69.9	No difference
	Ade Adjusted All-Cause Cancer Mortality Rate per 10,000 people 2008-2012 ^{iv}	18.1	17.0	No difference

Children and Youth

	<i>Health Metric</i>	<i>Millis</i>	<i>State</i>	<i>Performance</i>
Quality	Blood Lead Levels	Lower	3.7	Better
Quality & Location	Asthma Prevalence in K-8 kids	11.3%	12.4%	No difference
Affordability & Stability	Science and Tech/Eng MCAS 2015, proficient or higher, all grades	61%	54%	Better
	Science and Tech/Eng 2015 MCAS, needs improvement or warning/failing, all grades	39%	45%	Better

³⁰ Chronic Obstructive Pulmonary Disease; a respiratory disease that is often co-morbid with various other chronic diseases and is therefore a good proxy of co-morbidity.

	% attending college or university	82.9%	76.2%	Better
	High school dropout rate	1.3%	5.1%	Better
	Chronically Absent	5.1%	12.9%	Better
	Average # of days absent	6.9	9.0	Better

Senior health

	Health Metric	Millis	State	Performance
Chronic Disease	Alzheimer's disease or related dementias	12.4%	14.4%	No difference
	Ever had a heart attack	4.8%	5.0%	No difference
	Ischemic heart disease	43.7%	44.1%	No difference
	Osteoporosis	19.1%	21.7%	No difference
	Osteoarthritis/rheumatoid arthritis	46.6%	50.2%	No difference
	4+ chronic conditions	56.3%	61.5%	Better
	0 chronic conditions	10.6%	7.8%	Better
Living with Disability	% disabled for a year or more	29.2%	31.0%	No difference
	65-74 with hearing difficult	10.1%	7.4%	No difference
	75+ with hearing difficulty	17.7%	21.2%	No difference
	65-74 with vision difficulty	3.2%	3.2%	No difference
	75+ with vision difficulty	7.0%	9.3%	No difference
	65-74 with cognition difficulty	0.0%	4.7%	No difference
	75+ with cognition difficulty	19.0%	12.1%	No difference
	65-74 with ambulatory difficulty	15.5%	12.9%	No difference
	75+ with ambulatory difficulty	41.8%	29.4%	No difference
	65-74 with self-care difficulty	6.2%	3.7%	No difference
	75+ with self-care difficulty	11.8%	12.2%	No difference
	65-74 with independent living difficulty	6.2%	7.2%	No difference
	75+ with independent living difficulty	19.0%	24.3%	No difference
Access to Care	Medicare managed care enrollees	23.0%	21.2%	No difference
Service Utilization	Emergency room visits/1000 persons (65+)	623	646	No difference
	Inpatient hospital stays/1000 persons (65+)	316	354	No difference
	Skilled nursing facility stays/1000 persons (65+)	76	117	Better

Housing Determinants



Lead, Pests, Mold, Mildew, Allergens, and Indoor Pollutants.

Lead: Blood lead levels are lower in Millis than the State rate of 3.7 per 1,000 children. Compliance with state-and-federally mandated screening rates of blood lead in children under the age of 3 (all children must be tested 3 times by this age) is below

average in Millis compared to the State (68% vs 77%), which makes it difficult to determine whether this could be an issue in the Town. Since the Town has a smaller proportion of housing stock (62%) that contains lead compared to the commonwealth's average of 71%,³¹ however, this implies that lead poisoning is not likely a serious issue in Millis.

Although pests, mold, mildew, allergens, and indoor pollutants were not highlighted as issues through stakeholder engagement with

³¹ MA Bureau of Environmental Health (BEH) Environmental Public Health Tracking (EPHT) Millis Community Profile. <https://matracking.ehs.state.ma.us/> then click "community profile".

Millis's Health Compliance Officer, lack of a complete town-wide sewer system was. While the Town is partially served by sewer, many Town's residents are served by private septic systems, which is mostly an issue if the systems are not properly maintained and stop treating sewage thoroughly and can then lead to increased nitrates in the environment or by attracting mosquitoes or flies that carry disease to the area. This was not cited as an issue during stakeholder discussions.



Cost Burdened Households, % Renters, Food Insecurity, Cost Barriers to Health Care

Food Insecurity: To the best of our knowledge, no local USDA measure of food insecurity exists as of yet. The number of students with free or reduced lunch is not available for Millis, but the number of economically disadvantaged³² students is. 10.6% of Millis's students are considered economically disadvantaged, which is significantly lower than the 27.4% who receive benefits at the state level.

For adults, an estimated 4.2% of Millis residents were receiving food stamps according to 5 year ACS estimates from 2010-2014 which is less than half the proportion receiving food stamps across the state (9.5%).

Access to Healthcare: The number of Medicare enrollees is roughly the same in Millis (23%) as across the State (21.2%) and amongst Millis's elderly, only 2.5% reported not seeing a doctor when they needed to due to the cost, which is the statistically no different than the state's very low rate of 3.7% (3.3% - 4.0% CI).

³² Source: Department of elementary and Secondary Education (DESE). Calculated based on a student's participation in one or more of the following state-administered programs: the

One in three households in Millis spends more than 30% of their income on housing and is considered cost burdened. More comprehensive data on renters vs. homeowners and cost burden are included in the main HPP. Overall both demonstrate a need affordable and stable housing solutions.



Transportation, Healthy Food, Walkability, Crime, Pollution, Jobs

Transportation: With the exception of a bi-weekly Council on Aging bus, Millis is not served by transit, which could increase the risk of social isolation for all groups, but particularly less mobile populations, such as the elderly or disabled. This could also decrease the ability of these groups to access basic goods and services, such as healthy food and health care.

Walkability: The Town is considered a "car dependent" community according to Walk Score, scoring only a 46 out of 100. Without adequate transportation, this increases the risk that elderly, disabled, or other residents with limited mobility become socially isolated. During stakeholder engagement the lack of complete sidewalk networks was also flagged as an issue that acted as a barrier to walking to local destinations.

Healthy Food Access: There is one full service grocery store, Roche Bros., in the center of Millis. All others are more than 5 miles outside of town and can be reached only by car. The Council on Aging has a bi-weekly bus that runs to Roche Bros., but otherwise there is no easy access to the store besides driving or walking, which is not always feasible as residents age or if they live in areas where

Supplemental Nutrition Assistance Program (SNAP); the Transitional Assistance for Families with Dependent Children (TAFDC); the Department of Children and Families' (DCF) foster care program; and MassHealth (Medicaid).

there is an incomplete sidewalk infrastructure.

Green Space: Millis is extremely green. 74.3% of its land mass is dedicated to agriculture, forest, recreation, and open space. This may help protect the Town against extreme heat and other climate change related events while also providing great mental health benefits for the residents of the Town. Climate change also means that this large amount of greenery could expose Millis residents to a greater risk of tick- and certain mosquito-borne infectious diseases such as Lyme disease more over time however, and should therefore be carefully monitored.

Pollution: Regional pollutants such as PM2.5 and Ozone are low. According to Central Transportation Services (CTPS) Data measuring average daily traffic counts, routes 109 or 115 experience less than 20,000 vehicles per day. Near roadway pollutants called ultrafine particles may be a health hazard above 30,000 vehicles per day, but given the low traffic counts, this is not an issue in Millis.

Social Cohesion and Crime: Social support, defined broadly as the general perception that one feels cared for emotionally and can count on others for information and small resources such as a knowing your neighbor can watch your kids when you get home late from work, is an important indicator of social health and non-financial resource availability. Voter participation, levels of emotional support, and crime rates all suggest that Millis has a health promoting social environment. 83.8% of Millis voters (≥ 18) participated in the 2012 presidential election, compared to 73.3% in Massachusetts,³³ 84.4% of Millis's elderly residents say they receive adequate emotional support, compared to the state rate

of 80.7%,³⁴ and the Town has substantially lower violent (4.7) and property crime (65.9) rates per 10,000 residents compared to the State (42.8 and 225.9 respectively).

Despite this, stakeholders active in the community told us that many—particularly elderly—residents were socially isolated and that there is potential for more social events for the elderly in the Town, highlighting an opportunity for improvement. Feedback from municipal representatives at the housing and health convening suggested that the Town's Council on Aging could benefit from more resources to provide services or events and that its location in the basement could be a barrier to resident access, despite the physical accessibility and central nature of the location. Subsequent feedback highlighted the location as an asset for many of the same reasons, as well as its position as the coolest spot in the building and resilience against loss of electricity as it does not depend on the elevator for access or egress.

³³ Voter participation is a typically used as a proxy for the level of social engagement.

³⁴ Massachusetts Healthy Aging Collaborative Millis Profile.

https://mahealthyagingcollaborative.org/wp-content/themes/mhac/pdf/community_profiles/towncode187.pdf

Recommendations

1. Increase the rate of blood lead level screenings for children under 3

- 1.1 Collaborate with local health partners to improve access to screening rates for blood lead in children under 3 to continue monitoring this over time
- 1.2 Prioritize the removal of lead paint in housing during its remediation, where possible.

2 Increase transportation options to basic amenities, particularly for vulnerable populations such as low-income groups and the elderly

- 2.1 Collaborate with other local Councils on Aging to identify resources to increase the frequency of bi-weekly council on aging van
- 2.2 Explore the possibility of collaborating with local hospitals to provide transportation services for health care services, such as yearly doctor visits or other checkups or organize local clinics to improve screening for infectious disease, blood lead, and chronic diseases in the Town.
- 2.3 Consider other regional transportation services such as GATRA, where appropriate

3 Retain existing trees and greenery, but monitor any potential changes in infectious disease

- 3.1 Preserve greenery around new and rehabilitated housing—particularly affordable and senior housing—to continue to preserve any potential benefits to mental health and Millis’s resilience against climate change. The latter is particularly important for potential impacts of extreme heat events on seniors.
- 3.2 Coordinate with the Town Nurse to monitor changes in climate change related infectious diseases transmitted through ticks and mosquitoes.
- 3.3 Collaborate with Milford Regional Hospital or the MetroWest Health Foundation on possible resources to educate the Town’s residents about these infectious diseases to help prevent consequences of infection.

4 Address risks of social isolation amongst elderly living alone

- 5.1 Jointly develop a plan with health care system, if it does not already exist, to manage outreach and care during extreme heat events.
- 5.2 Prioritize the development of housing for the elderly near services and amenities they would use and be able to access physically on their own, rather than relying on vehicles.
- 5.3 Consider a periodic survey of elderly residents to evaluate what assets residents value and what elements could be improved related to the Council on Aging (CoA) location and services provided. In particular, topics that arose during this process worth exploring include CoA social activities, its role in

transportation provision and social events, and role as a social support network. The findings of these surveys can then be used to apply for additional funding from the MetroWest Health Foundation, Local Hospitals, and other regional funding providers to expand the CoA's capacity.

- 5.4 Provide information at key locations, such as the Council on Aging and Town Hall, on how all residents can be prepared for extreme heat events using these resources from the Centers for Disease Control.
 - Elderly Residents 65 and over:
 - https://emergency.cdc.gov/disasters/extremeheat/pdf/ready_extreme_heat.pdf
 - General Resources for all residents:
 - <https://emergency.cdc.gov/disasters/extremeheat/>
 - <http://www.cdc.gov/extremeheat/>
- 5.5 For existing housing, consider partnering with health care and aging service providers to transport or provide social interactions for elderly residents with each other and surrounding community members.
- 5.6 Consider housing models that explicitly integrate populations so they mutually benefit each other, such as giving younger residents free rent for living with and helping elderly residents.
- 5.7 Prioritize the construction of new housing for the elderly in walkable areas with even and safe sidewalk networks that could connect residents to each other and basic amenities, where possible

5 Continue to reduce the risk of elderly falls

- 6.1 Develop strategic plan and partnership to prevent unintentional falls amongst the elderly. State resource: <http://www.mass.gov/eohhs/docs/dph/injury-surveillance/strategic-plan-2012-2016.pdf>

6 Continue to be proactive promoting affordable, inclusive, community integrated, and aging supportive housing in order to continue to promote population health and prevent future problems

Primary Data Source Description

MetroWest Regional 2013 Community Health Assessment and Other Regional Data

Under the Affordable Care Act all non-profit hospitals are required to conduct a Community Health Needs Assessment (CHNA) every 3 years in order to identify the most pressing health issues in the community to then invest in preventing them. These geographies are based on a hospital's self-defined primary service area. Millis falls in CHNA 7's region, but the responsible hospital for the area is unclear. The 2013 MetroWest Health Foundation conducted the regional assessment, but this is not the norm and may not be repeated going forward. The Foundation does host more up-to-date data on its website here:

<http://www.mwhealth.org/Learning-Insights/Health-Data-Center/Data-Search>

Massachusetts Environmental Public Health Tracking Data

This data source is managed by the Bureau of Environmental Health at the Massachusetts Department of Public Health and is funded by a National Effort from the Centers for Disease Control (CDC) to increase the tracking of environmental health determinants. The data portal includes air quality, blood lead, cancer, asthma, and other data related to health. The data pulled for this report is under the "community profile" link.

Massachusetts Healthy Aging Collaborative Data

The Massachusetts Healthy Aging Collaborative is a network of leaders in community, health and wellness, government, advocacy, research, business, education, and philanthropy who have come together to advance healthy aging. These data, funded by Tufts Health Connector, details individual town data alongside of state averages, allowing for a comparison of how a town is doing relative to the rest of the state by each variable. Multi-dimensional indicators of healthy aging and healthy aging programs are identified along with GIS analyses that will enable communities to address local challenges and better allocate resources to those areas (physical, social and health) of greater need. Learn more about the [Healthy Aging Data Report](#).

Community Health Needs Assessment Draft Data Release from MDPH

These data will be released fully soon, but are an initial attempt at replacing MassCHIP with critical hospitalization, prevalence, health behavior, and other health-related data to partners who need them for data analyses. The full data release is forthcoming, but DPH provided this report with an advanced version to facilitate the creation of this report.

ⁱ Source: BRFSS 3 year average: 2005, 2007, 2009

ⁱⁱ Source: BRFSS 3 year average: 2008-2010

ⁱⁱⁱ 2013 MetroWest Region Community Health Assessment, Behavioral Risk Factor Surveillance System Statistical Estimates, 2010

^{iv} MetroWest Health Foundation Health Data Search. Accessed July 2016. <http://www.mwhealth.org/Learning-Insights/Health-Data-Center/Data-Search>

DRAFT