

# Demographic Projections for the City of Newton, Massachusetts



**Northeastern University**  
*Kitty and Michael Dukakis Center  
for Urban and Regional Policy*

Barry Bluestone  
Tracy A. Corley  
May 2014

## **Dukakis Center Report #2**

# **Demographic Projections for the City of Newton, Massachusetts**

**Barry Bluestone**

**Tracy Corley**

*With assistance from*

**James Huessy**

**Kitty and Michael Dukakis Center for Urban and Regional Policy  
Northeastern University**

**May 2014**

### **Introduction**

This is the second report for the City of Newton prepared by the Dukakis Center for Urban and Regional Policy at Northeastern University. The first report charted trends in Newton's population profile; tracked its housing stock, housing production, and home prices; and added detail on these matters for the city's 18 census tracts.<sup>1</sup> Most of the data for this first report covered the period 1980 to 2010, but some early Census data also informed the conclusions.

The key findings from that report included:

- Newton experienced robust population growth between 1940 and 1960 with the number of residents increasing from less than 69,000 to more than 92,000. But following 1960 and continuing through 1990, the city saw its population decline to less than 83,000. Now, after two decades of slow but steady growth, Newton's 2010 population is a bit over 85,000.
- Between 1980 and 2010, household growth outpaced population growth by a factor of 4.4 (8.3 percent versus 1.9 percent respectively) as the average size of a Newton household declined steadily from 2.77 persons to 2.50 between 1980 and 2010.
- In 1980, the number of school aged children (ages 5-19) comprised more than 22 percent of Newton's population. Following a sharp decline to just 18.4 percent of the population in 1990, that percentage has nearly rebounded by 2010 to nearly its peak -- 21.9 percent.

- The city's population over age 65 grew from 14.2 percent in 1980 to 15.2 percent of the total population in 2010.
- Families as a proportion of households in Newton has declined from 79.6 percent to 67.3 percent of all households between 1980 and 2010. This reflects an increase in single-person households and unrelated individuals sharing a home.
- Newton is becoming more diverse as the percentage of non-Hispanic whites dropped from nearly 95 percent in 1980 to less than 80 percent in 2010, with Asians representing the fastest-growing demographic.
- Newton has become increasingly affluent over the decades as household incomes grew more than 56 percent faster than the Greater Boston region as a whole. By 2010, median family income in the city was \$148,877. Nonetheless, nearly one out of eight Newton households (12.2 percent) live on less than \$25,000 per year.
- Though Newton saw the construction of 1,787 new housing units between 2000 and 2010, the net addition to the city's housing stock during this decade was just 536 units as more than a 1,000 units were torn down and replaced.
- From 1990 to 2012, single-family units held steady at 61 percent of the total housing stock while the proportion of 2 to 4 unit structures declined from 25 percent to 22 percent. The city added 669 units of apartments and condominiums in buildings with 5 or more units between 2002–2007.
- Median home values increased from \$293,400 in 1990 to more than \$687,000 in 2010. Home selling prices have soared even faster with the median selling price of a single-family home hitting over \$855,000 in 2013. Only about 6 percent of the homes in Newton had a value of less than \$300,000 in 2010, down from 10 percent in 2000.
- With a median rent of \$1,632 during the 2008-2012 period, rents in Newton were 29 percent higher than those in Middlesex County and 55 percent more than the median rent in Greater Boston.

In summary, by 2010, Newton's population remained below its 1960 peak, household size was shrinking as the proportion of married families with children declined, and the proportion of older residents increased. Between 1980 and 2010, Newton became wealthier on average, but more than 12 percent of the city's households are surviving on less than \$25,000. Household incomes and housing values increased far more quickly than the rest of the region and the state, but at the same time the city became more racially and ethnically diverse. Housing construction continued to focus on single family housing, but sizable multifamily projects built between 2002 and 2007 gave the city a much-needed start in providing apartment dwellings for the city's increasingly smaller-sized households.

## **Projecting Newton's Population 2010-2040**

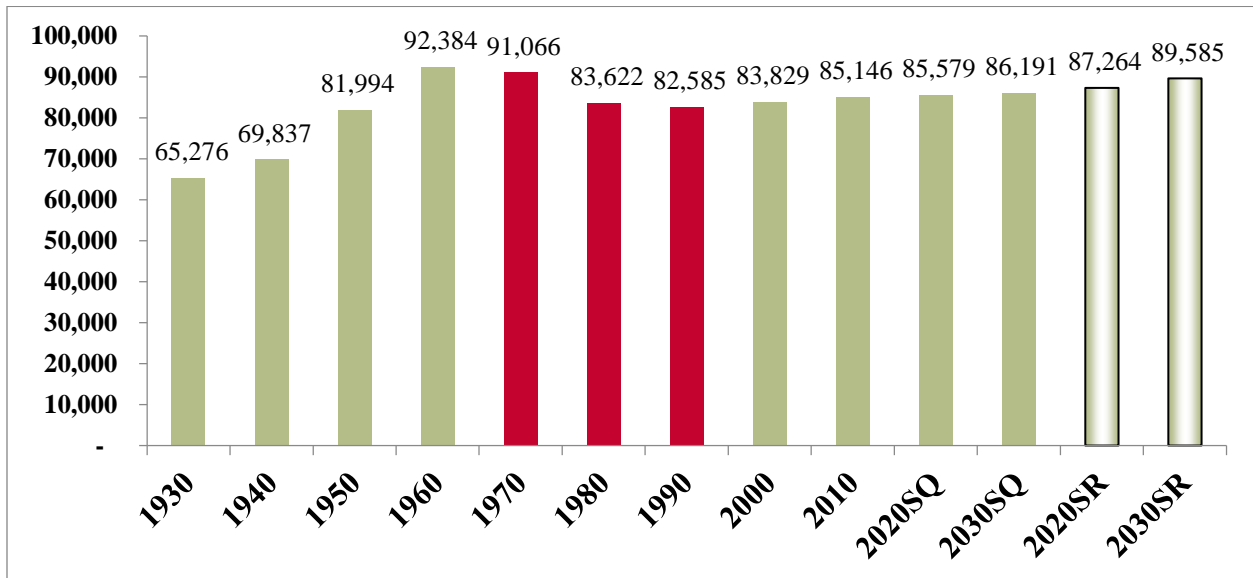
This second report relies on demographic projections for the Greater Boston region recently conducted by the Metropolitan Area Planning Council (MAPC).<sup>2</sup> The data sources for these projections include *Decennial Census* data from 1990, 2000, and 2010; *American Community Survey* data from 2006 to 2012; fertility and mortality information from the *Massachusetts Community Health Information Profile* (MassCHIP); and housing production information from the *Census Building Permit Survey* database.

To prepare population estimates, MAPC projected birth and death rates as well as interregional and international migration rates based on two scenarios. The *Status Quo* scenario assumes that domestic migration rates continue at the average of the past five to seven years. The *Stronger Region* scenario anticipates that net outmigration from the region continues to slowly decline by 1 percent per year as a result of stronger economic growth relative to the rest of the nation. The stronger growth presumably helps retain some households in Greater Boston that might otherwise have left, and it attracts others to the region to take advantage of expanding job opportunity. As such, the Stronger Region projection yields slightly higher population totals.

### **Projected Trends in Newton's Total Population**

According to the MAPC projection, Newton's population is expected to continue to grow slowly between 2010 and 2030, incrementally reversing the decline the town experienced between 1960 and 1990. As **Figure 1** demonstrates, Newton's population is expected to expand modestly to over 86,000 by 2030 according to the *Status Quo* projection. This falls short of the 1960 peak of more than 92,000 residents, but represents nearly a 9 percent increase over 2010 and 15 percent more than in 2000. The *Stronger Region* projection suggests Newton's population could grow to about 89,600 by 2030, about 3,400 more than the Status Quo projection – but still below the 1960 peak.

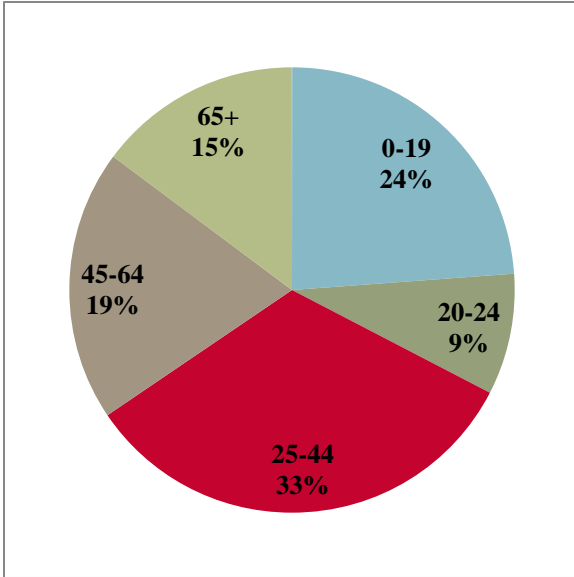
**Figure 1: City of Newton Projected Population 1930 to 2030**



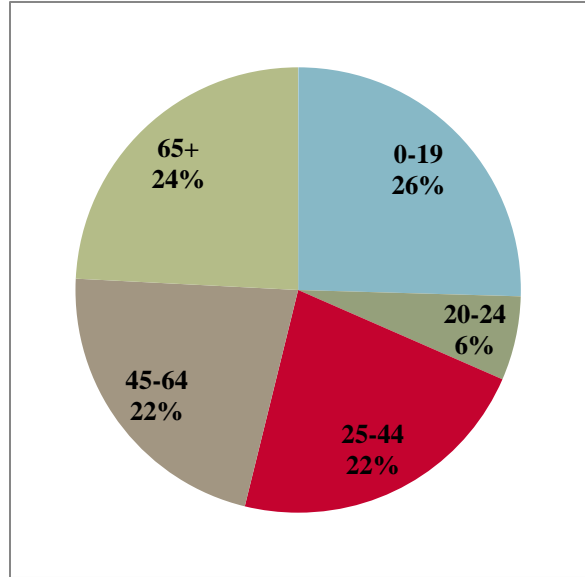
*Source: MAPC Projection Data*

What is by far more important is the change in the projected age composition of the town's population. It mirrors what is expected throughout Greater Boston—a population growing slowly, but aging rapidly. As **Figures 2A-2C** reveal, back in 1990, 24 percent of Newton's population were children and teenagers (age 0–19). This proportion is expected to rise slightly to 25- 26 percent by 2030 depending on which projection is used. Meanwhile the senior population (age 65+) is expected to increase from 15 percent to 24 percent. In addition, the cohort of older prime age adults (age 45–64) is expected to increase from 19 percent to 22 percent. This is due to the aging of the immense baby boom generation.

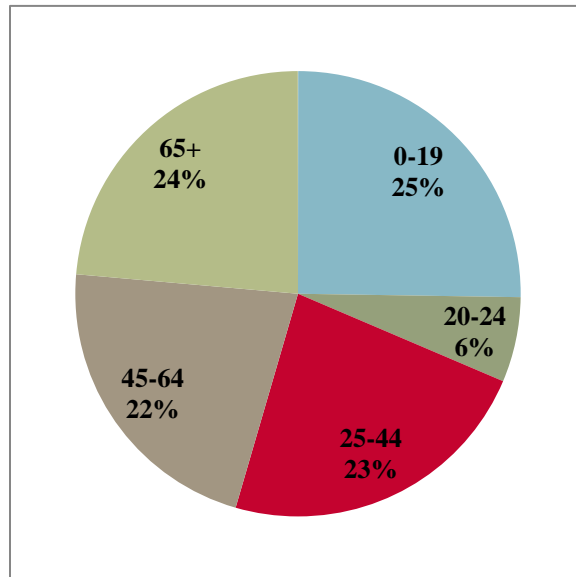
**Figure 3A: City of Newton Distribution of Population by Age 1990**



**Figure 2B: City of Newton Distribution of Population by Age 2030 *Status Quo* Projection**



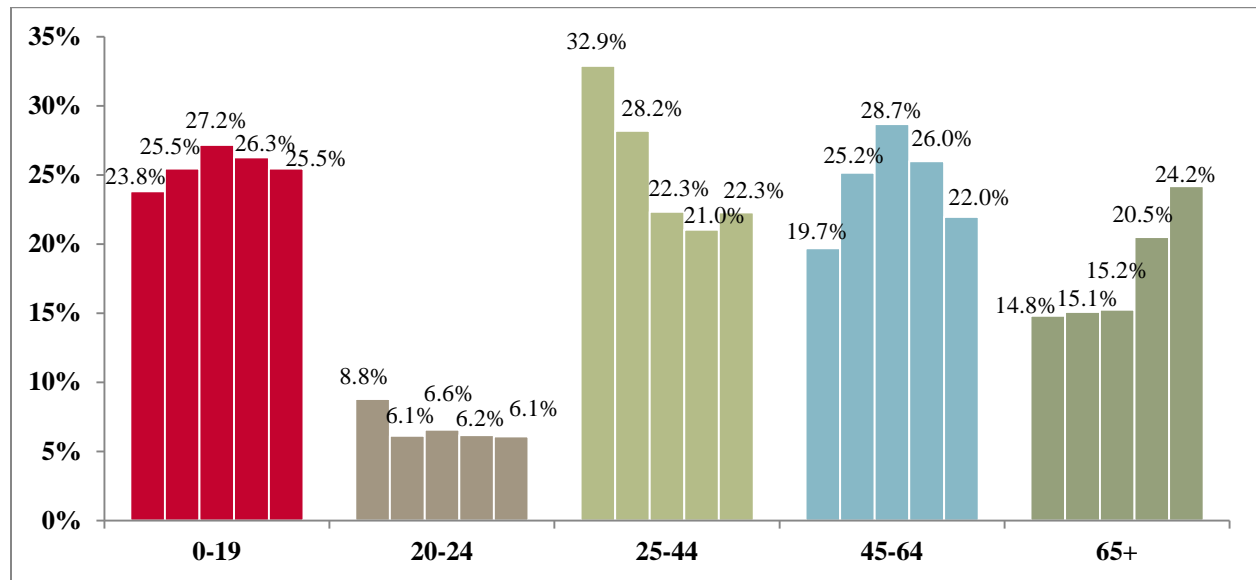
**Figure 4C: City of Newton Distribution of Population by Age 2030 *Stronger Growth* Projection**



Source: Computed from MAPC Projection Data

**Figure 3** provides a more complete depiction of these population trends. The share of Newton’s population comprised of youth (age 0–19) and young adults (20–24) is expected to drop slightly from 33.8 percent in 2010 to 31.6 percent in 2040. The percentage of younger prime age adults (25–44) is expected to hold steady at 22.3 percent. The proportion of older prime age individuals (age 45–64) is expected to decline by nearly 7 percentage points to 22 percent of the total 2030 population. This relative decline of younger residents will be offset by those who will be 65 or older as this population increases from 15.2 percent to at least 24 percent of Newton’s residents. This demographic revolution is similar to what will occur throughout Greater Boston.

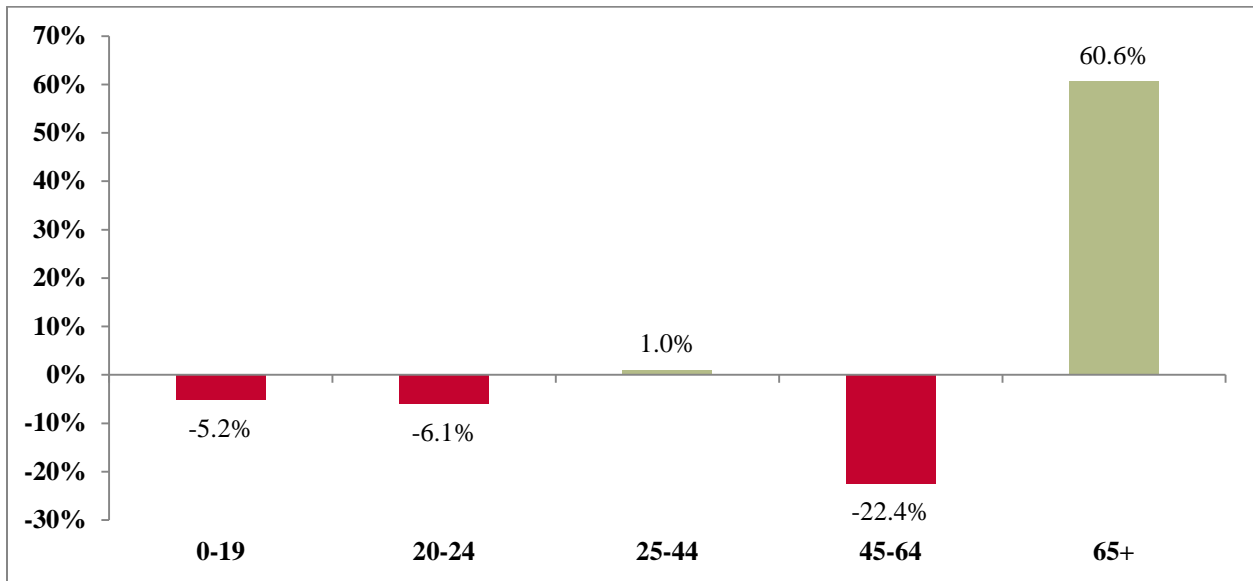
**Figure 3: City of Newton Projected Population Change by Age Cohort 1990–2030SQ**



Source: Computed from MAPC Projection Data

**Figure 4** makes this expected demographic revolution even more apparent. In absolute terms, the MAPC projection suggests that there will be nearly 1,000 *fewer* children and teenagers living in Newton by 2030 relative to 2010. The number of young adults drops by 6.1 percent whereas the younger prime age adults (age 25–44) will remain essentially unchanged. The number of older prime age adults (age 45–64) will decline dramatically—by nearly 5,500 residents. Meanwhile, the number of senior citizens 65 and older will increase by more than 7,800—or 61 percent—as Newton’s population of today ages over the course of the next twenty years with little increase in the size of the cohorts who follow them.

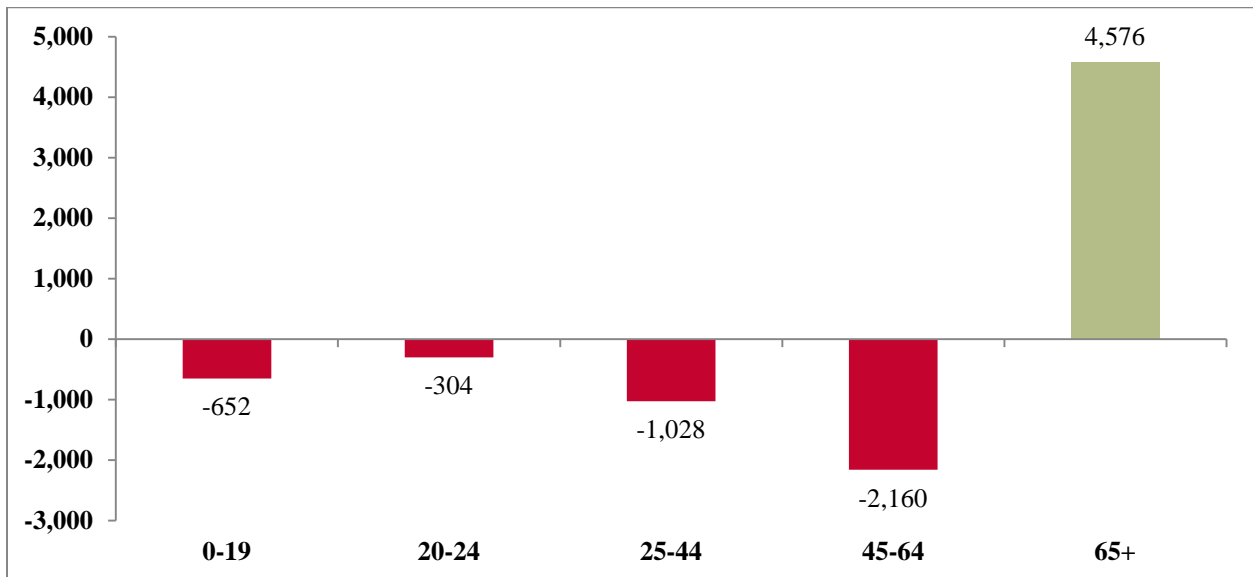
**Figure 4: City of Newton Projected Population Change by Age Cohort 2010–2030 Status Quo Projection**



Source: Computed from MAPC Projection Data

The increase in the senior population can be traced through the decades as demonstrated in Figures 5A–5B.

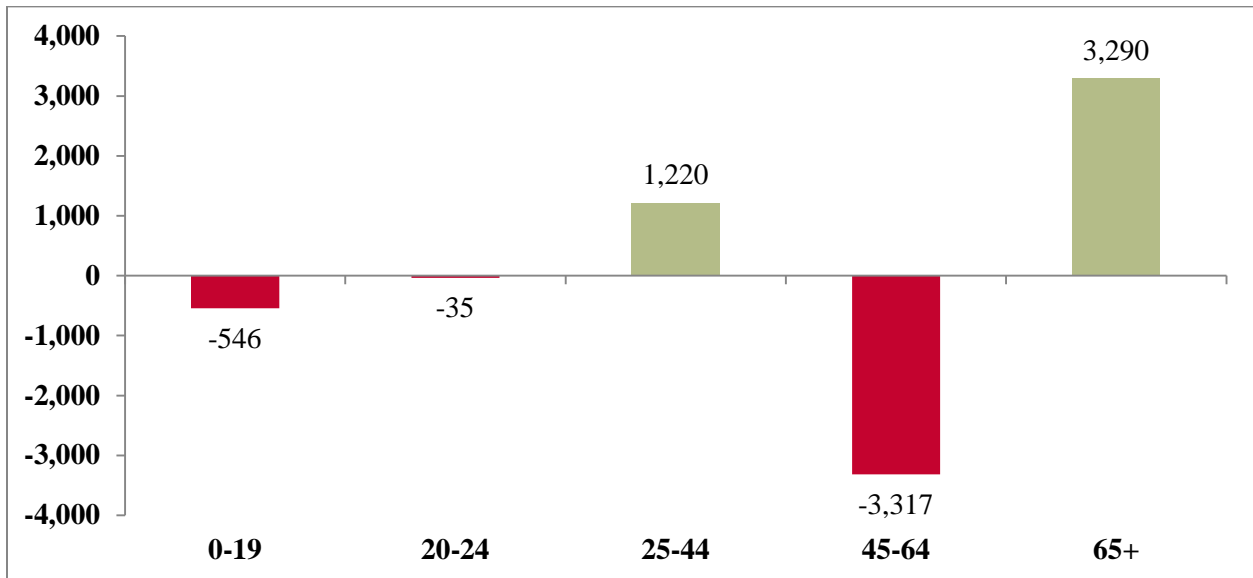
**Figure 5A: City of Newton Projected Population Change by Age Cohort 2010–2020**



Source: Computed from MAPC Projection Data



**Figure 5B: City of Newton Projected Population Change by Age Cohort 2020–2030**



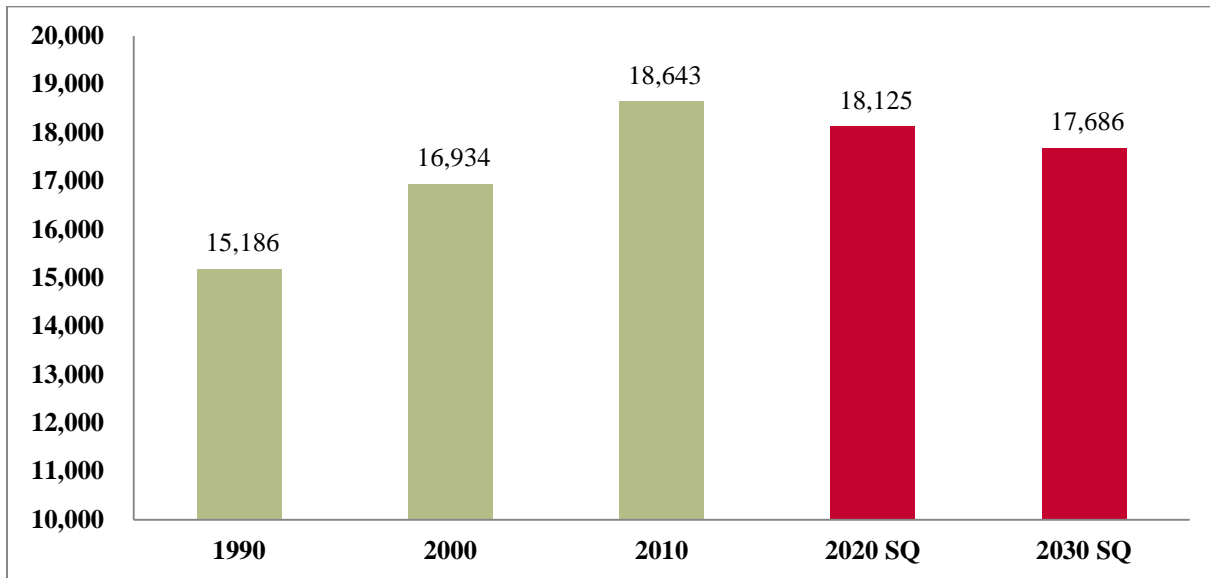
Source: Computed from MAPC Projection Data

While there will be a loss of approximately 1,332 young and prime age adults between 2010 and 2020, an approximately equal number will be gained in the following decade for a net loss of 147 residents during this time period.

A loss of older prime age residents (age 45–64) increases through 2030, yielding a total loss of 5,477 residents in this age cohort. Just the opposite is true for the 65+ cohort. In each decade, residents over 65 increase their numbers—first by nearly 4,600, then by almost 3,300 in the final decade of this twenty year projection.

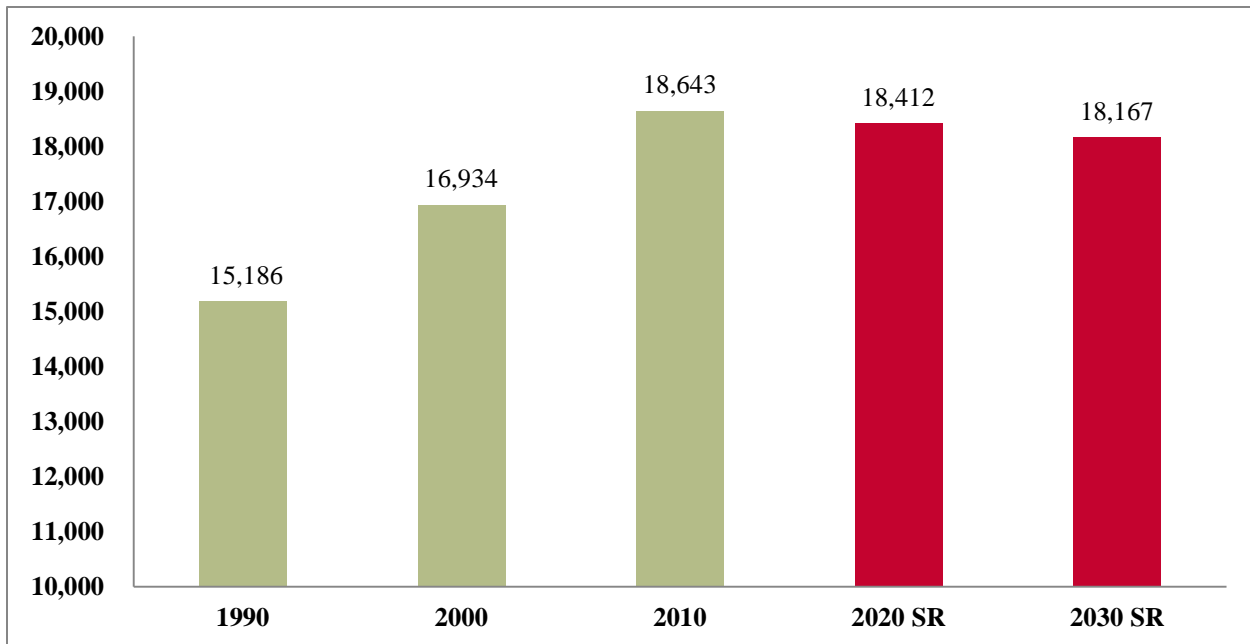
The projections also suggest a slow down in school-aged children. Between 1990 and 2010, Newton was home to 3,457 more school-aged children. As Figures 6B and 6C indicate, the number of school-aged children declines slightly in both the *Status Quo* and *Stronger Region* scenarios. The City of Newton can expect the numbers of school-aged children to drop anywhere from 476 to 957 children between 2010 and 2030.

**Figure 6A: Age 5–19 City of Newton 1990–2030SQ**



*Source: Computed from MAPC Projection Data*

**Figure 6B: Age 5–19 City of Newton 1990–2030SR**



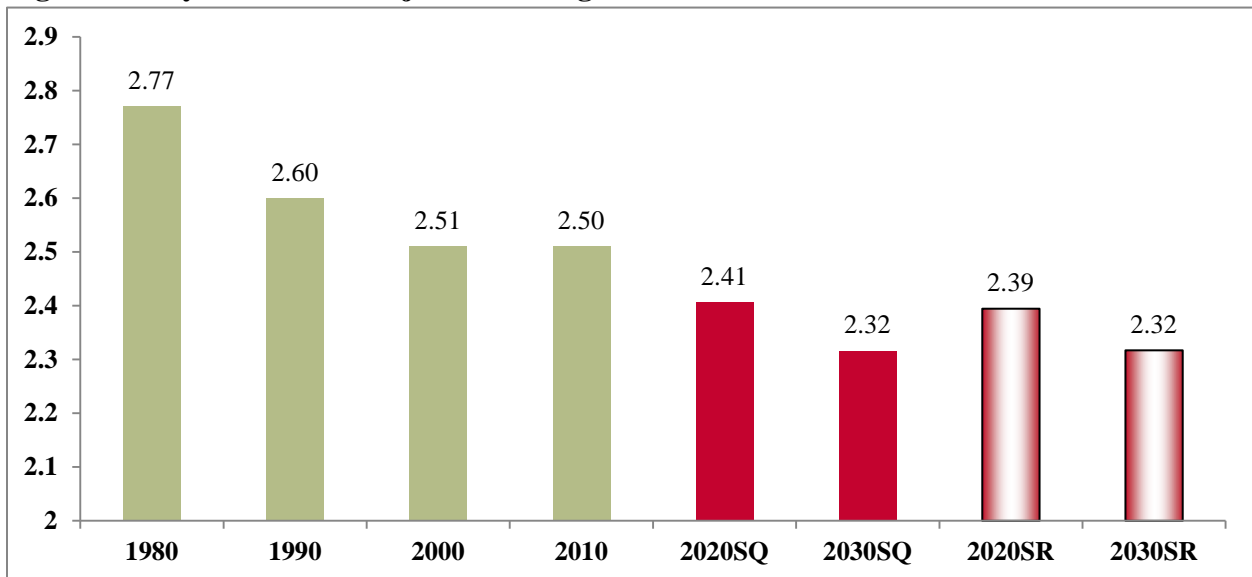
*Source: Computed from MAPC Projection Data*

According to these projections, the number of children and teenagers in Newton will continue to decline each decade between 2010 and 2030.

## Household Size

The number of projected households can defy the trend in population as it is conditioned by changes in the average size of households. As we saw in our previous report, the average household in Newton had 2.77 members in 1980. By 2010, after a continual decline over three decades, average household size was down to 2.50. The MAPC projection suggests that this trend toward smaller households will continue. As **Figure 7** reveals, the average household is projected to contain only 2.32 members by 2030.

**Figure 7: City of Newton Projected Average Household Size 1980-2030**

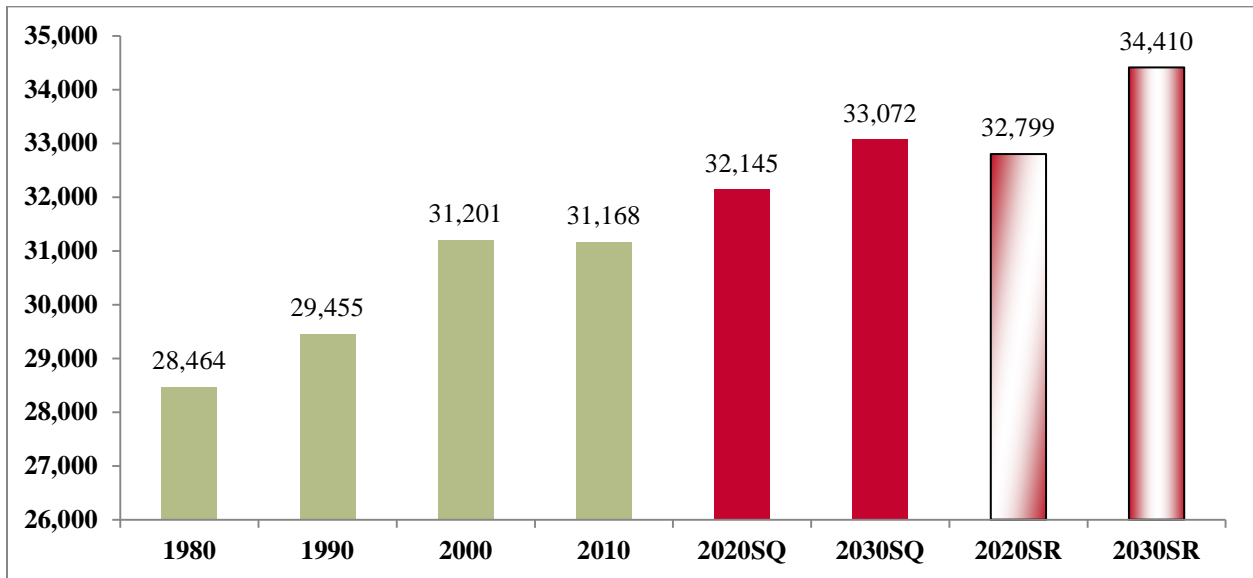


Source: Computed from MAPC Projection Data

## Projected Household Growth in Newton

As **Figure 8** demonstrates, the number of households in Newton grew from decade to decade from 1980 to 2000, then held steady in 2010. The MAPC projections suggest that household growth will resume through 2030. By then, Newton can expect to have more than 33,000 households in the *Status Quo* scenario, an increase of 6 percent over the 2010 level. In the *Stronger Region* scenario, the expected number of households is nearly 34,500, an increase of more than 10 percent over the 2010 level. Because of the decline in household size, this compares with a 2010–2030 population increase of only 1 to 5 percent.

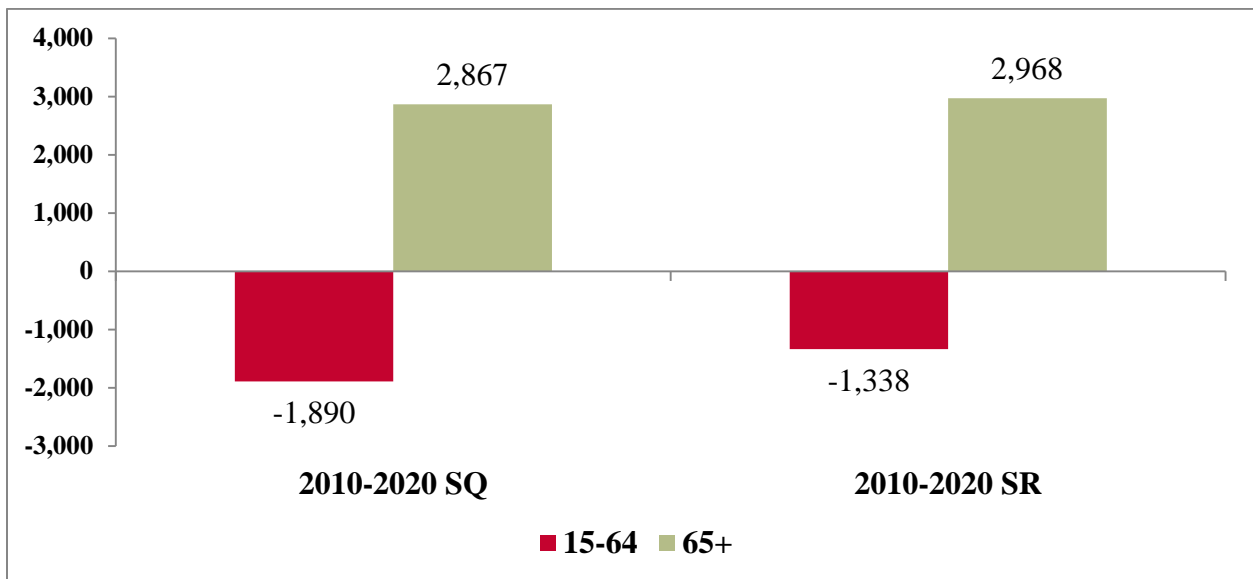
**Figure 8: City of Newton Projected Total Households 1980 to 2030**



Source: MAPC Projection Data

The overwhelming share of household growth will take place among older residents. As **Figure 9** indicates, the projection suggests that between 2010 and 2020, there will be roughly 2,900 additional households where the head of household is age 65 or older. The projection suggests a decline of between 1,300 and 1,900 households headed by a younger householder.

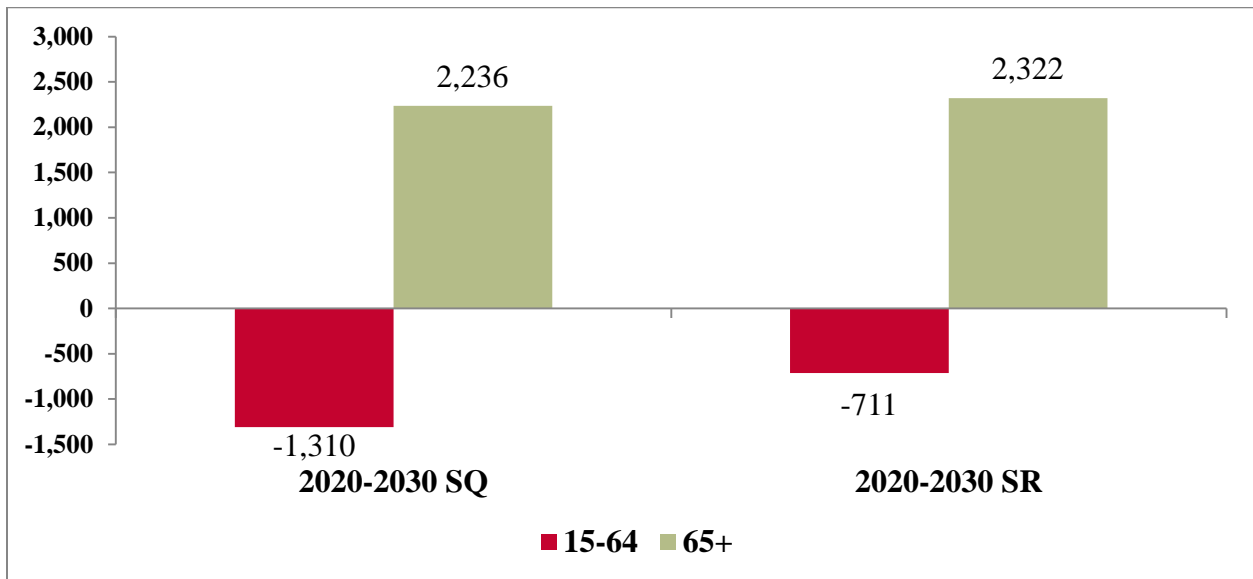
**Figure 9: City of Newton Change in Households by Age Cohort 2010-2020 *Status Quo* vs. *Stronger Region***



Source: Computed from MAPC Projection Data

As **Figure 10** reveals, the shift to older households is projected to continue between 2020 and 2030. During that decade, the number of senior households will increase by more than 2,200 while the number of younger households is expected to decline by 700 to 1,300.

**Figure 10: City of Newton Change in Households by Age Cohort 2020-2030 *Status Quo* vs. *Stronger Region***

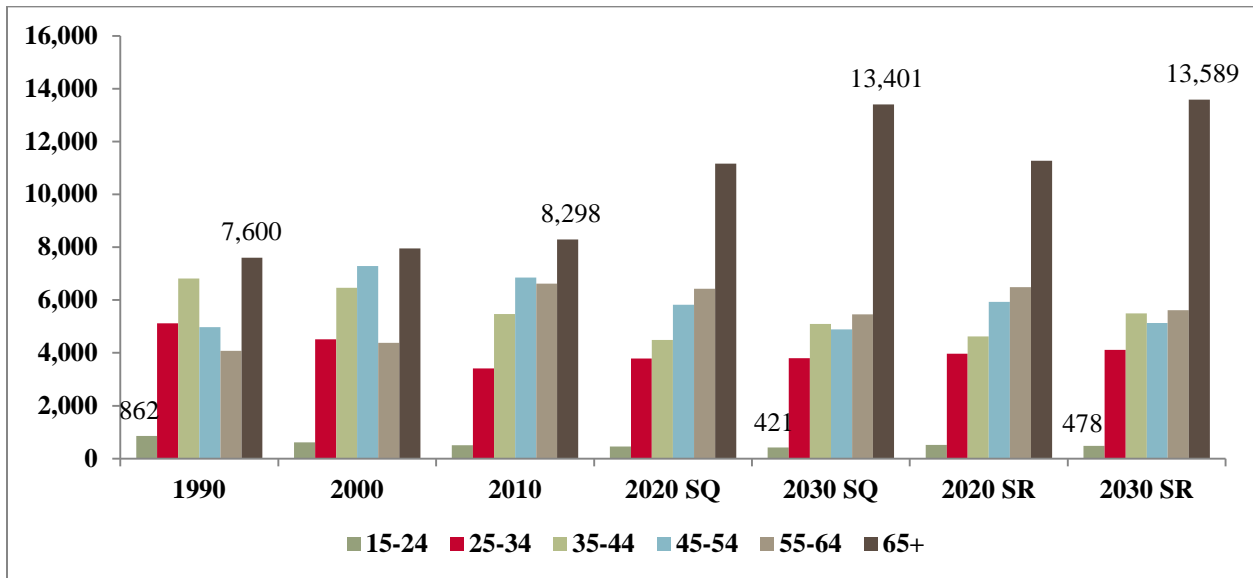


Source: Computed from MAPC Projection Data

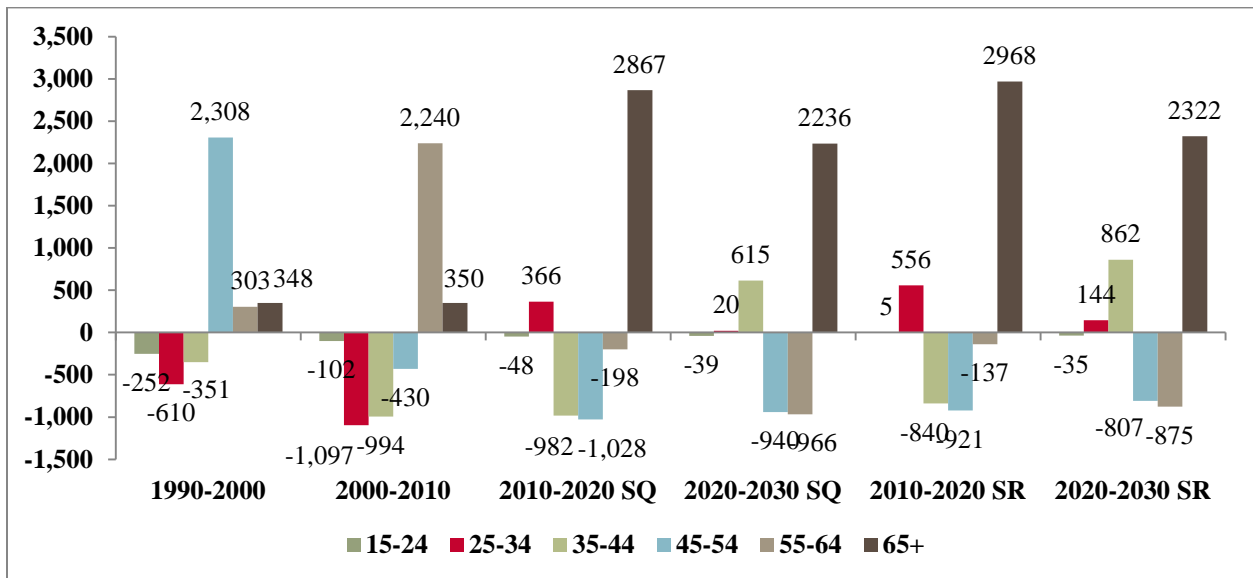
All of these household data are summarized in **Figures 11A and 11B**. Essentially, between 2010 and 2030, the number of households headed by someone under the age of 65 is projected to decline slightly while the number of older households will expand by at least 5,100.

In 2010, older Newton households accounted for less than 27 percent of all households. By 2030, they are expected to account for approximately 40 percent. *If this projection holds, the demographic profile of Newton will be fundamentally altered over the next two decades.*

**Figure 5A: City of Newton Count of Households by Age Cohort 1990-2030**



**Figure 6B: City of Newton Change in Households by Age Cohort 1990-2030**

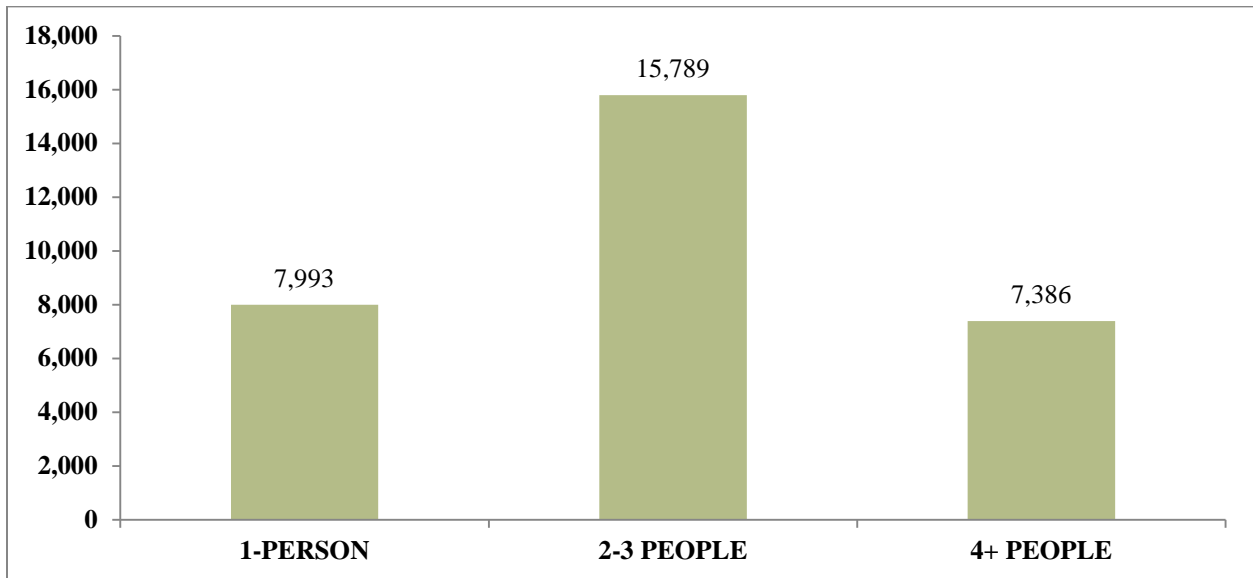


Source: Computed from MAPC Projection Data

### Size of Households

As the demographic profile of Newton changes over time, household size will almost inevitably change as well. **Figure 12** provides existing data on how many households in the city contained a single person, 2–3 people, or 4 persons or more in 2010. About 29 percent of all households (2,831) had a single resident. About half (48 percent or 4,641) had 2 to 3 residents while 23 percent of households (2,179) contained 4 or more persons.

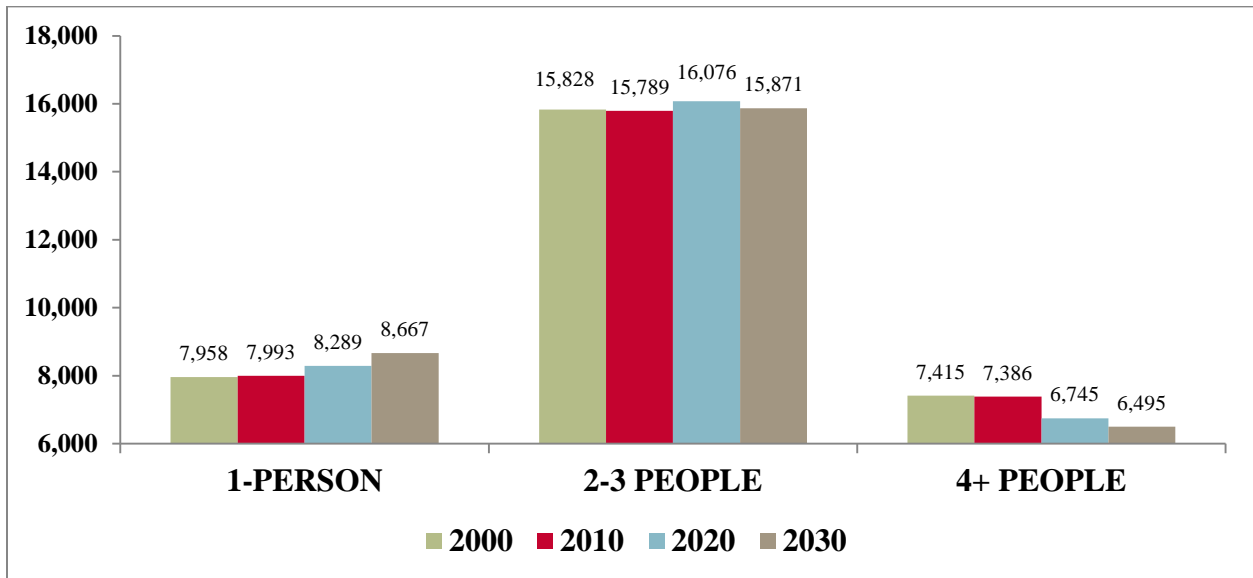
**Figure 7: City of Newton Estimated Household Size 2010**



*Source: Computed from MAPC Projection Data*

**Figure 13** provides estimates of the projected change in households by household size between 2000 and 2030. Note that between 2000 and 2010, household sizes pretty much held steady. The projections indicate that in 2020, more people will be living in one-person households and 2–3 person households, whereas the number of people living in larger households with more than 4 people will drop sharply. This number of Newton residents living in these larger 4+ person households is expected to continue to decline in the following decade to 2030, while one person households will continue to rise. The number of 2–3 person households, according to these projections will hold steady between 2000 and 2030.

**Figure 8: City of Newton Projected Household Size 2000 to 2030 *Status Quo***



*Source: Computed from MAPC Projection Data*

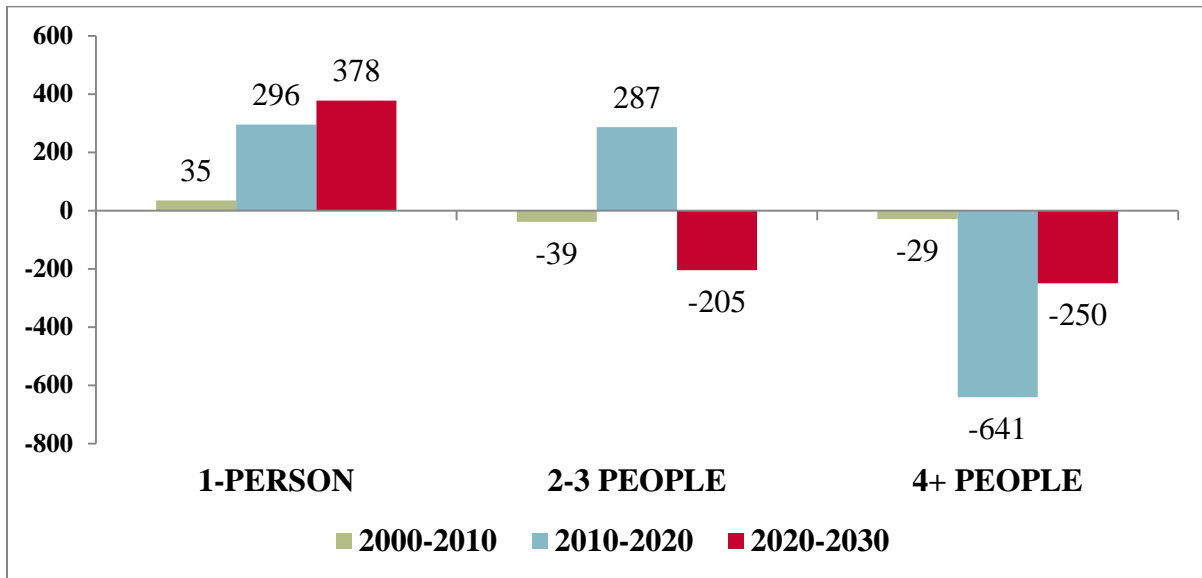
**Figure 14** provides more detail and better illustrates this phenomenon. Over the entire period 2010-2030, the number of one-person households is expected to increase by a total of 674 households, after increasing by only 35 between 2000 and 2010. Almost all (85 percent) of the additional single-person households will be persons over 65, many of whom are likely to be widows or widowers.

The number of households with four or more people will, under this projection, decline sharply, resulting in a total loss of 891 such households between 2010 and 2030.

*If this projection holds true, Newton will have nearly 9 percent more single person households by 2030; roughly the same number of small family households; and 12.4 percent fewer 4+ person households than today.*



**Figure 9: City of Newton Projected Change in Household Size 2000-2030 *Status Quo***



Source: Computed from MAPC Projection Data

### Projection Variance

All projections are obviously subject to forecast error. In the case of these population and household projections, changes in birthrates could affect the number of children in Newton in 2020 and beyond. Lower death rates could affect the number of older residents. The same is true of changes in in- and out-migration rates which are influenced by many factors including changes in immigration policy and the relative strength of the Greater Boston economy. If job opportunity increases in the region faster than other places, the number of out-migrants will likely contract and the number of in-migrants will expand, boosting Newton's population as the *Stronger Region* projection suggests.

Of course, it is possible that Newton will experience even less population growth than suggested by these projections. This could occur under a number of scenarios.

- The regional economy could grow slower than expected, leading to greater out-migration of workforce-aged cohorts and less in-migration from other regions.
- Immigration into the region and into Newton could be lower if immigration regulations are tightened.
- Newton residents, particularly aging Baby Boomers could choose to move out of Newton in larger numbers, seeking warmer climates or seeking more appropriate housing available outside of Newton.

*As such, these projections must be taken with a note of caution. The further out we go in our projections, the more likely a range of factors will condition the future to differ from these projected values. What is unlikely to differ from these projections, however, is the aging of Newton's population. This is virtually inevitable.*

### **Potential Implications of Newton's Demographic Revolution**

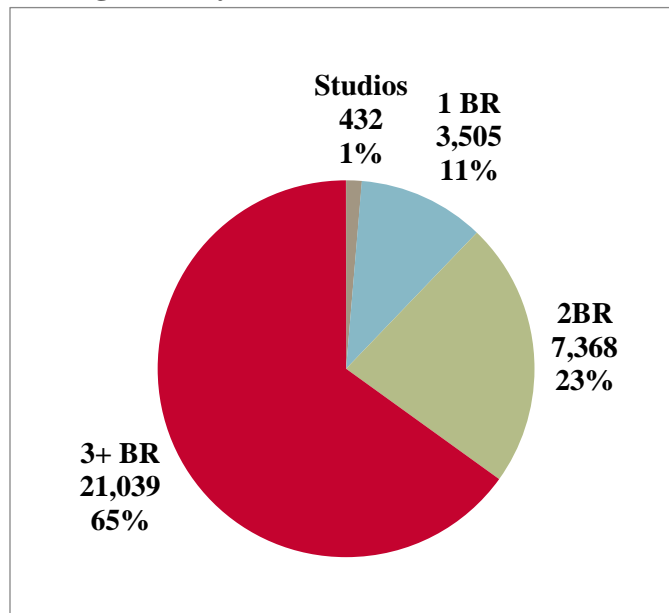
Newton will hardly be alone in experiencing such a demographic revolution over the next three decades. What will happen in Newton reflects similar trends throughout most of the communities in Greater Boston. All of them will have to plan for demographic change which will affect most aspects of city life.

#### *Housing*

Over the fifteen years, the aging of the Newton population will likely affect the housing choices of current residents. Empty-nesters may find it desirable to “age in place” in Newton, but not necessarily in their current homes. As the Baby Boomers age further, many are expected to end up as single person households. They, too, may wish to stay in the city but downsize from their existing homes. Moreover, younger families may become smaller as they delay childbearing and opt for fewer children. This will also affect housing demand.

As **Figure 16** reveals, the current housing stock in Newton is overwhelmingly comprised of larger homes with three or more bedrooms. More than three-fifths (21,039) of the current stock of 32,344 housing units in the city contain three or more bedrooms with studio apartments and 1-bedroom units accounting for only 12 percent (3,937 units) of the city's housing stock.<sup>3</sup> According to the projection found previously in Figure 14, we expect 674 additional single person households in Newton by 2030. If the projection holds true and single person households opt for smaller housing units, this will likely require 17 percent more studio and 1-bedroom apartments in the city. If such housing is not developed, it is possible that older Newton residents will seek more appropriate housing in other communities.

**Figure 10: Share of Housing Units by Number of Bedrooms 2008-2012**



Source: American FactFinder – 2008–2012 American Community Survey

Moreover, with a projected decrease of 891 households with four or more persons through 2030, it appears there will be little to no need for the construction of additional larger single-family homes—and certainly fewer per decade than the 715 constructed between 2000 and 2010.<sup>4</sup> The projected increase of 287 smaller households with two-to-three persons may also increase demand for 2-bedroom housing units of which today there are about 7,400.

### *Transportation*

Along with the need for smaller housing units for an aging population, Newton might also wish to consider the transportation needs of their older residents. Of the projected addition of 7,866 residents 65 and older by 2030, the MAPC expects more than 50 percent (3,933) of these to be age 75 plus and 15.2 percent (1,194) to be 85 or older. Many of these older residents may choose to abandon their private automobiles and seek public transit. While the current train, bus, and private taxi service may be adequate to fill their needs, Newton might consider developing a public van service or other form of transportation to supplement this mode of transit.

### *Social Services*

A range of social services may also need to be expanded to serve Newton’s aging population. This could include skilled nursing, financial planning, and age-appropriate recreational services.

### *Public Schools*

These projections suggest that the school-age population in Newton will decrease over the next two decades. In 2010, there were 18,643 residents aged 5 to 19. By 2030, we project this age cohort will be down to about 17,686—a decline of 957. As such, it appears that Newton will not need to substantially increase its investment in public school construction beyond plans for renovation or to adjust for the number of students in each grade or across schools.

### *Tax Revenue and Economic Development*

Finally, Newton should begin to consider what impact its changing demographics might have on the city's tax base. With its age profile shifting toward older residents, it is possible that it will be difficult to maintain the city's residential property tax base as its senior citizens downsize their housing and find themselves increasingly living on fixed incomes. Raising revenue through Prop 2 ½ overrides may also become more difficult politically.

In this case, the city may become more dependent on its commercial and industrial tax base. With little additional local aid forthcoming from the Commonwealth and little federal aid, Massachusetts towns and cities will increasingly find themselves “on their own.” Municipalities will find themselves competing for business investment. In this case, Newton may wish to seek ways to become more attractive to business development.

### **Conclusions**

While projections always must be taken with a grain of salt, the projections here reflect the best data available at this time. They suggest that Newton should begin planning for a very different demographic future than its demographic present. The aging of its population with its smaller household size and fewer school-aged children will require new thinking about housing, transportation, social services, and the city's economic base. While there is time for careful planning for this demographic transition, there is no time like the present to begin.

## ENDNOTES

---

<sup>1</sup> Barry Bluestone and Tracy A. Corley, “Demographic Trends and Housing in the City of Newton, Massachusetts,” *The Kitty and Michael Dukakis Center for Urban and Regional Policy*, April 25, 2014.

<sup>2</sup> See Tim Reardon and Meghna Dutta, “Population Change and Housing Demand Projections for Metro Boston: Regional Projections and Provisional Municipal Forecasts,” *Metropolitan Area Planning Council*, October 9, 2013.

<sup>3</sup> Housing unit data for Newton for the period 2008–2012 are available from American FactFinder provided by the U.S. Census Bureau.

[http://factfinder2.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](http://factfinder2.census.gov/faces/nav/jsf/pages/community_facts.xhtml)

<sup>4</sup> See Barry Bluestone and Tracy A. Corley, *op. cit.*, Figure 17, p. 20.