

495/MetroWest Profile

Prepared for the 495/MetroWest
Suburban Edge Community
Commission

Public Policy Center

UMass Dartmouth

495/MetroWest Suburban Edge Community Commission

The 495/ MetroWest Suburban Edge Community Commission was established by the Legislature in Section 233 of Chapter 119 of the Session Laws of 2015. The commission will study development challenges experienced by edge communities, including transportation, water, cellular, and energy infrastructure, transit services, residential development, reuse of former industrial facilities and historic mills, brownfields reclamation, downtown redevelopment and other such constraints. The commission will then develop policy responses and recommendations to ensure that edge communities can participate in state development initiatives and benefit from state resources. The commission will focus its investigation and study on the 35 municipalities served by the 495/MetroWest Corridor Partnership, Inc. and develop a pilot program to address the issues to be studied and investigated by the commission.

Public Policy Center

UMass Dartmouth

Our Mission

The mission of the Public Policy Center (PPC) at UMass Dartmouth is to:

- Inform evidence-based policy making.
- Improve public understanding of critical policy issues.
- Provide educational and research opportunities to our faculty and students.
- Connect the resources of the University of Massachusetts to the communities we serve.

The PPC's primary goal is to inform public policy discussions by providing policy makers with university quality research, technical assistance, and analytical services designed to help make our state, region, and communities better places to live, work, and do business. We do this by leveraging the substantial skills of our students and faculty partners, and enhancing the connections between the University and the communities it serves.

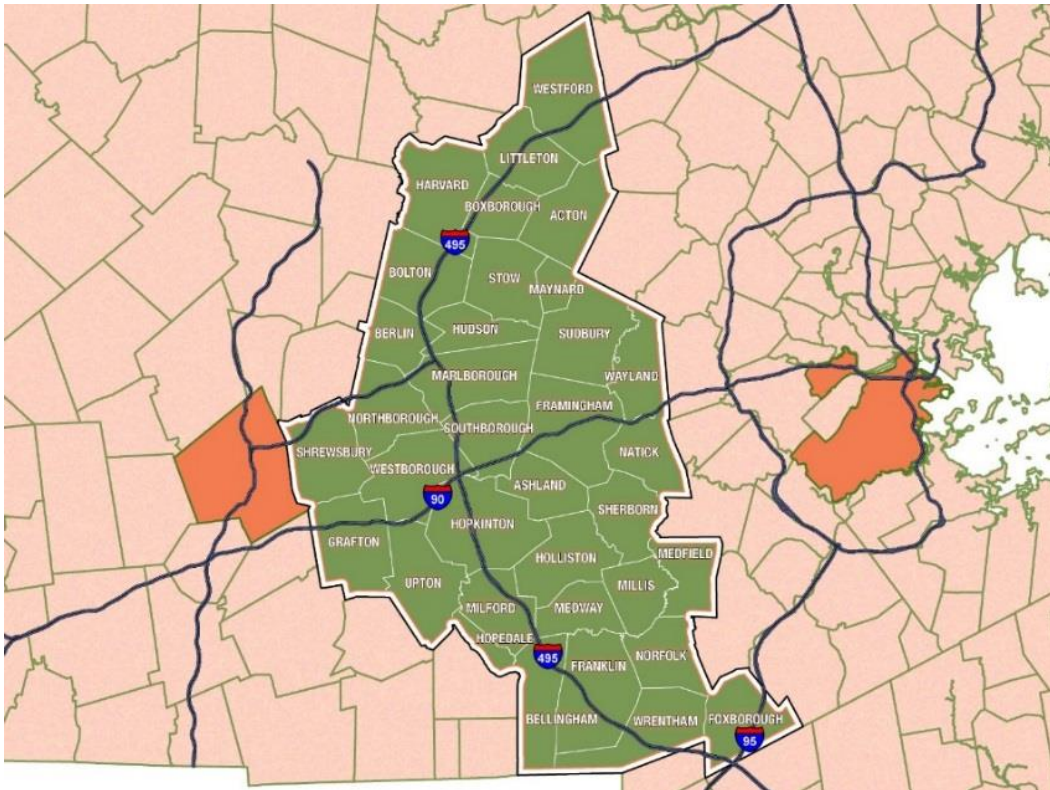
TABLE OF CONTENTS

1.0	The 495/MetroWest Region	1
2.0	Socio-Demographic Indicators.....	2
2.1	Population	2
2.2	Age Cohorts.....	4
2.3	Race / Ethnicity	4
2.4	English Language Proficiency	5
2.5	Nativity and Citizenship.....	6
2.6	Educational Attainment	7
3.0	Income & Poverty	9
3.1	Median Household income	9
3.2	Per Capita Income	10
3.3	Household Poverty	11
4.0	Employment and Unemployment	12
4.1	Total Employment	12
4.2	Unemployment	13
5.0	Jobs and Wages	14
5.1	Jobs and Wages.....	14
6.0	Industry Profile	15
6.1	Largest Industries	15
6.2	High Growth Industries	16
6.3	Industry Cluster Analysis	17
6.4	Industry Clusters by Location Quotient.....	18
7.0	Occupations.....	20
8.0	Industry and Occupational Projections	21
8.1	Industry Projections	21
8.2	Occupational Projections	21
9.0	Commuting Patterns.....	22
9.1	Inflow and Outflow	22
9.2	Workers Living in The Region	23
10.0	Housing.....	25
10.1	Housing Stock.....	25
10.2	Housing Occupancy	27
10.3	Real Estate Market	28
11.0	Trends in Property values	31
11.1	All Property Types	31
11.2	Commercial Properties.....	33
Appendix A: Description of Major Industries		35
Appendix B: Description of Industry Clusters		37

1.0 THE 495/METROWEST REGION

The 495/MetroWest region consists of 35 cities and towns in the Middlesex, Norfolk, and Worcester counties of Massachusetts (see Figure 1). These communities share geography and transportation infrastructure and grapple with similar challenges and opportunities related to infrastructure, transportation, housing, water resources, and wastewater, among other issues.

Figure 1
495/MetroWest Suburban Edge Region



Source: 495/MetroWest Partnership.

2.0 SOCIO-DEMOGRAPHIC INDICATORS

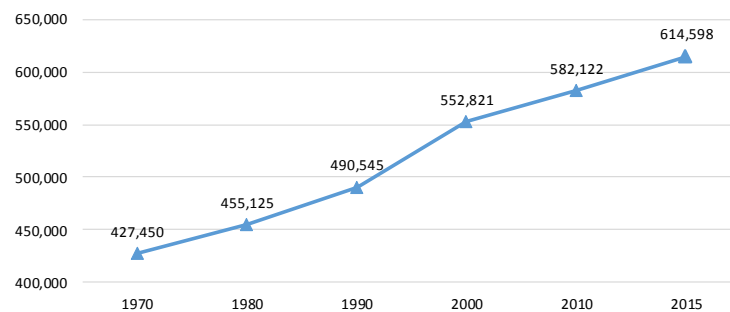
Highlights

- The 495/MetroWest region's population increased by 43.8 percent from 1970 to 2015, compared to 17.0 percent statewide. The region's population growth continued to outpace the state's from 2010 to 2015, increasing by 5.6 percent in comparison to 1.7 percent for the state.
- The majority of the region's population identifies as white (85.1%), although this share decreased by 6.5 percentage points between 2000 and 2015. During the same period, the share of individuals who identify as Asian more than doubled, from 3.5 percent to 7.7 percent.
- The region's residents are more educated than the state's as a whole, with 54.8 percent having a Bachelor's Degree or higher, compared to 40.5 percent statewide.
- The vast majority of residents (92.4%) living in the region are U.S. citizens, with 85.1 percent being native citizens and 7.3 percent being naturalized citizens.

2.1 POPULATION

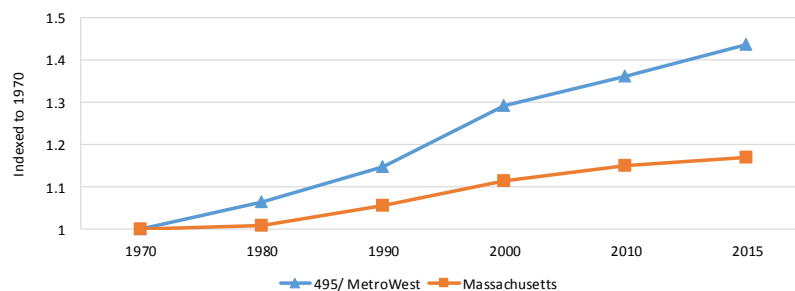
The 495/MetroWest region's population grew by 43.8 percent from 1970 to 2015, or an additional 187,148 residents (see Figure 2). This compares to a change in population of 17.0 percent statewide. The population growth rate of the 495/MetroWest region has continually outpaced that of the Commonwealth since 1970 (see Figure 3).

Figure 2
Total Population, 495/MetroWest Region, 1970–2015



Source: Massachusetts Department of Revenue Municipal Databank, 1970–2015

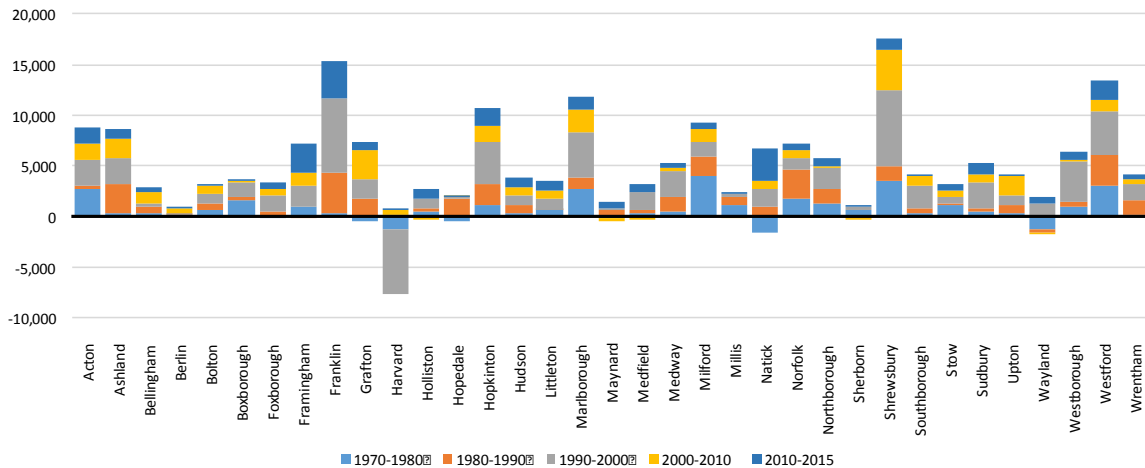
Figure 3
Index of Total Population, 495/MetroWest and Massachusetts, 1970–2015



Source: Massachusetts Department of Revenue Municipal Databank, 1970–2015;
Public Policy Center

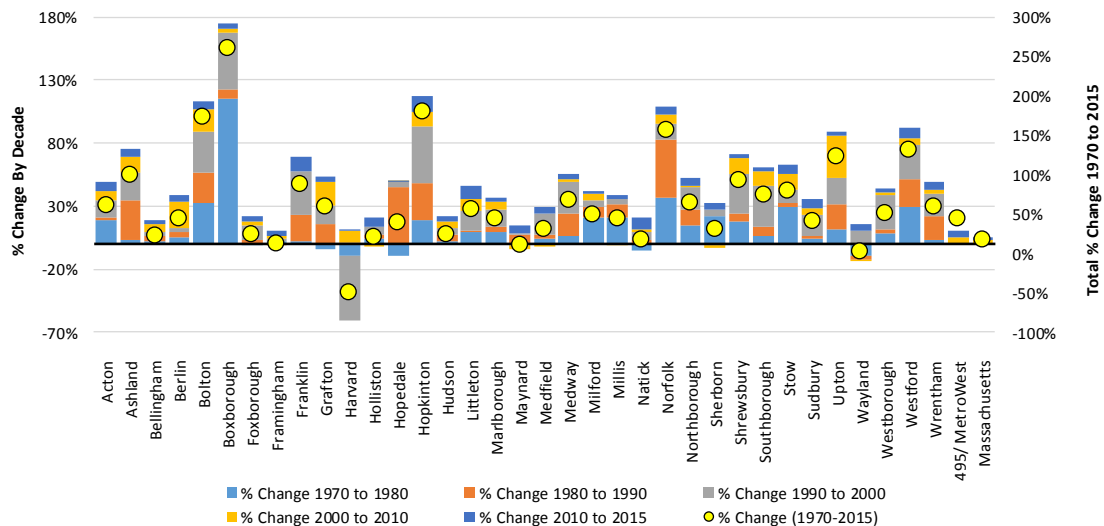
The communities experiencing the largest absolute population growth from 1970 to 2015 are Shrewsbury (+17,609), Franklin (+15,317), and Westford (+13,463).¹ Each of the region's communities added residents from 2010 to 2015, with Franklin (+3,587), Natick (+3,256), and Framingham (+2,891) experiencing the largest increase in the number of residents over this period (see Figure 4). In terms of percentage growth, Franklin (+12.1%), Hopkinton (+11.7%), and Littleton (+11.1%) underwent the largest percent change in population from 2010 to 2015, although Boxborough experienced the largest percent change in population from 1970 to 2015 (see Figure 5).²

Figure 4
Absolute Population Change By Decade, 495/MetroWest Region, 1970–2015



Source: MA DOR Municipal Databank, 1970–2015; Public Policy Center.

Figure 5
Percent Population Change By Decade, 495/MetroWest, 1970–2015



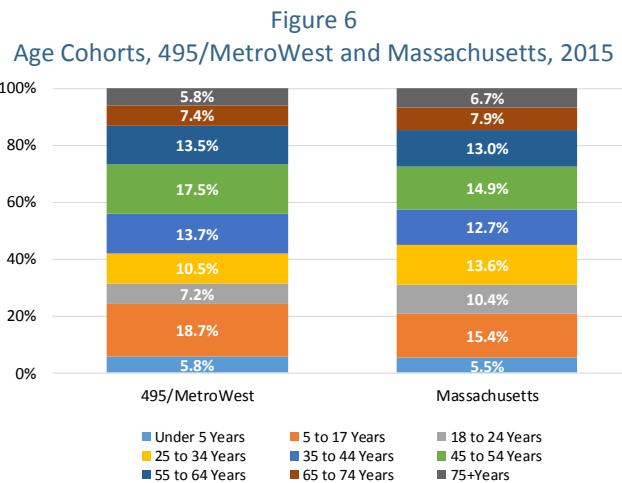
Source: MA DOR Municipal Databank, 1970–2015; Public Policy Center.

¹ The decline in the population of the town of Harvard from 1990 to 2000 is attributable to the closure of Fort Devens in 1996, which was converted primarily to commercial use.

² Note that summing the percentage change for each decade does equal the percentage change from 1970 to 2015.

2.2 AGE COHORTS

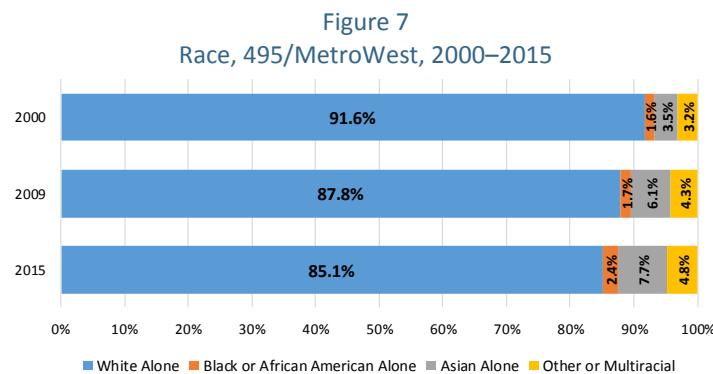
The 495/MetroWest region's population is well diversified in terms of age, with an age breakdown similar to that of the state as a whole (see Figure 6). Massachusetts and the 495/MetroWest region had similar shares of working class individuals; those who are between 25 and 54 years old (Massachusetts: 41.2%, 495/MetroWest: 41.7%).³ The percentage of school age children (5 to 17 years old) is slightly higher in the 495 Metro/West region in comparison to the state (18.7% compared to 15.4%).



Source: 2011–2015 ACS 5-year estimates.

2.3 RACE / ETHNICITY

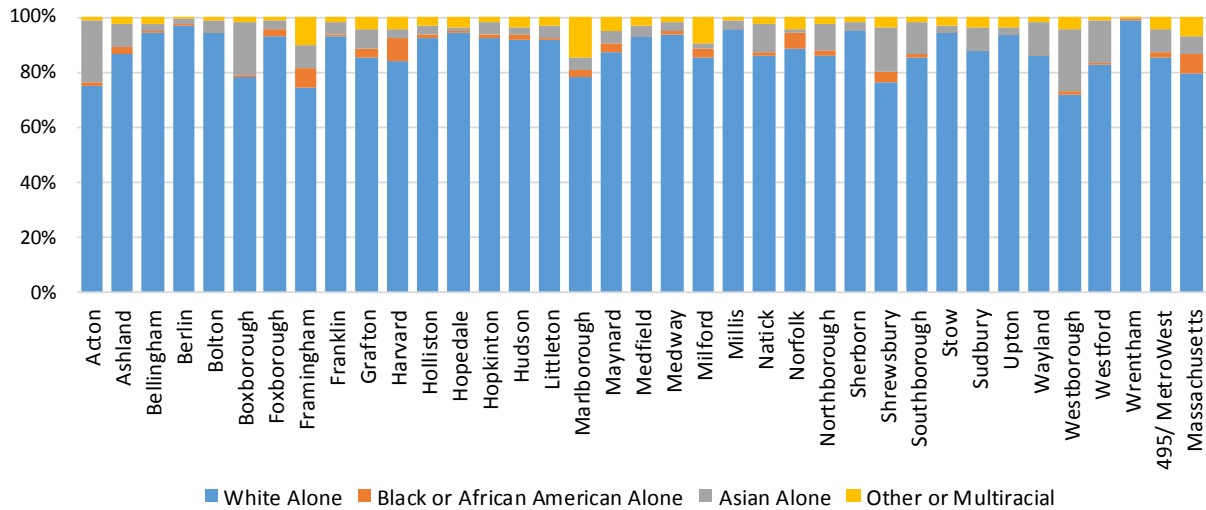
The 495/MetroWest region has historically had a high portion of residents who identify as White alone. Nonetheless, this figure declined by 6.5 percentage points from 2000 to 2015 (91.6% to 85.1%), while the percentage of those who identify with other races increased, albeit modestly (see Figure 7). Asian alone is the most significant minority portion of the population in the region (7.7%). Westborough, Framingham, Acton, Shrewsbury, and Boxborough are the most diverse communities in the region, with considerably larger portions of Asian residents in comparison to the state average (see Figure 8).



Source: 2000 Census, 2005–2009 ACS 5-year estimates, 2011–2015 ACS 5-year estimates.

³ Defined by the Organization of Economic and Cooperational Development (OECD) as individuals in their “prime working lives.”

Figure 8
Race by Community, 495/MetroWest, 2015

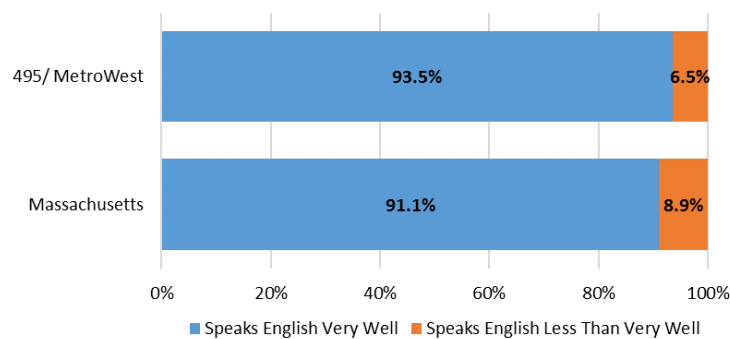


Source: 2011–2015 ACS 5-year estimates.

2.4 ENGLISH LANGUAGE PROFICIENCY

Nearly 94 percent (93.5%) of the 495/MetroWest population report that they speak English “very well,” compared to 91.1 percent of residents statewide (see Figure 9).

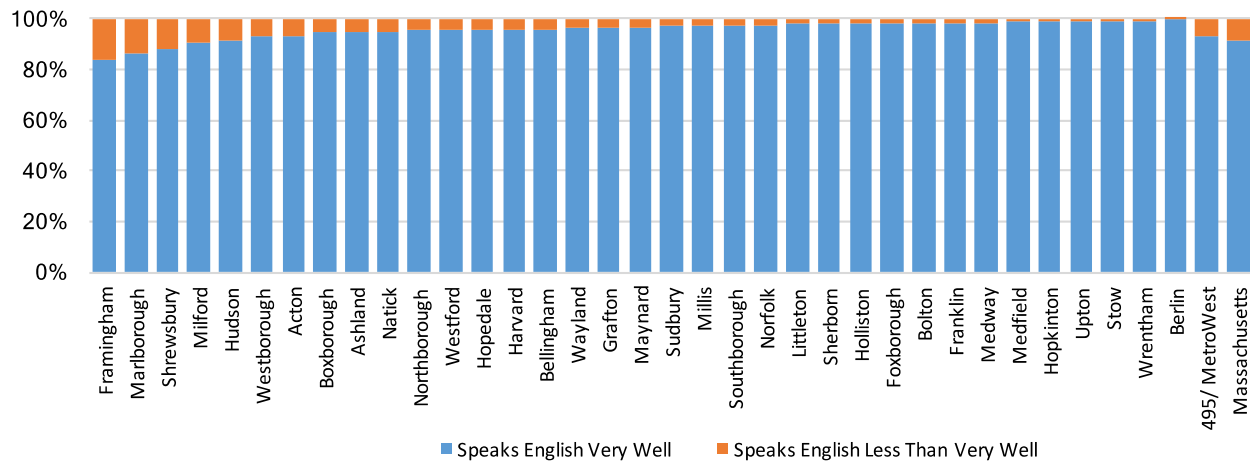
Figure 9
English Language Proficiency, 495/MetroWest and Massachusetts, 2015



Source: 2011–2015 ACS 5-year estimates.

Several towns in the 495/MetroWest region have smaller portions of English proficient residents compared to Massachusetts as a whole (91.1% residents statewide speak English “very well”), including Framingham (83.6%), Marlborough (86.0%), and Shrewsbury (88.3%). Conversely, many communities have a very large portion of English proficient residents, such as Berlin (99.6%), Wrentham (99.3%), Stow (99.2%), and Upton (99.1%) (see Figure 10).

Figure 10
English Language Proficiency by Community, 495/MetroWest, 2015



Source: 2011–2015 ACS 5-year estimates.

2.5 NATIVITY AND CITIZENSHIP

The vast majority of citizens living in the region are Native born U.S. Citizens: 85.1 percent in 2015, which is slightly higher than the statewide average of 84.5 percent. The region experienced a small increase in the percentage of noncitizens from 2000 to 2015 (1.5%), compared to a 0.5 percent increase statewide. Overall, the region has about the same percentage of noncitizens as Massachusetts as a whole (7.6% and 7.4%, respectively) (see Table 1).

Table 1
Nativity/Citizenship, 495/MetroWest and Massachusetts, 2000–2015

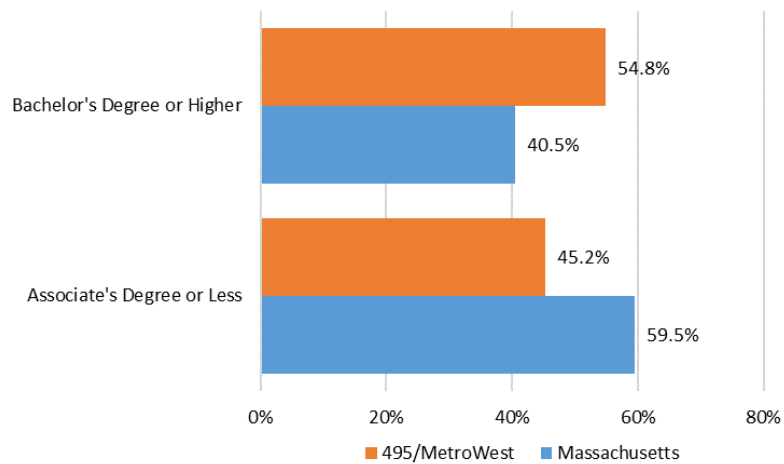
	495/MetroWest			Massachusetts		
	2000	2015	%Change (2000–2015)	2000	2015	% Change (2000–2015)
Native	89.9%	85.1%	-4.8%	87.8%	84.5%	-3.3%
Naturalized U.S. Citizen	4.1%	7.3%	3.2%	5.3%	8.0%	2.7%
Not a U.S. Citizen	6.1%	7.6%	1.5%	6.9%	7.4%	0.5%

Source: 2000 Census, 2010–2015 ACS 5-Year Estimates.

2.6 EDUCATIONAL ATTAINMENT

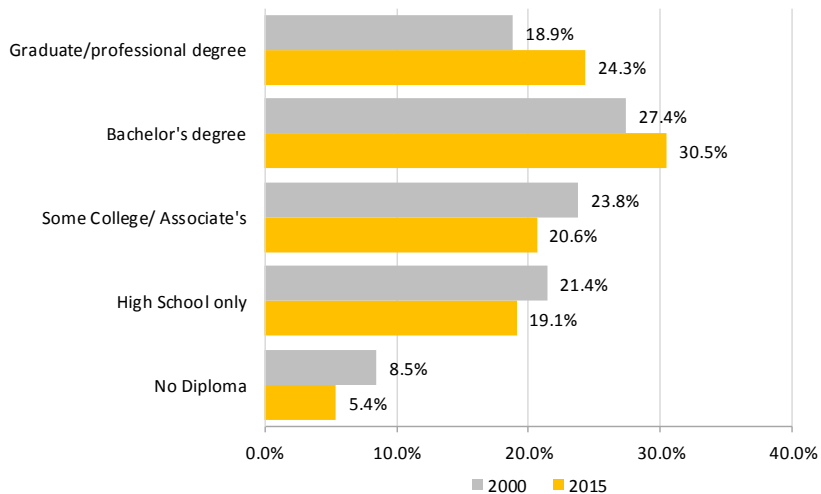
The 495/MetroWest population is more educated than the state's population as a whole. For example, 54.8 percent of the region's residents have a Bachelor's Degree or higher, which compares to 40.5 percent of residents statewide (see Figure 11). Overall, educational attainment levels have risen since 2000, with the percentage of residents age 25 and older with a Bachelor's Degree or higher increasing by 8.5 percentage points from 2000 to 2015. Conversely, the percentage of residents who have not earned a high school diploma decreased by 3.1 percentage points over this period (see Figure 12).

Figure 11
Residents 25 Years and Older Earning Bachelor's Degrees or Higher, 495/MetroWest and Massachusetts, 2015



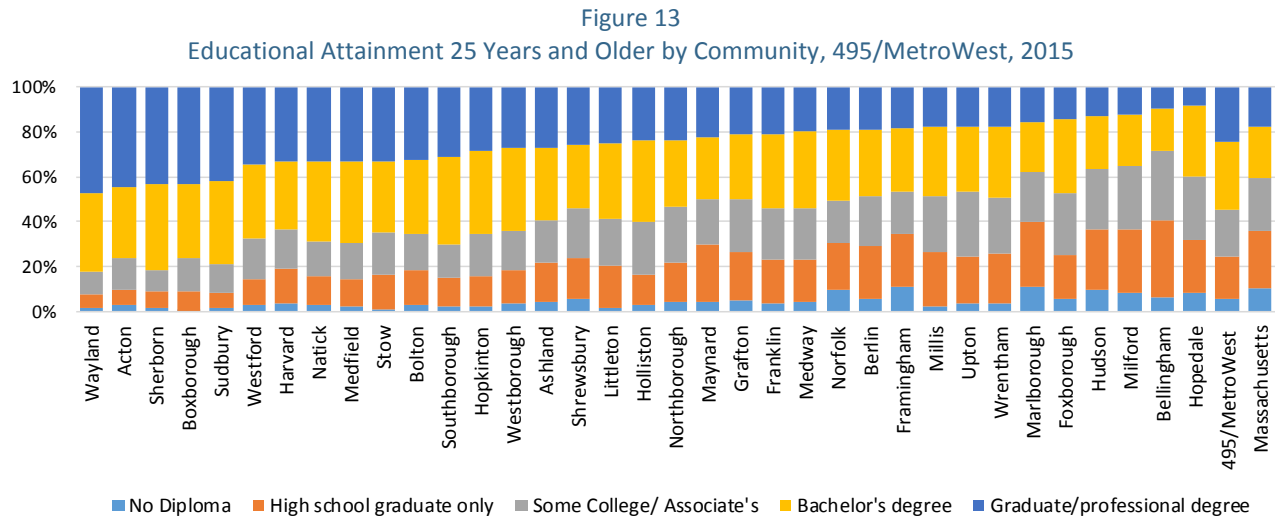
Source: 2011–2015 ACS 5-year estimates.

Figure 12
Educational Attainment 25 Years and Older, 495/MetroWest, 2000–2015



Source: 2000 Census, 2011–2015 ACS 5-year estimates.

Educational attainment varies from community to community, with the towns of Wayland (47.3%), Acton (44.5%), Sherborn (43.4%), and Boxborough (43.4%) having the largest portion of residents with graduate or professional degrees. In comparison, 17.7 percent of Massachusetts residents have achieved this level of education (see Figure 13).



3.0 INCOME & POVERTY

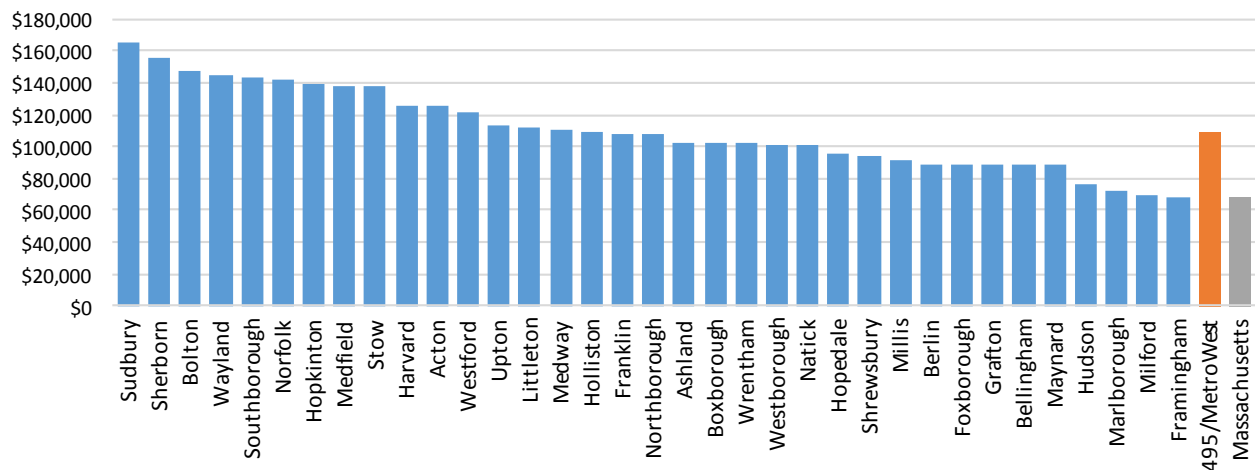
Highlights

- Overall, households and residents in the 495/MetroWest region are wealthier in comparison to households and residents statewide. In 2015, the region's households had a median household income that was 159 percent of the state median and a per capita income that was 125 percent of the state per capita income. Consequently, the region overall has much lower poverty rates in comparison to the state.

3.1 MEDIAN HOUSEHOLD INCOME

All communities in the 495/MetroWest have higher median household incomes than Massachusetts as a whole. Sudbury had the highest median household income in 2015 (\$165,745), followed by Sherborn (\$155,956) and Bolton (\$147,446) (see Figure 14).

Figure 14
Median Household Income, 495/MetroWest, 2015



Source: 2011–2015 ACS 5-Year Estimates.

3.2 PER CAPITA INCOME⁴

The inflation-adjusted per capita income for the 495/MetroWest region decreased by 0.5 percent from 2000 to 2015, while it increased by 3.4 percent statewide.⁵ Nonetheless, the region's per capita income has been higher than the state as a whole since 2000, and was 125 percent of Massachusetts' per capita income in 2015 (see Table 2).

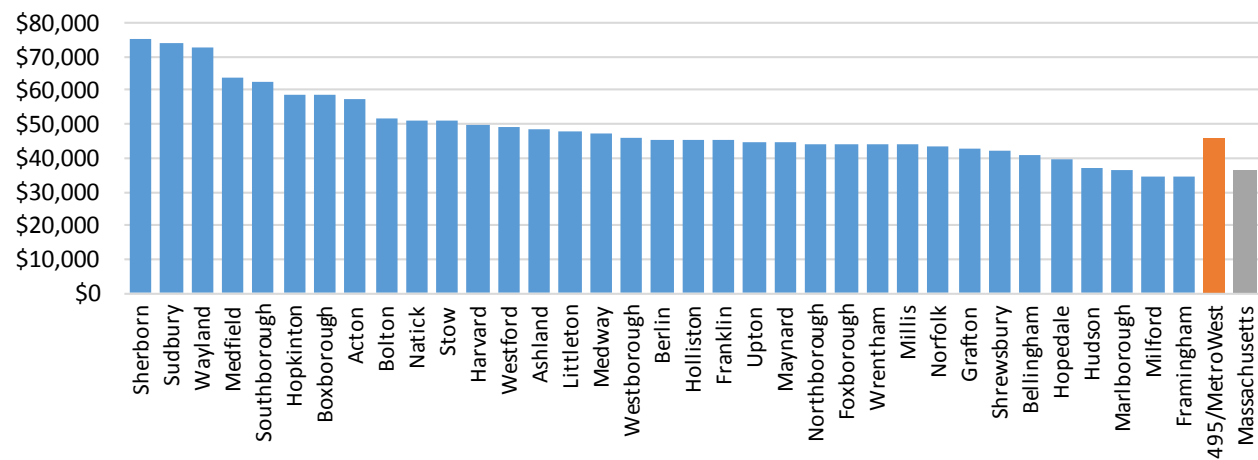
Table 2
Inflation-Adjusted Per Capita Income,
495/MetroWest and Massachusetts, 2000–2015

	2000	2015	% Change (2000–2015)
495/MetroWest	\$46,328	\$46,117	-0.5%
Massachusetts	\$35,678	\$36,895	3.4%

Source: 2000 Census, 2011–2015 ACS 5-year estimates.

While per capita income varies among the region's individual communities, all the region's communities other than Marlborough, Milford, and Framingham have per capita incomes greater than the statewide average (see Figure 15).

Figure 15
Per Capita Income, 495/MetroWest, 2015



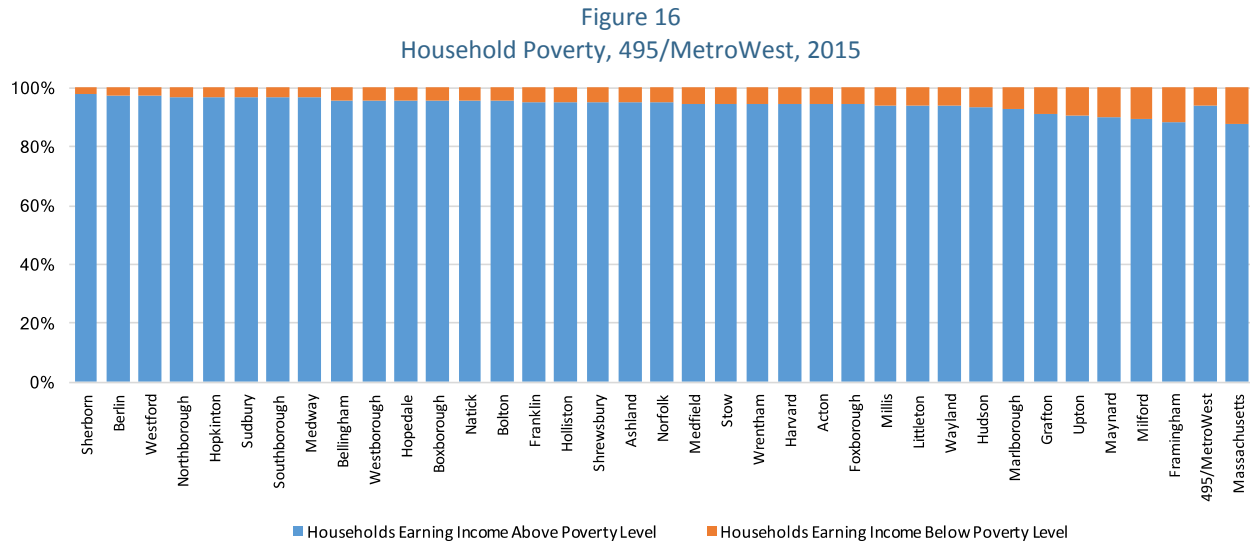
Source: 2011–2015 ACS 5-year estimates.

⁴ Per capita income values for the 495/MetroWest region were calculated using a weighted average derived from the individual community per capita incomes and populations.

⁵ All per capita income values were adjusted for inflation to 2015.

3.3 HOUSEHOLD POVERTY

Only about 6 percent (6.2%) of 495/MetroWest region households earned incomes below the poverty level in 2015, compared to 11.9 percent of households statewide (see Figure 16).



Source: 2011–2015 ACS 5-year estimates.

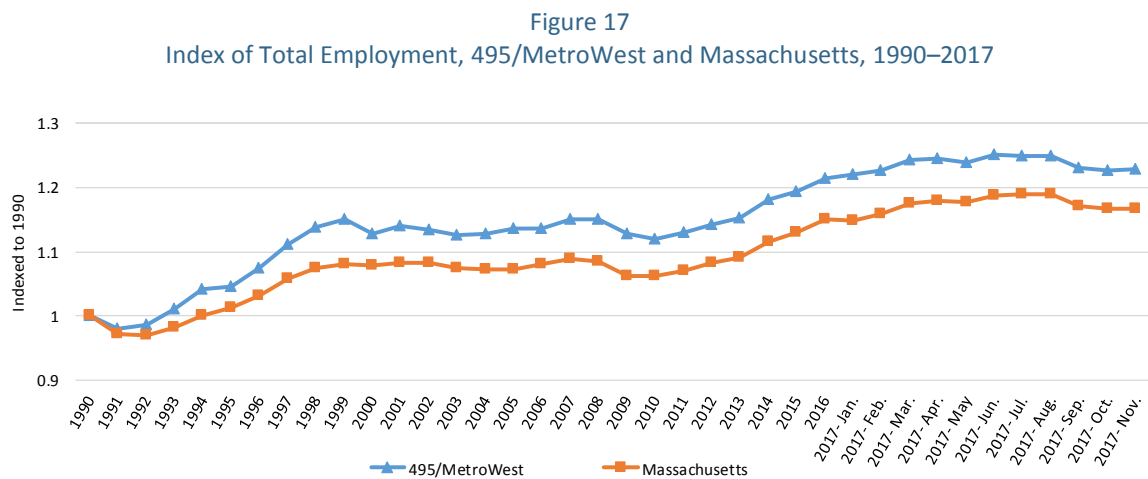
4.0 EMPLOYMENT AND UNEMPLOYMENT

Highlights⁶

- The employment patterns among the region's residents closely mirrored the state between 1990 and 2017, albeit the number of 495/MetroWest residents employed grew at a faster pace in the first 10 years.
- The region's unemployment rate has been consistently lower than that of the state as a whole since 1990.

4.1 TOTAL EMPLOYMENT

Total employment patterns in the region closely mirrored the state between 1990 and 2017, although the region's employment level grew at a faster pace in the first 10 years (see Figure 17).

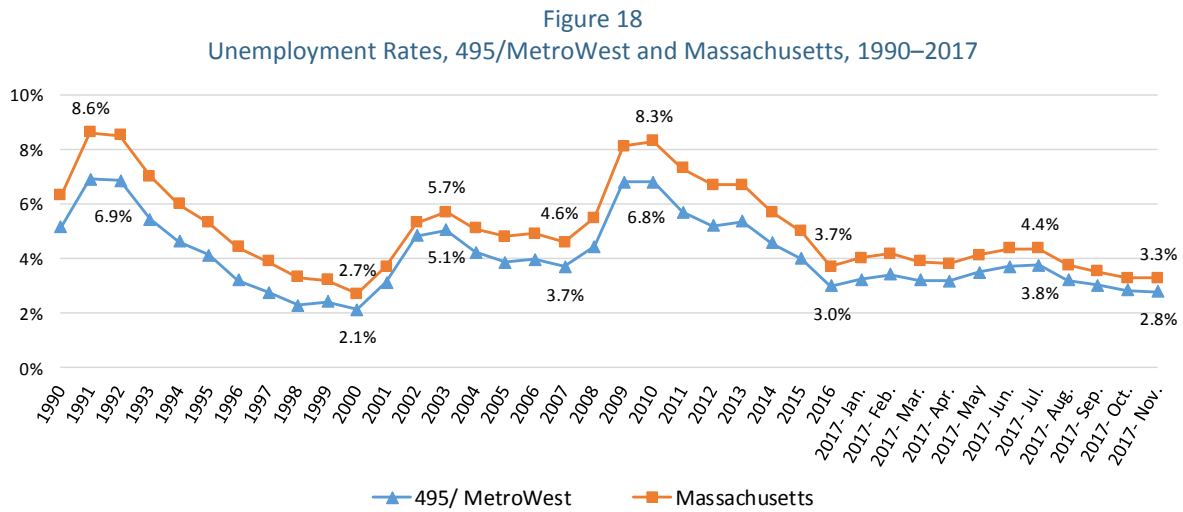


Source: Massachusetts Executive Office of Labor & Workforce Development LAUS data (Not Seasonally Adjusted), 1990–2017 (Indexed to 1970).

⁶ This data measures the number of the region's residents who are employed, regardless of the location of their job(s).

4.2 UNEMPLOYMENT

The region's unemployment rate has been consistently lower than that of the state since 1990 (see Figure 18). The latest unemployment rate for the region was 2.8 percent (November 2017), which compares to a statewide unemployment rate of 3.3 percent.



Source: Massachusetts Executive Office of Labor & Workforce Development LAUS data
(Not Seasonally Adjusted), 1990–2017.

5.0 JOBS AND WAGES

Highlights⁷

- An average of 360,840 jobs were located within the 495/MetroWest region in 2016, an increase of 3.0 percent in the number of jobs from 2001. The job total increased by 7.3 percent statewide over this period.
- In 2016, residents in the region earned an average annual wage that was 109 percent of the state annual average wage (\$69,263 versus \$63,261 respectively).
- Year-to-year changes in the region's average annual wage were in step with statewide trends since 2001, although wages were consistently higher.

5.1 JOBS AND WAGES

There were an average of 360,840 jobs located within the 495/MetroWest region in 2016, an increase of 3.0 percent from 2001 (+10,621 jobs). This compares to a 7.3 percent job increase statewide (+263,379 jobs) over this period (see Table 3).

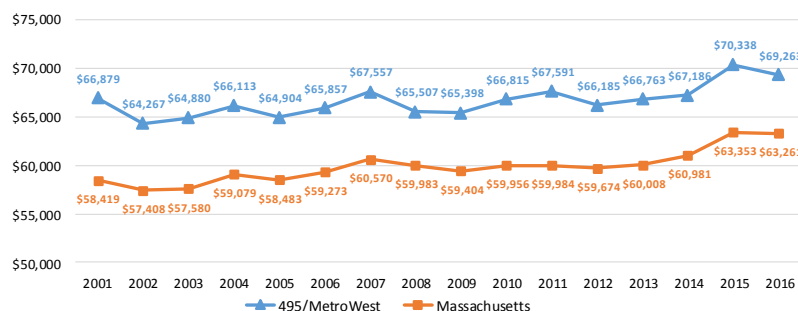
Table 3
Change in Jobs, 495/MetroWest and Massachusetts, 2001–2016

	2001	2016	% Change (2001–2016)
495/MetroWest	350,219	360,840	3.0%
Massachusetts	3,622,169	3,885,548	7.3%

Source: EMSI, 2001–2016.

495/MetroWest residents earned an average annual wage in 2016 that was 109 percent of the state annual average wage (\$69,263 and \$63,261, respectively). Year-to-year changes in the region's average annual wage were in step with statewide trends since 2001, although wages were consistently higher (see Figure 19).

Figure 19
Inflation-Adjusted Average Annual Wages, 495/MetroWest and Massachusetts, 2001–2016



Source: EMSI, Inflation adjusted to 2016.

⁷ Data in this section refers to jobs located within the 495 MetroWest region, as opposed to the previous section that measures the number of the region's residents who are employed, regardless of where their job is located.

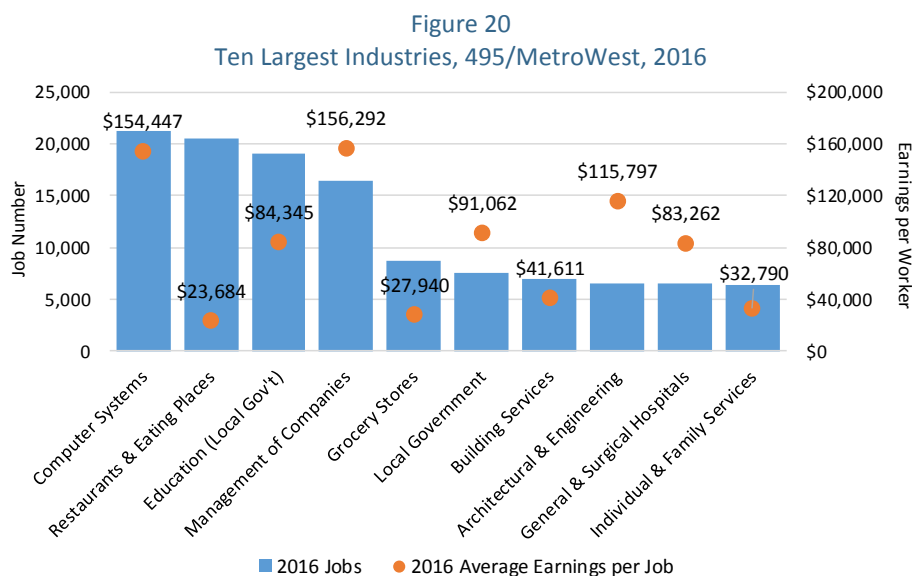
6.0 INDUSTRY PROFILE

Highlights

- The Computer Systems Design industry accounts for the largest number of the region's jobs (21,192 jobs, 5.9% of all jobs), followed by Restaurants & Eating Places (20,553 jobs, 5.7% of all jobs) and Local Education (19,091 jobs, 5.3% of all jobs). Computer Systems Design is also the fastest growing industry since 2010.
- Industry sectors related to Employment Services, Restaurants & Eating Places, and Individual & Family Services also added a sizeable number of jobs over this time period.
- Annual average wages in the top industries range considerably, with many of the smaller industries paying the highest wages.
- The region specializes in the IT & Analytics Cluster; with a location quotient (LQ) of 7.2, the region is roughly seven times more specialized than the nation. The region also has a considerably high LQ in Biopharmaceuticals (5.3), a cluster that has experienced a 21.1 percent increase in employment since 2010.
- Other industry clusters with positive growth from 2010 to 2016 and above average employment include Business Services, Medical Devices, Textile Manufacturing, Recreational & Small Electric Goods, Communication Equipment & Services, Distribution & E-Commerce Equipment, Education & Knowledge Creation, and Electric Power Generation & Transmission.

6.1 LARGEST INDUSTRIES⁸

Figure 20 displays the 495/MetroWest region's 10 largest industries in 2016 in terms of employment (based on four-digit NAIC sectors). Computer Systems Design accounted for the largest number of jobs (21,192), followed by Restaurants & Eating Places (20,553) and Local Education (19,091). Annual average wages range considerably, with many of the smaller industries paying the highest wages.



Source: EMSI, 2016.

⁸ Please see Appendix A for industry descriptions.

6.2 HIGH GROWTH INDUSTRIES

Table 4 displays the 10 industries by absolute increase in jobs between 2010 and 2016. The region's fastest growing industry is the Computer Systems Design industry, which grew by 5,155 jobs. Restaurants & Other Eating Places and Individual & Family Services also added a sizeable number of jobs over this time period. Corporate headquarters located in the 495/MetroWest region, such as BJ's Wholesale Club or TJX Companies, are represented in the Management of Companies Enterprise industry, which was the fourth fastest growing industry in the region from 2010 to 2016.⁹

Table 4
Ten Fastest Growing Industries, 495/MetroWest, 2010–2016

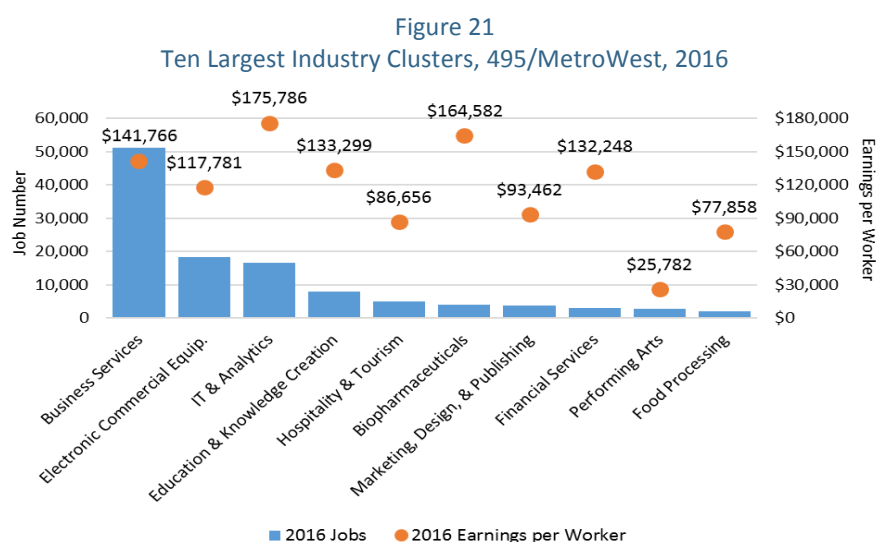
Industry	2010 Jobs	2016 Jobs	Change in Jobs (2010–2016)	% Change in Jobs (2010–2016)
Computer Systems Design & Related Services	16,037	21,192	5,155	32.1%
Individual & Family Services	2,808	6,375	3,567	127.0%
Restaurants & Other Eating Places	17,182	20,553	3,371	19.6%
Management of Companies & Enterprises	14,692	16,381	1,689	11.5%
Investigation & Security Services	2,136	3,326	1,190	55.7%
Home Health Care Services	1,795	2,944	1,149	64.0%
Animal Production & Aquaculture	170	1,267	1,097	645.3%
Building Equipment Contractors	3,463	4,487	1,024	29.6%
Education & Hospitals (Local Government)	18,110	19,091	981	5.4%
Other Amusement & Recreation Industries	3,566	4,520	954	26.8%

Source: EMSI Highest Ranked Industries – Fastest Growing Industries, 2010–2016.

⁹ The Management of Companies and Enterprises sector comprises (1) establishments that hold the securities of (or other equity interests in) companies and enterprises for the purpose of owning a controlling interest or influencing management decisions or (2) establishments (except government establishments) that administer, oversee, and manage establishments of the company or enterprise and that normally undertake the strategic or organizational planning and decision making role of the company or enterprise.

6.3 INDUSTRY CLUSTER ANALYSIS

Industry clusters differ from individual industries in that they consist of groups of related industries in a defined geographic area that share common markets or are interrelated in some way. Figure 21 highlights the largest industry clusters within the 495/MetroWest region in terms of the number of workers they employ.¹⁰ Table 5 displays the 10 fastest growing industry clusters in the region from 2010–2016. Business Services is the largest industry cluster within 495/MetroWest, having a combined total of 51,095 jobs in 2016. This cluster includes industries pertaining to business management, business support services, corporate headquarters, computer services, employment placement services, engineering services, architectural and drafting services, and ground passenger transportation services.¹¹



Source: EMSI- Industry Group Comparison- Jobs and Earnings Comparison, 2016.

Table 5
Ten Fastest Growing Industry Clusters in 495/MetroWest, 2010–2016

Industry	2010 Jobs	2016 Jobs	Change in Jobs (2010–2016)	% Change in Jobs (2010–2016)
Business Services	43,750	51,095	7,345	17.0%
Education & Knowledge Creation	6,715	7,900	1,185	18.0%
Hospitality & Tourism	4,118	4,881	763	19.0%
Marketing, Design, & Publishing	3,084	3,777	694	22.0%
Biopharmaceuticals	3,333	3,937	604	18.0%
Medical Devices	1,122	1,641	518	46.0%
Performing Arts	2,287	2,733	446	20.0%
Electronic Commercial Equipment	17,951	18,340	388	2.0%
Food Processing & Manufacturing	1,762	2,046	284	16.0%
Recreational & Small Electric Goods	521	609	87	17.0%

Source: EMSI-Industry Group Comparison-Fastest Growing Industries, 2010–2016.

¹⁰ The clusters analyzed in this section were based on the Michael Porter cluster methodology. See <http://clustermapping.us/content/cluster-mapping-methodology>.

¹¹ See Appendix B for more information on Industry Clusters.

6.4 INDUSTRY CLUSTERS BY LOCATION QUOTIENT

Location quotient (LQ) is a method that quantifies how concentrated a particular industry is in a region compared to the nation. Industries that have both a high LQ and relatively high total job numbers typically form a region's economic base. An LQ above 1.0 means that the region has an above average concentration of employment in that sector compared to the nation.

In 2015, the Baker-Polito administration released its economic development plan *Opportunities for All: The Baker-Polito Strategy and Plan for Making Massachusetts Great Everywhere*. The plan is oriented around 11 industry clusters in which Massachusetts competes on a national and international scale. Figure 22 displays these industry clusters and their corresponding LQs, with Information Technology & Analytics and Biopharmaceuticals having the highest LQs in the 495/MetroWest region.

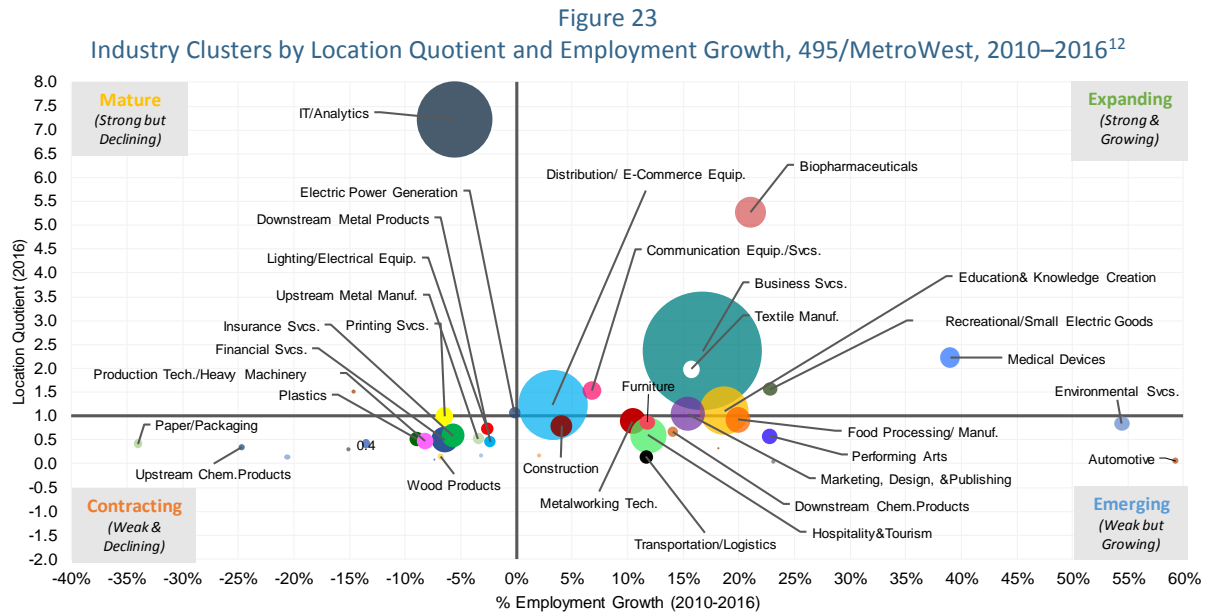
Figure 22
"Opportunities For All" Industry Cluster LQs, 2015

	495/MetroWest	Massachusetts
Biopharmaceuticals	11.16	3.18
Education & Knowledge Creation	2.27	5.97
Financial Services	1.07	2.81
Fishing & Fishing Products	0.18	5.81
Footwear	2.98	6.30
Information Technology & Analytics	15.14	5.59
Insurance Services	1.21	2.99
Jewelry & Precious Metals	0.31	3.99
Marketing, Design, & Publishing	2.18	2.59
Medical Devices	4.50	3.67
Recreational & Small Electric Goods	3.40	2.20

Source: Opportunities for All; Author's Calculations.

Importantly, an industry may have a high LQ but low levels of employment or declining employment, and therefore may not be as vital to a region's economy in comparison to industries with lower LQs. Figure 23 displays the LQ for each of the region's industry clusters in relation to their size and employment growth from 2010 to 2016, which presents a more holistic view of the strength of each industry. The LQ for each industry is presented on the vertical axis, while the horizontal axis displays employment growth. The size of the bubble corresponds to current employment. There are four quadrants in the figure, with the top left quadrant representing Mature industries, the bottom left representing Contracting industries, the top right representing Expanding industries, and the bottom right representing Emerging industries.

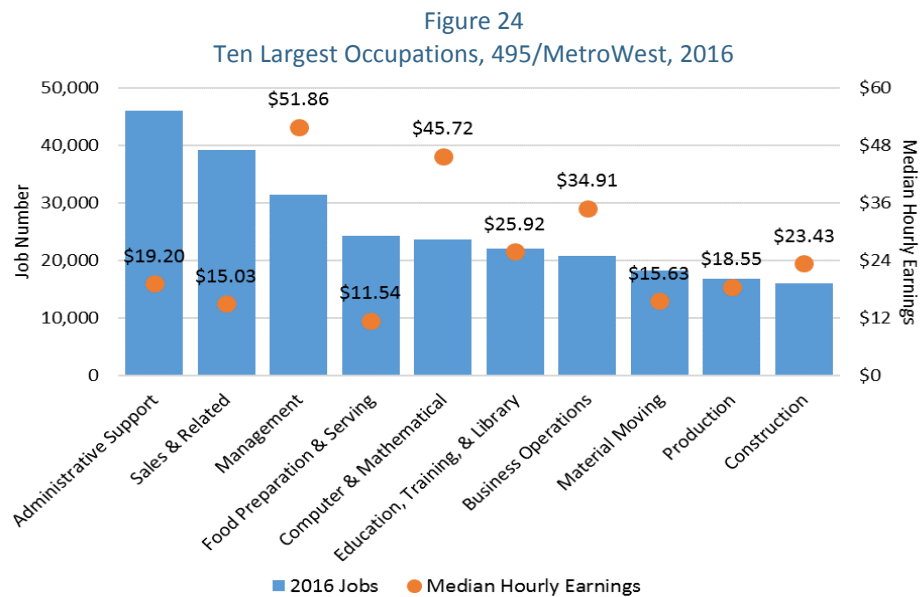
The 495 Metro/West region specializes in the IT and Analytics Cluster; with an LQ of 7.2, the region is roughly seven times as specialized in the cluster as the U.S. as a whole. However, employment in the IT & Analytics cluster declined by 5.6 percent since 2010. The region also has a high LQ in Biopharmaceuticals (LQ of 5.3), a cluster with 21.1 percent employment growth since 2010. Other industry clusters with positive employment growth from 2010 to 2016 and LQs above 1.0 include Business Services, Medical Devices, Textile Manufacturing, Recreational & Small Electric Goods, Communication Equipment & Services, Distribution & E-Commerce Equipment, Education & Knowledge Creation, and Electric Power Generation & Transmission.



¹² All traded industry clusters are represented as a bubble within Figure 20, however, clusters with fewer than 100 jobs are not labelled for presentation purposes. These include Video Production and Distribution, Apparel, Nonmetal Mining, Footwear, Oil and Gas Production and Transportation, Forestry, Trailer/Motor Homes, Livestock Processing, Music/Sound recording, Fishing, Jewelry and Precious Metals, Water Transportation, Metal Mining, Leather Products, Coal Mining, and Tobacco.

7.0 OCCUPATIONS

The occupations within 495/MetroWest are wide ranging. Figure 24 displays the largest occupations in the region and the median hourly wage per occupation. Intuitively, the region's top occupations closely match its industrial mix. Office and Administrative Support (45,978 jobs) and Sales occupations (39,125 jobs) are the largest occupation groups. There are also several occupations related to knowledge creation and tech-driven industries, such as Computer and Mathematic occupations (23,623 jobs) and Education/Training and Library occupations (22,145 jobs).



Source: EMSI- Highest Ranked Occupations, 2016.

Table 6 shows the fastest growing occupations in 495/MetroWest region, which includes many of the largest occupations. Note that the fastest growing occupation group, Management (+3,848), pays the highest wages.

Table 6
Ten Fastest Growing Occupations, 495/MetroWest, 2010–2016

Occupation	2010 Jobs	2016 Jobs	Change in Jobs (2010–2016)	% Change in Jobs (10–16)	2015 Earnings per Worker
Management	27,513	31,361	3,848	14.0%	\$51.86
Food Preparation & Serving	20,898	24,283	3,385	16.0%	\$11.54
Computer & Mathematical	20,542	23,623	3,081	15.0%	\$45.72
Office & Administration Support	43,453	45,978	2,525	6.0%	\$19.20
Construction & Extraction	13,660	16,033	2,373	17.0%	\$23.43
Personal Care Services	13,004	15,317	2,313	18.0%	\$12.66
Material Moving	16,139	18,311	2,172	13.0%	\$15.63
Education, Training, & Library	20,138	22,145	2,007	10.0%	\$25.92
Business & Financial	19,147	20,814	1,667	9.0%	\$34.91
Healthcare Support	6,600	8,020	1,420	22.0%	\$15.33

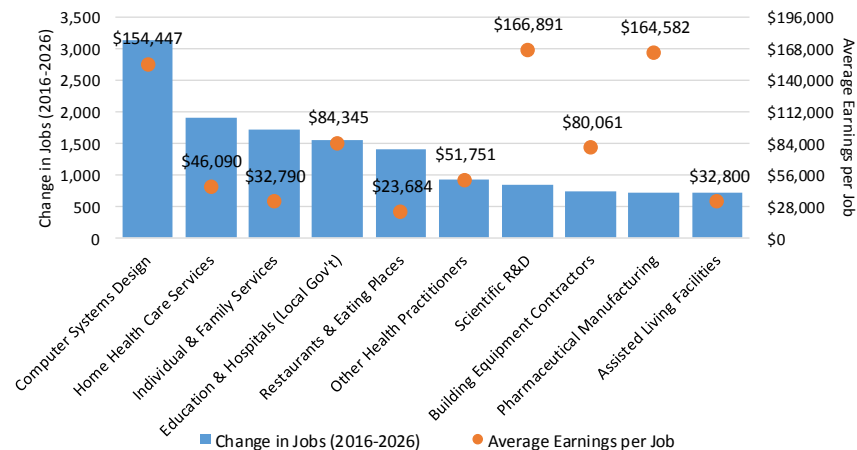
Source: EMSI- Highest Ranked Occupations, 2010–2016.

8.0 INDUSTRY AND OCCUPATIONAL PROJECTIONS

8.1 INDUSTRY PROJECTIONS

Figure 25 displays the projected 10 fastest growing industries for the years 2016 to 2026 based on the number of jobs expected to be added per industry. The Computer Systems Design sector is expected to gain the largest number of jobs over the next decade (+3,141 jobs), followed by Home Health Care Services (+1,901 jobs), Individual & Family Services (+1,722 jobs), and Education (public) (+1,548 jobs).

Figure 25
Ten Fastest Growing Industries by Projected Job Increase, 495/MetroWest, 2016–2026

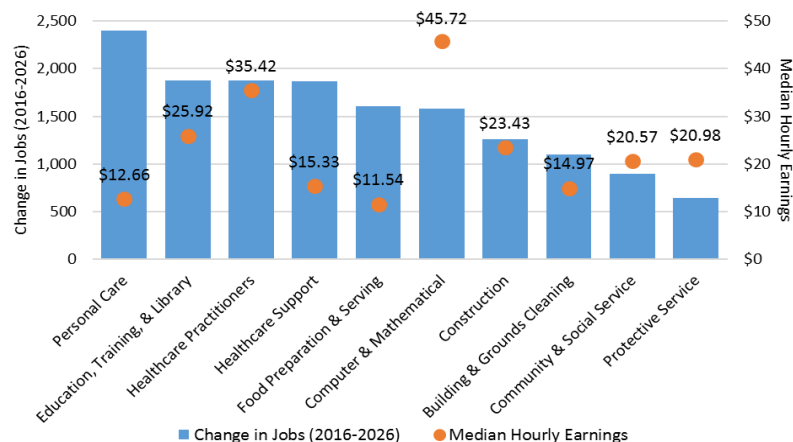


Source: EMSI Highest Ranked Industries - Largest Industries, 2016–2026.

8.2 OCCUPATIONAL PROJECTIONS

Figure 26 displays the 10 occupational groups projected to grow the fastest between 2016 and 2026 in terms of the number of jobs added. The fastest growing occupations are closely tied to the fastest growing industries in the area, with Personal Care occupations projected to grow the fastest.

Figure 26
Ten Fastest Growing Occupations by Projected Increase, 495/MetroWest, 2016–2026



Source: EMSI Highest Ranked Occupations – Fastest Growing Occupations, 2016–2026.

9.0 COMMUTING PATTERNS

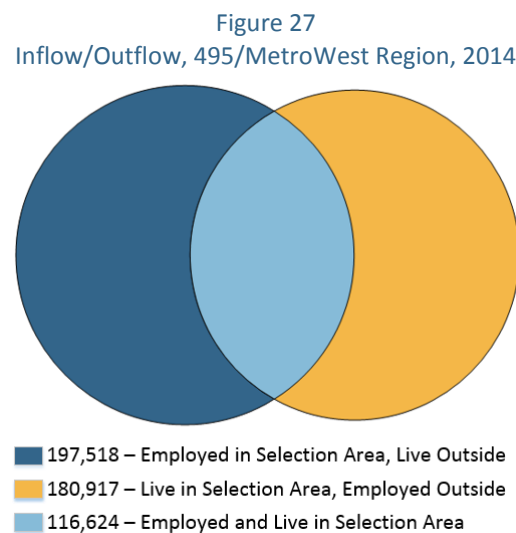
Examining regional commuting patterns provides insight into where workers in the region live and work. This analysis used data from the U.S. Census Bureau's Longitudinal Employer-House Dynamics (LEHD) Origin-Destination Employment Statistics (LODES) program,¹³ which links the community in which an employee resides with the community in which they work. The resulting commuting patterns are useful in shedding light on where all people working in a particular geography live or where all the workers living in a particular geography are employed.

Highlights

- The 495/MetroWest region is a net labor importer. There are 297,541 workers living in the 495/MetroWest region and among these, 60.8 percent are employed in outside areas and the remaining 39.2 percent are employed within the region.
- While the region's workers are more likely to commute out of the region to work than to work in the region, this effect is stronger for higher earners; there are more low wage workers coming into the region than leaving.
- The region is home to more jobs than employed residents. In 2014, there were 286,883 primary jobs located in the region and 269,336 employed residents.

9.1 INFLOW AND OUTFLOW

There is a large volume of workers moving into and out of the region for work on a daily basis. Nearly 200,000 workers (197,518) who work in the region commute from outside the region, while 180,917 commute to jobs outside the region. More than 116,000 (116,624) both live and work in the region (see Figure 27).



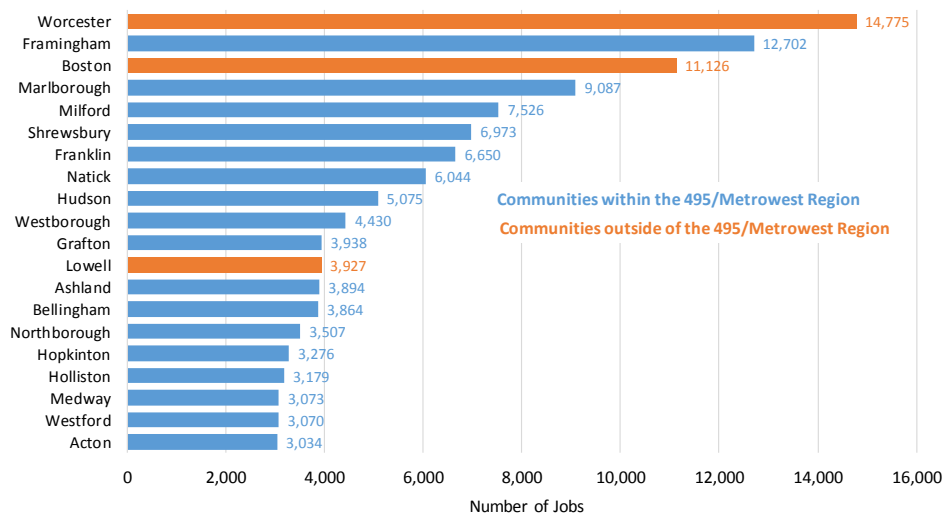
Source: Source: U.S. Census Bureau LEHD Origin-Destination Employment Statistics (LODES);
Inflow/Outflow Analysis, All Jobs, 2014.

¹³ LODES data includes most full-time and part-time workers, but does not include self-employed workers or students whose permanent residence is outside the study geography.

9.2 WORKERS LIVING IN THE REGION

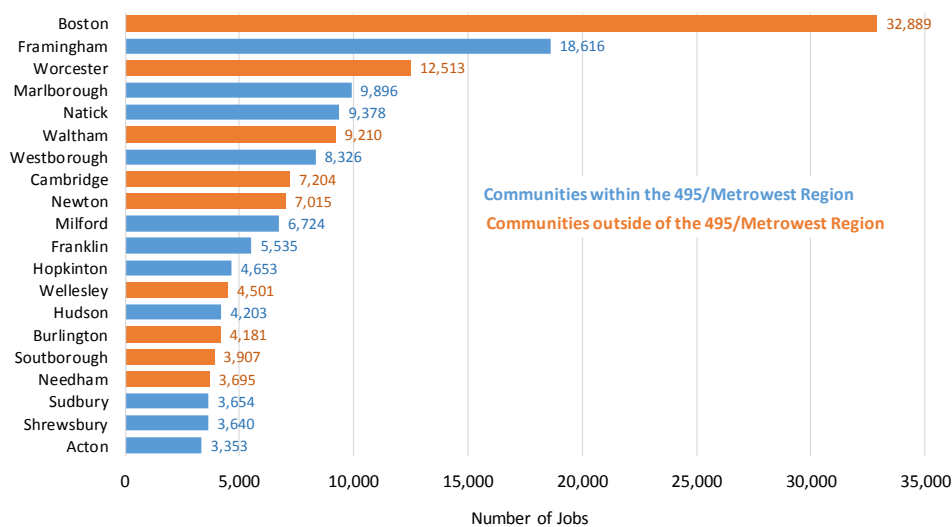
The 495/MetroWest region is a net labor importer. The U.S. Census reports that there are 297,541 workers living in the 495/MetroWest region. Of these workers, 60.8 percent are employed in outside areas and the remaining 39.2 percent are employed within the region. Figure 28 highlights the top communities where people working in the 495/MetroWest region reside, with all but three being 495/MetroWest communities. Alternatively, Figure 29 represents the top 20 communities where residents of the 495/MetroWest region are working. Boston, Framingham, and Worcester are the top three communities that 495/MetroWest residents are commuting to for work (32,889, 18,616, and 12,513, respectively).

Figure 28
Top 20 Communities Where People Working in the 495/MetroWest Region Reside, 2014



Source: U.S. Census Bureau LEHD Origin-Destination Employment Statistics (LODES);
Home Destination Analysis by County Subdivision - All Jobs, 2014.

Figure 29
Top 20 Communities Where People Residing in the 495/MetroWest Region Work, 2014



Source: U.S. Census Bureau LEHD Origin-Destination Employment Statistics (LODES);
Work Destination Analysis by County Subdivision - All Jobs, 2014.

Workers who commute from outside the region primarily travel from communities that are closest, while commuters who travel outside the region for work primarily commute to the Greater Boston area or Worcester (see Figure 30 and Figure 31).

Figure 30: Total Number of Commuters Traveling into MetroWest by Point of Origin

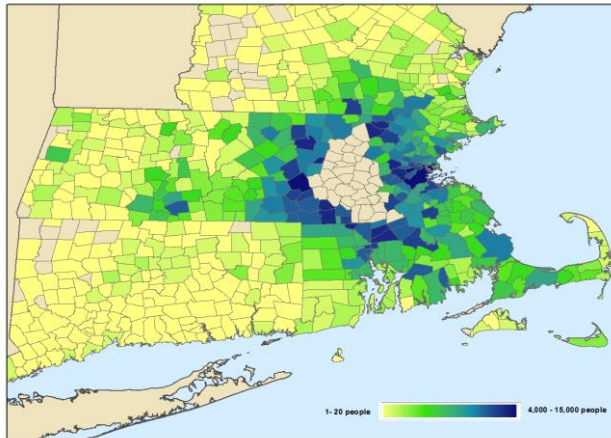
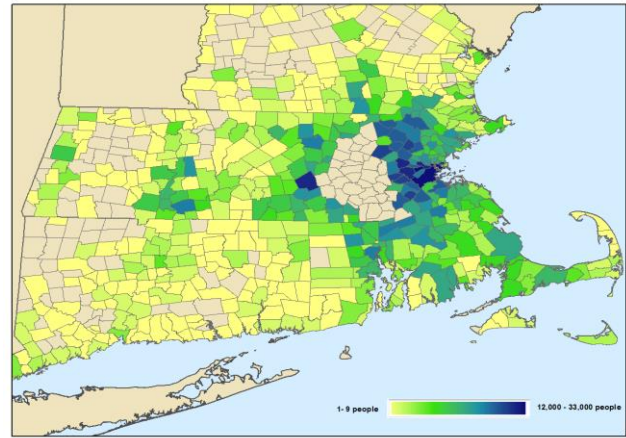


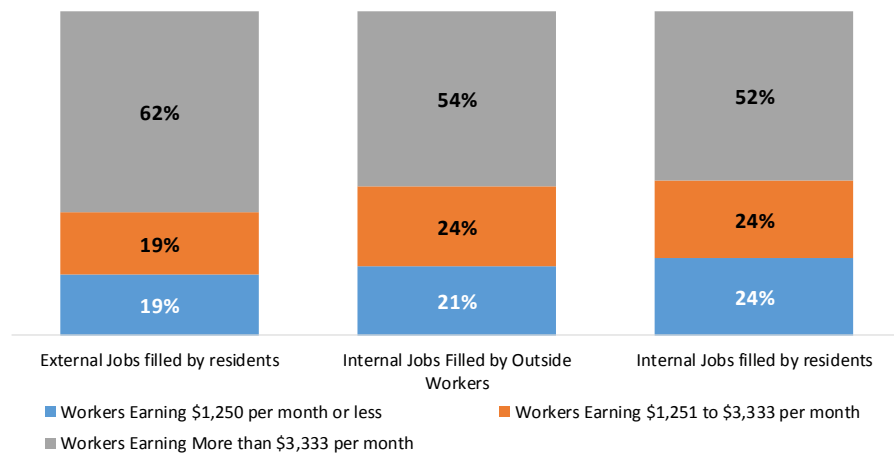
Figure 31: Total Number of Commuters Traveling out of MetroWest by Destination



Source: U.S. Census Bureau LEHD Origin-Destination Employment Statistics (LODES);
Home/Work Destination Analysis by County Subdivision- All Jobs, 2014.

495/MetroWest residents who are employed outside the region earn higher wages than workers commuting into the region, and 495/MetroWest residents who work in the region earn the least of any group (see Figure 32). This result suggests that the area exports its most skilled workers, while importing less skilled workers.

Figure 32
Inflow/ Outflow Job Monthly Job Earnings, 495/MetroWest, 2014



Source: U.S. Census Bureau LEHD Origin-Destination Employment Statistics (LODES), All Jobs, 2014.

10.0 HOUSING

Highlights

- There are 230,740 housing units within the 495/MetroWest region. The majority of the region's occupied housing units are in single-unit buildings; 72.6 percent in 2015.
- Building permit estimates show that 12,069 new permits were approved between 2009 and 2015, for a total of 20,516 new units.
- The region's housing stock is newer than that of the state, with 36.9 percent of housing units developed between 1980 and 2015, compared to 26.7 percent statewide.
- More than 95 percent (95.7%) of the region's housing units are occupied. The vast majority of the region's housing units are owner-occupied; 74.4 percent versus 64.0 percent statewide.
- There were 7,925 home sales in the 495/MetroWest region in 2016, with a median sale price of \$400,820. In terms of both price and volume, home sales have not returned to 2005 levels.
- The median days on the market for homes within the 495/MetroWest region was 45 days during 2016.

10.1 HOUSING STOCK

There are 230,740 housing units in the 495/MetroWest region. The majority of the region's occupied housing units are in single-unit buildings; 72.6 percent in 2015. The proportion of single-unit and multi-unit buildings has not changed considerably since 2009 (see Table 7).

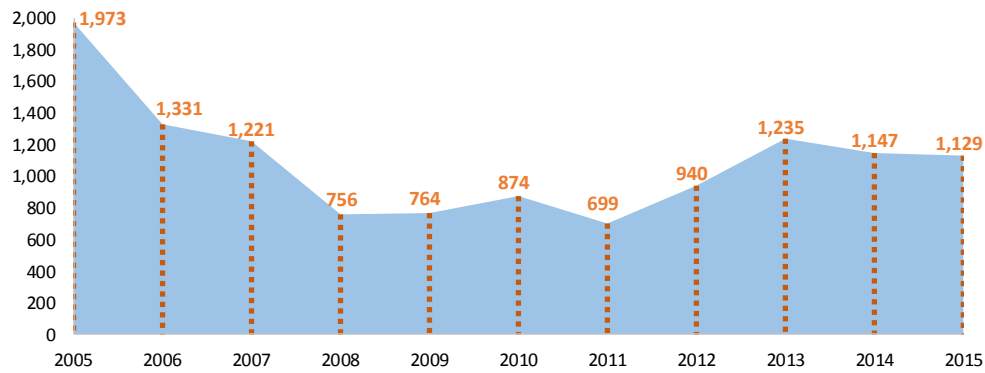
Table 7
Occupied Housing Units by Units in Structure,
495/MetroWest and Massachusetts, 2009–2015

	495/MetroWest		Massachusetts	
	2009	2015	2009	2015
Total Units	216,391	230,740	2,727,374	2,827,820
In Single-Unit Building	73.0%	72.6%	57.7%	57.4%
In Multi-Unit Building	27.0%	27.4%	42.3%	42.6%

Source: 2000 Census, 2005–2009 ACS 5-year estimates, 2011–2015 ACS 5-year estimates.

Building permit estimates show that 12,069 building permits were approved between 2005 and 2015 (see Figure 33), or a total of 20,516 new units (a single building permit can include multiple units).

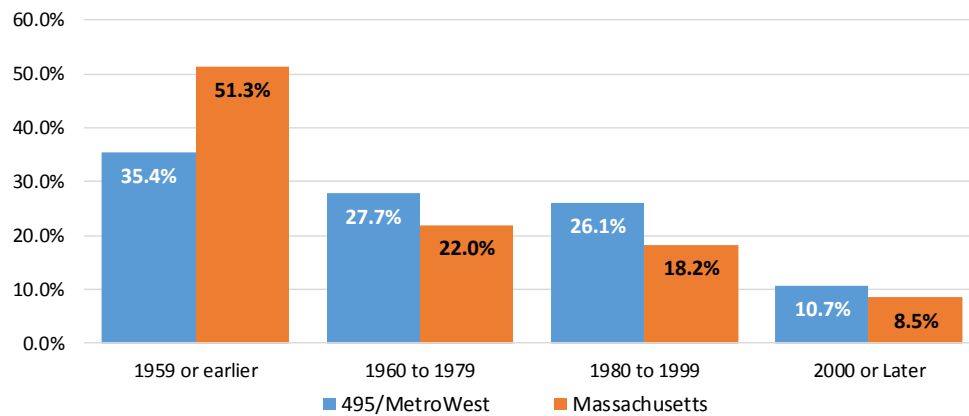
Figure 33
Building Permits, 495/MetroWest, 2015



Source: ACS 2011–2015 5-Year Estimates, Census of Building Permits 2005–2015.

The region's housing stock was built more recently than that of the state, with 36.8 percent of housing units developed between 1980 and 2015, compared to 26.7 percent statewide (see Figure 34).

Figure 34
Total Housing Units by Year Structure Built, 495/MetroWest and Massachusetts, 2015

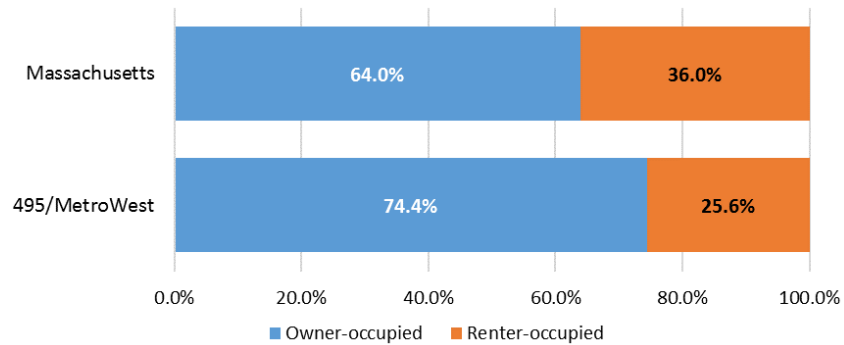


Source: 2011–2015 ACS 5-year estimates.

10.2 HOUSING OCCUPANCY

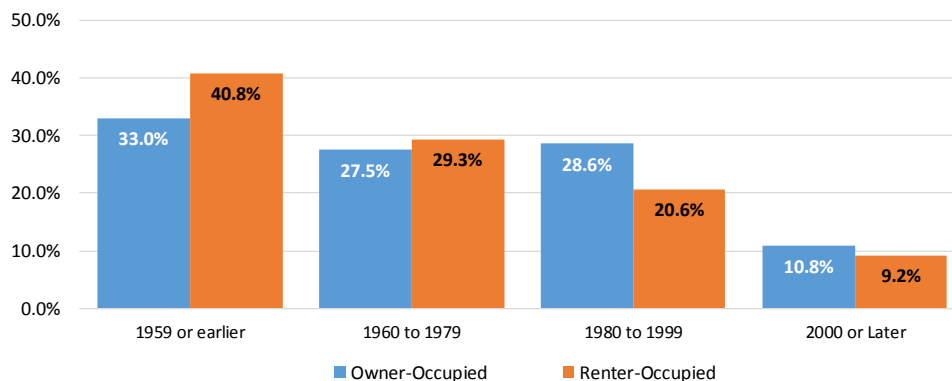
More than 95 percent (95.7%) of the region's housing units are occupied. The implied vacancy rate of 4.3 percent is lower than what is considered healthy for residential churn (7.0%). The vast majority of the region's housing units are owner-occupied; its 74.4 percent owner occupancy rate compares to an owner occupancy rate of 64.0 percent statewide (see Figure 35). The renter-occupied housing units tend to be older than those that are owner-occupied (see Figure 36).

Figure 35
Owner Occupied Housing Units, 495/MetroWest and Massachusetts, 2015



Source: 2011–2015 ACS 5-year estimates.

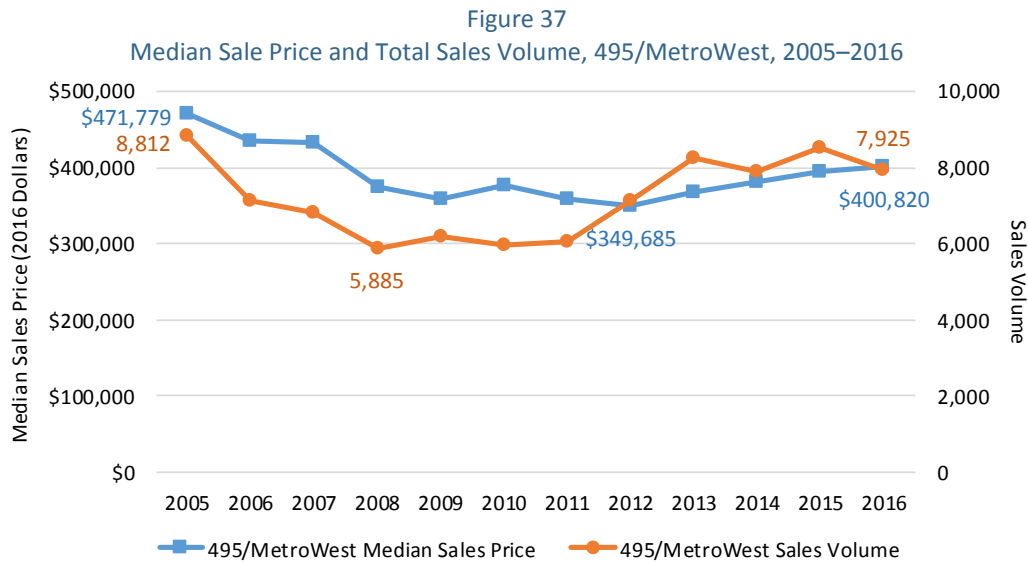
Figure 36
Tenure by Year Structure Built, 495/MetroWest, 2015



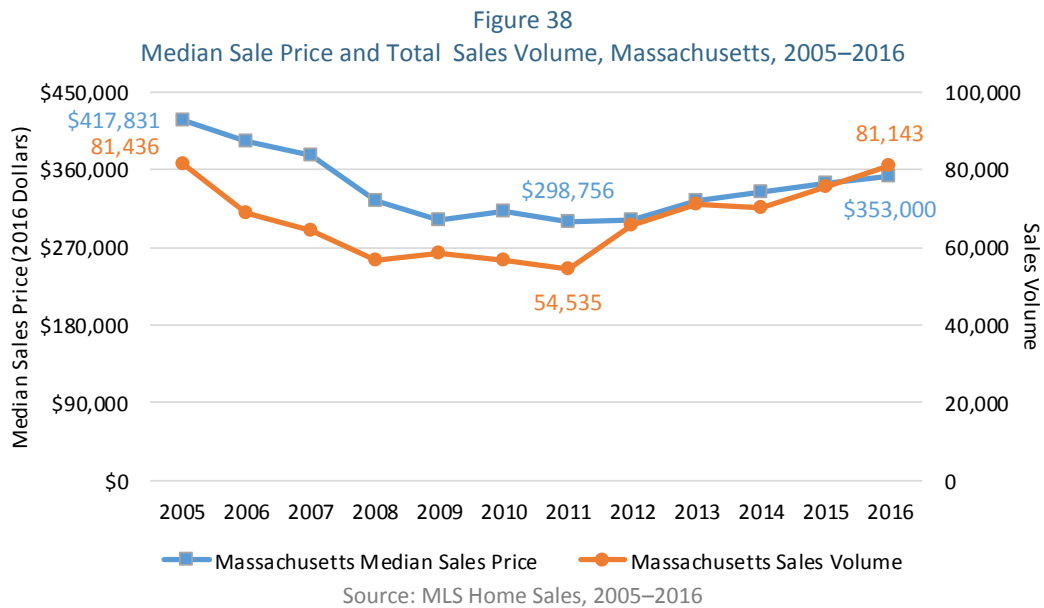
Source: 2011–2015 ACS 5-year estimates.

10.3 REAL ESTATE MARKET

There were 7,925 home sales in the 495/MetroWest region in 2016, with a median sale price of \$400,820. Home sales in terms of both price and volume have not returned to 2005 levels (see Figure 37).



Similar to the 495/MetroWest region, the Massachusetts median sale price and sales volume have not returned to 2005 levels (see Figure 38). In 2016, the 81,143 homes sold in Massachusetts had a median sale price of \$353,000.



Wayland had the highest median sale price out of all communities in the 495/MetroWest region in 2016 (\$683,550) while Hopedale had the lowest median sale price (\$278,282). Berlin had the smallest number of sales in 2016 (38), while Framingham had the largest number of sales (737) (see Table 8).

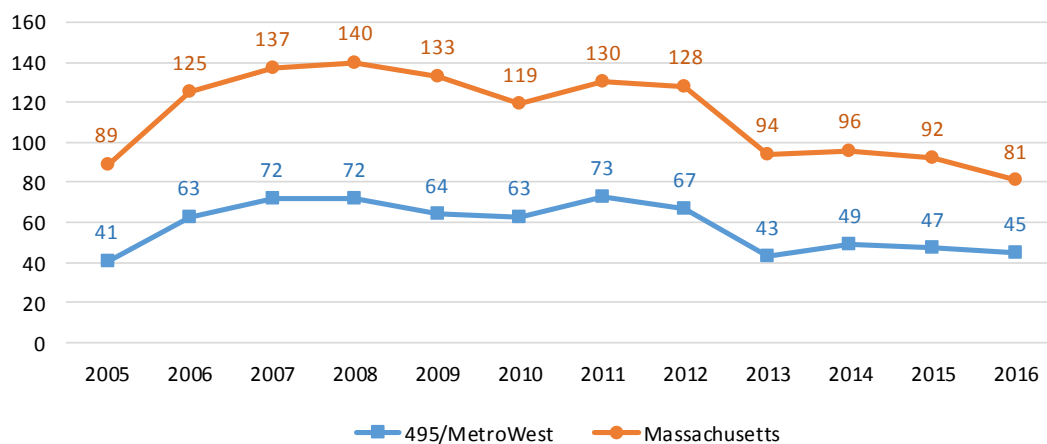
Table 8
Median Sale Price and Total Sales Volume by Community, 495/MetroWest, 2016

Top 50% Median Sales Price			Bottom 50% Median Sales Price		
	Median Sales Price	Sales Volume		Median Sales Price	Sales Volume
Wayland	\$683,550	223	Westford	\$416,500	264
Sudbury	\$657,384	246	Northborough	\$407,680	184
Sherborn	\$619,850	83	Medway	\$392,000	171
Medfield	\$614,460	154	Berlin	\$381,220	38
Hopkinton	\$572,009	307	Framingham	\$377,300	737
Upton	\$510,904	113	Foxboro	\$374,850	181
Southborough	\$509,600	122	Franklin	\$367,500	365
Harvard	\$505,104	71	Shrewsbury	\$367,402	420
Natick	\$503,475	451	Ashland	\$352,800	262
Norfolk	\$485,100	149	Millis	\$352,800	118
Bolton	\$478,240	106	Hudson	\$330,260	258
Boxborough	\$476,035	81	Maynard	\$323,400	176
Stow	\$454,181	89	Grafton	\$310,660	312
Littleton	\$450,800	138	Marlborough	\$308,700	440
Acton	\$448,845	427	Milford	\$291,060	323
Westboro	\$445,900	233	Bellingham	\$285,180	214
Wrentham	\$441,490	146	Hopedale	\$278,282	86
Holliston	\$420,420	206			

Source: MLS Home Sales, 2016.

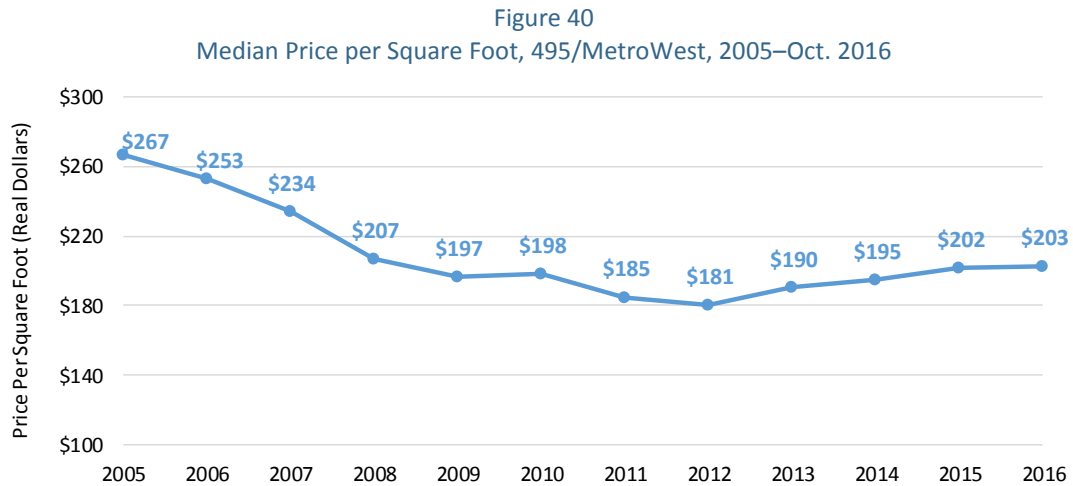
Most 495/MetroWest homes do not stay on the market for long, with 45 days being the median number of days on the market in 2016 (see Figure 39). Homes statewide were on the market an average of 81 days.

Figure 39
Median Days on Market, 495/MetroWest and Massachusetts, 2005–2016



Source: MLS Home Sales 2005–2016.

The “amount of home” that buyers receive for their money as measured by price per square foot has been relatively stable since 2009, although the region has not recovered to pre-recession levels (see Figure 40). Since at least 2009, half (50%) of all homes in 495/MetroWest have seven rooms or more, compared to only 33 percent statewide; 1 in 3 homes in 495/MetroWest has four or more bedrooms, compared to 1 in 5 statewide.



Source: MLS Home Sales, 2005–2016.

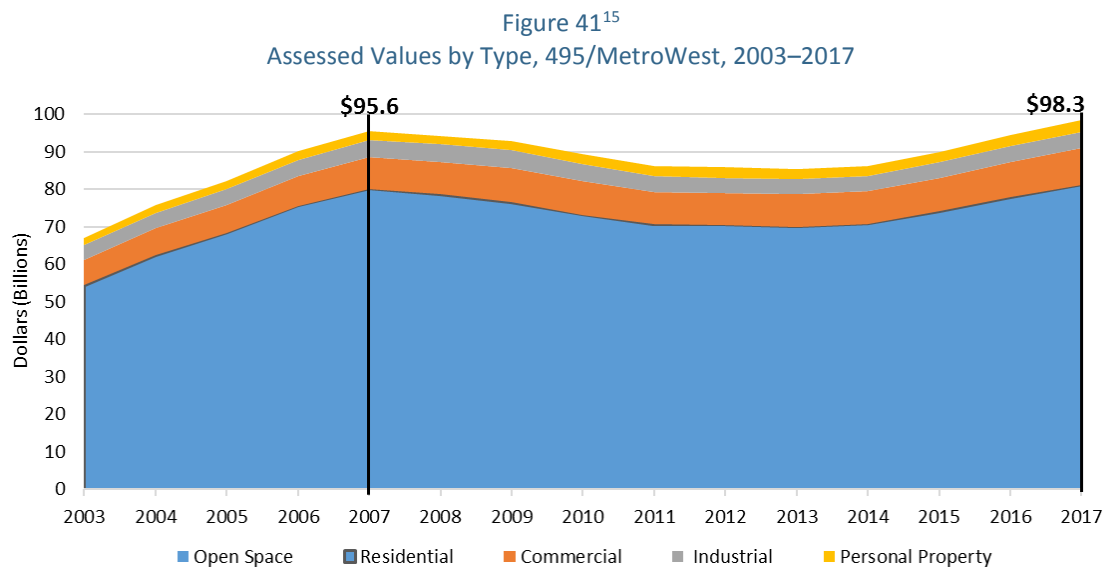
11.0 TRENDS IN PROPERTY VALUES

Highlights

- The total assessed value of land in the 495/MetroWest region was \$98.3 billion in 2017, which is an uptick from \$95.6 billion pre-recession.
- Residential parcels accounted for 82.4 percent of all assessed values in the region.
- Assessed values for residential and commercial properties have been increasing in lockstep since 2014, although residential values have been increasing at a slightly higher rate. Assessed values for industrial parcels have been lagging.
- Northborough experienced the largest increase in commercial property values among the region's communities (+175.6% in 2017) since 2009, followed by Littleton (+174.6%) and Hopkinton (+150.2%).

11.1 ALL PROPERTY TYPES

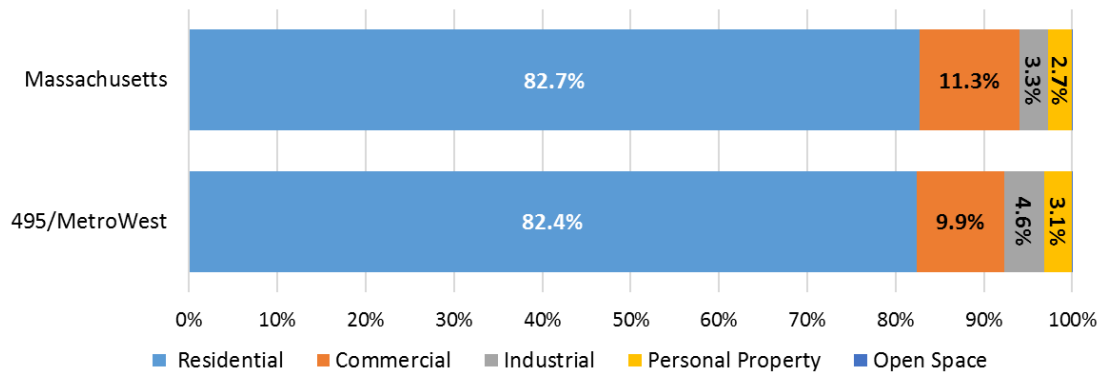
The total assessed value of land in the 495/MetroWest region was \$98.3 billion, which is an uptick from \$95.6 billion pre-recession (see Figure 41).¹⁴ Residential parcels accounted for 82.4 percent of all assessed values in the region in 2017. Both Massachusetts and the region share similar proportions of assessed values by parcel type (see Figure 42).



¹⁴ Open space parcels account for only a very small proportion of total assessed values and is not visible on the chart.

¹⁵ Personal Property is defined as any movable goods not attached to/part of the real estate. Please visit <http://www.mass.gov/dor/all-taxes/excise-and-property/> for more information.

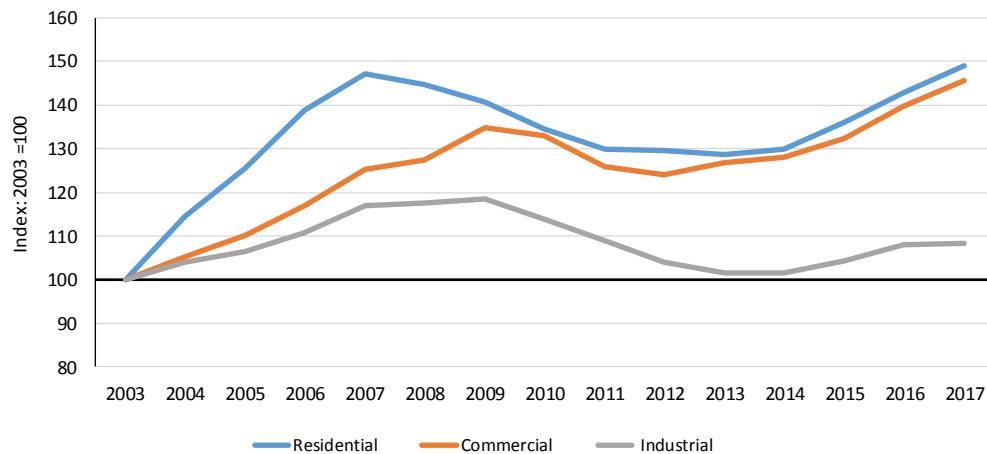
Figure 42
Assessed Values by Property Type, 495/MetroWest, 2017



Source: MA Division of Local Services, 2017, Author's Calculations.

Figure 43 indexes residential, commercial, and industrial assessed values in the 495 MetroWest region from 2003 to 2017. Assessed values for residential and commercial properties have been increasing in lockstep since 2014, although residential values have been increasing at a slightly higher rate. Assessed values for industrial parcels have been lagging (see Figure 43).

Figure 43
Index of Assessed Value by Type, 495/ MetroWest, 2003–2017



Source: MA Division of Local Services 2003–2017, Author's Calculations.

11.2 COMMERCIAL PROPERTIES

There are 14 495/MetroWest communities where commercial property values are growing faster than the region as a whole. Northborough experienced the largest increase in commercial property values among the region's communities since 2009 (+175.6%), followed by Littleton (+174.6%) and Hopkinton (+150.2%) (see Figure 44).

Figure 44
Index of Change in Commercial Property Values, 495/MetroWest, 2009–2017
(Communities with values growing faster than the region)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Northborough	100.0	99.6	98.4	126.4	158.0	161.9	163.9	167.0	175.6
Littleton	100.0	115.6	115.5	107.4	104.3	105.0	105.0	134.5	174.6
Hopkinton	100.0	99.7	97.1	96.9	118.7	125.8	130.0	139.3	150.2
Wrentham	100.0	98.2	97.5	97.3	109.8	108.4	112.7	133.4	135.4
Norfolk	100.0	103.7	107.1	107.6	105.6	105.8	110.3	126.2	130.6
Wayland	100.0	91.9	89.6	90.4	114.2	123.9	124.2	127.3	129.8
Shrewsbury	100.0	95.6	95.5	108.5	108.6	108.0	107.8	117.2	128.7
Westford	100.0	100.1	92.6	106.2	106.7	113.5	122.3	130.8	125.6
Ashland	100.0	95.4	93.6	93.2	93.3	94.1	97.0	112.5	121.8
Holliston	100.0	105.0	104.2	103.8	105.5	107.5	108.1	116.6	120.2
Medfield	100.0	102.5	101.4	102.5	106.9	107.0	109.4	117.7	119.9
Medway	100.0	100.1	100.3	104.3	102.8	102.3	110.8	113.4	117.6
Southborough	100.0	107.3	109.0	99.7	100.0	100.9	102.5	111.2	115.2
Natick	100.0	105.6	99.9	97.4	98.0	103.2	107.7	111.6	114.6
495/MetroWest	100.0	98.6	93.3	92.1	94.1	95.0	98.2	103.7	108.0

Source: MA Division of Local Services 2009–2017, Author's Calculations.

There are eight 495/MetroWest communities where commercial property values have recovered to pre-recession assessed values, but are growing more slowly than the region as a whole (see Figure 45).

Figure 45
Index of Change in Commercial Property Values, 495/MetroWest, 2009–2017
(Communities that have recovered pre-recession values but are growing more slowly than the region)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Millis	100.0	99.5	96.6	97.0	98.1	97.8	103.4	104.2	106.1
Grafton	100.0	99.6	100.2	101.4	97.8	102.5	97.9	98.6	104.4
Foxborough	100.0	120.9	106.9	101.6	101.8	92.5	93.1	95.7	103.4
Franklin	100.0	95.8	89.2	88.5	89.0	93.7	94.5	98.3	103.4
Hudson	100.0	101.7	107.7	102.4	98.3	99.6	99.5	100.4	103.0
Sudbury	100.0	99.9	92.7	92.6	93.6	93.4	94.0	98.0	103.0
Berlin	100.0	96.3	100.1	90.7	92.6	91.0	95.5	110.2	102.7
Bellingham	100.0	93.0	93.1	93.8	95.6	97.2	99.6	99.4	102.5
495/MetroWest	100.0	98.6	93.3	92.1	94.1	95.0	98.2	103.7	108.0

Source: MA Division of Local Services 2009–2017, Author's Calculations.

There are 13 495/MetroWest communities where commercial property values have yet to recover pre-recession values and are fluctuating between growth and decline (see Figure 46).

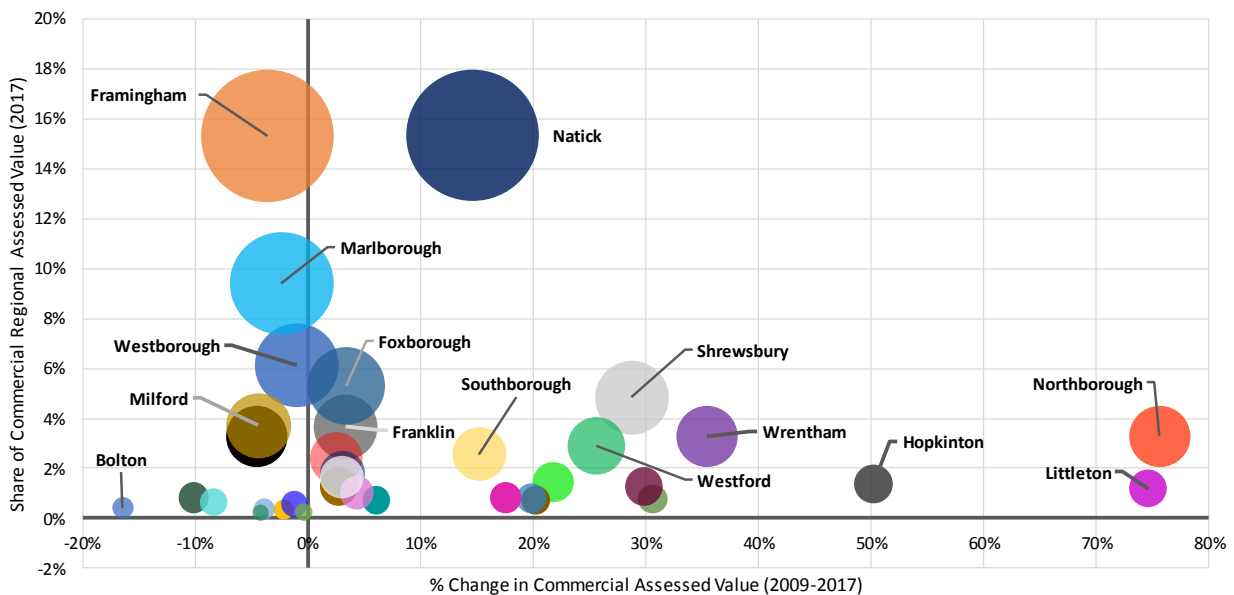
Figure 46
Index of Change in Commercial Property Values, 495/MetroWest, 2009–2017
(Communities that have yet to recover pre-recession values)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Sherborn	100.0	94.2	99.0	98.8	98.2	97.6	100.26	101.09	99.6
Westborough	100.0	95.4	89.8	88.8	91.8	90.4	92.4	97.9	99.0
Stow	100.0	96.5	93.4	97.5	97.8	98.8	101.27	98.5	98.8
Harvard	100.0	95.3	95.3	95.3	93.8	92.9	95.0	98.5	97.8
Marlborough	100.0	93.5	83.7	81.8	84.5	86.2	90.6	98.6	97.7
Framingham	100.0	91.7	84.0	77.7	77.0	76.8	83.1	86.2	96.4
Hopedale	100.0	98.9	92.1	90.9	90.9	96.8	94.4	94.1	96.1
Upton	100.0	101.01	105.22	107.57	100.83	92.6	92.9	92.6	95.8
Milford	100.0	93.8	91.5	89.9	88.3	88.3	90.9	94.5	95.6
Acton	100.0	95.5	91.9	89.0	93.0	90.9	90.3	94.0	95.5
Maynard	100.0	99.1	91.0	90.9	88.6	86.8	84.8	93.1	91.6
Boxborough	100.0	89.8	82.2	83.8	85.7	83.5	83.0	92.2	89.8
Bolton	100.0	95.0	85.8	83.9	80.7	84.3	82.2	83.3	83.5
495/MetroWest	100.0	98.6	93.3	92.1	94.1	95.0	98.2	103.7	108.0

Source: MA Division of Local Services 2009–2017, Author's Calculations.

Figure 47 measures the share of regional commercial assessed values against the percent change in values from 2009 to 2017. Natick had the largest share of the total regional assessed value for commercial properties in 2017 followed by Framingham, although Framingham experienced a decline in commercial values between 2009 and 2017 (see Figure 47).

Figure 47
Share of Regional Commercial Assessed Values, 495/MetroWest, 2009–2017



Source: MA Division of Local Services 2009–2017, Author's Calculations.

APPENDIX A: DESCRIPTION OF MAJOR INDUSTRIES¹⁶

Industry	4-Digit NAICS	Definition
Animal Production & Aquaculture	1120	Industries within this subsector primarily raise and/or fatten animals for sale, including animal products. These industries also include the equipment and labor required for maintenance of pasture land.
Architectural, Engineering, & Related Services	5413	Includes services related to architectural and engineering such as drafting, building inspection, testing, mapping, and surveying.
Building Equipment Contractors	2382	This industry group installs, repairs, and services building equipment, such as cooling, electricity, elevators, heating, and water systems.
Computer Systems Design & Related Systems	5415	Establishments within this industry write software, design computer systems integrating software and hardware, and manage data processing facilities.
Education (Local Government)	6110	Educational services industries provide instruction and training of different types and at differing levels.
General Medical & Surgical Hospitals	6221	This industry diagnoses patients, provides medical treatment, performs X-Rays, provides patient care services, conducts laboratory services, and provides pharmaceutical services.
Home Health Care Services	6216	Includes personal care services such as home companions, physical therapy, 24-hour home care, dietary services, speech therapy, occupational therapy, and vocational therapy.
Individual & Family Services	6241	Establishments which provide social assistance to children, youth, elderly, and disabled persons outside of the home.
Investigation & Security Services	5616	Investigation & Security Services industries sells, installs, monitors, and repairs security systems such as burglar alarms, fire alarms, car alarms, and locking devices.
Management of Companies & Enterprises	5511	This industry oversees management decisions and manages other establishments.

¹⁶ For more information, visit www.census.gov/NAICS. All information was gathered from the 2017 NAICS Manual.

Other Amusement & Recreation Industries	7139	Services within this industry include golf courses, country clubs, skiing and snowboarding facilities, recreational sports centers, and other amusement centers.
Restaurants & Other Eating Places	7225	Includes sit-down restaurants, fast-food restaurants, and nonalcoholic beverage counters.
Services to Buildings & Dwellings	5617	Industries within this subsector contain extermination services, janitorial services, landscaping services, and upholstery cleaning services.

APPENDIX B: DESCRIPTION OF INDUSTRY CLUSTERS

Industry Cluster	Includes:
Biopharmaceuticals	Biopharmaceutical Products, Biological Products, and Diagnostic Substances
Business Services	Corporate Headquarters, Consulting Services, Business Support Services, Computer Services, Employment Placement Services, Engineering Services, Architectural & Drafting Services, and Ground Passenger Transportation.
Education & Knowledge Creation	Training Programs, Colleges, Universities, & Professional Schools, Educational Support Services, Research Organizations, and Professional Organizations.
Electronic Commercial Equipment	Warehousing & Storage, Electronic & Catalog Shopping, Wholesale Trade Agents & Brokers, Support Services, Wholesale of Apparel & Accessories, Wholesale of Books, Periodicals, & Newspapers, Wholesale of Chemical & Allied Products, Wholesale of Drugs & Druggists' Sundries, Wholesale of Farm Products & Supplies, Wholesale of Food Products, Wholesale of Furniture & Home Furnishing, Wholesale of Jewelry, Watches, Precious Stones, & Precious Metals, Wholesale of paper & Paper Products, Wholesale of Sporting & Recreational Goods & Supplies, Wholesale of Toy & Hobby Goods & Supplies, Wholesale of Other Merchandise, Wholesale of Farm & Garden Machinery & Equipment, Wholesale of Construction & Mining Machinery & Equipment, Wholesale of Service Establishment Equipment, & Supplies, Wholesale of Transportation Equipment & Supplies, Wholesale of Professional & Commercial Equipment & Supplies, Wholesale of Electrical & Electronic Goods, Wholesale of Metals & Minerals (except Petroleum), Wholesale of Petroleum & Petroleum Products, and Rental & Leasing.
Financial Services	Financial Investment Activities, Credit Intermediation, Credit Bureaus, Monetary Authorities- Central Bank, and Securities Brokers, Dealers, & Exchanges.
Fishing & Fishing Products	Finfish Fishing, Shellfish Fishing, Other Marine Fishing, Seafood Product Preparation & Packaging, Seafood Canning, and Fresh & Frozen Seafood Processing.
Food Processing & Manufacturing	Specialty Foods & Ingredients, Baked Goods, Candy & Chocolate, Coffee & Tea, Packaged Fruit & Vegetables, Dairy Products, Animal Foods, Soft Drinks & Ice, Malt Beverages, Distilleries, Wineries, Milling & Refining of Cereals & Oilseeds, Milling & Refining of Sugar, Farm Wholesalers, and Glass Containers.
Footwear	Footwear, and Footwear Components.
Hospitality & Tourism	Spectator Sports, Amusement Parks & Arcades, Cultural & Educational Entertainment, Gambling Facilities, Other Tourism Attractions, Accommodations & Related Services, and Tourism Related Services.
Insurance Services	Insurance Related Services, Insurance Carriers, and Reinsurance Carriers.
IT & Analytics	Electronic Components, Computers & Peripherals, Semiconductors, Software Publishers, Software Reproducing, Process & Laboratory Instruments, Medical Apparatus, and Audio & Video Equipment.
Jewelry & Precious Metals	Jewelry & Precious Metals Products.
Marketing, Design, & Publishing	Advertising Related Services, Other Marketing Related Services, Design Services, and Publishing.

Medical Devices	Optical Instruments & Ophthalmic Goods, and Surgical & Dental Instruments & Supplies.
Performing Arts	Performing Artists, and Promoters & Managers.
Recreational & Small Electric Goods	Recreational & Decorative Goods, Games, Toys, & Children's Vehicles, Motorcycles & Bicycles, Sporting & Athletic Goods, Office Supplies, and Electric Housewares.