

GREATER METROWEST Economic Profile 2020[®]



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Research Center
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Framingham State University

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Note: Due to lags in data availability, most of the data presented in this report does not capture the significant recent changes in our economy due to the COVID-19 pandemic. For a more recent overview of the effects of the pandemic on the local economy, please refer to MERC Insights: Greater MetroWest Economy in the Times of COVID-19, which is available on our website.



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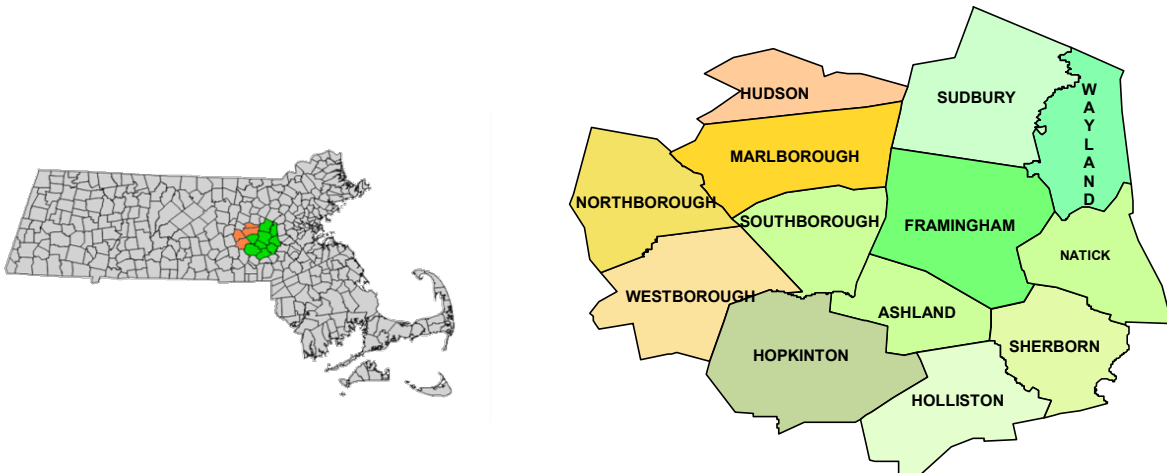
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INTRODUCTION

Greater MetroWest (GMW) includes thirteen communities located between Boston and Worcester: the nine towns of the MetroWest Cohesive Commercial Statistical Area (CCSA), and the four communities of the Greater Marlborough Region. With a population of over 296,000, the region hosts a well-educated and highly-skilled labor force of more than 170,000 individuals who reside in households with high incomes when compared to the state and the nation. Strategically located between Boston and Worcester, GMW benefits from four major highways serving the region's residents and businesses: Interstate 495, Interstate 90 (Massachusetts Turnpike) and U.S. routes 9 and 20.

Greater MetroWest establishments generated 191,886 jobs and a payroll exceeding \$15B in 2018. The region provided 4.4% of the Massachusetts labor force, 5.4% of Massachusetts employment, and 5.8% of Massachusetts payroll. Home to thousands of small and medium sized businesses as well as large national firms such as, Bose, Boston Scientific, Cumberland/Gulf, Dell/EMC, GE Healthcare Life Sciences, Intel, Kidde-Fenwal, Mathworks, Quest Diagnostics, Raytheon, Sanofi Genzyme, Staples, TJX, and the internationally-known U.S. Army Natick Laboratories, GMW is a recognized center of research and development, wholesale and retail trade, and corporate headquarters.



The *2020 Greater MetroWest Economic Profile* includes the most recent economic data for the region and its individual communities, and trends over several years as well as comparisons with the state and the nation. This comprehensive publication provides economic data and analyses of labor force and unemployment, employment (including payroll, wages and establishments), housing permits, existing home sales, cost of living, municipal revenue, municipal taxes, and K-12 public school enrollment.

The MetroWest Economic Research Center (MERC) at Framingham State University creates and maintains economic databases on a number of regional economies in the state. For more information on the data and analyses in this report, please contact MERC.

2020 Greater MetroWest Economic Profile

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GREATER METROWEST – UNEMPLOYMENT

UNEMPLOYMENT¹

Each month the MetroWest Economic Research Center (MERC) at Framingham State University calculates a composite unemployment rate for the Greater MetroWest region, which includes MetroWest and the Greater Marlborough Region. The unemployment rate is household-based and reflects the labor market status of the **residents** of the regions. The information for the rate is obtained from the Massachusetts Executive Office of Labor and Workforce Development (MA EOLWD) which provides monthly estimates of the size of the local labor force, the number of employed and unemployed residents, and the unemployment rates for all Massachusetts cities and towns.

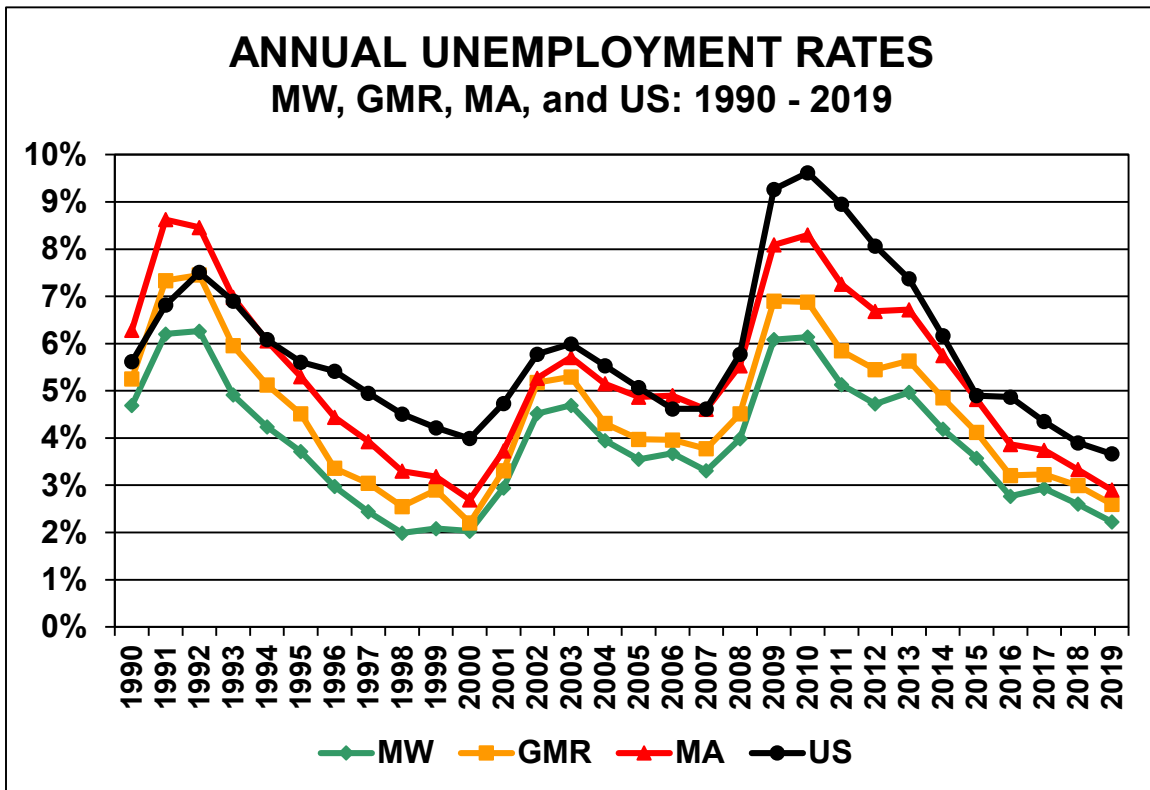
The unemployment rate is a measure of the amount of unutilized labor in the economy. The rate represents the proportion of unemployed individuals in the labor force. The **labor force** is defined as all civilian non-institutionalized persons age 16 and over who are either employed or unemployed. The **employed** are those individuals who work as paid employees, are self-employed, or who work 15 hours or more as unpaid workers in a family-operated enterprise. Also included as employed are people who did not work, but who had a job from which they temporarily were absent due to vacation, illness, childcare problems, or other personal obligations, whether or not they were paid during their absence. The **unemployed** are those who did not hold a job during the survey period, but were actively seeking employment. For example, the February 2020 unemployment rate in Framingham of 2.4% was based on the following information: the size of the labor force was **estimated** at 41,729 workers, the sum of 40,710 residents who were employed and 1,019 residents who were unemployed. The rate, expressed as a percentage, was obtained by dividing the unemployed (1,019) by the labor force (41,729) and multiplying by 100 to get the unemployment rate of 2.4%.

Not everyone in the working age population is included in the labor force. Individuals who were in the working age population, but who could not be classified as employed or unemployed (a fulltime homemaker, for example) would not be counted in the labor force.

The local area unemployment rates for the cities and towns are not seasonally adjusted and are subject to periodic revision and re-benchmarking. For purposes of comparison, the state and national unemployment rates shown in this report are likewise not seasonally adjusted.

¹The definition of terms such as labor force, employed, and unemployed are based on those in *The BLS Handbook of Methods*, U.S. Bureau of Labor Statistics, 2015.

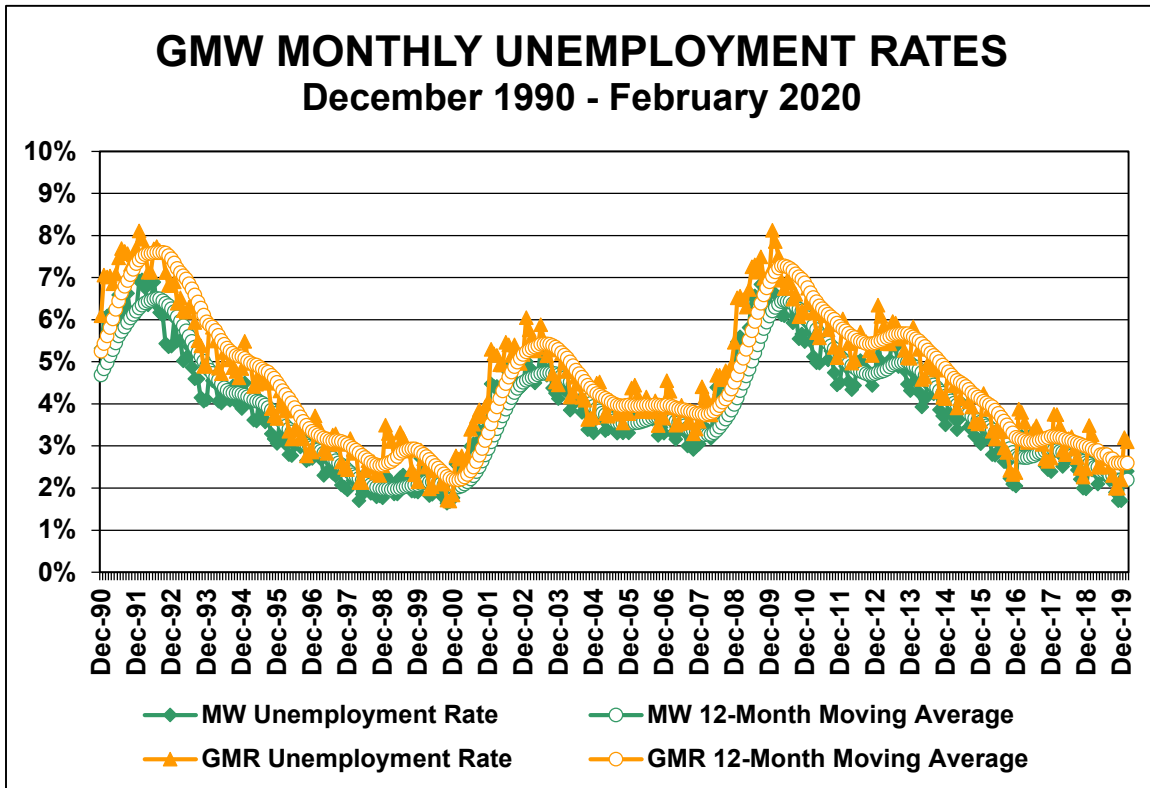
GREATER METROWEST – UNEMPLOYMENT



Source: MA EOLWD and MERC

- The annual unemployment rates for MetroWest (MW), the Greater Marlborough Region (GMR), Massachusetts, and the United States from 1990 to 2019 are calculated by averaging the monthly unemployment rates for each year.
- MW posted an unemployment rate of 2.2% in 2019 while GMR posted an unemployment rate of 2.6% for the same year. Both MW's and GMR's rates were lower than the Massachusetts' and the United States' rate of 2.9% and 3.7%, respectively.
- Between 2018 and 2019, both MW and GMR experienced a slight decrease in their unemployment rates by 0.4 percentage points.
- Massachusetts and the United States both experienced decreases in their unemployment rates from 2018 to 2019 by 0.4 and 0.2 percentage points respectively.
- MW and GMR have consistently posted annual unemployment rates lower than both Massachusetts and the United States with the exception of 1991 when GMR recorded higher annual unemployment rate than the nation.

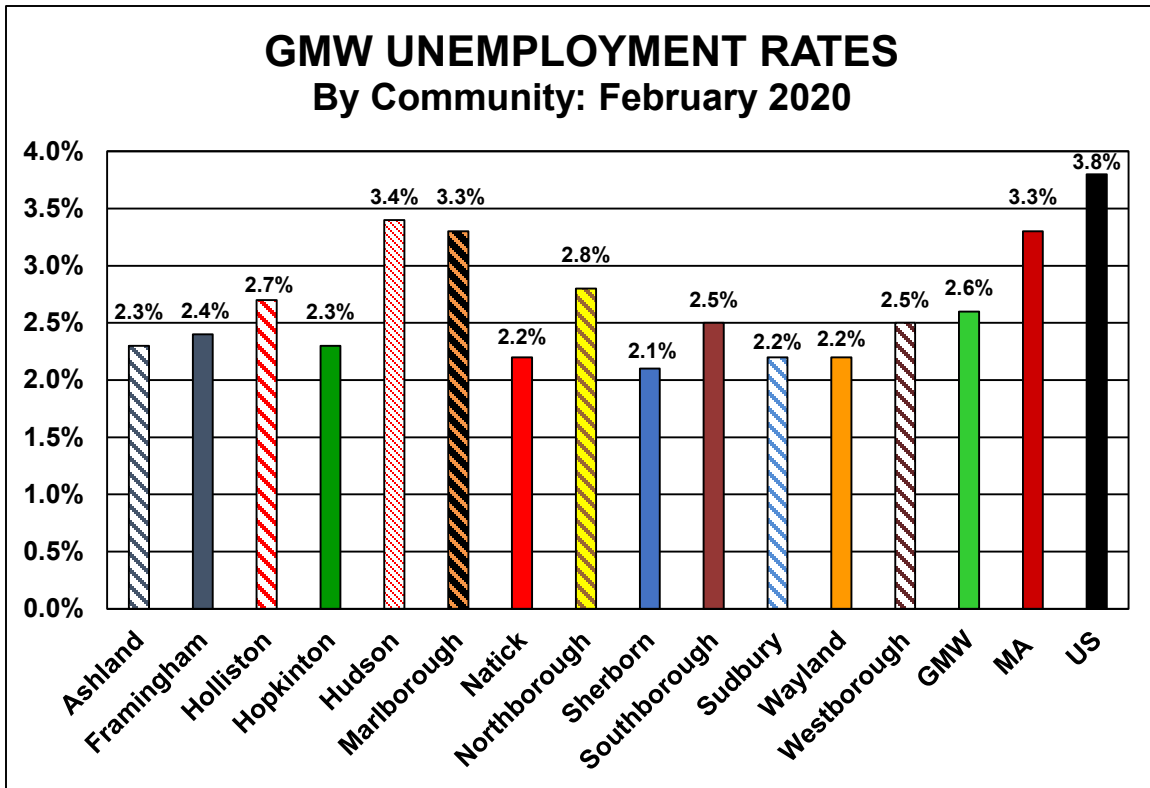
GREATER METROWEST – UNEMPLOYMENT



Source: MA EOLWD and MERC

- This graph examines the monthly unemployment rates and the 12-month moving average rates for MetroWest (MW, shown in green) and the Greater Marlborough Region (GMR, shown in orange) from December 1990 to February 2020. The 12-month moving average evens out the month-to-month variation of the data.
- During this time span, MW reached its peak unemployment rate of 7.0% in February 1992, while GMR reached its peak at 8.1% a month before on January 1992. MW and GMR reached their lowest unemployment rates of 1.6% and 1.7% respectively in October 2000.
- In February 2020, the unemployment rate in MW was 2.4%, which was unchanged from the previous month's rate in January 2020. GMR's unemployment rate in February 2020 was 3.1% which decreased 0.1 percentage points from 3.2% of the previous month.
- The 12-month moving averages in both MW and GMR followed a similar pattern with their monthly rates from December 1990 through February 2020. GMR rates tend to be slightly higher than MW rates throughout the years.

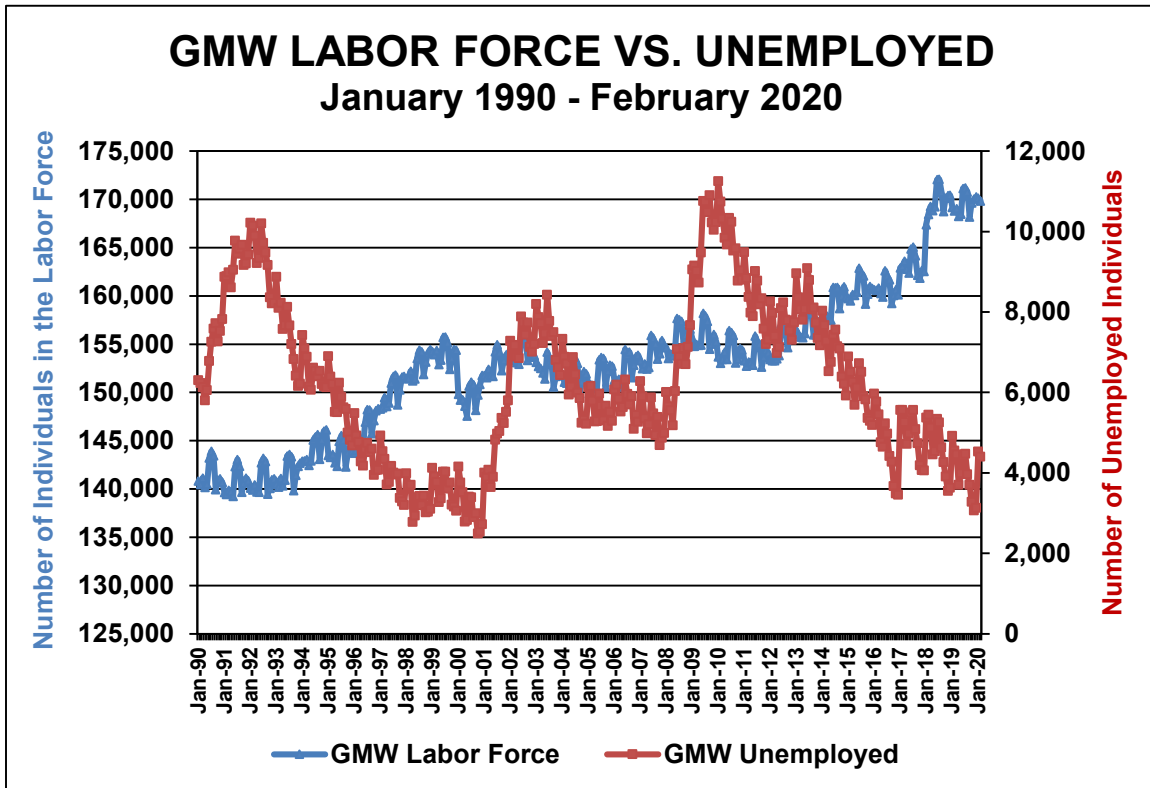
GREATER METROWEST – UNEMPLOYMENT



Source: MA EOLWD and MERC

- In February 2020, all of the thirteen communities in Greater MetroWest (GMW) posted unemployment rates lower than the nation's rate of 3.8%.
- All of the communities in GMW posted unemployment rates lower than that of the state's rate of 3.3% except for Hudson and Marlborough.
- Marlborough recorded the same unemployment rate as the state while Hudson surpassed it with 3.4%.
- Hudson, Marlborough, Northborough and Holliston were the four communities that experienced higher unemployment rates than GMW's rate of 2.6%.
- The communities with the lowest unemployment rates were Sherborn at 2.1%, followed by Natick, Sudbury and Wayland all at 2.2% for February 2020.

GREATER METROWEST – UNEMPLOYMENT



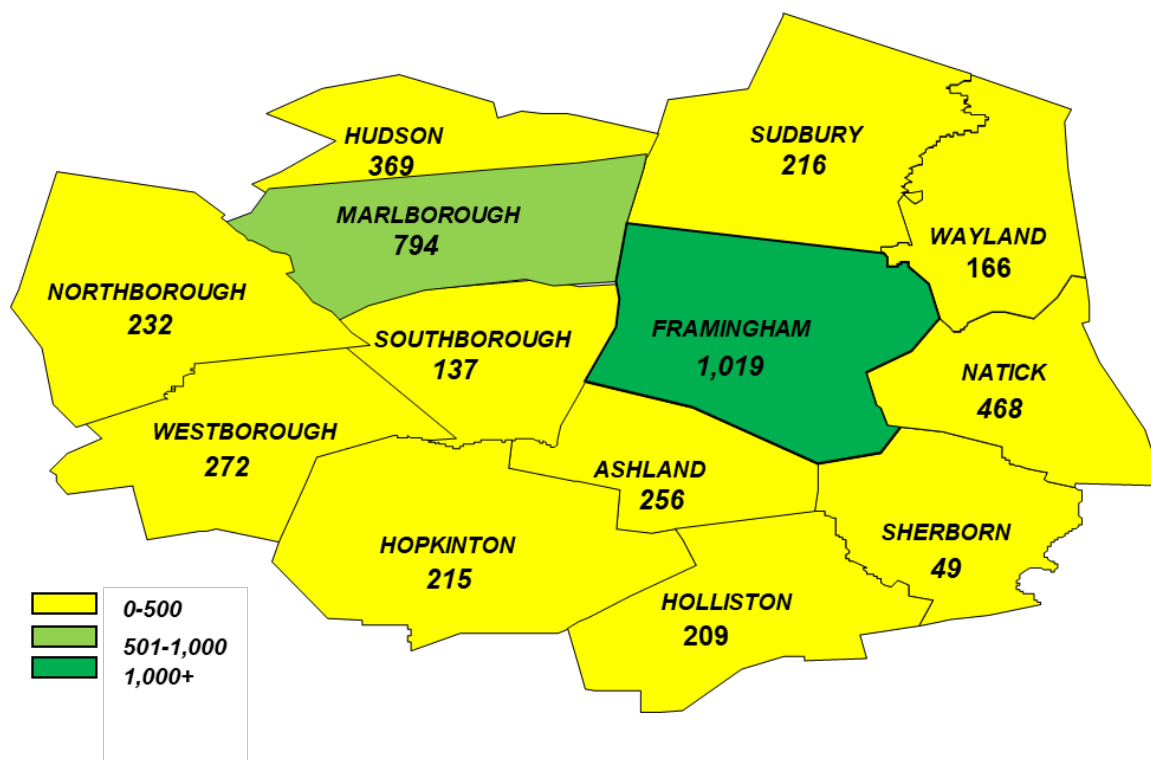
Source: MA EOLWD and MERC

- This graph uses two different scales to compare the labor force, shown in blue on the left-hand scale, to the number of unemployed individuals, shown in red on the right-hand scale, in Greater MetroWest (GMW) from January 1990 to February 2020. The labor force includes individuals aged 16 years and older who were either employed or unemployed. An individual is unemployed if he or she did not have a job, but was actively seeking employment.
- GMW recorded 169,860 individuals in the labor force in February 2020. The highest recorded number of individuals in the region was in July 2018 with 172,089 individuals. The lowest recorded number of individuals in the labor force was in May 1991 at 139,225 individuals.
- In February 2020, GMW reported 4,402 unemployed individuals. The region's record low of unemployed individuals was in October 2000 with 2,498 individuals. The number of unemployed in this region reached a record high in January 2010 at 11,258 individuals.

GREATER METROWEST – UNEMPLOYMENT

GMW NUMBER OF UNEMPLOYED

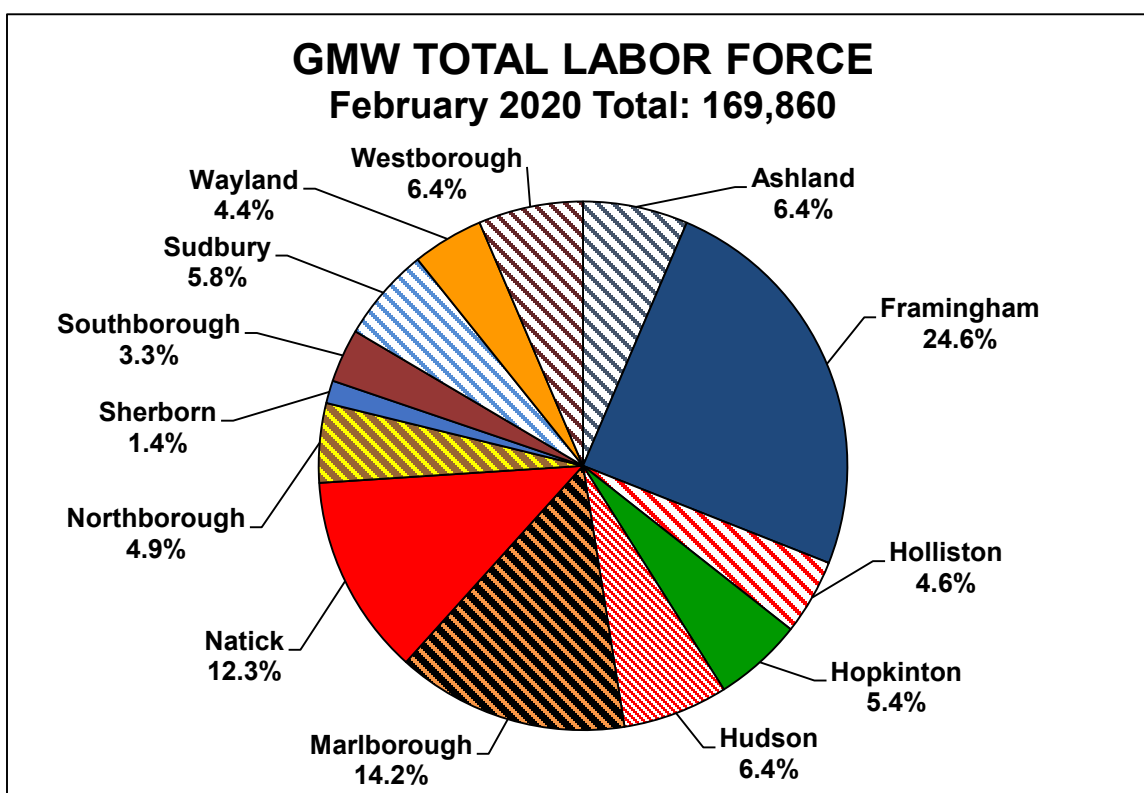
February 2020 Total: 4,402



Source: MA EOLWD and MERC

- In February 2020, the total number of unemployed individuals in Greater MetroWest area (GMW) was 4,402.
- Framingham was the only community to have above 1,000 unemployed individuals within the entire GMW. Marlborough followed by having the second largest number of unemployed individuals with 794. Combined, these two communities accounted for 41% of the total unemployed individuals in GMW. This implied that 4 out of 10 individuals who did not have a job in GMW resided within these two communities.
- The communities with the lowest number of unemployed individuals in the labor force were Sherborn with 49 individuals, followed by Southborough with 137 individuals and Wayland with 166 individuals. Together, these three communities accounted for just about 8% of the total unemployed individuals in the region.

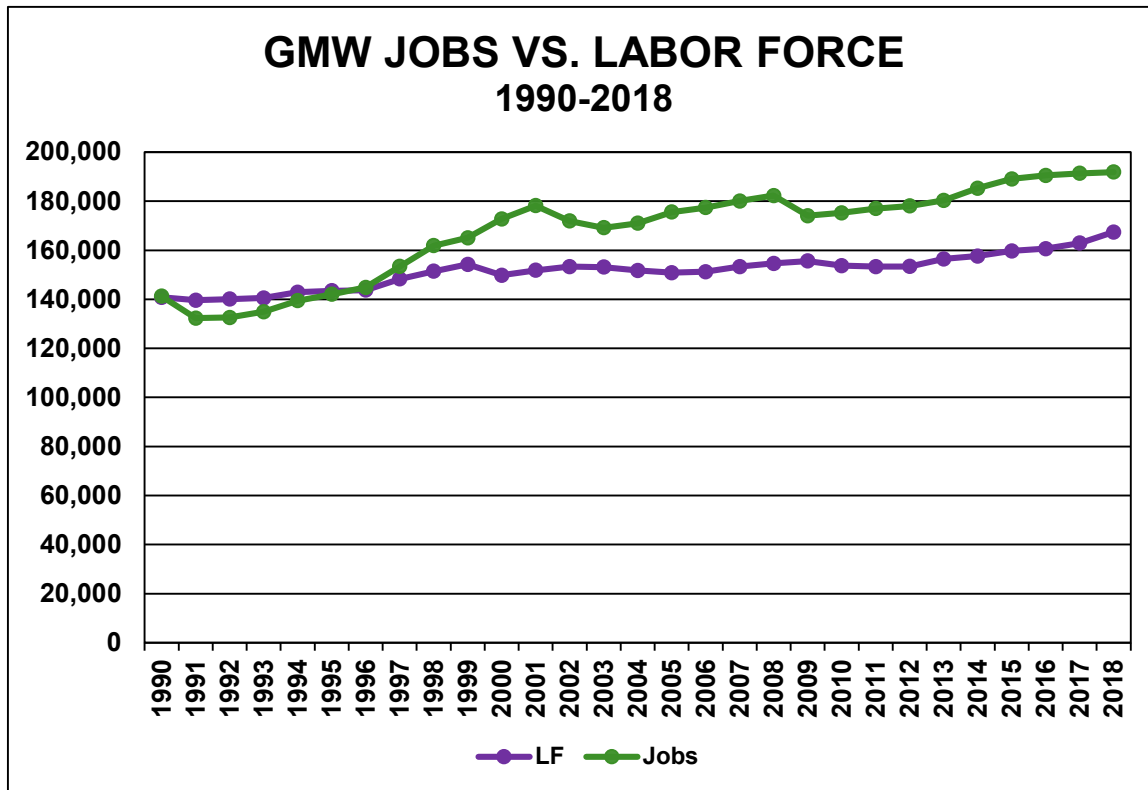
GREATER METROWEST – UNEMPLOYMENT



Source: MA EOLWD and MERC

- In February 2020, the total number of individuals in the labor force in Greater MetroWest (GMW) was 169,860 individuals.
- The nine communities that make up MetroWest (MW) accounted for 115,714 individuals or about two-thirds of the total labor force in GMW. The four communities in the Greater Marlborough Region (GMR) accounted for 54,146 individuals or about one-third of the total labor force in GMW.
- Among the communities in GMW, Framingham was the largest contributor to the total labor force during February 2020 with 24.6% or 41,729 individuals. The second largest contributor to the labor force in the region was Marlborough with 14.2% or 24,100 individuals, followed by Natick with 12.3% or 20,881 individuals. Together, these three communities accounted for about half of the region's total labor force.
- Out of the thirteen communities, the smallest contributors to the total labor force in GMW were Sherborn with only 1.4% or 2,367 individuals, followed by Southborough with 3.3% or 5,564 individuals and Wayland with 4.4% or 7,394 individuals. Combined, these three communities accounted for 9.1% of the total labor force in the GMW.

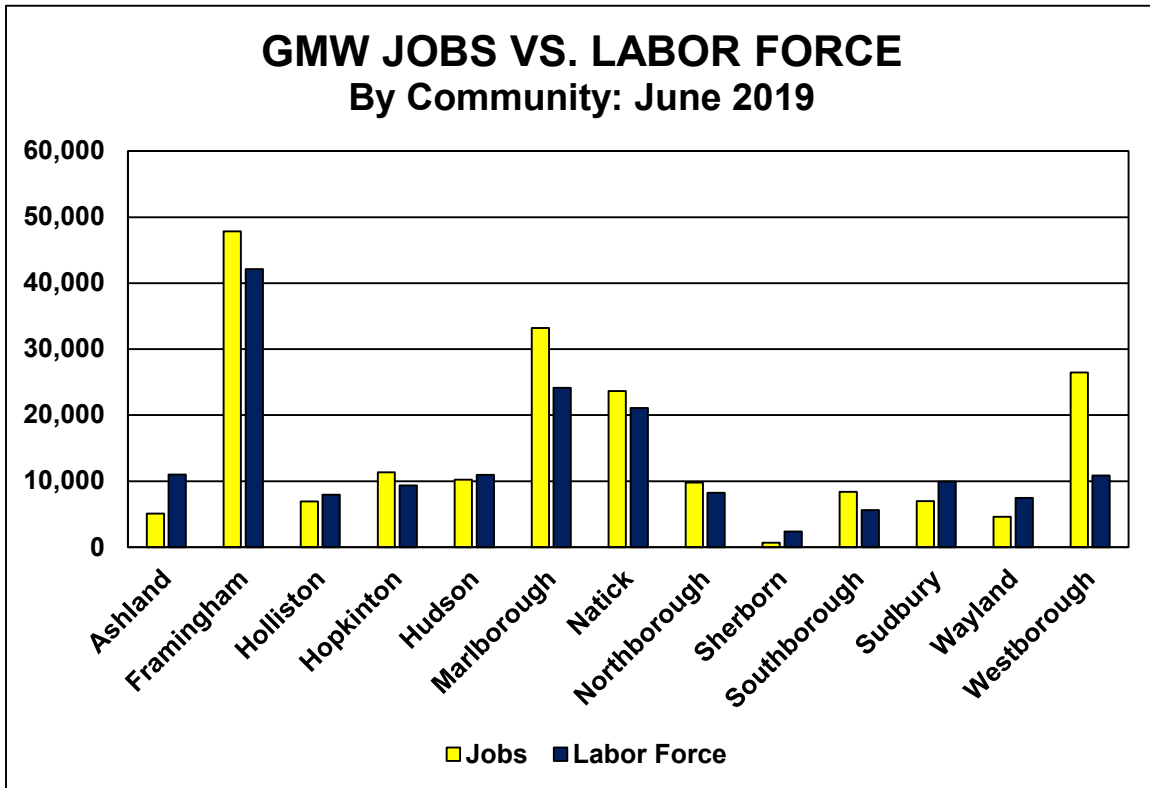
GREATER METROWEST – UNEMPLOYMENT



Source: MA EOLWD and MERC

- The total number of jobs, depicted in green, refers to the total number of jobs in establishments located in Greater MetroWest (GMW). The total number of individuals in the labor force, depicted in purple, consists of residents in GMW that are currently employed or unemployed.
- Between 1990 and 1996, the number of jobs in GMW was less than the number of individuals in the labor force, indicating that the region was a net exporter of labor during this seven-year period. From 1997 to 2018, however, the number of jobs in GMW was greater than the number of individuals in the labor force, meaning that the region was a net importer of labor.
- From 1990 through 2018, the total number of jobs and individuals in the labor force reached their respective peaks in 2018. Since 2011 total number of jobs as well as individuals in the labor force have consistently increased each year.
- In 2018, the total number of jobs in GMW was 191,886, and the total number of individuals in the labor force was 167,400. During this year, there were 24,486 more jobs than individuals in the labor force.

GREATER METROWEST – UNEMPLOYMENT



Source: MA EOLWD and MERC

- The total number of jobs, shown in yellow, is compared to the total number of people in the labor force, shown in blue, for each community in Greater MetroWest (GMW). Jobs refer to the number of jobs in the establishments that are located in each community while the labor force consists of all residents in each community who are either employed or unemployed.
- As of June 2019, there was a total of 195,228 jobs in GMW. Framingham had the highest number of jobs available during this month with 47,871 jobs, followed by Marlborough with 33,214 jobs and Westborough and Natick came next with 26,448 and 23,653 available jobs, respectively. These four communities combined contributed two-thirds of the total available jobs in the region.
- Framingham, Hopkinton, Marlborough, Natick, Northborough, Southborough, and Westborough had more jobs available than individuals in the labor force, indicating that these seven communities were net importers of labor.
- The remaining six communities, however, had more individuals in the labor force than number of jobs available, implying that these six communities were net exporters of labor.

GREATER METROWEST – EMPLOYMENT

EMPLOYMENT¹

The MetroWest Economic Research Center (MERC) at Framingham State University maintains an employment database for the MetroWest CCSA™, the Greater Marlborough Region, the South Shore CCSA™, the 495/MetroWest Region, the Blackstone Valley Region, and other substate economies. MERC has documented major changes in regional employment, industrial structure and wages since 1980. For this 2020 publication, MERC has developed data for the Greater MetroWest Region (GMW).

MERC research relies on the Massachusetts Executive Office of Labor and Workforce Development (MA EOLWD), ES-202 series to develop time series for employment, payroll, wages and establishments in the Greater MetroWest Region. ES-202 data are derived from quarterly census reports filed by all employers subject to unemployment laws, both state and federal, and cover 98% of all U.S. jobs. More than 150,000 MA employers subject to unemployment compensation laws participate in the quarterly census.

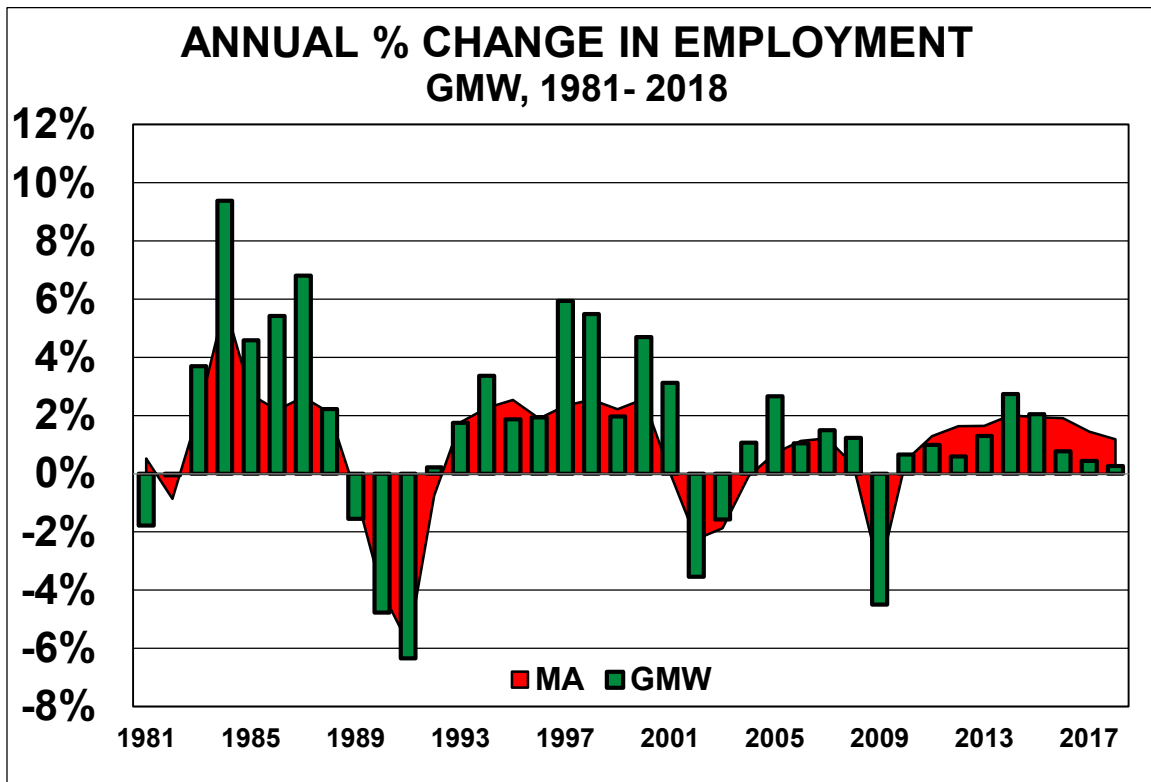
For the first time in 2002, employers were classified by industry solely in accordance with the North American Industry Classification System (NAICS). NAICS groups together establishments that use the same processes to produce goods and services. NAICS permanently replaced the Standard Industrial Classification (SIC) system, which was in use for the previous 70 years. For a more detailed description of NAICS categories as used in this publication, please see the Appendix.

In the ES-202 series **employment** refers to the count of all persons on the payroll of establishments subject to the law, who worked full-time or part-time within the 13 communities of Greater MetroWest. Annual **payroll** includes all wages and salaries paid to covered employees including commissions, bonuses, stock options, overtime and sick pay. The **average annual wage** is derived by dividing the gross annual payroll by the average annual employment. **Establishment** or place of work refers to an economic unit that produces goods or services at a single location and is engaged in one type of economic activity. A firm therefore may have one or more establishments where work is produced. More complete definitions are included in the Appendix.

Please note that all data and analysis included in this report refer to business establishments, *not* residents, located within the 13 communities. Please also note that totals may not always add due to rounding.

¹The definitions of terms are based on those in the *Handbook of U.S. Labor Statistics (1998)*, *Employment and Wages in Massachusetts and the Major Metropolitan Statistical Areas Annual Averages 1993-1996*, the *North American Industry Classification System - United States, 2002*, www.bls.gov/cew, and MA EOLWD, *Employment and Wages by Industry and Area (ES202)*.

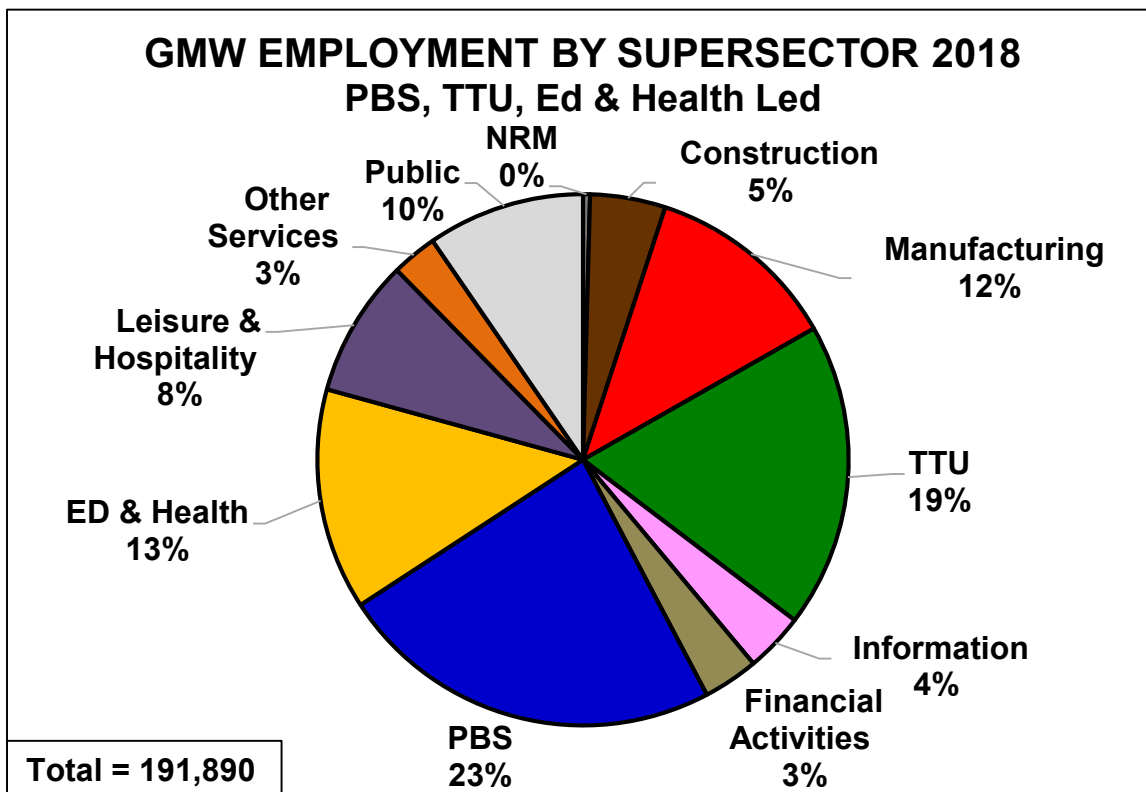
GREATER METROWEST – EMPLOYMENT



Source: MA EOLWD, MERC

- The annual percentage net change in employment for GMW ranged from a low of -6.3% in 1991 to a high of 9.4% in 1984. The annual percentage net change in Massachusetts (MA) employment ranged from a low of -5.9% in 1991, to a high of 5.8% in 1984.
- Since 1980, GMW employment increased at an average annual rate of 1.5%, while MA employment increased at an average annual rate of 0.9%.
- From 2009 to 2018, GMW employment increased at an average annual rate of 10.2%, or 17,810 jobs. MA average annual employment has increased 14.3%, or 449,570 jobs from 2009 to 2018.
- The data above suggests that annual employment growth in MA and GMW tend to move in tandem. However, prior to 2009, GMW has generally experienced more pronounced annual percent changes than the state. Since the Great Recession, annual growth rates for employment in GMW have been mostly lower than in MA.

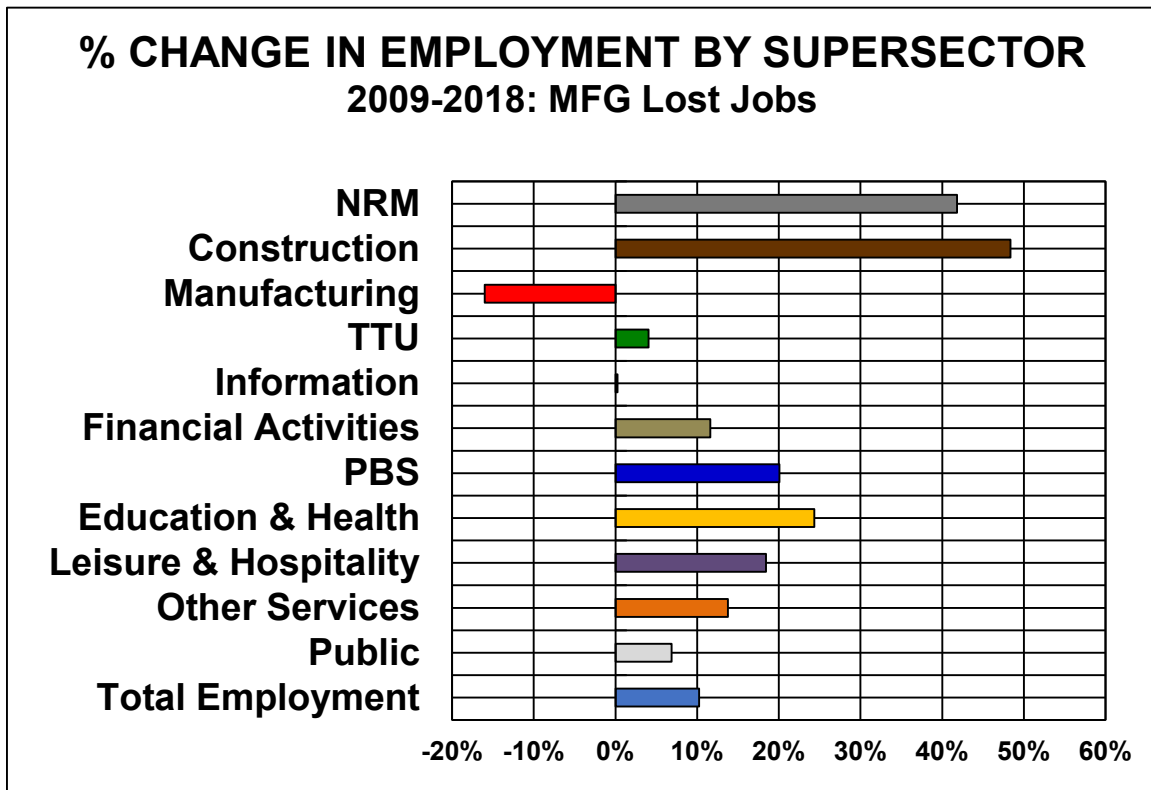
GREATER METROWEST – EMPLOYMENT



Source: MA EOLWD, MERC

- In 2018, Greater MetroWest (GMW) employment reached a historical high of 191,890, up 520 jobs, or 0.3% from 2017.
- Professional and Business Services (PBS) generated the largest share of GMW employment at 23%, or 45,130 jobs. Trade, Transportation and Utilities (TTU) produced the second largest share at 35,600 jobs or 19%.
- Education and Health Services formed the third largest share at 13%, or 25,860 jobs. Manufacturing followed closely at fourth, producing 25,560 jobs, or 12%. Together, PBS, TTU, Education and Health Services, and Manufacturing generated more than two thirds of GMW employment, roughly 132,150 jobs.
- Three supersectors generated between 5% and 10% of GMW regional employment: Public (18,380 or 10%), Leisure and Hospitality (16,070 or 8%), and Construction (8,800 or 5%).
- The four remaining supersectors in order of size: Information, Financial Activities, Other Services, and Natural Resources and Mining (NRM) combined, generated 10% of GMW regional employment, or 19,490 jobs.

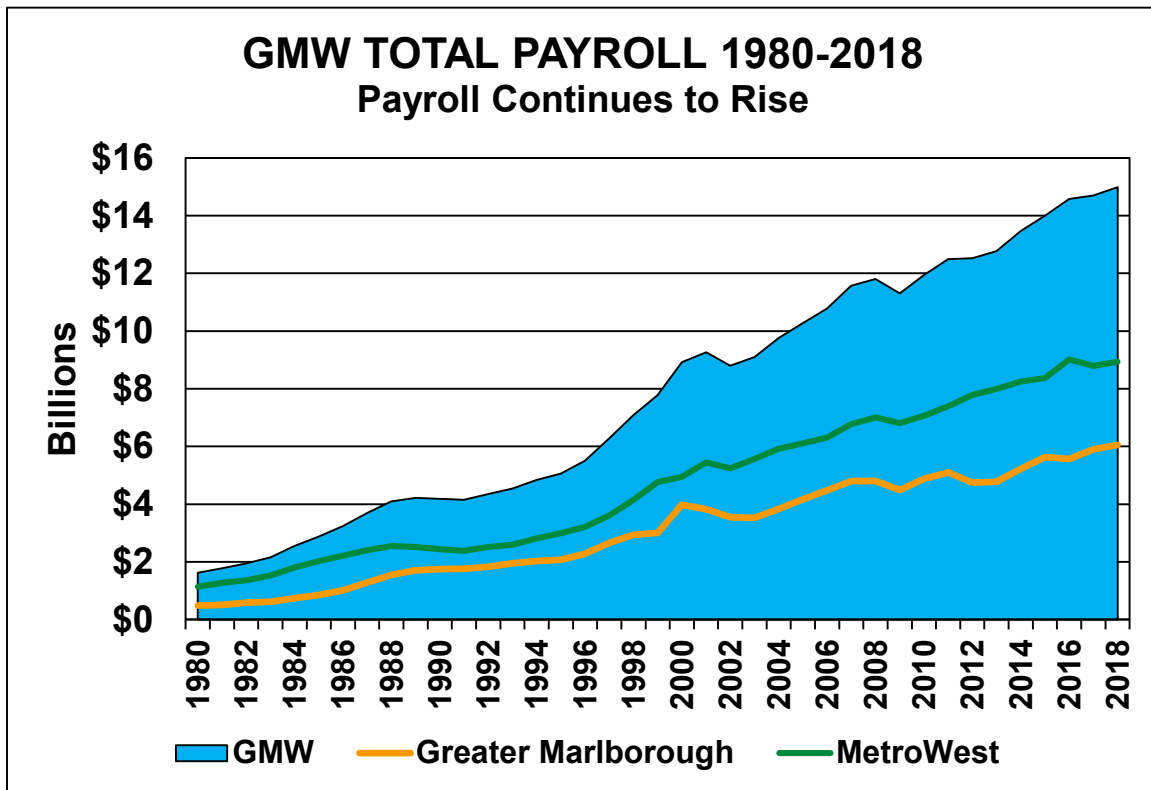
GREATER METROWEST – EMPLOYMENT



Source: MA EOLWD, MERC

- Total Greater MetroWest (GMW) employment increased from 174,080 jobs in 2009 to 191,890 jobs in 2018, an increase of 10.2% or 17,810 jobs.
- The largest employment gains in GMW came from the Construction (+48.4%), Natural Resources and Mining (NRM) (+41.8%), and Education and Health Services (+24.3%) supersectors. Professional and Business Services (PBS) was the only other supersector that saw gains in employment larger than 20%, at 20.1%.
- Between 2009 and 2018, six other supersectors saw increases to employment, ranked in size from the largest, Leisure and Hospitality (+18.4%), Other Services (+13.8%), Financial Activities (+11.6%), Public (+6.9%), Trade, Transportation and Utilities (TTU) (+4.0%), and Information (+0.3%).
- There was only one supersector that saw decreases in employment from 2009 to 2018: Manufacturing. Jobs in this supersector declined by 16.0%, or 4,300 jobs.

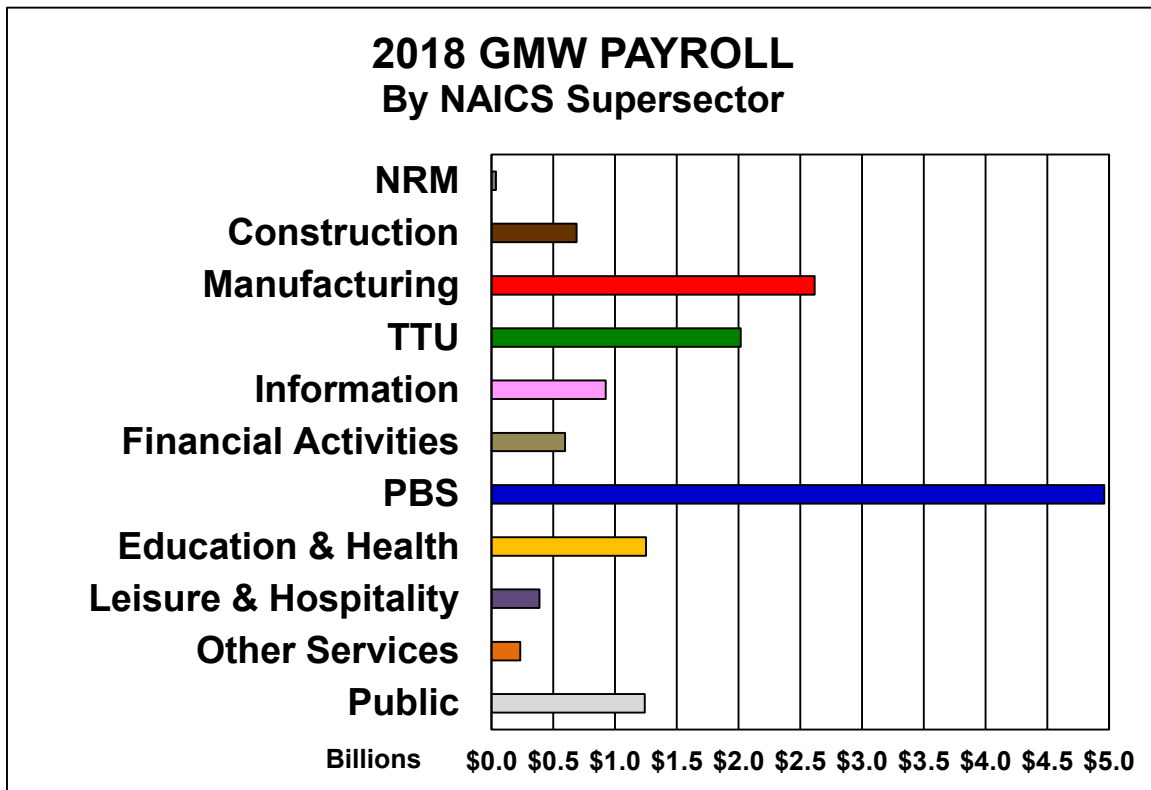
GREATER METROWEST – EMPLOYMENT



Source: MA EOLWD, MERC

- Greater MetroWest (GMW) total payroll reached historical highs in 2018 of \$14.9 billion, up 2.0% or \$290 million from 2017. This graph shows the nominal total payroll in current dollars, not adjusted for inflation.
- In 2018, the Greater Marlborough Region (GMR) accounted for 40.4% of regional payroll in GMW, while MetroWest (MW) accounted for 59.6%.
- GMW payroll increased at an average annual rate of 7.2% in the 38-year period since 1980, declining twice in 2002 and 2009.
- Over the 38-year period, GMR payroll increased at an average annual rate of 7.2%, while MW increased at a rate of 5.7%.
- GMR reached a historical high in total payroll of \$6.1 billion in 2018, an increase of \$150 million from 2017. In 2018 MW recorded a regional payroll of \$8.9 billion, an increase of \$140 million, or 1.6% from 2017.

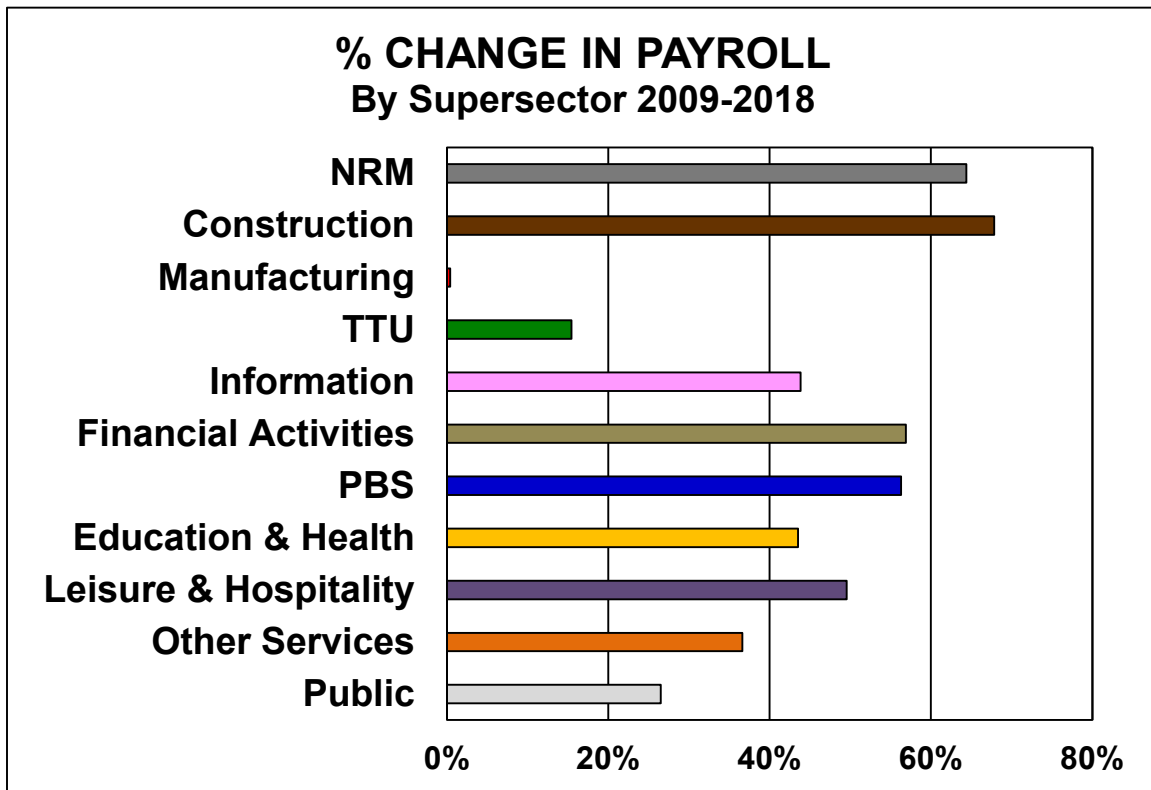
GREATER METROWEST – EMPLOYMENT



Source: MA EOLWD, MERC

- In 2018, Greater MetroWest (GMW) payroll reached a historical high of \$15 billion, an increase of 2.0% from 2017.
- Among the NAICS supersectors, Professional and Business Services (PBS) generated the largest share of GMW total payroll at 33.1%, or \$4.9 billion. It was followed by Manufacturing with 17.8%, or \$2.6 billion. Trade, Transportation and Utilities (TTU) held the third largest share of GMW total payroll at 13.5%, or \$2.0 billion.
- Together, PBS, Manufacturing, and TTU generated 64.3% of GMW total payroll, or \$9.6 billion.
- Five other NAICS supersectors generated between \$0.5 billion and \$1.5 billion, ranked in order from largest to smallest: Education and Health Services (\$1.3 billion), Public (\$1.2 billion), Information (\$0.9 billion), Construction (\$0.7 billion), and Financial Activities (\$0.6 billion). Together, these five supersectors generated 31.3% of GMW total payroll, or \$4.7 billion.
- The remaining three supersectors generated less than \$0.5 billion, ranked in order from highest to lowest: Leisure and Hospitality (\$0.4 billion), Other Services (\$0.2 billion), and Natural Resources and Mining (NRM) (\$0.03 billion). Combined, the three NAICS supersectors generated \$0.7 billion.

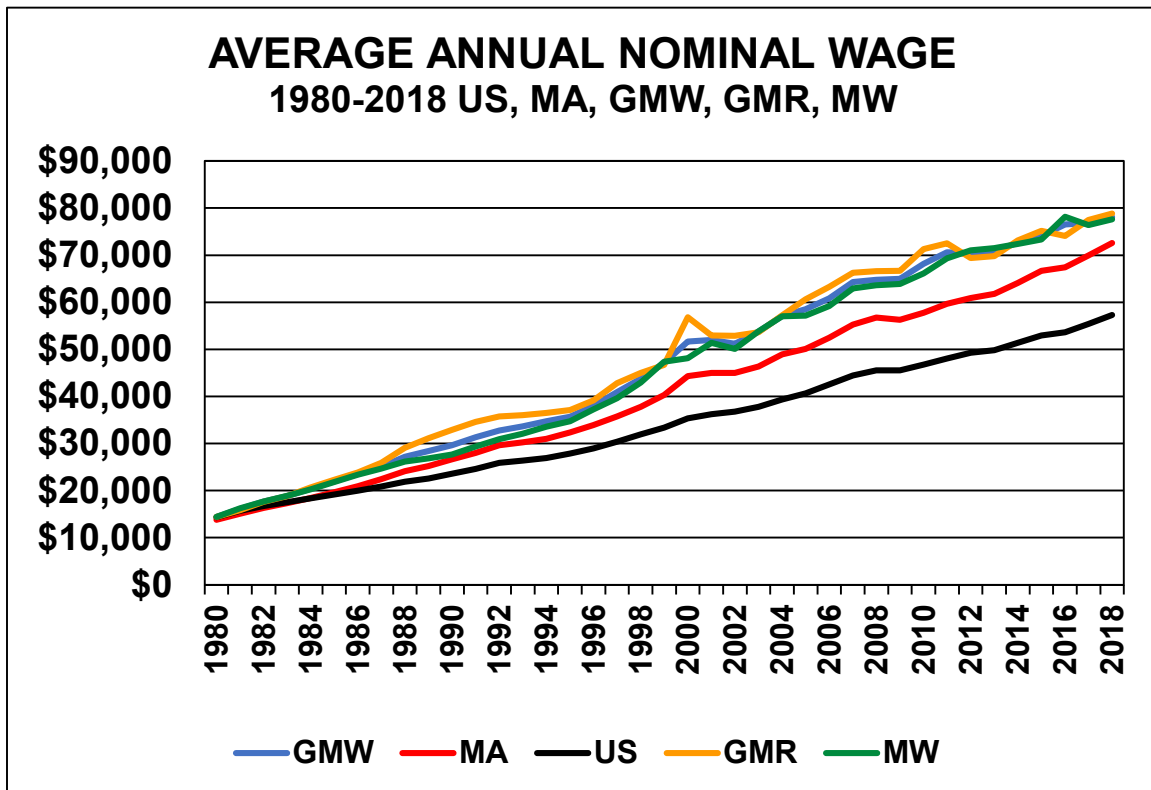
GREATER METROWEST – EMPLOYMENT



Source: MA EOLWD, MERC

- Greater MetroWest (GMW) payroll increased from \$11.3 billion in 2009 to \$15 billion in 2018, an increase of \$3.7 billion or 32.6%.
- Construction held the largest percentage increase in payroll for NAICS supersectors at 67.8%, followed by Natural Resources and Mining (NRM) at 64.4%.
- Six other NAICS supersectors experienced percentage increases in payroll between 40% to 60% from 2009 to 2018. These supersectors, ranked from largest to smallest percentage increases, were Financial Activities (56.9%), Professional and Business Services (PBS) (56.3%), Leisure and Hospitality (49.6%), Information (43.9%), Education and Health Services (43.5%), and Other Services (36.6%).
- The remaining three NAICS supersectors saw percentage increases in payroll of less than 20% during this period. The Public NAICS supersector experienced a percentage increase of 26.5%, followed by Trade, Transportation and Utilities (TTU) with a percentage increase of 15.5%. The NAICS supersector with the lowest increase during this period was manufacturing, which saw its payroll increased by just 0.4%

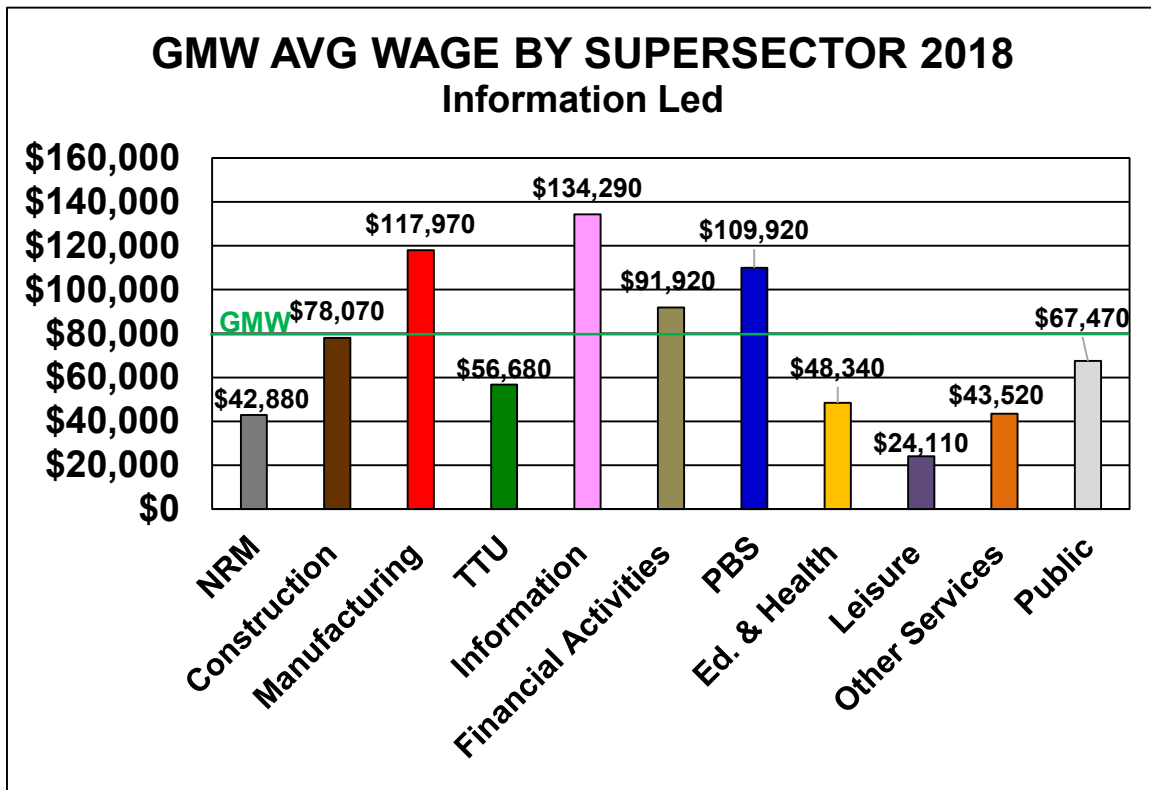
GREATER METROWEST – EMPLOYMENT



Source: MA EOLWD, MERC

- In 2018, Greater MetroWest (GMW), Massachusetts (MA), United States (US), and the Greater Marlborough Region (GMR) reached record highs in average annual nominal wages. GMR led with an average annual nominal wage of \$78,800, an increase of 1.8% from 2017. Followed by GMW, with an average annual nominal wage of \$78,100, an increase of 1.7% from 2017.
- MetroWest (MW) had an average annual nominal wage of \$77,600 in 2018, up 1.6% from 2017. GMW, GMR, and MW all held an average annual nominal wage higher than Massachusetts's average annual nominal wage of \$72,600 in 2018. The state, and the three regions had average annual nominal wages higher than the nation. The US average annual nominal wage was \$57,300 in 2018.
- During the 1980 to 2018 period, GMW average annual nominal wage increased at an average rate of 4.6%. The MA average annual nominal wage increased at a rate of 4.5%, while the US average annual nominal wage increased at a rate of 3.7%.
- Between 1980 and 2018, the GMW average annual nominal wage increased by 442% or \$64,000. The MA average annual nominal wage increased by a similar percent at 426%, or \$58,800. However, the United States average annual nominal wage increased by 298%, or \$42,900 during this same period.

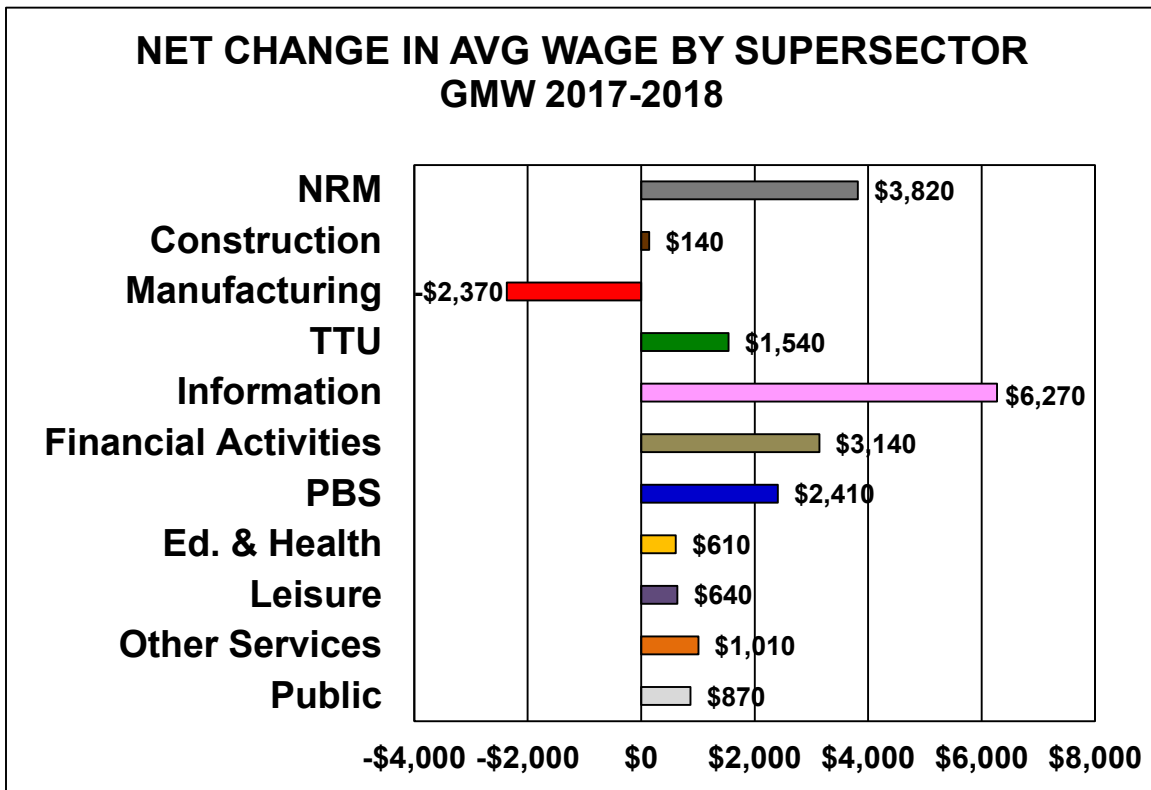
GREATER METROWEST – EMPLOYMENT



Source: MA EOLWD, MERC

- In 2018, Greater MetroWest (GMW) (green line) average annual wage reached a record high of \$78,120, up 2.0% or \$1,300 from 2017.
- Information led with the highest average annual wage of \$134,290, followed by Manufacturing at \$117,970, and Professional and Business Services (PBS) at \$109,920. These three NAICS supersectors were the only ones with average annual wages above \$100,000.
- Financial Activities was the only other supersector to have had an average annual wage higher than GMW's at \$91,920.
- The remaining seven supersectors, ranked in size from highest to lowest, had average annual wages below that of GMW: Construction (\$78,070), Public (\$67,470), Trade, Transportation and Utilities (TTU) (\$56,680), Education and Health Services (\$48,340), Other Services (\$43,520), Natural Resources and Mining (NRM) (\$42,880), and Leisure and Hospitality (\$24,110).

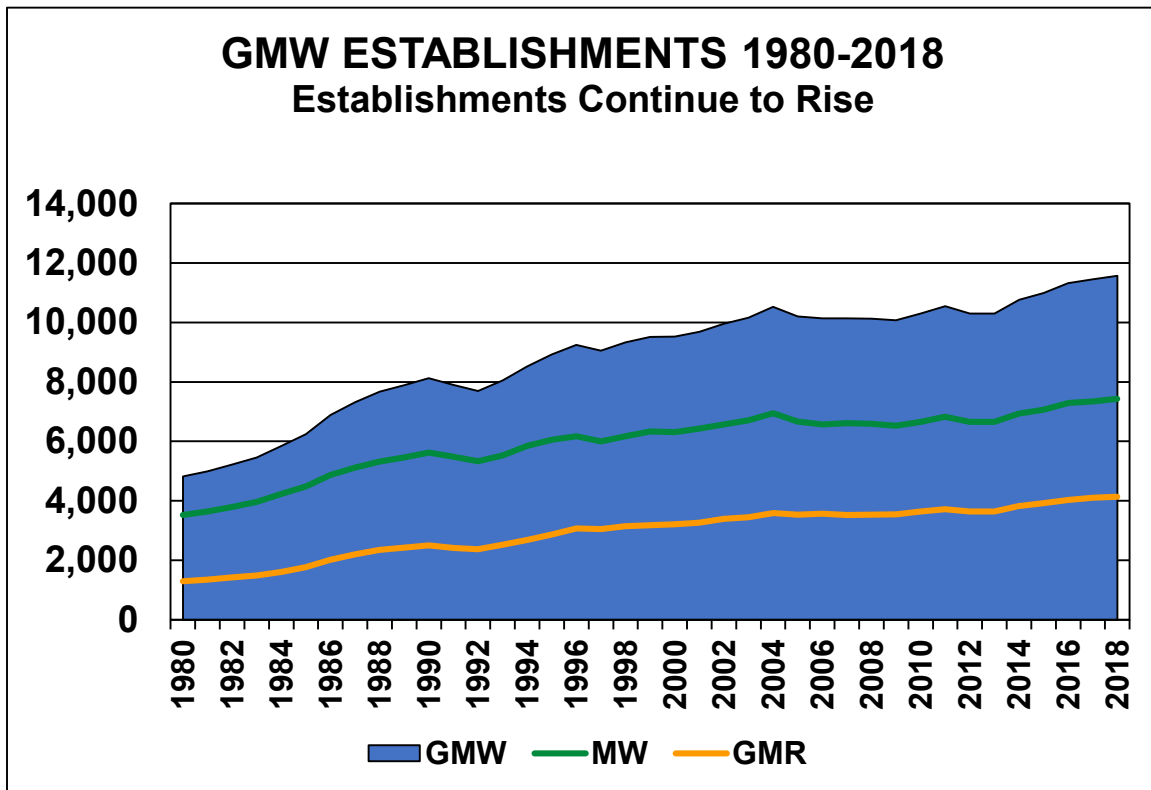
GREATER METROWEST – EMPLOYMENT



Source: MA EOLWD, MERC

- In 2018, Greater MetroWest (GMW) average annual wage reached a record high of \$78,120, up 2.0% or \$1,300 from 2017.
- From 2017 to 2018, three supersectors saw increases to average annual wage larger than \$3,000: Information (\$6,270), Natural Resources and Mining (NRM) (\$3,820), and Financial Activities (\$3,140).
- From 2017 to 2018, there were three supersectors that saw gains to average annual wage between \$1,000 to \$3,000: Professional and Business Services (PBS) (\$2,410), Trade, Transportation and Utilities (TTU) (\$1,540), and Other Services (\$1,010).
- Four supersectors saw increases to average annual wage below \$1,000: Public (\$870), Leisure (\$640), Education and Health Services (\$610), and Construction (\$140).
- From 2017 to 2018, there was only one supersector that experienced a decline in average annual wage; Manufacturing annual average wage declined by \$2,370.

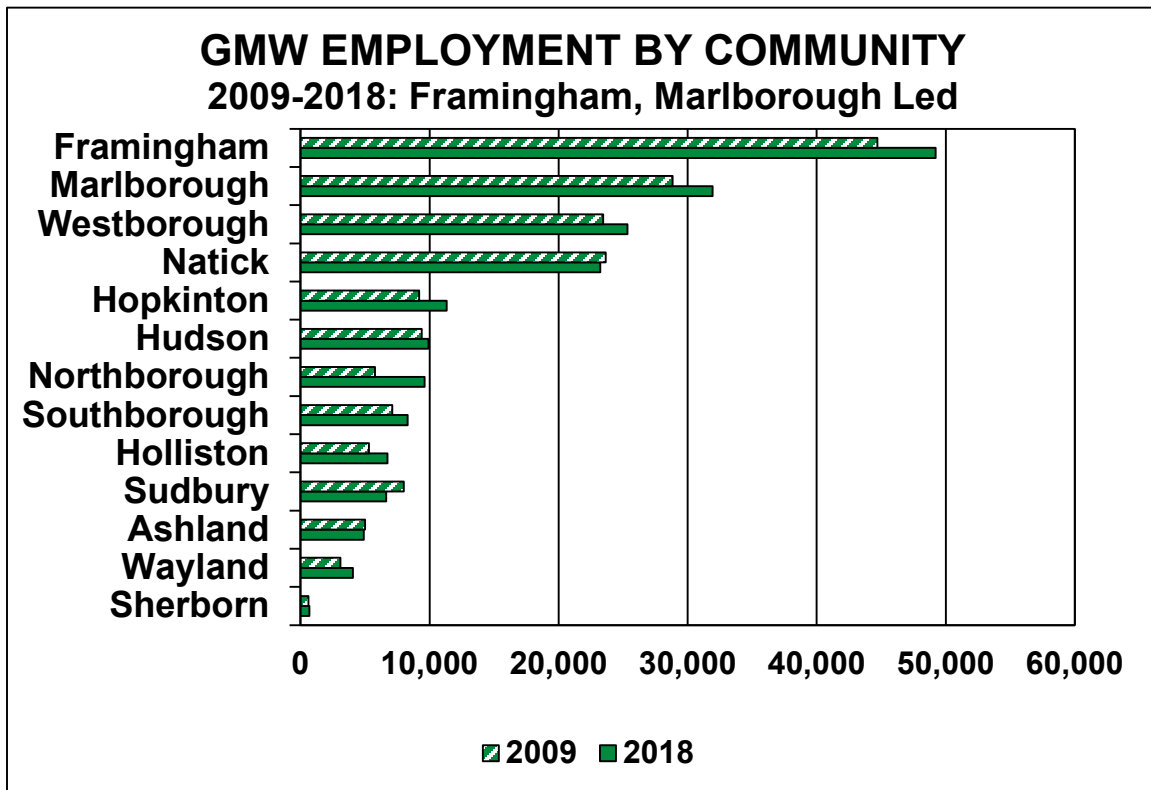
GREATER METROWEST – EMPLOYMENT



Source: MA EOLWD, MERC

- In 2018, Greater MetroWest (GMW) establishments, or separate places of work, reached a historical high of 11,570, up 120.
- Following the Great Recession of 2009, GMW added 1,492 establishments, an increase of 14.8%.
- In 2018, MetroWest (MW) establishments accounted for 64.3% of GMW establishments, with a record high of 7,440 establishments. The Greater Marlborough Region (GMR) accounted for 35.6% of GMW establishments, with a historical high of 4,130 establishments in 2018.
- Between 1980 and 2018, GMW establishments increased from 4,810 to 11,570, an increase of 140.5%. MW establishments increased from 3,530 in 1980, to 7,440 in 2018, an increase of 111.0%. GMR establishments increased from 1,290 in 1980 to 4,130 in 2018, an increase of 220.2%.
- In the 38-year period since 1980, GMW establishments increased at an average annual rate of 2.4%, MW establishments increased at an average annual rate of 2.0%, while GMR establishments increased at an average annual rate of 3.2%.

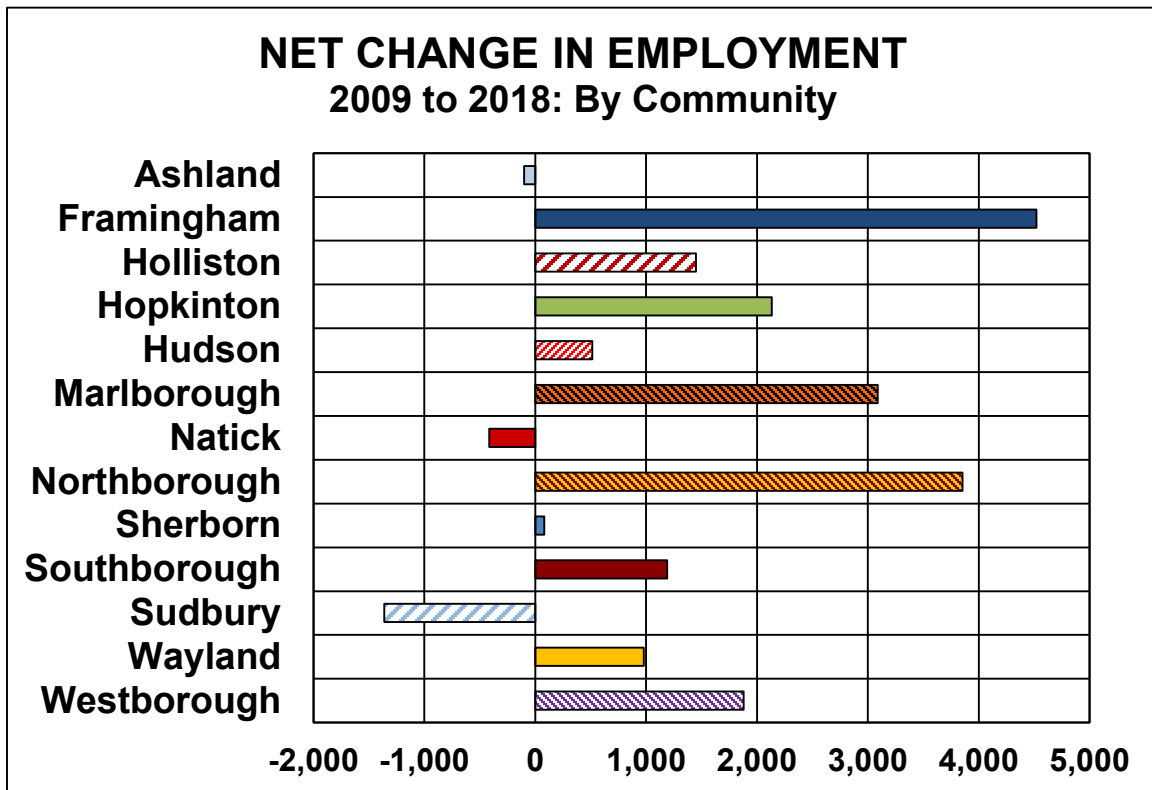
GREATER METROWEST – EMPLOYMENT



Source: MA EOLWD, MERC

- The graph above shows the thirteen Greater MetroWest (GMW) communities ranked from largest to smallest in terms of employment size based on 2018 data.
- GMW employment rose from 174,080 in 2009, to a record 191,890 in 2018, a gain of 17,810 jobs or 10.2%. Ten communities saw gains in employment from 2009 to 2018, while only three (Ashland, Natick, Sudbury) experienced losses.
- In 2009, Framingham led the region with the highest employment, 44,700 jobs, followed by Marlborough at 28,830 jobs, and Natick at 23,650 jobs.
- By 2018, nine years after the Great Recession, Framingham continued to lead with 49,220 jobs, followed by Marlborough with 31,920 jobs. By 2018, Westborough had surpassed Natick in employment to become the third largest GMW community in terms of employment in 2018, with 25,340 jobs.
- Ashland and Sudbury experienced losses in employment in the nine years following 2009. Sudbury dropped from the 7th highest community in 2009, to the 10th highest community by employment in 2018, as its number of jobs fell from 8,000 to 6,640. Ashland had 5,000 jobs in 2009, and 4,900 in 2018, a loss of 100 jobs.

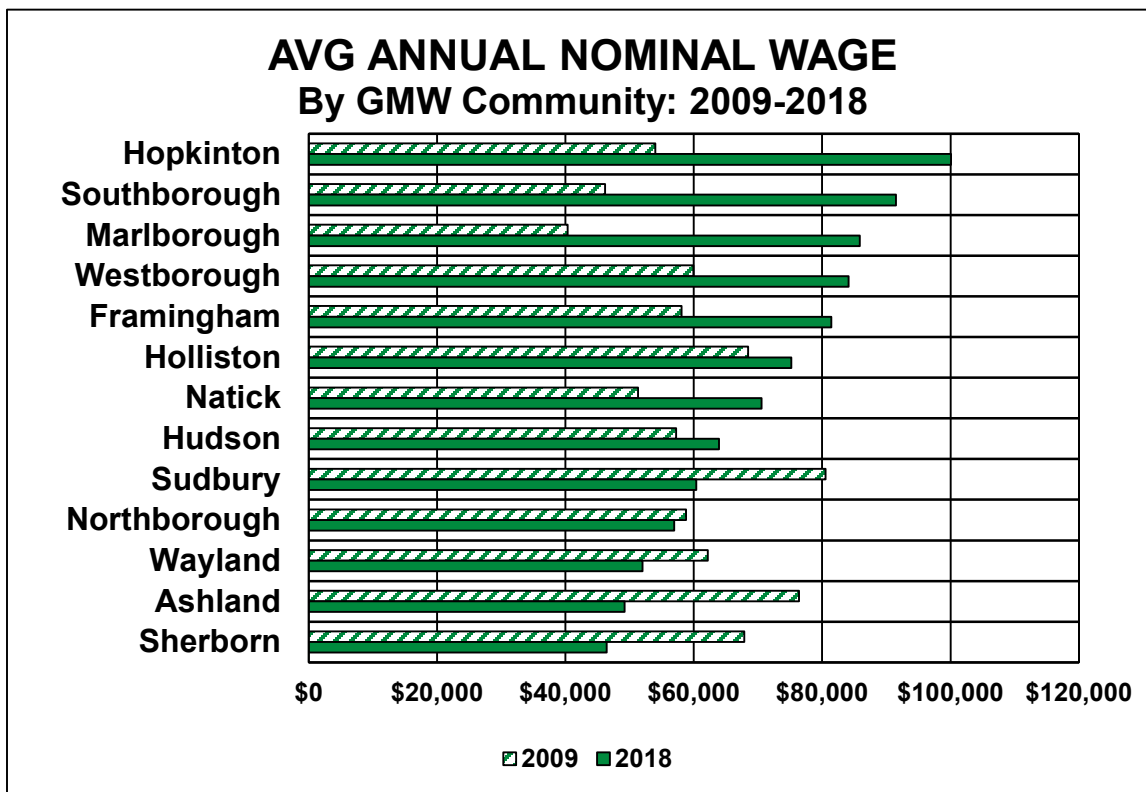
GREATER METROWEST – EMPLOYMENT



Source: MA EOLWD, MERC

- Greater MetroWest (GMW) employment rose from 174,080 in 2009, to 191,890 in 2018, an increase of 17,810 or 10.2%. Framingham led in absolute net change adding 4,520 jobs, an increase of 10.1%.
- While Framingham had the largest change in terms of number of jobs during this period, Northborough had the largest percentage increase in employment, gaining 3,860 jobs, or an increase of 66.9%. Marlborough added 3,090 jobs, or an increase of 10.7%. It was followed by Hopkinton, which gained 2,130 jobs, or an increase of 10.7%.
- The communities of Sudbury, Natick, and Ashland experienced declines in employment from 2009 to 2018. Sudbury lost 1,360 jobs, or a loss of 17.0%, followed by Natick which lost 420 jobs, or a decrease of 1.8%. Ashland lost 100 jobs, which is equivalent to a 2.0% decline.

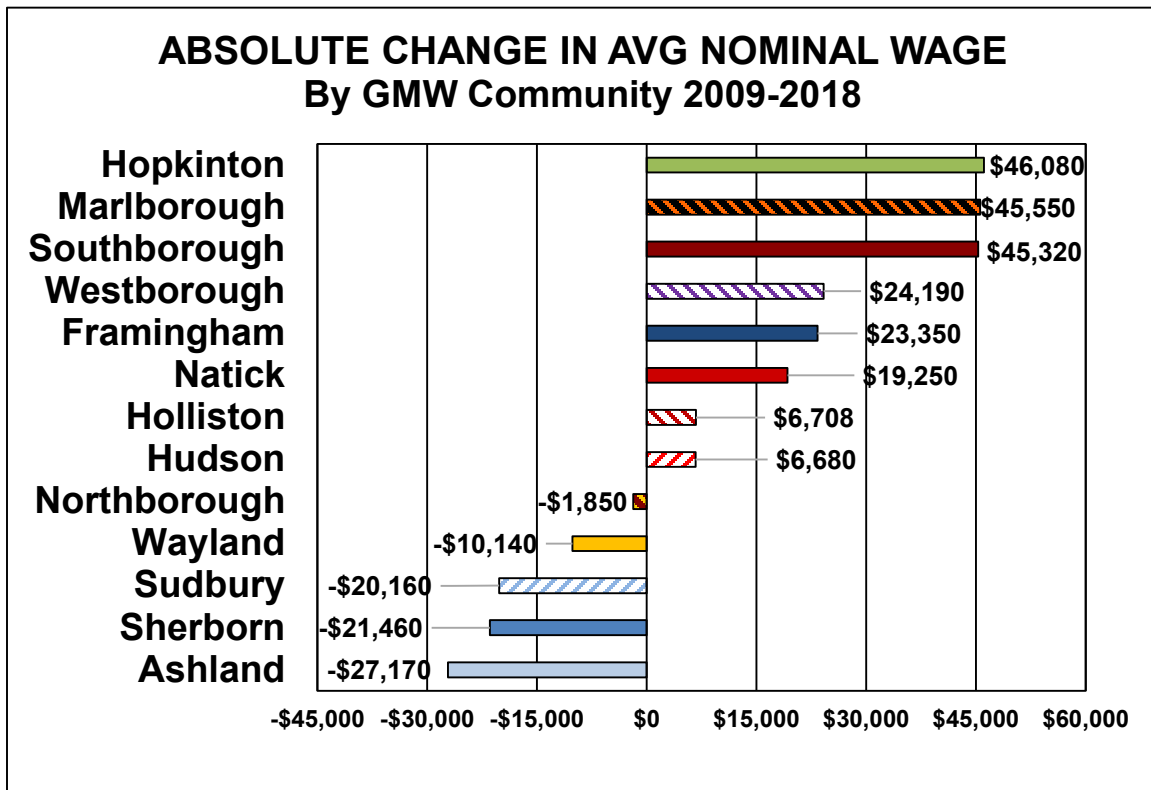
GREATER METROWEST – EMPLOYMENT



Source: MA EOLWD, MERC

- In 2018, Greater MetroWest (GMW) reached a historical high in average annual nominal wage of \$78,120, an increase of \$13,180 or 20.3% relative to 2009. The thirteen Greater MetroWest (GMW) communities are ranked in size by their 2018 average annual nominal wage with solid green.
- Hopkinton had the largest average annual wage in 2018 at \$100,070. It experienced an increase of \$46,080 or 85.3% relative to 2009. Southborough followed with an average annual wage of \$91,480, which represented an increase of \$45,320 or 98.2% from its 2009 level.
- Three other communities had average annual wages larger than GMW in 2018: Marlborough (\$85,880), Westborough (\$84,110), and Framingham (\$81,420).
- Five communities experienced declining average annual nominal wages from 2009 to 2018: Ashland (-\$27,170), Sherborn (-\$21,460), Sudbury (-\$20,160), Wayland (-\$10,140), and Northborough (-\$1,840).

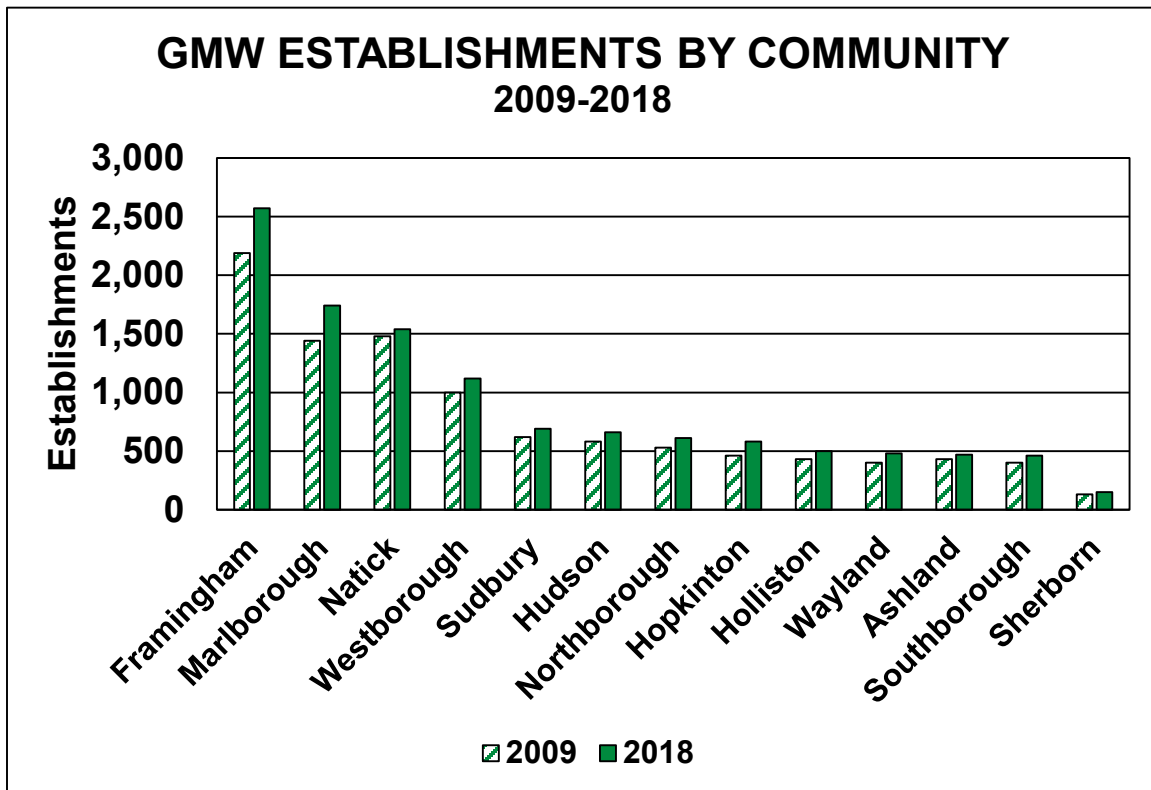
GREATER METROWEST – EMPLOYMENT



Source: MA EOLWD, MERC

- Between 2009 and 2018, the average annual nominal wage for Greater MetroWest (GMW) increased by \$13,180. The graph above shows the thirteen GMW communities ranked from largest to smallest in terms of the absolute change in the average nominal annual wage.
- Hopkinton experienced the largest absolute change in average nominal annual wage during the 2009-2018 period, increasing by \$46,080. Marlborough followed with an increase of \$45,550, while Southborough had the third largest increase in the region with \$45,320.
- Three communities had average annual nominal wages that increased between \$15,000 and \$40,000 during this period. Westborough's average annual nominal wage increased by \$24,190, followed by Framingham's and Natick's, which increased by \$23,350 and \$19,250, respectively.
- Five communities saw absolute decreases to their average annual nominal wage during the 2009-2018 period: Ashland (-\$27,170), Sherborn (-\$21,460), Sudbury (-\$20,160), Wayland (-\$10,140), and Northborough (-\$1,850).

GREATER METROWEST – EMPLOYMENT



Source: MA EOLWD, MERC

- The number of establishments, or separate places of work, in Greater MetroWest (GMW) reached a historical high of 11,570 in 2018.
- Framingham led the region in both 2009 (with 2,190 establishments), and in 2018 (with 2,570 establishments). This is equivalent to an increase of 17.4% in the number of establishments during this period. Marlborough followed with the second largest number of establishments in 2018, 1,740, up 20.8% from 2009. Natick, which ranked second in 2009, fell to third place, with 1,540 establishments in 2018. This represents an increase of 4.1% relative to 2009.
- The number of establishments increased in every community during the 2009-2018 period. Hopkinton experienced the largest percentage increase during this period. The number of establishments in Hopkinton increased by 26.2% to 580 establishments in 2018.
- Four communities had less than 500 establishments in 2018: Wayland (480), Ashland (470), Southborough (460), and Sherborn (150).

GREATER METROWEST – EMPLOYMENT

EMPLOYMENT COMPARISON Greater MetroWest Region By Community 2018

Community/ Region	Number of Jobs	Average Wage	Total Payroll (millions)	Number of Establishments	Largest Supersector (Employment)
Ashland	4,900	\$49,200	\$241	470	TTU*
Framingham	49,220	\$81,400	\$4,007	2,570	PBS**
Holliston	6,740	\$75,200	\$507	500	PBS
Hopkinton	11,320	\$100,100	\$1,132	580	Manufacturing
Hudson	9,910	\$64,000	\$633	660	TTU
Marlborough	31,290	\$85,900	\$2,741	1,740	PBS
Natick	23,230	\$70,600	\$1,640	1,550	TTU
Northborough	9,620	\$57,000	\$548	610	TTU
Sherborn	690	\$54,000	\$37	150	Public
Southborough	8,300	\$91,500	\$759	460	PBS
Sudbury	6,640	\$60,400	\$401	690	TTU
Wayland	4,070	\$52,000	\$212	480	Leisure & Hospitality
Westborough	25,340	\$84,100	\$2,131	1,120	PBS
MetroWest CCSA	115,110	\$77,600	\$8,937	7,440	PBS
Greater Marlborough Region	76,780	\$78,850	\$6,054	4,130	PBS
Greater MetroWest	191,890	\$78,120	\$14,990	11,570	PBS
Massachusetts	3,586,110	\$72,600	\$260,365	260,360	Education & Health

Source: MA EOLWD, MERC

Note: Numbers above are rounded.

*Trade, Transportation and Utilities (TTU)

**Professional and Business Services (PBS)

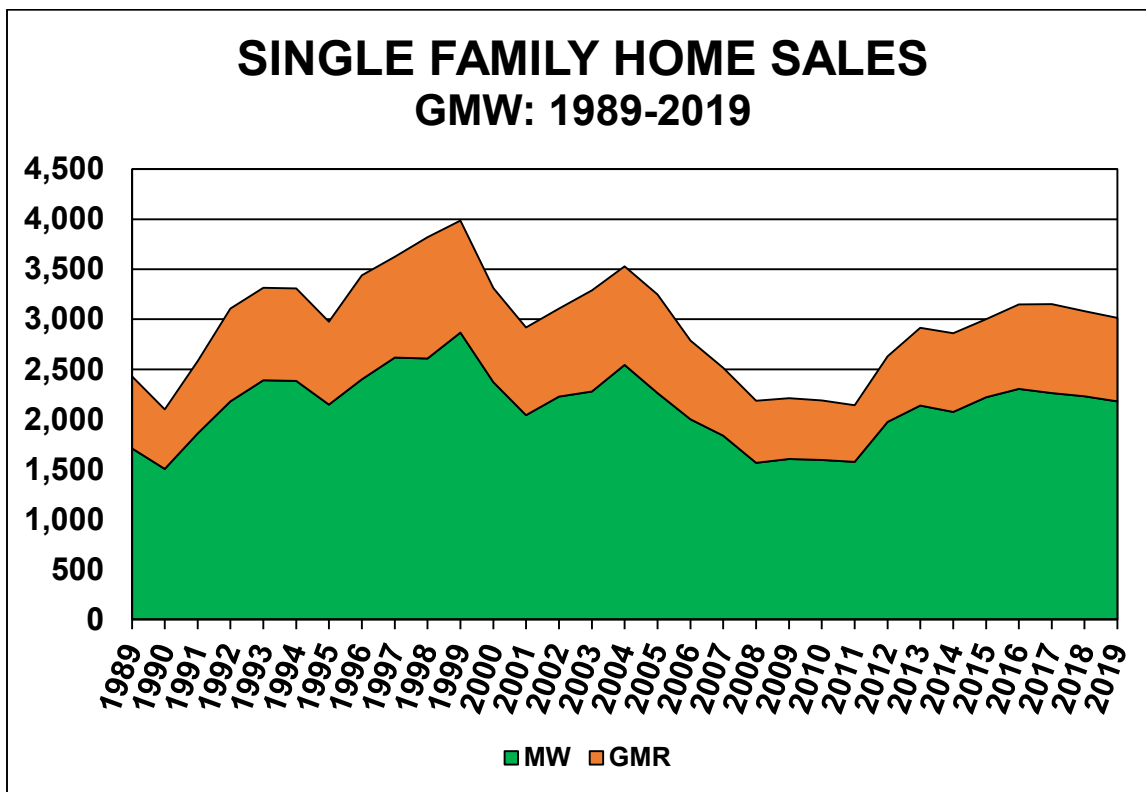
GREATER METROWEST – HOUSING

HOUSING

The MetroWest Economic Research Center (MERC) at Framingham State University collects and analyzes data on housing permits issued and existing home sales for Greater MetroWest (GMW), the aggregated MetroWest CCSA™ and Greater Marlborough Region. The MetroWest CCSA™ includes Ashland, Framingham, Holliston, Hopkinton, Natick, Sherborn, Southborough, Sudbury and Wayland. The Greater Marlborough Region includes Hudson, Marlborough, Northborough, and Westborough. MERC gathers housing data for these thirteen communities from several sources.

Information on existing home sales is based on data published by The Warren Group for *Banker & Tradesman*. Most of these data are available from 1987 forward, and were significantly revised in the spring of 2008 in order to better capture market activity. Hence some of the housing figures in this report are not directly comparable to the values reported in previous MERC publications. Data are collected on single and multi-family residences sold in the thirteen communities. Median house price is measured at the 50th percentile in each town; that is, half the homes sold for more than the median price and half sold for less than the median price. Median prices for the regions are estimated. It is important to remember that a change in median price does not reflect appreciation or depreciation in the value of individual homes. Rather, there is a different mix of homes sold each year.

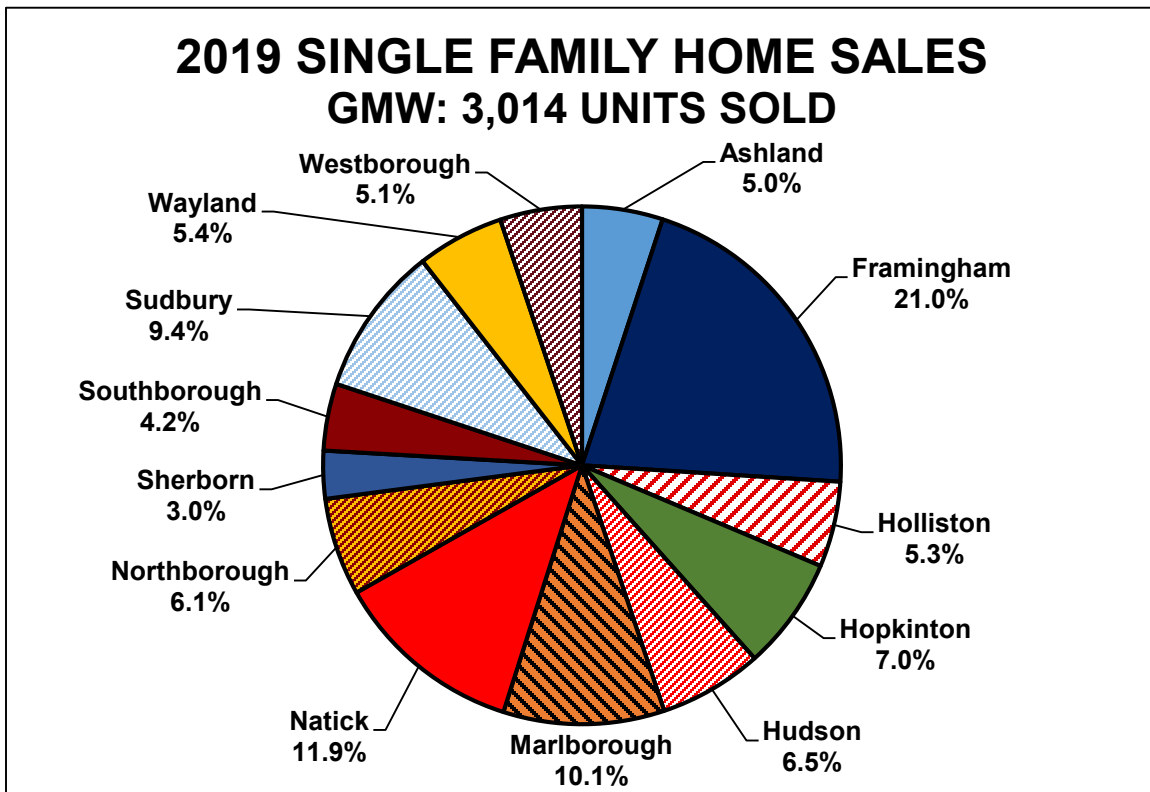
GREATER METROWEST - HOUSING



Source: The Warren Group and MERC

- Sales of existing single family homes are shown for Greater MetroWest (GMW) by the height of the graph depicted above. The data is shown for a 31-year period from 1989 to 2019. These sales consist of a different mix of homes sold each year, and do not represent a change in value of the homes. The green area shows the sales of existing homes in the nine communities of MetroWest (MW) while the orange area refers to the four communities of the Greater Marlborough Region (GMR).
- The largest percentage decrease in single family home sales occurred 1999 to 2000, representing a 16.9% drop; the largest percentage increase occurred between 1990 and 1991, representing a 23.0% increase in single family home sales in GMW.
- Low points in single family home sales in GMW occurred in 1990, 1995, 2001, 2008, and 2011; whereas peaks occurred in the years 1999 and 2004. The fewest homes sold in GMW occurred in 1990 at 2,099 units sold, and the peak occurred in 1999 at 3,986 units sold.
- From 2018 to 2019, MW experienced a decrease of 52 units sold or -2.3% and GMR experienced a decrease of 16 units sold or -1.9%.

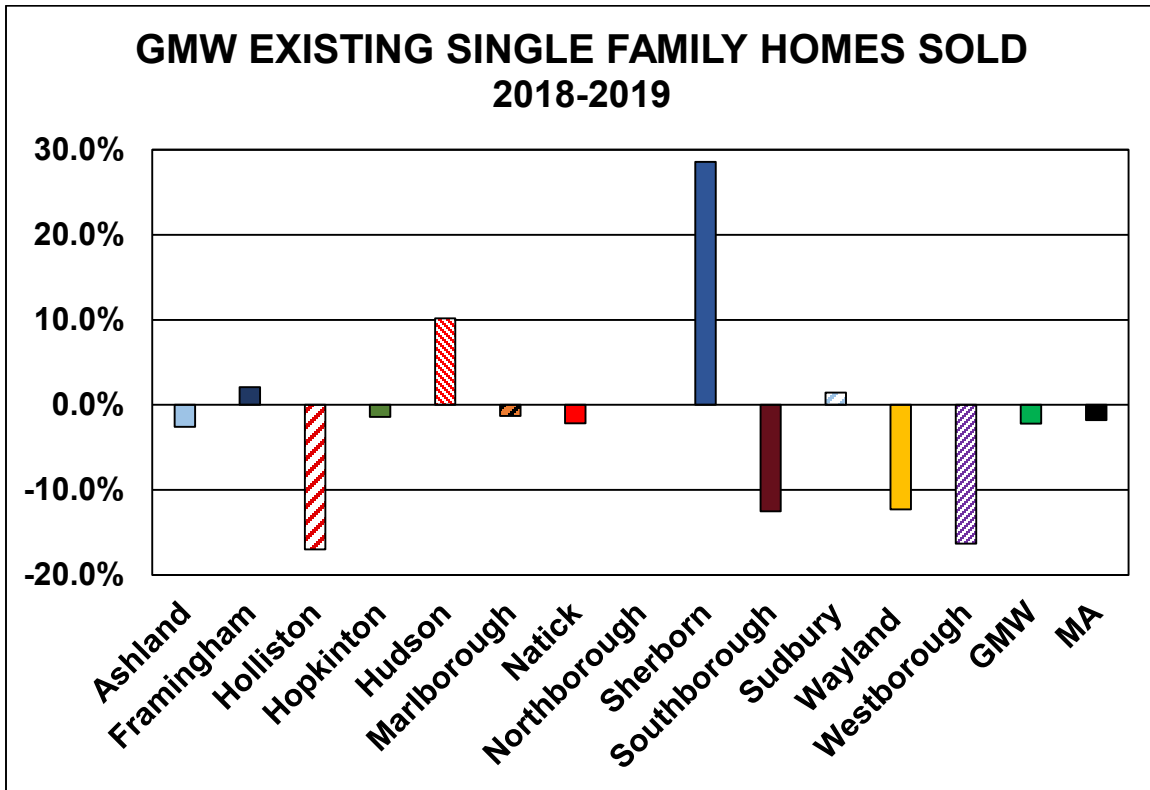
GREATER METROWEST – HOUSING



Source: The Warren Group and MERC

- In 2019, 3,014 existing single family homes were sold in Greater MetroWest (GMW). This represents a decrease of about 68 homes from the previous year.
- Framingham, Marlborough, and Natick were the only three communities to have over 300 single family home sales in 2019 and these three communities combined for 43.0% of all single family home sales in GMW.
- The nine communities of MW combined to contribute 72.3% or 2,178 single family home sales and the four communities of GMR contributed 27.7% or 836 single family home sales in 2019.
- Framingham, Marlborough, and Natick were the only communities to each contribute over 10% of total sales and Southborough and Sherborn were the only two to contribute less than 5% each.
- Framingham accounted for over one fifth of all single family home sales made in the entire GMW in 2019, 21.0%. Sherborn accounted for the smallest percentage of single family homes sales in GMW at only 3.0%.

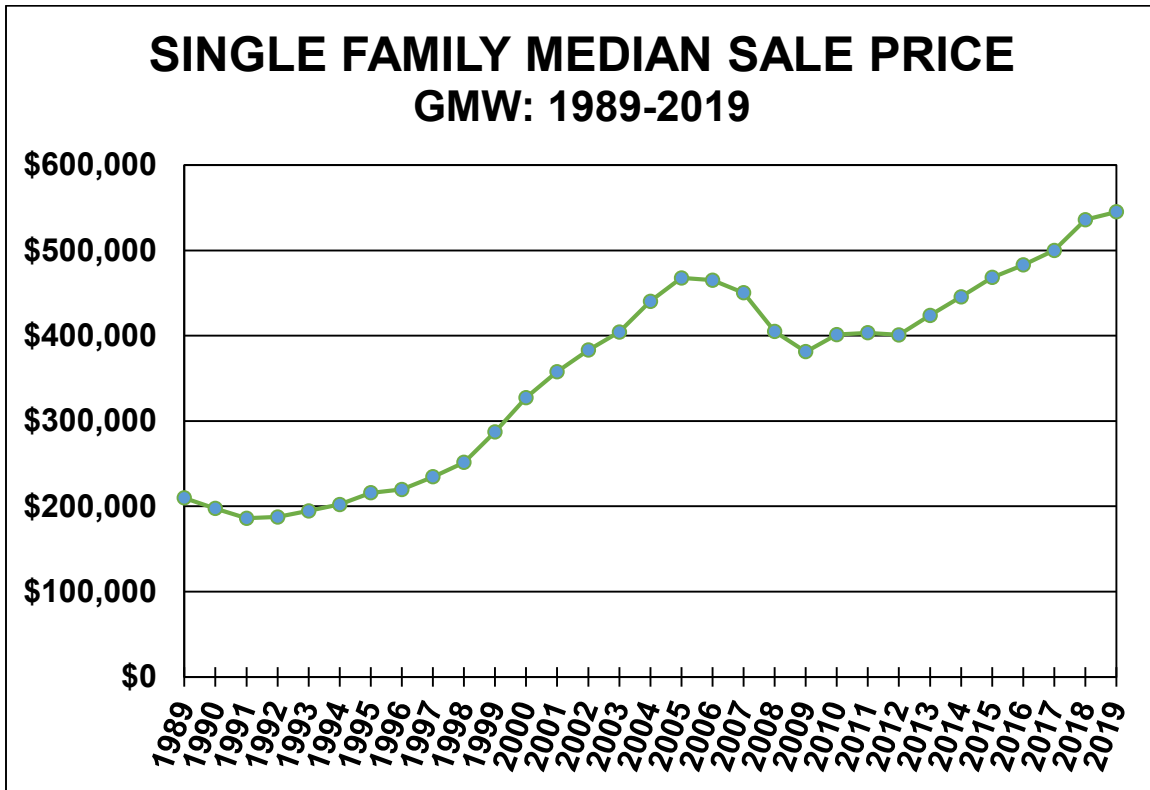
GREATER METROWEST – HOUSING



Source: The Warren Group and MERC

- The above graph shows the percent change in existing single family home sales from 2018 to 2019 in Greater MetroWest (GMW) and in each of its thirteen communities, as well as Massachusetts (MA).
- In 2019, there were 68 fewer units sold in GMW than in 2018, a 2.2% decrease. Massachusetts, on the other hand, reported a 1,067-unit decrease from 2018, or -1.8%, respectively.
- Sherborn and Hudson reported the largest percent increases in units sold between 2018 and 2019. In Sherborn, an additional 20 units were sold, a 28.6% increase. Hudson reported 18 additional units sold, equivalent to 10.2%.
- Holliston and Westborough reported the largest percent decreases in units sold between 2018 and 2019. In 2019, Holliston saw a 17.0% decrease in units sold from 2018 and Westborough, a 16.3% decrease.
- From 2018 to 2019, Northborough did not see any percentage change in units sold.

GREATER METROWEST – HOUSING

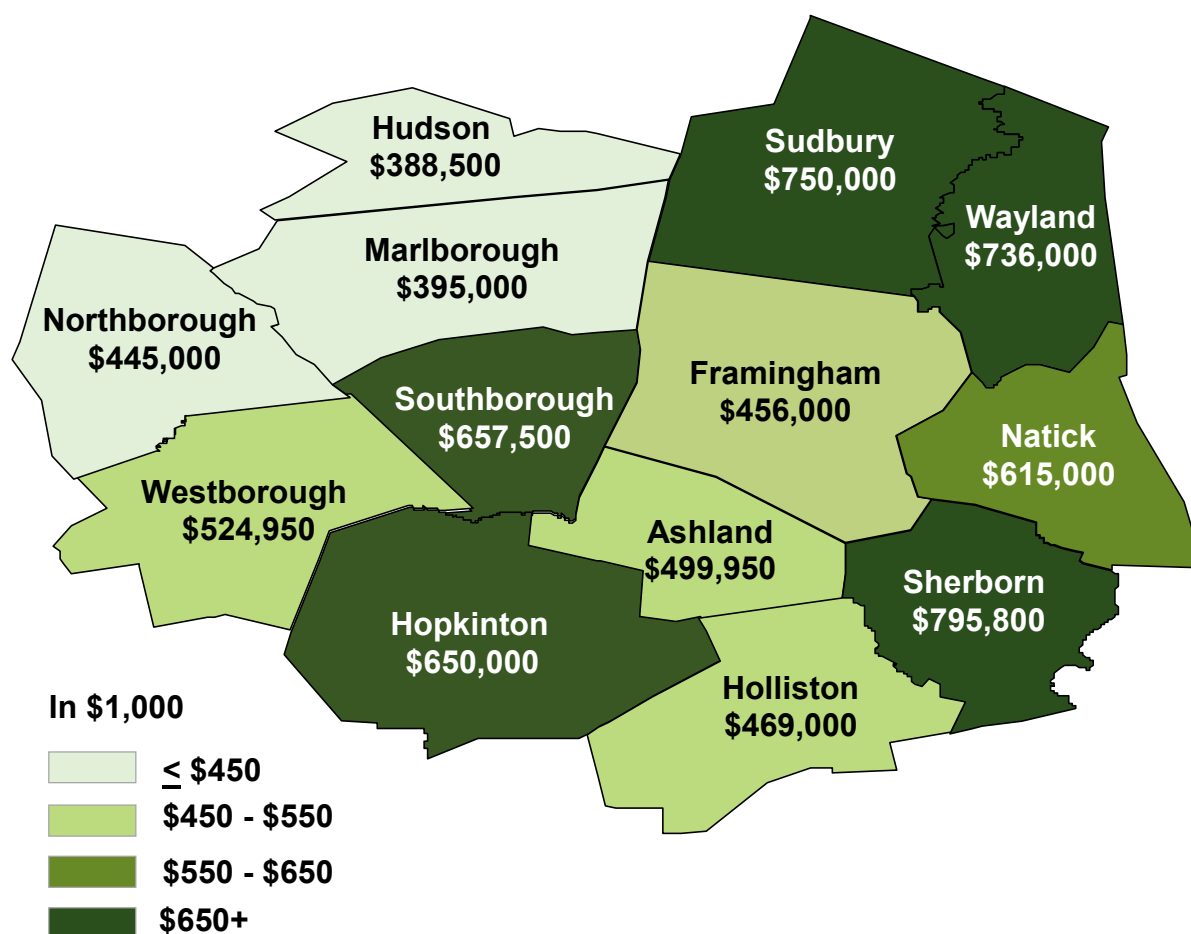


Source: The Warren Group and MERC

- The graph above shows the estimated median sale price of existing single family homes in Greater MetroWest (GMW) during the 31-year period from 1989 to 2019. Please note that these sales represent a different mix of homes sold each year and, therefore, do not reflect the changes in the value of individual homes.
- The data series reached a new peak in 2019 with an estimated median sale price of \$545,208 representing a 159.8% increase from the 1989 median sales price of \$209,839.
- The biggest one year increase from 2012 to 2018 occurred between 2017 and 2018, when prices were \$498,838 and \$535,329, respectively. This increase of over \$36,000 represents a 7.3% gain.
- The most recent low point for estimated median sales price in this region occurred in 2009 at \$381,134. There was a 43.0% increase from 2009 to 2019, during which the estimated median sale price increased by nearly \$165,000.

GREATER METROWEST – HOUSING

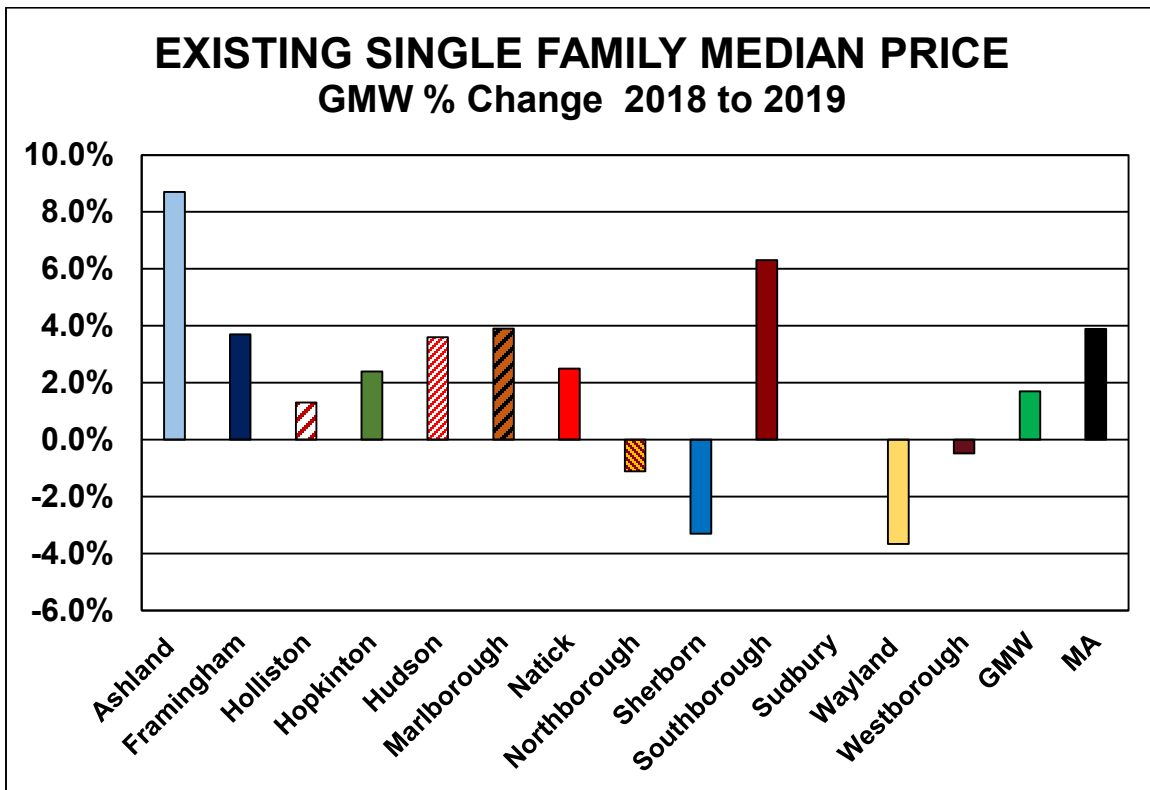
2019 EXISTING SINGLE FAMILY HOME PRICES GMW Communities



Source: The Warren Group and MERC

- The map above shows the 2019 median sale prices for existing single family homes in the 13 communities of Greater MetroWest (GMW). Median sale prices ranged from a low of \$388,500 in Hudson to a high of \$795,800 in Sherborn.
- Seven of the thirteen communities had median sale prices under \$550,000. Ashland, Framingham, Holliston, Northborough, and Westborough registered under \$550,000. Only Hudson and Marlborough posted median sale prices below \$400,000.
- Six communities had median sale prices above \$550,000. Natick came in at \$615,000. Hopkinton had a median sale price of \$650,000 and Southborough had a median sale price of \$657,500. Sherborn, Sudbury and Wayland posted the highest median sale prices at \$795,800, \$750,000, and \$736,000, respectively.

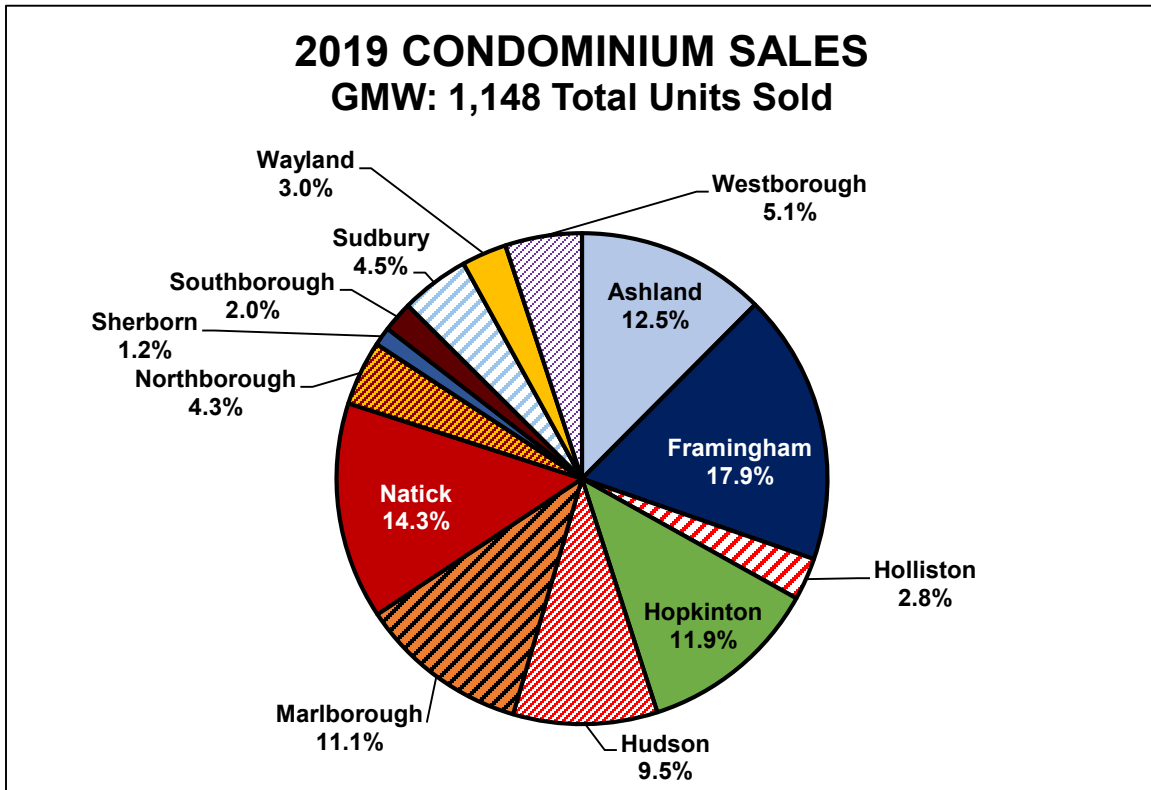
GREATER METROWEST – HOUSING



Source: Banker & Tradesman and MERC

- Nine of the thirteen communities experienced increases in median price between 2018 and 2019. Ashland recorded the largest percentage increase in median price at 8.7% from \$460,000 in 2018 to \$499,950 in 2019. Southborough had the second largest percentage increase of 6.3% from \$618,500 in 2018 to \$657,500 in 2019.
- Four of the thirteen communities experienced decreases in median prices between 2018 and 2019. Wayland recorded the largest percentage decrease in median price of 3.7% from \$764,000 in 2018 to \$736,000 in 2019. Sherborn had the second largest percentage decrease of 3.3% from \$823,000 in 2018 to \$795,800 in 2019.
- Sudbury was the only community in the GMW region to not experience any percentage change in median price between 2018 and 2019.
- From 2018 to 2019, Massachusetts experienced an increase of 3.9%, which is a higher percentage increase than ten of the communities in GMW and is 2.2 percentage points higher than the overall change in GMW.

GREATER METROWEST – HOUSING

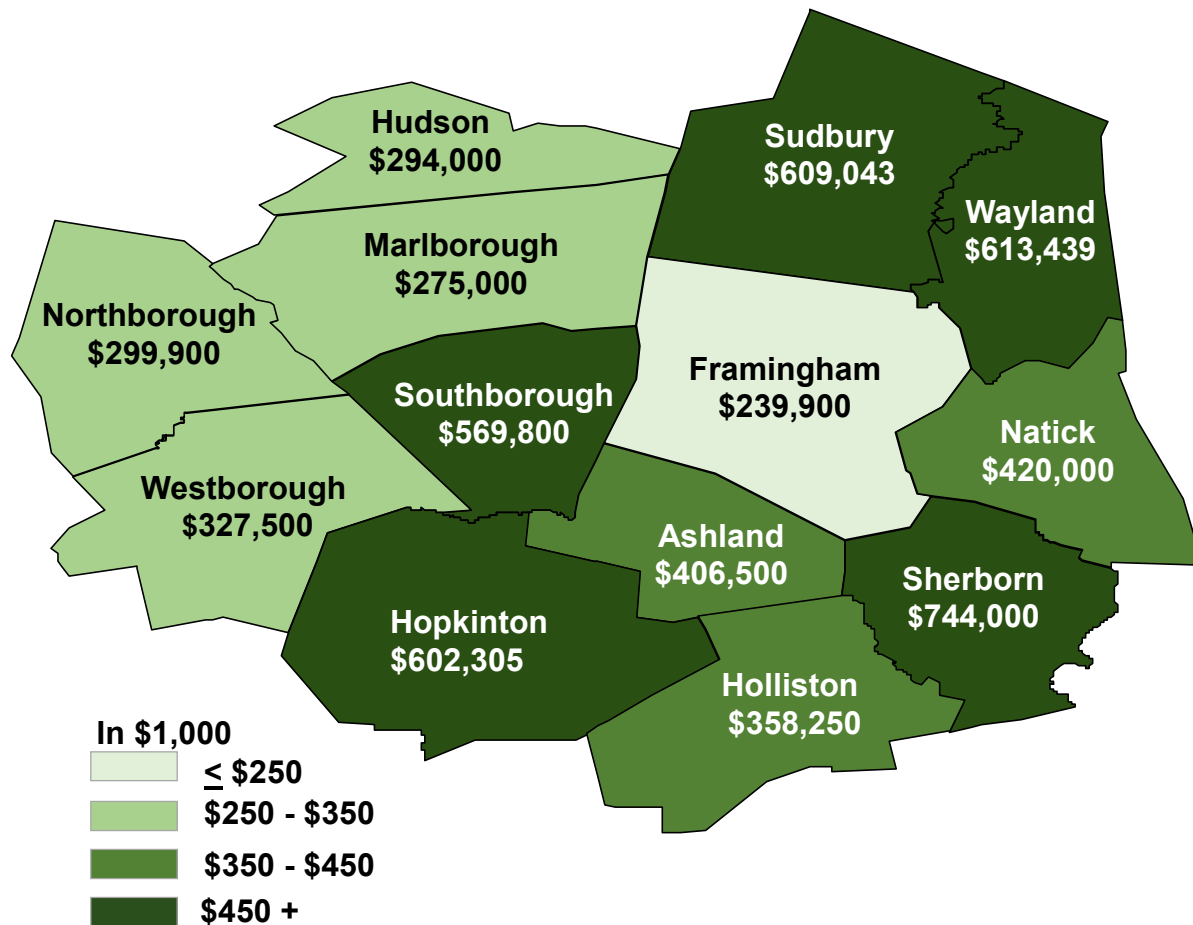


Source: The Warren Group and MERC

- In 2019, 1,148 condominiums were sold in the thirteen communities of Greater MetroWest (GMW); this is 104 units fewer than in 2018.
- Condo sales in six of the communities, Ashland, Framingham, Hopkinton, Hudson, Marlborough and Natick dominated the region making up 77.2% of the total units sold in GMW. Framingham contributed 17.9% to the region's sales. Ashland, Hopkinton, Hudson, Marlborough and Natick contributed 12.5%, 11.9%, 9.5%, 11.1%, and 14.3%, respectively.
- Holliston, Northborough, Sherborn, Southborough, Sudbury, and Wayland, each contributed 5.0% or less of total sales. Sherborn contributed the smallest number of sales with only five condominiums sold, which was about 1.2% of total condominium sales.
- The nine communities of MW combined for 70.0% and the four communities of GMR combined for 30.0% of the total condominium sales in GMW in 2019.

GREATER METROWEST – HOUSING

2019 CONDOMINIUM PRICES GMW Communities



Source: The Warren Group and MERC

- In 2019, the estimated median price for condominium sales in Greater MetroWest (GMW) was about \$389,606, an 8.4% increase from 2018.
- Only one community, Framingham, had a median condominium price under \$250,000. Framingham had the lowest median price in the region at \$239,900. Hudson, Marlborough, Northborough, and Westborough had median sale prices ranging between \$250,000 and \$350,000.
- Five communities had median condominium sale prices over \$450,000. In 2019, Sherborn and Wayland had the highest median condominium sale prices within the region at \$744,000 and \$613,439, respectively.
- Ashland, Holliston, and Natick each were between \$350,000 and \$450,000, additionally Westborough recorded a median condominium price of \$327,500 in 2019.

GREATER METROWEST – COST OF LIVING

MEASURING THE COST OF LIVING IN METROWEST

The MetroWest Economic Research Center (MERC) tracks the cost of living in the MetroWest¹ CCSA area by calculating the average cost of a “market basket” of 57 items that are representative of the items typically purchased by professional and executive households. The items in this “market basket” were selected by The Council for Community and Economic Research (C2ER - formerly ACCRA) based on a survey of consumer spending patterns done by the U.S. Bureau of Labor Statistics. The 57 items are grouped into six categories: grocery items, housing, utilities, transportation, health care and miscellaneous goods and services.

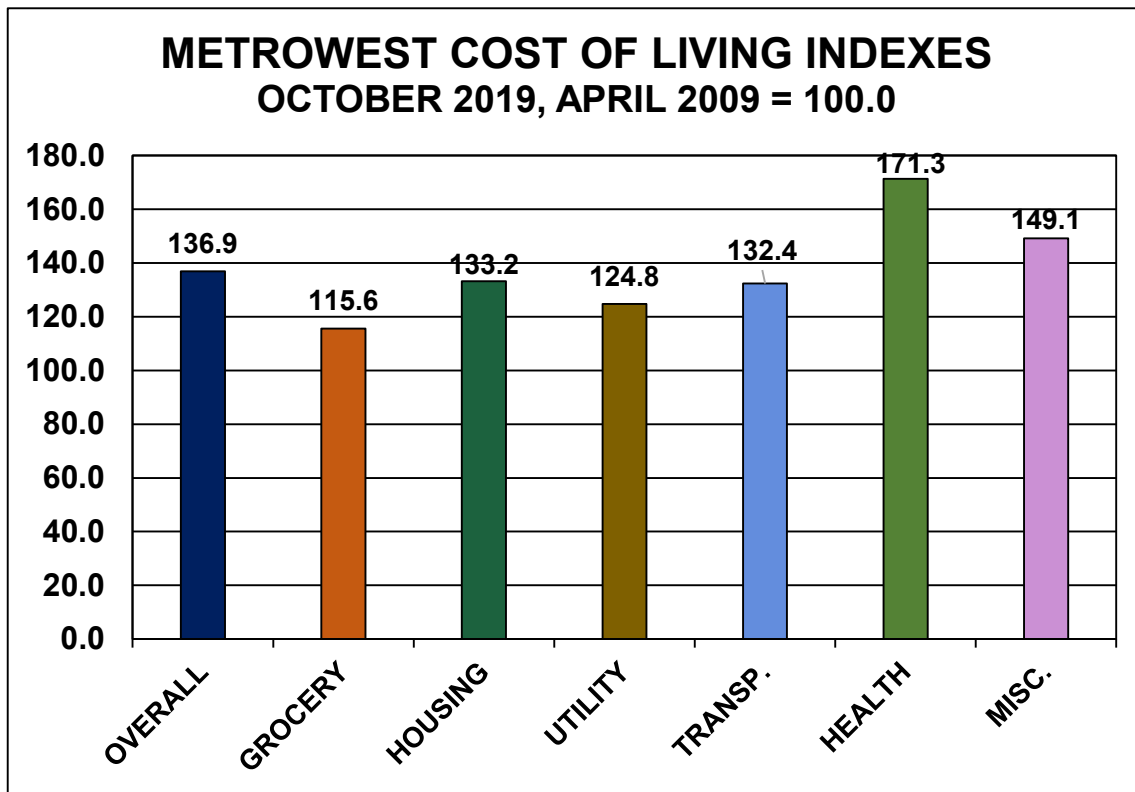
During each survey period, MERC gathers data on the prices of these items from over 100 businesses in the MetroWest area and calculates the average price of each item. These average prices are then used to calculate an index for each of the six categories mentioned above and, from them, the overall cost of living index for the area. When calculating each sub-index, every item is assigned a weight that reflects the relative importance of the item in that category of goods and services. The overall cost of living index is then a weighted average of the six sub-indexes, with the weights here reflecting the relative importance of each of the six sub-groups in the overall cost of living. The weights, like the items in the “market basket”, are also determined by C2ER based on the information obtained in the Bureau of Labor Statistics survey mentioned previously. Please note that the MERC indexes have been revised since last year’s conference.

In addition to using this data to track the cost of living in MetroWest over time, MERC also sends its survey results to C2ER to be included in that group’s survey of living costs across the nation. The data from MetroWest are combined with the same data from approximately 300 other U.S. communities to calculate the overall average cost of the “market basket” of goods and services. C2ER calls this the “national average” and then calculates a cost of living index (still called the ACCRA index) for each community as a percentage of this national average. The overall index for each city or town is also broken down into the same six sub-indexes described above and is calculated using the same weighting process. These results make it possible to compare living costs in different areas across the country.

Because these indexes are calculated from the prices of a relatively small sample of the many goods and services which middle-management households actually purchase, they are only estimates of the true cost of living in any given area. As with any figure calculated from sample data, there is a margin of error in the estimate. Since the items in the “market basket” were not randomly chosen, however, it is not possible to calculate exactly what that margin of error is. In its literature, C2ER suggests that small differences in these indexes (up to 3 or 4 percentage points) do not necessarily mean that differences in the true cost of living actually exist.

¹ MetroWest CCSA includes the towns of Ashland, Framingham, Holliston, Hopkinton, Natick, Sherborn, Southborough, Sudbury, and Wayland

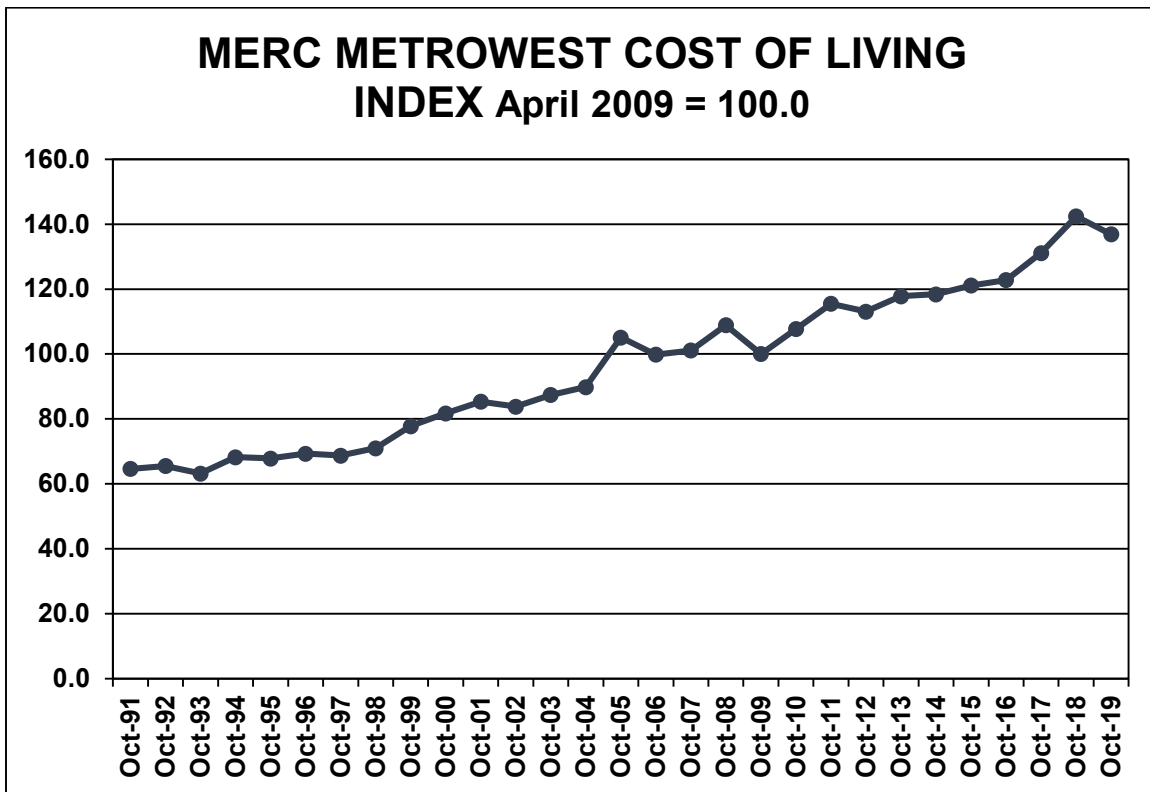
GREATER METROWEST – COST OF LIVING



Source: MERC

- The MERC Overall Cost of Living Index for the MetroWest Region was 136.9 in October 2019. This indicated that the Cost of Living in MetroWest was roughly 37% higher in October 2019 than it was in April 2009. This is roughly a 3.9% decrease from October of last year.
- The Health Care Index had a significantly higher value than the other Indexes, 171.3, in October 2019. This implies that in October 2019 health care costs were over 70% higher than they were in April 2009. The Index was, on the other hand, up about 5.8% from its value only a year earlier in October 2018.
- The Index with the lowest value was the Groceries Index, with a value of 115.6, over 15% higher than in April 2009, but about 6.4% lower than October 2018.
- Not one of the Indexes in the MetroWest Region fell below the April 2009 base year of 100.0.

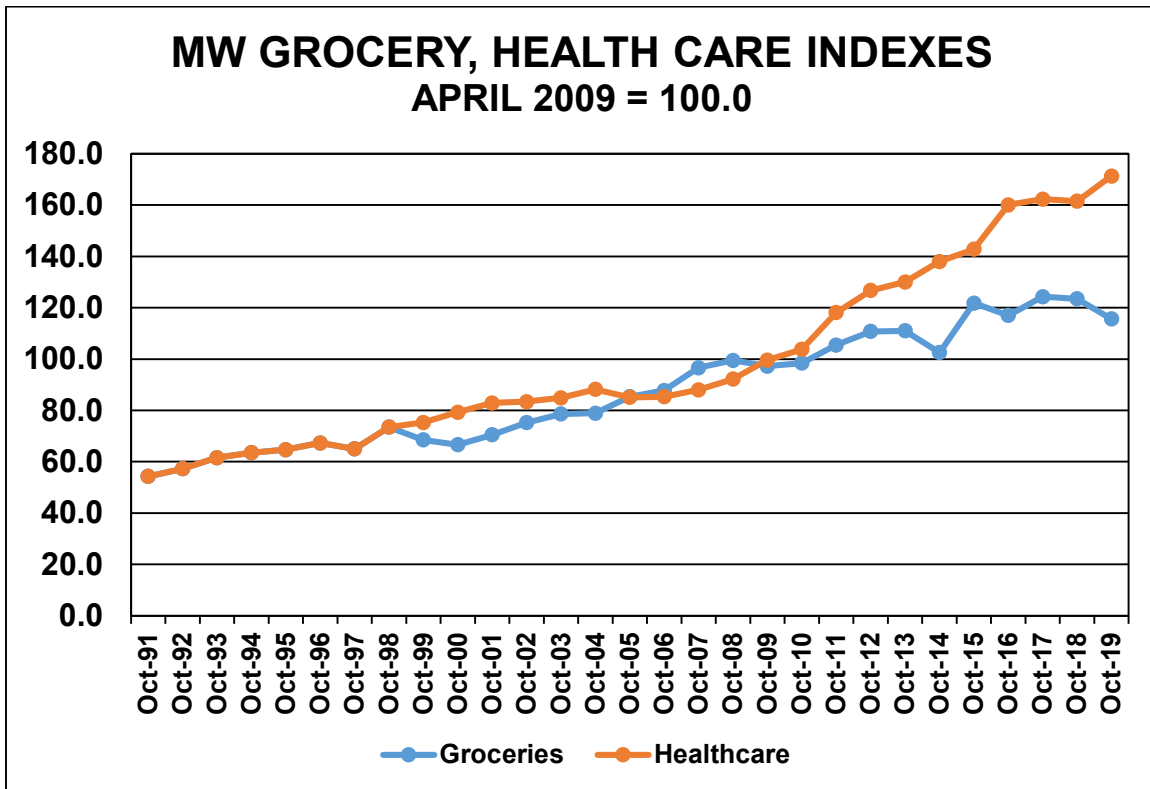
GREATER METROWEST – COST OF LIVING



Source: MERC

- This graph shows the values of the MERC Overall Cost of Living Index from October 1991 to October 2019. April 2009 is the base period for the Index. Its value in April 2009 was 100.0.
- From October 2018 to October 2019, the MERC MetroWest Cost of Living Index decreased 3.8% to a value of 136.9 from a high of 142.4 in October 2018.
- The Overall Index had an average annual increase of about 2.62% from October 1991 to October 2019.
- The largest 12-month increase was a 17% rise in the index between October 2004 and October 2005. The largest 12-month fall in the Index was immediately following this increase between October 2008 and October 2009, a 8.2% decrease.
- Since 1991, the MERC Cost of Living Index has increased from a value of 64.6 to 136.9. This is a 112% increase over the 29-year span.

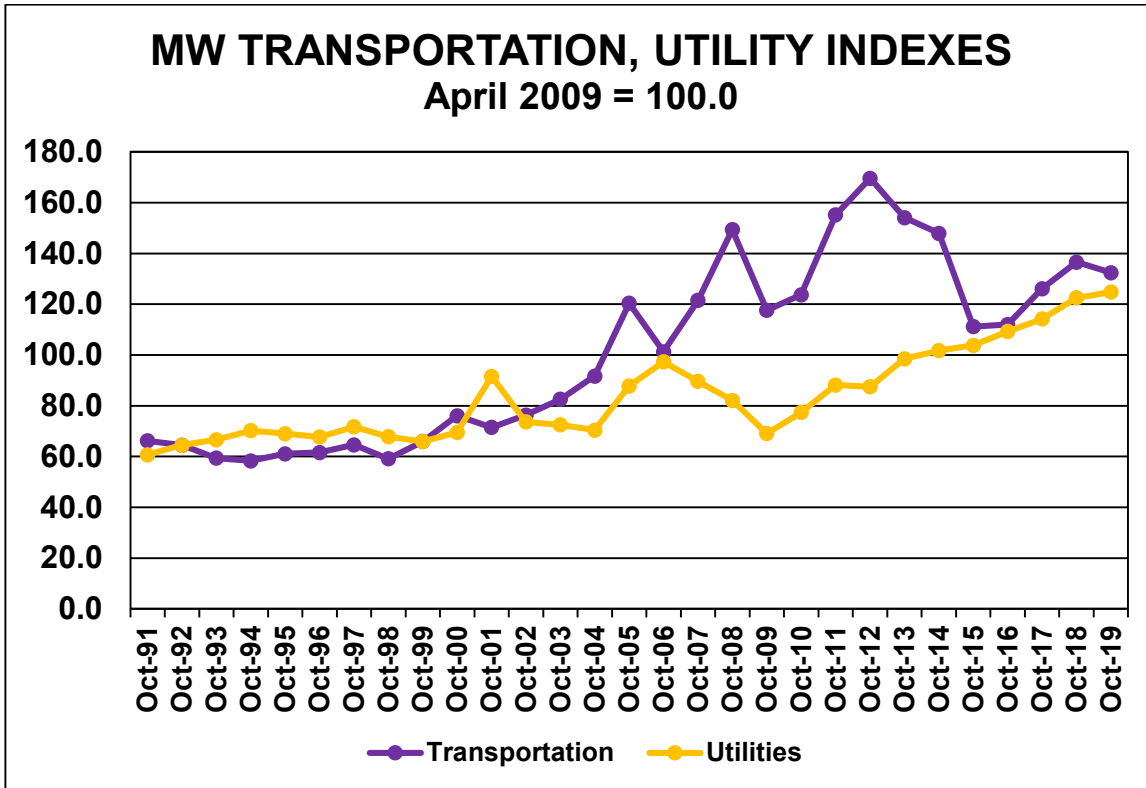
GREATER METROWEST – COST OF LIVING



Source: MERC

- Over the 28 years between October 1991 and October 2019, the Health Care Index rose at a steady rate and had less volatility than almost all of the other Indexes.
- The Health Care Index rose approximately 10 index points between October 2018 and October 2019, or 6.1%
- The Grocery Items Index, on the other hand, decreased by about 6.4% between October 2018 and October 2019, having gone from a value of 123.5 to 115.6.
- In October 2019, the Health Care Index was the highest of the six sub-indexes with a value of 171.3.
- The Grocery Items Index was the lowest of the six sub-indexes with a value of 115.6. These values are referenced to the base period of April 2009, when the Index equaled 100.0.

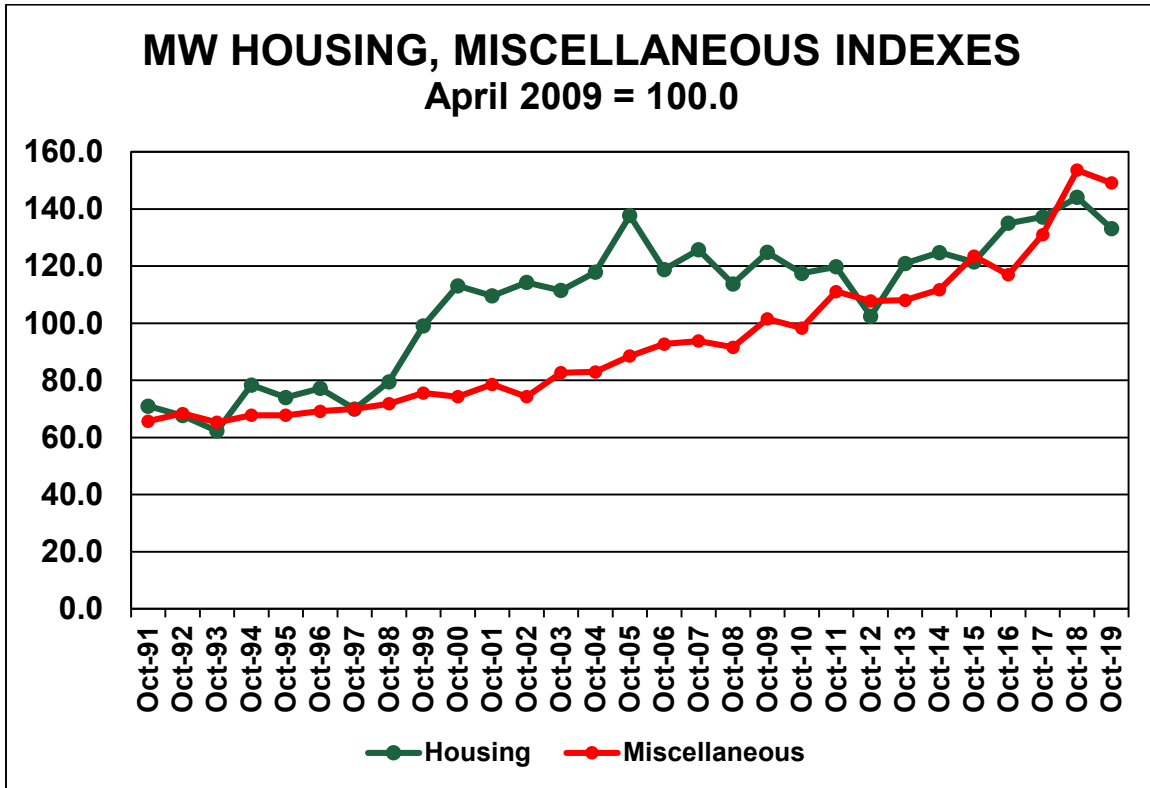
GREATER METROWEST – COST OF LIVING



Source: MERC

- For the first 15 years until October 2006, the Transportation Index and the Utility Index fluctuated in similar patterns. After 2006, the Index fluctuations began to diversify; the Transportation Index experienced a trough in 2006 and a peak in 2008, while the Utility Index experienced a peak in 2006 and a trough in 2009. This pattern continued for eight more years.
- The Transportation Index has continually been the most volatile of all Indexes, particularly from around October 2004 through October 2019.
- Between October 1991 and October 1999, the Transportation Index only rose about 1.8 points. Since then, the Index more than doubled, reaching an all-time high of 174.4 in April 2012; April 2009 being the base period with a value of 100.0.
- Since the all-time high of 174.4 in April 2012, the Transportation Index fell to a value of only 112.0 in October 2016; a decrease of approximately 36% in 4 years. As of October 2019, the Transportation Index now has a value of 132.4.

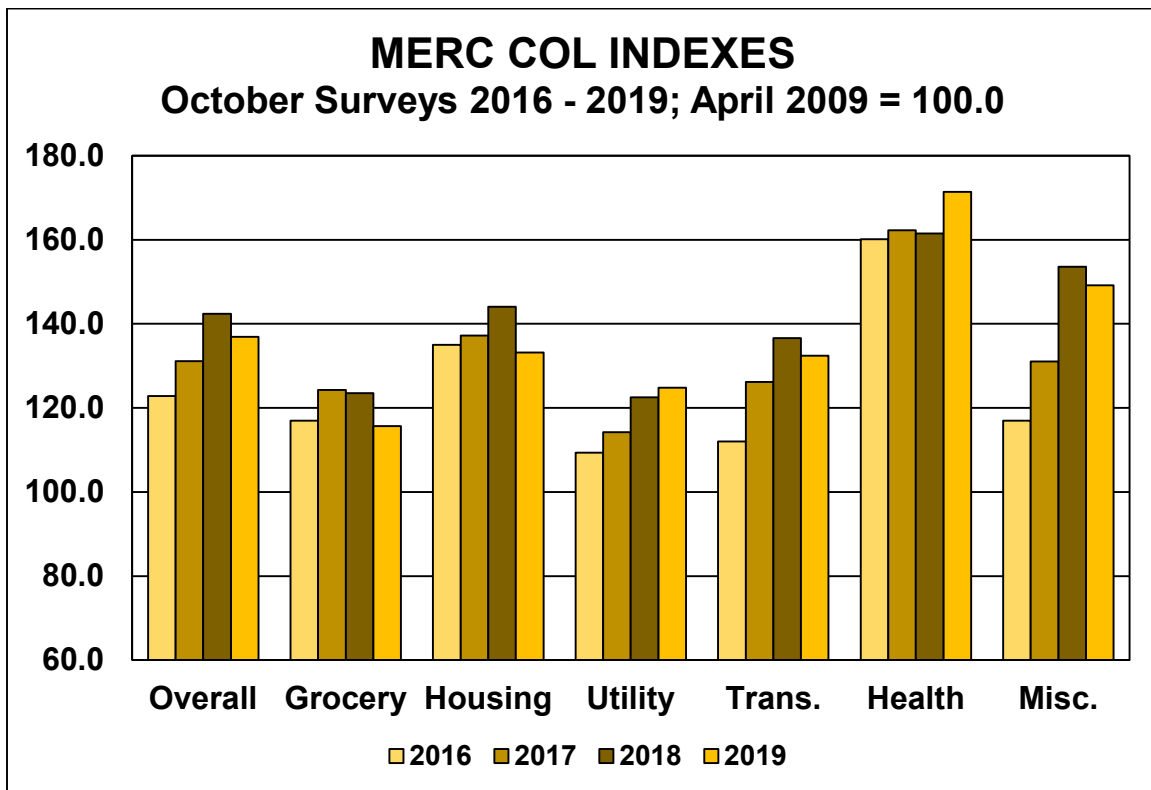
GREATER METROWEST – COST OF LIVING



Source: MERC

- The Housing Index had a value of 133.2 in October 2019. This means that housing costs in MetroWest were approximately 33% higher in October of 2019 than the base period in April 2009.
- The Housing Index reached its peak in October 2018 with a value of 144.1. The Miscellaneous Goods and Services Index also reached its peak in October 2018 with a value of 153.6.
- In October 2019, both the Housing Index and Miscellaneous Goods and Services Index saw slight decreases from October 2018. The Housing Index was 133.2, a 7.6% decrease from October 2018; and the Miscellaneous Goods and Services Index was 149.1, a 2.9% decrease from October 2018.
- From October 2017 to October 2018, the Miscellaneous Goods and Services Index recorded one of its largest increases at 17.3%, increasing from 131.0 to 153.6.

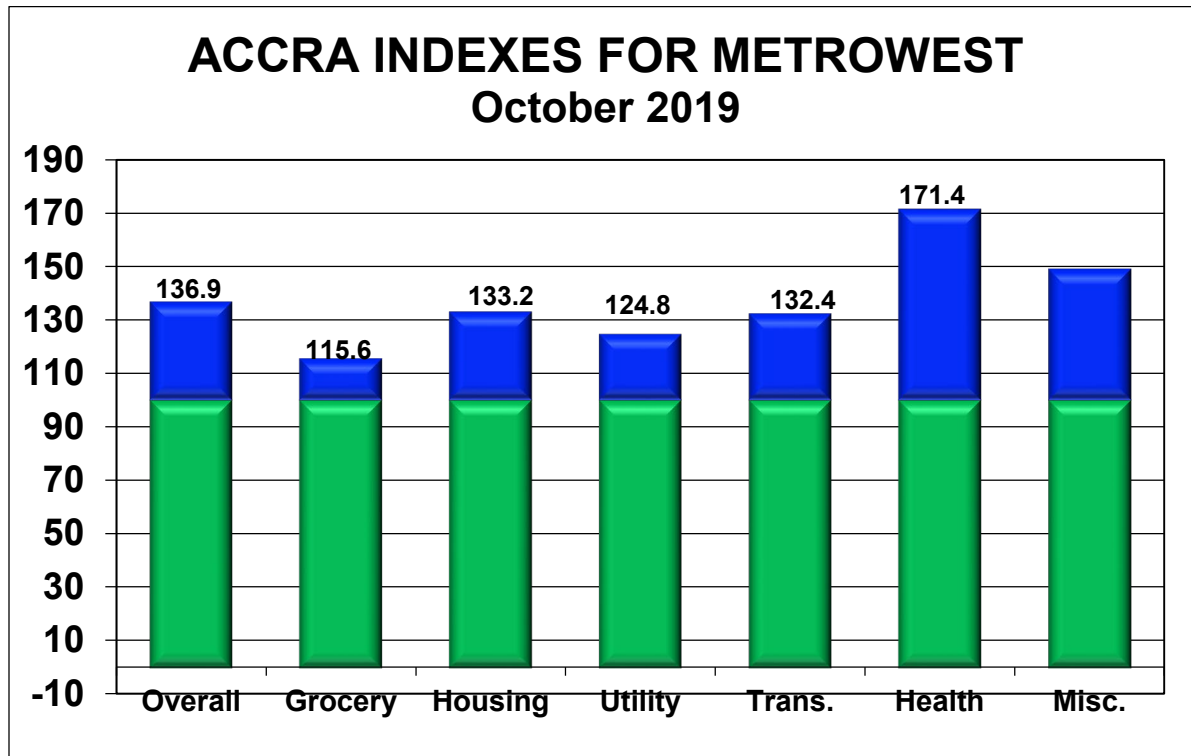
GREATER METROWEST – COST OF LIVING



Source: MERC

- The graph shows all of the indexes from the October surveys of each year, from 2016 to 2019. The base period for all the indexes is April 2009, at which time each index had a value of 100.0.
- The general trend is that the indexes grow larger each year. However, the most recent survey conducted in October 2019 showed a decrease of 3.9% from October of 2018.
- In the October 2019 survey, the Grocery, Housing, Transportation, and Miscellaneous Goods and Services Indexes all reported decreases ranging from 2.9%-7.6% from October 2018.
- The Housing Index reported the greatest annual decrease in October 2019, a decrease of 7.6% from October 2018. The Health Care Index reported the greatest annual increase from October 2016 of 12.1%.

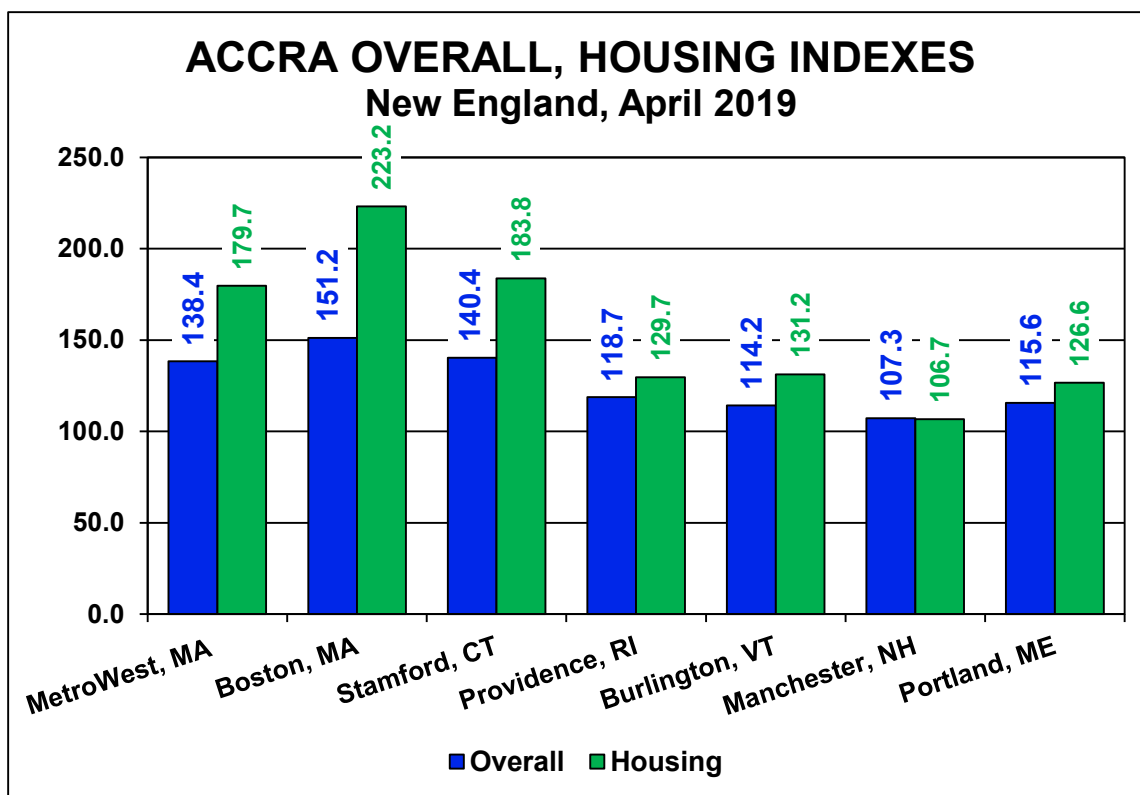
GREATER METROWEST – COST OF LIVING



Source: C2ER and MERC

- In the graph above, the green segment of each bar represents the national average cost of living, which is normalized to 100.0. In October 2019, the ACCRA Overall Cost of Living Index for MetroWest was 136.9; about 36.9% above the national average.
- All of the sub-indexes were higher than the national average; this has been consistent throughout almost every ACCRA report since MERC began participating in 1991.
- The Healthcare Index was the highest of six sub-indexes with a value of 171.4. This means that the price of healthcare in MetroWest was almost 75% above the national average.
- The Grocery Items Index had the lowest value of all six sub-indexes with a value of 115.6, still over 15% higher than the national average. It was followed by the Utilities Index at 124.8.
- Health Care was the only sub-index greater than the Overall Index.

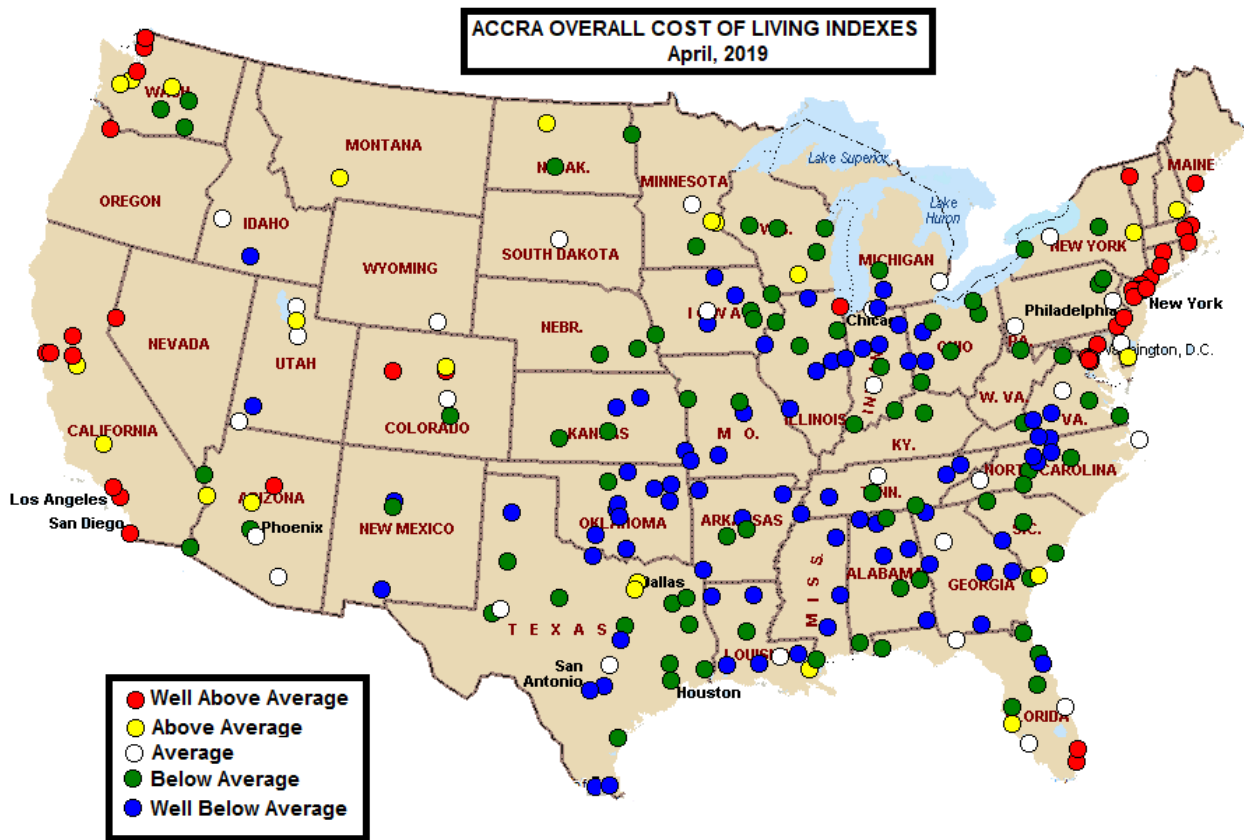
GREATER METROWEST – COST OF LIVING



Source: C2ER and MERC

- The graph above shows the Overall Cost of Living Indexes (in blue) and the Housing Indexes (in green) for MetroWest, Boston, and five other New England communities that participated in the April 2019 C2ER survey. Every area had both Overall and Housing Indexes greater than the national average.
- Among the eight areas studied in the graph above, Boston, MA had the highest Overall Index and the highest Housing Index in April 2019. The Overall Index had a value of 151.2, signifying that living in Boston, MA was roughly 51% more expensive than the national average. Boston's Housing Index had a value of 223.2; housing costs in Boston were 2.2 times the national average.
- The lowest Overall Index value for the selected New England communities belonged to Manchester, NH. However, even having the lowest value of the seven areas, it still recorded a value 7% greater than the national average.
- In all of the New England communities surveyed, aside from Manchester, NH, the Housing Index was higher than the Overall Index; suggesting that the cost of housing is a significant contributor to the high cost of living in the region.

GREATER METROWEST – COST OF LIVING

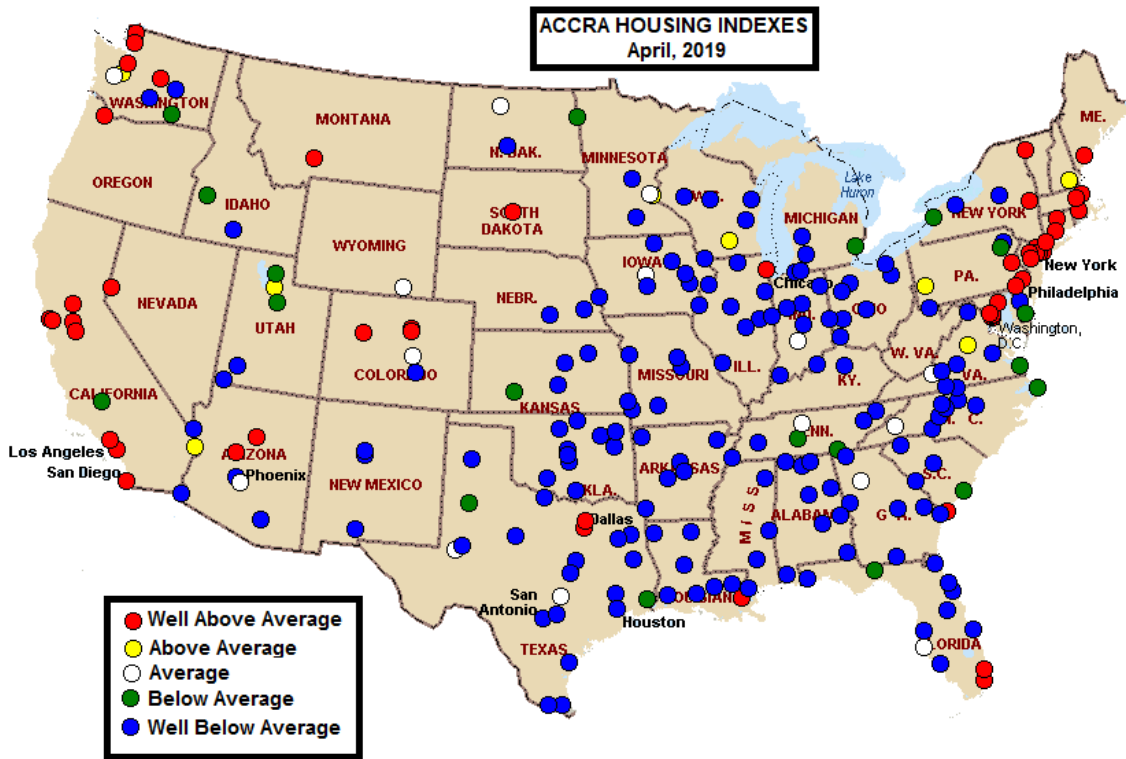


Source: C2ER and MERC

- In April of 2019, the participating communities with the highest living costs (red dots) were mostly located in the Northeast. Manhattan, NY (242.5) had the highest Overall Index, 2.4 times the national average. It was followed by San Francisco, CA (201.7) and Honolulu, HI (191.4). Boston ranked 9th at 151.2 and MetroWest ranked 17th at 138.4.
- Harlingen, TX had the lowest Overall Index in April 2019 with a value of 73.8, implying that the overall cost of living in Harlingen was more than 25% below the national average. The next two lowest Overall Indexes were observed in McAllen, TX and Kalamazoo, MI, both recording an Overall Index value of 78.5 and 77.0, respectively.
- Seventy-eight of the 254 communities (30.7%) had Overall Indexes below 90.0 (represented by blue dots), while 44 of 254 communities (17.3%) had Overall Indexes greater than 110.0 (represented by red dots).

Note: The Overall ACCRA Index was used for this classification. Average means that the index was between 97.0 and 103.0; Above Average is an index between 103.1 and 110.0; Well Above Average is an index higher than 110.0. A community with an index below 90.0 is classified as Well Below Average, while Below Average is an index between 90.0 and 96.9.

GREATER METROWEST – COST OF LIVING



Source: C2ER and MERC

- The Housing Indexes from the April 2019 survey exhibited a similar pattern to that seen in the Overall Indexes. The highest housing costs are mostly seen in the Northeast and on the West Coast, with some scattered in the Midwest.
- The highest Housing Index was 506.9 in Manhattan, NY, implying that housing costs in Manhattan are over five times the national average. The next highest indexes were San Francisco, CA (371.7) and Brooklyn, NY (332.2). Boston ranked 10th at 223.2, and MetroWest ranked 18th at 179.7.
- The lowest Housing Index was found in Kalamazoo, MI (53.3), over 45% lower than the national average. The next two lowest Housing Indexes were Joplin, MO and Decatur, AL, both recording an Index value of 57.1.
- Fifty-six of 254 communities (22.0%) had indexes greater than 110.0; well above the national average. The majority of the communities in the survey had indexes well below the national average: 156 of 254 communities (61.4%) had Housing Indexes below 90.0 (represented by the blue dots).

Note: The Overall ACCRA Index was used for this classification. Average means that the index was between 97.0 and 103.0; Above Average is an index between 103.1 and 110.0; Well Above Average is an index higher than 110.0. A community with an index below 90.0 is classified as Well Below Average, while Below Average is an index between 90.0 and 96.9.

GREATER METROWEST – MUNICIPAL REVENUE

MUNICIPAL REVENUE

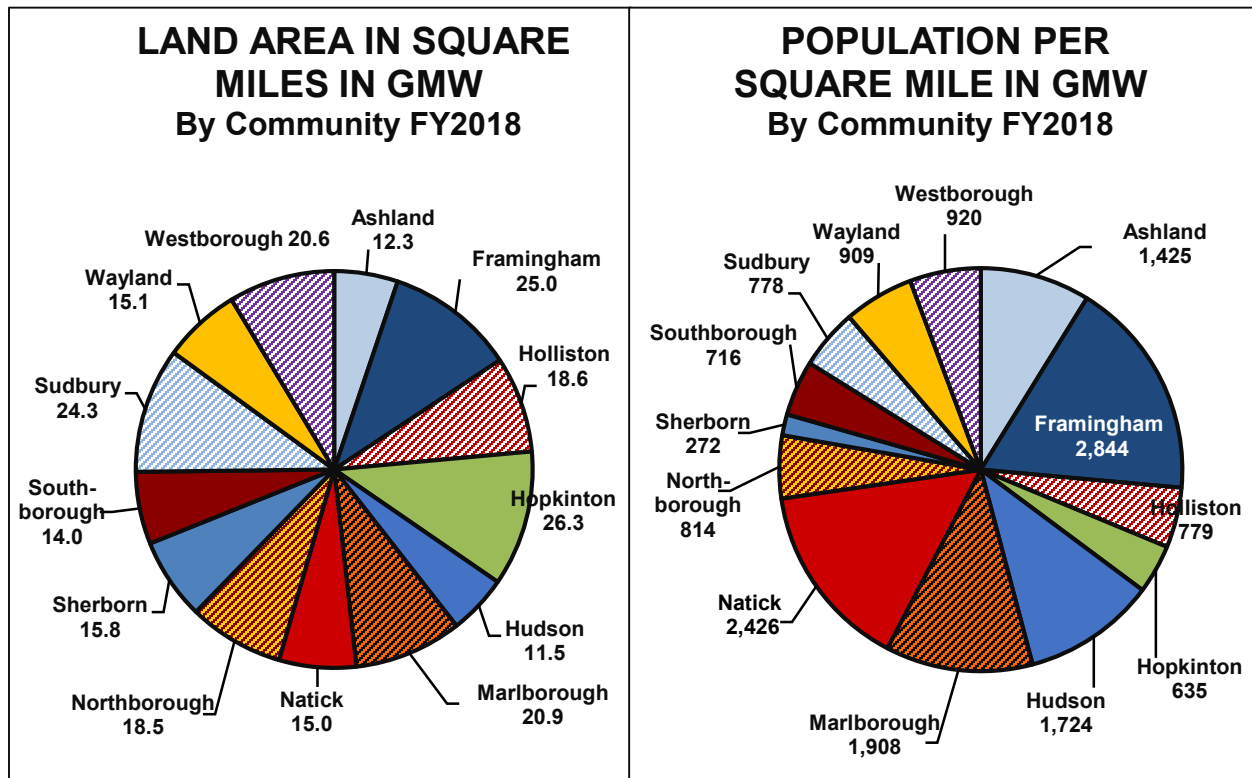
Municipalities report budgeted revenue, actual revenue and actual expenditures to the Massachusetts Department of Revenue (DOR), Division of Local Services (DLS) on form Schedule A which includes a tax recapitulation report. The DLS of the DOR prepares several analyses from these reports. The MetroWest Economic Research Center (MERC) at Framingham State University uses the underlying information as well as DLS reports to prepare analyses for the local region.

Unless otherwise stated, revenue presented in this report represents budgeted revenue reported to the Massachusetts Department of Revenue, Division of Local Services by the respective municipalities. It consists of the total tax levy, state aid, local receipts and an “all other” category. The tax levy consists of assessments on personal property, industrial, commercial, open space, and residential real estate. Personal property includes furnishings of second homes and some inventories and equipment of unincorporated businesses. On-site vehicles of utility companies are generally included in this category as well. State aid is earmarked as state aid for education and state aid for general government. Local receipts include motor vehicle excise taxes, licenses and charges for services. The “all other” category includes free cash and other available funds. Budgeted revenue and actual revenue differ very little.

Tax levies are subject to limitations imposed by related legislation. In any given year, the tax levy cannot exceed 2½ percent of the total assessed value of the property of the community. In addition, the tax levy cannot increase by more than 2½ percent of the prior year tax levy limit plus new growth without voter approval of an operating budget override or a debt exclusion override. An operating budget override constitutes a permanent adjustment to the tax levy base that is used for subsequent year calculation limits while a debt exclusion override is in effect only for the life of the bond for which it was approved. It does not become a permanent adjustment to the tax levy base. Individual communities are also able to determine the extent to which property taxes will be borne by residential taxpayers or commercial and industrial (C&I) taxpayers. Some communities choose to tax residential, commercial and industrial property at the same rate while others use split rates. Personal property is generally taxed at C&I rates imposed by the respective community.

With the residential exemption, the tax burden shifts within the residential class from owner-occupied, and relatively lower valued properties, to relatively higher valued ones and to those not eligible for the exemption, such as vacant land, rental properties and seasonal homes. The small commercial exemption is a similar shift within the class in that it excludes a percentage of the assessed value of each eligible parcel. It covers commercial real property valued at less than \$1 million that is occupied by certified small business (10 or fewer employees).

GREATER METROWEST – MUNICIPAL REVENUE

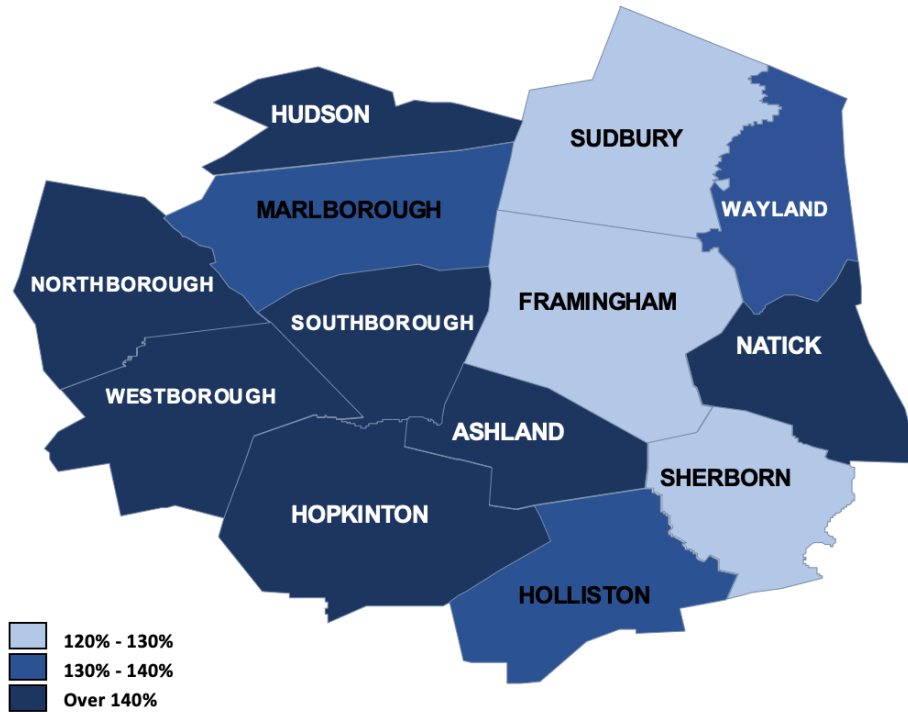


Source: MA Department of Revenue, DLS, and MERC

- The chart on the left panel reflects the size of each community as a share of the total Greater MetroWest (GMW) region in square miles while the chart on the right panel represents the density (population per square mile) for each community. The GMW communities comprise an area of about 237.8 square miles. Hopkinton is the largest community in GMW in square miles and account for 26.3 square miles, followed by Framingham (25.0) and Sudbury (24.3). The size of the remaining nine communities fell between 11.5 square miles in Hudson and 20.6 in Westborough.
- The chart on the right represents the density (population per square mile) for each community. The most dense communities are Framingham (2,844), Natick (2,426) and Marlborough (1,908), followed closely by Hudson (1,724) and Ashland (1,425). The least dense communities were Sherborn (272) followed by Hopkinton (635). The remaining communities in GMW fell between 716 individuals per square mile in Southborough and 920 in Westborough. The average density for GMW was 1,248 individuals per square mile and 766 for MA.
- As shown on the right panel, the population density varies considerably across the thirteen communities. Although a community may have a large land area, such as Hopkinton at 26.3 square miles, the population density is only 635 individuals per square mile; compare this to Framingham at a smaller land area of 25.0 square miles and a larger population density at 2,844 individuals per square mile.

GREATER METROWEST – MUNICIPAL REVENUE

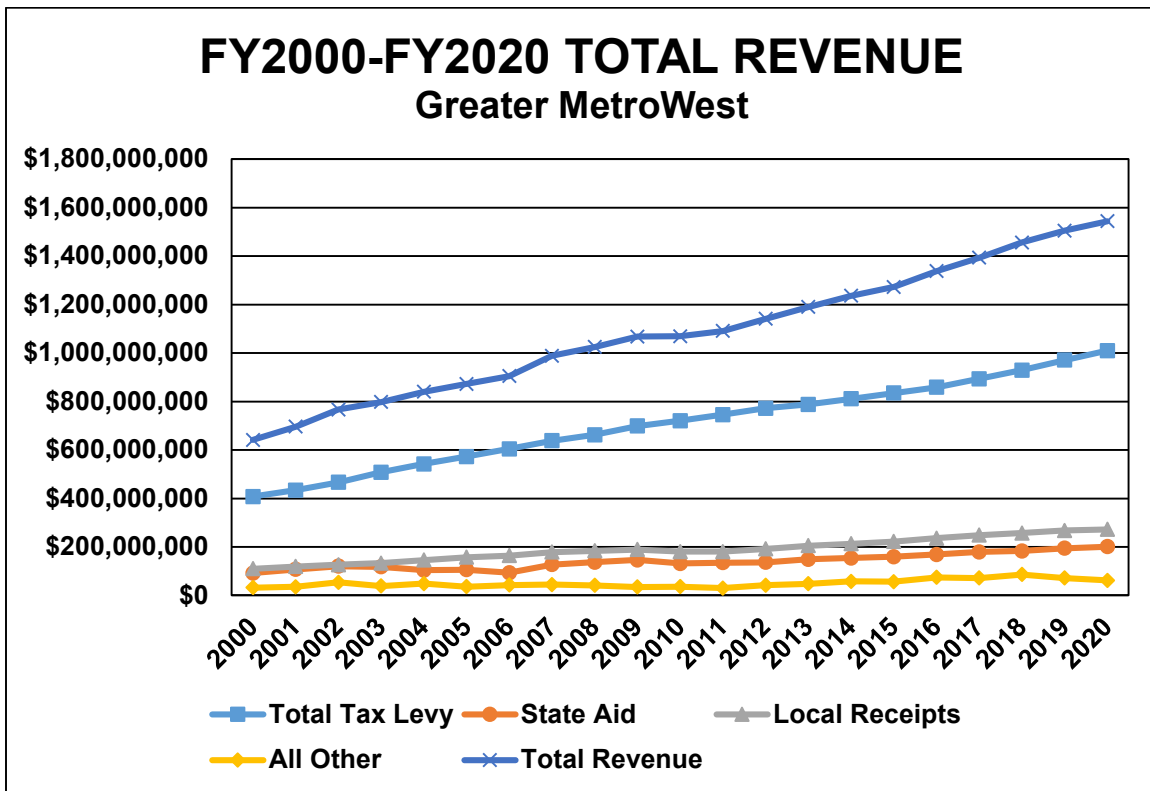
GMW GROWTH IN MUNICIPAL REVENUE FY 2000 – FY 2020



Source: MA Department of Revenue, DLS, and MERC

- This map reflects municipal revenue growth in Greater MetroWest (GMW) from FY2000 to FY2020. Thirteen communities are color coded into the following three intervals: 120%-130%, 130%-140%, and over 140%.
- In FY2000 total revenue for GMW was \$641.3 million and has since increased by \$863.4 million in FY2020 to a total of \$1.5 billion. This is an increase of 140.8%. Only three communities in the GMW area: Wayland, Marlborough and Southborough, showed growth rates of 130%-140%. Three other communities – Sudbury, Framingham, and Sherborn – fell in the 120%-130% growth interval. The remaining seven communities were in the over 140% bracket.
- In FY2020, Hopkinton had the largest growth rate among all the communities at 196.0%. This was followed by Northborough (162.7%), Southborough (160.3%) and Ashland (160.0%).

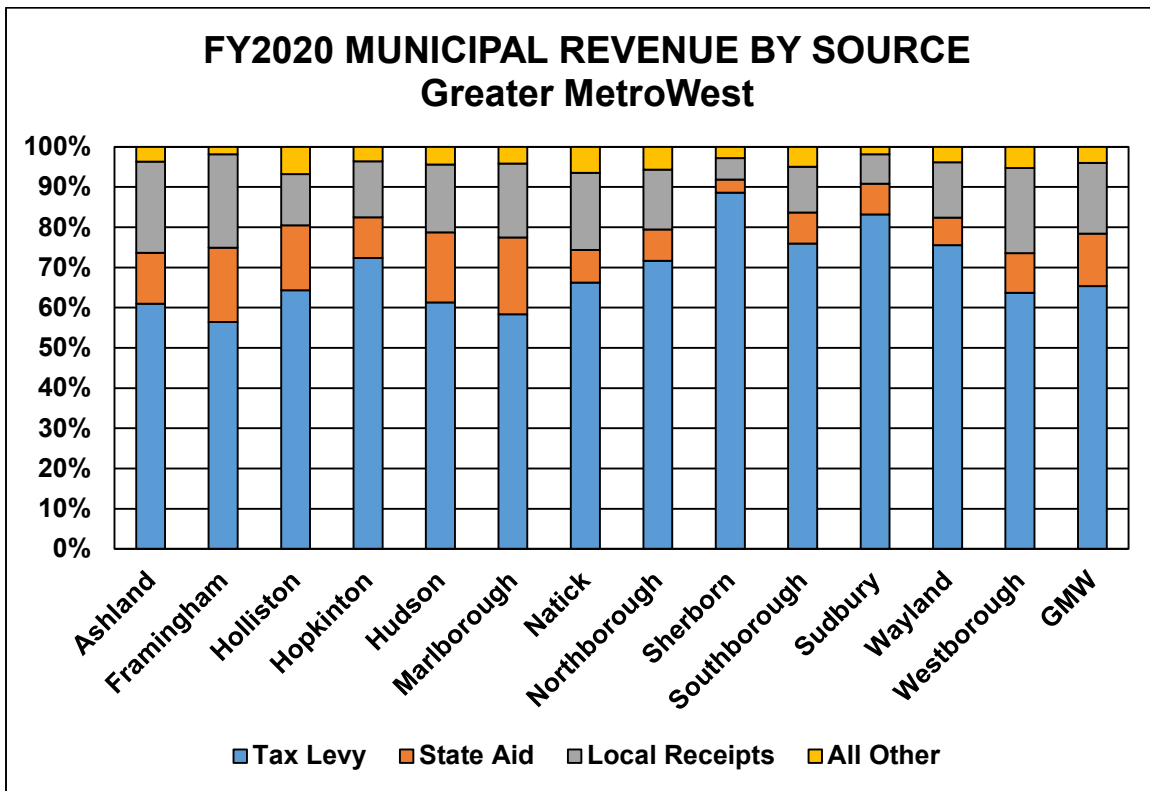
GREATER METROWEST – MUNICIPAL REVENUE



Source: MA Department of Revenue, DLS, and MERC

- Total Revenue for Greater MetroWest (GMW) for FY2020 was approximately \$1.54 billion. This has increased 140.8% from \$641.3 million in FY2000.
- The Total Tax Levy continued to increase from FY2000 through FY2020; starting with a total of \$407.8 million and reaching just over \$1 billion, an overall increase of 147.6%.
- Unlike Total Tax Levy, State Aid had several years of decreasing totals. Overall, it increased from \$91.8 million in FY2000 to \$200.8 million in FY2020, or an increase of 118.7%.
- Similar to State Aid, Local Receipts also fluctuated over the years. The FY2000 total was \$110.0 million, rounding off at \$272.1 million in FY2020 and showing a 147.4% increase. Local Receipts was the second biggest revenue contributor to the GMW region. The last category “All Other” is the smallest contributor of revenue to the GMW region, never surpassing the \$100 million mark from FY2000 to FY2020. It increased from \$31.7 million to \$61.6 million, which represents 94.4% growth.

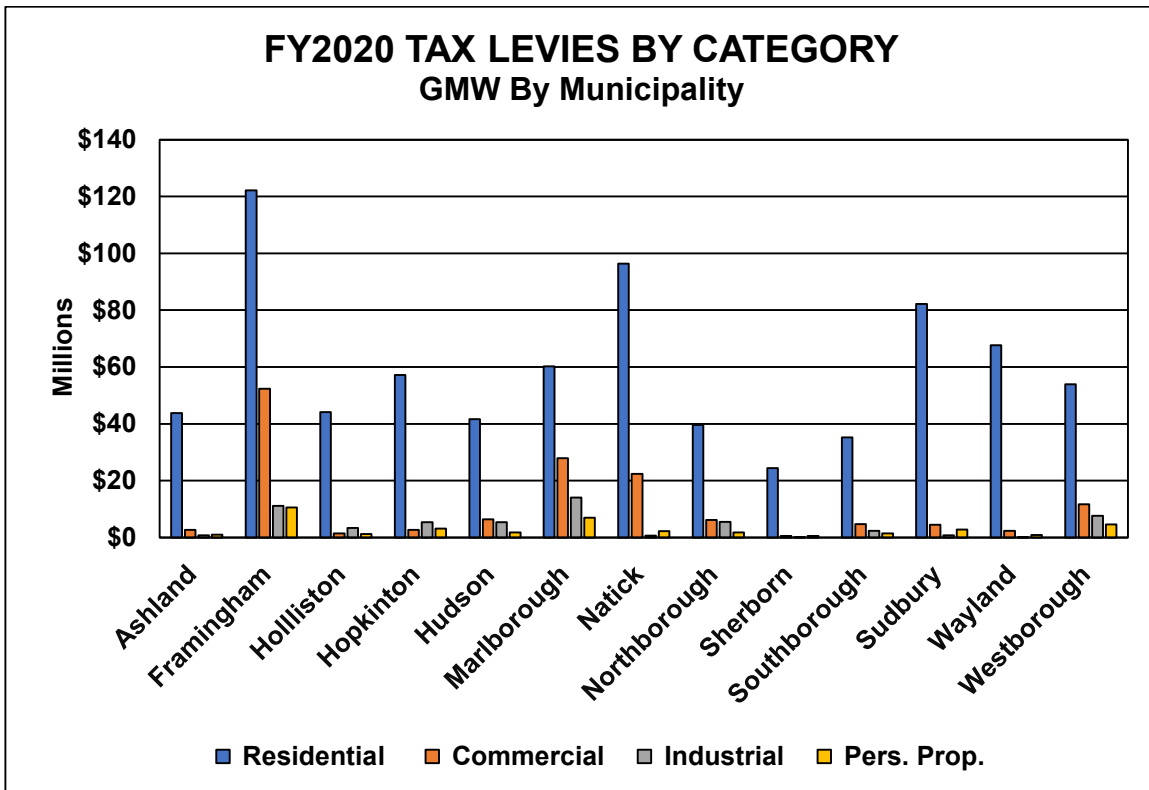
GREATER METROWEST – MUNICIPAL REVENUE



Source: MA Department of Revenue, DLS, and MERC

- In FY2020, the total municipal revenue for the Greater MetroWest (GMW) totaled \$1.54 billion from four different sources. The sources that make up municipal revenue are as follows: Tax Levy, State Aid, Local Receipts, and “All Other.”
- Total Tax Levy was the main source of revenue for each of the thirteen communities that make up GMW. Framingham has the smallest percentage of revenue coming from tax levy at 56.4% and Sherborn has the highest at 88.6%. The average tax levy for the region was 65.4%.
- State Aid and Local Receipts recorded averages of 13.0% and 17.6% for the region. State Aid ranged from 19.1% in Marlborough to 3.3% in Sherborn. Local Receipts’ highest percentage came from Framingham at 23.2% and their lowest percentage came from Sherborn at 5.3%. Of the four different revenue sources, “All Other” contributed the smallest amount with the average of the region at 4.0%.

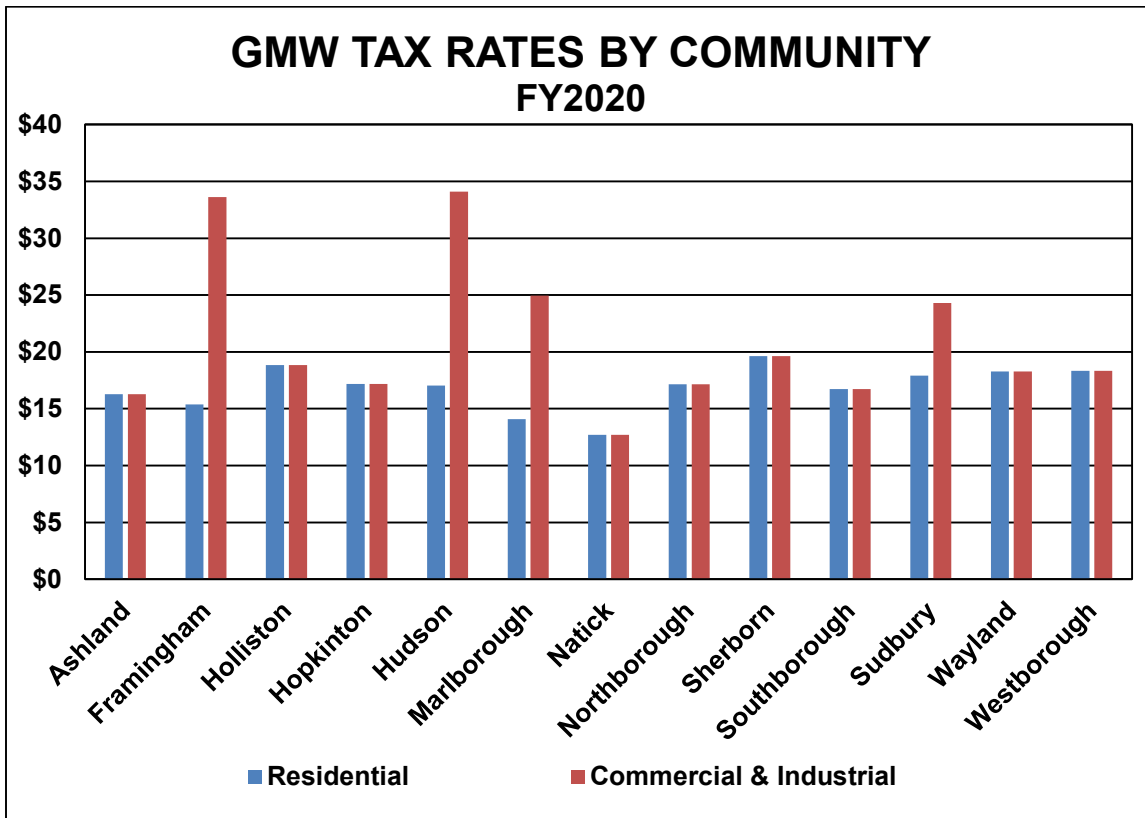
GREATER METROWEST – MUNICIPAL REVENUE



Source: MA Department of Revenue, DLS, and MERC

- Total tax levy consists of four components as follows: Residential, Commercial, Industrial, and Personal Property (Pers. Prop). In FY2020 the residential tax category accounted for the largest portion of the total tax levy for all the communities that make up Greater MetroWest. The total tax levy for GMW in FY2020 totaled \$1.0 billion.
- The commercial tax levy was the next largest contributor to the total tax levy, ranging from \$52.4 million in Framingham to \$476,975 in Sherborn. Marlborough held the second largest commercial tax levy at \$27.9 million.
- For the industrial component of the total tax levy, the highest total of all thirteen communities in GMW came from Marlborough at \$14.0 million, while the lowest was recorded in Sherborn at \$55,767.
- The personal property tax was the smallest contributor among all four categories measured. The range in GMW went from \$10.6 million in Framingham to \$553,239 in Sherborn.

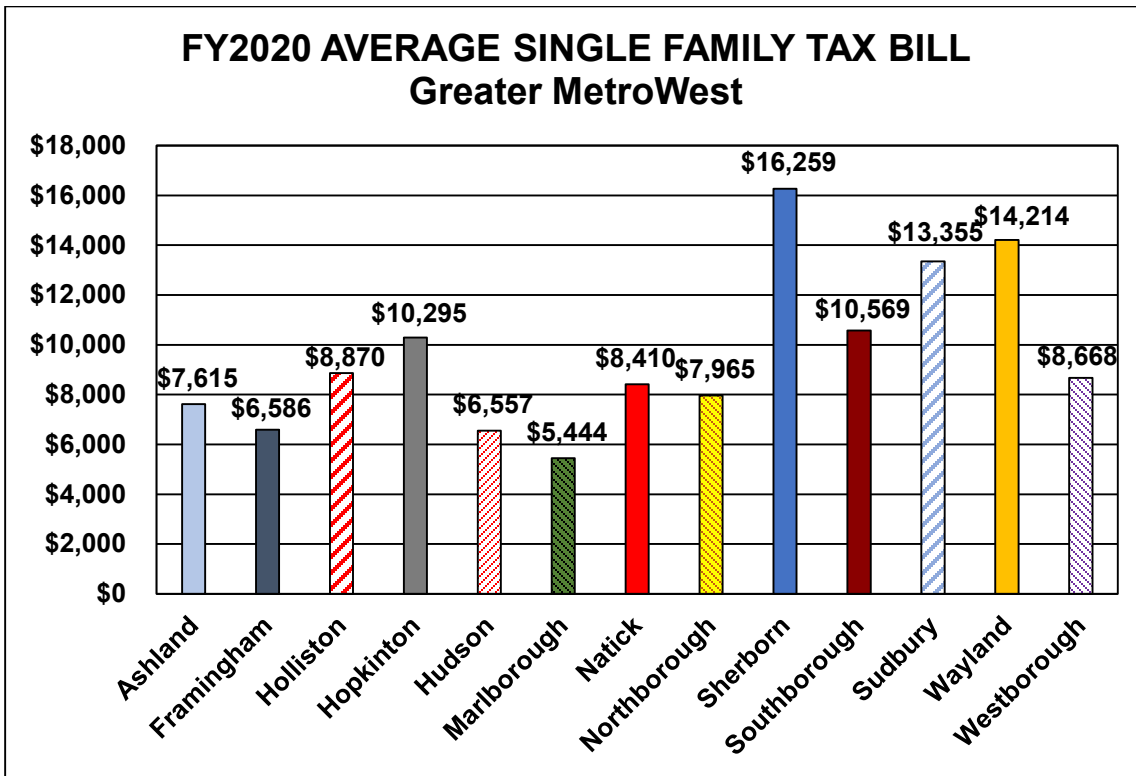
GREATER METROWEST – MUNICIPAL REVENUE



Source: MA Department of Revenue, DLS, and MERC

- The graph above depicts the FY2020 Residential and Commercial & Industrial (C&I) tax rates per \$1,000 of assessed value for the thirteen communities that comprise the Greater MetroWest (GMW). Of the thirteen communities, Ashland, Holliston, Hopkinton, Natick, Northborough, Sherborn, Southborough, Wayland, and Westborough all had one set rate for both tax rates with Natick having the lowest rate of \$12.71.
- Framingham, Hudson, Marlborough, and Sudbury had split residential and C&I rates. The C&I rates were always higher than the residential rates.
- Of those four communities with split rates, Hudson had the largest C&I rate at \$34.10 with Framingham just behind at \$33.61. Marlborough and Sudbury posted C&I tax rates at \$24.95 and \$24.30, respectively.
- Marlborough's residential rate was \$14.07, making it the smallest rate of all the communities with split rates. Framingham at \$15.38 was the next smallest rate followed by Hudson (\$17.03) and Sherborn (\$19.62). Natick recorded the lowest rates at \$12.71 for both residential and C&I property.

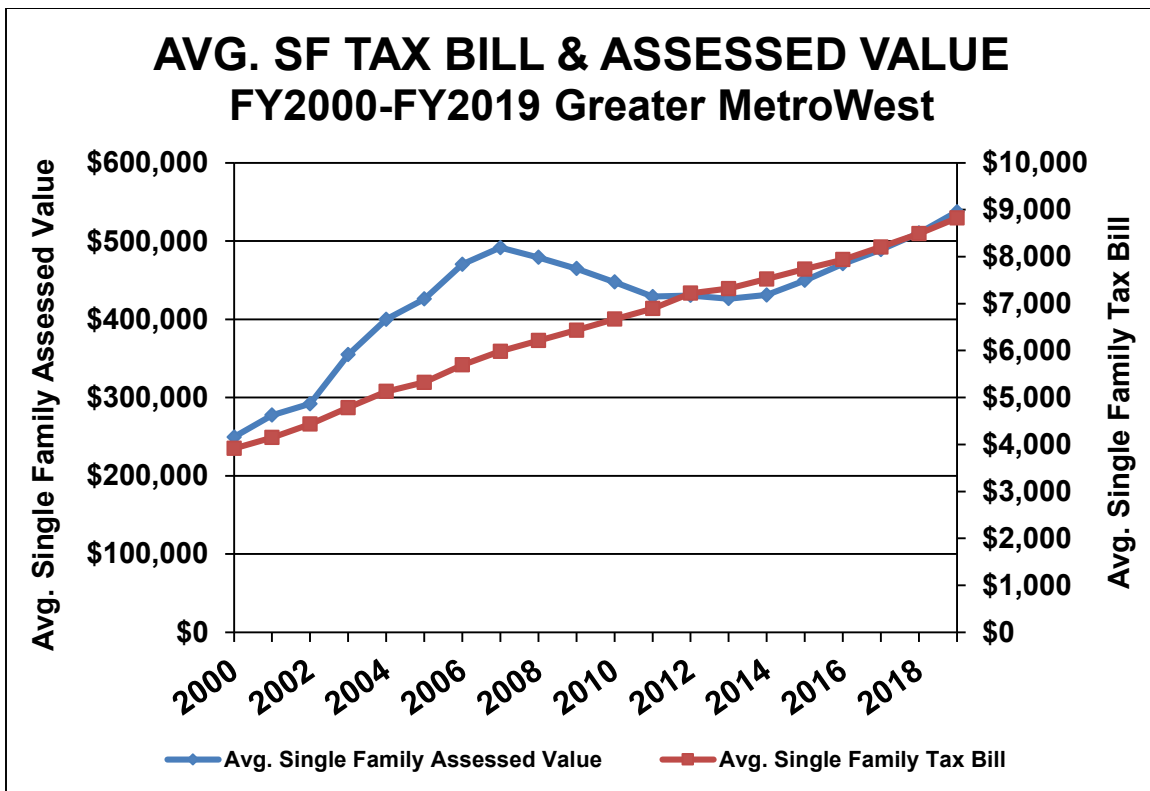
GREATER METROWEST – MUNICIPAL REVENUE



Source: MA Department of Revenue, DLS, and MERC

- The average single family tax bill for a given community is determined by applying the respective residential tax rate to the average single family assessed value.
- In Greater MetroWest in FY2020, the highest single family tax bill of all thirteen communities came from Sherborn at \$16,259. Marlborough has the lowest single family tax bill at \$5,444, about three times smaller than that of Sherborn.
- In GMW, five out of thirteen communities had a single family tax bill larger than \$10,000, which include: Sherborn (\$16,259), Wayland (\$14,215), Sudbury (\$13,355), Hopkinton (\$10,295), and Southborough (\$10,569).
- The range for an average single family tax bill for the remaining eight communities in Greater MetroWest was between \$5,000 and \$9,000.

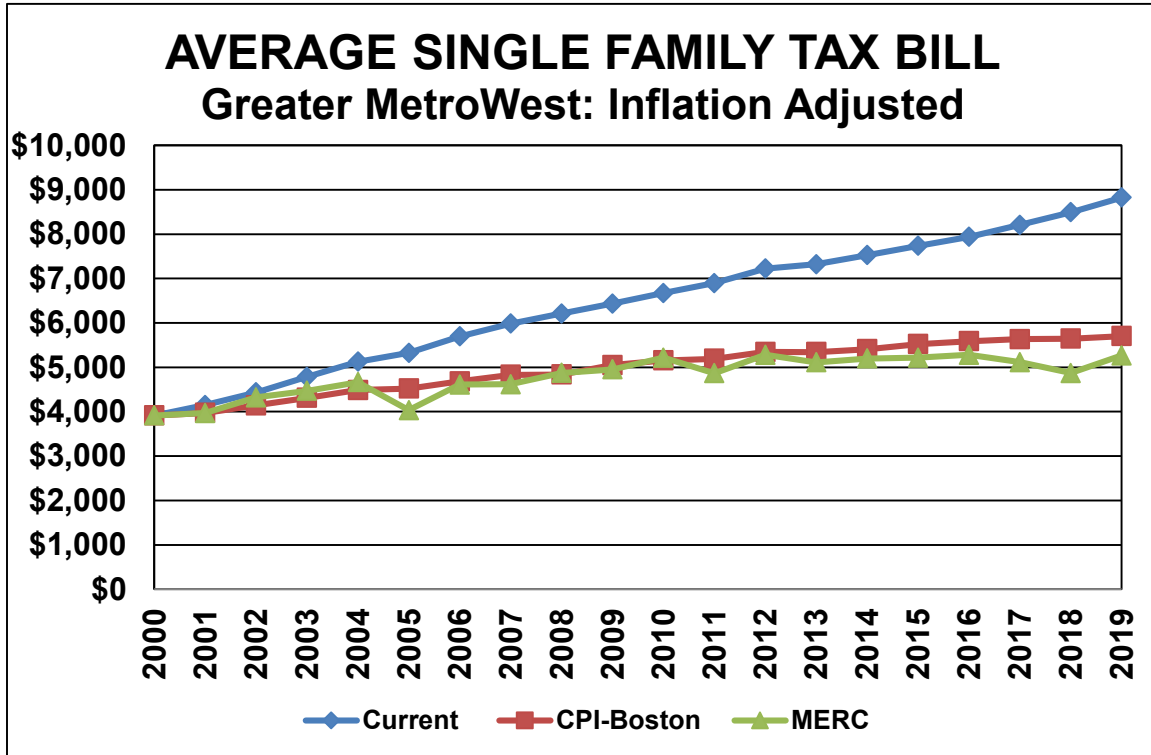
GREATER METROWEST – MUNICIPAL REVENUE



Source: MA Department of Revenue, DLS, and MERC

- The average single family assessed value for Greater MetroWest (GMW), excluding Marlborough, is shown in blue on the left vertical axis. The average single family tax bill is shown in red and on the right vertical axis. Marlborough is not included as values were not available for all years.
- The average single family tax bill increased from a low of \$3,915 in FY2000 to a high of \$8,223 in FY2019, an increase of 125.4% over the period. The average single family tax bill increased each year over this 19-year period.
- From FY2000 to FY2019, the average single family assessed value fluctuated. The lowest value occurred in FY2000 at \$249,490 while the highest value between FY2000 and FY2017 was \$491,631 in FY2007. Since then it fluctuated, increasing each year from FY2013 forward to \$510,140 in FY2018 and \$537,407 in FY2019.
- The average single family tax bill for the region was determined by calculating a residential tax rate for the region and applying this to the average single family assessed value. The rate was determined by dividing the residential tax levy by the residential assessed value for the region. The average single family assessed value of the region was determined by dividing the total single family assessed value for the region by the total single family dwellings.

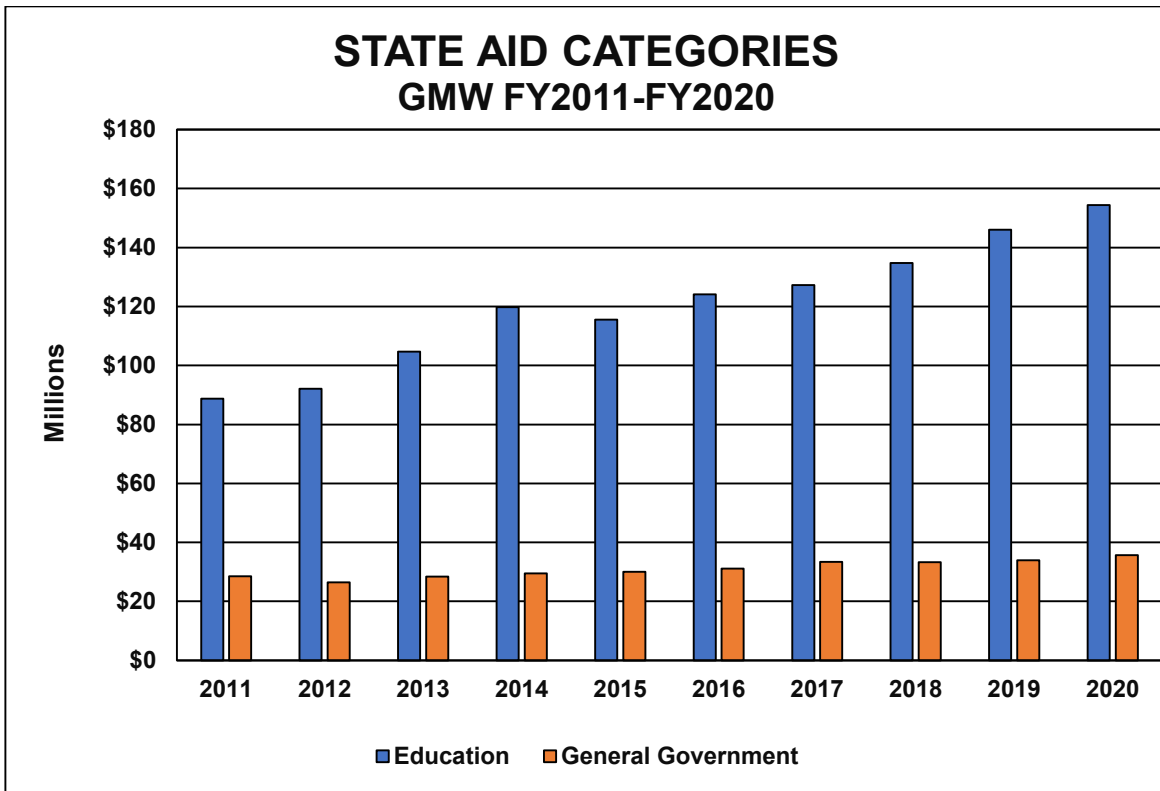
GREATER METROWEST – MUNICIPAL REVENUE



Source: MA Department of Revenue, DLS, and MERC

- This graph depicts the average single family tax bill in Greater MetroWest (GMW), excluding Marlborough, for FY2000 to FY2019 with FY2000 being the base year. The values are measured in nominal or current dollars and also adjusted for inflation.
- The actual (nominal) single family tax bill, shown in blue, increased every year during this time period from \$3,915 in FY2000 to \$8,823 in FY2019, an increase of \$4,908 or 125.4%.
- Two different price indexes are used to calculate the inflation-adjusted real dollar value of the average single family tax bill: MERC's MetroWest Cost of Living Index and the Boston Consumer Price Index (CPI).
- Each of the two inflation adjustments yielded higher total tax bills in FY2018 than in FY2000. The Boston CPI produced a larger increase in the tax bill over the period, an increase of \$1,789 to a tax bill of \$5,704, while the MERC Index generated an increase of \$1,350 to \$5,265.

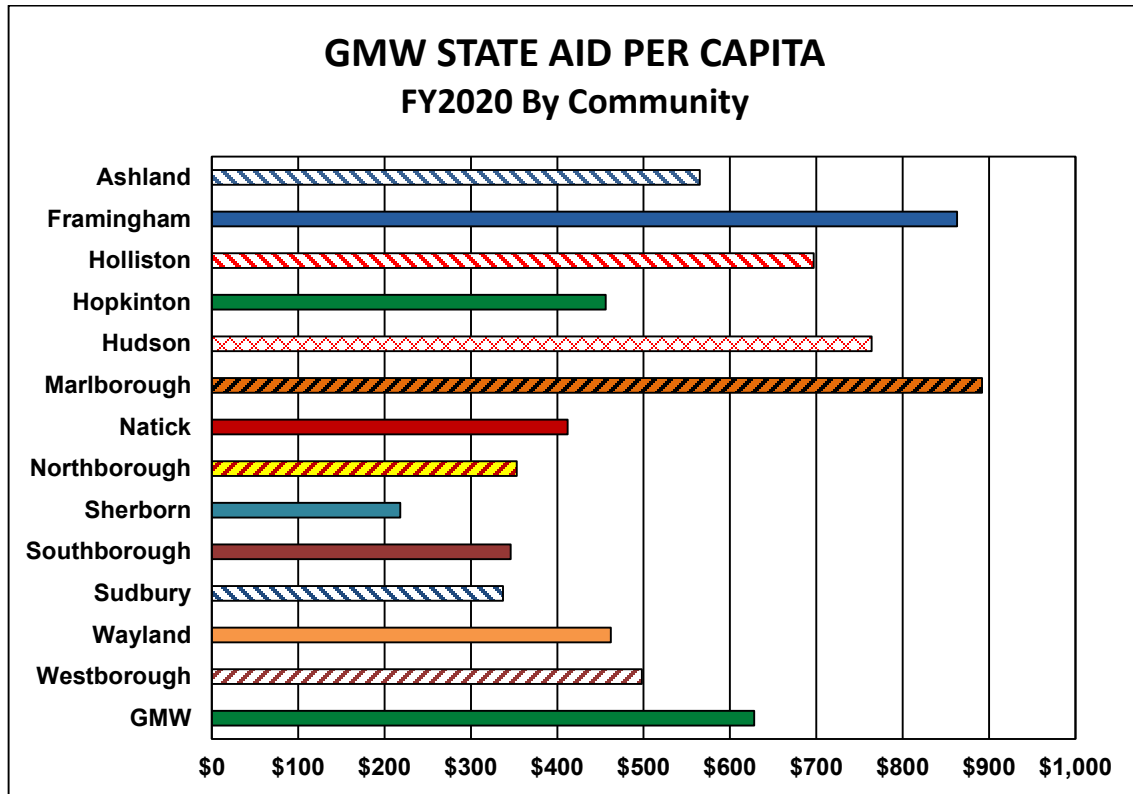
GREATER METROWEST – MUNICIPAL REVENUE



Source: MA Department of Revenue, DLS, and MERC

- State aid for education in Greater MetroWest (GMW) has nearly doubled its overall amount in the past decade, starting at \$88.7 million in FY2011 and increasing to \$154.0 million in FY2020. During the ten-year span displayed and measured on the graph above, state aid for education increased every year except for FY2014 to FY2015 in which it decreased 3.5%, around \$4.2 million. The biggest total increase for state aid for education came between FY2013 and FY2014, increasing a total of \$15.0 million.
- State aid for General Government (GG) in GMW had a constant and significantly lower totals during the same ten-year span. In FY2010, state aid for GG totaled \$29.8 million and increased 19.5% to \$35.6 million in FY2020.
- During the ten-year span being measured, state aid for GG saw decreasing totals in several years. From FY2011 to FY2012, it decreased from \$28.5 million to \$26.5 million, thus showing a 7.0% decrease, or about \$2.0 million. It decreased one more time in FY2017 to FY2018, this time less significant, only showing a \$120,000 drop.

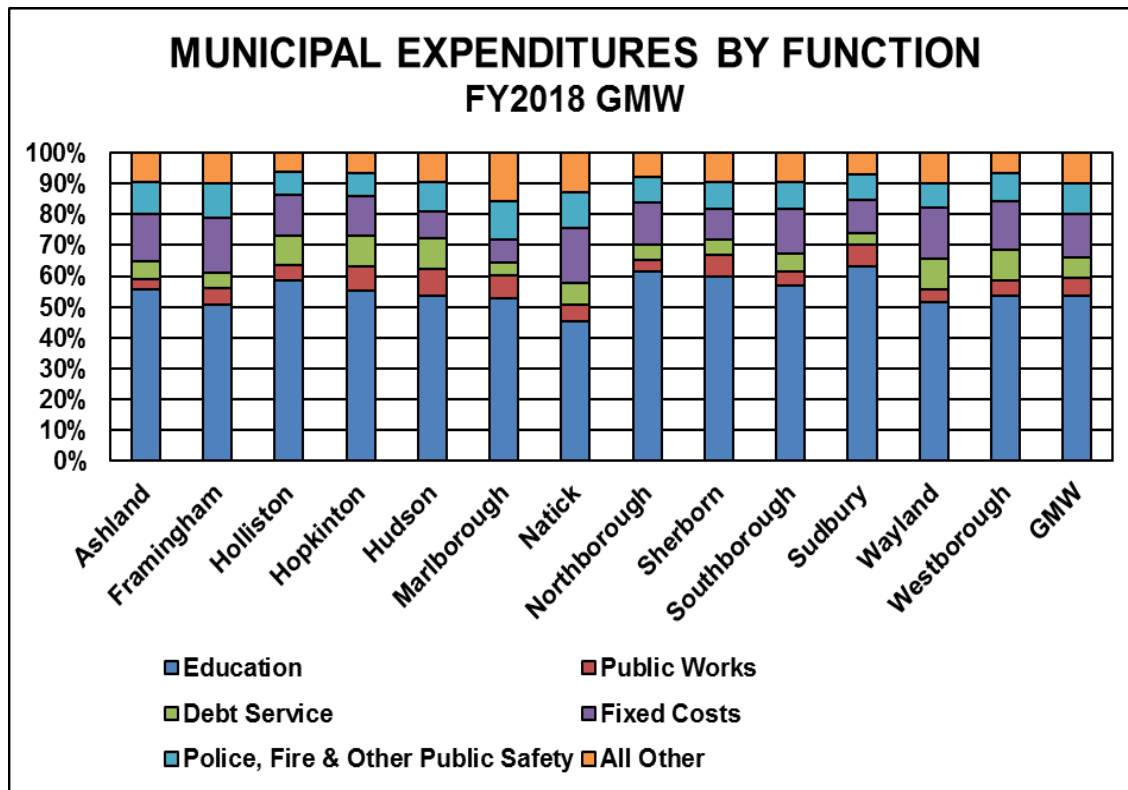
GREATER METROWEST – MUNICIPAL REVENUE



Source: MA Department of Revenue, DLS, and MERC

- The graph above displays the per capita state aid given to each of the thirteen communities that make up Greater MetroWest (GMW) in FY2020. Per capita state aid is calculated by dividing the sum of the aid given to a community by the population of that community.
- The amount of per capita state aid given to the communities in GMW ranged from \$892 in Marlborough, with Framingham not far behind at \$863, to \$217 in Sherborn.
- The graph above consists of both state aid for education and state aid for general government combined and given directly to each respective community. The total amount of state aid given to GMW was \$190,049,337.
- It is important to note that communities such as Northborough, Southborough, Sudbury, and Sherborn all belong to regional school districts. The state aid that is given to those districts is not included in the above calculations.
- Most of the GMW communities received between \$300-\$500 state aid per capita, including: Sudbury, Southborough, Northborough, Natick, Hopkinton, Wayland, and Westborough. Nine of the thirteen communities received less than the regional average of \$628.

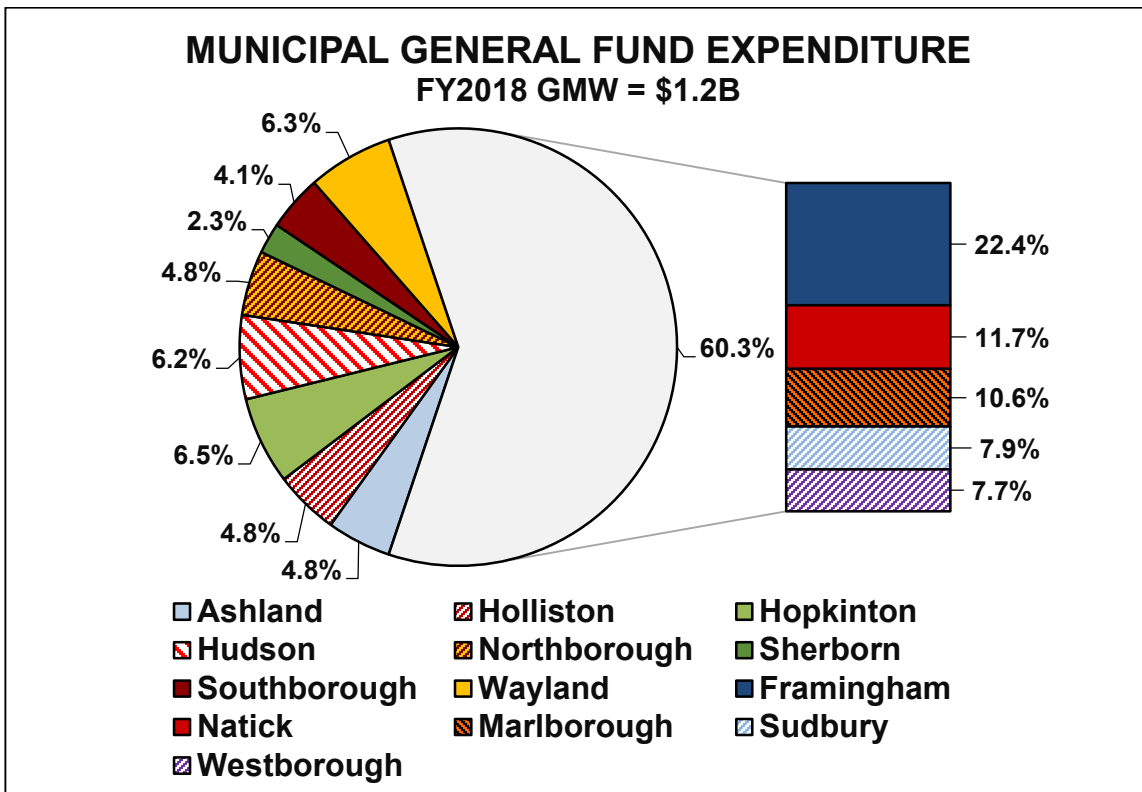
GREATER METROWEST – MUNICIPAL EXPENDITURE



Source: MA Department of Revenue, DLS, and MERC

- Municipal expenditures are categorized into six main categories: Education, Debt Service, Police, Fire, & Other Public Safety, Public Works, Fixed Costs, “All Other.” The respective expenditures are shown as percentages of total expenditures in the graph. Fixed employee benefits for all municipal employees are included in fixed costs. In FY2018 these general fund expenditures reached over \$1.2 billion in Greater MetroWest.
- Education expenditures comprised the largest portion of each community in GMW. Natick at 45.3% was the only community within GMW to have had less than 50% of their municipal expenditure go to education with Sudbury having the largest share at 63.0%. The average education expenditure for GMW was around 53.6%.
- The highs and lows of the remaining categories varied by community. Debt Service was a relatively low percentage of total expenditures with Wayland having the highest at 10.0% while Sudbury posted the smallest at 3.6% and the average for GMW at 6.7%. The Police, Fire & Other Public Safety average for GMW was about 10% with Marlborough having the highest expenditure at 12.7%. Public Works was the lowest average expenditure throughout the region coming in at 5.8%, with Fixed Costs at 14.2% and “All Other” at 9.9%.

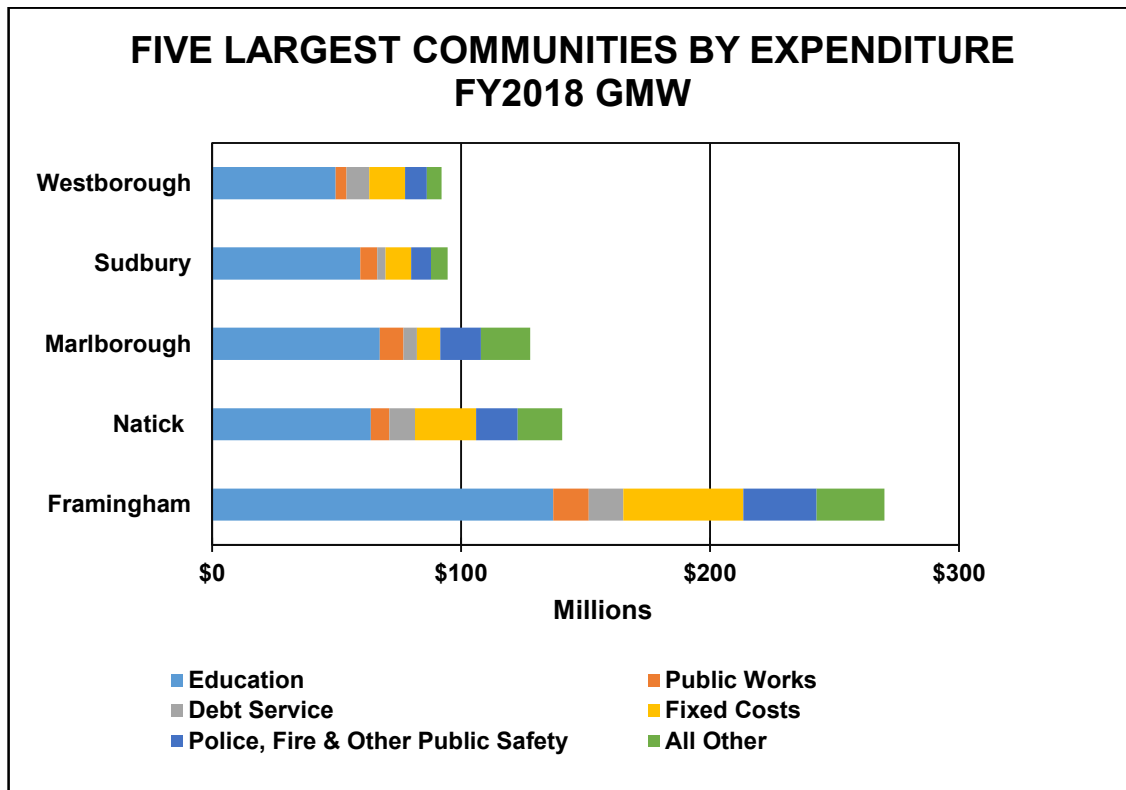
GREATER METROWEST – MUNICIPAL REVENUE



Source: MA Department of Revenue, DLS, and MERC

- Municipal expenditures are categorized into six main categories: Education, Debt Service, Police, Fire, & Other Public Safety, Public Works, Fixed Costs, and “All Other.” The above pie graph shows the combined total of these categories by community of the Greater MetroWest region.
- In FY2018 these general fund expenditures reached over \$1.2 billion in Greater MetroWest. Combined, the communities of Framingham, Marlborough, Natick, Sudbury, and Westborough, combined, were responsible for 60.3% of that expenditure.
- Ashland, Holliston, and Northborough each make up 4.8% of the total GMW expenditure, collectively totaling about \$172.3 million.
- The two communities with the smallest expenditure are: Sherborn at 2.3% and Southborough at 4.1%, together totaling \$76.8 million or about 6.4% of GMW’s total expenditure of \$1.2 billion.

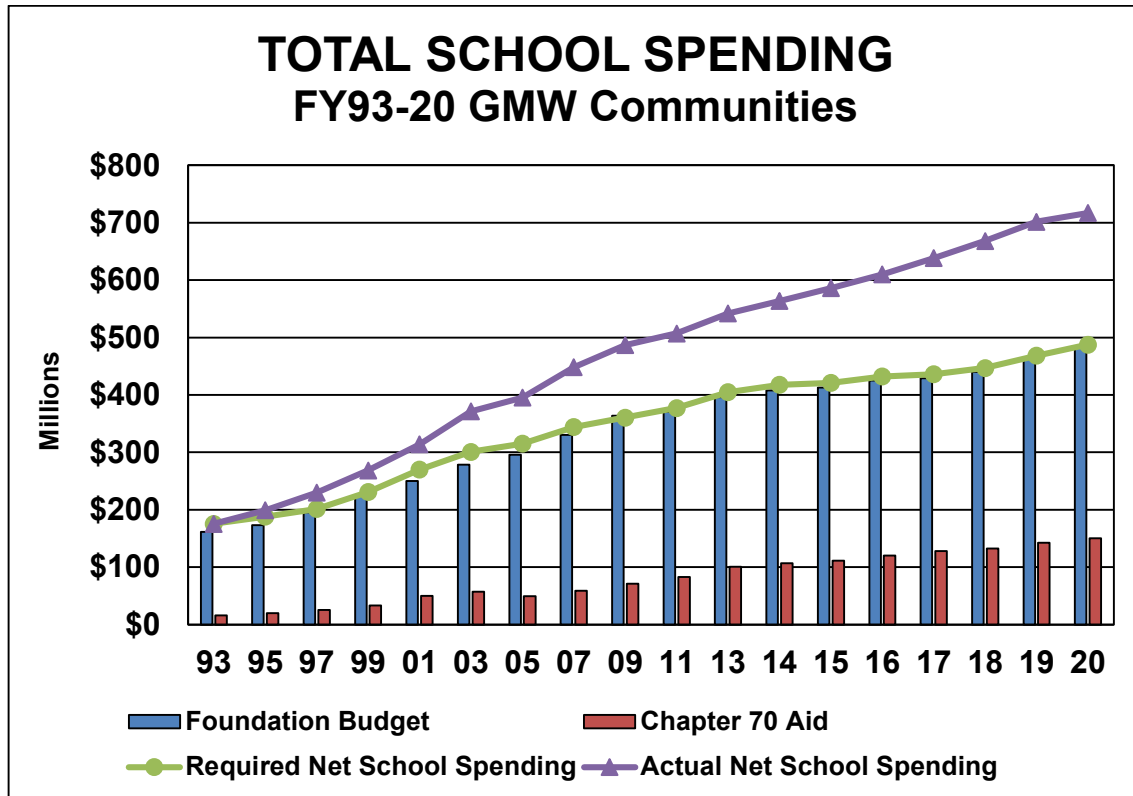
GREATER METROWEST – MUNICIPAL REVENUE



Source: MA Department of Revenue, DLS, and MERC

- The above chart shows the five largest communities by expenditure in the Greater MetroWest Region which include the following: Framingham, Marlborough, Natick, Sudbury, and Westborough.
- Framingham, which had the largest amount of spending out of all the communities, had collectively spent a total of \$269.9 million on Education, Debt Service, Police, Fire, & Other Public Safety, Public Works, Fixed Costs, and “All Other” in FY2018.
- Westborough and Sudbury had a similar collective expenditure total of \$92.2 million and \$94.6 million, respectively, in FY2018. Both communities spent less than half the total spending of Framingham.
- Natick had a collective expenditure of \$140.6 million, followed by Natick Marlborough at \$127.8 million in FY2018.
- These five communities each spent about half of their total expenditure on Education, making it the largest category for spending in FY2018. The second largest category for spending was in Fixed Costs for Framingham, Natick, Sudbury and Westborough. The “all other” category was the second largest for Marlborough.

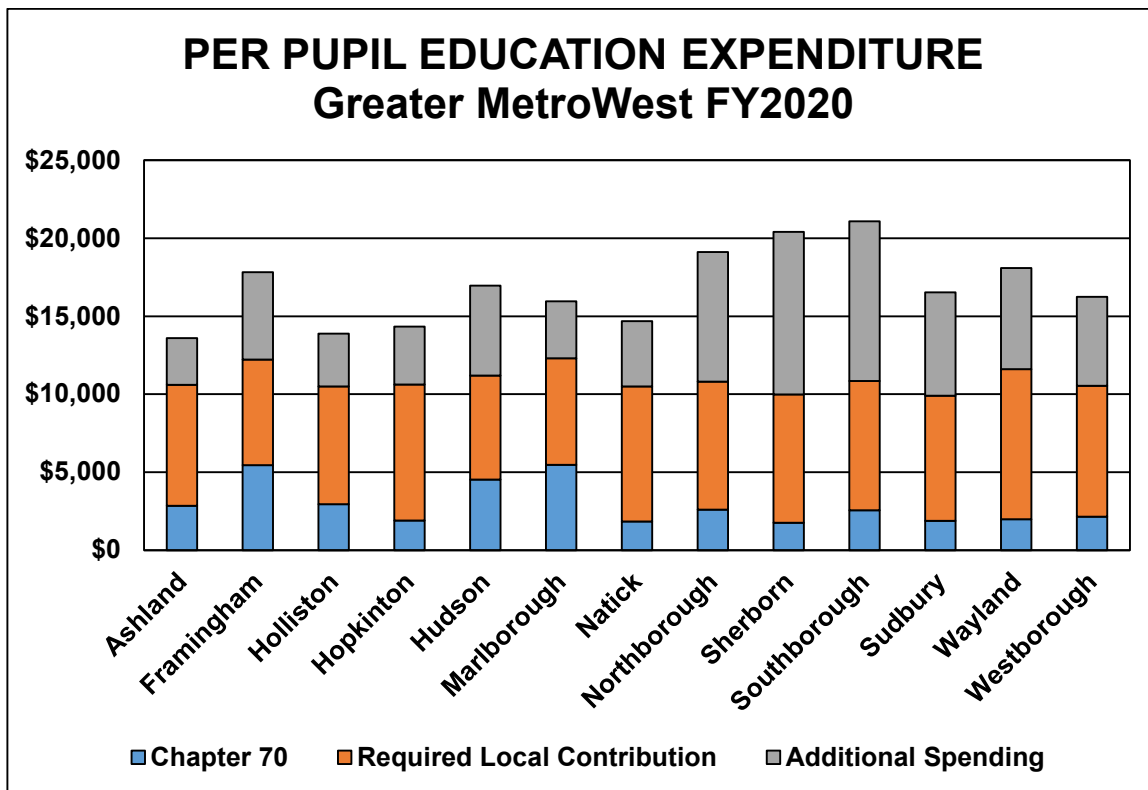
GREATER METROWEST – MUNICIPAL REVENUE



Source: MA Department of Revenue, DLS, and MERC

- The chart above displays the total school spending over a 27-year period for the thirteen communities that make up Greater MetroWest (GMW). The four components within the graph are as follows, Foundation Budget (Blue), Chapter 70 Aid (Red), Required Net School Spending (Green), and Actual Net School Spending (Purple).
- The foundation budget is a measure of the amount needed in order to provide the students with an adequate education and is determined by the enrollment classification categories and related costs. In FY2020 the foundation budget totaled \$484.0 million in GMW while required net school spending totaled \$487.8 million.
- Chapter 70 state aid which is represented by the red bar is the educational assistance given to a community and in FY2020 it totaled \$150.3 million for GMW. Local contributions for GMW in FY2020 were \$333.7 million, and this number is the difference between the Foundation Budget (blue) and Chapter 70 aid (red).
- The actual net school spending in the GMW region for FY2020 totaled \$717.1 million. This category is made up of required local contributions, Chapter 70 Aid, and additional dollars communities chose to spend on education.

GREATER METROWEST – MUNICIPAL REVENUE



Source: MA Department of Revenue, DLS, and MERC

- The graph above represents the per pupil education expenditures for the communities that make up Greater MetroWest (GMW) for FY2020 as reported by the Massachusetts Department of Elementary and Secondary Education (DESE). The DESE values are classified in the following three categories: Chapter 70 state aid (Blue), Required Local Contribution (Orange), and Additional Spending (Grey) which consists of added amounts municipalities chose to spend over education reform requirements.
- Total per pupil education spending in GMW ranged from a high of \$21,083 in Southborough to a low of \$13,880 in Holliston. With the exception of Wayland (\$20,461), the remaining communities spent less than \$20,000 per pupil.
- The required local contribution and related state aid given to each municipality includes DOR income and municipal property values in the calculations. The total local contribution and state aid is the foundation budget and the amount a municipality needs to provide an adequate education for its students.
- The communities with the largest Additional Spending are Sudbury (\$8,309), Wayland (\$10,248), and Westborough (\$10,442). Ashland, Framingham, Holliston, and Hopkinton are the communities with the smallest Additional Spending at less than \$4,000 per pupil.

GREATER METROWEST – K-12 PUBLIC SCHOOL ENROLLMENT

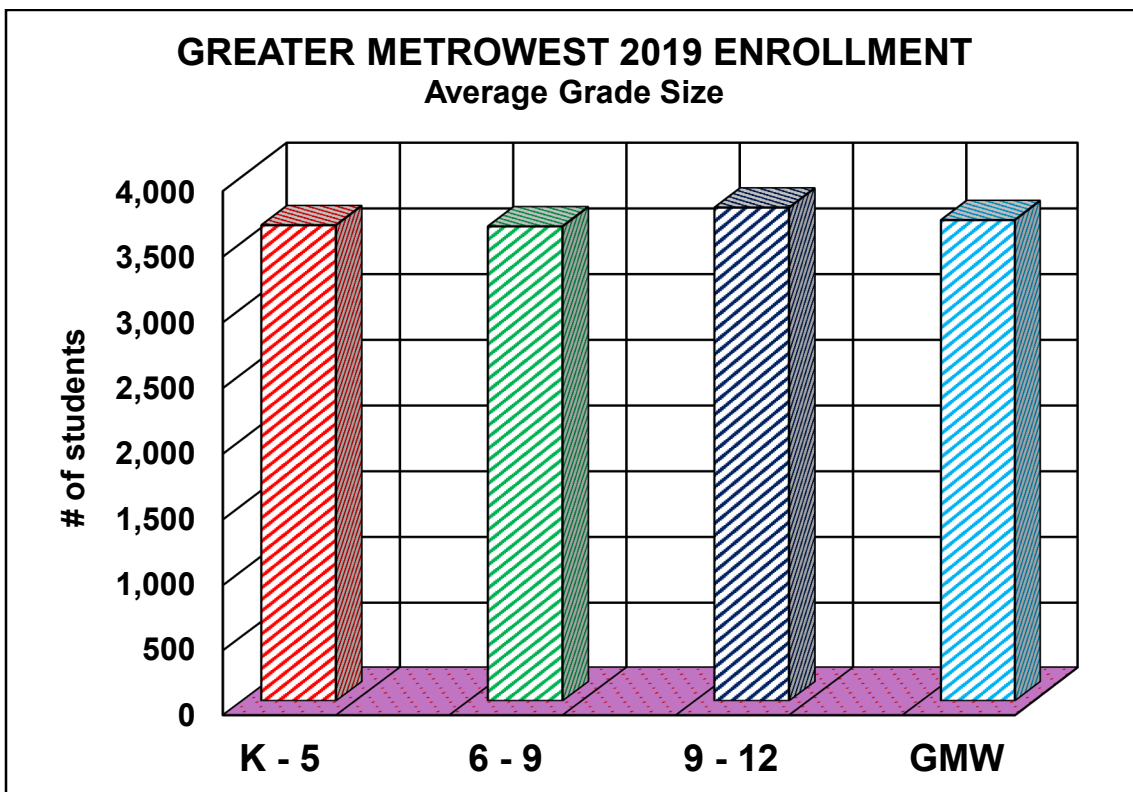
K-12 PUBLIC SCHOOL ENROLLMENT

The MetroWest Economic Research Center (MERC) at Framingham State University annually collects data on K-12 public school enrollment for several sub-state regions. Greater MetroWest public school enrollment is calculated for kindergarten through grade 12 using the annual state student census conducted in October of each year. Included in the data are all public school students in regular education, special education, ELL (English Language Learners), regional charter schools and the regional vocational high schools. MERC contacts the regional's charter schools, McAuliffe Regional Charter School and the Advanced Math and Science Academy, to obtain their enrollment figures.

In many communities, kindergarten enrollment typically increases 3.2% upon entry into the first grade.

The Massachusetts Department of Elementary and Secondary Education implemented a student enrollment database, the Student Information Management System (SIMS) in 2000. The MERC K-12 data presented in this report are obtained from both the October SIMS student census and data provided directly to MERC by the local school districts.

GREATER METROWEST – K-12 PUBLIC SCHOOL ENROLLMENT

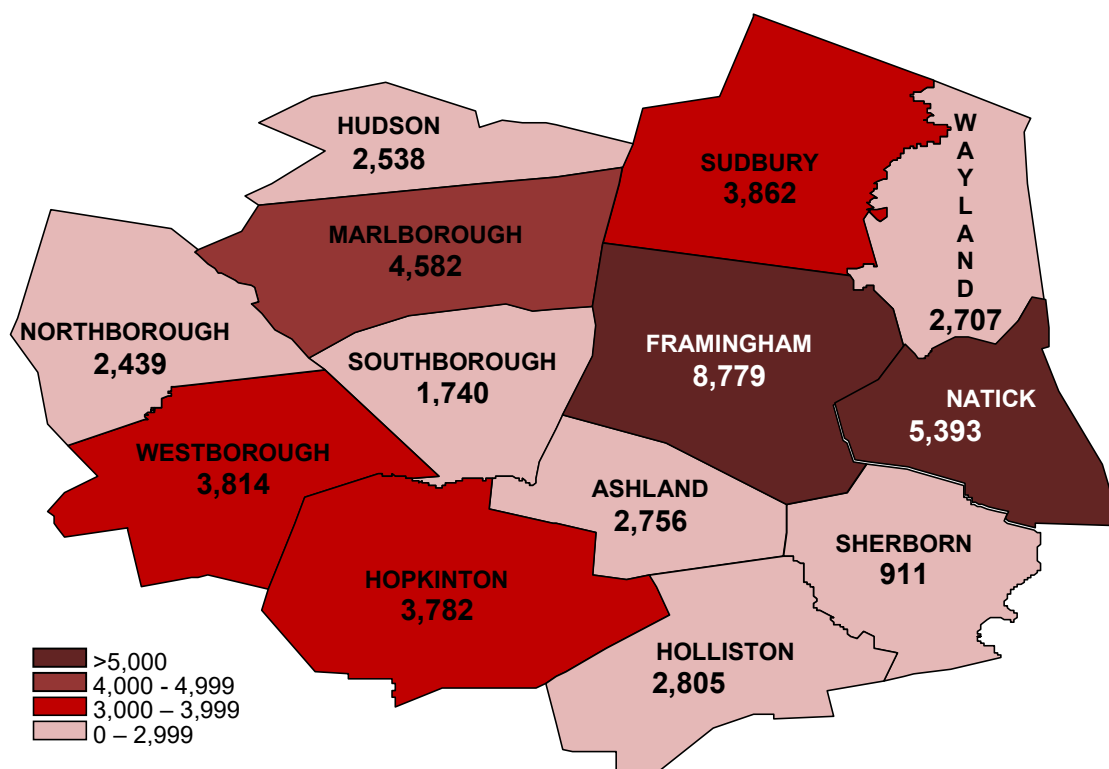


Source: MA Department of Elementary and Secondary Education and MERC

- The 2019 Greater MetroWest (GMW) K-12 public school enrollment averaged 3,669 students per grade. The GMW regional average enrollment increased by 0.72%.
- In 2019, the average number of students per grade at the elementary school level, kindergarten through fifth grade, was 3,630 an increase of 1.2% from 2018.
- At the middle school level, grades 6 through 8, the average number of students per grade was 3,621, an increase of 2.4% compared to 2018.
- The average number of students per grade at the high school level was 3,764, a decrease of 1.2%.
- Charter school enrollment is not included in the average grade size calculations.

GREATER METROWEST – K-12 PUBLIC SCHOOL ENROLLMENT

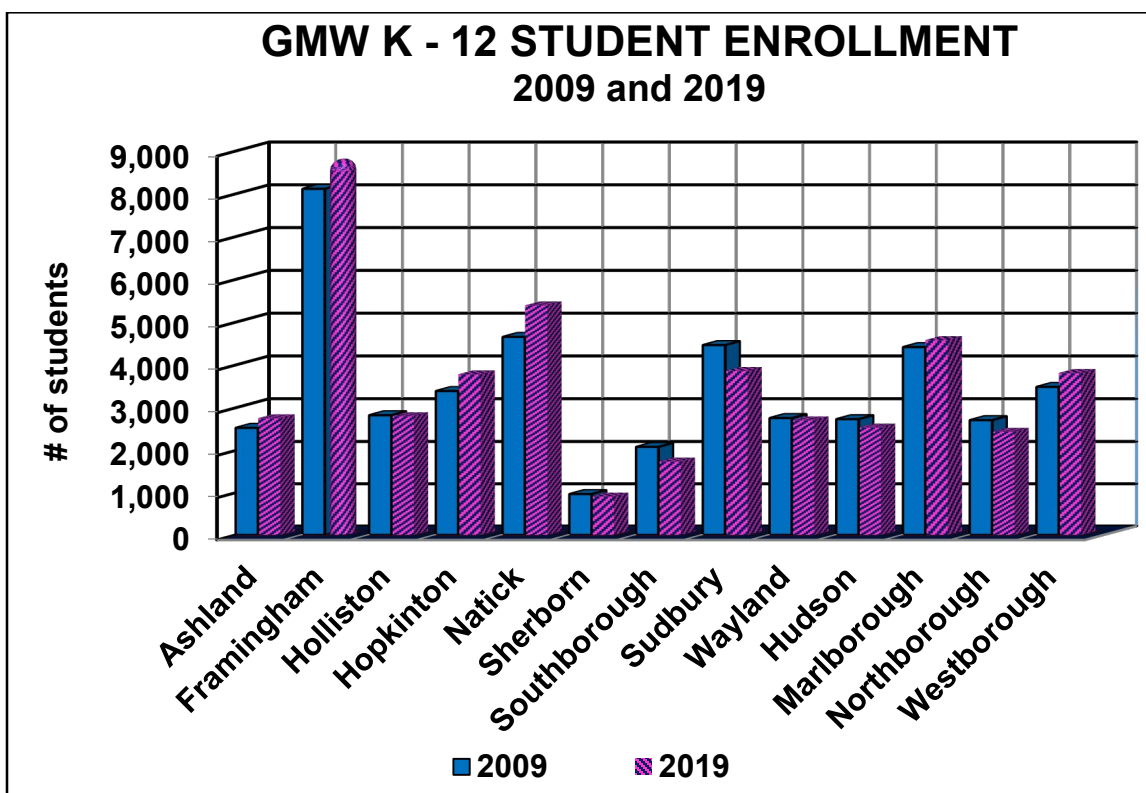
GMW 2019 PUBLIC SCHOOL ENROLLMENT By Town



Source: MA Department of Elementary and Secondary Education and MERC

- K-12 public school enrollment in the Greater MetroWest totaled 46,108 students. This figure does not include students enrolled in charter schools and vocational schools.
- The community reporting the highest enrollment was Framingham having a student enrollment of 8,779. The towns of Marlborough and Sudbury had enrollments between 4,000 and 5,000 students.
- Ashland, Holliston, Hudson, Northborough, and Wayland had enrollments between 2,000 and 3,000 students. Sherborn reported the smallest enrollment at 911 students.
- Enrollment in vocational high school for Greater MetroWest Region totaled 1,590 students in 2019. Vocational student enrollment has increased by 4.1% from 2018.

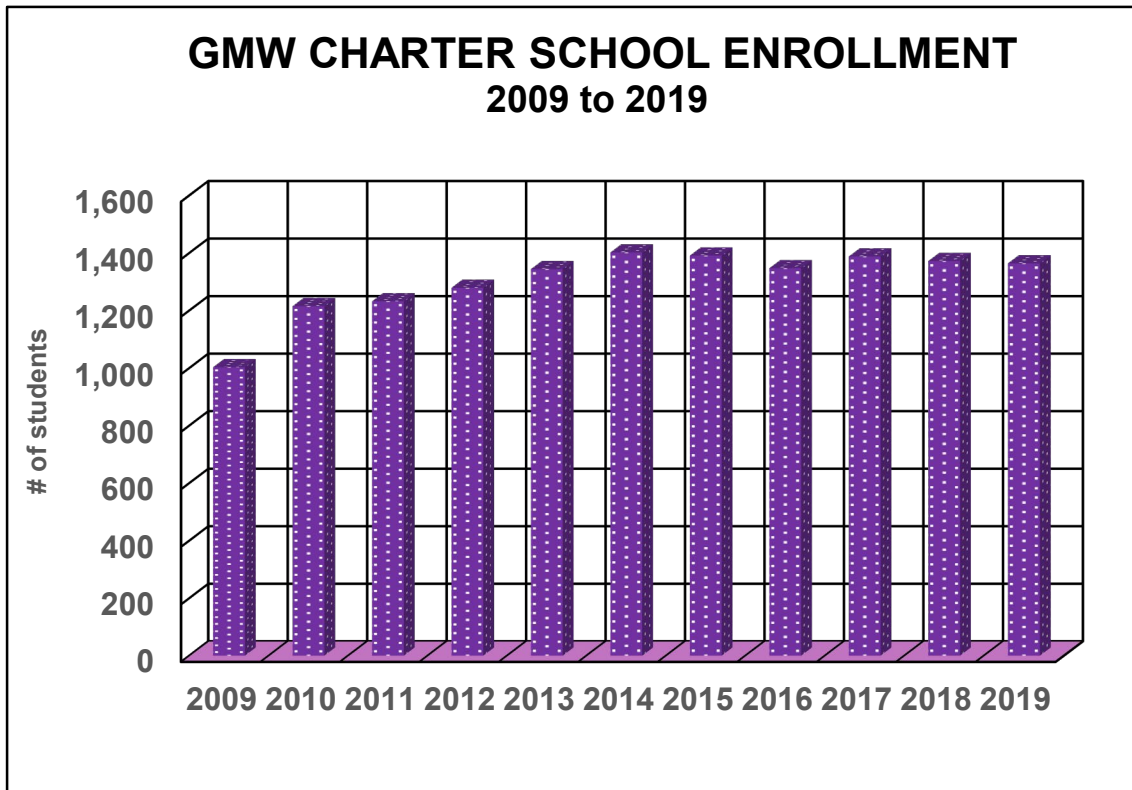
GREATER METROWEST – K-12 PUBLIC SCHOOL ENROLLMENT



Source: MA Department of Elementary and Secondary Education and MERC

- The graph compares student enrollment in Greater MetroWest (GMW) in 2009 and 2019 by community.
- Greater MetroWest student enrollment in 2009 was 45,143 and 46,108 in 2019, a 2.1% increase.
- During this period, Natick had the largest percentage growth in school enrollment with a 15.9% increase, followed by Hopkinton (11.5%), Westborough (9.4%), Ashland (8.2%), Framingham (8.2%).
- Marlborough had the smallest percentage growth of student enrollment, 3.7%.
- Southborough had the largest decrease in student enrollment at 16.5% followed by Sudbury (13.5%), Northborough (10.0%), Hudson (7.1%), Sherborn (5.9%), and Wayland (1.9%).
- Holliston had the smallest decline in student enrollment at 0.7%.

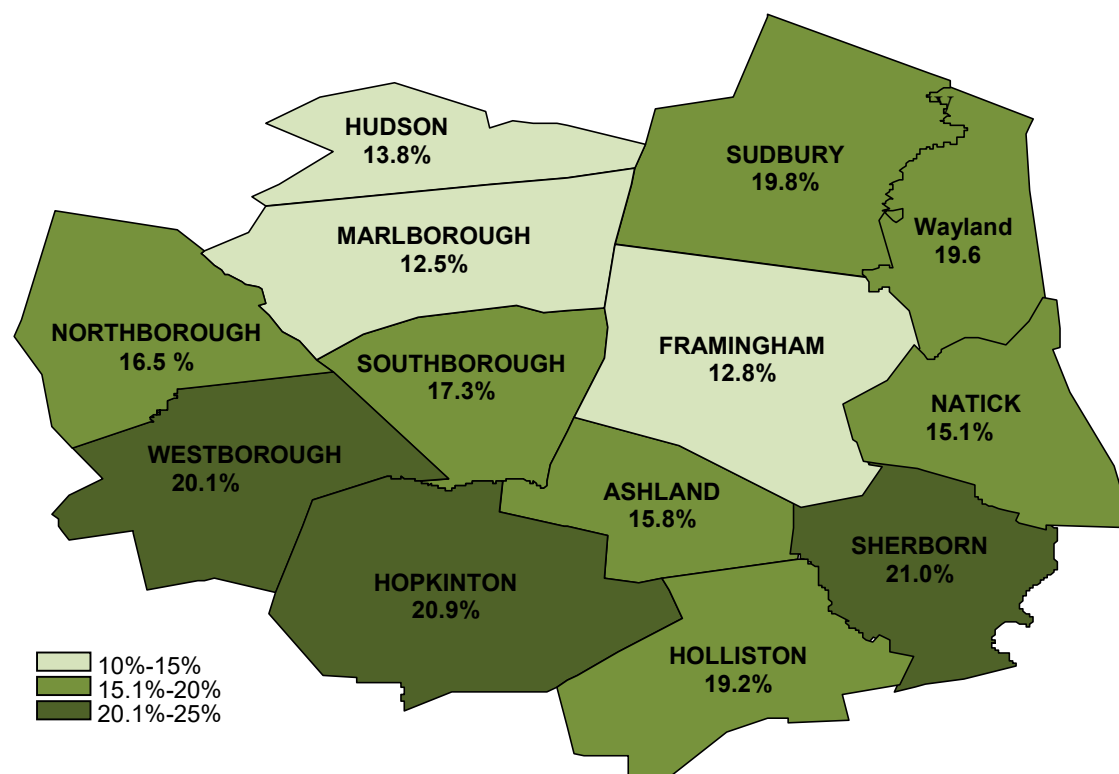
GREATER METROWEST – K-12 PUBLIC SCHOOL ENROLLMENT



Source: MA Department of Elementary and Secondary Education and MERC

- Charter school enrollment for Greater MetroWest (GMW) rose from 1,003 students in 2009 to 1,364 students in 2019 representing a 36.0% increase.
- MetroWest region (MW) charter school enrollment increased from 202 in 2009 to 401 students in 2019, a 98.5% increase. The programs in the charter schools in the MetroWest region began in 2003.
- Greater Marlborough Region (GMR) charter school enrollment was 801 in 2009 and rose to 963 students in 2019, representing an increase of 20.2%. Charter schools in the Greater Marlborough Region began in 2005.
- In 2014, the charter school enrollment in GMW peaked with enrollment of 1,402 students. Since then, the charter school enrollment declined 2.7% over the last five years.
- According to the Massachusetts Department of Elementary and Secondary Education, there are currently 81 charter schools in the Commonwealth.

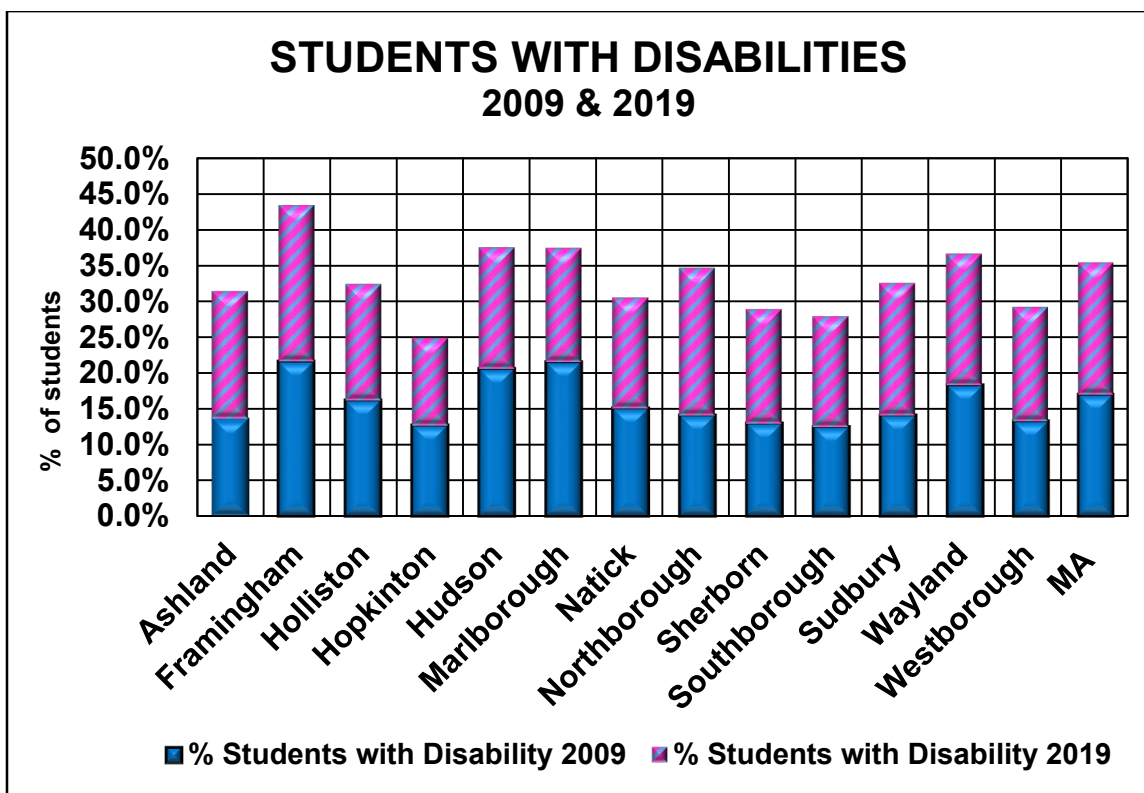
GMW PUBLIC SCHOOL ENROLLMENT As Percentage of 2018 Population



Source: U. S. Census and MERC

- K-12 public school enrollment in the Greater MetroWest Region (GMW) for 2019 was 47,698 students. This figure does not include students enrolled in charter schools.
- This map measures the proportion of the community enrolled in public school. Public school enrollment in 2019 is given as a percentage of 2018 population an estimate of the most recent census data available. The highest enrollment as percentage of population occurred in Sherborn, followed by Hopkinton and Westborough. In these communities, slightly more than 1 in 5 population members were in public schools.
- A little more than 19.0% of the population in the communities of Holliston, Sudbury and Wayland attend public school. The remaining communities of Ashland, Natick, Northborough, and Southborough had public school enrollment around 15.1% to 17.3% of the total population.
- Framingham (12.8%) and Marlborough (12.5%), the communities with the largest population and public school enrollment, also report a small percentage of the population in school.

GREATER METROWEST – K-12 PUBLIC SCHOOL ENROLLMENT



Source: MA Department of Elementary and Secondary Education and MERC

- According to the Massachusetts Department of Elementary and Secondary Education (DESE) students with disabilities include those with any of the following: autism, communication impairment, developmental delay, emotional impairment, health impairment, intellectual impairment, neurological impairment, physical impairment and sensory impairment.
- The graph shows the percentage of students with disability by community. The percentage is calculated by dividing the number of students with disability by the number of students enrolled in the community.
- Northborough experienced the highest percentage of students with disability from 2009 to 2019 followed by Ashland, Sherborn, Southborough, Sudbury and Westborough.
- Hopkinton, Hudson and Marlborough showed a decrease in the percentage of students with disability from 2009 to 2019.
- The Commonwealth of Massachusetts showed an increase from 17.0% in 2009 to 18.4% in 2019.

APPENDIX

North American Industry Classification System (NAICS)

In 2001 the North American Industry Classification System (NAICS) permanently replaced the Standard Industrial Classification (SIC) system in use for seventy years. NAICS is an industrial classification system that groups establishments into industries based on the activities in which they are primarily engaged. It is a comprehensive system covering the entire field of economic activities, both producing and non-producing. NAICS has twenty separate industrial sectors that are described in this appendix. These twenty sectors are grouped into eleven supersectors. NAICS data used in this publication are presented by supersectors and by sectors.

NAICS Supersectors*

Goods-Producing Domain (GPD)

Natural Resources and Mining Supersector (NRM)

- 11 Agriculture, Forest, Fishing and Hunting
- 21 Mining

Construction Supersector

- 23 Construction

Manufacturing Supersector

- 31-33 Manufacturing

Service Producing Domain (SPD)

Trade, Transportation and Utilities Supersector (TTU)

- 22 Utilities
- 42 Wholesale Trade
- 44-45 Retail Trade
- 48-49 Transportation and Warehousing

Information Supersector

- 51 Information

Financial Activities Supersector

- 52 Finance and Insurance
- 53 Real Estate and Rental and Leasing

Professional and Business Services Supersector ** (PBS)

- 54 Professional, Scientific and Technical Services
- 55 Management of Companies and Enterprises
- 56 Administrative and Support and Waste Management and Remediation Services

Education and Health Services Supersector

- 61 Educational Services
- 62 Health Care and Social Assistance

Leisure and Hospitality Supersector

- 71 Arts, Entertainment, and Recreation
- 72 Accommodation and Food Services

Other Services Supersector

- 81 Other Services (except Public Administration)

Public Supersector* as used in this publication, includes the Public Administration NAICS sector defined below, plus all other jobs in federal, state and local government.

APPENDIX

NAICS Sectors

Natural Resources and Mining Supersector:

11-Agriculture, Forestry, Fishing and Hunting comprises establishments primarily engaged in crop growing, animal raising, and timber and fish harvesting.

21-Mining comprises establishments that extract naturally occurring mineral solids, liquid minerals, and gases.

Construction Supersector:

23-Construction comprises establishments primarily engaged in the construction of buildings or engineering projects.

Manufacturing Supersector:

31-33-Manufacturing comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products.

Trade, Transportation and Utilities Supersector:

22-Utilities comprises establishments engaged in the provision of the following utility services: electric power, natural gas, steam supply, water supply and sewage removal, through a permanent infrastructure of lines, mains, and pipes.

42-Wholesale Trade comprises establishments engaged in wholesaling merchandise, generally without transformation, and rendering services incidental to the sale of merchandise, including the outputs of agriculture, mining, manufacturing, and certain information industries, such as publishing. The wholesaling process is an intermediate step in the distribution of merchandise.

44-45-Retail Trade comprises establishments engaged in retailing merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The retailing process is the final step in the distribution of merchandise; retailers are, therefore, organized to sell merchandise in small quantities to the general public. This sector comprises two main types of retailers: store and nonstore retailers.

48-49-Transportation and Warehousing comprises industries providing transportation of passengers and cargo, warehousing and storage for goods, scenic and sightseeing transportation, and support activities related to modes of transportation (air, rail, water, road, and pipeline).

Information Supersector:

51-Information comprises establishments engaged in producing and distributing information and cultural products, providing the means to transmit these products, and processing data.

APPENDIX

Financial Activities Supersector:

52-Finance and Insurance comprises establishments primarily engaged in financial transactions (transactions involving the creation, liquidation, or change in ownership of financial assets) and/or in facilitating financial transactions.

53-Real Estate and Rental and Leasing comprises establishments primarily engaged in renting, leasing, or otherwise allowing the use of tangible or intangible assets.

Professional and Business Services Supersector:**

54-Professional, Scientific, and Technical Services comprises the performing of professional, scientific, and technical activities for others. These activities require a high degree of expertise and training. Some activities performed include: legal advice and representation, accounting, engineering services, computer services, research services, advertising services, and veterinary services.

55-Management of Companies and Enterprises comprises establishments that either hold the securities of companies for the purpose of owning a controlling interest or influencing management decisions, or establishments that administer, oversee, and manage establishments of the company and that normally undertake the organizational planning and decision making role of the company.

56-Administrative and Support and Waste Management and Remediation Services include establishments performing routine support activities for the day-to-day operations of other organizations. Activities performed include: office administration, hiring and placing of personnel, document preparation and similar clerical services, solicitation, collection, security and surveillance services, cleaning, and waste disposal services.

Education and Health Services Supersector:

61-Educational Services comprises establishments that provide instruction and training to a wide variety of subjects. This instruction and training provided by specialized establishments, such as schools, colleges, universities, and training centers.

62-Health Care and Social Assistance comprises establishments that provide health care and social assistance for individuals.

Leisure and Hospitality Supersector:

71-Arts, Entertainment, and Recreation comprises a wide range of establishments that operate facilities or provide services to meet varied cultural, entertainment, and recreational interests of their patrons.

72-Accommodation and Food Services comprises establishments providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption.

Other Services Supersector:

81-Other Services (except Public Administration) comprises establishments engaged in providing services not specifically provided for elsewhere in the classification system. Establishments in this sector are primarily engaged in activities, such as equipment repairing, administering religious activities, grantmaking, advocacy, and providing laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services.

APPENDIX

Public Supersector* as used in this publication, includes the Public Administration NAICS sector defined below, plus all other jobs in federal, state and local government.

Public Administration The Public Administration sector consists of establishments of federal, state, and local government agencies that administer, oversee, and manage public programs and have executive, legislative, or judicial authority over other institutions within a given area.

****Professional and Business Services Supersector:** In this and other MERC publications MERC uses the acronyms **PBS** and **BPS** interchangeably to refer to this NAICS supersector.

SOURCES

- The Council for Community and Economic Research (C2ER) (formerly ACCRA)
- *Banker & Tradesman*; The Warren Group
- Bureau of Labor Statistics, U. S. Department of Labor (USBLS)
- Massachusetts Department of Elementary and Secondary Education (DESE)
- Massachusetts Department of Revenue, Division of Local Services (DLS)
- Massachusetts Executive Office of Labor and Workforce Development (MA EOLWD)
- MetroWest Economic Research Center (MERC)
- United States Census Bureau, U.S. Department of Commerce

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