# Greater MetroWest Economic Profile 2022<sup>©</sup>





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## Greater MetroWest Economic Profile 2022<sup>®</sup>

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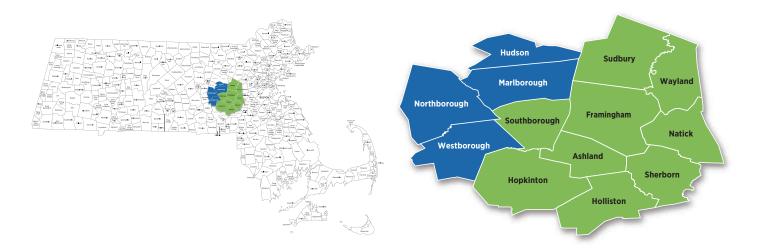
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### Introduction

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 just under 308,875, the region hosts a well-educated and highly-skilled labor force of more than 164,000 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 175,041 jobs and a payroll of nearly \$15.4B in 2020. The region provided 4.5% of the Massachusetts labor force, 5.3% of Massachusetts employment, and 5.5% of Massachusetts payroll. Home to thousands of small and medium sized businesses as well as large national firms such as, Bose, Boston Scientific, Cumberland Farms, 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 2022 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), existing home sales, cost of living, municipal revenue, municipal taxes, and K-12 public school enrollment.

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.



ach month, 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 2022 unemployment rate in Framingham of 3.1% was based on the following information: the size of the labor force was **estimated** at 40,805 workers, the sum of 39,543 residents who were employed and 1,262 residents who were unemployed. The rate, expressed as a percentage, was obtained by dividing the unemployed (1,262) by the labor force (40,805) and multiplying by 100 to get the unemployment rate of 3.1%.

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 full-time homemaker, for example) would not be counted in the labor force.

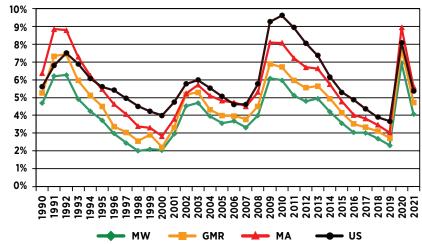
The local area unemployment rates for the cities and towns are not seasonally adjusted and are subject to periodic revision and re-benchmarking. For purposes of comparison, the state and national unemployment rates shown in this report are likewise not seasonally adjusted.<sup>1</sup>



<sup>&</sup>lt;sup>1</sup>The 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.

#### 1990 - 2021 ANNUAL UNEMPLOYMENT RATES MW, GMR, MA and US

- The annual unemployment rates from 1990 through 2021 for MetroWest (MW), Greater Marlborough Region (GMR), Massachusetts (MA) and the United States (US) is calculated by averaging the monthly unemployment rates for each year.
- In 2021, MW posted an unemployment rate of 4.1% while GMR posted an unemployment rate of 4.7%. MW and GMR had lower unemployment rates compared to Massachusetts' and the United States' rate of 5.6% and 5.4%, respectively. All regions posted lower unemployment rates in 2021 than in 2020.
- In the last three decades, the sharpest increases in unemployment rates in MW, GMR, Massachusetts and the United States occurred from 2019 to 2020. Massachusetts



Source: MA EOLWD and MERC

- witnessed the largest increase from 3.0% to 8.9%, followed by GMR which posted an increase from 2.7% to 7.7%.
- MW and GMR have consistently had lower unemployment rates than the rates in both Massachusetts and the United States except in 1991 and 1992 when GMR posted higher unemployment rates than the US.

#### **DECEMBER 1990 - FEBRUARY 2022 GMW MONTHLY UNEMPLOYMENT RATES**

- This graph examines the monthly unemployment rates and the 12-month moving average rates for MetroWest (MW) and the Greater Marlborough Region (GMR) from December 1990 through December 2021. The 12-month moving average looks at the average unemployment rates from the most recent 12-month period in order to smooth the month-to-month variation of the data.
- In February 2022, the unemployment rate in MW was 2.9%, a decrease of 0.5 percentage points from the previous month's rate of 3.4%. During the same period, the unemployment rate in GMR was 3.8%, a decrease of 0.7 percentage points from the previous month's rate of 4.5%
- As a result of the Covid-19 pandemic economic impact, MW and GMR both reported their highest unemployment rates of 11.9% and 14.3%, respectively, in April 2020. Historically, MW and GMR unemployment rates reached their lowest at 1.6% and 1.7%, respectively, in October 2000.

16%
14%
12%
10%
8%
6%
4%
2%
0%

— MW Unemployment Rate
— GMR Unemployment Moving Average

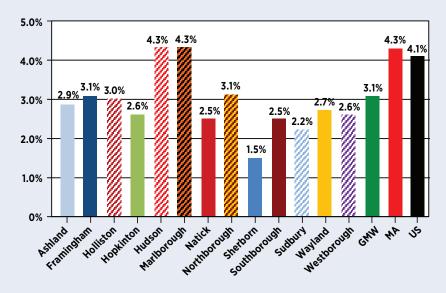
Source: MA EOLWD, MERC

• Both MW and GMR monthly unemployment rates followed a similar trend with their 12-month moving average rates from December 1990 through February 2022. However, GMR rates tend to be slightly higher than MW rates throughout the years.



### FEBRUARY 2022 GMW UNEMPLOYMENT RATES By Community

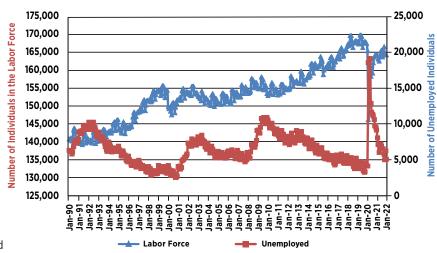
- In February 2022, all the communities in Greater MetroWest (GMW) posted unemployment rates lower than the state's rate of 4.3% and the nation's rate of 4.1% except for Hudson and Marlborough.
- Hudson and Marlborough posted the highest unemployment rate in the region at 4.3%, followed by Framingham and Marlborough both at 3.1%. The rest of the communities in the region experienced lower unemployment rates than GMW's rate of 3.1%.
- The lowest unemployment rate in GMW was reported by Sherborn at 1.5%, followed by Sudbury at 2.2%, and Natick and Southborough at 2.5%.



Source: MA EOLWD and MERC

#### **JANUARY 1990 - FEBRUARY 2022 GMW LABOR FORCE VS. UNEMPLOYED**

- This graph uses two different scales to compare the labor force (left scale), to the number of unemployed individuals (right scale), in the Greater MetroWest Region (GMW) from January 1990 to February 2022. 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.
- In February 2022, GMW reported 5,075
   unemployed individuals. The region
   registered its lowest number of unemployed
   individuals in October 2000 with 2,498
   unemployed individuals. The Covid-19
   pandemic caused the number of unemployed
   in GMW to reach its peak in June 2020 at
   19,157 individuals.

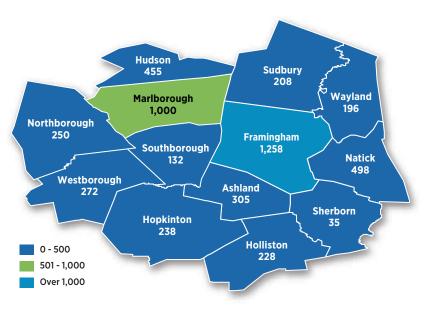


Source: MA EOLWD and MERC

GMW totaled 164,361 individuals in the labor force in February 2022. The highest recorded number of individuals in the region
was in June 2019 with 169,905 individuals, while the lowest recorded number of individuals in the labor force was in May 1991
with 139,225 individuals.



#### FEBRUARY 2022 GMW NUMBER OF UNEMPLOYED **Total 5.075**

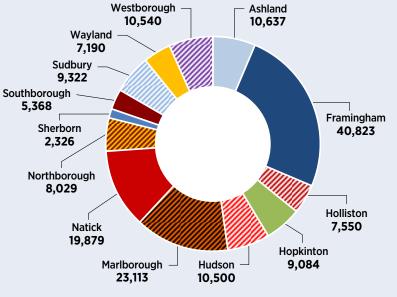


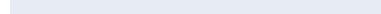
Source: MA EOLWD, MERC

- The total number of unemployed individuals in Greater MetroWest (GMW) in February 2022 was 5,075.
- Among the thirteen communities in the region, Framingham reported the largest number of unemployed individuals of 1,258, followed by Marlborough with 1,000 individuals. Together, these two communities accounted for about 44% of the total number of individuals unemployed within GMW, implying that 4 out of 10 individuals who did not have a job in the region either resided in Framingham or Marlborough.
- Sherborn reported the lowest number of unemployed individuals in the region with 35 individuals, followed by Southborough with 132 individuals and Wayland with 196 individuals. Together, these three communities accounted for just about 7.1% of the total unemployed individuals in the region.

#### **FEBRUARY 2022 GMW TOTAL LABOR FORCE Total 164,361**

- The total labor force in Greater MetroWest (GMW) in February 2022 was 164,361 individuals.
- The nine communities of MetroWest (MW) represented about 68% of the GMW labor force with a total of 112,179 individuals. The remaining four communities making up the Greater Marlborough Region (GMR) accounted for 52,182 individuals representing about 32% of the GMW labor force.
- The largest contributor to the GMW labor force was Framingham with 40,823 individuals, followed by Marlborough with 23,113 individuals and Natick with 19,879 individuals. Together, these three communities represented about 50% of the total labor force in GMW, implying that 1 out of 2 individuals in the GMW labor force resided in one of these three communities.
- Sherborn had the smallest contribution to the labor force in the region with 2,326 individuals, representing only 1.4% of the total labor force, followed by Southborough with 5,368 individuals, representing 3.3% and Wayland with 7,190 individuals, representing 4.4% of the total labor force.

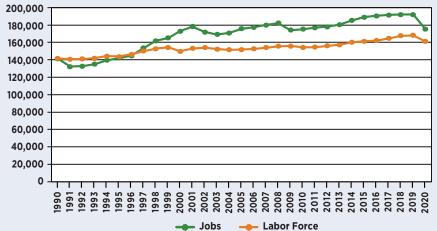






#### 1990 - 2020 GMW JOBS VS. LABOR FORCE

- The total number of jobs refers to the total number jobs in establishments located in Greater MetroWest (GMW).
   The total number of individuals in the labor force consists of residents in GMW that are currently employed or unemployed.
- During the last three decades, the total number of jobs in GMW reached its peak in 2018 with 191,886 job offers and the region recorded its greatest number of individuals in the labor force in 2019 with 168.199 individuals.
- GMW was a net exporter of labor between 1990 and 1996 where the number of individuals in the labor force were more than the number of jobs in the region.



Source: MA EOLWD and MERC

- However, between 1997 and 2020, the number of jobs in the region were more than the number of individuals in the labor force, indicating that the region was a net importer of labor.
- In 2020, the total number of jobs in GMW was 175,041, and the total number of individuals in the labor force was 160,994. During this year, there were 14,047 more jobs than individuals in the labor force.

### JUNE 2021 GMW JOBS VS. LABOR FORCE By Community

- The total number of jobs is compared to the total number of individuals in the labor force 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.
- The total number of jobs available in GMW in June 2021 was 179,604 jobs. Among the communities in the region, Framingham had the highest number of jobs with 40,680 jobs, followed by Marlborough with 32,385 jobs, Westborough with 24,995 jobs and Natick with 21,805 jobs. Together, these four communities made up two-thirds of the total available jobs in GMW.
- 45,000
  40,000
  35,000
  25,000
  15,000
  10,000
  5,000

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Source: MA EOLWD and MERC

- Sherborn had the smallest number of jobs available and individuals in the labor force in the region, with 725 jobs and 2,274 individuals.
- Hopkinton, Marlborough, Natick, Northborough, Southborough and Westborough had more jobs available than individuals
  in the labor force, indicating these six communities were net importers of labor. The remaining seven communities, however,
  had more individuals in the labor force than number of jobs available, implying that the seven communities were net
  exporters of labor.



etroWest 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 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 data for employment, payroll, wages and establishments<sup>1</sup> in the Greater MetroWest Region and Massachusetts. 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. In addition, MERC research relies on the U.S. Bureau of Labor Statistics Quarterly Census of Employment and Work for national employment, payroll, wages, and establishment data. This publication will include the latest annual employment data for 2020, which provides a first full-year look at the effects of the Covid-19 pandemic on the employment picture of the region.

In 2001, the North American Industry Classification System (NAICS) permanently replaced the Standard Industrial Classification (SIC) system which was in use for the previous 70 years. NAICS groups together establishments that use the same processes to produce goods and services. 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 of this report.

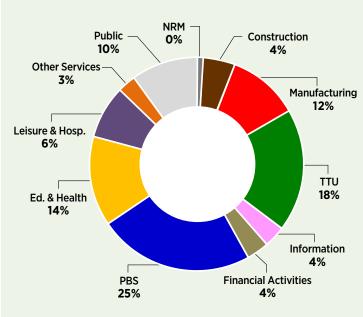


Please note that all data and analysis included in this section refer to business establishments, not residents, located within the 13 communities. Please also note that totals may not always add due to rounding.



<sup>&</sup>lt;sup>1</sup>The 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).

### 2020 GMW EMPLOYMENT BY SUPERSECTOR PBS, TTU, Ed. & Health, Manufacturing Led



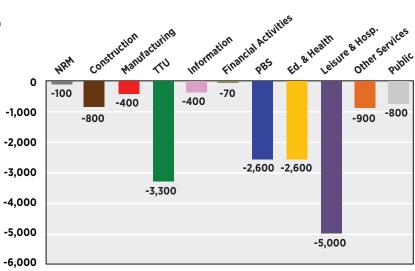
Total GMW Employment = 175,000

Source: MA EOLWD, MERC

- In 2020, Greater MetroWest (GMW) employment totaled 175,000 jobs, a decrease of 16,800 jobs or 8.8% from 2019.
- One supersector, Professional and Business Services (PBS), generated one-quarter of all GMW employment, 25% or 43,100 jobs, in 2020.
- Four supersectors each produced between 10% and 19% of regional employment. Trade, Transportation and Utilities (TTU) at 18% or 32,200 jobs, ranked second to PBS, followed by Education & Health Services at 14% or 23,700 jobs, Manufacturing at 12% or 21,600 jobs, and Public at 10% or 17,800 jobs.
- Together, the five largest GMW supersectors in terms of employment contributed 138,300 jobs or nearly 80% of all jobs in the region.
- The remaining six GMW supersectors, combined, produced 21% of regional employment. Listed in descending order they were: Leisure & Hospitality (6%), Construction (4%), Information (4%), Financial Services (4%), Other Services (3%) and Natural Resources and Mining (NRM) (0.4%).

### 2019 - 2020 GMW EMPLOYMENT NET CHANGE All Supersectors Lost Jobs

- Total employment in Greater MetroWest (GMW) fell from 191,900 jobs in 2019 to 175,000 jobs in 2020, a decline of almost 17,000 jobs or -8.8%. During this first year of the Covid-19 pandemic, every GMW supersector lost employment.
- In 2020, Leisure & Hospitality suffered the largest decline in employment in both absolute and percentage terms. This supersector lost 5,000 jobs, almost one-third (-31%) of all Leisure and Hospitality jobs in the region in a single year.
- In terms of absolute job losses, Trade, Transportation and Utilities (TTU) (-3,300 jobs) ranked second to Leisure & Hospitality, followed by Education & Health Services (-2,600) and Professional and Business Services (PBS) (-2,600). Financial Activities declined the least in employment with the fewest job losses (-70).



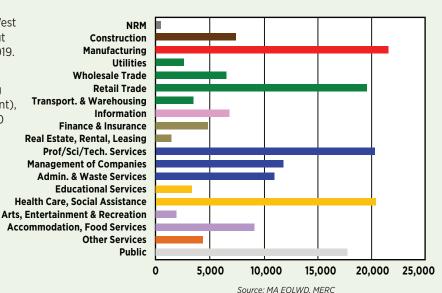
Source: MA EOLWD, MERC

 In terms of percentage job losses, Other Services (-16.8% or -900 jobs) ranked second, followed by Natural Resources and Mining (NRM) (-11.7% or -100 jobs) and Construction (-10.2% or -800 jobs). Financial Activities had the lowest percentage decline in employment, -1.1%, followed by Manufacturing with -1.9% or -400 jobs.



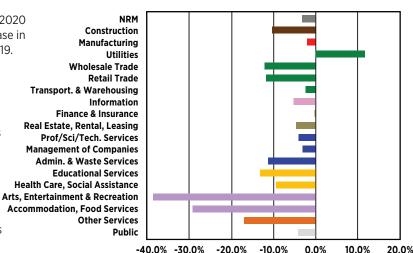
### 2020 GMW EMPLOYMENT By NAICS Sector

- The total number of jobs in Greater MetroWest (GMW) in 2020 was 175,000. This was about 8.8% lower than the employment level in 2019.
- Three NAICS sectors each generated more than 20,000 jobs. They were Manufacturing with 21,600 jobs (12.3% of GMW employment), Health Care & Social Assistance with 20,300 jobs (11.6%), and Professional, Scientific and Technical Services (Prof/Sci/Tech.) which also provided 20,300 jobs. Together these sectors were responsible for almost 36% of GMW employment (62,200 jobs).
- Retail Trade with 19,500 jobs (11.2%) and Public with 17,800 jobs (10.1%) were the only other NAICS sectors that provided more than 15,000 jobs.
- Six sectors generated between 5,000 and 15,000 jobs: Management of Companies (11,800 or 6.7%), Administrative & Waste Services (11,000 or 6.3%), Accommodation & Food Services (9,100 or 5.2%), Construction (7,400 or 4.2%), Information (6,900 or 3.9%) and Wholesale Trade (6,600 or 3.8%).
- The remaining eight sectors, combined, produced 22,800 jobs (13.0%) in 2020.



### 2019 - 2020 GMW EMPLOYMENT % CHANGE By NAICS Sector

- Total Greater MetroWest (GMW) employment in 2020 was 175,000 jobs. This represents an 8.8% decrease in the number of jobs in the region compared to 2019.
- The two NAICS sectors that make up the Leisure and Hospitality supersector saw the largest percentage declines. Arts, Entertainment and Recreation lost over 38% of its jobs, while employment in Accommodation & Food Services fell by 29%. The Accommodation & Food Services sector lost a total of 3,800 jobs, the largest absolute job loss of any NAICS sector.
- More than 10% of jobs were lost in six other sectors. Other Services suffered a 16.8% decline in employment, followed by Educational Services (-13.0%), Wholesale Trade (-12.0%), Retail Trade (-11.7%), Administrative & Waste Services (-11.2%) and Construction (-10.2%). Retail Trade lost the second largest total number of jobs: 2,600 jobs.

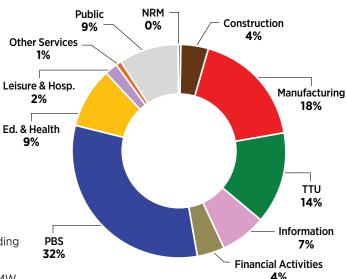


- The smallest percentage losses occurred in the Finance and Insurance sector (-0.1%), Manufacturing (-1.9%) and Transportation and Warehousing (-2.3%).
- Only one NAICS sector saw an increase in employment. The Utilities sector added 300 jobs, an 11.7% increase in that sector's employment.



### 2020 GMW PAYROLL BY SUPERSECTOR PBS, Manufacturing Produced Half

- In 2020, the Greater MetroWest (GMW) payroll totaled \$15.3 billion, a decline of \$106.8 million or -0.7% from 2019.
- Two supersectors, combined, generated half of the GMW payroll in 2020. Professional and Business Services (PBS), which ranked first in employment, produced one-third of all GMW payroll or \$5.0 billion. Manufacturing, the region's fourth largest employer, ranked second with 18% of regional payroll or \$2.8 billion.
- Four more supersectors also generated more than \$1 billion in payroll in 2020. Trade, Transportation, and Utilities (TTU), the region's second largest employer, ranked third in payroll with 14% or \$2.1 billion. The Public and Education & Health Services supersectors each provided 9% of regional payroll shares or \$1.3 billion. Information produced 7% or \$1.1 billion.
- Combined, the six largest supersectors, all with payrolls exceeding \$1 billion, generated 88% of total GMW payroll or \$13.5 billion.
- The remaining five supersectors combined produced 12% of GMW payroll. In descending order, they are: Construction (4% or \$663 million), Financial Activities (4% or \$641 million), Leisure & Hospitality (2% or \$293 million), Other Services (1% or \$217 million) and Natural Resources & Mining (NRM) (0.2% or \$32 million).

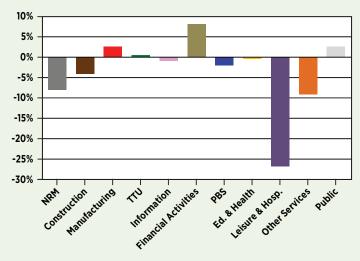


#### Total GMW Payroll = \$15.3 Billion

Source: MA EOLWD, MERC

### 2019-2020 GMW PAYROLL % CHANGE Leisure & Hospitality Largest Decline

- The Greater MetroWest (GMW) payroll declined by 0.7% between 2019 and 2020, a much smaller decrease than occurred in GMW employment (-8.8%). Seven GMW supersectors lost payroll but four supersectors gained payroll.
- Leisure & Hospitality experienced the largest percentage and absolute declines in payroll, losing over one-quarter of its payroll or \$107 million in one year.
- In terms of percentage losses in payroll, Other Services ranked second to Leisure & Hospitality and decreasing by 9.1% or \$22 million, followed by Natural Resources and Mining (NRM), down 8% or \$3 million, and Construction down 4% or \$28 million.
- In terms of absolute payroll losses, Professional and Business Services (PBS) with -\$97 million or -1.9%, ranked second to Leisure & Hospitality, followed by Construction, and Other Services.



Source: EOLWD, MERC

• From 2019-2020, Financial Activities experienced the highest percentage and absolute payroll gain, up 8.1% or \$48 million, followed by Manufacturing up 2.5% or \$67 million and Public, up 2.5% or \$32 million.



#### 2020 GMW PAYROLL By NAICS Sector

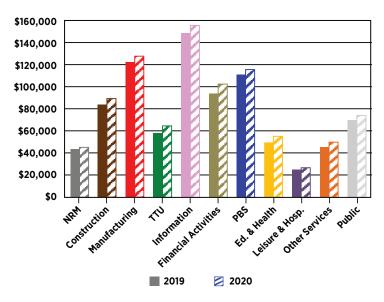
- In 2020, the total payroll generated by firms located in Greater MetroWest (GMW) was \$15.3 billion. This was a slight (-0.7%) decrease in total payroll from one year earlier.
- Two NAICS sectors each paid more than \$2 billion in total payroll. Manufacturing led the way with a total payroll of \$2.8 billion, followed closely by Professional, Scientific & Technical Services (Prof/Sci/Tech.) at \$2.7 billion. These payroll figures represent 18.3% and 17.6%, respectively, of total GMW payroll.
- The next four largest NAICS sectors all had payrolls over \$1 billion: Management of Companies (\$1.7 billion), Public (\$1.3 billion), Health Care & Social Assistance (\$1.1 billion) and Information (\$1.1 billion). The six largest sectors in terms of payroll combined to generate 70% of total GMW payroll.

NRM Construction Manufacturing Utilities Wholesale Trade **Retail Trade** Transport, & Warehousing Information Finance & Insurance Real Estate, Rental, Leasing Prof/Sci/Tech. Services Management of Companies Admin. & Waste Services **Educational Services** Health Care, Social Assistance Arts, Entertainment & Recreation **Accommodation, Food Services Other Services Public** \$1 \$0 \$2 \$3 **Billions** 

Source: MA EOLWD, MERC

- Five of the remaining sectors generated payrolls of more than \$500 million. They were Retail Trade (\$790 million), Wholesale Trade (\$680 million), Construction (\$660 million), Administrative and Waste Services (\$600 million), and Finance and Insurance (\$530 million).
- The smallest payroll sector (\$23 million) was Natural Resources and Mining (NRM).

### GMW AVERAGE WAGE BY SUPERSECTOR 2019 vs. 2020

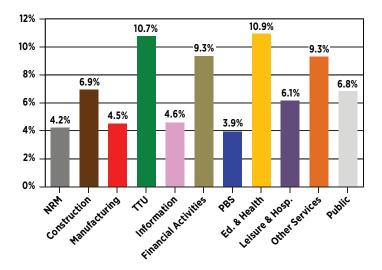


- In 2020, the average annual wage for Greater MetroWest (GMW) reached a historical high of \$87,600, up \$7,100 or 8.9% from 2019. The average annual wage rose in all eleven GMW supersectors during 2019-2020.
- Among all supersectors, Information generated the region's highest average annual wage of \$155,500, followed by Manufacturing (\$127,600), Professional and Business Services (PBS) (\$115,700), Financial Activities (\$102,300), and Construction (\$89,400).
- Leisure and Hospitality (\$26,400) and Natural Resources and Mining (NRM) (\$45,100) offered the lowest average annual wages among all supersectors.
- In 2020, the average annual wage of \$26,400 in Leisure & Hospitality was one-sixth of the average wage of \$155,500 in the Information supersector.
- Between 2019 and 2020, Financial Activities offered the largest absolute annual wage increase of \$8,700.
   In contrast, Leisure & Hospitality experienced the lowest absolute annual wage increase of \$1,500.



### 2019 - 2020 GMW % CHANGE IN AVERAGE WAGE By Supersector

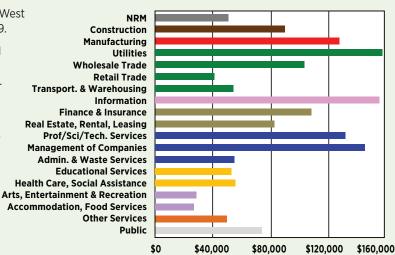
- The GMW average annual wage rose from \$80,500 in 2019 to \$87,600 in 2020, a gain of 8.9% or \$7,100.
- All eleven supersectors experienced annual wage gains between 2019 and 2020 ranging from 10.9% in Education & Health Services down to 3.9% in Professional and Business Services.
- Average percentage wage increases in seven supersectors exceeded 6%: Education & Health Services (10.9%), Trade, Transportation and Utilities (TTU) (10.7%), Financial Activities (9.3%), Other Services (9.3%), Construction (6.9%), Public (6.8%), and Leisure & Hospitality (6.1%). The remaining four supersectors had wage increases around 4%.
- In absolute terms, Financial Activities received the largest annual dollar increase in wages of \$8,700, followed by Information (\$6,800), TTU (\$6,300), Construction (\$5,800), Manufacturing (\$5,500), and Education & Health Services (\$5,400).
- In absolute terms, Leisure & Hospitality and Natural Resources and Mining (NRM) received the lowest annual dollar increase in wages of \$1,500 and \$1,800, respectively.



Source: MA FOLWD, MERC

### 2020 GMW AVERAGE WAGE By NAICS Sector

- In 2020, the average annual wage in Greater MetroWest (GMW) was \$87,600, up 8.9% from \$80,500 in 2019.
- The Utilities sector paid the highest average annual wage in 2020 at \$158,300. The Information sector followed closely with an average wage of \$155,500.
- Wages in three other NAICS sectors topped \$120,000. The average wage in Management of Companies was \$145,400 followed by Professional, Scientific & Technical Services (Prof/Sci/Tech.) at \$131,500 and Manufacturing (\$127,600).
- In all, eight sectors offered wages above the regional average. In addition to the five mentioned above, Finance & Insurance (\$108,000), Wholesale Trade (\$103,000) and Construction (\$89,400) exceeded the average.



 The lowest average wages in the region were found in Arts, Entertainment & Recreation (\$28,300) and Accommodation & Food Service (\$26,000).

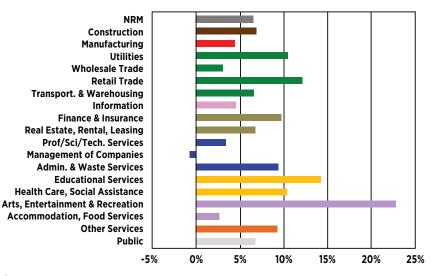
Source: MA EOLWD, MERC

• Even though, as previously noted, the number of jobs in every NAICS sector except Utilities declined between 2019 and 2020; the average wage in all sectors but one actually rose over that same time. The increases ranged from 2.7% in Accommodation & Food Service to 22.8% in Arts, Entertainment & Recreation.



#### 2019 - 2020 GMW % CHANGE IN AVERAGE WAGE By NAICS Sector

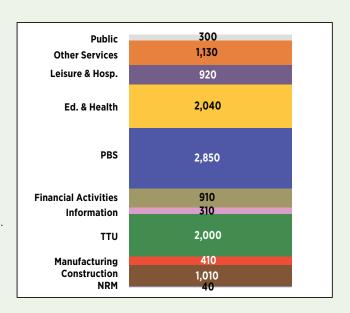
- The average annual wage in Greater MetroWest (GMW) in 2020 was \$87,600, up over \$7,100 (+8.9%) from 2019.
- Five NAICS sectors experienced wage increases of greater than 10%. They were Arts, Entertainment & Recreation (+22.8%), Educational Services (+14.3%), Retail Trade (+12.2%), Utilities (+10.5%) and Health Care & Social Assistance (+10.3%).
- Average annual wages in three other sectors also increased by more than the 8.9% regional increase. The average wage in the Finance & Insurance sector rose 9.7%. The Administrative & Waste Services sector saw the average wage rise by 9.4%, and the increase in Other Services was 9.3%.



- The average wage increased by less than 5% in four Source: MA EOLWD, MERC NAICS sectors: Accommodation & Food Service (+2.7%). Wholesale Trade (+3.1%), Professional, Scientific & Technical Services (Prof/Sci/Tech.) (+3.5%) and Manufacturing (+4.5%).
- Average wage in only one sector, Management of Companies, actually fell. The decline in that sector's average annual wage was only 0.7%.

#### **2020 GMW ESTABLISHMENTS BY SUPERSECTOR** PBS, Ed. & Health, TTU Led

- In 2020, the number of establishments or separate places of work in the Greater MetroWest region (GMW) totaled 11,900, a modest gain of 130 establishments or 1.1% since 2019. Three supersectors dominated the region contributing 6,880 or 58% of all GMW establishments.
- PBS led with the highest number of establishments, 2,850 or 24% of all GMW establishments. Education & Health Services ranked second to PBS with 2,040 establishments or 17% followed by Trade, Transportation and Utilities (TTU) with 2,000 or 17% of GMW establishments. Other Services had the fourth largest number of establishments with 1,130, or 9% of GMW establishments.
- Three supersectors had between 910 and 1,010 establishments. Construction was home to 1,010 establishments (9%), followed by Leisure & Hospitality with 920 (8%), and Financial Activities with 910 establishments (8%). The remaining four supersectors each had fewer than 420 establishments.
- Between 2019 and 2020. Education & Health added the most establishments, 100, while TTU lost the most establishments, -70.

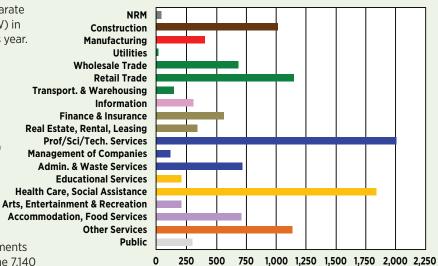


Source: FOLWD, MERC



### 2020 GMW ESTABLISHMENTS By NAICS Sector

- The total number of establishments or separate places of work in Greater MetroWest (GMW) in 2020 was 11,900, up 1.1% from the previous year.
- The Professional, Scientific & Technical Services (Prof/Sci/Tech.) sector had the largest number of establishments, 2,010. This represents 16.9% of all the establishments in the region.
- The only other sector with more than 1,250 establishments was Health Care & Social Assistance, whose 1,830 establishments were 15.4% of the regional total.
- The other sectors topping 1,000 establishments were Retail Trade at 1,150 (9.7%), Other Services with 1,130 establishments (9.5%) and Construction at 1,010 (8.5%). The 7,140 establishments located in the top five sectors represent 60.0% of all establishments in GMW.
- The smallest number of establishments were found in Utilities (15), Natural Resources & Mining (NRM) (18), Management of Companies (120) and Transportation & Warehousing (146).

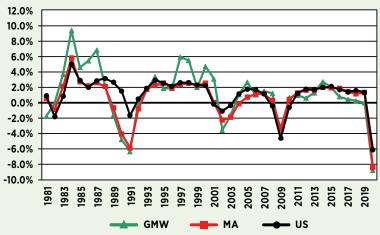






### 1981 - 2020 ANNUAL PERCENT CHANGE IN EMPLOYMENT GMW, MA and US

- This graph illustrates the annual percent change in employment for the past forty years in Greater MetroWest (GMW), Massachusetts, and the United States. As expected, declines in employment tend to coincide with economic recessions as identified by the National Bureau of Economic Research (NBER).
- There is a high degree of co-movement in employment levels for these three regions.
   The reductions in employment shown on the graph correspond to economic recessions that took place in 1982, 1991, 2002, 2009 and 2020.
- The biggest decline in employment in all three regions took place in 2020, in the midst of the Covid-19 pandemic. During that year, employment decreased by -8.8% in GMW, -8.4% in Massachusetts and -6.1% in the United States.

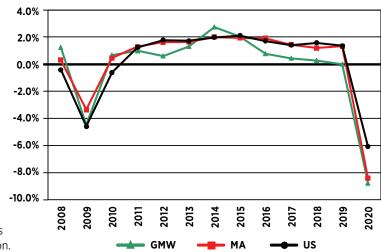


Source: MA EOLWD, MERC

- Conversely, the fastest employment growth in all three regions took place in 1984. During that year, employment increased by 9.4% in GMW, 5.8% in Massachusetts and 5.1% in the United States.
- Historically, there has been a strong correlation between employment and economic growth in all three regions when
  economic growth occurs jobs increase, and when recessions occur jobs decrease.

### 2008 - 2020 ANNUAL PERCENT CHANGE IN EMPLOYMENT GMW, MA and US

- In order to put the recent Covid-19 recession in perspective relative to the Great Recession, this graph shows the annual percent change in employment from the 2008 to 2020 in GMW, Massachusetts and the United States.
- Employment in all three regions was significantly affected during the Great Recession. During 2009, GMW lost 8,189 jobs or -4.5%, Massachusetts lost 109,216 jobs or -3.4%, and the US lost 6,197,817 jobs or -4.6%.
- The drop in employment was, however, followed by a sustained growth trend in all three regions until 2020 when the global pandemic occurred.
- By comparison, the Covid-19 pandemic recession was shorter-lived but more severe than the 2009 recession.
   During 2020, GMW lost 16,838 jobs or -8.8%, which is double what it lost in 2009, Massachusetts lost 306,175 jobs or -8.4%, which is almost three times the loss in 2009, and the US lost 9,001,319 jobs or -6.1%.
- As can be seen on this graph, the recent Covid-19 pandemic effects on employment on all three regions was unprecedented in recent history.





### 2019 - 2020 GMW ANNUAL CHANGE IN EMPLOYMENT By Community, GMW, MA and US

- This bar graph shows the annual change in employment from 2019 to 2020 for the individual communities of Greater MetroWest (GMW), GMW as a whole, Massachusetts, and the United States. As seen here, all regions considered experienced a loss in employment during the 2019-2020 period.
- Among the communities of GMW, the largest annual percent decline in employment happened in Wayland, which experienced a job loss of 19.7% or 836 jobs.
   Framingham had the second largest employment loss during this year. It lost 12% of its employment, which is equivalent to a loss of 5,719 jobs.
- On the other hand, the GMW community with the smallest percentage decline in employment during this period was Sherborn, which lost 3.3% of its employment or 21 jobs.

  Southborough followed closely with an employment decrease of -3.4%, which is equivalent to a loss of 277 jobs.

-5.6% -1,464 -1,

-8.2%

-10.8%

-9.1%

-12.0%

-11.6%

-411

-5.719

-716

-277

Ashland

Holliston

Hudson

Natick Northborough

Sherborn

Wavland

Hopkinton

Marlborough

Southborough Sudbury

Framingham

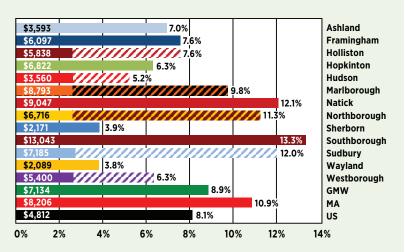
• To put this in perspective, during the same period, the US had a loss of 6.1% or 9,001,319 jobs, the state of Massachusetts had a loss of 8.4% or 306,175 jobs, and GMW as a whole had a loss of 8.8% or 16,838 jobs.

-19 7%

• While all regions experienced job losses during the 2019-2020 period, the employment effects of the pandemic have not been uniform. Some communities in GMW have suffered greatly as a result of the pandemic while others have experienced only limited changes.

### 2019 - 2020 GMW ANNUAL CHANGE IN AVERAGE WAGE By Community, GMW, MA and US

- This bar graph illustrates the annual change in average wage from 2019 to 2020 for the thirteen Greater MetroWest (GMW) communities, GMW as a whole, the state of Massachusetts, and the US.
- As can be seen by this graph, the average wages for all regions considered here increased during the 2019-2020 period.
- Southborough had the fastest growing average wage of all regions considered during this time period at 13.3% or \$13,043. It was closely followed by Natick with a 12.1% increase or \$9,047.
- On the other end of the spectrum, Wayland experienced the smallest annual percent increase in average wages with a 3.8% annual change or \$2,089. It was closely followed by Sherborn with a 3.9% annual change or \$2,171.



- To put this in perspective, the annual percent change in average wage for the US was 8.1% or \$4,812, the state of Massachusetts was 10.9% or \$8,206, and lastly, GMW as a whole was 8.9% or \$7,134.
- It is interesting to note that although employment decreased between 2019 and 2020 for all regions considered, average wage actually increased during the same period.



### 2020 EMPLOYMENT COMPARISON GREATER METROWEST REGION By Community

Community/Region	Number of Jobs*	Average Wage*	Total Payroll* (millions)	Number of Establishments*	Largest Supersector (Employment)
Ashland	4,600	\$55,100	\$255	500	TTU**
Framingham	41,900	\$86,700	\$3,632	2,600	PBS***
Holliston	6,000	\$83,000	\$493	500	PBS***
Hopkinton	11,000	\$114,800	\$1,146	600	Manufacturing
Hudson	10,000	\$71,500	\$676	700	TTU**
Marlborough	3,300	\$98,800	\$3,094	1,700	PBS***
Natick	20,700	\$83,900	\$1,738	1,600	TTU**
Northborough	8,700	\$66,400	\$578	650	TTU**
Sherborn	600	\$58,300	\$36	170	Public
Southborough	8,000	\$110,700	\$877	500	PBS***
Sudbury	6,000	\$67,000	\$396	700	Public
Wayland	3,400	\$56,500	\$192	500	Public
Westborough	24,600	\$90,500	\$2,227	1,100	PBS***
MetroWest	101,000	\$86,800	\$8,765	7,670	PBS***
Greater Marlborough Region	74,000	\$88,800	\$6,576	4,200	PBS***
Greater MetroWest	175,000	\$87,600	\$15,340	11,900	PBS***
Massachusetts	3,327,000	\$83,700	\$278,456	268,600	Education and Health Services
United States	137,104,000	\$64,000	\$8,905,607	10,487,700	TTU**

Source: MA EOLWD, US BLS, MERC



<sup>\*</sup>Rounded

<sup>\*\*</sup>Trade, Transportation and Utilities (TTU)

<sup>\*\*\*</sup>Professional and Business Services (PBS)



etroWest 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. 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.





#### 1987-2021 GMW SINGLE-FAMILY HOME SALES

4,500

4,000

3,500

3.000

2.500

2.000

1,500

1,000

500

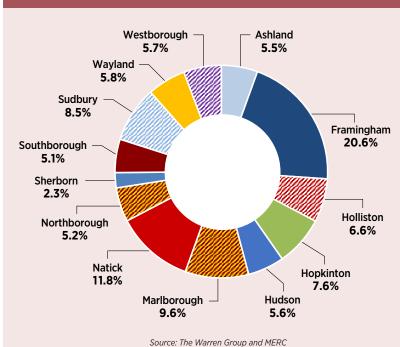
- Sales of existing single-family homes are shown for Greater MetroWest (GMW) by the height of the graph depicted above. The data is shown for a 35-year period from 1987 to 2021. These sales consist of a different mix of homes sold each year, and do not represent a change in value of the homes. The green 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.
- Relative low points in single-family home sales in GMW.

  Source: The Warren Group and MERC
  GMW occurred in 1990, 1995, 2001, 2008, 2011 and
  2019; whereas peaks occurred in the years 1999 and 2004 (also others around 1993, 1999, 2004, 2013, and 2017.) The fewest homes
- GMW.

  Source: The Warren Group and MERC
- sold in GMW occurred in 1990 at 2,099 units sold, and the peak occurred in 1999 at 3,986 units sold.

   From 2020 to 2021, MW experienced an increase of 81 units sold or 3.4% and GMR experienced an increase of 45 units sold or 5.4%.

### 2021 GMW SINGLE-FAMILY HOME SALES 3.369 Units Sold

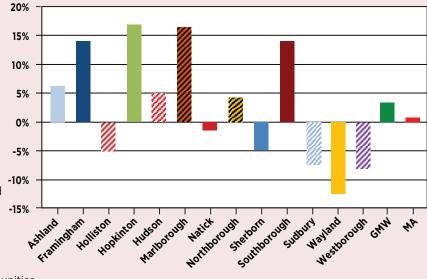


- In 2021, 3,369 existing single-family homes were sold in Greater MetroWest (GMW). This represents an increase of about 126 homes from the previous year.
- Framingham and Natick were the only two communities to have over 300 single-family home sales in 2021 and these communities combined for 32.4% of all single-family home sales in GMW.
- The nine communities of MW combined to contribute 73.9% or 2,489 single-family home sales, and the four communities of GMR contributed 26.1% or 880 single-family home sales in 2021.
- Framingham and Natick were the only communities to each contribute over 10% of total sales, and Sherborn was the only to contribute less than 5%.
- Framingham accounted for over one fifth of all single-family home sales made in the entire GMW in 2021, at 20.6% of the total. Sherborn accounted for the smallest percentage of single-family homes sales in GMW at only 2.3%.



#### 2020 - 2021 GMW EXISTING SINGLE-FAMILY HOMES SOLD

- This graph shows the percent change in existing single-family home sales from 2020 to 2021 in Greater MetroWest (GMW) and in each of its thirteen communities, as well as Massachusetts (MA).
- In 2021, there were 126 more units sold in GMW than in 2010, a 3.9% increase.
   Massachusetts, on the other hand, reported a 463-unit increase from 2020, up 0.8%.
- Hopkinton and Marlborough reported the largest percent increases in units sold between 2020 and 2021. Hopkinton reported 37 additional units sold, equivalent to a 16.9% increase and Marlborough reported 46 additional units sold, an increase of 16.5%. In Southborough and Framingham, an additional 21 and 85 units were sold in 2021 respectively, a 14.0% increase for both communities.

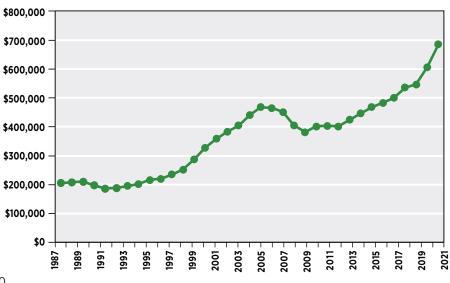


Source: The Warren Group and MERC

 Wayland and Westborough reported the largest percent decreases in units sold between 2020 and 2021. In 2021, Wayland saw a 12.4% decrease in units sold from 2020 and Westborough, an 8.1% decrease.

#### 1987-2021 GMW SINGLE-FAMILY MEDIAN SALE PRICE

- This graph shows the estimated median sale price of existing single-family homes in Greater MetroWest (GMW) during the 35-year period from 1987 to 2021. 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 2021 with an estimated median sale price of \$685,000, representing a 234.5% increase from the 1987 median sales price of \$204,758.
- The biggest one-year increase since 2012 occurred between 2020 and 2021, when prices were \$604,841 and \$685,000, respectively. This increase of over \$80,000 represents a 13.3% gain.

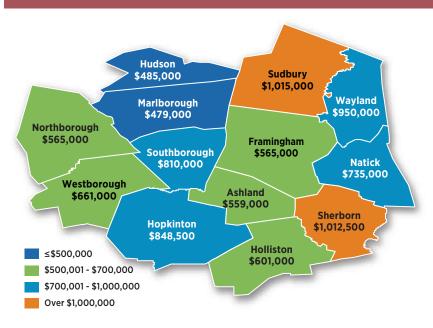


Source: The Warren Group and MERC

• The most recent low point for estimated median sales price in this region occurred in 2009 at \$381,180. There was a 79.7% increase from 2009 to 2021, during which the estimated median sale price increased by nearly \$304,000.



### 2021 EXISTING SINGLE-FAMILY HOME PRICES GMW Communities

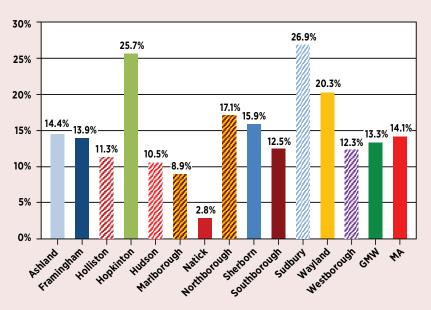


Source: The Warren Group and MERC

- This map shows the 2021 median sale prices for existing single-family homes in the 13 communities of Greater MetroWest (GMW). Median sale prices ranged from a low of \$479,000 in Marlborough to a high of \$1,015,000 in Sudbury.
- Seven of the thirteen communities had median sale prices under \$700,000. Ashland, Framingham, Holliston, Northborough, and Westborough registered under \$700,000.
   Only Hudson and Marlborough posted median sale prices below \$500,000.
- Six communities had median sale prices above \$700,000. Natick came in at \$735,000. Hopkinton had a median sale price of \$848,500, Southborough had a median sale price of \$810,000, and Wayland had a median sale price of \$950,000. Sherborn and Sudbury both had median sale prices over \$1,000,000. Sherborn had a median sale price of \$1,012,500 and Sudbury had the highest median sale price of \$1,015,000.

### EXISTING SINGLE-FAMILY MEDIAN SALE PRICE GMW % Change 2020 to 2021

- All thirteen communities experienced increases in median sale price between 2020 and 2021. Sudbury recorded the largest percentage increase in median sale price at 26.9% from \$800,000 in 2020 to \$1,015,000 in 2021. Hopkinton had the second largest percentage increase of 25.7% from \$675,000 in 2020 to \$848.500 in 2021.
- None of the thirteen communities experienced a decrease in median sale prices between 2020 and 2021. Natick recorded the smallest percentage increase in median sale price of 2.8% from \$715,000 in 2020 to \$735,000 in 2021. Marlborough had the second lowest percentage of 8.9% from \$440,000 in 2020 to \$479,000 in 2021.
- From 2020 to 2021, Massachusetts experienced an increase of 14.1%, which is a higher percentage increase than seven of the communities in GMW.

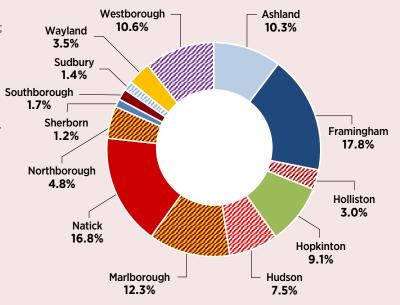


Source: The Warren Group and MERC



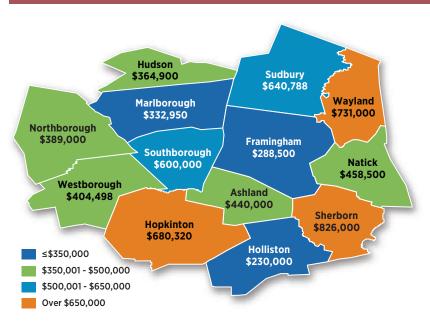
### 2021 GMW CONDOMINIUM SALES 1,382 Total Units Sold

- In 2021, 1,382 condominiums were sold in the thirteen communities of Greater MetroWest (GMW); this is 181 units more than in 2020.
- Condo sales in seven of the communities, Ashland, Framingham, Hopkinton, Hudson, Marlborough, Natick and Westborough dominated the region making up 84.4% of the total units sold in GMW. Framingham contributed 17.8% to the region's sales. Ashland, Hopkinton, Hudson, Marlborough, Natick and Westborough contributed 10.3%, 9.1%, 7.5%, 12.3%, 16.8%, and 10.6% 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 17 condominiums sold, which was about 1.2% of total condominium sales.
- The nine communities of MW combined for 64.8% and the four communities of GMR combined for 35.2% of the total condominium sales in GMW in 2021.



#### Source: The Warren Group and MERC

### 2021 CONDOMINIUM PRICES GMW Communities



Source: The Warren Group and MERC

- In 2021, the estimated median price for condominium sales in Greater MetroWest (GMW) was about \$459,207, a 0.2% increase from 2020.
- Only three communities, Holliston, Framingham and Marlborough, had a median condominium price under \$350,000. Holliston had the lowest median price in the region at \$230,000; Framingham and Marlborough had median sales prices of \$288,500 and \$332,950, respectively. Ashland, Hudson, Natick, Northborough, and Westborough had median sale prices ranging between \$350,000 and \$499,000.
- Two communities had median condominium sale prices between \$500,000 and \$649,000. Southborough had a median sale price of \$600,000 and Sudbury had a median sale price of \$640,788.
- Three communities had median condominium sale prices over \$650,000. Sherborn recorded the highest median sale price at \$826,000 followed by Wayland at \$731,000. Additionally, Hopkinton had a median sale price of \$680,320.



etroWest Economic Research Center (MERC) tracks the cost of living in the MetroWest¹ CCSA area by calculating the average cost of a "market basket" of 61 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 61 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 (MW) 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.

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. Complications due to the Covid-19 pandemic resulted in MERC being unable to conduct the survey in October 2020.

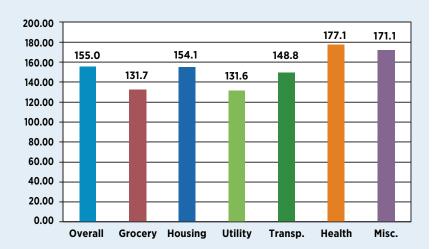
Because these Indexes are calculated from the prices of a relatively small sample of the many goods and services which middle-management households actually purchase, they are only estimates of the true cost of living in any given area. As with any figure calculated from sample data, there is a margin 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. The MERC Cost of Living Survey was conducted in October 2021 for the first time since October 2019. The break in the survey was due to the Covid-19 pandemic. For continuity purposes, the growth between October 2019 to October 2021 was averaged to estimate October 2020.



<sup>&</sup>lt;sup>1</sup> MetroWest CCSA includes the communities of Ashland, Framingham, Holliston, Hopkinton, Natick, Sherborn, Southborough, Sudbury, and Wayland.

#### **MERC MW COST OF LIVING INDEXES** October 2021, April 2009 = 100.0

- The MERC Overall Cost of Living Index for MetroWest (MW) was 155.0 in October 2021. This indicated that the Cost of Living in MetroWest was 55% higher in October 2021 than it was in April 2009. This is a 13.2% increase from October 2019, the last time the survey was conducted.
- The Health Care Index had a significantly higher value than the other Indexes, 177.1, in October 2021. This implies that in October 2021, health care costs were more than 77% higher than they were in April 2009. The Index was, on the other hand, up about 3.4% from its value in October 2019.
- The Index with the lowest value was the Utilities Index, with a value of 131.6, over 30% higher than in April 2009, and roughly 5.5% higher than October 2019.
- Not one of the Indexes in the MetroWest fell below the April 2009 base year of 100.0.



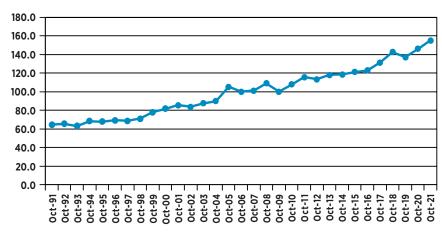
Source: MFRC

#### MERC MW COST OF LIVING INDEX **April 2009 = 100.0**

- This graph shows the values of the MERC Overall Cost of Living Index from October 1991 to October 2021. April 2009 is the base year for the Index, thus the Index value in April 2009 is normalized to 100.0.
- From October 2019 to October 2021, the MERC MetroWest Cost of Living Index increased 13.2% to a value of 155.0 from 136.9 in October 2019, the most recent survey conducted prior to the Covid-19 pandemic.
- The Overall Index had an average annual increase of roughly 3% from October 1991 to October 2021.

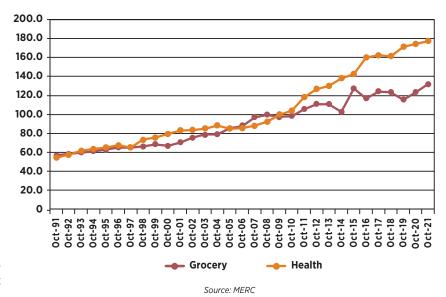


 Since 1991, the MERC Cost of Living Index has increased from a value of 64.6 to 155.0. This is a 140% increase over the 31-year span.



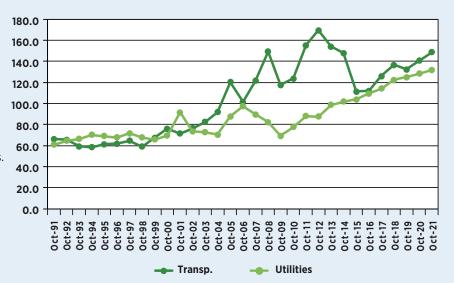
### MW GROCERY, HEALTH CARE INDEXES April 2009 = 100.0

- Over the 30 years between October 1991 and October 2021, the Health Care Index rose at a steady rate and had less volatility than almost all of the other Indexes.
- The Grocery Items Index, on the other hand, increased an astounding 14% between October 2019 and October 2021, having gone from a value of 115.6 to 131.7.
- In October 2021, the Health Care Index was the highest of the six sub-Indexes with a value of 177.1.
- The Grocery Items Index was the second lowest of the six sub-Indexes with a value of 131.7. These values are referenced to the base period of April 2009, when the Index equaled 100.0.



### MW TRANSPORTATION, UTILITIES INDEXES April 2009 = 100.0

- For the first 15 years until October 2006, the Transportation Index (Transp.) and the Utilities Index fluctuated in similar patterns. After 2006, the Index fluctuations began to diverge; the Transportation Index experienced a trough in 2006 and a peak in 2008, while the Utilities Index experienced a peak in 2006 and a trough in 2009. This pattern continued for ten more years.
- Between October 1991 and October 1999, the Transportation Index only rose 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 four years. As of October 2021, the Transportation Index now has a value of 148.7.



Source: MERC



### MW HOUSING, MISCELLANEOUS INDEXES April 2009 = 100.0

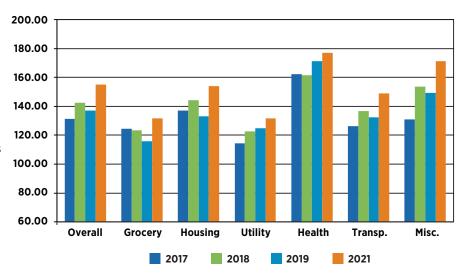
- The Housing Index had a value of 154.1 in October 2021. This means that housing costs in MetroWest were approximately 54% higher in October of 2021 than the base period in April 2009.
- Both the Housing Index and Miscellaneous Goods and Services (Misc.) Index have dramatically increased since October 2019.
   The Housing Index at 154.1 was 15.7% larger than October 2019; and the Miscellaneous Goods and Services Index at 171.1 was a 14.7% increase from October 2019.



Source: MERC

### MERC COL INDEXES October Surveys 2017 - 2019 & 2021; April 2009 = 100.0

- This graph shows all of the Indexes from the October surveys of each year, from 2017 to 2021. The base period for all the Indexes is April 2009, at which time each Index had a value of 100.0.
- The largest relative increase occurred for the Housing Index; it was 15.7% higher than in 2019. The Miscellaneous Goods & Services (Misc.) Index recorded the second largest increase from 2019 at 14.7% followed by the Grocery Items Index at 13.9%.
- The smallest increase was the Health Care Index at 3.4%.



Source: MERC



unicipalities 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. 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.

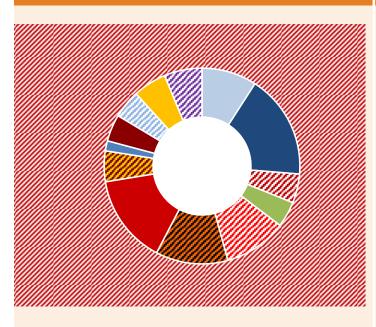


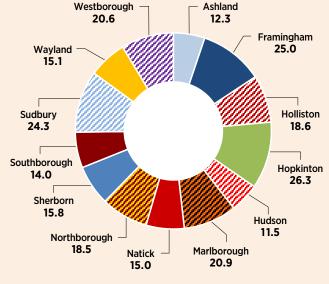
With the residential exemption, the tax burden shifts within the residential class from owner-occupied, and relatively lower valued properties, to relatively higher valued ones and to those not eligible for the exemption, such as vacant land, rental properties, and seasonal homes. The small commercial 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 (ten or fewer employees).



### FY 2022 GMW POPULATION PER SQUARE MILE By Community

### GMW LAND AREA IN SQUARE MILES By Community



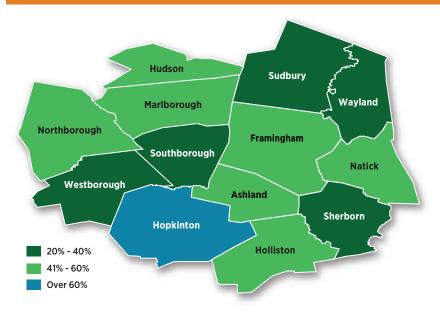


Source: MA Department of Revenue, DLS, and MERC

Source: MA Department of Revenue, DLS, and MERC

- The chart on the right 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 left panel represents the density (population per square mile) share for each community. The GMW communities comprise an area of about 237.9 square miles. Hopkinton is the largest community in GMW in square miles and accounts 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 20.9 in Marlborough.
- The chart on the left represents the density (population per square mile) for each community. The densest communities are Framingham (2,890), Natick (2,475) and Marlborough (2,003), followed closely by Hudson (1,744) and Ashland (1,527). The least dense communities are Sherborn (278) followed by Hopkinton (714). The remaining communities in GMW fell between 745 individuals per square mile in Southborough and 1,048 in Westborough. The average density for GMW is 1,299 individuals per square mile and 902 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 714 individuals per square mile.

#### FY2012 - FY2022 GMW GROWTH IN MUNICIPAL REVENUE

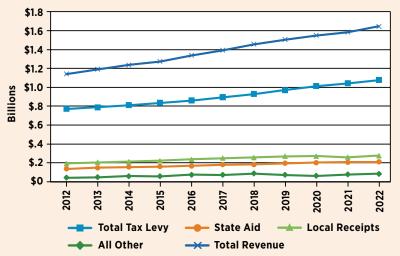


Source: MA Department of Revenue, DLS, and MERC

- This map reflects municipal revenue growth in Greater MetroWest (GMW) from FY2012 to FY2022.
- In FY2012, total revenue for GMW was \$1.14 billion and has since increased by \$503.4 million in FY2022 to a total of about \$1.64 billion. This is an increase of 44.1% in 10 years. Seven communities: Marlborough, Ashland, Framingham, Natick, Hudson, Holliston, and Northborough, showed growth rates of 40% 60%. Five other communities Westborough, Sudbury, Southborough, Wayland, and Sherborn fell in the 20% 40% growth interval.
- For FY2012 FY2022, Hopkinton, however, was the only community with a growth rate of over 60%, making it the largest among all the communities at 64.6%. This was followed by Marlborough (55.8%) and Ashland (47.3%).

#### FY2012 - FY2022 GMW TOTAL REVENUE

- For the recent 10-year period, total revenue for Greater MetroWest (GMW) has increased from \$1.14 billion in FY2012 to \$1.64 billion in FY2022. This is a 44.1% increase from FY2012.
- Total Tax Levy continued to increase from FY2012 through FY2022; starting with a total of \$771.9 million and reaching \$1.1 billion, an overall increase of 39.4%.
- State Aid had steady increases over this period. Overall, it increased from \$136.2 million in FY2012 to \$210.1 million in FY2022, an increase of over 50%.
- Local Receipts showed an increase of about 44% from \$191.4 million in FY2012 to a total of \$275.5 million in FY2022. Local Receipts were the second biggest revenue contributor to the GMW region. The last category, All Other, is the smallest contributor of revenue to the GMW region. It increased from \$41.8 million in FY2012 to almost doubling in FY2022 at \$83.3 million, but never surpassed the \$100 million mark during this period.

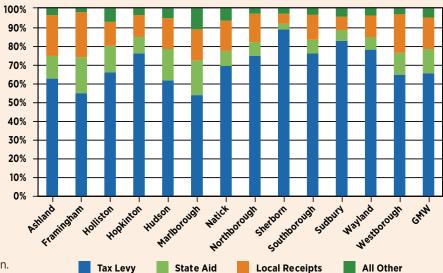


Source: MA Department of Revenue, DLS, and MERC



### FY2022 GMW MUNICIPAL REVENUE By Source

- In FY2022, the total municipal revenue for Greater MetroWest (GMW) totaled \$1.64 billion from four different sources. The sources that make up municipal revenue are as follows: Tax Levy, State Aid, Local Receipts, and All Other.
- Tax Levy is the main source of revenue for each of the thirteen communities that make up GMW. Marlborough had the smallest percentage of revenue coming from Tax Levy at 53.6%, followed by Framingham (54.6%), and Sherborn had the highest at 88.5%. The average Tax Levy for the region was 65.4%.
- State Aid and Local Receipts recorded averages of 12.8% and 16.8% for the region.
   State Aid ranged from 19.0% in Framingham to 3.2% in Sherborn. Local receipts' highest percentage came from Framingham at 24.0% and the lowest percentage came from Sherborn at

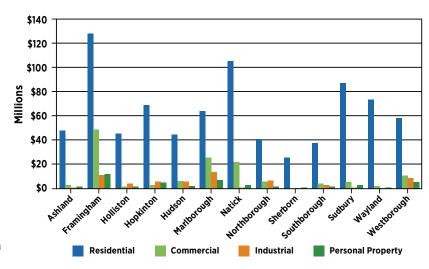


Source: MA Department of Revenue, DLS, and MERC

5.2%. Of the four different revenue sources, All Other contributed the smallest amount with the average for the region at 5.1%.

### FY2022 GMW TAX LEVIES BY CATEGORY By Community

- Total Tax Levy consists of four components as follows: Residential, Commercial, Industrial, and Personal Property.
- In FY2022, the Residential tax category accounted for the largest portion of the Total Tax Levy for all the communities that make up Greater MetroWest (GMW). The Residential Tax Levy fell between \$25.7 million in Sherborn and \$128.0 million in Framingham. The Total Residential Tax Levy for GMW accounted for \$827.3 million, or 76.9% of the total GMW Tax Levy of over \$1.07 billion.
- The Commercial Tax Levy was the next largest contributor to the Total Tax Levy, ranging from \$477,354 in Sherborn to \$48.9 million in Framingham. Marlborough held the second largest Commercial Tax Levy at \$25.7 million.



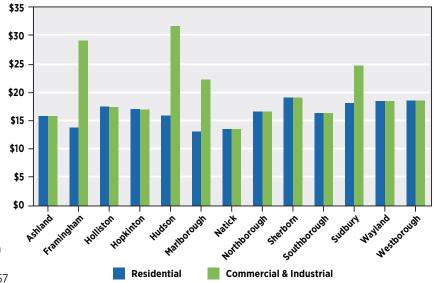
Source: MA Department of Revenue, DLS, and MERC

- For the industrial component of the Total Tax Levy, the highest total of all thirteen communities in GMW came from Marlborough at \$13.9 million, while the lowest was recorded in Sherborn at \$54,534, followed by Wayland at \$85,461.
- The Personal Property Tax was the smallest contributor among all four categories measured. The range in GMW went from \$848,164 in Sherborn to \$12.1 million in Framingham.



### FY2022 GMW TAX RATE BY COMMUNITY Four with Split Rates

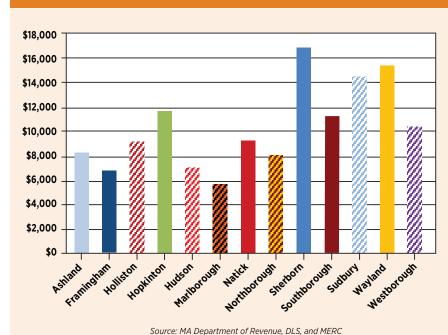
- This graph depicts the FY2022 Residential and Commercial & Industrial (C&I) tax rates per \$1,000 of assessed value for the thirteen communities that comprise Greater MetroWest (GMW). Of the thirteen communities, Ashland, Holliston, Hopkinton, Natick, Northborough, Sherborn, Southborough, Wayland, and Westborough, all had one set rate for both residential and C&I rates.
- Framingham, Hudson, Marlborough, and Sudbury had split residential and C&I rates.
   The C&I rates were higher than the residential rates in all four communities.
- Of those four communities with split rates, Hudson had the largest C&I rate at \$31.60 with Framingham just behind at \$29.00. Sudbury and Marlborough posted C&I tax rates at \$24.57 and \$22.17, respectively.



Source: MA Department of Revenue, DLS, and MERC

 Marlborough's residential rate was \$13.12, making it the smallest rate of all the communities with split rates. Framingham, at \$13.74, was the second smallest rate, followed by Hudson (\$15.86) and Sherborn (\$19.03). Natick recorded the lowest rates at \$13.34 for both residential and C&I property.

### FY2022 GMW AVERAGE SINGLE-FAMILY TAX BILL By Community

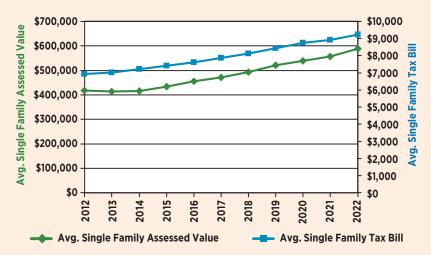


- The average single-family tax bill for a given community is determined by applying the respective residential tax rate to the average single-family assessed value.
- In Greater MetroWest (GMW) in FY2022, the highest single-family tax bill of all thirteen communities came from Sherborn at \$16,760. Marlborough had the lowest single-family tax bill at \$5,657, about three times smaller than that of Sherborn.
- In GMW, six out of thirteen communities had a single-family tax bill larger than \$10,000, which include: Sherborn (\$16,760), Wayland (\$15,386), Sudbury (\$14,469), Hopkinton (\$11,599), Southborough (\$11,234), and Westborough (\$10,328).
- The range for an average single-family tax bill for the remaining seven communities in Greater MetroWest was between \$5,000 and \$10,000.



#### FY2012 - FY2022 GMW AVERAGE SINGLE-FAMILY TAX BILL & ASSESSED VALUE

- The average single-family assessed value for Greater MetroWest (GMW), is shown in green on the left vertical axis. The average single-family tax bill is shown in blue on the right vertical axis.
- The average single-family tax bill increased from a low of \$6,926 in FY2012 to a high of \$9,231 in FY2022, an increase of over 30% during the period. The average single-family tax bill increased each year.
- From FY2012 to FY2022, the average single-family assessed value fluctuated. The lowest value occurred in FY2013 at \$413,490 while the highest value during this period was \$588,165 in FY2022.
- The average single-family tax bill for the region

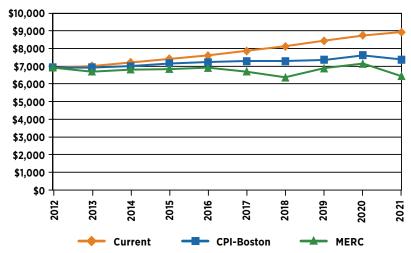


Source: MA Department of Revenue, DLS, and MERC

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.

#### **AVERAGE SINGLE-FAMILY TAX BILL GMW: Inflation Adjusted**

- This graph depicts the average single-family tax bill in Greater MetroWest (GMW), for FY2012 to FY2021 with FY2012 as 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 orange, increased every year during this time period from \$6,926 in FY2012 to \$8,926 in FY2021, an increase of \$5,240, or 28.9%.
- 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). MERC's MetroWest Cost of Living Index for FY2019 is also used for FY2020 as FY2020 amounts were unavailable.

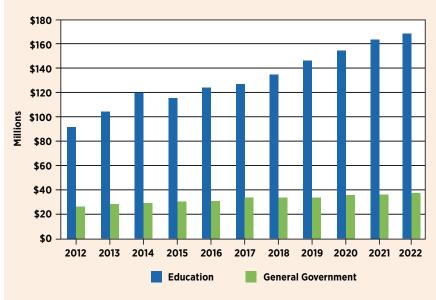


Source: MA Department of Revenue, DLS, and MERC

The Boston CPI produced an increase in the tax bill of \$449 over the period of FY2012 through FY2021 from \$6,926 to a tax bill of \$7,375; while the MERC index produced a decrease of \$493 to a \$6,433 over the same period.



#### FY2012 - FY2022 GMW STATE AID CATEGORIES

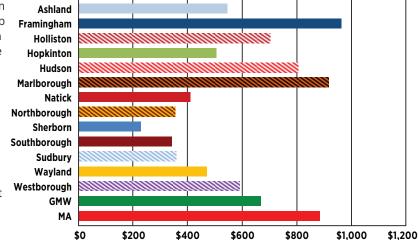


Source: MA Department of Revenue, DLS, and MERC

- State Aid for Education in Greater MetroWest (GMW) has nearly doubled its overall amount during this period, starting at \$92.1 million in FY2012 and increasing to \$168.6 million in FY2022.
- During the period displayed and measured in this graph, State Aid for Education increased every year except for FY2014 to FY2015, where it decreased 3.5%, around \$4.2 million. The biggest total increase for State Aid for Education came between FY2013 and FY2014, increasing about \$15 million.
- State Aid for General Government in GMW had constant and significant lower totals during this same period. In FY2012, it totaled \$26.5 million and increased 40.3 percentage to \$37.1 million in FY2022.
- During the period being measured. State Aid for General Government saw a minimal average of a \$1 million increase each year, which included one minor decrease of \$120,000 in FY2017 to FY2018.

#### **FY2022 GMW STATE AID PER CAPITA** By Community

- This graph displays the per capita State Aid given to each of the thirteen communities that make up Greater MetroWest (GMW) in FY2022. 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 GMW communities ranged from a high of \$964 in Framingham, followed by Marlborough with \$917, and Hudson, not far behind with \$803, to a low of \$225 in Sherborn, in comparison to the MA state average of \$884.
- This graph 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 is \$205,730,940.
- It is important to note that communities such as Northborough, Southborough, Sudbury, and Sherborn



Source: MA Department of Revenue, DLS, and MERC

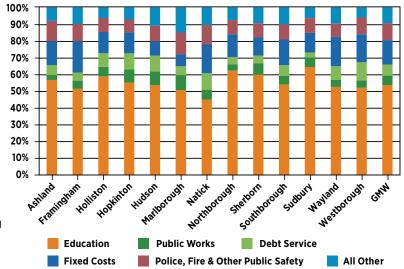
all belong to regional school districts. The State Aid that is given to those districts is not included in the above calculations. Five of the GMW communities received between \$300-\$500 State Aid per capita, including: Southborough (\$342). Northborough (\$353), Sudbury (\$356), Natick (\$411), and Wayland (\$469). The average State Aid per capita in Greater MetroWest is \$666. Nine of the thirteen GMW communities received less than the regional average which is also less than the MA state average of \$884.



### Municipal Revenue

# FY2020 GMW MUNICIPAL EXPENDITURES BY FUNCTION By Community

- There are six main categories of municipal expenditures: Education, Debt Service, Police, Fire & Other Public Safety, Public Works, Fixed Costs, and All Other. The respective expenditures are shown as percentages of total expenditures in this graph. Fixed Costs also include fixed employee benefits for all municipal employees. In FY2020, these general fund expenditures reached over \$1.2 billion dollars in Greater MetroWest (GMW).
- Education expenditure was the largest expenditure in each GMW community. Natick, at 45.2%, 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 66.7%. The average Education expenditure for GMW was around 53.7%.
- The highs and lows of the remaining categories varied by community. Debt Service had a relatively

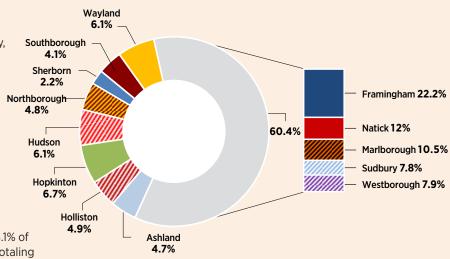


Source: MA Department of Revenue, DLS, and MERC

low percentage of total expenditures with Westborough having the highest at 10.9%, while Sudbury posted the smallest at 2.9%, and the average for GMW at 7%. The Police, Fire & Other Public Safety average for GMW was about 10% with Marlborough having the highest expenditure at 12.8%. Public Works was the lowest average expenditure throughout the region coming in at 5.4%, with Fixed Costs at 14.4% and All Other at 9.5%.

### MUNICIPAL GENERAL FUND EXPENDITURE FY2020 GMW = \$1.3B

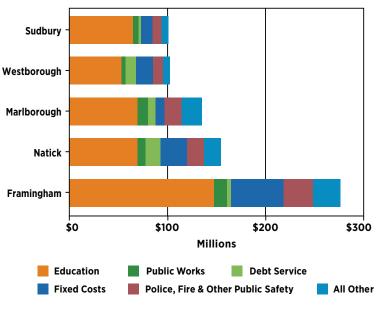
- Municipal expenditures are categorized into six main categories: Education, Debt Service, Police, Fire, & Other Public Safety, Public Works, Fixed Costs, and All Other. This pie graph shows the combined total of these categories by community of the Greater MetroWest region.
- In FY2020, these general fund expenditures reached over \$1.3 billion dollars in Greater MetroWest. Combined, the communities of Framingham, Marlborough, Natick, Sudbury, and Westborough, were responsible for 60.4% of that expenditure.
- Hudson and Wayland each represented 6.1% of the total GMW expenditure, collectively totaling about \$158.8 million.
- Sherborn and Southborough were the two communities with the smallest expenditure at 2.2% and 4.1%, respectively.
   Together, they represented 6.3% of GMW's total expenditure; totaling about \$81.5 million.



Source: MA Department of Revenue, DLS, and MERC

### Municipal Revenue

# FY2020 FIVE LARGEST COMMUNITIES BY EXPENDITURE Greater MetroWest

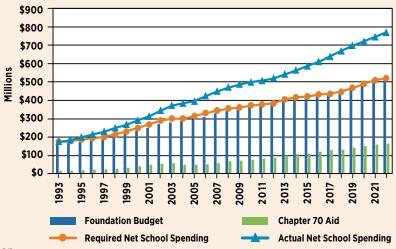


Source: MA Department of Revenue, DLS, and MERC

- This chart shows the five largest communities by expenditure in the Greater MetroWest region which includes the following: Framingham, Marlborough, Natick, Sudbury, and Westborough.
- Framingham had the largest amount of spending of all the communities, spending a total of \$287.5 million on Education, Debt Service, Police, Fire, & Other Public Safety, Public Works, Fixed Costs, and All Other in FY2020.
- Westborough and Sudbury had a similar collective expenditure total of \$102.5 million and \$100.9 million, respectively, in FY2020. Both communities spent less than half the total spending of Framingham.
- Natick had a collective expenditure of \$154.6 million, followed by Marlborough at \$135.5 million in FY2020.
- These five communities each spent about half of their total expenditure on Education, making it the largest category for spending in FY2020. 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.

### FY1993 - FY2022 GMW COMMUNITIES TOTAL SCHOOL SPENDING

- This chart displays the total school spending over a 29-year period for the thirteen communities that make up Greater MetroWest (GMW).
   The four components within the graph are as follows: Foundation Budget, Chapter 70 Aid, Required Net School Spending, and Actual Net School Spending.
- 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 FY2022, the Foundation Budget totaled \$512.5 million in GMW, while Required Net School Spending totaled \$520.0 million.
- Chapter 70 Aid is the educational assistance given to a community and in FY2022, it totaled \$164 million for GMW. Local contributions for GMW in FY2022 were \$348 million, and this number is the difference between the Foundation Budget and Chapter 70 Aid.



Source: MA Department of Revenue, DLS, DESE and MERC

 The Actual Net School Spending in the GMW region for FY2022 totaled \$770.5 million. This category is made up of required local contributions, Chapter 70 Aid, and additional amounts that communities chose to spend on education.



### Municipal Revenue

# FY2022 GMW PER PUPIL EDUCATION EXPENDITURE By Community

- This graph represents the per pupil education expenditures for the communities that make up Greater MetroWest (GMW) for FY2022 as reported by the Massachusetts Department of Elementary and Secondary Education (DESE). The DESE values are classified in the following three categories: Chapter 70 Aid, Required Local Contribution, and Additional Spending 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 \$22,147 in Southborough, followed by Sherborn (\$20,440), Wayland (\$19,652), and Northborough (\$19,565), to a low of \$15,353 in Holliston. Natick reported per pupil education spending of \$16,909 and the GMW average was \$17,662.
- \$25,000
  \$15,000
  \$10,000
  \$5,000
  \$0

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Source: MA Department of Revenue, DLS, DESE and MERC

- The Foundation Budget is comprised of the local municipal contribution and Chapter 70 Aid given to each community.
   This total represents the minimum a municipality needs to spend to provide an adequate education for its students.
- The Department of Revenue income and property values by municipality are used to calculate aid. Framingham (\$6,131) and Marlborough (\$5,990) received the most per pupil aid.
- The communities with the largest Additional Spending were Southborough (\$10,808), Sherborn (\$9,838), and Wayland (\$8,592).



etroWest 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.

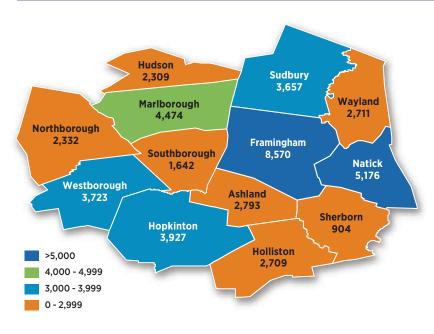
MERC contacts the regional's charter schools, McAuliffe Regional Charter School and the Advanced Math and Science Academy, to obtain their enrollment figures.

In many communities, kindergartner enrollment typically increases 7.6% 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.



# GMW 2021 PUBLIC SCHOOL ENROLLMENT By Community

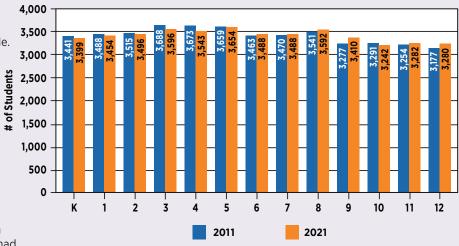


- K-12 public school enrollment in Greater MetroWest (GMW) totaled 44,927 students. This figure does not include students enrolled in charter and vocational schools.
- The community reporting the highest enrollment was Framingham having a student enrollment of 8,570. The communities of Marlborough and Natick had enrollments of 4,474 and 5,176 students respectively.
- Ashland, Holliston, Northborough, Hudson, and Wayland had enrollments between 2,000 and 3,000 students. Sherborn reported the smallest enrollment at 904 students.
- The top three towns of Framingham, Natick and Marlborough had 40.6% of all public school enrollment in GMW.

Source: MA Department of Elementary and Secondary Education and MERC

### 2011 AND 2021 K-12 STUDENT ENROLLMENT By Grade

- This graph compares public student enrollment in Greater MetroWest (GMW) in 2011 and 2021 by each grade.
- Student enrollment in 2011 was 44,941 and by 2021 the enrollment was 44,927. The enrollment does not include the charter or vocational schools.
- Kindergartner enrollment in 2011 was 3,441 and 3,400 in 2021, a 1.2% decrease.
- Enrollments in every grade from kindergarten through grade 5 fell between 2011 and 2021. Enrollment in grade 3 (-2.5%) and grade 4 (-3.4%) had the highest decreases from 2011 to 2021.



Source: MA Department of Elementary and Secondary Education and MERC

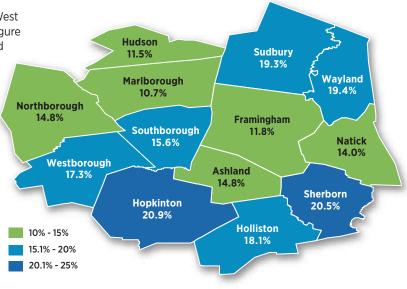
- Grade 9 (4.1%) and grade 12 (3.0%) experienced the largest increases in student enrollment comparing 2011 to 2021.
- Grade 6 (0.75%), grade 7 (0.66%), grade 8 (1.44%), and grade 11 (1.0%) had increases in student enrollment between 2011 and 2021.



### **GMW 2021 PUBLIC SCHOOL ENROLLMENT** As Percentage of Population

 K-12 public school enrollment in the Greater MetroWest region (GMW) for 2021 was 44,927 students. This figure does not include students enrolled in vocational and charter schools.

- This map measures the proportion of each community's population enrolled in public school. Public school enrollment in 2021 is given as a percentage of the estimated 2020 population, the most recent census data available. The highest enrollment as percentage of population occurred in Hopkinton, followed by Sherborn. In these communities, slightly more than 1 in 5 population members were in public schools.
- About 20% of the population in the communities of Holliston, Sudbury, Wayland, and Westborough attend public school. Comparatively, the communities of Ashland, Natick, and Northborough had public school enrollment equaling around 15% of the total population.

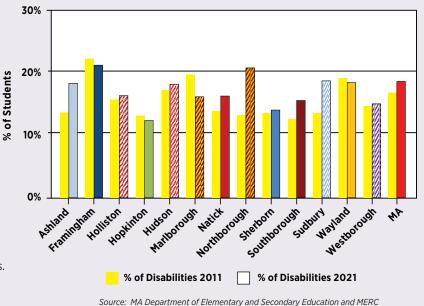


Source: U. S. Census and MERC

 Framingham and Marlborough, the communities with the largest population and public school enrollment, also report a small percentage of the population in school.

### **2011 AND 2021 METROWEST STUDENTS WITH DISABILITIES**

- This graph shows the percentage of students with disabilities by community. The percentage is a calculated by dividing the number of students with disabilities by the number of students enrolled in the community.
- 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.
- Ashland, Northborough, and Sudbury had the largest increase in students with disabilities.
- Framingham and Marlborough had the largest percent decrease in students with disabilities at -1.1% and -3.7% respectively.

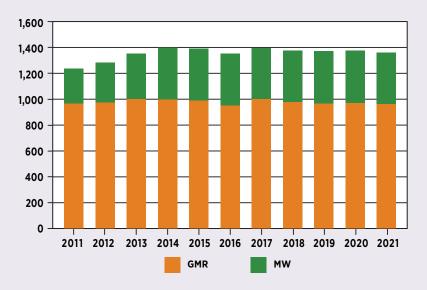


Sherborn and Westborough had the smallest percent increase in students with disabilities at 0.5% for both.



### 2011 TO 2021 GMW CHARTER SCHOOL ENROLLMENT

- Charter School enrollment for Greater MetroWest (GMW) was 1,232 students in 2011 and by 2021, the student enrollment had risen to 1,353 students representing a 9.8% increase.
- The MetroWest (MW) region's charter school enrollment went from 269 students in 2011 to 388 students in 2021, showing an increase of 44.2%. The largest enrollment of 401 charter school students occurred in 2019.
- Greater Marlborough Region (GMR) charter school enrollment was 963 students in 2011 and relatively the same in 2021. However, the charter school enrollment peaked in 2014 with 999 students enrolled. Since 2014, enrollment declined.
- Overall, charter school enrollment in the Greater MetroWest region stayed relatively the same in 2021 as the previous year.



Source: MA Department of Elementary and Secondary Education and MERC





### **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

<sup>\*</sup>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.



### **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.

### **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 non-store 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.

### **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.

**Note:** Educational Services includes only private educational services. Public K-12 and public higher education are included in the Public Supersector.

**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.

**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

- 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



### Acknowledgements

MetroWest Economic Research Center (MERC) at Framingham State University would like to acknowledge the contributions of the following individuals and organizations:

- Office staffs of the building departments and assessors for Ashland, Framingham, Holliston, Hopkinton, Hudson, Marlborough, Natick, Northborough, Sherborn, Southborough, Sudbury, Wayland, Westborough
- Office staffs of the public school districts serving the towns of Ashland, Framingham, Holliston, Hopkinton, Hudson, Marlborough, Natick, Northborough, Sherborn, Southborough, Sudbury, Wayland, Westborough
- Massachusetts Department of Elementary and Secondary Education, Data Collection staff
- Commonwealth of Massachusetts
- Sponsors: Avidia Bank, EVERSOURCE, Coan Heating & Cooling, Main Street Bank, MassHire Metro South/West Workforce Board, MetroWest Chamber of Commerce, Middlesex Savings Bank, and Framingham State University
- A special thank you to Donna Olafsen, MERC Office Manager





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