



The Research Bureau

# Worcester by the Numbers: Economy and Jobs

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May 2013

*Worcester by the Numbers: Economy and Jobs*



Picture provided by City of Worcester/Warren

### *MassDevelopment and The Worcester Regional Research Bureau*

Examining the economic health of a city, state, or even an organization is often the first, hardest, and most necessary step in answering, “Where do we go from here?” The Worcester Regional Research Bureau, with whom we enjoy a productive partnership, serves that role on several platforms through its research and programs. At MassDevelopment, the Commonwealth’s quasi-public finance and development arm, we have taken a page out of the Research Bureau’s book to develop metrics that measure our programs’ impact, ensuring we do our best and most efficient work for greater Worcester. MassDevelopment is fortunate to work with people and organizations like the Research Bureau who make greater Worcester an attractive place to live and do business, and I thank them for their dedication.

The Research Bureau sparks informed discussions about public policy, and we often use these discussions to determine how we can better serve those who live and work in the region. To that end, MassDevelopment has worked with our public and private partners to develop new products and programs that meet market demand on the commercial, residential, and educational sides.

In concert with the Patrick-Murray Administration, MassDevelopment has renewed its focus on the state’s manufacturing industry. The Agency oversees the AMP it up! campaign, an initiative to promote advanced manufacturing as an attractive career path. As part of the AMP it up! matching grant program, MassDevelopment provided \$10,000 to the Central Massachusetts Workforce Investment Board to educate Worcester-area students and the adults in their lives about today’s manufacturing and bolster the prospective employee base for these quality jobs. The organization, along with its partners, is using grant funds to enhance its summer externship program at manufacturing companies in central Massachusetts to allow students to gain vital first-hand industry experience.

As part of an annual series of regionally-based academies to discuss best practices and lessons learned in economic development, MassDevelopment will hold a central Massachusetts-focused forum in Worcester on June 12. Given the wealth of excellent case studies and experienced development officials in the area, we are looking forward to this event and hope to see you there.

Where things change, they often stay the same. MassDevelopment continued its commitment to the revitalization of downtown Worcester through a recent \$2 million bridge loan to New Garden Park, the non-profit affiliate of the Worcester Business Development Corporation. New Garden Park will use the proceeds of this new loan to fund the first phase of the redevelopment of the former *Worcester Telegram & Gazette* headquarters on Franklin Street. The organization is leasing a large portion of the building to Quinsigamond Community College, which will locate its allied health

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services department at this site. Plans also call for a restaurant, small business incubator and offices in the remaining space.

MassDevelopment also recently partnered with lead lender Bay State Savings Bank to provide a \$5.35 million loan to SJ Realty LLC to develop the City's first "micro-loft" apartments for graduate students attending Worcester-area colleges and universities. The developers are in the process of converting the buildings at 371-379 Main Street into 55 residential apartment units. The Massachusetts School of Pharmacy and Allied Health Sciences, which already has a large presence in downtown Worcester, will occupy almost half of the units in the building.

This year also marked another successful collaboration with Worcester's Massachusetts Biomedical Initiatives, as MassDevelopment provided equipment loans to two life science companies that grew out of the MBI's incubators. Blue Sky Biotech, a contract manufacturer of proteins and other biological products for pharmaceutical companies, received a \$300,000 equipment loan to purchase laboratory equipment for its new 50 Prescott Street space. MassDevelopment also provided a \$150,000 loan for the same purpose to Nemucore Medical Innovations, Inc., a life science company developing nanomedicines to treat ovarian cancer.

We have also recently provided bond financing for projects at UMass Memorial Health Care, Assumption College, and Alternatives Unlimited, supporting the medical, educational, and human services sectors in Central Massachusetts. MassDevelopment continued its backing of the area's arts and humanities through the Cultural Facilities Fund (CFF), which MassDevelopment administers along with the Massachusetts Cultural Council. Organizations that have recently received CFF support for capital projects include the Hanover Theatre for the Performing Arts, Mechanics Hall and the Ecotarium in Worcester.

Greater Worcester offers tremendous opportunities and resources for manufacturers, college and universities and high-tech companies. To find out more about how MassDevelopment can help your organization, please contact our Worcester staff (Roy Angel, Kelly Arvidson, Shyla Matthews and Bob Seega) at 508-363-2799.

MassDevelopment looks forward to working with the Research Bureau and all of you to build on Worcester's strengths in the years to come.

Sincerely,

Marty Jones  
MassDevelopment President and CEO

## EMPLOYMENT

- In 2011, an average of 96,671 people were employed in the City of Worcester<sup>1</sup>, a decrease of more than 4% in a decade.
- In 2011 there were 92,902 people in Worcester in the “Civilian Labor Force,”<sup>2</sup> which represents the number of Worcester **residents** who are employed or unemployed, and actively looking for work.

Employment by Industry, City of Worcester	2001	Percent of Total (2001)	2011	Percent of Total (2011)	Percentage Change, 2001-2011	Total Change
<b>Total, All Industries</b>	100,977	100%	96,671	100%	-4.26%	-4,306
<b>Goods-Producing Domain</b>	14,674	14.53%	9,878	10.22%	-32.68%	-4,796
Construction	4,025	3.99%	3,094	3.20%	-23.13%	-931
Manufacturing	10,626	10.52%	6,780	7.01%	-36.19%	-3,846
Natural Resources and Mining	23	0.02%	N/A	N/A	-100.00%	-23
<b>Service-Providing Domain</b>	86,303	85.47%	86,793	89.78%	0.57%	490
Trade, Transportation and Utilities	13,452	13.32%	12,239	12.66%	-9.02%	-1,213
Information	1,796	1.78%	1,559	1.61%	-13.20%	-237
Financial Activities	7,999	7.92%	6,496	6.72%	-18.79%	-1,503
Professional and Business Services	12,765	12.64%	8,760	9.06%	-31.37%	-4,005
Education and Health Services	36,186	35.84%	43,324	44.82%	19.73%	7,138
Leisure and Hospitality	6,712	6.65%	7,018	7.26%	4.56%	306
Other Services <sup>3</sup>	4,108	4.07%	4,293	4.44%	4.50%	185
Public Administration	3,285	3.25%	3,104	3.21%	-5.51%	-181

Source: Massachusetts Department of Workforce Development

- As the table above indicates, the number of employees decreased in most industry sectors.
- Between 2001 and 2011, the number of people employed in the “Goods-Producing Domain” decreased by 32.68%, a loss of 4,796 jobs.
- During that same period, the number of people employed in the “Service-Providing Domain” increased by .057%, an increase of 490 jobs.

<sup>1</sup> Source: Massachusetts Department of Workforce Development

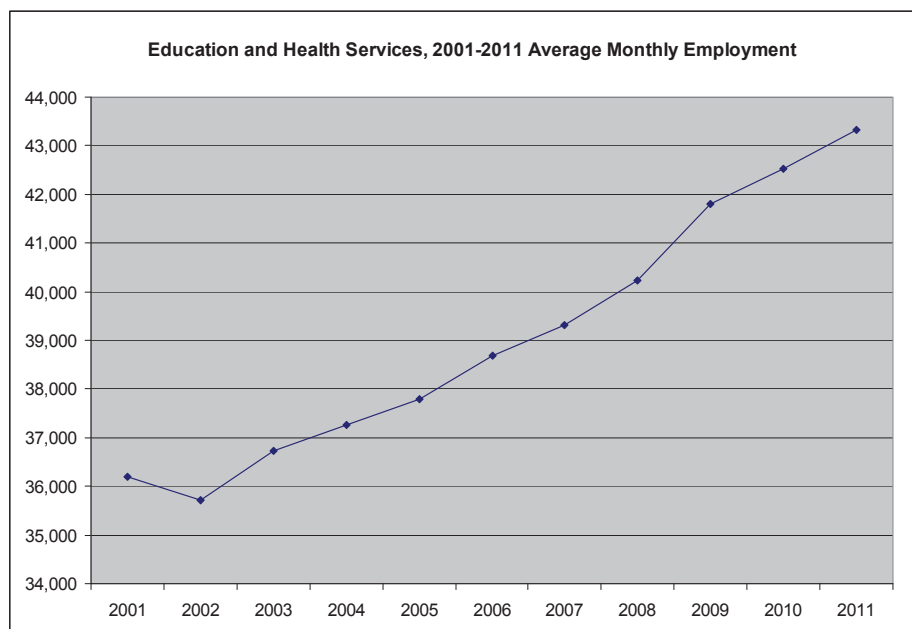
<sup>2</sup> Source: US Census Bureau, 2007-2011 American Community Survey

<sup>3</sup> “Other Services” includes repair services, personal services, household services, and works in philanthropic and other non-profit organizations.

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- During the first decade of the 21<sup>st</sup> century, the largest employment growth in Worcester has been in the fields of education and health services – an increase of 19.73%, or 7,138 jobs.

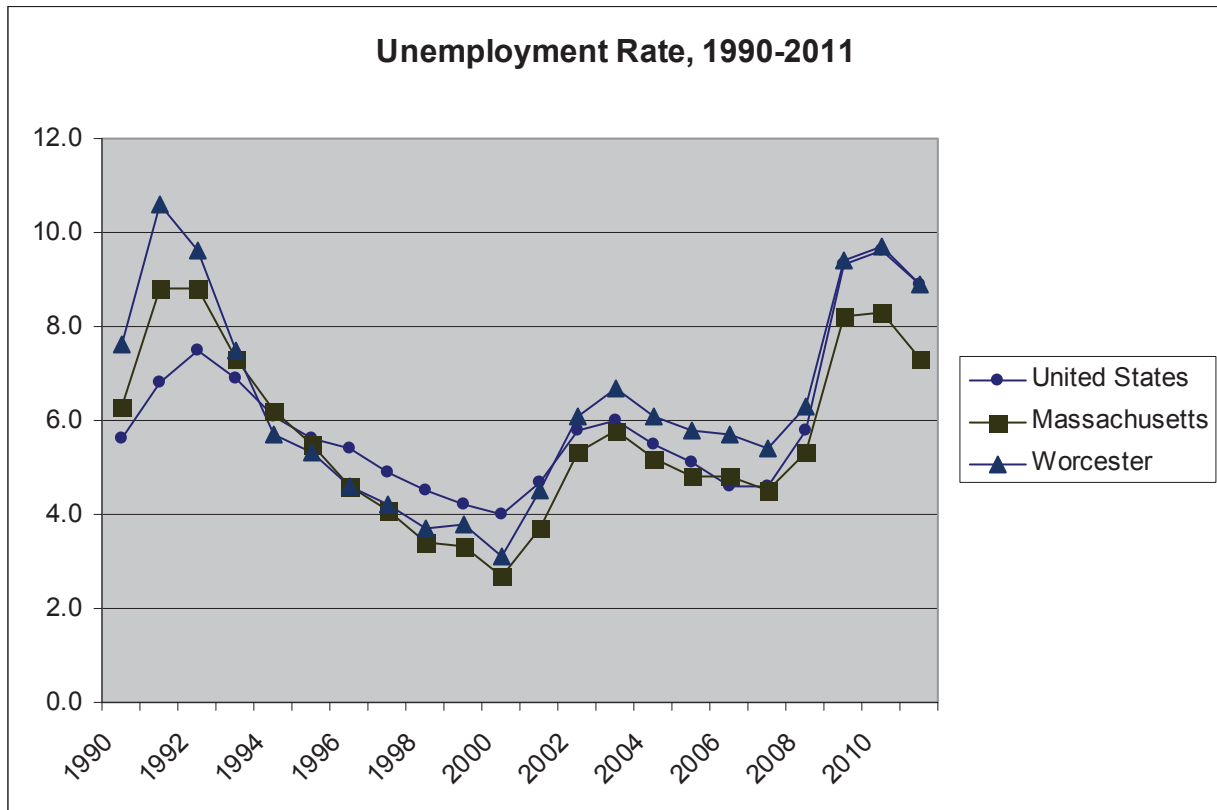
Education and Health Services, 2001-2011	Average Monthly Employment, 2001	Average Monthly Employment, 2011	Percentage Change, 2001-2011	Average Nominal Weekly Wage, 2001	Average Nominal Weekly Wage, 2011	Percentage Change, 2001-2011
<b>Educational Services</b>	11,839	15,065	27.25%	\$841	\$1,015	20.69%
<b>Health Care and Social Assistance</b>	24,347	28,259	16.07%	\$662	\$1,035	56.34%
<b>Total</b>	36,186	43,324	19.73%	\$721	\$1,028	42.58%



Source: Massachusetts Department of Workforce Development

## UNEMPLOYMENT

The unemployment rate does not include those who are no longer looking for work.



Source: US Bureau of Labor Statistics

- During the recession of the early 1990s and through most of the 2000s, Worcester’s unemployment was higher than that of Massachusetts.
- Since the start of the latest recession, Worcester’s unemployment has been the same as the national rate.
- While unemployment rose significantly in the City as it did in the state and the nation during the recession it has since begun to decline at all three levels.

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WAGES

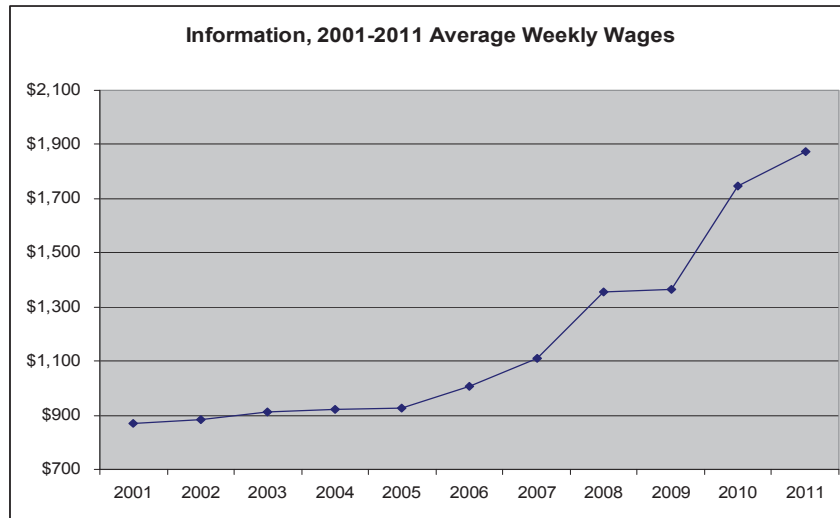
Average Weekly Wages by Industry, City of Worcester	Nominal Wage, 2001	Real Wage, 2001	Nominal Wage, 2011	Real Wage, 2011	Real Percentage Change, 2001-2011	Real Wage, Total Change
Total, All Industries	\$725	\$409	\$982	\$423	3.42%	\$14
<b>Goods-Producing Domain</b>	<b>\$888</b>	<b>\$501</b>	<b>\$1,215</b>	<b>\$524</b>	<b>4.59%</b>	<b>\$23</b>
Construction	\$942	\$531	\$1,146	\$494	-6.97%	-\$37
Manufacturing	\$870	\$491	\$1,247	\$538	9.57%	\$47
Natural Resources and Mining	\$244	\$138	N/A	N/A	-100.00%	-\$138
<b>Service-Providing Domain</b>	<b>\$698</b>	<b>\$394</b>	<b>\$956</b>	<b>\$412</b>	<b>4.57%</b>	<b>\$18</b>
Trade, Transportation and Utilities	\$594	\$335	\$694	\$299	-10.75%	-\$36
Information	\$869	\$490	\$1,874	\$808	64.90%	\$318
Financial Activities	\$1,048	\$591	\$1,400	\$604	2.20%	\$13
Professional and Business Services	\$753	\$425	\$1,089	\$470	10.59%	\$45
Education and Health Services	\$721	\$407	\$1,028	\$443	8.85%	\$36
Leisure and Hospitality	\$291	\$164	\$354	\$153	-6.71%	-\$11
Other Services	\$417	\$235	\$454	\$196	-16.60%	-\$39
Public Administration	\$888	\$501	\$1,271	\$548	9.38%	\$47

Average Weekly Wages by Industry, Massachusetts	Nominal Wage, 2001	Real Wage, 2001	Nominal Wage, 2011	Real Wage, 2011	Real Percentage Change, 2001-2011	Real Wage, Total Change
Total, All Industries	\$865	\$488	\$1,147	\$495	1.43%	\$7
<b>Goods-Producing Domain</b>	<b>\$1,018</b>	<b>\$574</b>	<b>\$1,394</b>	<b>\$601</b>	<b>4.70%</b>	<b>\$27</b>
Construction	\$963	\$543	\$1,205	\$520	-4.24%	-\$23
Manufacturing	\$1,047	\$591	\$1,495	\$645	9.14%	\$54
Natural Resources and Mining	\$662	\$373	\$1,042	\$449	20.38%	\$76
<b>Service-Providing Domain</b>	<b>\$834</b>	<b>\$470</b>	<b>\$1,114</b>	<b>\$480</b>	<b>2.13%</b>	<b>\$10</b>
Trade, Transportation and Utilities	\$707	\$399	\$857	\$370	-7.27%	-\$29
Information	\$1,244	\$702	\$1,767	\$762	8.55%	\$60
Financial Activities	\$1,515	\$854	\$2,100	\$906	6.09%	\$52
Professional and Business Services	\$1,114	\$628	\$1,624	\$700	11.46%	\$72
Education and Health Services	\$715	\$403	\$1,022	\$441	9.43%	\$38
Leisure and Hospitality	\$347	\$196	\$427	\$184	-6.12%	-\$12
Other Services	\$477	\$269	\$545	\$235	-12.64%	-\$34
Public Administration	\$861	\$486	\$1,221	\$527	8.44%	\$41

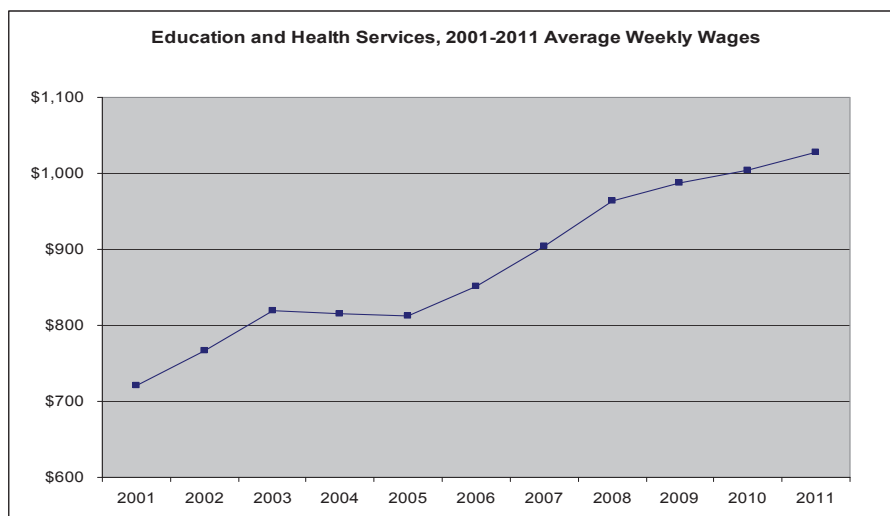
Source: Massachusetts Department of Workforce Development  
Bureau of Labor Statistics



- Between 2001 and 2011, the average weekly wage in Worcester rose from \$725 (\$37,700 annually) to \$982 (\$51,064 annually), a growth of over 35%. In terms of real wages, however, the growth was only 3.42%. In comparison, the weekly wage in Massachusetts during the same decade rose from \$865 (\$44,980 annually) to \$1,147 (\$59,644 annually), an increase of almost 33%. Real wages, however, increased by only 1.43%.
- The largest wage growth in Worcester was in Information Services, from \$869 weekly (\$45,188 annually) to \$1,874 weekly (\$97,448 annually), an increase of 115.65%. The weekly real wages grew by almost 65%.



- In the sector with the largest employment growth, Education and Health Services, wages in Worcester have grown from \$721 weekly (\$37,492 annually) to \$1,028 weekly (\$53,456 annually), or almost 43%. Real wages, however, grew by only 9%.



Source: Massachusetts Department of Workforce Development

LOCATION QUOTIENT

- The location quotient (LQ) shows the distribution of employees in a particular industry and geographic region compared to the distribution of employees in that same industry in the entire USA. In the chart below, Worcester’s distribution of employees in ten different industries is compared to the nation as a whole. The national average of employees for each industry is represented by the number one. If Worcester has more employees in a certain industry than the national average, Worcester is represented by a number greater than one. For example, Worcester’s LQ of 1.39 in Education and Health Services means that Worcester has 1.39 times the per capita number of employees in that field compared with the national average. If Worcester has fewer employees in an industry than the national average, the LQ is represented by a number less than one.<sup>4</sup>



Source: US Bureau of Economic Analysis

- Education and Health Services, Manufacturing, and “Other Services”<sup>5</sup> make up a larger portion of total jobs in Worcester than at the national level.

<sup>4</sup> Source: US Bureau of Labor Statistics, <http://www.bls.gov/cew/cewfaq.htm#Q19>

<sup>5</sup> See definition of “Other Services” on page one.

## ESTABLISHMENTS

Number of Establishments by Industry, City of Worcester	2001	Percent of Total (2001)	2011	Percent of Total (2011)	Percentage Change, 2001-2011	Total Change
<b>Total, All Industries</b>	4,331	100%	5,093	100%	17.59%	762
<b>Goods-Producing Domain</b>	541	12.49%	470	9.23%	-13.12%	-71
Construction	267	6.16%	296	5.81%	10.86%	29
Manufacturing	271	6.26%	173	3.40%	-36.16%	-98
Natural Resources and Mining	3	0.07%	N/A	N/A	100.00%	-3
<b>Service-Providing Domain</b>	3,790	87.51%	4,623	90.77%	21.98%	833
Trade, Transportation and Utilities	939	21.68%	891	17.49%	-5.11%	-48
Information	61	1.41%	52	1.02%	-14.75%	-9
Financial Activities	383	8.84%	366	7.19%	-4.44%	-17
Professional and Business Services	719	16.60%	721	14.16%	0.28%	2
Education and Health Services	589	13.60%	627	12.31%	6.45%	38
Leisure and Hospitality	406	9.37%	482	9.46%	18.72%	76
Other Services	645	14.89%	1,421	27.90%	120.31%	776
Public Administration	48	1.11%	63	1.24%	31.25%	15

Establishments versus Employment 2001-2011, City of Worcester	2001 Establishments	2001 Employment	2011 Establishments	2011 Employment
<b>Total, All Industries</b>	4,331	100,977	5,093	96,671
<b>Goods-Producing Domain</b>	541	14,674	470	9,878
Construction	267	4,025	296	3,094
Manufacturing	271	10,626	173	6,780
Natural Resources and Mining	3	23	N/A	N/A
<b>Service-Providing Domain</b>	3,790	86,303	4,623	86,793
Trade, Transportation and Utilities	939	13,452	891	12,239
Information	61	1,796	52	1,559
Financial Activities	383	7,999	366	6,496
Professional and Business Services	719	12,765	721	8,760
Education and Health Services	589	36,186	627	43,324
Leisure and Hospitality	406	6,712	482	7,018
Other Services	645	4,108	1,421	4,293
Public Administration	48	3,285	63	3,104

Source: Massachusetts Department of Workforce Development

- The number of employees in Worcester has decreased by 4,306 or 4.26% between 2001 and 2011, while the number of establishments has increased by 762 or 17.59%. The number of employees decreased from 100,977 in 2001, to 96,671 in 2011, while the number of employment establishments rose from 4,331 to 5,093.

*Mission Statement:*

*The Research Bureau serves the public interest of the Greater Worcester region by conducting independent, non-partisan research and analysis of public policy issues to promote informed public debate and decision-making.*



## The Research Bureau

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