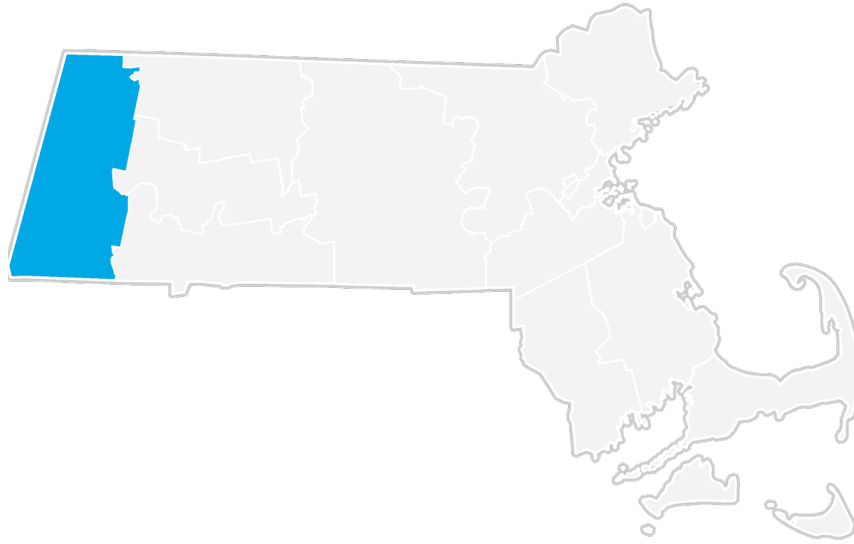




PREPARED FOR



**BERKSHIRE
WORKFORCE BOARD**



June 23, 2020

ECONOMIC IMPACT OF COVID-19 ON BERKSHIRE COUNTY, MA INDUSTRIES

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1. Background

The global COVID-19 pandemic has attacked the national economy in a manner not experienced in modern times. This pandemic has impacted every community and every industry.

Berkshire County, located in western Massachusetts, composes the Pittsfield, metropolitan statistical area (MSA). The main industries of the county are healthcare; education; retail; and accommodation and food services.¹ The MassHire Berkshire Workforce Board needs an analysis of the COVID-19 pandemic's impact on area industries, and the path to eventual recovery for the county's economy.

Information about the pandemic's spread, government response, and implementation of social distancing has evolved quickly. Consequently, any forecasts should be considered subject to change as more information becomes available. Even with this uncertainty, it is clear that some businesses, such as restaurants and hospitality establishments, have suffered more than others. Industries such as manufacturing or professional services may be less affected.

Similarly, government actions and policies are evolving quickly, which also have a profound influence on the national and regional economies. On March 10, 2020, Massachusetts Governor Barker declared a state of emergency for the state of Massachusetts. On March 23, he issued an order for the closure of non-essential businesses, which continued until May 18. This order defined certain industries as essential, such as healthcare, food and agriculture, energy, and law enforcement. The state released its sector-specific reopening plan on May 18, with construction and manufacturing being among the first industries to resume operations.² Research facilities, offices, and consumer services such as hair salons reopened with restrictions one week later. Reopening guidance plans for increased indoor business capacities starting Monday, June 22.

Federal actions also impact the regional economy. On March 27, 2020, the U.S. Congress passed—and the President signed into law—the Coronavirus Aid, Relief, and Economic Security (CARES) Act. The CARES Act temporarily expands unemployment insurance benefits and provides a \$1,200 payment to eligible Americans. In addition, this law includes the Paycheck Protection Program (PPP) that allocates \$349 billion in loans to small businesses to help

¹ Source: Economic Overview Report, JobsEQ by Chmura.

² Source: <https://www.boston.gov/departments/public-health-commission/coronavirus-timeline>.

them continue to pay their employees.^{3, 4} In late April, Congress passed, and the President signed, another piece of legislation that injects \$310 billion to replenish the PPP program.⁵ Those policies will allow many businesses to keep their employees, thus moderating the effects of the COVID-19 pandemic on the economy.

Chmura's analysis incorporated anticipated changes in industry as well as the latest government policy actions. In this analysis, Chmura will evaluate the impact of COVID-19 on Berkshire County for the second quarter of 2020, when many jobs are impacted. The county was under a stay-at-home advisory from March 23 through May 18, resulting in significant job losses for county businesses. Many non-essential retail establishments were allowed to open after May 18, with limited capacity throughout the summer. Starting in the third quarter of 2020, the county's economy is expected to recover. Chmura will provide an analysis of the county's potential recovery path for the next three years.

³ Source: <https://www.washingtonpost.com/business/2020/03/25/trump-senate-coronavirus-economic-stimulus-2-trillion/>.

⁴ This program provides forgivable loans to small businesses so they may pay their employees during the pandemic. The loans will be forgiven as long as they are used to cover payroll, most mortgage interest, rent, and utilities over an 8- or 24-week period and if employee and compensation levels do not decrease. Sources: <https://home.treasury.gov/system/files/136/PPP--Fact-Sheet.pdf> and <https://home.treasury.gov/system/files/136/PPP-IFR-Revisions-to-First-Interim-Final-Rule.pdf>.

⁵ Source: <https://www.marketwatch.com/story/house-set-to-pass-bill-that-replenishes-coronavirus-aid-program-for-small-businesses-2020-04-23>.

2. Impact on County Industries and GDP

This section analyzes the impact of the COVID-19 pandemic on both employment and Gross Domestic Product (GDP) of the industries based in Berkshire County.

2.1. Overall Impact on County Industries

As of the fourth quarter of 2019, total employment in Berkshire County was 66,203.⁶ Based on the two-digit industry level of the North American Industry Classification System (NAICS), the largest sector in the county was healthcare and social assistance, employing 13,280 workers. The next-largest sectors in the region were retail (7,987 workers); education (7,626); accommodation and food services (6,985); and manufacturing (4,157).

Based on research of COVID-19's potential impact on different industry sectors, recent releases of unemployment claims, and the latest job postings data from Chmura's proprietary technology platform JobsEQ®, Chmura first estimated the potential impact of COVID-19 on the national labor market. Chmura classified industries by different levels of exposure to the pandemic based on a study by Moody's Investors Service, which categorizes industries into low, moderate, and high levels of exposure.⁷

Next, Chmura incorporated information related to the COVID-19 impact that is specific to Berkshire County. For example, there were five WARN act layoff notices submitted for businesses located in Berkshire County since the beginning of the pandemic, affecting 788 workers.⁸

Statewide policies also affect the pandemic's impact in Berkshire County. Massachusetts's non-essential business closure and stay-at-home advisory placed restrictions on many businesses that have direct contact with consumers, such as restaurants and entertainment venues, in March, April, and May. However, essential businesses were allowed to continue operations, including healthcare, food and agriculture, energy, utilities, financial services, and certain manufacturers.⁹ Governor Barker decided to let the stay-at-home advisory expire on May 18 and announced a phased reopening plan with detailed instructions by industry.¹⁰

Combining the above state and local information sources, Table 2.1 summarizes the employment and GDP impact in Berkshire County at the two-digit NAICS industry level. It is estimated that 7,505 jobs based in the county could be lost during the three-month period from April to June 2020, equivalent to 11.3% of the workforce. This corresponds to a loss of \$141.2 million of the county's gross domestic product (GDP) over three months. Before the pandemic, in February 2020, the county's unemployment rate was 4.3%. The estimated unemployment rate could reach 14.9% for the three-month period of April to June. It is also estimated that during the month of April, when the stay-at-home advisory was in effect, as many as 10,152 jobs based in the county were lost. This is equivalent to 15.3% of the workforce and represents a loss of \$62.5 million of the county's gross domestic product (GDP) for the month of April. The reopening of the economy and the PPP program will bring some jobs back, and the average estimated job loss for the second and third quarters of 2020 remains smaller than the peak job loss in April.

⁶ This employment number is based on the place of work, not the place of residence. The latest data indicate that the number of employed Berkshire County residents was 60,768 in the first quarter of 2020. Source: JobsEQ by Chmura.

⁷ Source: <https://www.moody.com/newsandevents/topics/Coronavirus-Credit-Effects-007054>.

⁸ Source: <https://www.mass.gov/doc/warn-report-for-week-ending-05-29-20/download>.

⁹ Source: <https://www.boston.gov/departments/public-health-commission/coronavirus-timeline>.

¹⁰ Source: <https://www.mass.gov/info-details/reopening-massachusetts>.

Table 2.1: Estimated Employment and GDP Impact from COVID-19 in Berkshire County

	Employment Impact (Average 3-Month Job Losses)	GDP Impact (3-Month, \$Million)	Employment Impact (Peak April Job Losses)	GDP Impact (April 2020)
Accommodation and Food Services	-1,664	-\$21.2	-2,882	-\$12.4
Health Care and Social Assistance	-946	-\$17.5	-1,214	-\$7.4
Educational Services	-863	-\$18.0	-875	-\$6.1
Arts, Entertainment, and Recreation	-787	-\$16.1	-948	-\$6.4
Retail Trade	-774	-\$9.4	-1,153	-\$4.9
Other Services (except Public Administration)	-523	-\$9.5	-705	-\$4.0
Administrative and Support and Waste Management and Remediation Services	-415	-\$5.9	-487	-\$2.3
Construction	-334	-\$7.0	-502	-\$3.5
Public Administration	-326	-\$6.9	-326	-\$2.3
Manufacturing	-317	-\$8.7	-420	-\$4.1
Transportation and Warehousing	-200	-\$3.3	-210	-\$1.2
Professional, Scientific, and Technical Services	-133	-\$4.8	-162	-\$2.0
Wholesale Trade	-66	-\$1.9	-79	-\$0.8
Information	-61	-\$1.2	-71	-\$0.5
Real Estate and Rental and Leasing	-55	-\$8.3	-74	-\$4.0
Finance and Insurance	-19	-\$0.9	-22	-\$0.3
Management of Companies and Enterprises	-10	-\$0.2	-10	-\$0.1
Agriculture, Forestry, Fishing and Hunting	-8	-\$0.1	-7	\$0.0
Mining, Quarrying, and Oil and Gas Extraction	-3	-\$0.2	-4	-\$0.1
Utilities	-3	-\$0.3	-3	-\$0.1
County Total	-7,505	-\$141.2	-10,152	-\$62.5

Source: Chmura and JobsEQ by Chmura

Not surprisingly, the industry impacted the most in terms of employment is accommodation and food services, with an estimated job loss of 1,664 during this period. The healthcare sector is expected to lose 946 jobs. Other county industries such as education; arts and entertainment; and retail will also lose a significant number of jobs.

On the other hand, some industries are expected to see limited impact. For example, the agriculture; management of companies and enterprises; finance; mining; and utilities sectors are estimated to only lose a small number of jobs.

2.2. Industries Most Impacted by COVID-19

Chmura also analyzed industries that will be impacted the most by COVID-19, based on total job losses at the more detailed three-digit NAICS level. The 20 most-impacted industries are presented in Table 2.2. In total, these industries accounted for 88.3% of all 7,505 job losses in the county due to COVID-19 during the three-month period.

Table 2.2: Twenty Industries Impacted Most by COVID-19 in Berkshire County

	Employment Impact (Average 3-Month Job Losses)	GDP Impact (3-Month, \$Million)	Employment Impact (Peak April Job Losses)	GDP Impact (April 2020)
Food Services and Drinking Places	-1,220	-\$11.6	-2,062	-\$6.5
Educational Services	-863	-\$18.0	-875	-\$6.1
Accommodation	-444	-\$9.6	-820	-\$5.9
Clothing and Clothing Accessories Stores	-439	-\$4.3	-461	-\$1.5
Ambulatory Health Care Services	-430	-\$11.5	-581	-\$4.8
Amusement, Gambling, and Recreation Industries	-428	-\$7.8	-496	-\$3.0
Personal and Laundry Services	-414	-\$7.8	-468	-\$2.9
Administrative and Support Services	-413	-\$5.9	-481	-\$2.3
Social Assistance	-369	-\$3.4	-401	-\$1.2
Performing Arts, Spectator Sports, and Related Industries	-271	-\$7.1	-328	-\$2.8
Specialty Trade Contractors	-237	-\$5.1	-343	-\$2.4
Transit and Ground Passenger Transportation	-177	-\$2.7	-181	-\$0.9
Justice, Public Order, and Safety Activities	-144	-\$3.8	-144	-\$1.3
Miscellaneous Store Retailers	-141	-\$1.6	-269	-\$1.1
Professional, Scientific, and Technical Services	-133	-\$4.8	-162	-\$2.0
Executive, Legislative, and Other General Government Support	-121	-\$1.3	-121	-\$0.4
Motor Vehicle and Parts Dealers	-107	-\$2.3	-128	-\$0.9
Nursing and Residential Care Facilities	-94	-\$1.3	-139	-\$0.6
Printing and Related Support Activities	-93	-\$1.5	-104	-\$0.6
Museums, Historical Sites, and Similar Institutions	-88	-\$1.3	-124	-\$0.6
Top 20 Total	-6,625	-\$112.7	-8,687	-\$47.9
Percent of Top 20 in County Total	88.3%	79.8%	85.6%	76.6%

Source: Chmura and JobsEQ by Chmura

At the three-digit level, food services and drinking places is estimated to lose 1,220 jobs from April to June, or 25% of the county's workforce in that industry. Educational services is estimated to suffer 863 job losses, or 11% of the workforce. The top 20 list also includes two retail industries deemed non-essential: clothing and clothing accessories stores and miscellaneous store retailers. Other industries also expected to experience large job losses are education, accommodation, and some healthcare services. Despite the initial reopening of the Massachusetts economy in May, many businesses are still restricted to limited capacity—meaning job losses may continue in the summer months. Consumers may also remain hesitant to patronize certain businesses where it may be difficult to maintain social distancing.

3. Berkshire County’s Path to Recovery

Chmura conducted research using various studies and industry expert reports to understand the different recovery paths for different industries. The development of a vaccine and/or effective treatment for COVID-19 will be the determining factors in achieving a full economic recovery. Without a medical breakthrough, social distancing policies will remain in place. Consumers will be cautious about travel and visiting establishments, such as food service and entertainment venues.

Many health specialists agree that the timetable for an effective vaccine will be one to two years. In this analysis, Chmura’s assumption is consistent with this timeline—that a vaccine will be widely available for people in the fourth quarter of 2021.¹¹

For each industry, there will be a fairly quick, short-term comeback as the stay-at-home advisory is lifted. However, that recovery will only last a few months and will not get many businesses back to pre-pandemic levels, as consumers will be hesitant to participate in the economy without a vaccine or an effective treatment. This is especially true for travel, retail, entertainment, and food service businesses.

On the positive side, industries such as construction and manufacturing were among the first to reopen. They require fewer person-to-person interactions, which makes it easier to maintain social distancing. Since manufacturing is a major industry in Berkshire County, it is expected that this will lead the county in recovery. In addition, professional and finance-related services will be among the earliest industries to recuperate.¹² Some reports also found that the healthcare industry will enjoy a fast recovery.¹³ We expect to see these industries rebound in the second and third quarters of 2020.

The other affected industries, such as food service, personal services, hospitality, and entertainment, may be on a slower recovery path. Each of these industries involves close contact with customers. The retail industry is in the middle, as it involves fewer close interactions. Some non-essential retail businesses may experience slow recovery, even if the governor continues lifting restrictions. Other essential retail businesses, like grocery and drug stores, remained open throughout the pandemic.

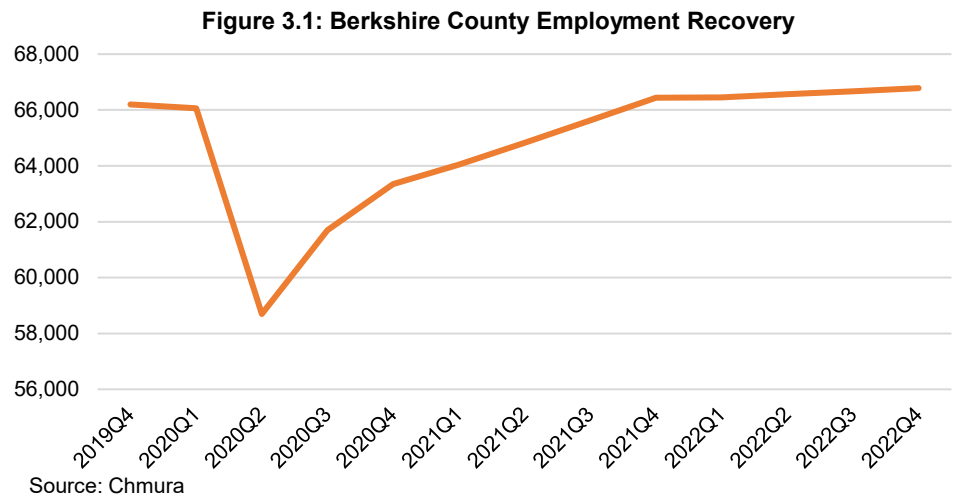


Figure 3.1 and Table 3.1 present the projected employment recovery for Berkshire County from 2020 to 2022. For overall county employment, the lowest expected point will be in the second quarter of 2020, at 88.7% of pre-pandemic level (or 58,698). Net jobs are expected to be added starting in the third quarter of 2020, led by education and healthcare. However, the food service and entertainment industries are still expected to be constrained. By the fourth quarter of 2020, the county

¹¹ Source: <https://www.cnbc.com/2020/05/20/accelerating-the-timeline-for-covid-19-vaccine-will-take-collaboration.html>.

¹² Source: <https://www.inquirer.com/business/recovery-economy-zandi-moodys-virus-covid-19-jobs-prediction-20200423.html>.

¹³ Source: <https://www.moodysanalytics.com/-/media/article/2020/this-week-in-covid-crisis-april-19-2020.pdf>.

is projected to recover 63% of lost jobs, with total employment reaching 63,343. By mid-year 2021, the county is projected to recover 83% of lost jobs, as other consumer-driven industries including retail, food service, and recreation will be on a path to recovery. If a vaccine is developed and implemented by the end of 2021, the county is projected to recover all of the jobs lost during the pandemic by the end of 2021 and begin expanding again.

Table 3.1: Projected Employment by Industry (2020-2022)

	2019Q4 -Actual	2020Q2	2020Q4	2021Q2	2021Q4	2022Q2	2022Q4
Accommodation and Food Services	6,985	5,321	5,791	6,406	7,021	7,046	7,077
Administrative and Support and Waste Management and Remediation Services	3,136	2,721	3,080	3,109	3,139	3,143	3,151
Agriculture, Forestry, Fishing and Hunting	478	470	477	478	478	478	478
Arts, Entertainment, and Recreation	2,261	1,474	1,932	2,100	2,268	2,273	2,279
Construction	4,086	3,752	3,970	4,031	4,092	4,104	4,124
Educational Services	7,625	6,762	7,570	7,598	7,626	7,634	7,649
Finance and Insurance	1,837	1,818	1,823	1,829	1,837	1,839	1,841
Health Care and Social Assistance	13,281	12,335	13,033	13,159	13,302	13,361	13,468
Information	1,228	1,167	1,182	1,211	1,229	1,229	1,230
Management of Companies and Enterprises	252	242	252	252	252	252	253
Manufacturing	4,151	3,834	4,070	4,107	4,149	4,149	4,149
Mining, Quarrying, and Oil and Gas Extraction	68	65	68	68	68	68	68
Other Services (except Public Administration)	3,243	2,720	3,094	3,147	3,244	3,246	3,250
Professional, Scientific, and Technical Services	3,297	3,164	3,278	3,288	3,299	3,308	3,324
Public Administration	2,615	2,289	2,529	2,572	2,616	2,616	2,618
Real Estate and Rental and Leasing	779	724	759	771	779	780	782
Retail Trade	7,987	7,213	7,571	7,817	8,141	8,141	8,141
Transportation and Warehousing	1,307	1,107	1,288	1,298	1,309	1,310	1,312
Unclassified	10	10	10	10	10	10	10
Utilities	303	300	303	303	303	303	303
Wholesale Trade	1,274	1,208	1,264	1,269	1,274	1,274	1,274
County Total	66,203	58,698	63,343	64,822	66,435	66,564	66,783

Source: Chmura and JobsEQ by Chmura