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COVID-19 ends longest employment recovery and expansion in CES history, causing unprecedented job losses in 2020

In March and April 2020, the longest employment recovery and expansion in U.S. history abruptly ended, with total nonfarm employment falling sharply because of the coronavirus disease 2019 (COVID-19) pandemic and the efforts to contain it. Job losses were historic and widespread. Although state and local government restrictions on businesses and individuals began to ease somewhat after April 2020, total nonfarm employment ended the year 10.0 million below its February peak.

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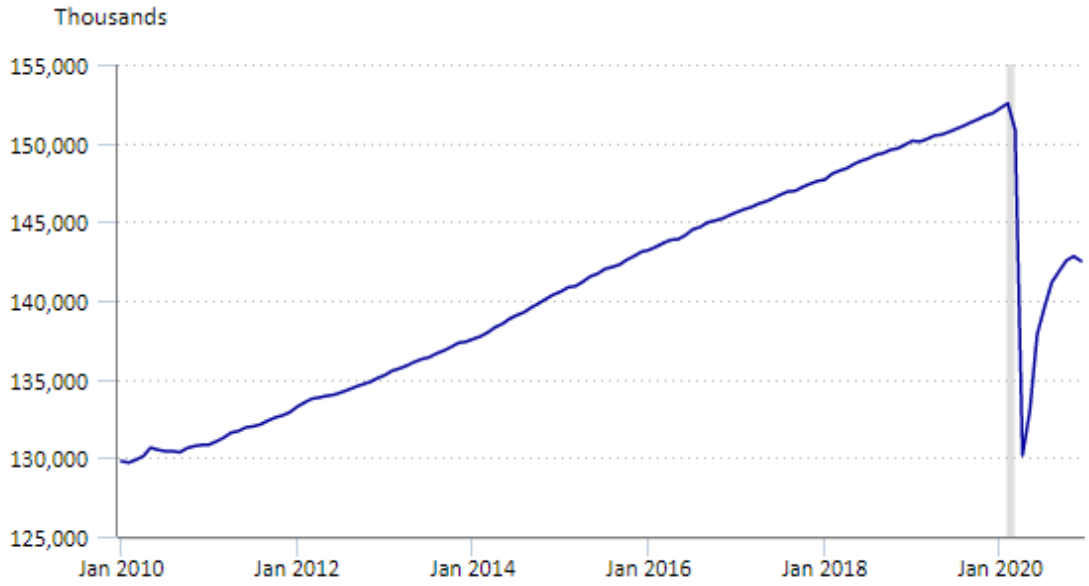
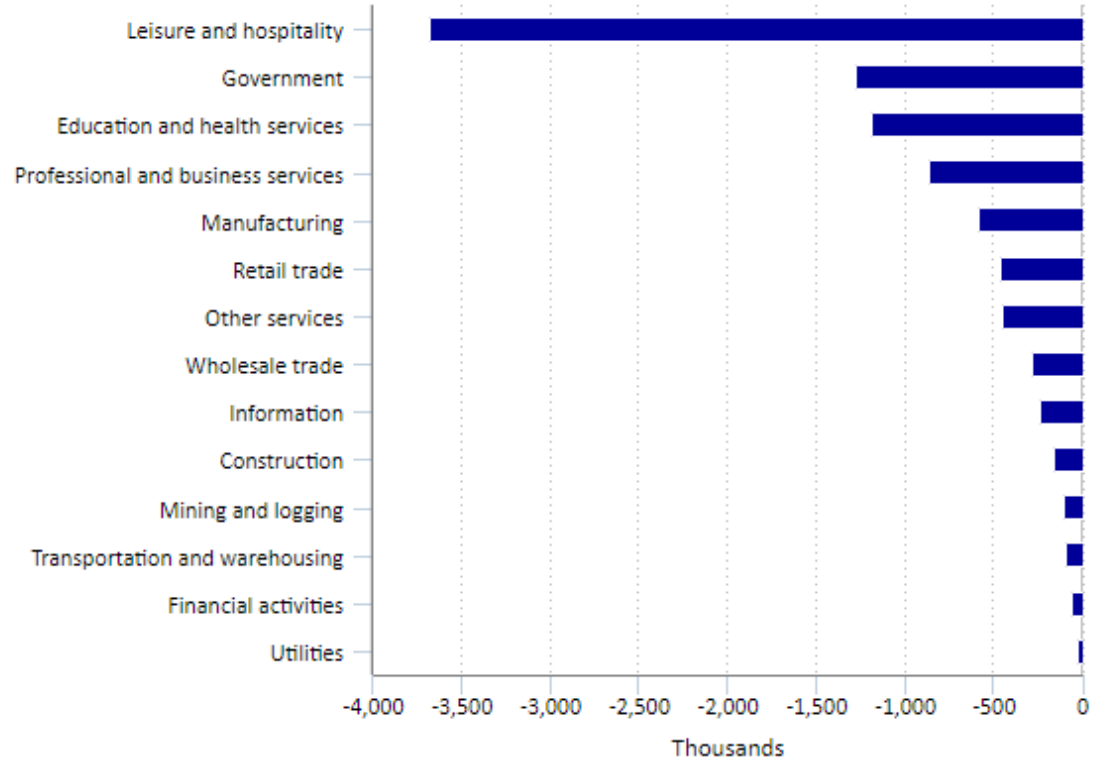
According to data from the U.S. Bureau of Labor Statistics (BLS) Current Employment Statistics (CES) survey, nonfarm payroll employment in the United States declined by 9.4 million in 2020,[1] the largest calendar-year decline in the history of the CES employment series.[2] (See chart 1.) As with virtually all economic activity in 2020, this decline was due to the coronavirus disease 2019 (COVID-19) pandemic, including pandemic-driven social and behavioral changes and government restrictions on business activity.[3] While the job losses were widespread, they were greatest in industries that involve people (employees, customers, or both) coming in close contact. The leisure and hospitality industry suffered the greatest job losses, but every major industry lost jobs over the year. (See charts 2 and 3.) Although 2020 can certainly be characterized as a year of extreme job loss, it also saw several months of recovery with historic job growth. In addition, the pandemic affected each industry differently, resulting in considerable variability in employment impacts.

Chart 1. Total nonfarm employment, seasonally adjusted, January 2010–December 2020



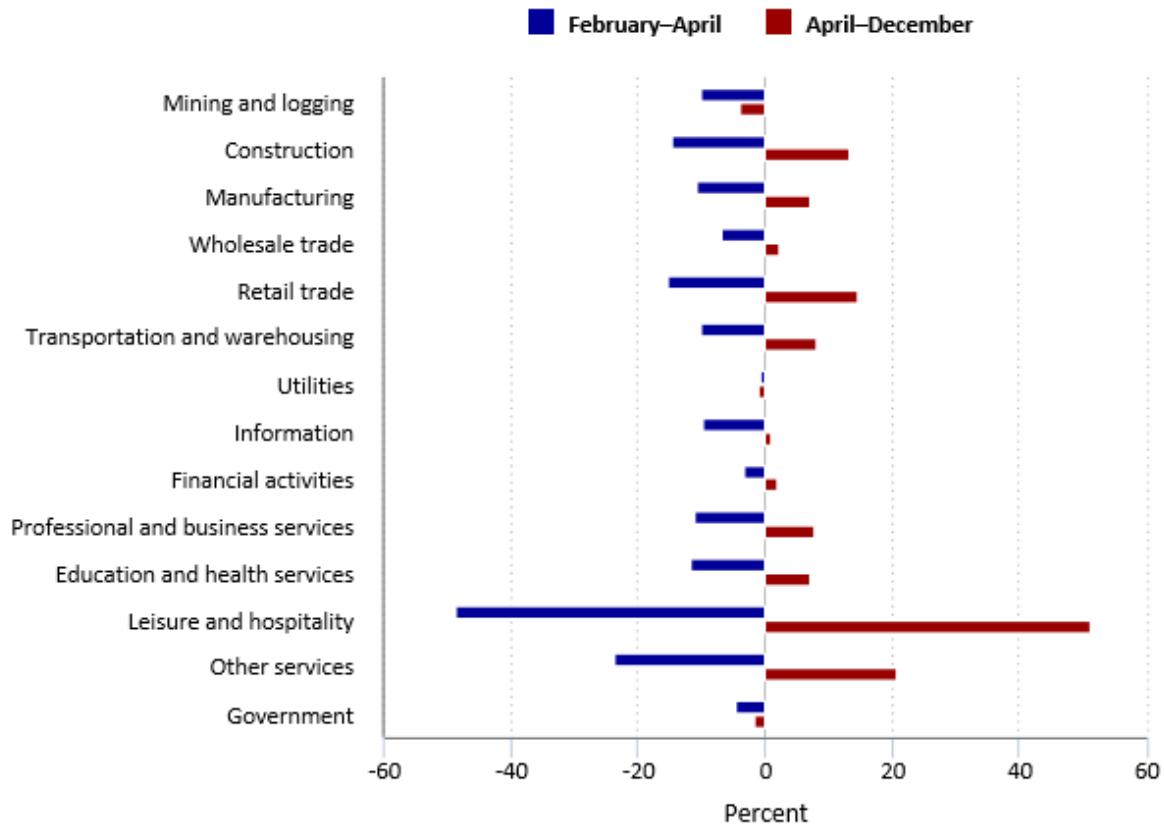
Click legend items to change data display. Hover over chart to view data.
Note: The vertical line at February 2020 represents the start of a recession, as determined by the National Bureau of Economic Research (NBER). When this chart was published, the NBER had not yet determined an endpoint for that recession.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

Chart 2. Change in total nonfarm employment, by industry, seasonally adjusted, 2020



Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

Chart 3. Percent change in total nonfarm employment, by industry, seasonally adjusted, February–April and April–December 2020



Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

This article details the historic employment declines of 2020, specifically within the context of the COVID-19 pandemic. It also touches upon nonemployment data from the CES survey, including hours, earnings, and diffusion indexes, which measure the breadth of employment change across industries. The focus is on employment changes after the February 2020 peak in nonfarm payroll employment.

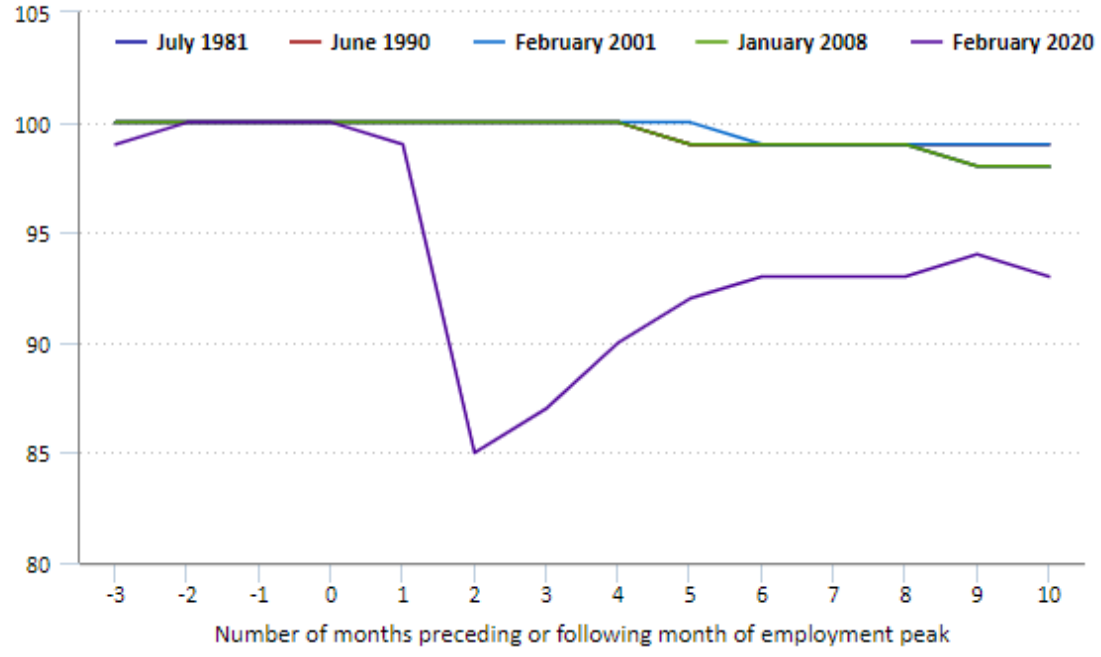
Historical context and employment trends

By the end of 2019, payroll employment in the United States had been growing steadily for over 9 years, marking the longest recovery and expansion in CES history. This growth continued into the start of 2020, with January and February adding a combined 604,000 jobs. At about the same time, however, news of a rapidly spreading disease was growing dire. After the first disease cases were identified in early January, their number grew rapidly.[4] On January 21, the U.S. Centers for Disease Control and Prevention (CDC) announced the first U.S. case.[5] On March 11, the day the World Health Organization designated COVID-19 as a pandemic, the count of new daily cases in the United States stood at 312.[6] This number would grow to the thousands within a week and exceed 22,000 by the end of the month.[7]

In March 2020, state and local governments began imposing restrictions in response to the pandemic, including stay-at-home orders, social distancing requirements, travel restrictions, school closures, and capacity limitations on, or complete closures of, some businesses.[8] These restrictions varied from state to state and from industry to industry, as did the rigorousness of their enforcement. However, combined with a public reluctance to engage in activities requiring close human contact, the restrictions led to immediate job losses.[9] In March, nonfarm employment fell by 1.7 million, a loss only surpassed by a 1945 employment decline that came as the country demobilized after World War II.[10] Unsurprisingly, February was designated as the month in which overall economic activity peaked, marking the beginning of an economic recession.[11] In April, employment plummeted, dropping by 20.7 million—the largest decline in the history of the CES employment series, which originated in 1939.[12] Then, however, a job recovery began, with nonfarm employment growing by 2.8 million in May and by 4.8 million in June. In fact, May, June, July, and August brought the four largest monthly job gains in CES history. As COVID-19 cases surged back later in 2020 and as most state and local governments tightened restrictions in response, employment gains grew progressively smaller, and the year ended with a December employment loss.

The job loss of the 2020 recession is particularly stark when compared with losses in the previous four recessions.[13] (See chart 4.) After reaching a peak in February 2020, employment fell by a combined 22.4 million in March and April, a decline of 15 percent. By contrast, in the previous four employment downturns since 1981, job losses averaged 3 percent, with the largest decline (6 percent) occurring during the Great Recession of 2007–09.

Chart 4. Total nonfarm employment indexed to employment peak, seasonally adjusted



Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

Employment of women, average hourly earnings, and average weekly hours

Besides driving large movements in employment, the pandemic led to substantial volatility in three other CES data series: employment of women, average weekly hours, and average hourly earnings. In all three cases, large swings in the data were due mainly to the industry mix of employment change.

Employment of women

In 2020, employment of women fell by 5.2 million. In March and April, women's nonfarm employment declined by 12.2 million, accounting for 55 percent of the total employment decline over this time. (See table 1.) This disproportionate decline in women employment is attributable to two factors. The first is that pandemic-related job losses were concentrated in industries with large shares of women workers. In March and April, the leisure and hospitality industry, in which women made up 53 percent of total employment, lost 8.2 million jobs, an employment decline of 49 percent. Also hard hit was the private education and health services industry, whose total employment, made up mostly of women (77 percent), fell by 2.8 million, or 12 percent. Other industries in which women constituted a large share of total employment, such as government (58 percent), other services (53 percent), retail trade (50 percent), and professional and business services (46 percent), all saw employment declines of more than a million in March and April. Industries with relatively small shares of women employees generally experienced smaller job declines over the year. The second factor responsible for employment declines among women is that, within industry groups with large proportions of women employees, job losses were disproportionately concentrated among those employees. In education and health services, for example, employment declines among women accounted for 84 percent of total employment declines in March and April. And in leisure and hospitality—the industry with the greatest overall employment declines—women accounted for 54 percent of job losses in those 2 months. From April to December, women's employment across industry groups grew at about the same pace as did total employment.

Table 1. Employment of women, by industry, seasonally adjusted

Industry	All employees, February 2020 (thousands)	Women employees as a percent of all employees, February 2020	Change in all employees, February– April 2020 (thousands)	Change in women employees, February– April 2020 (thousands)	Change in women employees as a percent of change in all employees, February–April 2020
Total nonfarm	152,523	50.0	-22,362	-12,205	54.6
Total private	129,688	48.7	-21,353	-11,575	54.2
Mining and logging	690	12.9	-68	-1	1.5
Construction	7,648	13.0	-1,113	-112	10.1
Manufacturing	12,799	28.7	-1,385	-461	33.3
Wholesale trade	5,895	30.0	-409	-157	38.4
Retail trade	15,610	49.6	-2,375	-1,423	59.9
Transportation and warehousing	5,823	26.1	-575	-222	38.5

See footnotes at end of table.

Table 1. Employment of women, by industry, seasonally adjusted

Industry	All employees, February 2020 (thousands)	Women employees as a percent of all employees, February 2020	Change in all employees, February– April 2020 (thousands)	Change in women employees, February– April 2020 (thousands)	Change in women employees as a percent of change in all employees, February–April 2020
Utilities	547	24.4	-4	-1	12.8
Information	2,914	39.6	-281	-105	37.4
Financial activities	8,875	56.5	-279	-136	48.7
Professional and business services	21,469	45.9	-2,387	-1,198	50.2
Education and health services	24,565	77.4	-2,843	-2,379	83.7
Leisure and hospitality	16,915	53.2	-8,224	-4,459	54.2
Other services	5,937	53.4	-1,410	-923	65.5
Government	22,835	57.8	-1,009	-630	62.4

Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

Earnings

In 2020, average hourly earnings of all private sector employees rose by $1.55, or 5.5 percent, and average hourly earnings of production and nonsupervisory employees rose by $1.31, or 5.5 percent. In both dollar and percent terms, these are the largest annual changes in CES history.[14] Over-the-year changes, however, mask volatility in the monthly data. For example, in April, which saw the largest over-the-month earnings change during the year, the hourly earnings of all private sector employees rose by $1.33, or 4.6 percent, and the earnings of private sector production and nonsupervisory employees rose by $1.01, or 4.2 percent. These changes were largely dictated by pandemic-related employment losses.

Employment declines were the greatest in industries with low earnings. (See table 2.) The leisure and hospitality industry, whose February average hourly earnings ($16.90) were the lowest of any industry, accounted for 39 percent of the February–April decline in total private employment. Retail trade, which had the second-lowest February earnings ($20.18) accounted for an additional 11 percent of job losses over the same period. Job losses in industries whose workers have higher earnings, such as information and financial activities, made up a relatively small share of the employment decline in March and April. Because overall private earnings in the CES program are calculated as an average weighted by employment share and by industry, the removal of workers with lower earnings drove up the total private average.[15] In other words, the loss of jobs in industries with low earnings pushes up average hourly earnings at the total private sector level.

Table 2. Employment change from February to April 2020, and February 2020 all-employee average hourly earnings, by industry, seasonally adjusted

Industry	Employment change, February–April 2020 (thousands)	Average hourly earnings, February 2020
Mining and logging	-68	$34.41
Construction	-1,113	31.36
Manufacturing	-1,385	28.23
Wholesale trade	-409	31.81
Retail trade	-2,375	20.18
Transportation and warehousing	-575	25.05
Utilities	-4	42.42
Information	-281	42.95
Financial activities	-279	36.85
Professional and business services	-2,387	34.43
Education and health services	-2,843	27.90
Leisure and hospitality	-8,224	16.90
Other services	-1,410	25.59

Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

There is also evidence that job losses were concentrated among workers with low earnings. As businesses tried to adapt to the pandemic-driven economic slowdown, newer and lower earning workers were let go, with supervisors and experienced (and therefore higher paid) workers being relied upon to maintain business operations.[16] This resulted in increases in the average earnings of workers, and these increases aggregated to the topside level.

Hours

In 2020, average weekly hours of all private sector employees rose by 0.4 hour, to 34.7 hours, and average weekly hours of production and nonsupervisory employees rose by 0.7 hour, to 34.2 hours. The annual change for all private sector employees was the largest since 2010, when average weekly hours grew by the same amount. The annual change for production and nonsupervisory employees was the largest in CES history. In May, which saw the largest over-the-month change during the year, weekly hours of all private sector employees grew by 0.5 hour, while hours of private sector production and nonsupervisory employees grew by 0.6 hour. These changes, like those for earnings, were largely dictated by pandemic-related employment changes. While employees in most industries saw an increase in their workweeks in May, the employment changes, especially those in industries with shorter workweeks, complicate monthly comparisons of average weekly hours.

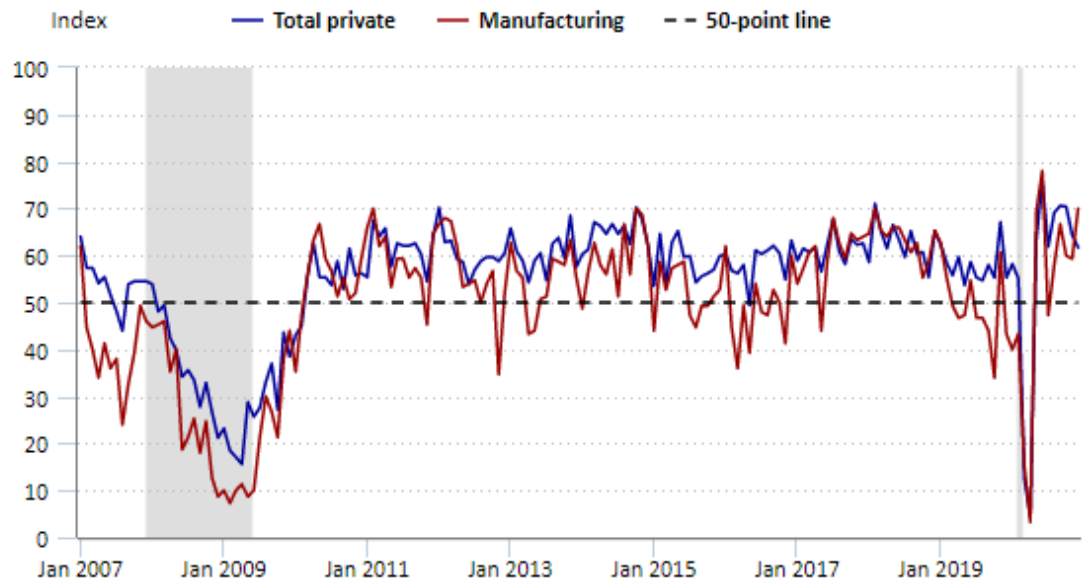
Diffusion indexes

CES uses diffusion indexes as a supplementary analysis tool to measure how widespread employment changes are across industries. Rather than measuring the magnitude of employment change (i.e., the number of jobs gained or lost over time), diffusion indexes measure how many industries added or lost jobs over 1, 3, 6, and 12 months. An index value above 50 indicates that, over the relevant period, more industries are adding jobs than

losing them, whereas a value below 50 indicates that more industries are losing jobs than adding them. CES produces diffusion indexes of employment for the total private sector and for manufacturing.

Diffusion indexes show that pandemic-related job losses were spread across most industries. In March 2020, the 1-month diffusion index for total private employment fell by 42.6 points, to 12.5, and in April, it fell a further 8.0 points, to 4.5—the lowest reading in the 30-year history of the time series. (See chart 5.) In March, job losses occurred in 221 of the 257 industries included in the total private diffusion index, and in April, 244 industries experienced job losses. The 1-month manufacturing index fell by 28.0 points, to 15.3, in March, and it fell a further 12.0 points, to 3.3, in April. As was the case with the index for total private employment, the April reading for manufacturing was the lowest in the history of the data series. In March, 61 of 75 manufacturing industries shed jobs, and in April, 72 manufacturing component industries lost jobs.

Chart 5. One-month diffusion index, total private and manufacturing employment, seasonally adjusted, January 2007–December 2020



Click legend items to change data display. Hover over chart to view data.
Note: Shaded areas represent recessions as determined by the National Bureau of Economic Research (NBER). When this chart was published, the NBER had not yet determined an endpoint for the recession that began in February 2020.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

From April to May, the total private index quickly surged back to 63.2, and the index for manufacturing rose to 69.3, reflecting the beginning of widespread job gains. For the rest of 2020, the 1-month total private index remained above 50, indicating a preponderance of job-gaining industries each month, and the 1-month manufacturing index was above 50 in all but 1 month between April and December. The 12-month diffusion index, however, paints a somewhat darker picture.[17] In December, the 12-month total private index stood at 14.6 and the manufacturing index stood at 11.3, indicating that, in 2020, job-losing industries outnumbered job-gaining industries. From December 2019 to December 2020, 219 of 257 total private industries lost jobs, with only 37 industries seeing job gains; in manufacturing, 66 of 75 industries shed jobs over this period, with only 8 seeing employment increases.

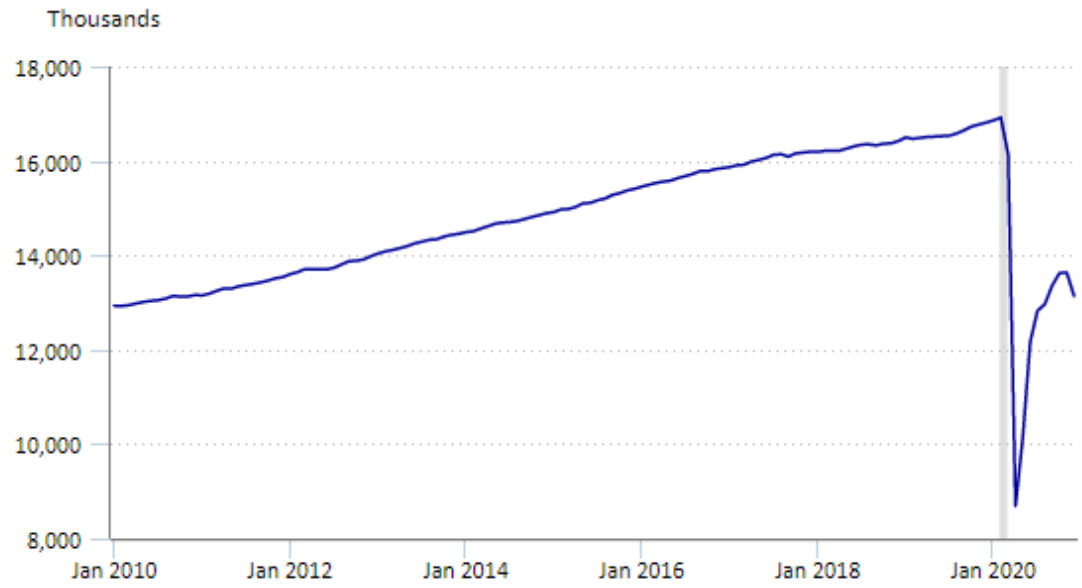
Detailed industry analysis

This section discusses CES employment changes by industry.

Leisure and hospitality

After reaching a peak in February 2020, employment in leisure and hospitality fell by 8.2 million in March and April. (See chart 6.) By the end of the year, 4.4 million of these jobs, or 54 percent, had been recovered. Leisure and hospitality's overall job loss for 2020 was 3.7 million—the largest of any major industry group.

Chart 6. Employment in leisure and hospitality, seasonally adjusted, January 2010–December 2020



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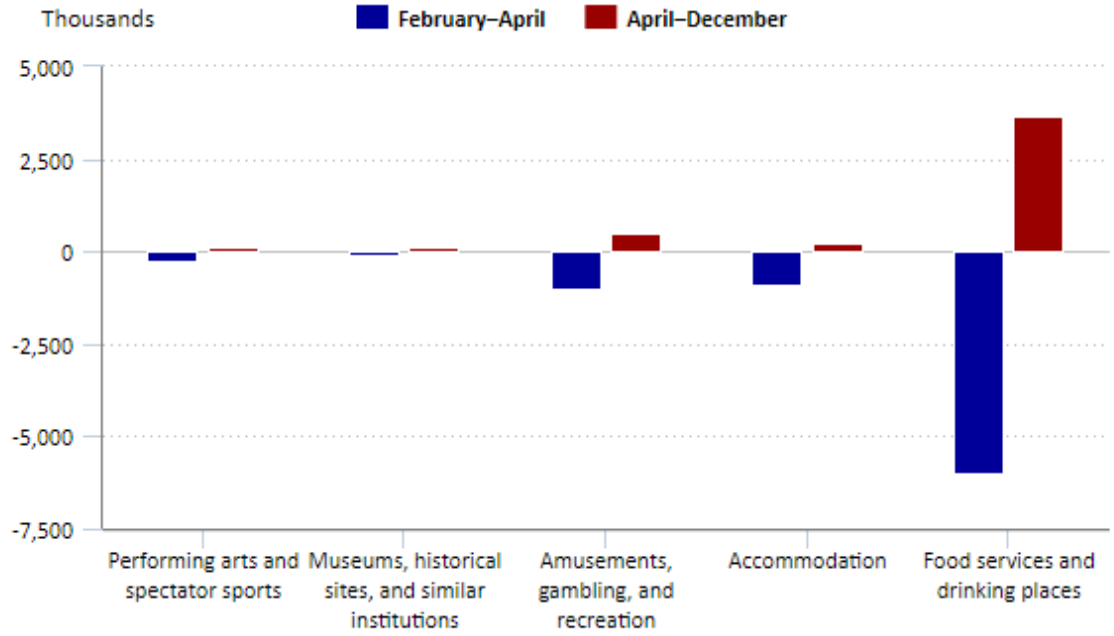
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

It is unsurprising that leisure and hospitality industries were seriously affected by the pandemic. These industries include businesses such as restaurants and bars, hotels, and sports and entertainment venues. What made this industry group so susceptible to pandemic impacts is that the activities of many of its businesses involve close gatherings of people. Restaurant and bar patrons dine and drink with other patrons, and theatergoers sit next to other theatergoers. In addition, leisure and hospitality industries, especially hotels, are tightly linked to travel, an activity that was seriously curtailed by fears of COVID-19 transmission. With individuals traveling less and staying home more, hotel occupancy rates plummeted.

Within leisure and hospitality, the accommodation and food services industry lost 6.9 million jobs in the 2 months following its February employment peak. Most of this decline occurred in the industry's largest component, food services and drinking places.[18] (See chart 7.) Restaurants and bars faced tight restrictions early in the pandemic.[19] These restrictions, combined with customer reticence to visit such establishments, led to sudden and

severe declines in restaurant sales, which fell by 49 percent from February to April.[20] Employment in the industry fell just as fast over this period, declining by 6.0 million, or 49 percent.

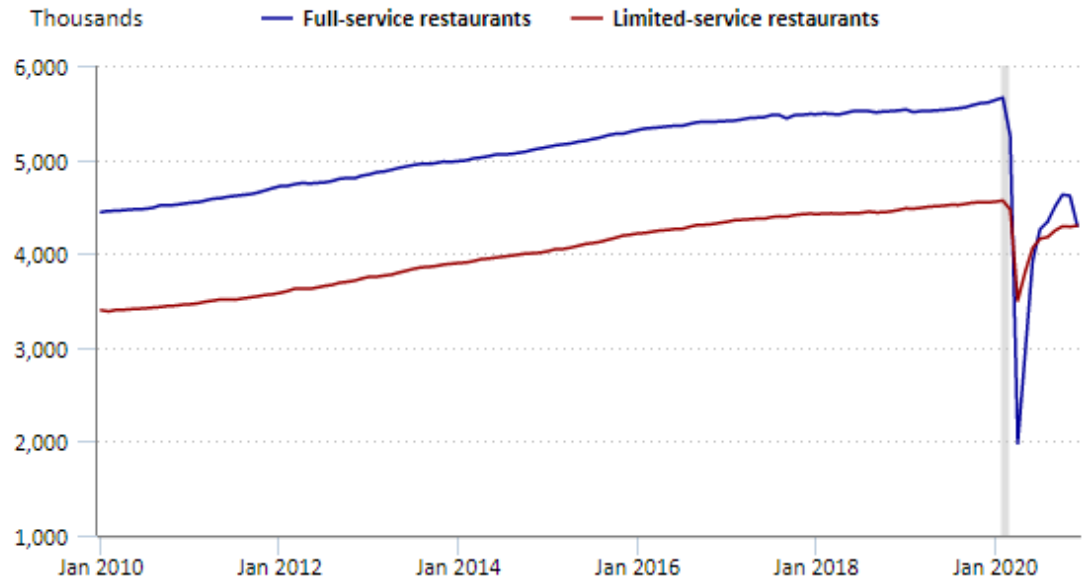
Chart 7. Employment change in leisure and hospitality, by component industry, seasonally adjusted, February–April and April–December 2020



Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

Job losses in food services and drinking places were greatest in full-service restaurants, in which patrons place orders and are served while seated. (See chart 8.) These types of restaurants faced wariness by customers, as well as government restrictions that imposed capacity limitations or limited sales to takeout, curbside pickup, or delivery. Employment in full-service restaurants fell by a combined 3.7 million in March and April, accounting for 70 percent of job losses in restaurants and other eating places over these 2 months. As restrictions began to ease in the late spring and summer months, full-service restaurants added 1.9 million jobs in May and June.[21] Growth continued at a lower rate through October, with the industry ending the year with employment declines in November and December. These late-year job losses coincided with a resurgence in the number of COVID-19 cases and a corresponding resumption of state and local government restrictions on restaurants.[22] By the end of the year, 63 percent of the jobs lost in March and April had been recovered, but employment in full-service restaurants was still 1.4 million below its February peak.

Chart 8. Employment in selected component industries of food services and drinking places, seasonally adjusted, January 2010–December 2020



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Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

Employment in limited-service restaurants also fell sharply in March and April, declining by 1.1 million. Although this decline—at 23 percent—was certainly large, it was much less steep than the 65-percent loss suffered by full-service restaurants. The relatively greater resilience of limited-service restaurants is largely a byproduct of their general business model. These restaurants, which include pizza and sandwich shops, takeout eating places, and fast-food and similar restaurants, had in place many systems and practices that benefitted them during the pandemic. Limited-service restaurants rely less on in-person dining and more on takeout, drive-through service, and delivery, and therefore posed less risk to customers. Most fast-food chains fared relatively well, because many of them have drive-through windows, which allow for social distancing.[23] By the end of 2020, limited-service restaurants had recovered 75 percent of their March and April job losses.

Other food service industries also experienced pandemic-related job losses. March and April saw combined job losses of 415,000 in snack and nonalcoholic beverage bars, which include businesses such as donut, bagel, and coffee shops. By the end of the year, 77 percent of these jobs had been recovered. Employment in cafeterias, grill buffets, and buffets fell by 94,000 in March and April. School and university closures eliminated much of the need for cafeteria service, and concerns about the health risks associated with dining at buffets led to their closures in much of the country.[24] About a quarter of cafeteria and buffet employment had been recovered by the end of 2020.

Employment in the accommodation industry fell by 1.0 million in March, April, and May, as travel restrictions hit this industry especially hard. The United States restricted travel for residents of many countries, and some states imposed traveler quarantine restrictions or prohibitions on domestic travel.[25] Both pleasure and business travel—key revenue sources for the accommodation industry—fell in response to these restrictions, as well as out of concern for employee safety.[26] According to one source, hotel occupancy rates in April 2020 fell to 25 percent, a

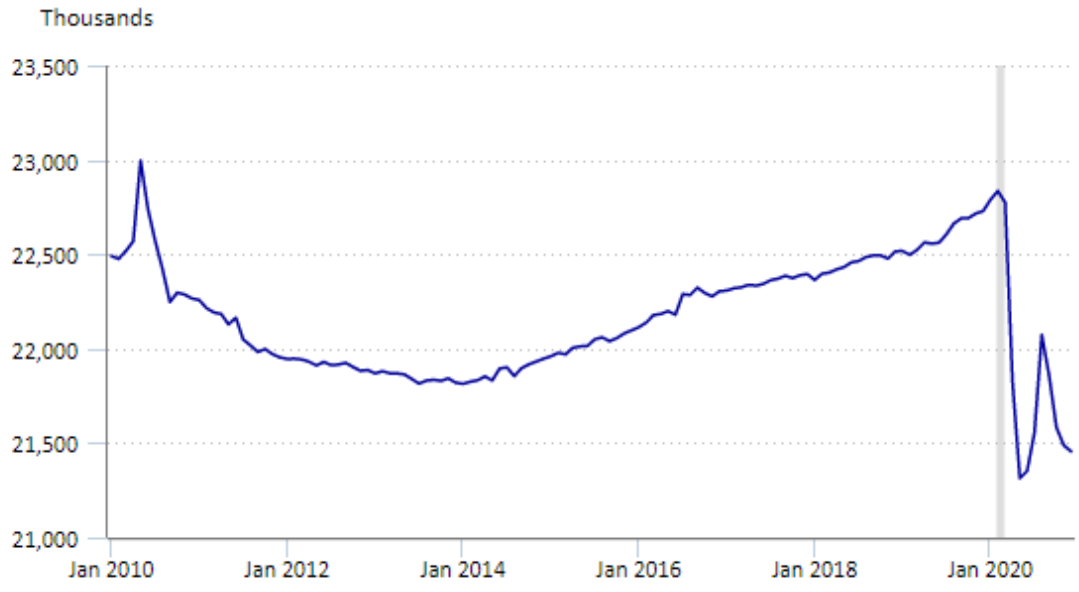
decline of 64 percent from April 2019.[27] Along with these low occupancy rates came job losses. Occupancy rates recovered slightly throughout the remainder of the year, but they ended the year 32 percent below 2019 levels.[28] By the end of the year, accommodation had recovered only 33 percent of its pandemic-related job losses.

Within leisure and hospitality, the arts, entertainment, and recreation industry lost 1.3 million jobs in March and April. This decline was concentrated in amusements, gambling, and recreation, which lost 1.0 million jobs. This industry includes casinos, amusement parks, bowling centers and fitness clubs, and similar businesses. These industry components faced the same combination of customer reluctance and state and local government restrictions as did other public-facing industries, such as performing arts and spectator sports. Employment in this industry fell by 259,000 in March, April, and May, finishing the year 204,000 below its January 2020 level.

Government

Government employment declined by 1.3 million in 2020, a drop of 6 percent. (See chart 9.) The largest job losses occurred in March, April, and May, when employment fell by a combined 1.5 million. Driving these losses were employment declines in local government education, which lost 749,000 jobs over the same period, and local government (excluding education), which lost 514,000 jobs. (See chart 10.)

Chart 9. Employment in government, seasonally adjusted, January 2010–December 2020



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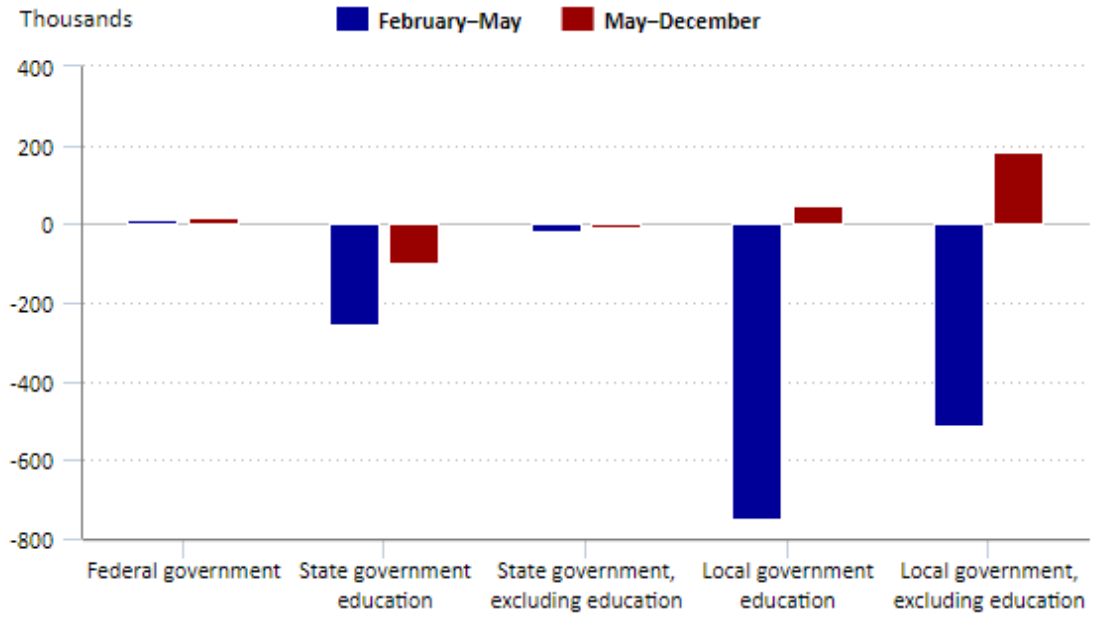
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

Chart 10. Employment change in government, by component industry, seasonally adjusted, February–May and May–December 2020



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Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

In early 2020, education officials started to discuss closing schools, as fears of spreading COVID-19 to children through exposure in classrooms, lunchrooms, and playgrounds gripped the nation. Eventually, most states recommended the closure of school buildings for the rest of the 2019–20 academic year, and by the end of March, all U.S. public school buildings were closed.[29] This either ended the school year early or moved students to virtual learning. Along with these closures came layoffs.[30] In March, April, and May, employment in local government education fell by 749,000. In June, July, and August, there were fewer layoffs than usual because workers had already been laid off as a result of the pandemic, and this led to employment gains after seasonal adjustment. Local government education continued to lose jobs for the remainder of the year, shedding 346,000 jobs from August to December, largely because of fewer hires being brought on than usual for the beginning of the 2020–21 school year. By the end of 2020, the industry had recovered only 6 percent of the jobs lost from February to May.

State government education behaved similarly to local government education, losing 255,000 jobs in March, April, and May; adding 28,000 jobs in June, July, and August; and losing 125,000 jobs in September, October, November, and December. Again, seasonally adjusted job gains over the summer reflected layoffs that had already occurred in the spring, and job losses in the fall reflected reduced hiring for the 2020–21 school year. However, state government education did not recover any of the jobs lost in March, April, and May.[31]

The education industries ended the year quite differently than they started it, with some state and local schools reopening fully, some adopting a hybrid model of in-person and virtual learning, and some remaining fully virtual.[32]

Over the year, federal government employment grew by 50,000, with monthly movements largely driven by the hiring and laying off of temporary workers tied to conducting the 2020 decennial census. Activities related to the census were supposed to peak in May, but they were delayed for several months, peaking in August instead, as

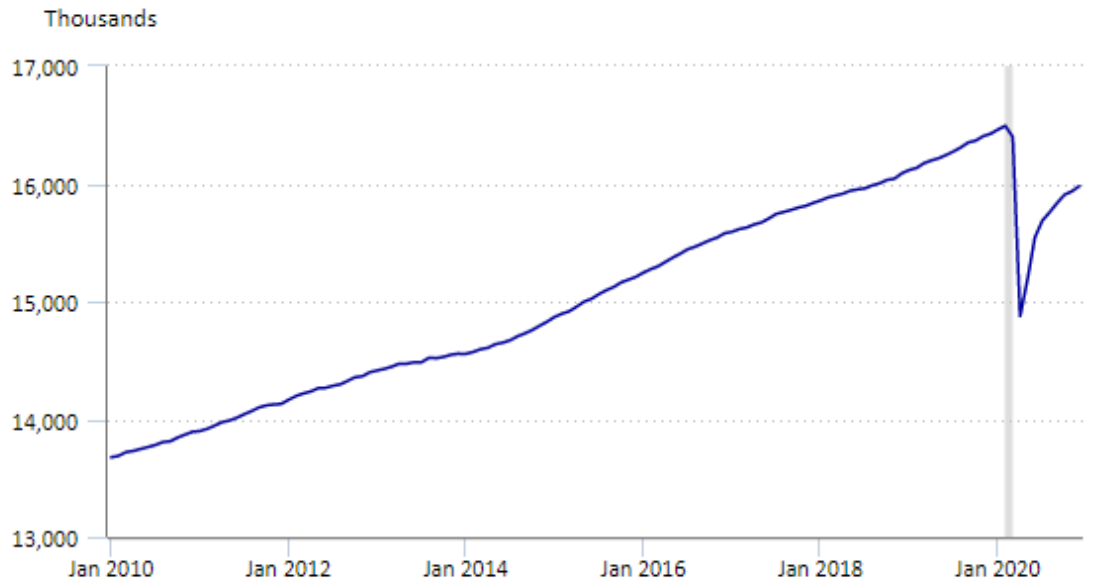
the U.S. Census Bureau modified normal activities in order to follow pandemic guidelines. These modifications included changing when and how temporary workers would follow up with residents who failed to file their census forms on time. Over the year, hiring tied to the census accounted for 280,000 jobs between December 2019 and August 2020, but by the end of the year, 285,000 jobs were lost because of layoffs. As a result, monthly data on federal government employment were skewed by changes to the pool of temporary census workers. For example, the federal government added 256,000 jobs in August, and decennial census workers accounted for 238,000 of those gains. In all, excluding temporary workers tied to the 2020 census suggests that the federal government was one of the few industries that were not affected by the pandemic, adding an average of 4,000 jobs per month in 2020, up from 3,000 jobs added per month in 2019.

Education and health services

Employment in education and health services fell by 1.2 million in 2020. After peaking in February, employment in this industry dropped by 218,000 in March and 2.6 million in April. Prior to these losses, the largest decline in the industry had been a loss of 48,000 jobs in September 1989, and there had not been a single monthly job loss since September 2013.

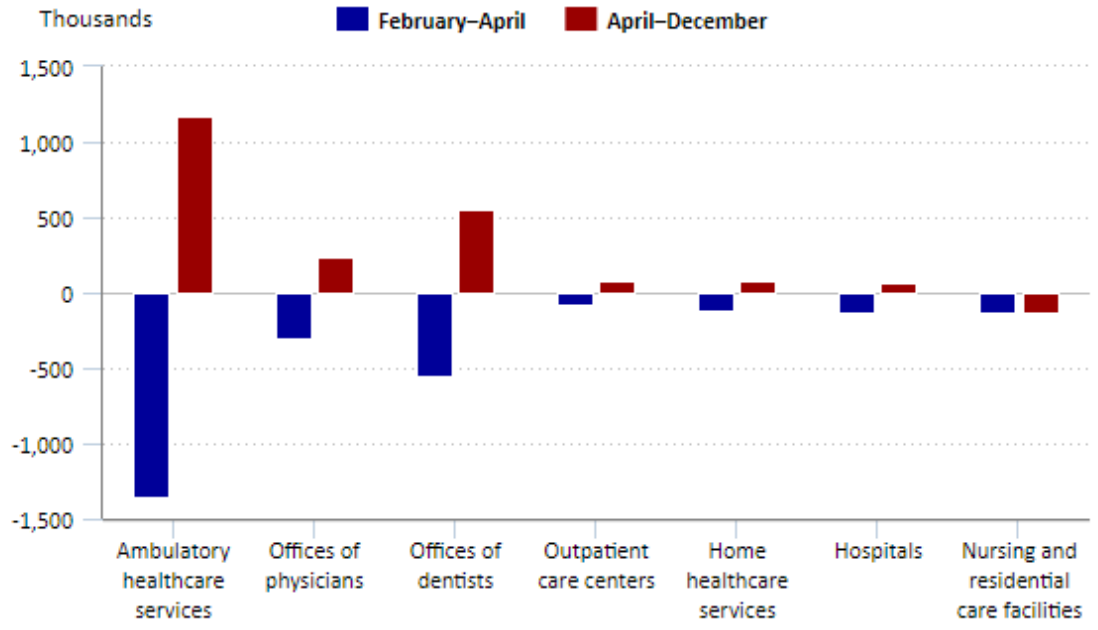
Job losses were widespread across component industries, but the largest declines occurred in healthcare,[33] whose employment fell by a combined 1.6 million in March and April. (See chart 11.) This loss was concentrated in ambulatory healthcare services, whose employment fell by 1.4 million. (See chart 12.) This industry includes offices of physicians, dentists, home healthcare providers, and other healthcare practitioners. On March 18, the Centers for Medicare and Medicaid Services—the federal agency that administers Medicare—recommended that elective and nonemergency procedures be deferred in order to preserve protective equipment for pandemic-related care.[34] Some state governments issued similar guidance, and others specifically prohibited nonemergency care.[35] In response to these recommendations and restrictions, and to protect themselves and their employees, healthcare practitioners began to cancel nonemergency, elective medical procedures. In addition, state-issued stay-at-home orders further kept patients away from medical offices. Together, these factors led to steep declines in office visits, and these declines were followed by job cuts.[36] In April and May, however, 30 states relaxed guidance or began eliminating restrictions on elective and nonemergency care.[37] Patient visits to ambulatory care facilities began to rebound and, according to one survey, had recovered to prepandemic levels by October.[38] Employment also began to grow, with ambulatory healthcare services recovering 1.2 million, or 87 percent, of the jobs lost in March and April by the end of 2020. Offices of dentists had an especially strong rebound and, by the end of the year, recovered 99 percent of the 555,000 jobs lost in the spring. Facing many of the same conditions as ambulatory healthcare services, hospitals lost 165,000 jobs in March, April, and May, and the industry's employment ended the year 63,000 below its February peak.[39]

Chart 11. Employment in healthcare, seasonally adjusted, January 2010–December 2020



Click legend items to change data display. Hover over chart to view data.
Note: The vertical line at February 2020 represents the start of a recession, as determined by the National Bureau of Economic Research (NBER). When this chart was published, the NBER had not yet determined an endpoint for that recession.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

Chart 12. Employment change in healthcare, by component industry, seasonally adjusted, February–April and April–December 2020



Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

Employment in social assistance declined by 701,000 in the 2 months following its peak in February 2020. The largest declines occurred in child daycare services,[40] which lost 373,000 jobs. Daycare centers were subject to a variety of state and local closure orders, capacity restrictions, and newly instituted protective equipment requirements.[41] In addition, some states approved certain daycare centers to open, but allowed them to provide services only to frontline workers.[42] These measures led to enrollment declines that one source pegged at two-thirds.[43] At the same time, daycare providers faced increased costs from modifying their facilities to prevent COVID-19 transmission, and by July, 18 percent of childcare centers were closed.[44] By year's end, child daycare services had recovered 54 percent of pandemic-related job losses.

Employment in individual and family services fell by 251,000 in March and April. Businesses in this industry provide nonmedical, nonresidential social assistance to children, young people, the elderly, people with disabilities, and all other individuals and families. Social-distancing requirements and funding shortfalls may have eliminated or hampered the operation of facilities such as drug-counseling centers, youth centers, and food banks.[45] State and local governments, facing falling revenue, cut back on payments to providers of individual and family services, and these providers responded with job cuts. By year's end, this industry had recovered 52 percent of the jobs lost in March and April.

Employment in nursing and residential care facilities fell by 271,000 in 2020. Although these job losses occurred throughout the year, they were greatest in April and May, at 179,000. This industry has long faced a shortage of qualified workers and high turnover, and, with the onset of the pandemic, nursing home staff faced the new and stressful prospect of becoming infected with COVID-19 at work. One study suggests that the prospect of infection was a reasonable fear, with nursing home employees representing one of the most dangerous occupations during

the pandemic.[46] In addition, as of May, a third of all deaths from COVID-19 involved residents and workers at long-term care facilities.[47] These factors, along with layoffs, led to 2020 employment declines in all nursing and residential care industries. No component industry within nursing and residential care facilities recovered any of the jobs lost in March and April 2020.

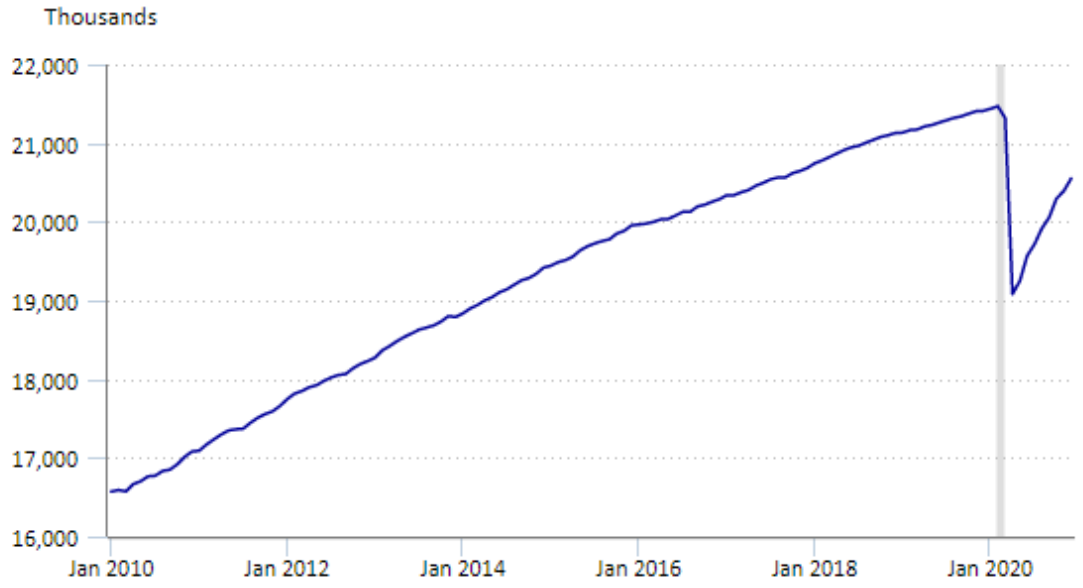
Private educational services employment declined by 533,000 in the 3 months following its peak in January 2020. Within educational services, colleges and universities experienced eight monthly declines in 2020, losing 254,000 jobs by the end of the year. With campuses largely closed, and with enrollment declining, these institutions turned to layoffs to cut expenses.[48] The months of May, June, July, and August saw fewer layoffs than usual because workers had already been laid off as a result of the pandemic, and this led to employment gains in educational services (after seasonal adjustment). Educational services employment then continued to fall for the rest of the year, declining by 140,000 from August to December, largely because of fewer hires being brought on than normal for the beginning of the 2020–21 school year. By the end of 2020, educational services had recovered just 13 percent of the jobs lost in February, March, and April.[49]

By the end of 2020, education and health services had recovered 54 percent of the 2.8 million jobs lost in March and April.

Professional and business services

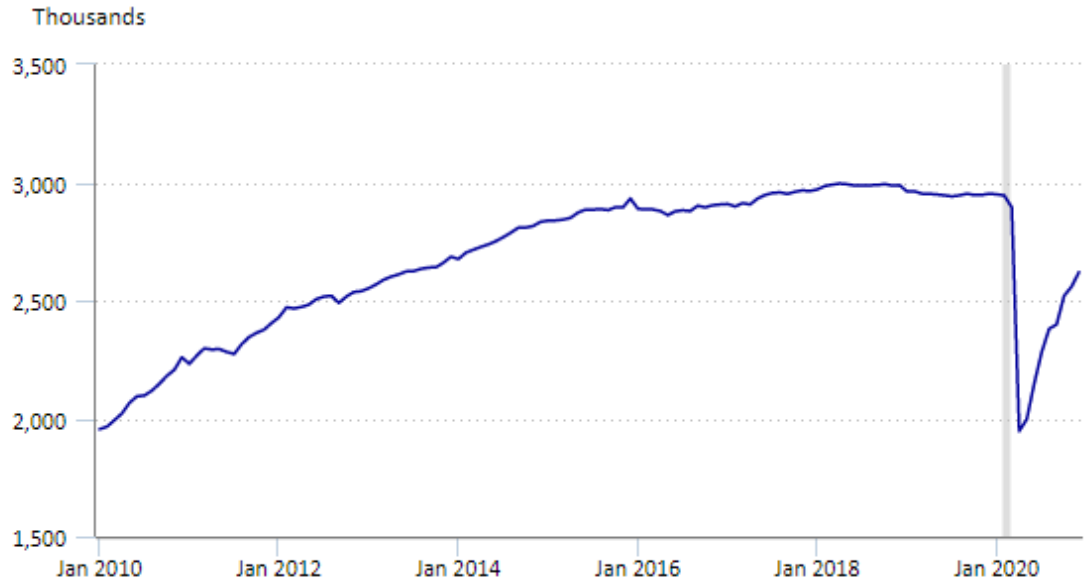
Employment in professional and business services fell by 860,000 in 2020, with the industry losing 2.4 million jobs in March and April. (See chart 13.) Temporary help services, a component industry of administrative and waste services, accounted for 1.0 million of these job losses. (See chart 14.) Establishments in this industry supply temporary workers to business clients. Employment in temporary help services is a leading economic indicator, because, in tight business conditions, employers tend to stop using temporary help employees before laying off their own employees. In March and April, when state and local government pandemic-related restrictions led to mass business closures, the need for temporary help services declined, prompting employment declines. According to a survey conducted by the American Staffing Association, the pandemic was the primary reason for employment declines in temporary and contract staff.[50] However, when restrictions eased and businesses began to reopen, many of these workers were rehired as businesses added telework options or optimized resources by adopting hybrid schedules.[51] By the end of the year, temporary help services had recovered 68 percent of the jobs lost in March and April.

Chart 13. Employment in professional and business services, seasonally adjusted, January 2010–December 2020



Click legend items to change data display. Hover over chart to view data.
Note: The vertical line at February 2020 represents the start of a recession, as determined by the National Bureau of Economic Research (NBER). When this chart was published, the NBER had not yet determined an endpoint for that recession.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

Chart 14. Employment in temporary help services, seasonally adjusted, January 2010–December 2020



Click legend items to change data display. Hover over chart to view data.
Note: The vertical line at February 2020 represents the start of a recession, as determined by the National Bureau of Economic Research (NBER). When this chart was published, the NBER had not yet determined an endpoint for that recession.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

Services to buildings and dwellings lost 273,000 jobs over March and April. Establishments in this industry provide services that include the exterior cleaning of buildings, swimming pool cleaning, housekeeping and washroom sanitation services, and drain and gutter cleaning. Like temporary help services, services to buildings and dwellings experienced employment declines and gains closely tied to the implementation and easing of pandemic-related restrictions. By the end of the year, the industry had recovered 77 percent of the jobs lost in March and April.

Elsewhere in professional and business services, professional and technical services lost 545,000 jobs in March and April. Within professional and technical services, accounting and bookkeeping services lost 61,000 jobs, architectural and engineering services lost 69,000 jobs, computer systems design and related services lost 68,000 jobs, and management and technical consulting services lost 98,000 jobs.[52] These industries contain establishments providing technical services within their respective industry areas. By the end of 2020, about two-thirds of the jobs lost in professional and technical services had been recovered. The share of recovered jobs in major professional and technical services component industries was 49 percent in accounting and bookkeeping services, 70 percent in architectural and engineering services, 59 percent in computer systems design and related services, and 79 percent in management and technical consulting services.

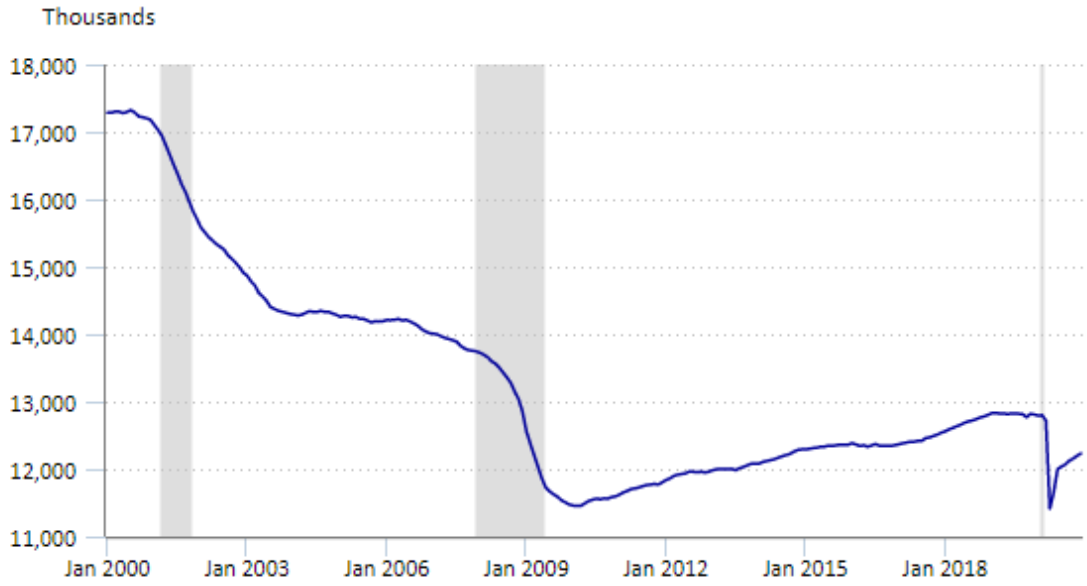
Employment in management of companies and enterprises fell by 96,000 in March and April. This industry contains establishments engaged in influencing management decisions or managing the companies or enterprises that assume organizational planning and decision-making roles. Given the widespread employment declines across industries, it is unsurprising that management of companies and enterprises experienced strong declines; with so many business closures—and with employees either being laid off or staying at home—the need for the

industry's management services inevitably declined. By the end of 2020, the industry had recovered only 23 percent of the jobs lost in March and April. Employment in all professional and business services recovered 61 percent of the jobs lost over the same period.

Manufacturing

In 2020, manufacturing employment fell by 578,000, a decline of 5 percent. (See chart 15.) At the onset of the pandemic, in March and April, employment in manufacturing fell by 1.4 million, or 11 percent, despite some manufacturing facilities being a part of the "Critical Manufacturing Sector," one of the infrastructure sectors deemed critical by the Cybersecurity and Infrastructure Security Agency of the U.S. Department of Homeland Security.[53]

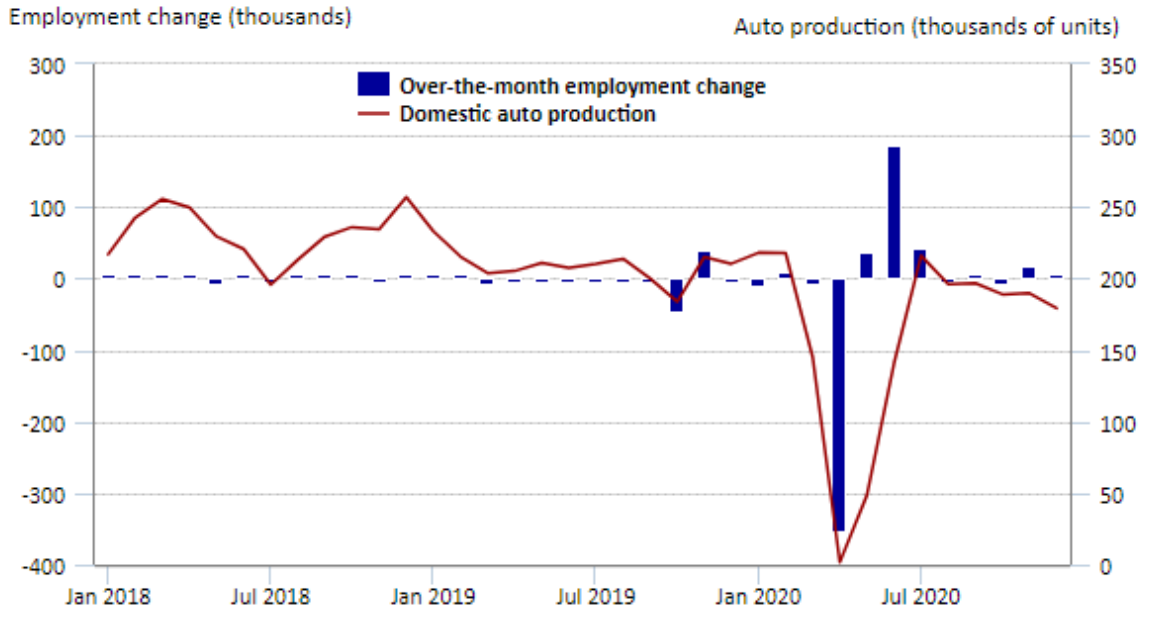
Chart 15. Employment in manufacturing, seasonally adjusted, January 2000–December 2020



Click legend items to change data display. Hover over chart to view data.
Note: Shaded areas represent recessions as determined by the National Bureau of Economic Research (NBER). When this chart was published, the NBER had not yet determined an endpoint for the recession that began in February 2020.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

Manufacturing job losses were concentrated in durable goods manufacturing industries, which accounted for 68 percent of the job losses in March and April. Transportation equipment manufacturing was the durable goods industry with the greatest employment decline, losing 403,000 jobs over March and April. Most of this decline (89 percent) came in motor vehicles and parts manufacturing, which lost 360,000 jobs. This job loss coincided with a steep drop in motor vehicle production, which fell by 99 percent over the same period, as automakers largely shuttered factories.[54] (See chart 16.) These declines, however, were offset after just a few months, as production resumed and auto sales surged in late spring.[55] In response to these developments, employment in motor vehicles and parts manufacturing rebounded quickly, and by the end of the year, the industry recovered 285,000, or 79 percent, of the jobs lost because of the pandemic.

Chart 16. Over-the-month employment change in motor vehicles and parts, and domestic auto production, seasonally adjusted, January 2018–December 2020



Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey; and U.S. Bureau of Economic Analysis.

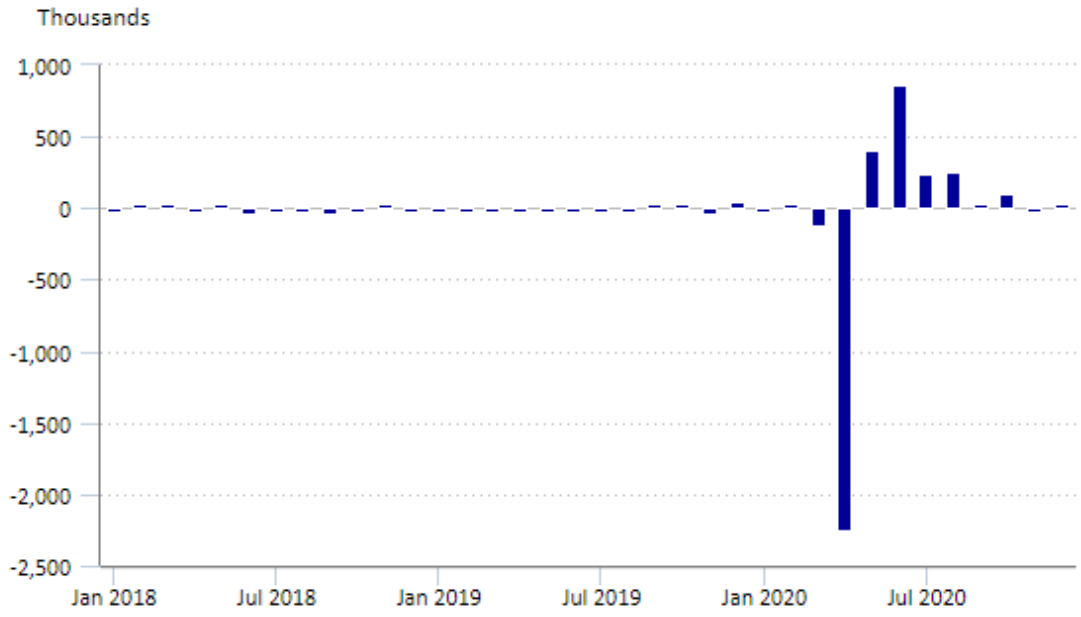
Nondurable goods employment fell by 440,000 in March and April. Although these losses were spread across component industries, the largest decline occurred in food manufacturing, which lost 111,000 jobs over this time. The pandemic caused at least 30 meatpacking plants to temporarily close, which resulted in a 40-percent drop in pork production capacity and a 25-percent drop in beef production capacity, alarming the public about the nation's food supply. In addition, news reports stated that tens of thousands of meatpacking workers were contracting COVID-19, with some dying from the disease, further exacerbating public concerns.[56] Employees returned to work in food manufacturing, as 83,000, or 74 percent, of the jobs lost in March and April were recovered in the industry by the end of 2020.

Employment declines in nondurable goods manufacturing also occurred in the printing and related support activities industry, in which pandemic-related economic impacts reduced demand for printing and resulted in a loss of 78,000 jobs in March and April. Employment in plastics and rubber products manufacturing fell by 70,000 in March and April, and employment in miscellaneous nondurable goods manufacturing fell by 58,000. Smaller employment declines were spread throughout the remaining nondurable goods manufacturing industries. After the initial effects of the pandemic subsided, nondurable goods manufacturing employment rebounded, recovering 64 percent of its pandemic-related job losses by the end of the year. As employees returned to work in both durable and nondurable goods industries, manufacturing recovered 817,000 jobs, or 59 percent, of the jobs lost in March and April.

Retail trade

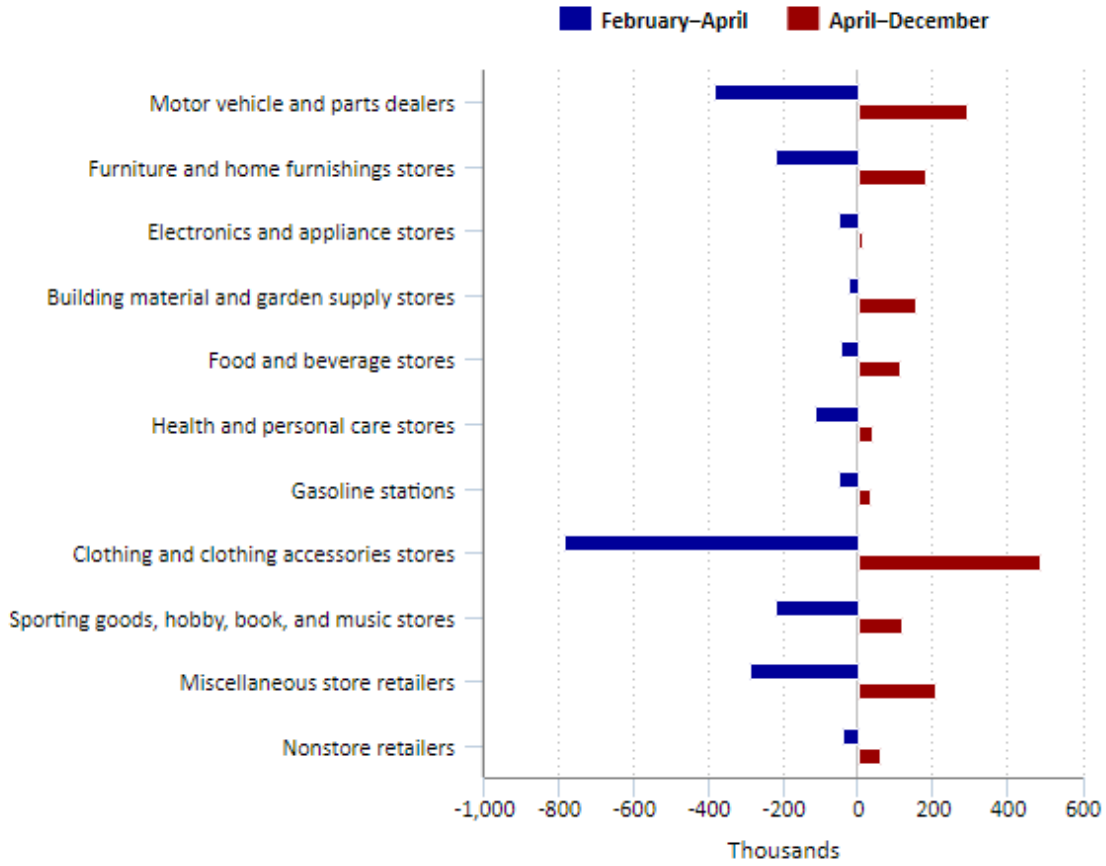
In 2020, employment in retail trade fell by 459,000, a decline of 3 percent. (See chart 17.) Retail trade had been in a period of slow employment decline even before the pandemic, losing about 8,000 jobs per month between an employment peak in January 2017 and February 2020. In March and April, however, retail trade employment plummeted, falling by 2.4 million, or 15 percent, with losses coming in all component industries. Over the same period, retail sales declined by 17 percent.[57] In terms of both sales and employment, the largest declines were in industries selling nonessential products whose purchase could easily be deferred. Among these industries were clothing and clothing accessories stores; motor vehicle and parts dealers; miscellaneous store retailers; sporting goods, hobby, book, and music stores; and furniture and home furnishings stores. In March and April, the greatest job losses occurred in clothing and clothing accessories stores, which lost 781,000 jobs, an employment decline of 61 percent. (See chart 18.) Many people, especially those working from home, deferred new clothing purchases, and, most importantly, clothing and clothing accessories stores were classified as nonessential in state shutdown orders. Over March and April, these factors led to a decline of 87 percent in retail sales at clothing and clothing accessories stores.[58] (See chart 19.) Shutdown orders were largely lifted by late spring, and although sales experienced a healthy rebound by year's end, only 63 percent of the jobs lost in the industry were recovered by December.

Chart 17. Over-the-month employment change in retail trade, seasonally adjusted, January 2018–December 2020



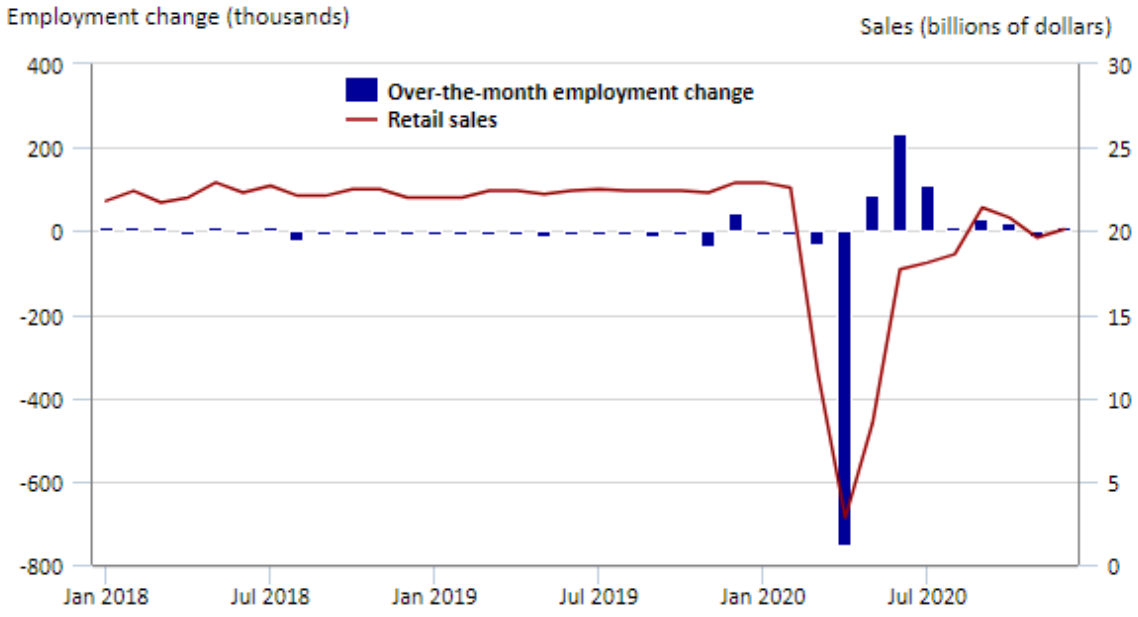
Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

Chart 18. Employment change in retail trade, by component industry, seasonally adjusted, February–April and April–December 2020



Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

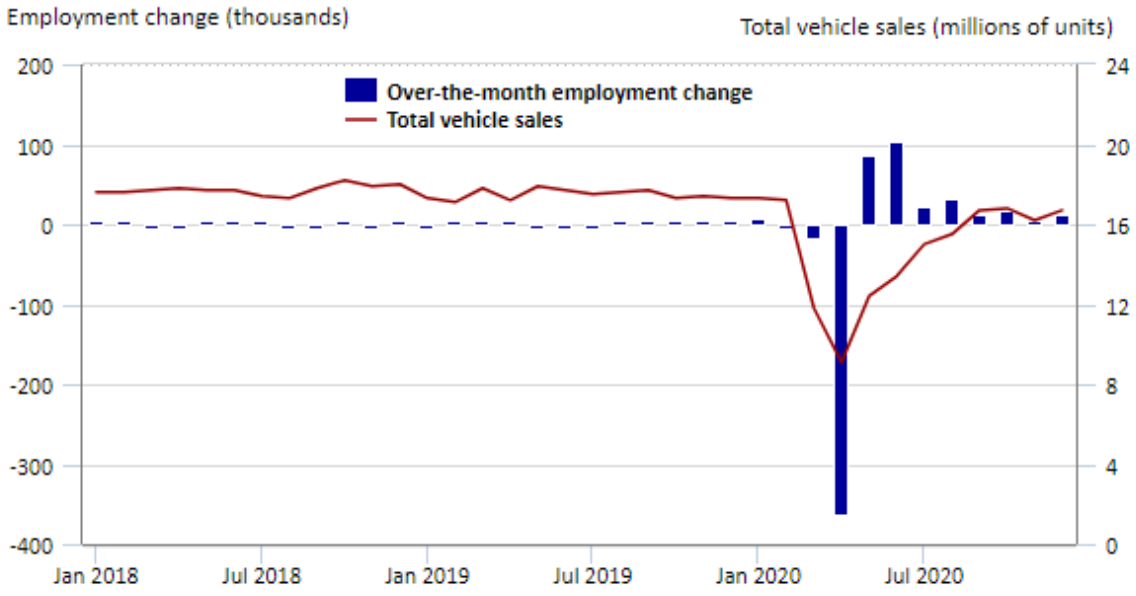
Chart 19. Over-the-month employment change and retail sales in clothing and clothing accessories stores, seasonally adjusted, January 2018–December 2020



Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey; and U.S. Census Bureau.

In March and April, employment in motor vehicle and parts dealers fell by 381,000, or 19 percent. This job loss coincided with a decline in total vehicle sales, which fell by 47 percent.[59] (See chart 20.) Social distancing upended traditional aspects of selling vehicles, such as in-person test drives and meetings with salespersons in showrooms. In addition, automobile factory shutdowns limited inventory and led to shortages of new vehicles. Motor vehicles and parts dealers worked to get customers back in their doors, advertising pandemic-safe sales floors or allowing fully online vehicle purchases with flexible return policies. As factories reopened, vehicle sales rebounded because of pent-up demand and an increasing preference for car ownership among urban consumers desiring social distancing and a pandemic-safe means of transportation.[60] By year's end, vehicle sales had rebounded by 84 percent, and motor vehicle and parts dealers had recovered 76 percent of the jobs lost in March and April.[61]

Chart 20. Over-the-month employment change in motor vehicle and parts dealers, and total vehicle sales, seasonally adjusted, January 2018–December 2020



Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey; and U.S. Bureau of Economic Analysis.

The other component industries of retail trade experienced variable job gains from April to December. Furniture and home furnishings stores recovered 83 percent of the jobs lost in March and April, whereas health and personal care stores recovered only 35 percent of the jobs lost in those 2 months. Some industries were able to fully recover their losses and continue to grow. For example, food and beverage stores ended 2020 with a 256-percent recovery, an unsurprising gain given that grocery stores fall within this industry group. Considered essential during state and local shutdowns—and helped by consumer avoidance of restaurants in an effort to maintain social distancing—grocery stores benefitted from considerable demand increases during the pandemic.[62] In fact, fearing scarcity amid COVID-19 lockdowns and panic buying, consumers rushed to grocery stores, causing demand to exceed supply.[63] Items in high demand included meat, eggs, milk, and toilet paper.

Building material and garden supply stores added 159,000 jobs between April and December, more than 6 times the industry's modest loss of 25,000 jobs during March and April. In fact, the industry thrived during the pandemic. Its stores were classified as essential businesses in state and local shutdowns, and they benefitted from a trend called "nesting," whereby homebound consumers focus on renovating and upgrading their living spaces. This trend resulted in substantial revenue gains at large building materials retailers, helping the industry weather the pandemic.[64] Overall, by the end of 2020, retail trade had recovered 81 percent of its March and April job losses.

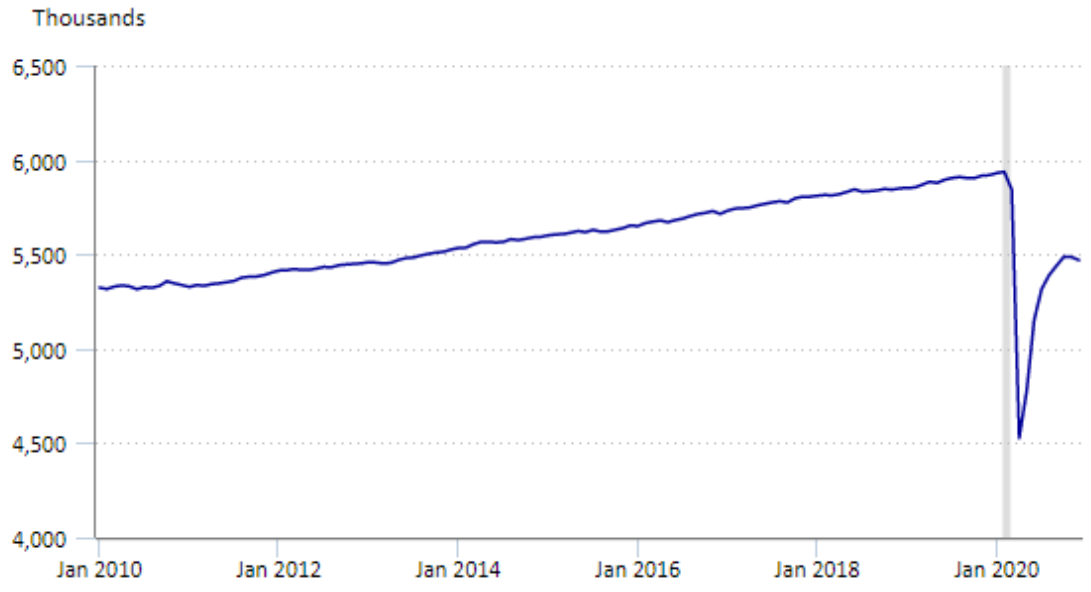
Much attention has been paid to increases in online retail sales during the pandemic, as consumers shifted to this shopping method in order to maintain social distancing. Web, catalog, and mail-order retailers are classified in the electronic shopping and mail-order houses industry, which experienced a small employment decline early in the pandemic, followed by a robust recovery. It is important to note, however, that much of the employment change resulting from increased online sales likely is not captured in this industry. As mentioned later in this article,

establishments engaged in fulfillment activities for web retailers are likely classified in the transportation and warehousing industry.

Other services

Employment in the other services industry fell by 450,000, or 8 percent, in 2020. After reaching a peak in February, employment dropped by 1.4 million, or 24 percent, in March and April. (See chart 21.) This loss was heavily concentrated in the personal and laundry services industry, whose employment fell by 884,000, or 56 percent, in March and April. These losses occurred primarily in the personal care services industry, which includes businesses such as barber shops, beauty and nail salons, and tattoo parlors. What characterizes many of these businesses is that they involve close personal contact with customers. As such, they were among the businesses most hurt by state shutdown orders, indoor capacity limits, and customer avoidance of close personal contact. In March and April, employment in barber shops and beauty salons declined by 375,000, or 82 percent, and employment in nail salons declined by 119,000, or 91 percent. (See chart 22.) Over the same time, employment declined by 122,000, or 70 percent, in other personal care services, a miscellaneous category that includes everything from tattoo parlors to massage parlors to ear piercing services. Given its scope, the personal care services industry provided services that customers seemed to miss the most at the onset of the pandemic. As a result of this consumer need, component industries in personal care services experienced the most rapid employment recovery within the other services industry.

Chart 21. Employment in other services, seasonally adjusted, January 2010–December 2020



Click legend items to change data display. Hover over chart to view data.
Note: The vertical line at February 2020 represents the start of a recession, as determined by the National Bureau of Economic Research (NBER). When this chart was published, the NBER had not yet determined an endpoint for that recession.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

Chart 22. Personal care services employment indexed to employment peak, by component industry, seasonally adjusted, November 2019–December 2020

Click legend items to change data display. Hover over chart to view data.
Note: The vertical line at February 2020 represents the start of a recession, as determined by the National Bureau of Economic Research (NBER). When this chart was published, the NBER had not yet determined an endpoint for that recession.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

Employment in personal care services began to recover in May, with most component industries seeing job growth throughout the summer and into the fall. The job gains were tied to reopening guidelines issued by state and local jurisdictions, and the approaches taken by states and localities varied widely. For example, Oklahoma fully reopened personal care businesses on April 24, whereas New York City allowed those businesses to reopen at 50-percent capacity on July 6.[65] However, facing a resurgence of COVID-19 cases and a reinstitution of government restrictions in the last 2 months of the year, businesses requiring close personal contact lost jobs again because of renewed closures or capacity limitations. Despite these restrictions, by December, barber shops and beauty salons had recovered 79 percent of their March and April job losses, nails salons had recovered 92 percent, and other personal care services had recovered 77 percent.

Membership associations and organizations—the largest industry in other services—lost 279,000 jobs in March and April, an employment decline of 9 percent. These losses occurred primarily in civic and social organizations, an industry that includes charitable organizations, business associations, and trade unions. Early pandemic-related employment declines were concentrated in civic and social organizations, examples of which include fraternal lodges, social clubs, and ethnic associations. Many of these organizations operate bars and restaurants for their members and, like establishments in the leisure and hospitality industry, were affected by closure orders and general public wariness about social gatherings. In March and April, employment in civic and social organizations fell by 208,000, or 53 percent. The industry's subsequent employment recovery lagged that of other component industries in other services. Civic and social organizations often engage in social advocacy, fundraising, and other similar activities, but their dependence on public assistance and donations makes them vulnerable to economic downturns. The industry's employment gains began in May and lasted through October, with the last 2 months of

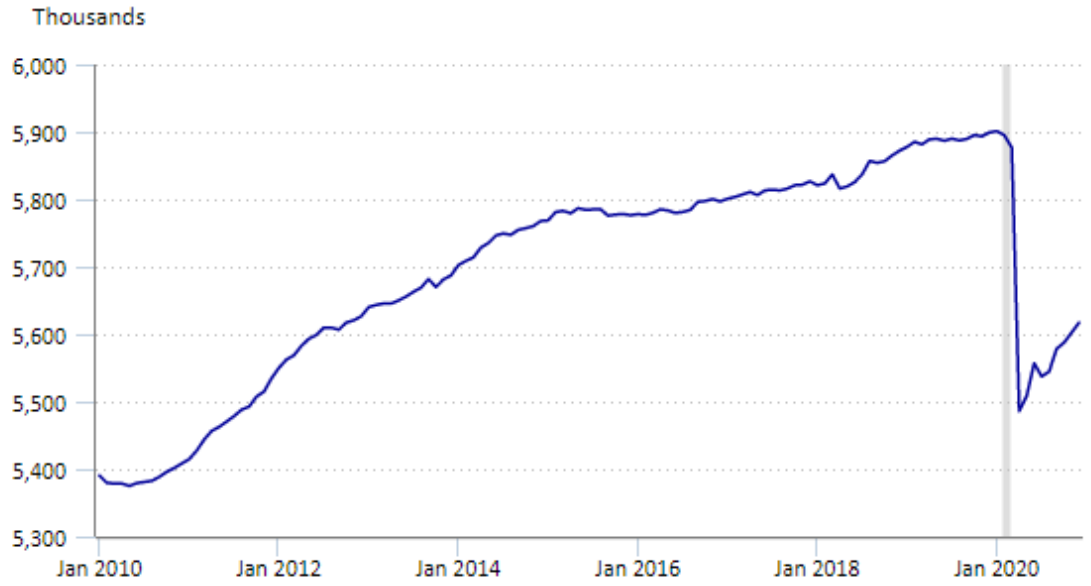
the year seeing renewed job losses alongside a resurgence in COVID-19 cases across the United States. By the end of the year, civic and social organizations had recovered just 38 percent of the jobs lost in March and April.

Employment in the repair and maintenance industry fell by 248,000, or 18 percent, in March and April. Most of these job losses occurred in the automotive repair and maintenance industry, which lost 191,000 jobs, an employment decline of 20 percent. The general economic decline associated with the pandemic, including stay-at-home orders and business closures, drove down vehicular traffic, reduced the need for repairs related to normal wear and tear and car accidents, and caused businesses to defer routine maintenance on their vehicles.[66] However, these negative impacts proved short lived and did not have a lasting effect on employment. By the end of 2020, 79 percent of the jobs lost in the automotive repair and maintenance industry had been recovered. Overall, by the end of the year, the other services industry was able to recover 942,000, or 67 percent, of the jobs lost in March and April.

Wholesale trade

Employment in wholesale trade fell by 409,000 in March and April, but it was down by 282,000 at the end of the year. (See chart 23.) The March and April job losses were divided among wholesale trade's durable and nondurable goods component industries, which lost 207,000 jobs and 164,000 jobs, respectively. These losses were spread across more detailed component industries, but the greatest job loss came in the grocery and related products industry, which lost 65,000 jobs over March and April. The pandemic disrupted supply chains associated with this industry, resulting in shortages of groceries at retail establishments.[67] Supply-chain disruptions also decreased demand for wholesalers to fulfill orders to certain sectors hit particularly hard by the pandemic, and this led to employment declines. Even as fears of contracting COVID-19 subsided for some, and as state and local government restrictions eased, only 23 percent of the jobs lost in the grocery and related products industry were recovered by the end of the year. In addition, wholesalers were affected by increased sales by businesses directly to consumers, because these sales bypassed wholesale intermediaries.[68]

Chart 23. Employment in wholesale trade, seasonally adjusted, January 2010–December 2020



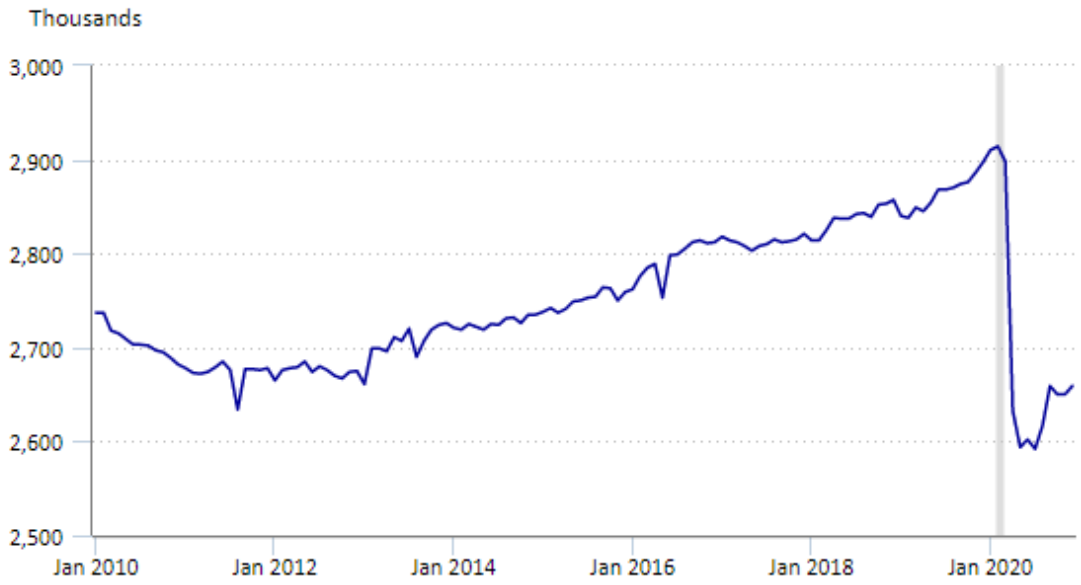
Click legend items to change data display. Hover over chart to view data.
Note: The vertical line at February 2020 represents the start of a recession, as determined by the National Bureau of Economic Research (NBER). When this chart was published, the NBER had not yet determined an endpoint for that recession.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

By the end of 2020, durable goods wholesalers recovered 30 percent of their March and April job losses, while nondurable goods wholesalers recovered 39 percent. In total, wholesale trade recovered 32 percent of its March and April job losses by the end of the year.

Information

Information employment declined by 238,000, or 8 percent, in 2020. (See chart 24.) After reaching an employment peak in February, information industries shed 322,000 jobs through July, an employment decline of 11 percent. This decline was most heavily concentrated in the motion picture and sound recording industries, which lost 231,000 jobs over this period. This industry group includes businesses that produce and distribute sound recordings, as well as those which produce, distribute, and exhibit motion pictures and videos. Amid stay-at-home orders and other state and local restrictions, television and movie production was largely shut down in the early months of the pandemic. Production was canceled indefinitely for many television shows and movies, and many major production companies postponed premiere dates of already completed projects.[69] However, as state and local restrictions eased, production resumed, and by the end of the year, motion picture and sound recording industries—as well as the entire information industry—recovered 21 percent of the jobs lost from February to July.

Chart 24. Employment in information, seasonally adjusted, January 2010–December 2020

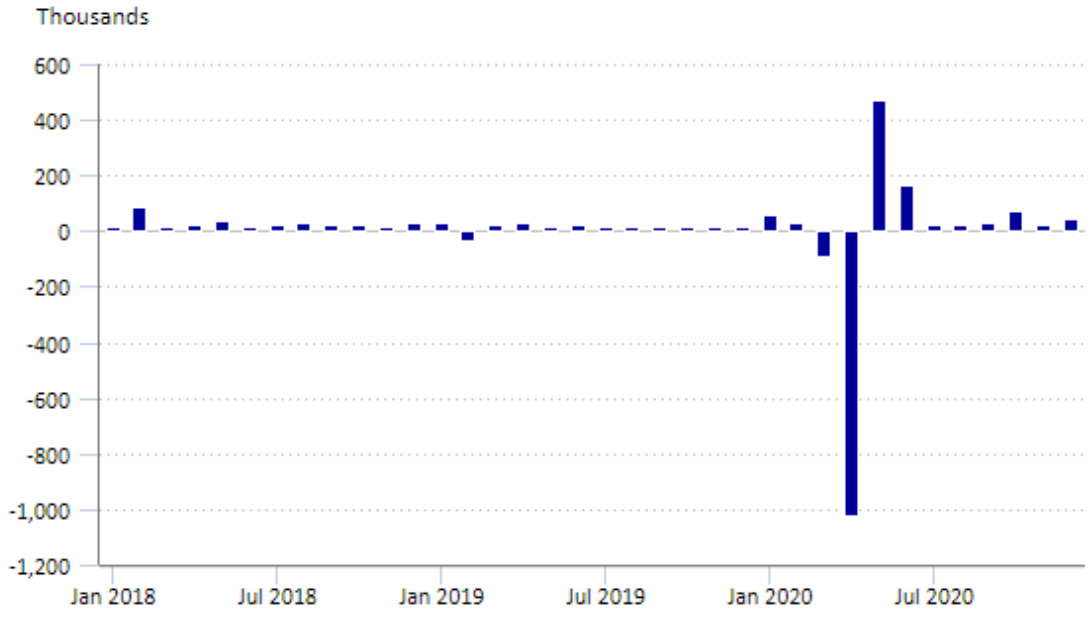


Click legend items to change data display. Hover over chart to view data.
Note: The vertical line at February 2020 represents the start of a recession, as determined by the National Bureau of Economic Research (NBER). When this chart was published, the NBER had not yet determined an endpoint for that recession.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

Construction

Construction employment fell by 1.1 million in March and April, but by the end of 2020, it had regained all but 248,000 of these jobs. (See chart 25.) Like employment in many other industries, employment in construction was affected by state and local government efforts to contain COVID-19, as worksites shuttered or substantially reduced employment across the United States. In March and April, pandemic-driven job declines occurred in every construction component industry, with the greatest decline coming in specialty trade contractors. Employment in this industry, which includes establishments involved in such trades as concrete pouring, plumbing, and electrical work for building construction, fell by 766,000, or 16 percent, between February and April. Construction employment is largely a function of consumer demand for new buildings, offices, or homes, and this demand was held back in March and April.[70] As the country reopened and demand returned, especially for new homes, construction recovered 78 percent of the jobs lost in March and April. Of the recovered jobs, 71 percent came in specialty trade contractors.

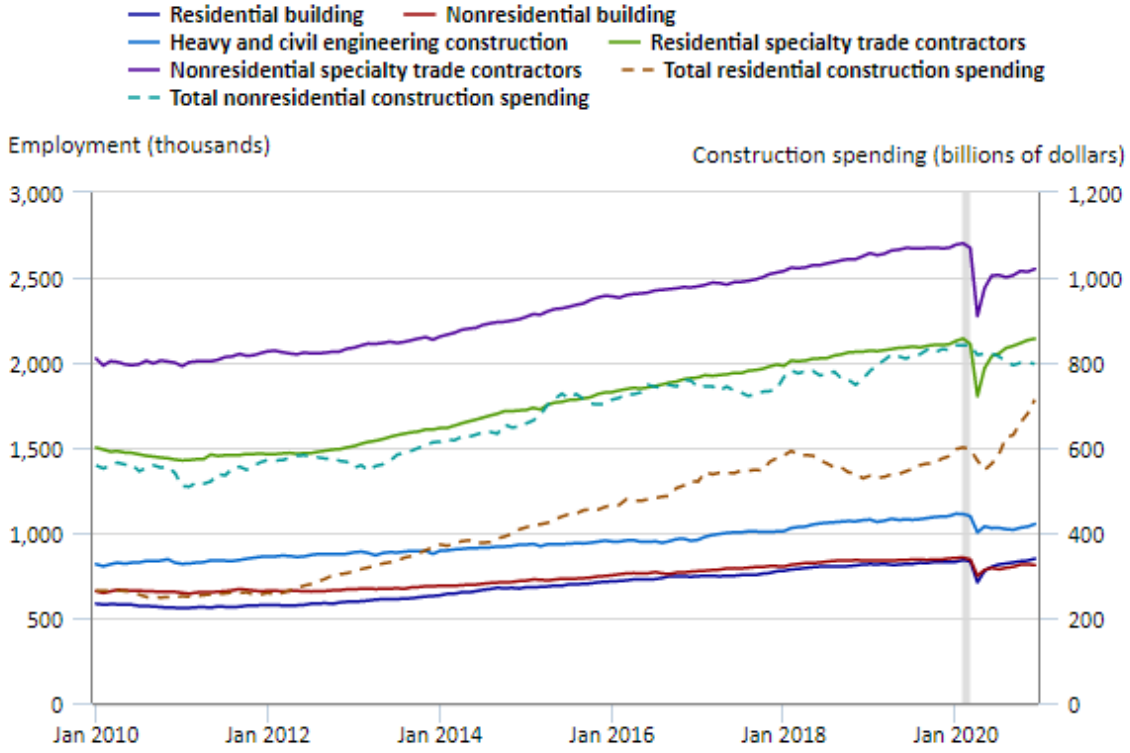
Chart 25. Over-the-month employment change in construction, seasonally adjusted, January 2018–December 2020



Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

One notable aspect of pandemic-related employment changes in construction was the divergence between the industry's residential and nonresidential components during the job recovery that began in May. Although both components suffered sharp job losses in March and April, residential construction industries experienced an immediate and sustained turnaround thereafter. By year's end, residential building construction had more than recovered the jobs lost in March and April, and residential specialty trade contractors fell just short of a complete recovery. Nonresidential component industries, on the other hand, saw a job recovery that was far less robust. (See chart 26.) Construction spending followed these employment trends, with residential construction spending growing by 30 percent from May to December, after declining 9 percent from February to May, and with nonresidential construction spending falling by 5 percent from March to December, after being essentially flat in February and March.[71] Other residential construction indicators, such as housing starts and new home sales, experienced steady growth from April to December after suffering declines in February and March.[72] This rebound matches growth in other housing-related industries, such as real estate and building material and garden supply stores, which were all helped by the desire of consumers to renovate or improve their homes, or to move to new homes after spending considerable time in their homes as a result of COVID-19 restrictions. Nonresidential construction, on the other hand, largely depends on spending by businesses and governments, both of which were reluctant to invest in new construction projects because of pandemic-related uncertainty.

Chart 26. Employment in selected construction component industries and spending in residential and nonresidential construction, seasonally adjusted, January 2010–December 2020

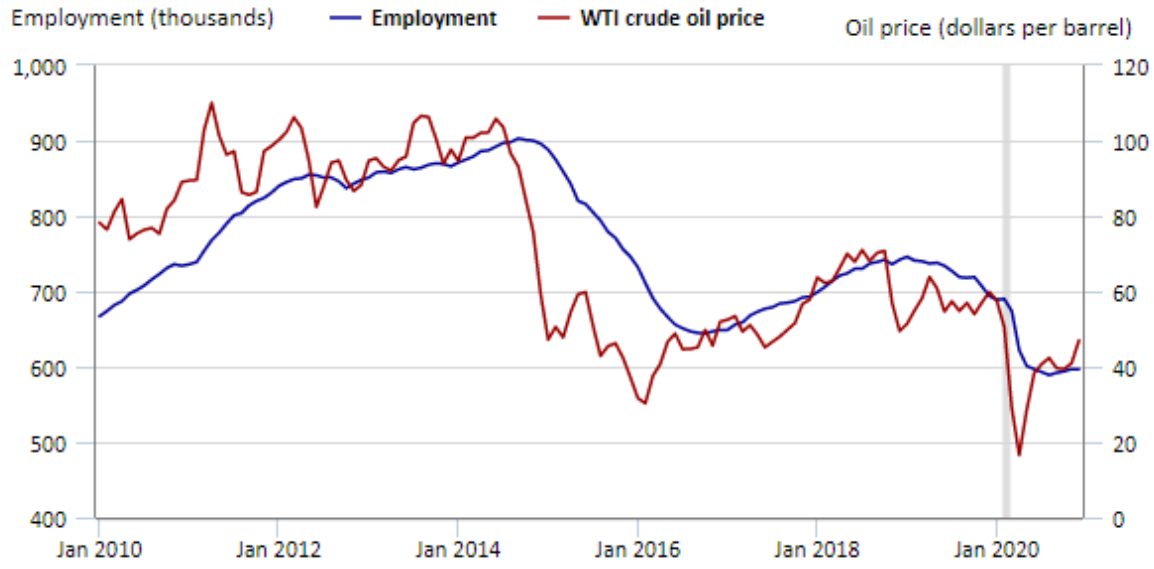


Click legend items to change data display. Hover over chart to view data.
Note: The vertical line at February 2020 represents the start of a recession, as determined by the National Bureau of Economic Research (NBER). When this chart was published, the NBER had not yet determined an endpoint for that recession.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey; and U.S. Census Bureau.

Mining and logging

In 2020, mining and logging employment fell by 97,000, or 14 percent. (See chart 27.) Although employment in the industry had already been on the decline since reaching a peak in January 2019, the pandemic exacerbated the losses, with 89,000 of the jobs lost in 2020 occurring in March, April, and May. Of those jobs, 70,000 were lost in the support activities for mining industry, which contains establishments providing mining support, such as site preparation, on a contract or fee basis. Support activities for mining lost another 15,000 jobs through December. Employment in mining and logging was likely affected by fluctuations in oil prices, which fell to a low in April and then recorded gains through December.[73] The 2020 employment decline in mining and logging came as the price of most mining commodities fell.[74]

Chart 27. Employment in mining and logging, seasonally adjusted, and West Texas Intermediate (WTI) crude oil price, not seasonally adjusted, January 2010–December 2020

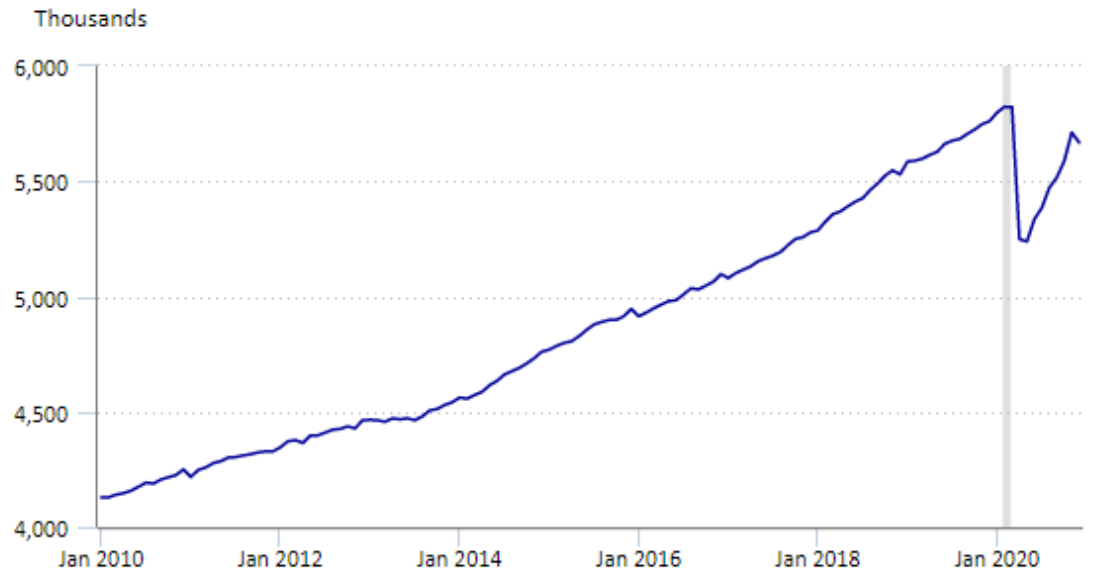


Click legend items to change data display. Hover over chart to view data.
Note: The vertical line at February 2020 represents the start of a recession, as determined by the National Bureau of Economic Research (NBER). When this chart was published, the NBER had not yet determined an endpoint for that recession.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey; and Federal Reserve Bank of St. Louis.

Transportation and warehousing

Transportation and warehousing employment fell by 93,000, or 2 percent, in 2020. (See chart 28.) This decline is modest in comparison with that in other industry groups, a fact due entirely to employment strength in couriers and messengers and in warehousing and storage.

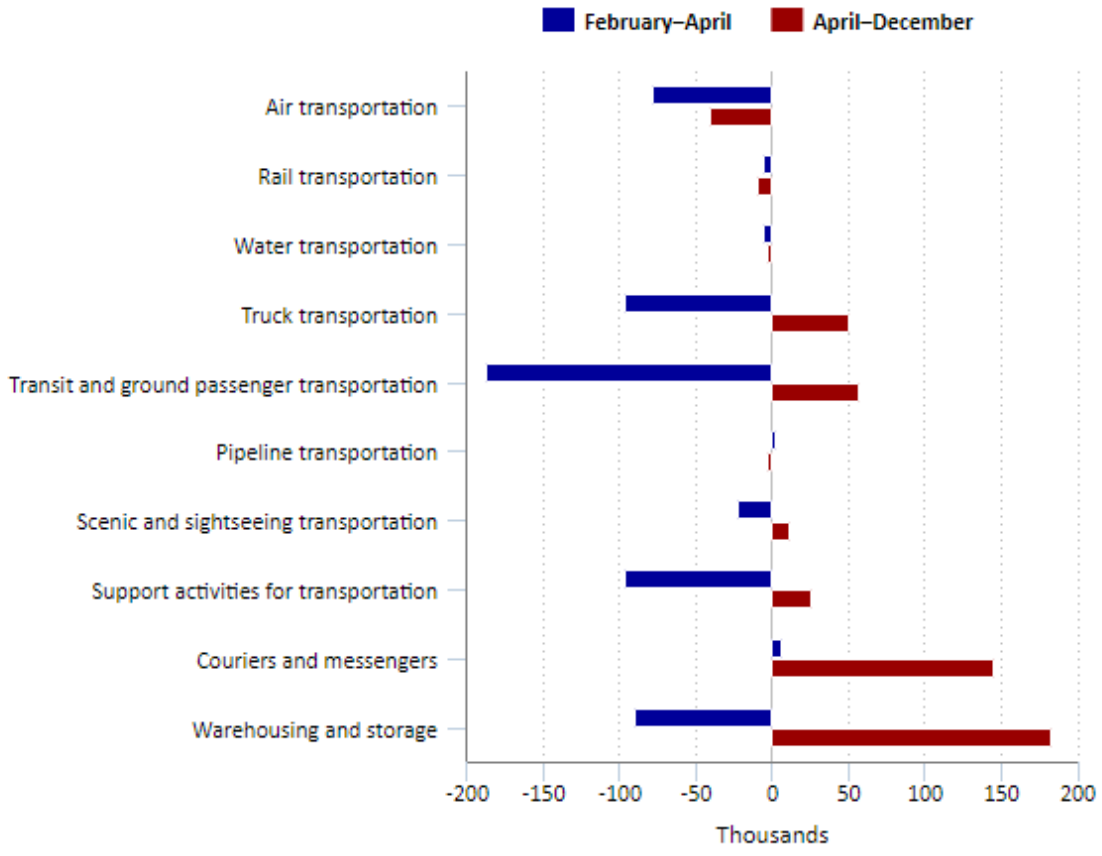
Chart 28. Employment in transportation and warehousing, seasonally adjusted, January 2010–December 2020



Click legend items to change data display. Hover over chart to view data.
Note: The vertical line at February 2020 represents the start of a recession, as determined by the National Bureau of Economic Research (NBER). When this chart was published, the NBER had not yet determined an endpoint for that recession.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

Peaking in February, transportation and warehousing employment changed little in March, but it fell by 583,000 in April and May. The details of this decline reflect common themes of the pandemic. (See chart 29.) Industries dependent on individuals being near one another experienced steep employment declines, whereas industries able to capitalize on people's desire for social distancing were able to mitigate losses, or even thrive.

Chart 29. Employment change in transportation and warehousing, by component industry, seasonally adjusted, February–April and April–December 2020



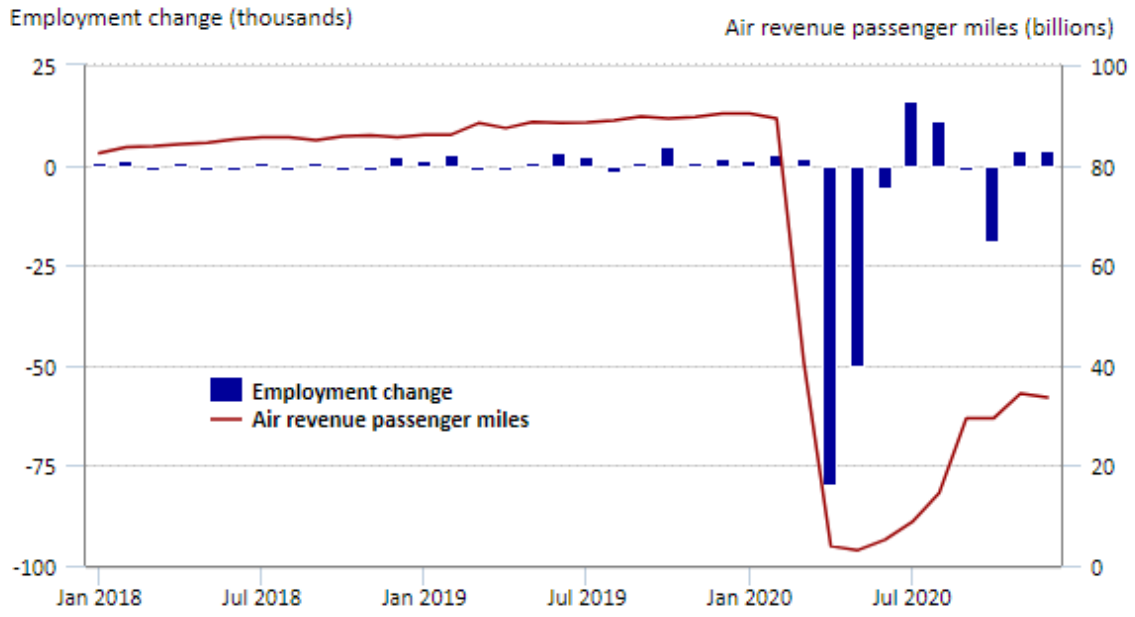
Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

Industries related to travel and commuting lost jobs from travel restrictions, increased telecommuting, school closures, and people's reluctance to travel. Between January and May, employment in transit and ground passenger transportation declined by 193,000, or 39 percent. This industry group includes businesses such as privately run urban transit systems, intercity and chartered bus services, school bus services, and taxis.[75] As employers increasingly allowed—or required—employees to work from home as much as possible, passenger traffic in transit systems fell dramatically.[76] Additionally, closures of school buildings reduced the need for school bus services, resulting in the loss of 104,000 jobs, or half of all workers on payrolls in the school and employee bus transportation industry, between January and June. Later in the year, the reopening of school buildings across the nation—usually with reduced schedules and limited capacity—led to a partial rebound in employment, with the industry recovering 44 percent of its job losses by the end of the year.[77] From May to December, school and employee bus transportation accounted for 43,000 of the 62,000 jobs gained in transit and ground passenger transportation, which recovered 32 percent of its job losses by the end of the year.

Between January and April, air revenue passenger miles fell by 96 percent.[78] (See chart 30.) The Coronavirus Aid, Relief, and Economic Security (CARES) Act, passed in March, brought some relief to the airline industry. To prevent job loss, the act provided $25 billion in payroll support to passenger airlines in the form of partially

forgivable loans. In order to receive support, airlines had to agree not to conduct involuntary furloughs of employees until September 30.[79] Despite this aid, air transportation employment fell in April, May, and June, declining by 135,000, or 26 percent. These losses were likely due to attrition and voluntary employee buyouts. After briefly rallying in the summer, air transportation employment fell in October (immediately after the CARES Act funding expired), before trending back up through December. By the end of the year, the industry had recovered only 11 percent of its pandemic-related job losses. A related transportation industry, support activities for air transportation, followed largely the same employment trend, losing 51,000 jobs between February and June and then entering a lackluster job recovery.

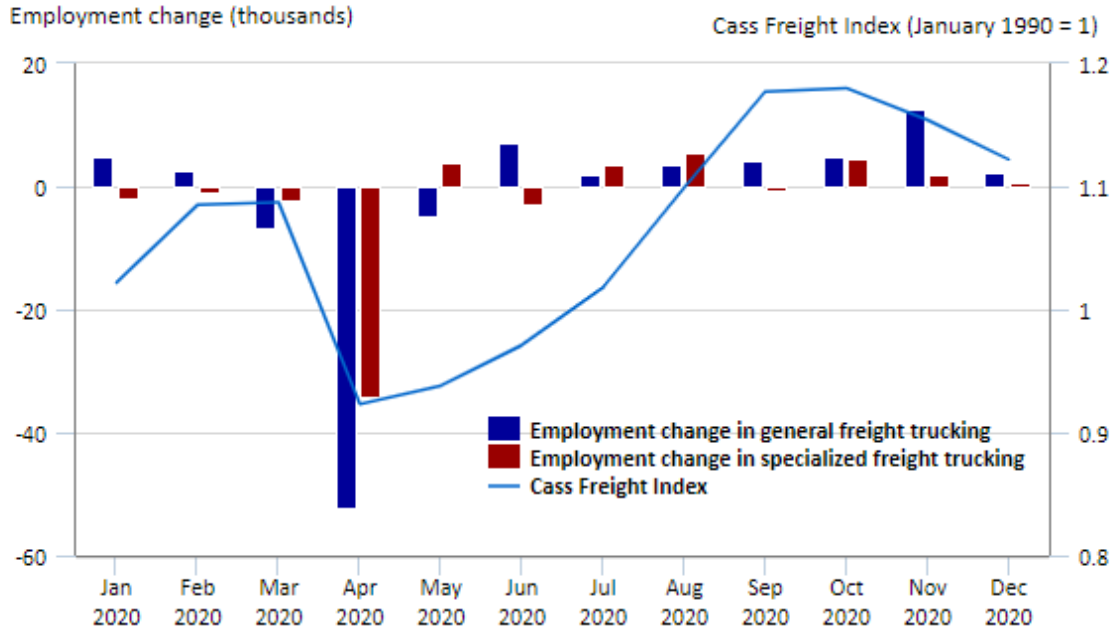
Chart 30. Over-the-month employment change in air transportation and air revenue passenger miles, seasonally adjusted, January 2018–December 2020



Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey; and U.S. Bureau of Transportation Statistics.

In March and April, trucking employment fell by 96,000, or 6 percent. These job losses occurred in both general freight and specialized freight trucking, but the former suffered greater losses. (See chart 31.) Establishments in general freight trucking haul a vast array of goods whose transportation requires no specialized equipment. They also may provide related support services, such as local pickup, local delivery, and sorting and terminal operations. General freight trucking lost 64,000 jobs in March, April, and May, an employment decline of 6 percent. By the end of the year, the industry had recovered 57 percent of its pandemic-driven job losses. Employment also fell in specialized freight trucking, an industry in which businesses haul articles whose transportation is complicated by item size, weight, and other characteristics and requires the use of specialized equipment, such as dump trucks or refrigerated trailers. Establishments within this industry also haul used residential or office goods. After seeing its employment decline by 36,000, or 8 percent, in March and April, specialized freight trucking recovered 45 percent of its losses by the end of 2020. Overall, as of December, truck transportation had recovered 52 percent of the jobs lost in March and April.

Chart 31. Over-the-month employment change in general freight and specialized freight trucking, seasonally adjusted, and Cass Freight Index, not seasonally adjusted, January–December 2020



Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey; and Cass Information Systems, Inc.

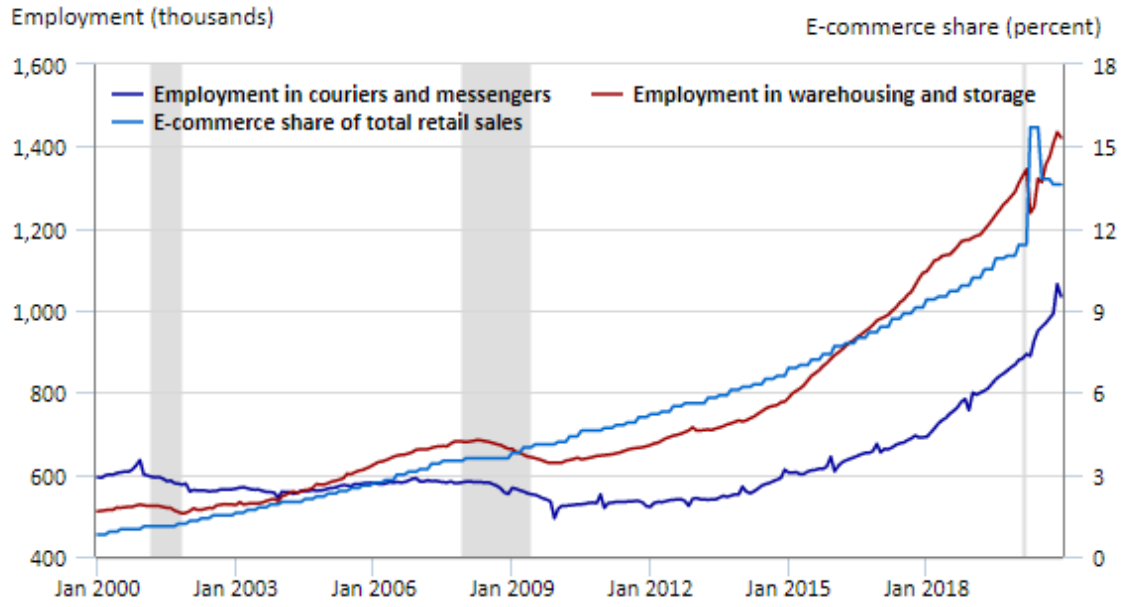
The job declines and gains in trucking coincided with changes in shipping volumes. In April, the Cass Freight Index, a measure of shipping activity, fell by 15 percent.[80] Another measure of trucking activity, the For-Hire Truck Tonnage Index, which measures the gross tonnage of freight, fell by 9 percent that same month.[81] These declines in shipping volume were due to the near-cessation of business activity and disruptions in global supply chains.[82] However, they were short lived, and as consumers turned to online shopping, shipping volumes recovered. As a result, trucking companies began modest rehiring, although the benefits accruing to trucking from online shopping were offset, to some degree, by declines in shipping to brick-and-mortar retail establishments.

Two transportation and warehousing industries added jobs in 2020. Over the year, couriers and messengers employment grew by 167,000, or 19 percent, and warehousing and storage employment grew by 133,000, or 10 percent. The employment growth of these two industries largely offset job losses in the other transportation and warehousing component industries, especially from May to December, when transportation and warehousing recovered 429,000 jobs, or 74 percent of the jobs lost in April and May. From May to December, couriers and messengers added 108,000 jobs, and warehousing and storage added 169,000 jobs, accounting for most of transportation and warehousing's recovery from pandemic-related losses in other industries.

Couriers and messengers employment saw only one monthly decline in the early days of the pandemic—a loss of 5,000 jobs in April. After that, the industry added an average of 18,000 jobs per month through the end of the year, well above the average monthly gain of 9,000 jobs experienced in 2019. Job gains in couriers and messengers were concentrated in the couriers and express delivery services industry, which, after losing 3,000 jobs in February, grew steadily through November. This industry includes businesses that provide air, surface, or

combined-mode parcel delivery services. Consumers, eager to observe social distancing and hesitant to shop in person, increasingly turned to online shopping during the pandemic.[83] The e-commerce share of total retail sales grew from 11 percent in the first quarter of 2020 to a high of 16 percent in the second quarter.[84] (See chart 32.) The relative strength of online shopping is further confirmed by the fact that e-commerce sales grew by 32 percent in 2020, while overall retail sales grew by only 7 percent. Increases in online shopping drove up shipping volumes for courier and delivery companies, and they responded with increased hiring.

Chart 32. Employment in couriers and messengers and warehousing and storage, and e-commerce sales as a percentage of total retail sales, seasonally adjusted, January 2000–December 2020



Click legend items to change data display. Hover over chart to view data.
Note: Shaded areas represent recessions as determined by the National Bureau of Economic Research (NBER). When this chart was published, the NBER had not yet determined an endpoint for the recession that began in February 2020.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey; and U.S. Census Bureau.

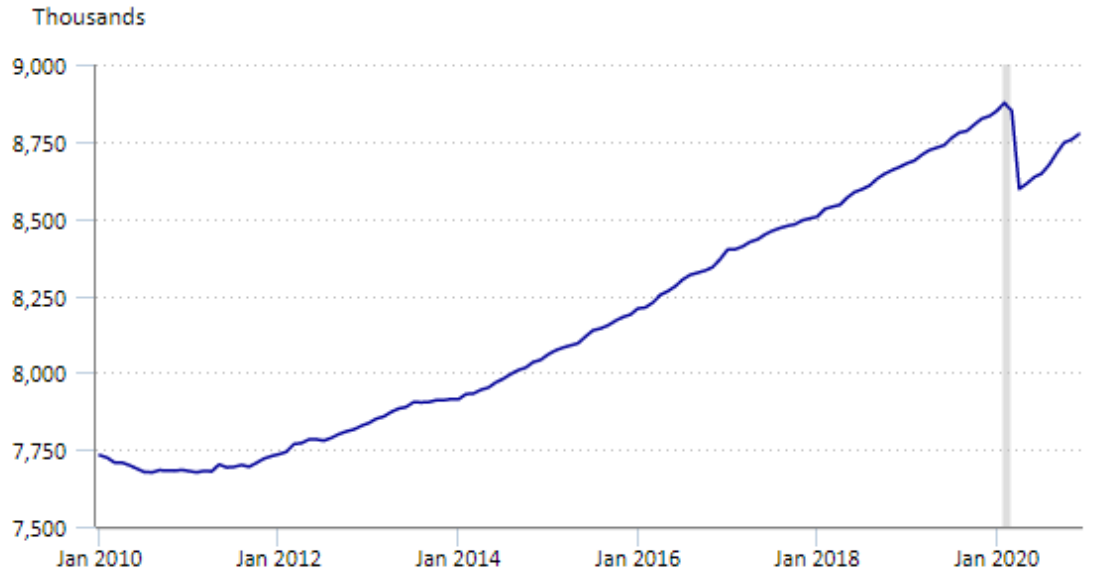
The warehousing and storage industry also managed to benefit from increases in online sales. Initially, the pandemic did drive job losses in this industry, which lost 106,000 jobs in April, an employment decline of 8 percent. However, the industry bounced back, adding jobs in 6 of the 8 months that followed. In December, employment in warehousing and storage exceeded its March level by 77,000 jobs. Many companies commonly described as online retailers frequently operate warehouses and fulfillment centers. So, when the volume of online sales rose, warehousing and storage employment rose with it. And even warehouses not owned by large retailers likely benefitted from the increased volume of shipments.

Financial activities

The financial activities industry was among the industries whose employment was minimally affected by the pandemic, losing 58,000 jobs in 2020, an employment decline of 1 percent. (See chart 33.) Even in the early months of the pandemic, when total nonfarm employment fell by 15 percent in March and April, employment in financial activities declined by only 3 percent, a drop of 279,000 jobs. Although nearly all component industries in

financial activities lost jobs over this time, the declines were primarily concentrated in rental and leasing and in real estate.

Chart 33. Employment in financial activities, seasonally adjusted, January 2010–December 2020



Click legend items to change data display. Hover over chart to view data.
Note: The vertical line at February 2020 represents the start of a recession, as determined by the National Bureau of Economic Research (NBER). When this chart was published, the NBER had not yet determined an endpoint for that recession.
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey.

The rental and leasing industry includes businesses engaged in renting consumer goods and equipment, as well as those leasing machinery and equipment for business operations. Employment in this industry fell by 124,000 in March and April, with about half of this decline coming in automotive equipment rental and leasing, which lost 58,000 jobs over this period and shed an additional 9,000 jobs in May. This employment loss occurred as the car rental industry suffered from a decline in both business and leisure travel. The loss was exacerbated by declining used car prices, which made selling used fleet vehicles less lucrative for automobile rental and leasing companies. One industry publication pegged the annual car rental revenue decline for 2020 at 27 percent.[85] Despite this dismal annual figure, the industry did see improvement in the second half of the year. Increased prices for used cars helped rental companies strengthen their financial position, and traveler preferences shifted toward automobile travel, which was perceived as safer than air, rail, and other forms of travel that involve close gatherings of people and provide limited opportunities for safe social distancing.[86] By the end of the year, employment in automotive equipment rental and leasing had rebounded somewhat, recovering 34 percent of its pandemic-related job losses. In the larger component, rental and leasing services, 24 percent of pandemic-related job losses were recovered by the close of 2020.

The real estate industry includes businesses that sell, buy, rent, lease, or manage real estate, both residential and commercial, for others. Employment in this industry fell by 115,000, or 7 percent, in March and April. These losses were spread across component industries, but the largest decline was in lessors of real estate, whose employment fell by 53,000, or 9 percent, over these 2 months. Lessors of real estate's residential and nonresidential

components both suffered job losses, having to deal with the problem of tenants being unable to pay rent because of pandemic-related layoffs or cuts in their workweek.[87] Within the residential component, establishments faced not only tenants struggling to keep up with their rent payments but also eviction prohibitions by various levels of government, finding themselves in a difficult financial situation. At the federal level, the CARES Act moratorium on evictions was in effect from March 27 to July 24, covering tenants living in "federally related properties," a category estimated to include between 28 and 46 percent of all occupied rental units. On September 4, the CDC issued a moratorium on evictions, citing public health concerns associated with homelessness. This moratorium was initially intended to last through the end of 2020, but it has since been extended.[88] Although landlords were restrained by eviction prohibitions, they were helped by federal, state, and local government rental assistance programs, some of which allowed landlords to apply for benefits on behalf of their tenants.[89]

Within lessors of real estate's nonresidential component, lessors faced similar problems. Real estate service company Coldwell Banker Richard Ellis's cash payments indexes, which serve as proxies for rent collections and indicators of tenants' financial health, declined rapidly in the early days of the pandemic, with the retail sector being especially hard hit.[90] With employees largely working from home, office tenants sometimes demanded renegotiations of their leases. With few other prospective tenants, landlords often agreed.[91] By the end of the year, lessors of real estate had recovered 48 percent of the jobs lost in March and April.

A related industry, real estate property managers, faced the same business conditions. Lower rent revenue led to job losses in this industry, which lost a combined 31,000 jobs in March and April, an employment decline primarily concentrated in the industry's residential component. By the end of the year, however, employment in the property management industry had regained 91 percent of these job losses.

Employment in offices of real estate agents declined by 29,000, or 8 percent, in March and April. This industry—in which businesses buy, sell, or rent real estate on behalf of others—played a part in one of the year's prominent economic stories. After declining early in the pandemic, existing home sales recovered by the summer of 2020 and then expanded rapidly through much of the fall. Along with increasing home sales and prices, employment in offices of real estate agents rebounded, recovering 88 percent of the March and April job losses by the end of the year.[92]

Among other financial activities industries, credit intermediation and related activities lost 34,000 jobs in March and April, an employment decline of only 1 percent. By the end of the year, 95 percent of these jobs had been recovered. Examples of businesses in this industry include banks, mortgage companies, and loan brokers. The nature of work at many of these businesses is well suited to having employees work from home, allowing this industry to adapt well to the pandemic. Other finance-related industries were similarly suited for remote work and saw little employment change during the pandemic.

By the end of 2020, the financial activities industry had recovered 64 percent of its March and April job losses.

Utilities

Employment in utilities changed little for the majority of 2020.

Conclusion

In 2020, the longest nonfarm payroll employment recovery and expansion in U.S. history abruptly ended, with historic and widespread employment declines occurring in March and April. State and local government restrictions implemented to slow the spread of COVID-19, coupled with pandemic-avoidance behaviors by the public, led to these unusually large job losses. Despite recovering quickly as restrictions eased, nonfarm employment still ended the year 10.0 million below its February peak. Job losses over the year were especially large in leisure and hospitality, government, education and health services, and professional and business services. None of the major industry sectors had fully recovered by the end of 2020.

SUGGESTED CITATION

Ryan Ansell and John P. Mullins, "COVID-19 ends longest employment recovery and expansion in CES history, causing unprecedented job losses in 2020," *Monthly Labor Review,* U.S. Bureau of Labor Statistics, June 2021, https://doi.org/10.21916/mlr.2021.13

NOTES

1 The Current Employment Statistics (CES) program, which provides detailed industry data on employment, hours, and earnings of workers on nonfarm payrolls, is a monthly survey of about 144,000 businesses and government agencies representing approximately 697,000 individual worksites. For more information on the program's concepts and methodology, see "Technical notes for the Current Employment Statistics survey" (U.S. Bureau of Labor Statistics), https://www.bls.gov/web/empsit/cestn.htm. To access CES data, see "Current Employment Statistics—CES (national)" (U.S. Bureau of Labor Statistics), https://www.bls.gov/ces. The CES data used in this article are seasonally adjusted unless otherwise noted.

2 The CES employment series goes back to 1939. Prior to 2020, the two next highest annual job losses occurred during the Great Recession years of 2008 and 2009, when job losses were 3.6 million and 5.1 million, respectively. Job losses in 2020 were greater than the combined losses for 2008 and 2009.

3 See Maria Nicola, Zaid Alsafi, Catrin Sohrabi, Ahmed Kerwan, Ahmed Al-Jabir, Christos Iosifidis, Maliha Agha, and Riaz Agha, "The socio-economic implications of the coronavirus pandemic (COVID-19): a review," *International Journal of Surgery*, vol. 78, June 2020, pp. 185–193, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7162753/.

4 See "Listings of WHO's response to COVID-19" (World Health Organization, June 29, 2020), https://www.who.int/news/item/29-06-2020-covidtimeline.

5 See "First travel-related case of 2019 novel coronavirus detected in United States" (Centers for Disease Control and Prevention, January 21, 2020), https://www.cdc.gov/media/releases/2020/p0121-novel-coronavirus-travel-case.html.

6 See "WHO Director-General's opening remarks at the media briefing on COVID-19—11 March 2020" (World Health Organization, March 11, 2020), https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020.

7 See "Trends in number of COVID-19 cases and deaths in the U.S. reported to CDC, by state/territory" (Centers for Disease Control and Prevention, updated daily), https://covid.cdc.gov/covid-data-tracker/#trends_dailytrendscases.

8 See "A timeline of COVID-19 developments in 2020," *American Journal of Managed Care*, updated January 1, 2021, https://www.ajmc.com/view/a-timeline-of-covid19-developments-in-2020.

9 According to one study, 27 percent of people polled said they would avoid eating in restaurants. See Mark Brandau, "COVID-19 report 2: fear and response" (Datassential, March 17, 2020), https://mcusercontent.com/45027c46b385d9b28f2d3a6d7/files/291b3e84-bd28-48a4-9f29-6c5e43d0bc2e/Datassential_Coronavirus_3_17_20_.pdf.

10 In September 1945, employment fell by 2.0 million, accelerating ongoing job losses. September's losses were concentrated in manufacturing and coincided with declines in industrial production. See "Industrial production: total index" (FRED, Federal Reserve Bank of St. Louis), https://fred.stlouisfed.org/series/INDPRO.

11 The National Bureau of Economic Research (NBER) Business Cycle Dating Committee is the generally recognized arbiter of business cycle turning points in the United States. The NBER defines recessions as economywide declines in economic activity lasting more than a few months that can be observed in major economic indicators, such as employment and output. Recession starting points are business cycle peaks, and recession ending points are business cycle troughs. The length and timing of the NBER-designated peaks and troughs do not necessarily align with the peaks and troughs in the CES employment series.

12 In both level and percent terms, the employment decline in April 2020 was the largest job change in CES history.

13 In each of the past four recessions, peaks in employment occurred within a month of peaks in the business cycle.

14 Hours and earnings data series for all employees originate in March 2006, and most hours and earnings data series for production and nonsupervisory employees originate in January 1964. Although production and nonsupervisory employees are defined differently for certain major industry sectors, they generally exclude workers whose primary duty is to supervise the work of others. In manufacturing and in mining and logging, production and nonsupervisory employees include only production and related employees. In construction, production and nonsupervisory employees include only construction employees, and in private service-providing industries, they include all nonsupervisory employees.

15 For an explanation of the CES aggregation procedures, see "Technical notes for the Current Employment Statistics survey" (U.S. Bureau of Labor Statistics), https://www.bls.gov/web/empsit/cestn.htm#section6d.

16 See Kim Parker, Rachel Minkin, and Jesse Bennett, "Economic fallout from COVID-19 continues to hit lower income Americans the hardest" (Washington, DC: Pew Research Center, September 24, 2020), https://www.pewresearch.org/social-trends/2020/09/24/economic-fallout-from-covid-19-continues-to-hit-lower-income-americans-the-hardest/.

17 The 12-month diffusion index is not seasonally adjusted.

18 According to nonseasonally adjusted annual average data for 2019, food services and drinking places employment made up 73 percent of total leisure and hospitality employment.

19 See Rebecca Klar, "More states close restaurants, entertainment venues amid pandemic," *The Hill*, March 16, 2020, https://thehill.com/policy/healthcare/487776-new-york-new-jersey-connecticut-set-to-close-restaurants-entertainment.

20 In a national survey conducted between April 28 and May 3, 2020, 78 percent of respondents said they would not be comfortable dining in a restaurant, regardless of government restrictions. See "Washington Post–University of Maryland national poll, April 28–May 3, 2020," *The Washington Post*, May 5, 2020, https://www.washingtonpost.com/context/washington-post-university-of-maryland-national-poll-april-28-may-3-2020/9ac3c026-f68c-4733-82a0-daa6862d99b3/?itid=lk_inline_manual_2; and "Retail sales: restaurants and other eating places" (FRED, Federal Reserve Bank of St. Louis), https://fred.stlouisfed.org/series/MRTSSM7225USN.

21 See Thomas Franck, "Restaurant bookings data show U.S. economy is starting to revive after Covid closures," *CNBC*, May 27, 2020, https://www.cnbc.com/2020/05/27/restaurant-data-show-us-economy-is-recovering-after-covid-closures.html.

22 See "Official return to work guidelines for foodservice establishments" (Washington, DC: Restaurant Law Center, National Restaurant Association), https://restaurantlawcenter.org/archive-official-return-to-work-guidelines-for-foodservice-establishments/.

23 See Jonathan Maze, "Fast food chains are thriving, some more than others," *Restaurant Business*, November 30, 2020, https://www.restaurantbusinessonline.com/financing/fast-food-chains-are-thriving-some-more-others; Heather Haddon, "McDonald's, Chipotle and Domino's are booming during coronavirus while your neighborhood restaurant struggles," *The Wall Street Journal*, October 12, 2020, https://www.wsj.com/articles/mcdonalds-chipotle-and-dominos-are-feasting-during-coronavirus-while-your-neighborhood-restaurant-fasts-11602302431; and David Vanamburg, "Why limited-service chains were better positioned for the pandemic than full-service restaurants" (American Customer Satisfaction Index, June 30, 2020), https://www.acsimatters.com/2020/06/30/why-limited-service-chains-were-better-positioned-for-the-pandemic-than-full-service-restaurants/.

24 See Chris Fuhrmeister, "'Cessation of services': food service companies lay off hundreds due to lack of college demand," *Atlanta Business Journal*, August 20, 2020, https://www.bizjournals.com/atlanta/news/2020/08/20/coronavirus-layoffs-colleges-foodservice-companies.html; and Max Matza, "Coronavirus: the slow death of the American all-you-can-eat buffet," *BBC News*, July 19, 2020, https://www.bbc.com/news/world-us-canada-53410931.

25 See Madeline Holcombe, "Here are the states restricting travel from the US," *CNN*, March 31, 2020, https://www.cnn.com/2020/03/31/us/states-travel-restrictions-list/index.html.

26 See Scott McCartney, "The Covid pandemic could cut business travel by 36%—permanently," *The Wall Street Journal*, December 1, 2020, https://www.wsj.com/articles/the-covid-pandemic-could-cut-business-travel-by-36permanently-11606830490?mod=article_inline.

27 See "U.S. COVID-19 travel guidelines," *VisitTheUSA.com*, https://www.visittheusa.com/us-covid-19-travel-guidelines; and "STR: U.S. hotel performance for April 2020" (STR, May 20, 2020), https://str.com/press-release/str-us-hotel-performance-april-2020.

28 See "STR: U.S. hotel performance for December 2020" (STR, January 20, 2021), https://str.com/press-release/str-us-hotel-performance-december-2020.

29 See "The coronavirus spring: the historic closing of U.S. schools (a timeline)," *Education Week*, July 1, 2020, https://www.edweek.org/leadership/the-coronavirus-spring-the-historic-closing-of-u-s-schools-a-timeline/2020/07.

30 In the CES survey, all persons employed by an establishment are included in the estimates for the industry into which that establishment has been classified, regardless of occupation. Therefore, employment estimates for state and local government education include not only teachers but also administrators and support staff employed by a school system.

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