



# What happened to temps? Changes since the Great Recession

The temporary help services (THS) industry has grown in absolute and relative terms since 1990, and also since the Great Recession, from 2008–18, the period covered in this article. THS employment levels have fluctuated in advance of broader economic changes, providing a method for employers to scale employment up and down to meet changing conditions. As the economy has changed, so too has the deployment of THS employees. Trends in the THS industry follow overall employment trends and shine a light on changes in the regional, occupational, and industrial utilization of THS employees. These trends in THS employment underscore the key features of the labor market that underlie the overall employment trends. THS employment is, in many ways, a barometer for the employment changes in the U.S. economy.

In August 2010, we published a *Monthly Labor Review* article titled "The expanding role of temporary help services from 1990 to 2008."[1] In the study, we reported that employment in temporary help services (THS) more than doubled from 1990 to 2008 and the industry came to include a larger share of jobs in highly skilled occupations. In addition to observing fast growth in legal, business, financial, computer, and other highly skilled occupations, we also observed a relative decline in transportation and material moving occupations and a rise in production occupations.

The United States experienced a financial crisis followed by the Great Recession from 2007 to 2009—the largest



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recession since the Great Depression. The Great Recession gave rise to a massive loss of jobs in nearly every industry and the largest post-World War II levels of unemployment on record, barring the recent employment changes from the 2020 coronavirus pandemic. Surely, the massive shifts in employment and methods of

production in the increasingly global value chain since the Great Recession would affect the employment levels and occupational types within the temporary help services industry.

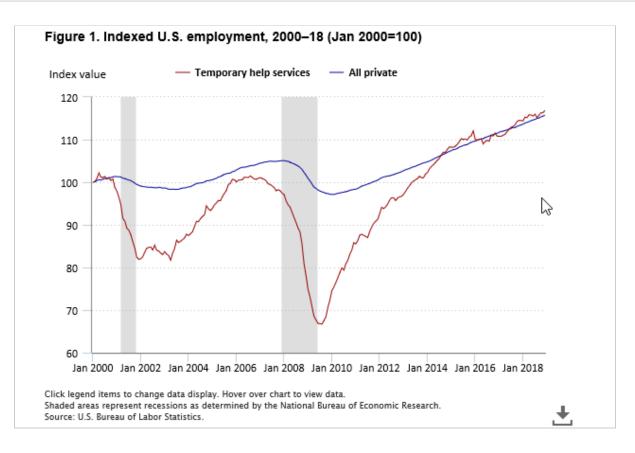
Once again, we observed that employment movements in the temporary help services industry preceded employment movements in the overall economy. Although temporary workers (temps) account for just 2 percent of total nonfarm employment in the United States, employers have increasingly relied on temps—typically supplied by temporary help agencies—to provide greater flexibility in meeting their staffing needs. When the economy expands, employers are able to ramp up quickly by using temporary workers until permanent staff are hired. Also, temporary help agencies offer flexible staffing, candidate screening, and the opportunity to try out potential hires before committing to a permanent employment contract. Conversely, when the economy contracts, flexible labor arrangements provided by temp agencies allow firms to scale down their operations readily and without the added expense of separation pay or having to let go of their best workers. For these and other reasons, temporary help jobs are widely viewed as an important port of entry to permanent employment from the candidate's perspective and a flexible staffing tool for employers.

The idea that temps have enhanced labor flexibility for firms was most evident during the most recent recessions (1990–91, 2001, and 2007–09) and subsequent recoveries. During the Great Recession, for example, temps experienced a larger share of job losses—34-percent decline for temps compared with 8-percent decline for all private employment—and during the recovery, a larger share of the job gains—75-percent growth for temps, 19-percent growth for all private jobs. Declines in THS employment preceded those in the overall labor market by 6 to 12 months in all three of the aforementioned recessions prior to the 2020 pandemic. Temp services also added jobs several months before the overall labor market began to recover following these recent recessionary periods.

As mentioned above, in recent years, the THS industry has supplied large numbers of jobs in production, construction, and similar occupations and in a wide variety of professional and technical occupations. Some studies have shown that the relationship between temp employment and employment in specific industries has strengthened in recent years. The THS industry has supplied large numbers of jobs in production, construction, and similar occupations, yet relatively little is understood about the dispersion and utilization rates of temp jobs across industries, occupations, and regions. By analyzing data on industries and occupations from the Occupational Employment Statistics (OES) survey and the Current Population Survey (CPS), this study provides a detailed profile of temps and the jobs, types of businesses, and parts of the United States where temps provided labor in the decade following the Great Recession.

# Growth of temps

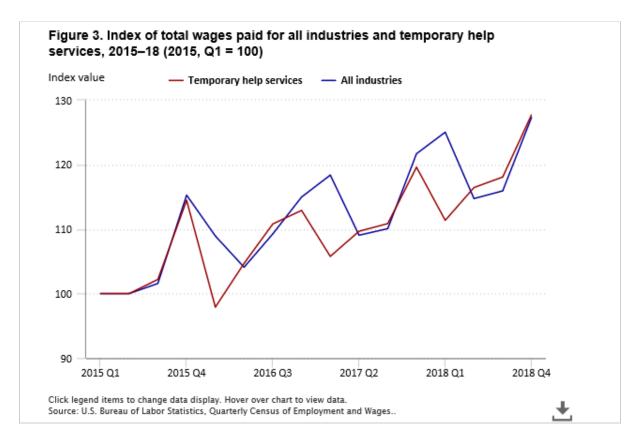
After the bottoming out of THS employment during the Great Recession, temp jobs had grown by approximately 75 percent, or 1.3 million jobs, across the United States by the end of 2018. Although the 6.2-percent annual growth of temps in the post-recession expansion outpaced the 2.0-percent annual growth for all employment, growth of temp jobs has decelerated in recent years. (See figure 1.)



While the overall number of temp jobs has continued to grow, the average hours worked in a week per temp job have generally declined since 2014. (See figure 2.)



In 2014, temp workers worked an average of 35 hours per week. That figure dropped below 34 hours per week by 2017, nearly approaching the level seen during the last recession. Therefore, as the economy continued to expand, the growth of temp jobs slowed and the average hours worked by temps declined. Nonetheless, the overall wage bill, as represented by the index of total wages paid (figure 3), still increased at a similar pace as all private employment. This suggests that since the growth in the number of temp jobs slowed while average hours declined, the average wage may have increased.

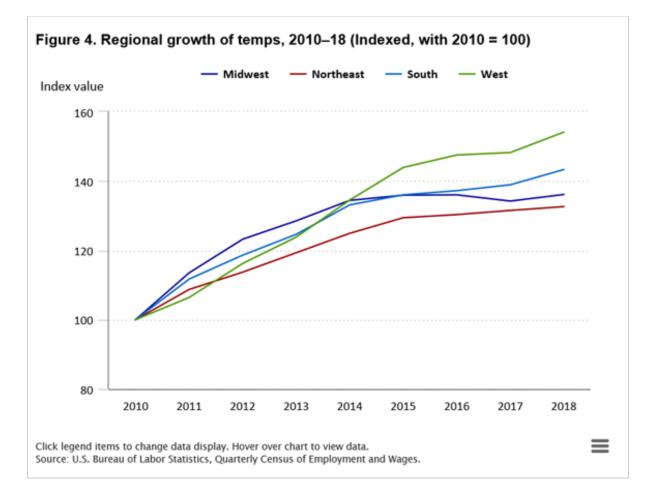


# **Regional growth**

Since THS employment bottomed out in 2009, all regions—Midwest, Northeast, South, and West—have experienced substantial growth in the industry.[2] Employment of temps grew the fastest during the 2010–14 period, led by the West region. With the exception of the West region, temp employment growth decelerated between 2014 and 2015.

During the 1990–2008 period, temp employment grew in the South by 4.6 percent per year and in the West by 3.6 percent. From 2010 to 2018, however, the lead reversed. Temp employment in the West (up 5.6 percent per year) grew 20 percent faster than temporary jobs in the South (4.6 percent), the second fastest growing region in the United States for temporary help. (See figure 4 and table 1.) From 2010 to 2018, temps in the Midwest grew by 3.9 percent annually, markedly lower than the 4.3-percent annual growth rate from 1990 to 2008. Temps in the Northeast grew by 3.8 percent per year from 1990 to 2008 and by 3.6 percent annually from 2010 to 2018. Thus, compared with the 1990–2008 period, THS employment growth was greater in the West and South relative to the Midwest and Northeast.

These regional differences follow the overall and specific employment trends in the United States. Since the Great Recession, both overall employment growth and employment growth in temporary help have been greater in the West than in any other region.



Another measure of the regional importance of temps is the utilization rate: the percentage of all jobs in a region that are temps. While employment growth for temps was highest in the West, utilization rates for temp jobs were highest in the Midwest and South regions. (See table 1.) Overall, utilization rates for temps ranged from 1.9 percent in the Northeast to 2.7 percent in the Midwest in 2018.

Region	Annualized percent growth (1990–2008)	Annualized percent growth (2010–18)	Utilization rate (2018)		
Midwest	4.3%	3.9%	2.7%		
Northeast	3.8	3.6	1.9		
South	4.6	4.6	2.5		
West	3.6	5.6	2.2		

#### Table 1. Percent change in employment, temporary help services, by region

Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages.

## **Occupational growth**

Data from the OES program show the growth and dispersion of temp jobs across occupations.[3] Since the end of the Great Recession, among the fastest growing groups of temp worker occupations has been the life, physical, and social science group, which grew 10.7 percent. Three other occupational groups of temps—computer and mathematical; arts, design, entertainment, sports and media; and education, training, and library—exceeded 9

percent annual growth during the 2010–18 timeframe: computer and mathematical; arts, design, entertainment, sports, and media; and education, training, and library. All but one occupational group in the employment services industry—education, training, and library—had increases in wages from 2010 to 2018.

In our previous analysis, employment in the employment services industry grew fastest between 2004 and 2008 in the legal; business and financial operations; computer and mathematical; community and social service; and arts, design, entertainment, sports, and media occupational groups.[4] Of the 22 occupational groups, 7 declined in employment from 2004 to 2008 and 10 declined in wages. The overall declines were expected as the Great Recession began in late 2007. Following the Great Recession, a shift in temp employment away from legal and financial occupations—which were more prominent during the 2004–08 period—to science, computer, and arts and media occupations during the 2010–18 period was observed.

In our current analysis, although employment in education, training, and library occupations has risen, average wages for temp jobs in the group as a whole have markedly declined. This pattern of rising employment and falling wages was evident during the 2004–08 period. However, the decline in wages was more pronounced during the 2010–18 period. The average decline from 2010 to 2018 is primarily due to the changing occupational mix rather than to declining wages for individual occupations. During the 2010 through 2018 period, teacher assistants, whose average wages were among the lowest in the occupational group, tripled in employment. While wages have generally grown for individual occupations within the group, the overall average wages within the education, training, and library group have declined because of the increasing number of teacher assistant temps.

The four highest paying occupational groups had average annual salaries for temps of more than \$80,000 in 2018: management (\$122,960), legal (\$88,110), computer and mathematical (\$88,070), and architecture and engineering (\$83,280). The greater pay in these occupational groups is associated with the high concentration of these jobs in some of the highest paying sectors of the economy. Many of these jobs—particularly in the computer and mathematical occupations—require specialized skills and advanced education, experience, or training. (See table 2.)

Major occupational group	Employ	/ment	Annualized percent change	
Major occupational group	2010	2018	Annualized percent change	
Life, physical, and social science	9,260	20,950	10.7%	
Computer and mathematical	64,360	135,600	9.7	
Arts, design, entertainment, sports, and media	14,940	30,720	9.4	
Education, training, and library	30,530	62,620	9.4	
Farming, fishing, and forestry	5,780	11,040	8.4	
Personal care and service	39,400	74,940	8.4	
Community and social service	7,080	13,160	8.1	
Transportation and material moving	508,790	890,660	7.2	
Food preparation and serving related	56,180	91,480	6.3	
Architecture and engineering	34,670	55,460	6.0	
Business and financial operations	132,550	195,710	5.0	
Production	490,070	719,720	4.9	

Table 2. Changes in employment and wages in the employment services industry, by major occupationalgroup, 2010–18

See footnotes at end of table.

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Major occupational group	2010	2018	Annualized percent change	
Installation, maintenance, and repair	50,560	72,310	4.6	
Legal	7,850	10,720	4.0	
Sales and related	89,290	119,800	3.7	
Management	53,360	67,890	3.1	
Building and grounds cleaning and maintenance	76,310	91,990	2.4	
Office and administrative support <sup>[1]</sup>	632,630	642,450	0.2	
Healthcare support <sup>[1]</sup>	78,420	79,620	0.2	
Construction and extraction <sup>[1]</sup>	128,760	129,110	0.0	
Healthcare practitioners and technical <sup>[1]</sup>	135,300	129,500	-0.5	
Protective service <sup>[1]</sup>	21,100	17,530	-2.3	
All occupations	2,667,200	3,662,950	4.0	

<sup>[1]</sup> Signifies that the occupations are not statistically significant at the 95 percent confidence level.

Note: All employment changes not accompanied by a footnote are statistically significant (different from 0) at the 95 percent confidence level. All salary changes are statistically significant at the 95 percent confidence level. Between May 2010 and May 2012, the OES program transitioned between the 2000 version of the Standard Occupational Classification (SOC) system and the 2010 SOC. As a result, data for some occupational groups and detailed occupations are not directly comparable over the analysis period. Comparability issues at the major group level should be relatively minor. Detailed occupational comparisons exclude occupations that are not defined comparably over the analysis period. Occupations that had major definitional changes in the 2010 SOC revision were excluded from the analysis. For more information, see https://www.bls.gov/oes/oes\_ques.htm#qf8 and https://www.bls.gov/opub/mlr/2013/05/art3full.pdf.

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics.

# **High-growth temp occupations**

Looking at the occupations within an occupational group provides specific insights into the temporary jobs that grew rapidly and those that declined.

Laborers and hand freight, stock, and material movers—within the transportation and material moving major occupational group—made up the largest number of temp jobs during the 2010–18 period. Between these years, their employment doubled from 300,000 to 610,000 and made up 17 percent of all national temp employment by 2018. (See tables 3 and appendix table A-1.) Employment of laborers and hand freight, stock, and material movers grew by 104 percent in employment services, compared with 43 percent across all industries. By 2018, over 1 in 5 laborers and hand freight, stock, and material movers were employed as temps.

# Table 3. Percent change in employment for selected occupations, temporary workers (temps) and across all industries, 2010–18

Occupations	Temps	All industries
Food processing workers	604.3%	20.3%
Applications software developers	483.4	80.9
Life, physical, and social science technicians	154.2	17.8
Laborers and hand freight, stock, and material movers	104.3	42.9

See footnotes at end of table.

# Table 3. Percent change in employment for selected occupations, temporary workers (temps) and acrossall industries, 2010–18

Occupations	Temps	All industries
Industrial truck and tractor operators	102.6	16.5
Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics.		

Industrial truck and tractor operators, also a relatively large group of temps, doubled employment, from 31,000 to 62,000 between 2010 and 2018. This occupation grew by 103 percent in temp employment services, while at the same time employment of industrial truck and tractor operators grew by 17 percent across all industries. In 2018, about 1 in 10 jobs in this occupation were employed as temps.

Food processing workers, which make up a relatively small share of all production jobs, had one of the highest rates of employment growth between 2010 and 2018. They added nearly 20,000 jobs and grew over 600 percent since 2010. The majority of these jobs added were food batchmakers and meat, poultry, and fish cutters and trimmers. All-industry occupational growth rose by 20 percent.

Applications software developers led the growth of temps within the computer and mathematical major occupational group, with nearly 500-percent employment growth and over 20,000 added jobs between 2010 and 2018. Compared with all-industry occupational growth, this occupation grew by 81 percent, but not nearly as fast as temp jobs in this occupation.

Life, physical, and social science technicians accounted for the majority of the temp job growth among the life, physical, and social science major occupational group, adding nearly 8,000 jobs between 2010 and 2018. Temps made up the majority of the nearly 10,000 life, physical, and social science technician jobs gained across all industries. By 2018, nearly 1 in 5 science technicians were hired as temps.

## **Declining temp occupations**

The construction laborers occupation was among the few construction occupations to have declined in temporary help. The level of temporary employment among construction laborers fell by about one-third or 24,000 jobs. (See table 4.) Across all industries, employment for construction laborers grew by 29 percent. This finding suggests that companies shifted from hiring construction laborers through temp agencies to hiring workers through more traditional employment.

# Table 4. Percent change in employment for selected occupations, temporary workers (temps) and across all industries, 2010–18

Occupations	Temps	All industries
Construction laborers	-31.6%	28.8%
Licensed practical and licensed vocational nurses	-30.9	-3.9
Receptionists and information clerks	-38.5	4.7
Data entry keyers	-28.9	-20.3
File clerks	-57.2	-37.1

See footnotes at end of table.

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics.

Temp employment for licensed practical and licensed vocational nurses declined by over 30 percent, falling by nearly 12,000. Across all industries, employment in this occupation fell by 4 percent. Several office and administrative support occupations suffered job losses in temp help between 2010 and 2018:

- Receptionists and information clerks declined by 38 percent or 15,000 jobs, while across all industries, this occupation grew by 5 percent.
- Data entry keyers declined by 29 percent, losing over 9,000 jobs. Similarly, jobs for this occupation declined by 20 percent for all industries. Despite the decline, 1 in 8 data entry keyers were still employed as temps in May 2018.
- File clerks declined by 57 percent, losing nearly 9,000 jobs. Across all industries, jobs in this occupation declined by 37 percent.

### Industry distribution of temps

THS is a unique industry in which workers are placed in companies across all industries. Because temporary firms do not report the specific industries in which temps are placed, the industry distribution of temps is not directly measured from the OES survey, a business establishment survey that measures employment and wages at the firm level. Instead, temp employment is captured under the temporary help services industry classification that falls within the professional and business services industry sector. To estimate the industries in which temps are placed, we use three methods, using CPS microdata alone, OES data alone, and a combination of CPS and OES data.

In contrast to OES, CPS is a national household survey of about 60,000 households collected by the Census Bureau. We use the May 2017 Contingent Worker Supplement microdata for our estimates on temporary workers.

We estimate two sets of results. First is the industry distribution of temps—that is what percent of temps are placed in which industries? And second, we estimate the industry utilization of temps—that is, the percentage of employment in each industry that are temp jobs.

For estimates using OES data, we exclude THS employment from the professional and business services industry throughout. Furthermore, to calculate industry utilization rates, we added the estimated temp employment in each industry to the total industry (e.g., utilization rate = [# temps in industry A]/[# temps in industry A + total employment in industry A]).

#### Estimate 1: CPS microdata

Using microdata from the CPS May 2017 Contingent Worker Supplement, we limit the scope to respondents who were paid by a temporary help agency.[5] The survey also collects the industry and occupation of the respondent. The distribution of temps is aggregated.[6] However, these published estimates include about one-quarter of respondents (from the microdata) who selected the "Employment Services" industry under the "Professional and business services" sector. For our purposes of estimating industry distribution for temps, this self-classification by household respondents as part of the "Employment Services" industry would overestimate the proportion of temps in the professional and business services industry, so we excluded these respondents and re-estimated the

industry distribution of temps. We assume here that no systematic assignment of individuals to employment services is related to any particular industry (i.e., individuals in employment services are "missing at random.")

#### Estimate 2: CPS microdata and OES data

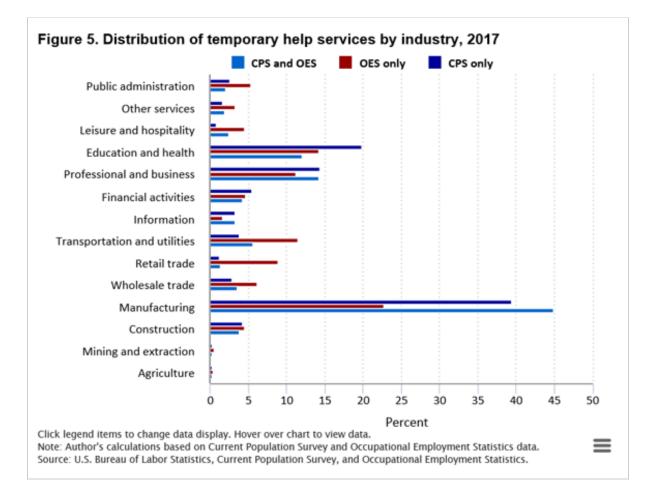
Similar to a method proposed by Dey, Houseman, Polivka for temps in the manufacturing industry,[7] we first use CPS microdata to estimate the distribution of employment to the 14 exclusive and exhaustive industry sectors for each of the 22 exclusive and exhaustive occupations. Then using OES occupational data for temps, we distribute the employment for each of these 22 occupations into the 14 industries based on the CPS estimates. We then sum cross all occupations for each industry.

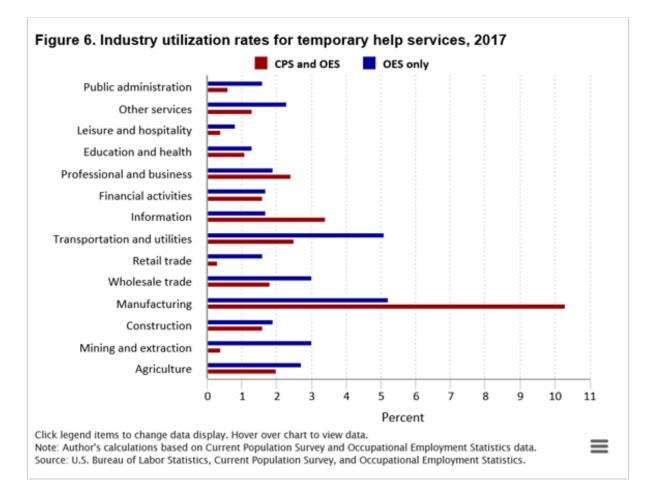
#### Estimate 3: OES cross-industry data

This method is the same as estimate 2, except that we replace the CPS estimate of the occupational-industry distribution of temps with those from OES data for all industries (i.e., we use the industry distribution of each occupation in place of the specific occupational-industry distribution estimates for temps.) This substitution assumes that the industry distribution for each occupation is the same for temps as it is for all industries.[8] For example, 76 percent of all production jobs across the United States were in manufacturing in May 2017, so we assume that 76 percent of production temp jobs are also in manufacturing. Just as we do in estimate 2, we then sum across all 22 occupations for each industry to estimate temps' industry employment.

### Results

From all estimates, it is clear that a large proportion of temp workers are placed in the manufacturing and education and health services industries. In terms of industry utilization rates, top industries include manufacturing and transportation and utilities. Considering that about 1 in 4 temp jobs are material moving workers and about 1 in 5 are assemblers and fabricators or in other production occupations,[9] it is not surprising that manufacturing and transportation and utilities are top industries for temp jobs. (See tables 5 and 6.)





### **Reliability of estimates**

The CPS is a household survey, whereas OES is an establishment survey. While OES does not directly measure the industry distribution for the temp jobs, the CPS asks respondents whether an individual is hired through a temp agency and the industry and occupation in which he or she works. Because of the different natures of the surveys, differences may arise in how jobs are classified into an industry in the CPS, a household survey, versus how firms report their industry classification in the OES survey. Furthermore, for this article, we use a subset of the CPS data: individuals who have indicated they are hired through temporary staffing firms. This subset of the CPS data contains fewer than 300 relevant respondents. With this relatively small sample size, estimates from estimate 2 may have low coverage, especially for smaller industry and occupation intersections. On the other hand, although the OES survey provides much more robust estimates and we can take advantage of occupational data for temps (which is much more precisely estimated), we must rely on an assumption about occupation-industry distribution that is not directly testable, but reasonable to assume. We do not suggest which of these estimates are more reliable, as each has its strengths and underlying assumptions. However, taken together, they provide estimates that give an overall idea about industry distribution and utilization patterns of temps for which no one source can currently provide precise estimates.

# Conclusions

Since the recovery from the Great Recession, temporary employment has increased by nearly 1 million jobs and at an annual rate more than triple that of private sector employment. In 2008, it represented 1.7 percent of total employment. By 2018, temp jobs represented 2 percent of all jobs. While the THS industry is small relative to retail trade, manufacturing, and other industry sectors, it is very important in a number of ways. First, temporary employment is the first resort of employers seeking to expand or contract their employment and it is essential in workforce level adjustment. It can immediately boost economic activity, or it can curb economic activity until firms are able to staff with confidence. For this reason, it is a bellwether for broader labor market and economic conditions and used as an indicator of potential changes in the economy.

Second, temporary employment provides insights as to change within economic regions and industry change. Similar to previous studies on temporary workers, this study found that both the largest number of temps and highest utilization rates were in manufacturing. For those temporary occupations that are changing the most, this reflects a shift in the broader themes of the economy. Prior to the last recession, the occupation growth patterns were dominated by jobs in legal, business and financial operations, and computer and mathematical occupations —all occupations that were associated with the rise of the financial sector. In recent years, the growth in jobs has shifted to science, computer and mathematical, and arts and media occupations—occupations that represent the emerging themes of biotechnology, data science, and expanding visual content in an increasingly connected world. Healthcare and construction industries, on the other hand, reduced their reliance on temps between 2010 and 2018.

Finally, temporary employment provides clues to changes in the type of temporary employment jobs, as we observe THS occupations growing rapidly in food, software, lab science, and logistics, which are all industry areas that share or support pop-up enterprises. One temp occupation on the rise, teacher assistants, has seen increased utilization but may also be dampening the average salary of temp workers in education. Meanwhile, those temp occupations in which employment is falling—construction laborers, licensed practical and licensed vocational nurses, and administrative support—relative to those occupations across all industries, appears to be reflecting a shift from temporary to permanent, full-time employment. Legal, business and financial operations, and computer and mathematical occupations represented the changes in the pre-recession period up until 2008; however, in the post-Great Recession expansion from 2010 and 2018, temps grew in science, computing, and arts and education occupations, representing the broader changes in a more highly technical and content-rich economy. Therefore, temp employment is much more significant in effect than its modest name implies—it quickly reflects changes in industry structure and emphasis over time and during periods of significant economic change.

The box below summarizes the changes in the temporary help services industry since the Great Depression.

#### Summary of key changes in temporary services employment since the Great Recession

- Temps grew by 75 percent (1.3 million jobs) across the United States compared to the total private employment change of 19 percent.
- The share of temps as a percent of all jobs grew from 1.7 in 2008 to 2.0 by 2018.
- · Largest industry share of temps are concentrated in manufacturing.

- Manufacturing and transportation and utilities industries continue to have the highest utilization rates of temps.
- The West region led growth with annual rate of 5.6 percent, followed by the South at 4.6 percent.
- The highest utilization of temps were in the Midwest, the lowest in the Northeast.
- The life, physical, and social science; computer and mathematical; arts and media; and education, training, and library occupational groups were among the fastest growing occupations (over 9 percent per year).
- Applications software developer jobs grew by nearly 500 percent.
- Temp construction laborers fell by a third, contrary to its overall occupational growth.

# Appendix A. Comparison showing the changes in temporary help services employment between 2010 and 2018.

	Temporary help services				
Occupation	Employment 2010	Employment 2018	Employment change	Percent change	
Laborers and hand freight, stock, and material movers (SOC 53-7062)	298,720	610,170	311,450	104.3%	
Industrial truck and tractor operators (SOC 53-7051)	30,820	62,430	31,610	102.6	
Food processing workers (SOC 51-3000)	3,230	22,750	19,520	604.3	
Applications software developers (SOC 15-1132)	4,210	24,560	20,350	483.4	
Life, physical, and social science technicians (SOC 19-4000)	5,070	12,890	7,820	154.2	
Construction laborers (SOC 47-2061)	75,480	51,610	-23,870	-31.6	
Licensed practical and licensed vocational nurses (SOC 29-2061)	37,860	26,180	-11,680	-30.9	
Receptionists and information clerks (SOC 43-4171)	40,500	24,920	-15,580	-38.5	
Data entry keyers (SOC 43-9021)	31,840	22,640	-9,200	-28.9	
File clerks (SOC 43-4071)	15,220	6,510	-8,710	-57.2	
All occupations	2,667,200	3,662,950	995,750	37.3	

#### Table A-1. Employment change in selected occupations in the employment services industry, 2010–2018

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics.

## Appendix B. Comparison showing the changes in all industry employment between 2010 and 2018, and the percentage of all industry employment that are temporary help services workers.

Table B-1. Employment change in selected occupations, all industries, 2010–18

		All industry		
Occupation	Employment 2010	Employment 2018	Percent change	Temps as a percent of all industries (2018)
Laborers and hand freight, stock, and material movers (SOC 53-7062)	2,024,180	2,893,180	42.9%	21.1%
Industrial truck and tractor operators (SOC 53-7051)	518,350	604,130	16.5	10.3
Food processing workers (SOC 51-3000)	666,430	801,770	20.3	2.8
Applications software developers (SOC 15-1132)	499,280	903,160	80.9	2.7
Life, physical, and social science technicians (SOC 19-4000)	55,360	65,220	17.8	19.8
Construction laborers (SOC 47-2061)	777,700	1,001,470	28.8	5.2
Licensed practical and licensed vocational nurses (SOC 29-2061)	730,290	701,690	-3.9	3.7
Receptionists and information clerks (SOC 43-4171)	997,080	1,043,630	4.7	2.4
Data entry keyers (SOC 43-9021)	219,530	174,930	-20.3	12.9
File clerks (SOC 43-4071)	174,910	110,020	-37.1	5.9
All occupations	127,097,160	144,733,270	13.9	2.5

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics.

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#### SUGGESTED CITATION

Tian Luo, Amar Mann, and Richard J. Holden, "What happened to temps? Changes since the Great Recession," *Monthly Labor Review,* U.S. Bureau of Labor Statistics, February 2021, https://doi.org/10.21916/mlr.2021.1

#### NOTES

<u>1</u> Tian Luo, Amar Mann, and Richard Holden. "The expanding role of temporary help services from 1990 to 2008." Monthly Labor Review 133 (August 2010).

2 Regions are defined as follows: West (AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY); South (AL, AR, DE, DC, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV); Northeast (CT, ME, MA, NH, NJ, NY, PA, RI, VT); and Midwest (IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI).

<u>3</u> Although we present selected employment comparisons using the Occupational Employment Statistics data, the data are not designed for making comparisons through time. Such comparisons should be interpreted with caution. For more information, see "<u>Can the OES data be used to compare changes in employment and wages over time?</u>" Occupational data for the temporary help services industry were not published until May 2014. In this section, for occupational comparisons between 2010 and 2018, we use employment services, a higher aggregate industry that includes temporary help, professional employer organizations, and employment placement and executive search services, as a proxy for temporary help services. Temp jobs typically make up over 80 percent of employment services industry employment. In particular, for the two largest temp occupational groups—transportation and material moving and production—over 90 percent of employment services employment were from temporary help services in the years 2014–18.

4 Luo, Mann, and Holden, "The expanding role of temporary help services from 1990 to 2008," table 1, p. 6.

5 Temps are individuals who answered "Yes" to the following two questions "Are you paid by a temporary help agency on your job?" or "Even though you told me your job is not temporary, are you paid by a temporary help agency?"

<u>6</u> Bureau of Labor Statistics. *Contingent and Alternative Employment Arrangements—May 2017*, USDL-18-0942 (U.S. Department of Labor, June 7, 2018), <u>https://www.bls.gov/news.release/pdf/conemp.pdf</u>.

<u>7</u> Matthew Dey, Susan Houseman, and Anne Polivka, "Manufacturers' outsourcing to temporary help services: a research update," BLS working paper, 2017, <u>https://www.bls.gov/osmr/research-papers/2017/pdf/ec170010.pdf</u>

<u>8</u> We exclude temporary help services from the professional and business services industry, essentially re-estimating the industry distribution, as usual.

9 Based on OES May 2017 data for temporary help services.

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