

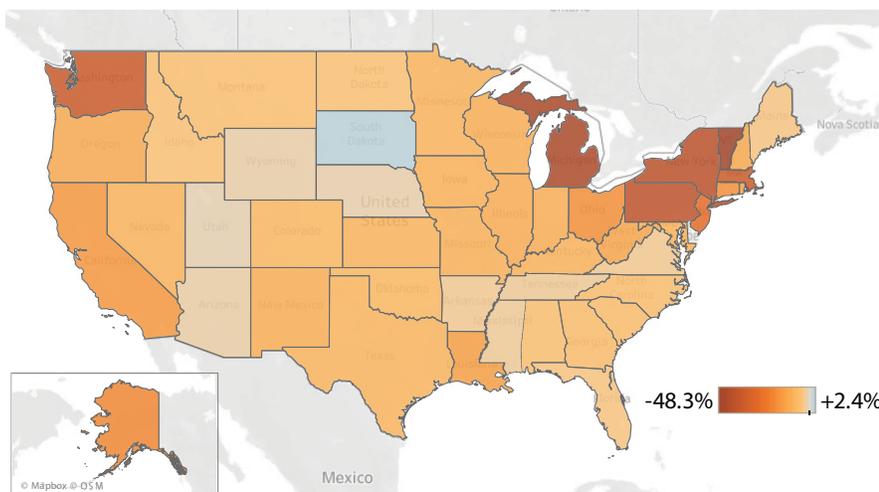
## Impact of COVID-19 on Construction Workers and Businesses

Samantha Brown, MPH, Raina D. Brooks, MPH, Xiuwen Sue Dong, DrPH\*

### OVERVIEW

The COVID-19 pandemic has caused considerable [economic uncertainty](#) in the U.S., leading to business closures, mass job loss, and the [deterioration of living conditions](#) for many. [Low-income workers](#), [racial/ethnic minorities](#), and [small businesses](#) are particularly affected. To shed light on the impact of these challenges in the construction industry, this Data Bulletin combines findings from three large national surveys.

Construction employment by demographic and work-related characteristics was estimated using data from the Current Population Survey (CPS). Employment numbers among construction subsectors were obtained from the Current Employment Statistics (CES). Both CPS and CES are conducted by the U.S. Bureau of Labor Statistics (BLS). The effects of COVID-19 on construction businesses were assessed using the U.S. Census Bureau's new weekly Small Business Pulse Survey (SBPS), which measures the changes in business conditions during the pandemic. The trends of monthly employment and weekly business performance were traced and compared between construction and all industries on average. Differences between construction subgroups were analyzed to identify which groups were hit harder. Definitions for italicized terms are included as the reader's references.



**Change in construction employment by state, April 2020 versus March 2020 (Wage-and-salary employment)**

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### THIS ISSUE

This issue focuses on COVID-19's economic impact on the construction industry from March through June 2020, including job losses, medical absences, and business closures.

### KEY FINDINGS

**From March to April 2020, nearly one million construction workers lost their jobs, of whom 55.1% were temporarily laid off.**

*Chart 2*

**About 673,000 Hispanic construction workers lost their jobs in April 2020; the percentage of job loss was higher than that of non-Hispanic workers (-19.8% vs. -12.7%).**

*Chart 4*

**From March to April 2020, construction employment fell 22.5% among self-unincorporated workers.**

*Chart 6*

**Absence from work due to personal medical reasons in construction increased 70% from March to April 2020.**

*Chart 8*

**Small businesses in construction were less likely than those in all nonfarm industries to report a large negative effect of COVID-19, but more likely to report moderate negative effects.**

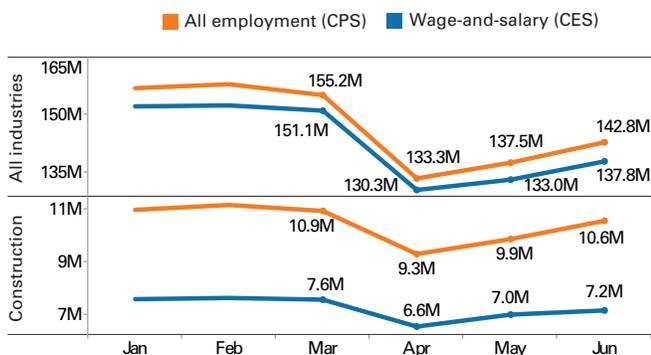
*Chart 10*

### NEXT DATA BULLETIN

Value Produced by the Construction Industry During the COVID-19 Pandemic

Overall U.S. employment dropped dramatically from March to April 2020 (-21.8 million workers), before increasing steadily from April to June (+9.5 million; chart 1). Payroll employment (nonfarm *wage-and-salary* only) showed a similar pattern. As of June 2020, national employment remained significantly below pre-pandemic levels.

**1. Employment, January-June 2020, construction versus all industries**



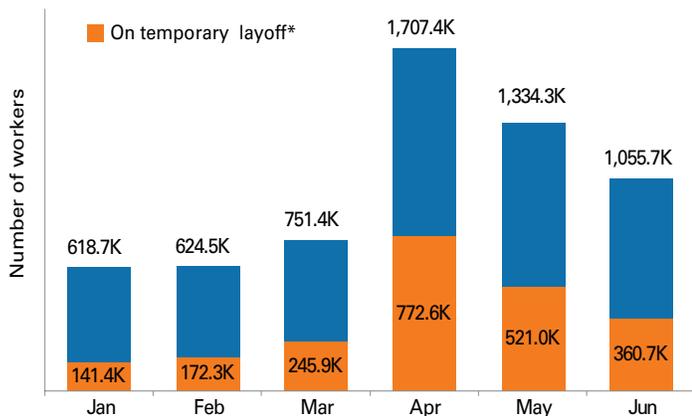
Source: U.S. Bureau of Labor Statistics, 2020 Current Population Survey, and 2020 Current Employment Statistics.

\*May and June CES data are preliminary.

\*\*Wage-and-salary: nonfarm industries, seasonally adjusted

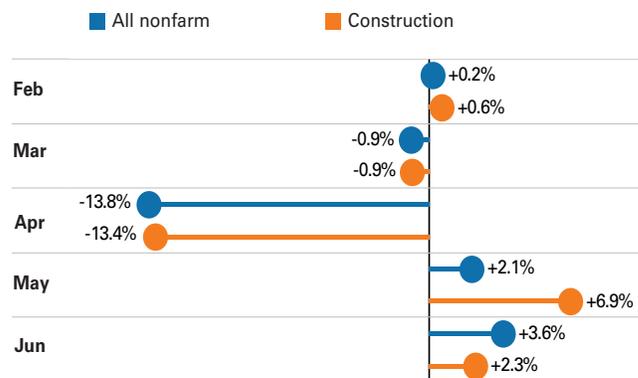
Following the overall trends, nearly one million (n=956,000) construction workers became *unemployed* from March to April 2020, of whom about 527,000 were *temporarily laid off* (chart 2). The number of temporary layoffs in April 2020 was more than four times the pre-COVID-19 level (172,000 in February 2020), and the number of April layoffs is likely *underestimated*. Construction wage-and-salary employment dropped by 13.4% from March to April (chart 3). However, it rose 9.3% from April to June, showing the effect of reopening.

**2. Construction unemployment, January-June 2020 (All workers)**



Source: U.S. Bureau of Labor Statistics, 2020 Current Population Survey.

**3. Monthly percentage change in employment from January to June 2020, construction versus all nonfarm industries (Wage-and-salary employment)**



Source: U.S. Bureau of Labor Statistics, 2020 Current Employment Statistics.

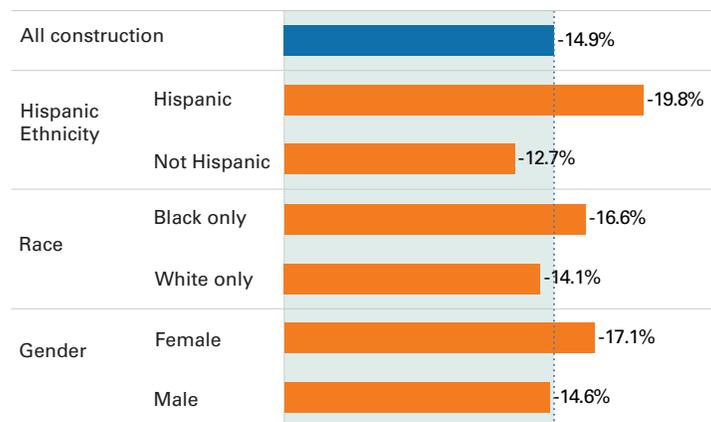
\*May and June data are preliminary.

\*\*Data are seasonally adjusted.

By demographics, Hispanic workers were more likely to lose their job than non-Hispanic workers (employment changes of -19.8% vs. -12.7% from March to April 2020; chart 4). About 673,000 Hispanic workers lost their jobs in April 2020. The employment drop was also more pronounced among female than male workers (-17.1% vs. -14.6%).

Geographically, the employment drop from March to April 2020 was more apparent in the Northeast, with losses of more than 40% in Vermont, Michigan, and New York (see page 1 chart).

**4. Change in construction employment, by demographics, April 2020 versus March 2020 (All employment)**

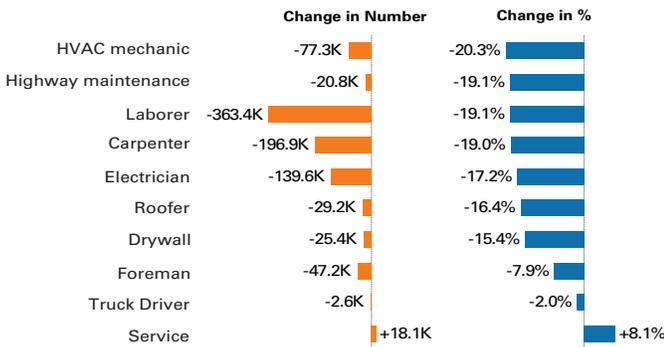


Source: U.S. Bureau of Labor Statistics, 2020 Current Population Survey.

Employment changes also varied by construction occupation, *class-of-worker*, and subsector. From March to April 2020, employment dropped more among HVAC mechanics (-20.3%), highway maintenance workers (-19.1%), laborers (-19.1%), and carpenters (-19.0%; chart 5). In contrast, employment in *service occupations* increased by 8.1% during this period.

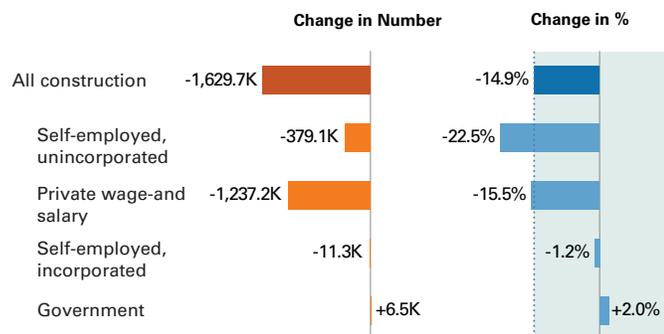
Moreover, *self-unincorporated* construction workers were hit the hardest, followed by private wage-and salary workers (employment changes of -22.5% vs. -15.5% from March to April 2020; chart 6). In contrast, employment remained relatively stable among *self-incorporated workers* (-1.2%) and even slightly increased among government workers (+2.0%).

**5. Change in construction employment, by selected occupation, April 2020 versus March 2020 (All employment)**



Source: U.S. Bureau of Labor Statistics. 2020 Current Population Survey.

**6. Change in construction employment, by class of workers, April 2020 versus March 2020 (All employment)**



Source: U.S. Bureau of Labor Statistics. 2020 Current Population Survey.

Among construction subsectors, employment loss was particularly large among the Building Foundation and Exterior (NAICS 23810) and Building Finishing (NAICS 23830) industry groups between March 2020 and April 2020 (-18.5% and -18.0%, respectively; chart 7). Employment across the Specialty Trade subsector (NAICS 23800) partially recovered from April to June 2020, adding 460,000 jobs.

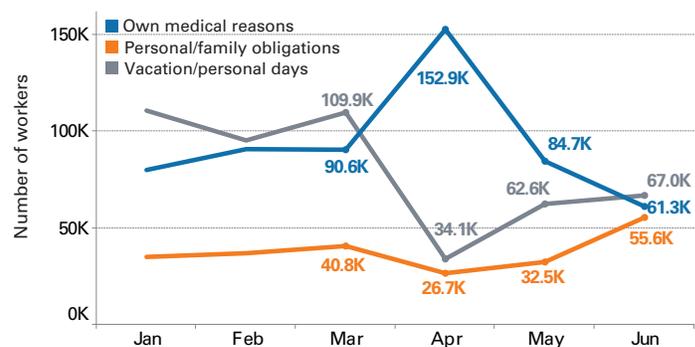
**7. Change in employment, by construction subsector, April 2020 versus March 2020 (Wage-and-salary employment)**

Subsector	Change in Number	Change in %
All construction	-1,018K	-13.4%
Building	-221K	-13.2%
Residential building	-125K	-14.9%
Nonresidential building	-97K	-11.5%
Heavy and civil engineering	-91K	-8.4%
Land subdivision	-4K	-10.1%
Utility system construction	-49K	-8.8%
Highway, street, and bridge	-33K	-9.1%
Other heavy construction	-8K	-6.3%
Specialty trade	-706K	-14.7%
Building foundation and exterior	-178K	-18.5%
Building finishing	-152K	-18.0%
Building equipment	-298K	-12.9%
Other specialty trade	-87K	-12.4%

Source: U.S. Bureau of Labor Statistics, 2020 Current Employment Statistics. \*Data are seasonally adjusted.

Among construction workers who held a job, *absence from work* due to *personal medical reasons* jumped by 70% from March to April 2020, before declining to its lowest annual point in June (~61,000 workers; chart 8). The spike in April possibly represents an increasing number of workers who were under quarantine or self-isolating due to COVID-19 health concerns. In contrast, absence from work due to vacation or personal days decreased from March to April, and increased from April to June.

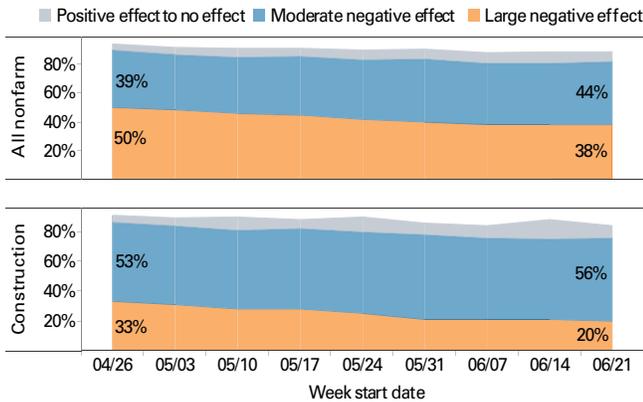
**8. Major reasons for "absence" from work in construction, January-June 2020 (All employment)**



Source: U.S. Bureau of Labor Statistics. 2020 Current Population Survey.

The pandemic has had a devastating impact on *small businesses*. In late April 2020, 86% of small construction businesses and 90% of small businesses in all nonfarm industries reported a large or moderate negative effect due to COVID-19 (chart 9). As lockdowns gradually lifted through the end of June, the percentage of businesses reporting large negative effects decreased, while the percentage of businesses reporting moderate negative effects increased.

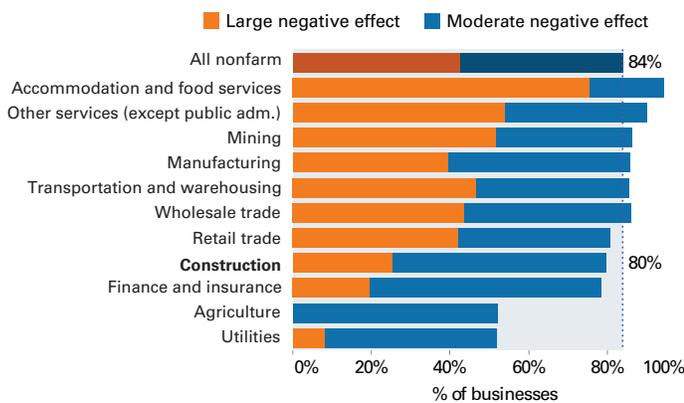
**9. Overall impact of COVID-19 on small businesses since April 26, 2020, construction versus all nonfarm industries**



Source: U.S. Census Bureau Small Business Pulse Survey.

On average, construction businesses were less likely than those in all nonfarm industries to report a large negative effect (25% vs. 43%), but were more likely to report a moderate negative effect of COVID-19 (55% vs. 41%; chart 10). Similarly, temporary closures and decreases in operating revenue were lower in construction than all nonfarm industries (supplemental chart S3).

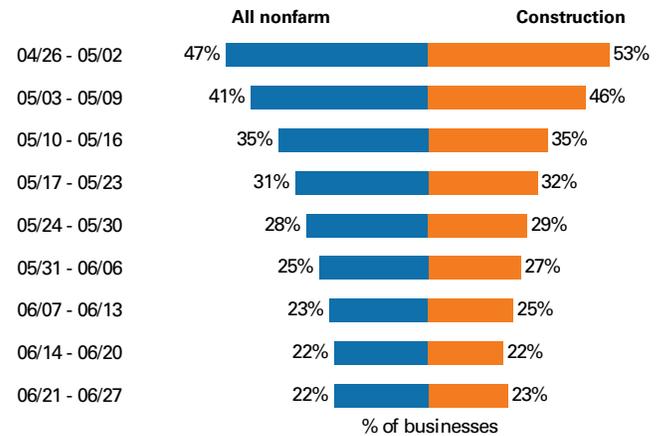
**10. Overall negative impact of COVID-19, average of April 26-June 27, 2020, selected industries**



Source: U.S. Census Bureau Small Business Pulse Survey.

In late April 2020, the majority (53%) of small construction businesses reduced work hours of paid employees, a percentage slightly higher than all nonfarm industries combined (47%; chart 11). By the end of June, reduction in work hours decreased for businesses in construction and all nonfarm industries.

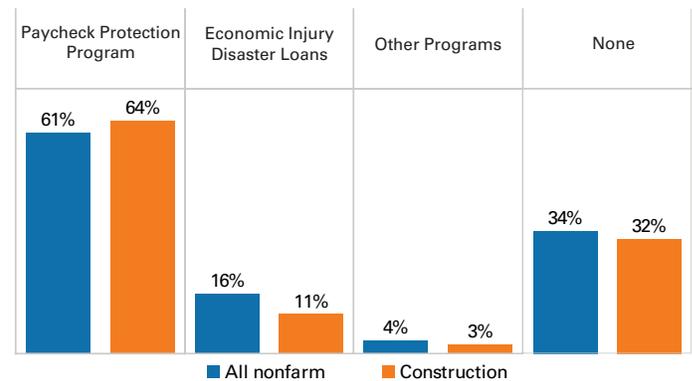
**11. Reduction in hours worked by paid employees since April 26, 2020, construction versus all nonfarm industries**



Source: U.S. Census Bureau Small Business Pulse Survey.

During the survey period, nearly two-thirds (64%) of small businesses in construction received financial assistance from the Paycheck Protection Program (PPP), slightly higher than all nonfarm industries. In addition, a small proportion of businesses received funds from other programs (chart 12).

**12. Financial assistance received during COVID-19 by type\*, average of April 26-June 27, 2020, construction versus all nonfarm industries**



Source: U.S. Census Bureau Small Business Pulse Survey.

\*Businesses were allowed to select more than one type of financial assistance received.

The construction industry was hit significantly by the COVID-19 pandemic. Nearly one million construction workers lost their jobs from March to April 2020. About 80% of small construction businesses experienced either a large or moderate negative impact. Hispanic workers and self-unincorporated workers were hit particularly hard, experiencing employment drops of about 20%.

As lockdowns lift, the pandemic's economic impact on construction businesses and workers has somewhat lessened, but the question of how to reopen construction sites safely has become a top priority given that COVID-19 cases are surging across the country. To respond to the challenge, NIOSH, CPWR, and the North America's Building Trades Unions (NABTU) are actively working together to provide guidance and tools for workers and employers as they look to reopen. CPWR has launched the [COVID-19 Construction Clearinghouse](#), providing easier access to reliable and current industry information, including the COVID-19 Standards for U.S. Construction Sites (developed in partnership with NABTU), Toolbox Talks, and more. Construction employers can also implement new routines to keep employees safe, such as alternate work schedules and staggered arrivals and departures, while still maintaining productivity and the same high-quality standards

## ACCESS THE CHARTS & MORE

View the [charts](#) (including supplement charts) in PowerPoint and the [data](#) underlying the charts in Excel. Downloading will start when you click on each link.

## DEFINITIONS

**Absence from work** – A subset of the employed. People with a job, not at work due to vacation, illness or other temporary reasons in the reference week. According to BLS, some responses may have been incorrectly coded as absent from work due to the misclassification of workers who were unemployed on temporary layoff because of COVID-19.

**Class-of-worker** – Classifies workers as: wage-and-salary (private or government), self-employed (incorporated or unincorporated), or unpaid family workers.

**Personal medical reasons** – Injuries, illnesses, or medical problems, including quarantine or self-isolating due to health concerns during the reference week.

**Self-incorporated** – Self-employed workers who have established a legal corporation and typically employ others (for example, small business owners).

**Self-unincorporated** – Self-employed workers who have not established a corporation and often operate alone (for example, freelancers, independent contractors, and independent consultants).

**Service occupations** – Includes occupations in building grounds cleaning and maintenance, personal care and service, food preparation and serving, healthcare support, and protective service.

**Small businesses** – U.S. nonfarm, single-location employer businesses with 1-499 employees and receipts of \$1,000 or more.

**Temporarily laid off** – Unemployed workers who expected to be recalled at any date within the next 6 months, including those who were uncertain whether they would return to work within 6 months due to the COVID-19 pandemic.

**Unemployed** – Individuals who (1) were not employed during the survey reference week, (2) were available for work during the reference week, and (3) made an effort to find a job within the last four weeks OR were temporarily laid off.

**Wage-and-salary** – Workers who receive wages, salaries, commissions, tips, or pay from a private employer or from a government unit.

## DATA SOURCE

U.S. Bureau of Labor Statistics, Current Employment Survey (CES), 2020. <https://www.bls.gov/ces/>

U.S. Census Bureau, Current Population Survey (CPS), January-June 2020

\*Datasets were downloaded through IPUMS: Sarah Flood, Miriam King, Renae Rodgers, Steven Ruggles and J. Robert Warren. Integrated Public Use Microdata Series, Current Population Survey: Version 7.0 [dataset]. Minneapolis, MN: IPUMS, 2020. <https://doi.org/10.18128/D030.V7.0>

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The CPWR Data Center is part of CPWR—The Center for Construction Research and Training. CPWR is a 501(c)(3) nonprofit research and training institution created by NABTU, and serves as its research arm. CPWR has focused on construction safety and health research since 1990. The Data Bulletin, a series of publications analyzing construction-related data, is part of our ongoing surveillance project funded by the National Institute for Occupational Safety and Health (NIOSH).

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- Choose Hand Safety  
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- Construction Safety and Health Network  
<https://safeconstructionnetwork.org/>
- Construction Solutions  
<http://www.cpwrconstructionsolutions.org/>
- Construction Solutions ROI Calculator  
<http://www.safecalc.org/>
- COVID-19 Construction Clearinghouse  
<http://covid.elcosh.org/index.php>
- Exposure Control Database  
<http://ecd.cpwrconstructionsolutions.org/>
- Stop Construction Falls  
<http://stopconstructionfalls.com/>
- The Electronic Library of Construction Occupational Safety and Health  
<http://www.elcosh.org/index.php>
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