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Data Bulletin

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Impact of COVID-19 on Construction Businesses and Productions

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OVERVIEW

The COVID-19 pandemic has had a significant effect on the U.S. economy. While stay-at-home orders aided in "flattening the curve," they had stark impacts on U.S. workers and businesses, including construction. To continue monitoring the economic impact of COVID-19 on the construction industry, this Data Bulletin provides updated data on construction business performance using the recently available national data.

Data from the U.S. Bureau of Economic Analysis (BEA) were used to track the U.S. real gross domestic product during the pandemic. Value produced by the construction industry was measured by Construction Spending, a monthly survey conducted by the U.S. Census Bureau. Trends in housing starts and building permits were estimated using data from New Residential Construction, another Census data source. The impact of COVID-19 on construction businesses was also assessed using the Census Bureau's weekly Small Business Pulse Survey (SBPS) Phase One (covering April to June) and Phase Two (August to October). Monthly trends in construction spending and new housing starts during the pandemic were analyzed by selected construction types. Weekly changes in small business conditions were compared between construction and all nonfarm industries. Selected outcomes were also compared by establishment size within construction. Definitions for italicized terms are included at the end of the report for the reader's reference.

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Numbers in text and charts were calculated by the CPWR Data Center.

THIS ISSUE

This issue focuses on the economic impact of COVID-19 on the construction industry through September 2020, examining construction spending, new residential construction, and the well-being of small businesses.

KEY FINDINGS

U.S. GDP dropped 31% in the second quarter of 2020 and increased 33% in the third quarter, the largest quarterly fall and rise ever recorded.

Chart 1

Residential construction was hit harder than other construction subsectors: spending dropped by $49.5 billion from January to May and surged by $71.3 billion from May to September. Over 60% of the fluctuation was in single-family home construction.

Charts 2,4

The impact of COVID-19 on construction businesses reduced after lockdowns lifted, with 16% reporting a large negative effect in October compared to 33% in April.

Chart 7

Construction businesses with less than five employees were more likely to report a large negative effect of COVID-19, yet less likely to receive federal financial assistance.

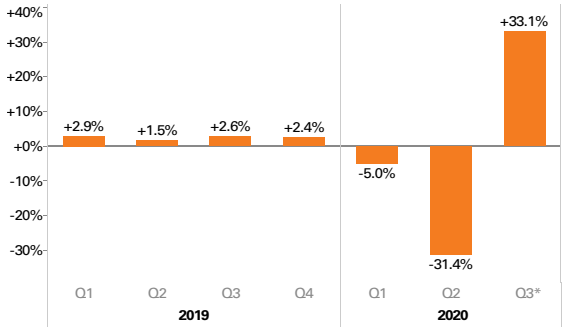
Charts 10-11

NEXT DATA BULLETIN

Trends of nonfatal occupational injuries and illnesses in the construction industry

The COVID-19 pandemic has significantly impacted the U.S. economy. The U.S. *real gross domestic product (GDP)* dropped 31% (*seasonally adjusted annual rate*[1]) in the second quarter of 2020 and grew 33% in the third quarter, resulting in the largest quarterly plunge and subsequent rebound ever recorded (chart 1). Nonetheless, the Q3 GDP remained below pre-pandemic levels.

1. Real GDP: Percentage change from preceding quarter

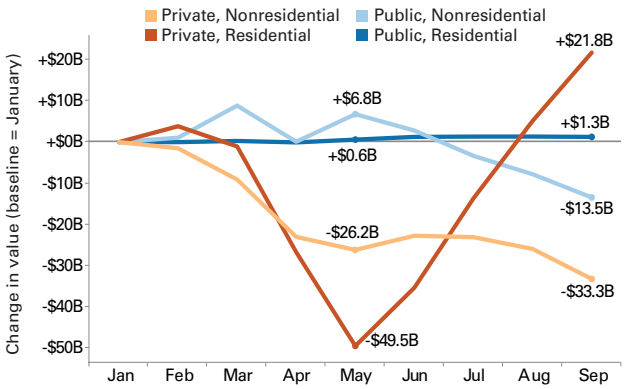


Source: *U.S. Bureau of Economic Analysis, Gross Domestic Product, Third Quarter 2020.*

**Estimate is preliminary.*

The pandemic hit some sectors of the construction industry harder than others. Overall *construction spending* dropped $68.4 billion from January to May and increased by $44.7 billion from May to September in 2020, remaining about $23.7 billion below January levels (chart 2). These trends were largely driven by private residential construction, which decreased by $49.5 billion from January to May and surged by $71.3 billion from May to September. In contrast, public residential construction increased slightly from January to September (+$1.3 billion).

2. Change in value of construction put in place, January - September*, 2020



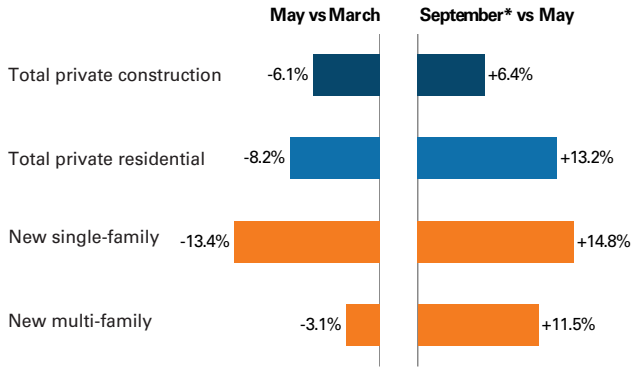
Source: *U.S. Census Bureau, Construction Spending.*

**September estimates are preliminary*

[1]All numbers in this report on spending, housing starts, and building permits are seasonally adjusted annual rates.

New single-family home construction was the primary driver of private construction spending trends. From March to May, it plummeted by 13.4% (-$41.3 billion), making up 62.9% of the total reduction (-$65.6 billion) in private construction spending during these months (charts 3-4). However, new single-family home spending increased by 14.8% (+$39.4 billion) from May to September, making up 61.3% of the total recovery in private construction spending (+$64.3 billion) during these months.

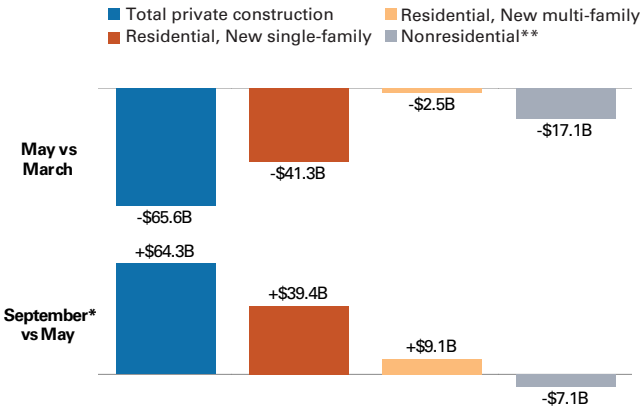
3. Percentage change in the value of private residential construction put in place, by selected type, 2020



Source: *U.S. Census Bureau, Construction Spending.*

**September estimates are preliminary.*

4. Change in the value of private construction put in place, by selected type, 2020



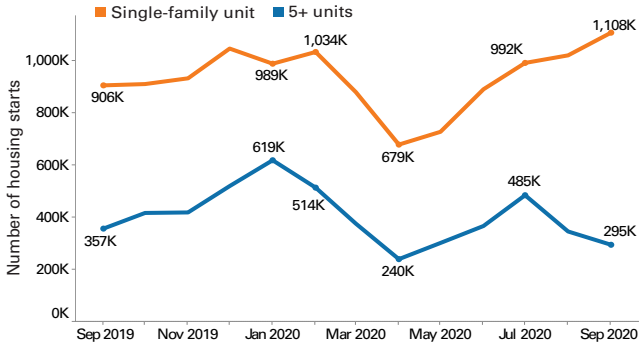
Source: *U.S. Census Bureau, Construction Spending.*

**September estimates are preliminary.*

***Total may not be equal to numbers in other charts due to rounding.*

The impact of the COVID-19 pandemic on private new residential construction can be further observed through trends in *housing starts* and *building permits*. The number of housing starts for *single-family units* decreased by one-third (-34.3%) from February to April, but increased 63.2% from April to September (chart 5). The number of housing starts for five or more units was halved (-53.3%) from February to April, doubled from April to July, and declined 39.2% from July to September.

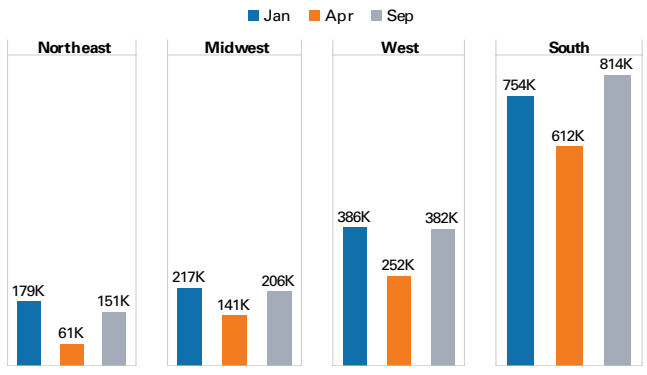
5. Number of private residential housing starts, September 2019 - September 2020



Source: *U.S. Census Bureau, New Residential Construction.*

The number of building permits for new housing units also dropped from January to April before increasing through September. This trend was consistent across all four U.S. Census regions (chart 6). However, the September numbers remained below the January numbers in all regions but the south.

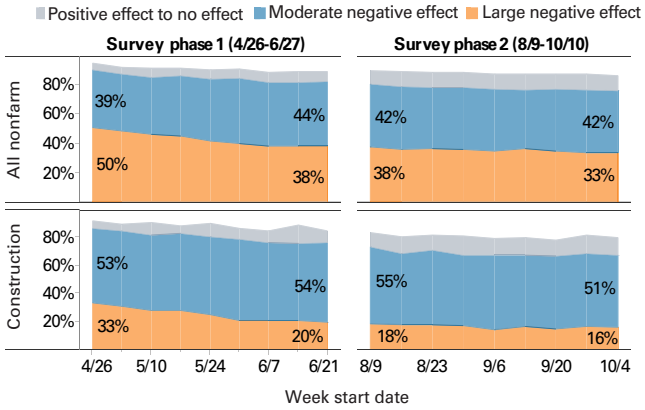
6. Number of new private housing units authorized by building permits by region, selected months, 2020



Source: *U.S. Bureau of Labor Statistics, New Residential Construction.*

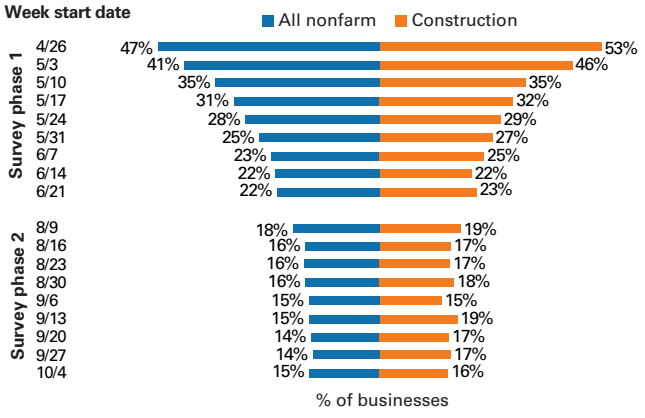
COVID-19 had devastating effects on *small businesses*, though its impact weakened after the lockdown lifted. In early October 2020, 16% of construction businesses reported that the pandemic had a large overall negative effect on their business compared to the 33% reported in April. Although construction businesses were less likely to report a large negative impact than the average of all nonfarm industries, the percentage reporting a moderate negative effect was higher in construction (51% vs. 42% ; chart 7). Reduction in total hours worked by paid employees also decreased substantially during this period in both construction (-70%) and all nonfarm industries (-68%; chart 8).

7. Overall impact of COVID-19 on small businesses, construction versus all nonfarm industries, 2020



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

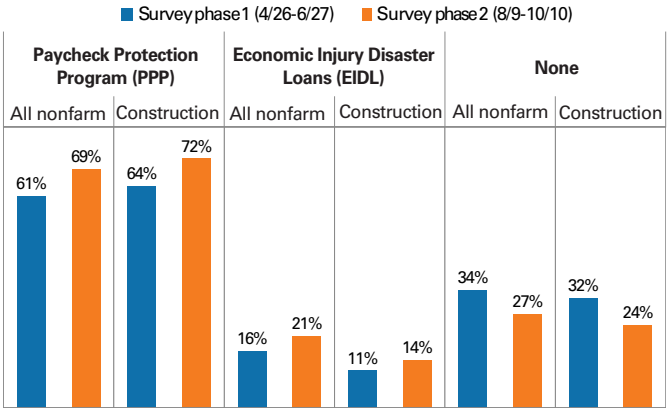
8. Reduction in hours worked by paid employees since April 26, 2020, construction versus all nonfarm industries



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

Construction businesses were more likely than those in all nonfarm industries to receive any federal financial assistance, yet less likely to receive Economic Injury Disaster Loans (chart 9). Furthermore, the percentage of small businesses receiving federal financial assistance in both construction and all nonfarm industries increased over the study period.

9. Financial assistance received during COVID-19 by selected type*, average of survey phases 1 and 2, construction versus all nonfarm industries

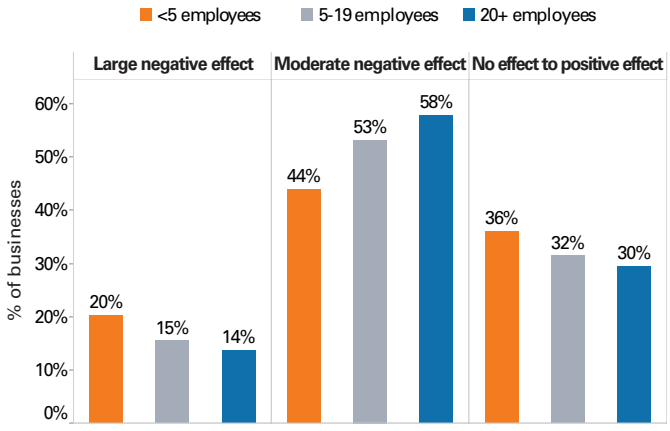


Source: *U.S. Census Bureau, Small Business Pulse Survey.*

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

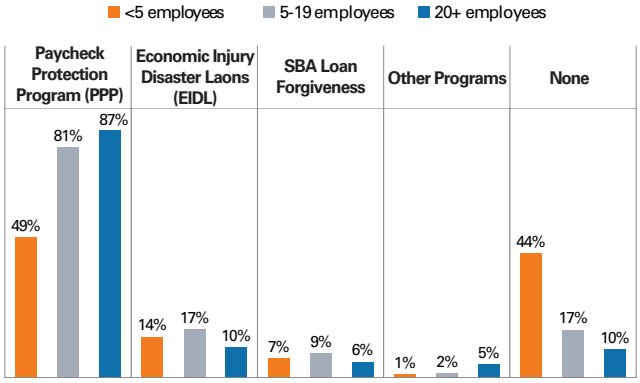
Construction establishments with fewer than five employees may be especially vulnerable to the impacts of the COVID-19 pandemic. Compared to establishments with 20 or more employees, those with less than five employees were more likely to report that the pandemic had a large negative effect on business (20% vs. 14%; chart 10), but were considerably less likely to receive federal financial assistance (66% vs. 90%; chart 11).

10. Overall impact of COVID-19 on construction businesses, by establishment size, average of August 9 - October 10, 2020



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

11. Financial assistance received by construction businesses during COVID-19, by type* and establishment size, average of August 9-October 10, 2020



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

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

The value produced by construction dramatically fluctuated during the pandemic, particularly in residential construction. The substantial swings in overall private construction spending were largely attributed to the sharp decline (-$41.3 billion) and subsequent recovery (+$39.4 billion) in single-family home construction. While the impact of the pandemic on the overall U.S. economy diminished after the lockdown lifted, about 67% of construction businesses still reported a large or moderate negative impact by October 2020. The impact likely had a greater influence on small construction businesses, as they typically work in the private residential construction subsector. Compared to their larger counterparts, construction businesses with fewer than five employees were more likely to report large negative effects of COVID-19 on business, but less likely to receive any federal financial assistance.

With the recent resurgence of coronavirus cases across the country, construction companies need to develop a plan to protect their employees and prevent the spread of COVID-19 following the guidance from the Centers for Disease Control and Prevention (CDC) and the Occupational Safety and Health Administration (OSHA). CPWR has created a free planning tool, aligned with the COVID-19 Construction Clearinghouse, to help construction employers of all sizes develop a COVID-19 exposure control plan that conforms to CDC and OSHA guidance. It shows how to develop an effective plan step-by-step, including analyzing job hazards from COVID-19, using personal protective equipment and administrative controls, screening workers and visitors, and training employees. OSHA also offers no-cost, on-site confidential advice to small and medium-sized businesses in all states, and gives priority to high-hazard worksites. Moreover, it is important to stay informed about the latest developments and recommendations since specific guidance may amend based upon changing situations.

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

Building permit *– The approval given by a local jurisdiction to proceed on a construction project. Note that not all areas of the country require a permit for construction. This bulletin only shows permits in permit-issuing locations.*

Construction spending *– Also known as value put in place, this describes Census Bureau estimates of the total dollar value of construction work done in the U.S.*

Housing start *– The beginning of housing construction, which occurs when excavation begins for the footings or foundation of a building.*

Real gross domestic product (GDP) *– Inflation-adjusted value of the goods and services produced by the nation's economy less the value of the goods and services used up in production.*

Seasonally adjusted annual rate *– A rate that accounts for typical seasonal fluctuations and is shown as an annual total.*

Single-family unit *– Fully detached (such as houses) or semidetached homes (such as townhouses) that do not share utilities with another home.*

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

DATA SOURCE

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- Construction Solutions
  http://www.cpwrconstructionsolutions.org/
- Construction Solutions ROI Calculator
  http://www.safecalc.org/
- COVID-19 Construction Clearinghouse
  http://covid.elcosh.org/index.php
- COVID-19 Exposure Control Planning Tool — https://www.covidcpwr.org
- Electronic Library of Construction Occupational Safety and Health
  http://www.elcosh.org/index.php
- Exposure Control Database
  http://ecd.cpwrconstructionsolutions.org/
- Stop Construction Falls
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- Work Safely with Silica
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