## Frequently Asked Questions (FAQs) COVID-19's Effect on the May 2020 New Residential Construction Indicator

#### **Data Collection**

### Did the Census Bureau change its data collection procedures this month?

Yes. Data on new housing units authorized are typically collected from local building permit jurisdictions on paper, online, or via fax. Our National Processing Center (NPC) is responsible for mailing, faxing, data capture, and responding to email messages. Services offered by NPC have been limited to ensure employee safety. As a result, data collection is now occurring primarily via email requests and online reporting. Jurisdictions that have not responded were also mailed a letter encouraging online response.

Data on new housing units started and completed are collected by the Census Bureau's field staff across the country. The Census Bureau has temporarily suspended in-person interviews for its ongoing surveys. Field staff contacted sampled building permit offices by telephone to obtain new residential permits for May, and followed up with builders or owners of newly sampled and previously sampled projects by telephone.

#### How has the collection of data on New Residential Construction been affected?

Many governments and businesses are operating in a limited capacity or have ceased operations. As a result, their ability to provide accurate, timely information to Census may be limited.

For the May 2020 New Residential Construction Report, processing and data quality were monitored throughout the month and quality metrics, including response rates, fell within normal ranges for these surveys.

#### Methodology

## Were any estimates withheld or delayed because of data collection problems?

No. All May estimates were released as scheduled.

## Did the Census Bureau modify its usual weighting or estimation methods used to produce monthly New Residential Construction estimates for May 2020?

No. Standard weighting and estimation methods were used to produce all indicator estimates for May 2020.

#### Has the reliability of the monthly New Residential Construction estimates changed?

No. The reliability of the estimates as measured by the coefficient of variation for monthly totals and the standard error for month-to-month change has not changed substantially.

#### Seasonal Adjustment

# Did the Census Bureau alter the procedures for developing seasonally adjusted estimates for monthly manufacturing data?

Yes. An alteration was made in an option in the Census Bureau's X-13ARIMA-SEATS seasonal adjustment software (the "additive outlier adjustment" option) for the May 2020 data month for some geographic areas. This was done in an effort to ensure that the published seasonally adjusted values fully include any immediate effects. These effects are not typical May effects and so should not be permitted to influence the seasonal factors for May and surrounding months. The altered option was applied to each series whose May unadjusted value was found to be statistically untypical, as indicated by the appropriate t-statistic having a magnitude larger than a commonly used "critical value", and for which there were independent indications of an impact. Such indications confirm that a May survey value has an unusual potential to be atypical and justify the use of a standard critical value. In a usual month, every survey value is "blindly" tested, therefore a higher critical value is used, making it more difficult for the survey value to be classified as untypical.

# What was the impact of altering the seasonal adjustment option (additive outlier adjustment) for the May 2020 data month?

The geographic areas that the alteration impacted may show a change in either direction from April. For these areas, if the May values had been treated as typical, the program would have taken part of the change to be a seasonal effect and would have adjusted the data in a way that would have brought the adjusted percent change from April to May closer to zero. The altered option we used determined the changes in these areas to be out of the ordinary. As a result, the April to May percent change in the adjusted value was left further from zero.

## How was the survey value for a geographic area determined to be out of the ordinary?

Each month, independent indications of how each series performed are researched as part of our normal review of the estimates to detect reporting errors. This research includes, but is not restricted to, conversations with jurisdictions in our survey, a review of publicly available press releases from state and local governments and industry associations, and a review of other economic indicators.

This month, the May value of a geographic area was considered to be out of the ordinary if it was found to be statistically untypical (as indicated by the appropriate t-statistic having a magnitude larger than a "standard" critical value) and independent sources indicated an impact.

## **Additional Information**

#### Are there additional Census Bureau resources available on the COVID-19 Pandemic?

Yes. The Census Bureau has created a <u>COVID-19 reference page</u> which includes links to relevant Census data sources. There is also a more general <u>FAQ on the impact of COVID-19 on</u> <u>operations.</u>

Source: U. S. Census Bureau Economic Indicators Division

Last Revised: June 17, 2020