

**Frequently Asked Questions (FAQs)**  
**COVID-19's Effect on the Monthly Retail Trade Survey**

**Data Collection**

**How has the collection of Monthly Retail Trade Survey data been affected?**

For this month's Monthly Retail Trade Survey, processing and data quality were monitored throughout the month and quality metrics, including response rates, fell within normal ranges for this survey for both sales and inventories.

**Methodology**

**Did the Census Bureau modify its usual weighting or estimation methods used to produce monthly retail estimates for the current month?**

No. Standard weighted and estimation methods were used to produce all monthly retail sales and inventories estimates for the current month.

**How did the Census Bureau treat companies that reported 0 sales in a given month?**

Consistent with our normal processing, companies that temporarily closed and reported \$0 sales in a month would be tabulated with \$0 sales as long as the company was viewed to be representative of other companies in the same industry.

**Has the reliability of the monthly retail estimates changed?**

No. The reliability of the retail estimates as measured by the coefficient of variation for monthly totals and the standard error for month-to-month change has not changed substantially. For the published industries, reported data for the current month exhibited variation similar to that for prior months.

**Seasonal Adjustment**

**Did the Census Bureau alter the procedures for developing seasonally adjusted estimates for monthly retail data?**

Yes. Consistent with our approach since March 2020, 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 current data month for some kinds of business. This was done in effort to ensure that the published seasonally adjusted values fully include any immediate effects. These effects are not typical effects for the current month and so should not be permitted to influence the seasonal factors for the current and surrounding months. The altered option was applied to each kind of business whose current 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 current month survey value has an unusual potential to be untypical 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 current data month?**

The kinds of business that the alteration impacted may show a change in either direction from the previous month. For these kinds of business, if the current month 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 the prior month to current month closer to zero. The altered option we used determined the changes in these kinds of business to be out of the ordinary.

**How was the survey value for a kind of business determined to be out of the ordinary?**

Each month, independent indications of how each kind of business 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 companies in our survey, a review of publicly available press releases from both companies and industry associations, and a review of other economic indicators.

This month, the value of a kind of business 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 [COVID-19 reference page](#) which includes links to relevant Census data sources.

Source: U. S. Census Bureau  
Economic Indicators Division  
Last Revised: June 15, 2021