

Frequently Asked Questions (FAQs)
COVID-19's Effect on the September 2020 Advance Monthly Retail Trade Survey

Data Collection

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

For the September 2020 Advance Monthly Sales for Retail and Food Services Report, processing and data quality were monitored throughout the month and quality metrics, including response rates, met the standards for publication

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

Yes. The Census Bureau utilizes a wide variety of collection methods for its surveys. Data, particularly from businesses, are collected on paper, online, and through telephone interviews. Our National Processing Center (NPC) is responsible for mailing, data capture, responding to email messages, and handling inbound/outbound calls. Services offered by NPC had been limited to ensure employee safety but are now mostly back online. Although data collection has mainly returned to normal, the survey continues to send less physical forms and leverage email outreach.

Methodology

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

No. All estimates were released as scheduled.

Did the Census Bureau modify its usual weighting or estimation methods used to produce monthly retail estimates for September 2020?

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

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 coefficients of variation for monthly totals and the standard errors for month-to-month change has not changed substantially. For the published industries, reported data for September 2020 exhibited variation similar to that measured by the 12-month medians.

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 September 2020 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 September effects and so should not be permitted to influence the seasonal factors for September and surrounding months. The altered option was applied to each kind of business whose September 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 September 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 September 2020 data month?

The kinds of business that the alteration impacted may show a change in either direction from August. For these kinds of business, if the September 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 August to September 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 September 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.