## ADVANCE MONTHLY SALES FOR RETAIL AND FOOD SERVICES, APRIL 2018

Release Number: CB18-72
Intention to Revise: Monthly retail sales estimates will be revised to reflect the introduction of a new sample, new seasonal factors, and the results of the 2016 Annual Retail Trade Survey. Estimates will be restated and the publication tables will be reformatted to incorporate the NAICS 2012 definitions. Revised adjusted and not adjusted estimates are scheduled to be released on our website on May 25, 2018 at 10:00 a.m. EDT. Please visit our Sample Revision FAQs <WWW.census.gov/retail/marts_sample_revision_faqs.html> and our summary of NAICS restatement and publication table changes <www.census.gov/retail/samp_rev/restatnpubtbls.pdf> for additional information.

May 15, 2018 - The U.S. Census Bureau announced the following advance estimates of U.S. retail and food services sales for April 2018:

| ADVANCE MONTHLY SALES |  |  |
| :---: | :---: | :---: |
| April 2018 | \$497.6 billion | 0.3\%* |
| March 2018 (revised) | \$496.1 billion | 0.8\% |
| Next release: June 14, 2018 |  |  |
| * The 90 percent confidence interv al includes zero. There is insufficient statistical ev idence to conclude that the actual change is different from zero. <br> Data adjusted for seasonal variation and holiday and trading-day differences but not for price changes. Source: U.S. Census Bureau, Adv anced Monthly Retail Trade Survey, May 15, 2018. |  |  |



Advance Estimates of U.S. Retail and Food Services
Advance estimates of U.S. retail and food services sales for April 2018, adjusted for seasonal variation and holiday and trading-day differences, but not for price changes, were $\$ 497.6$ billion, an increase of 0.3 percent ( $\pm 0.4$ percent)* from the previous month, and 4.7 percent ( $\pm 0.5$ percent) above April 2017. Total sales for the February 2018 through April 2018 period were up 4.6 percent ( $\pm 0.5$ percent) from the same period a year ago. The February 2018 to March 2018 percent change was revised from up 0.6 percent ( $\pm 0.5$ percent) to up 0.8 percent ( $\pm 0.2$ percent).

Retail trade sales were up 0.4 percent ( $\pm 0.5$ percent)* from March 2018 , and 4.8 percent ( $\pm 0.5$ percent) above last year. Gasoline Stations were up 11.7 percent ( $\pm 1.6$ percent) from April 2017, while Nonstore Retailers were up 9.6 percent ( $\pm 1.4$ percent) from last year.

## Data Inquiries

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U.S. Department of Commerce Economics and Statistics Administration

## General Information

The May 2018 Advance Monthly Retail report is scheduled for release on June 14, 2018 at 8:30 a.m. EDT. View the full schedule in the Economic Briefing Room: <www.census.gov/economic-indicators/>. The full text and tables of this release can be found at <www.census.gov/retail/>.

## EXPLANATORY NOTES

The advance estimates are based on a subsample of the Census Bureau's full retail and food services sample. A stratified random sampling method is used to select approximately 4,700 retail and food services firms whose sales are then weighted and benchmarked to represent the complete universe of over three million retail and food services firms.

## Survey Description

The U.S. Census Bureau conducts the Advance Monthly Retail Trade and Food Services Survey to provide an early estimate of monthly sales by kind of business for retail and food service firms located in the United States. Each month, questionnaires are mailed to a probability sample of approximately 4,700 employer firms selected from the larger Monthly Retail Trade Survey. Advance sales estimates are computed using a link relative estimator. For each detailed industry, we compute a ratio of current-to-previous month weighted sales using data from units for which we have obtained usable responses for both the current and previous month. For each detailed industry, the advance total sales estimates for the current month is computed by multiplying this ratio by the preliminary sales estimate for the previous month (derived from the larger MRTS) at the appropriate industry level. Total estimates for broader industries are computed as the sum of the detailed industry estimates. The link relative estimate is used because imputation is not performed for most nonrespondents in MARTS. For a limited number of nonresponding companies that have influential effects on the estimates, sales may be estimated based on historical performance of that company. The monthly estimates are benchmarked to the annual survey estimates from the Annual Retail Trade Survey once available. The estimates are adjusted for seasonal variation and holiday and trading day differences. Additional information on MARTS and MRTS can be found on the Census Bureau website at: <www.census.gov/retail>.

## Reliability of Estimates

Because the estimates presented in this report are based on a sample survey, they contain sampling error and nonsampling error.
Sampling error is the difference between the estimate and the result that would be obtained from a complete enumeration of the sampling frame conducted under the same survey conditions. This error occurs because only a subset of the entire sampling frame is measured in a sample survey. Standard errors and coefficients of variation (CV), as given in Table 3 of this report, are estimated measures of sampling variation.

The margin of sampling error, as used on page 1 , gives a range about the estimate which is a 90 percent confidence interval. If, for example, the percent change estimate is +1.2 percent and its estimated standard

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error is 0.9 percent, then the margin of sampling error is $\pm 1.753 \times 0.9$ percent or $\pm 1.6$ percent, and the 90 percent confidence interval is -0.4 percent to +2.8 percent. If the interval contains 0 , then one does not have sufficient evidence to conclude at the 90 percent confidence level that the change is different from zero and therefore the change is not statistically significant. Estimated changes shown in the text are statistically significant unless otherwise noted. For a monthly total, the median estimated coefficient of variation is given. The resulting confidence interval is the estimated value $\pm 1.753 \times \mathrm{CV}$ x (the estimated monthly total). The Census Bureau recommends that individuals using estimates in this report incorporate this information into their analyses, as sampling error could affect the conclusions drawn from the estimates.

Nonsampling error encompasses all other factors that contribute to the total error of a sample survey estimate. This type of error can occur because of nonresponse, insufficient coverage of the universe of retail businesses, mistakes in the recording and coding of data, and other errors of collection, response, coverage, or processing. Although nonsampling error is not measured directly, the Census Bureau employs quality control procedures throughout the process to minimize this type of error.

## RESOURCES

## API

The Census Bureau's application programming interface lets developers create custom apps to reach new users and makes key demographic, socio-economic and housing statistics more accessible than ever before. <www.census.gov/developers/>

## FRED Mobile App

Receive the latest updates on the nation's key economic indicators by downloading


ECONOMIC DATA I ST. LOUIS FED the FRED App [https://fred.stlouisfed.org/fred-mobile/](https://fred.stlouisfed.org/fred-mobile/) for both Apple and Android devices. FRED, the signature database of the Federal Reserve Bank of St. Louis, now incorporates the Census Bureau's 13 economic indicators.

## \#\#\#

[^0]Economic Indicators Division, Retail Indicator Branch
U.S. Department of Commerce

Table 1. Estimated Monthly Sales for Retail and Food Services, by Kind of Business
(Total sales estimates are shown in millions of dollars and are based on data from the Advance Monthly Retail Trade Survey, Monthly Retail Trade Survey, and administrative records.)

| NAICs ${ }^{1}$ code | Kind of Business | Not Adjusted |  |  |  |  |  |  | Adjusted ${ }^{2}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 4 Month Total |  | 2018 |  |  | 2017 |  | 2018 |  |  | 2017 |  |
|  |  | 2018 | $\begin{gathered} \% \text { Chg. } \\ 2017 \end{gathered}$ | Apr. ${ }^{3}$ <br> (a) | Mar. (p) | Feb. (r) | Apr. | Mar. | Apr. ${ }^{3}$ <br> (a) | Mar. (p) | Feb. <br> (r) | Apr. <br> (r) | Mar. <br> (r) |
|  | Retail \& food services, |  |  |  |  |  |  |  |  |  |  |  |  |
|  | total | 1,880,272 | 4.7 | 485,432 | 511,939 | 437,594 | 467,675 | 484,550 | 497,559 | 496,083 | 492,379 | 475,312 | 472,84 |
|  | Total (excl. motor vehicle \& parts) | 1,489,533 | 5.0 | 384,794 | 401,096 | 347,174 | 370,500 | 378,604 | 395,992 | 394,618 | 392,992 | 377,904 | 376,262 |
|  | Retail | 1,651,739 | 4.9 | 426,101 | 449,616 | 384,039 | 410,138 | 425,295 | 439,220 | 437,564 | 434,544 | 419,124 | 416,676 |
|  | GAFO ${ }^{4}$ | (*) | (*) | (*) | 109,214 | 93,755 | 100,776 | 103,122 | (*) | 108,574 | 108,206 | 106,166 | 105,484 |
| 441 | Motor vehicle \& parts dealers | 390,739 | 3.7 | 100,638 | 110,843 | 90,420 | 97,175 | 105,946 | 101,567 | 101,465 | 99,387 | 97,408 | 96,580 |
| 4411, 4412 | Auto \& other motor veh. dealers . | 361,873 | 4.0 | 93,305 | 102,915 | 83,720 | 89,790 | 97,894 | 94,152 | 93,986 | 92,000 | 89,880 | 89,076 |
| 44111 | New car dealers | (*) | (*) | (*) | 84,703 | 68,843 | 72,753 | 79,710 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 4413 | Auto parts, acc. \& tire stores | (*) | (*) | ${ }^{*}$ ) | 7,928 | 6,700 | 7,385 | 8,052 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 442 | Furniture \& home furn. stores | 37,097 | 5.3 | 9,256 | 10,273 | 8,685 | 8,749 | 9,797 | 10,072 | 9,993 | 9,858 | 9,489 | 9,549 |
| 4421 | Furniture stores | (*) | (*) | (*) | 5,673 | 4,785 | 4,599 | 5,292 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 4422 | Home furnishings stores | (*) | (*) | (*) | 4,600 | 3,900 | 4,150 | 4,505 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 443 | Electronics \& appliance stores | 30,286 | 3.5 | 7,168 | 8,094 | 7,344 | 7,013 | 7,824 | 8,333 | 8,340 | 8,286 | 8,193 | 8,112 |
| 44311, 13 | Appl., T.V. \& camera | ${ }^{*}$ ) | (*) | ${ }^{*}{ }^{*}$ | 5,846 | 5,240 | 5,265 | 5,637 | (*) | 6,046 | 5,982 | 5,997 | 5,878 |
| 44312 | Computer \& software stores | (*) | (*) | (*) | (S) | (S) | (S) | (S) | (*) | (S) | (S) | (S) | (S) |
| 444 | Building material \& garden eq. \& supplies dealers. | 118,949 | 5.0 | 35,676 | 32,282 | 25,475 | 33,776 | 31,454 | 32,464 | 32,323 | 32,665 | 31,099 | 31,012 |
| 4441 | Building mat. \& sup. dealers .... | (*) | (*) | (*) | 27,690 | 22,417 | 27,695 | 26,868 | (*) | 28,055 | 28,233 | 26,914 | 26,734 |
| 445 | Food \& beverage stores............... | 237,296 | 3.4 | 58,743 | 63,097 | 55,837 | 58,782 | 59,485 | 61,661 | 61,439 | 61,324 | 59,632 | 59,510 |
| 4451 | Grocery stores | 213,217 | 3.2 | 52,650 | 56,431 | 50,167 | 52,677 | 53,481 | 54,958 | 54,681 | 54,648 | 53,209 | 53,162 |
| 4453 | Beer, wine \& liquor stores. | ${ }^{*}$ ) | ${ }^{*}$ ) | ${ }^{*}{ }^{*}$ | 4,584 | 3,908 | 4,188 | 4,184 | (*) | 4,731 | 4,669 | 4,508 | 4,428 |
| 446 | Health \& personal care stores ....... | 108,180 | 0.7 | 26,852 | 28,596 | 25,463 | 26,795 | 28,479 | 27,512 | 27,629 | 27,321 | 27,652 | 27,436 |
| 44611 | Pharmacies \& drug stores | (*) | ${ }^{*}$ * | ${ }^{*}$ ) | 23,117 | 20,941 | 22,249 | 23,232 | (*) | 22,553 | 22,397 | 22,773 | 22,599 |
| 447 | Gasoline stations | 157,438 | 11.1 | 42,089 | 41,467 | 36,017 | 37,607 | 37,253 | 42,131 | 41,801 | 41,686 | 37,720 | 37,744 |
| 448 | Clothing \& clothing accessories stores $\qquad$ | 78,343 | 3.6 | 20,879 | 22,554 | 18,854 | 20,970 | 21,066 | 22,482 | 22,162 | 22,212 | 21,587 | 21,598 |
| 44811 | Men's clothing stores | ${ }^{*}$ ) | (*) | (*) | 852 | 667 | 804 | 765 | (*) | 820 | 803 | 749 | 785 |
| 44812 | Women's clothing stores | (*) | (*) | (*) | 3,482 | 2,687 | 3,533 | 3,364 | (*) | 3,248 | 3,273 | 3,333 | 3,272 |
| 448 | Family clothing stores | (*) | (*) | (*) | 8,7 | 6,874 | 8,18 | 8,11 | (NA) | (NA) | (NA) | (NA) | (NA) |
| 4482 | Shoe stores | (*) | (*) | (*) | 3,209 | 2,631 | 2,996 | 3,145 | (*) | 2,928 | 2,923 | 2,978 | 3,059 |
| 451 | Sporting goods, hobby, book \& music stores. $\qquad$ | 24,720 | -2.1 | 6,207 | 6,901 | 5,631 | 6,449 | 6,750 | 7,078 | 7,085 | 7,092 | 7,158 | 7,120 |
| 452 | General merchandise stores.... | 216,088 | 2.6 | 55,031 | 59,156 | 51,224 | 55,451 | 55,442 | 58,748 | 58,595 | 58,353 | 57,336 | 56,673 |
| 4521 | Department stores (ex. L.D.). | 43,126 | -1.0 | 11,285 | 12,148 | 10,098 | 11,883 | 11,943 | 12,527 | 12,502 | 12,535 | 12,730 | 12,650 |
| 4521 | Department stores (incl. L.D.) ${ }^{5}$ | (*) | (*) | (*) | 12,444 | 10,352 | 12,160 | 12,213 | (*) | (NA) | (NA) | (NA) | (NA) |
| 4529 | Other general merch. stores.... .. | (*) | (*) | (*) | 47,008 | 41,126 | 43,568 | 43,499 | (*) | 46,093 | 45,818 | 44,606 | 44,023 |
| 45291 | Warehouse clubs \& supercenters. | (*) | (*) | $\left.{ }^{*}\right)$ | 40,416 | 35,387 | 37,472 | 37,413 | ${ }^{*}{ }^{*}$ | 39,662 | 39,406 | 38,354 | 37,906 |
| 45299 | All oth. gen. merch. stores | (*) | (*) | (*) | 6,592 | 5,739 | 6,096 | 6,086 | (*) | 6,431 | 6,412 | 6,252 | 6,117 |
| 453 | Miscellaneous store retailers | 41,558 | 5.7 | 10,761 | 10,937 | 9,791 | 10,302 | 10,504 | 11,267 | 11,162 | 11,284 | 10,828 | 10,813 |
| 454 | Nonstore retailers ................. | 211,045 | 10.7 | 52,801 | 55,416 | 49,298 | 47,069 | 51,295 | 55,905 | 55,570 | 55,076 | 51,022 | 50,529 |
| 4541 | Elect. shopping \& m/o houses .... | (*) | (*) | (*) | 47,848 | 42,111 | 41,275 | 44,061 | (*) | 48,824 | 48,515 | 44,815 | 44,238 |
| 72 | Food services \& drinking places ... | 228,533 | 3.3 | 59,331 | 62,323 | 53,555 | 57,537 | 59,255 | 58,339 | 58,519 | 57,835 | 56,188 | 56,166 |

(*) Advance estimates are not available for this kind of business.
(NA) Not available
(a) Advance estimate
(p) Preliminary estimate
(r) Revised estimate
(S) Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than $30 \%$ ), poor response quality (total quantity response rate is less than $\mathbf{5 0 \%}$ ), or other concerns about the estimate's quality.
(1) For a full description of the NAICS codes used in this table, see http://www.census.gov/eos/www/naics
(2) Estimates are concurrently adjusted for seasonal variation and for holiday and trading day differences, but not for price changes. Concurrent seasonal adjustment uses all available unadjusted estimates as input to the X-13ARIMA-SEATS program. The factors derived from the program are used in calculating all seasonally adjusted estimates shown in this table. Year-to-date seasonally adjusted sales estimates are not tabulated. Adjustment factors and explanatory material can be found on the Internet at http://www.census.gov/retail
(3) Advance estimates are based on early reports obtained from a small sample of firms selected from the larger Monthly Retail Trade Survey (MRTS) sample. All other estimates are from the MRTS sample.
(4) GAFO represents firms which specialize in department store types of merchandise and is comprised of furniture \& home furnishings (442), electronics \& appliances (443), clothing \& accessories (448), sporting goods, hobby, book, and music (451), general merchandise (452), office supply, stationery, and gift stores (4532).
(5) Estimates include data for leased departments operated within department stores. Data for this line are not included in broader kind-of-business totals.

Source: U.S. Census Bureau, Advance Monthly Retail Trade Survey, May 15, 2018. Table 3 provides estimated measures of sampling variability. Additional information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions may be found at
<www.census.gov/retail/how_surveys_are_collected.html>.

Table 2. Estimated Change in Monthly Sales for Retail and Food Services, by Kind of Business
(Estimates are shown as percents and are based on data from the Advance Monthly Retail Trade Survey, Monthly Retail Trade Survey, and administrative records.)

(p) Preliminary estimate
(r) Revised estimate
(1) Estimates shown in this table are derived from adjusted estimates provided in Table 1 of this report.

Source: U.S. Census Bureau, Advance Monthly Retail Trade Survey, May 15, 2018. Table 3 provides estimated measures of sampling variability. Additional information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions may be found at <www.census.gov/retail/how_surveys_are_collected.html>.

Table 3. Estimated Measures of Sampling Variability and Revision to Advance Estimates Apr. 2018
(Estimates are shown as percents and are based on data from the Advance Monthly Retail Trade Survey and Monthly Retail Trade Survey)

| NAICS Code | Kind of Business | Median $\mathrm{CV}^{(1)}$ for Current Mo. (\%) | Median standard error ${ }^{(1)}$ for Percent change |  |  | Revision for month-to-month change ${ }^{(2)}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | ```Previous Mo. to Current Mo.``` | ```Previous Qtr. to Current Qtr.``` | $\begin{aligned} & \text { Current Mo. } \\ & \text { to same } \\ & \text { Mo. Last Yr. } \end{aligned}$ | Average revision | Median absolute revision |
|  | Retail \& food services, total $\qquad$ | 0.6 | 0.2 | 0.2 | 0.3 | 0.1 | 0.2 |
|  | Total (excl. motor vehicle \& parts) .. | 0.7 | 0.2 | 0.2 | 0.4 | 0.1 | 0.2 |
|  | Retail ................................... | 0.6 | 0.3 | 0.1 | 0.3 | 0.1 | 0.2 |
| 441 | Motor vehicle \& parts dealers ........ | 1.4 | 0.8 | 0.4 | 0.9 | 0.1 | 0.5 |
| 4411, 4412 | Auto \& other motor veh. dealers . | 1.5 | 0.8 | 0.4 | 1.0 | 0.1 | 0.6 |
| 442 | Furniture \& home furn. stores....... | 2.5 | 1.0 | 0.7 | 1.3 | 0.1 | 0.6 |
| 443 | Electronics \& appliance stores ..... | 2.6 | 0.6 | 0.5 | 1.3 | 0.1 | 0.7 |
| 444 | Building material \& garden eq. \&.... supplies dealers. | 2.5 | 1.0 | 0.7 | 1.3 | 0.1 | 0.6 |
| 445 | Food \& beverage stores................ | 1.5 | 0.2 | 0.2 | 0.4 | 0.0 | 0.2 |
| 4451 | Grocery stores ...................... | 1.6 | 0.1 | 0.2 | 0.5 | 0.0 | 0.2 |
| 446 | Health \& personal care stores ...... | 2.2 | 0.4 | 0.4 | 1.3 | 0.0 | 0.3 |
| 447 | Gasoline stations ...................... | 1.9 | 0.5 | 0.4 | 0.9 | 0.4 | 0.4 |
| 448 | Clothing \& clothing accessories stores $\qquad$ | 2.4 | 0.7 | 0.4 | 0.8 | 0.1 | 0.4 |
| 451 | Sporting goods, hobby, book \& music stores. $\qquad$ | 2.7 | 1.0 | 0.9 | 1.3 | -0.2 | 0.6 |
| 452 | General merchandise stores......... | 0.2 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 |
| 4521 | Department stores (ex. L.D.)..... | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 |
| 453 | Miscellaneous store retailers ........ | 3.0 | 2.4 | 1.1 | 2.4 | 0.4 | 1.1 |
| 454 | Nonstore retailers ...................... | 1.6 | 0.4 | 0.5 | 0.8 | 0.1 | 0.5 |
| 722 | Food services \& drinking places .. | 2.1 | 1.0 | 0.6 | 1.4 | 0.0 | 0.4 |

(1) Estimated measures of sampling variability are based on estimates not adjusted for seasonal variation or holiday or trading day variation. Medians are based on estimates for the most recent 12 months.
(2) These columns provide measures of the difference between the advance-to-preliminary and preliminary-to-final estimates of month-to-month change for the same pair of months as measured by the Advance sample and MRTS sample. The average and median revisions are based on estimates for the most recent 12 months.
Source: U.S. Census Bureau, Advance Monthly Retail Trade Survey, May 15, 2018. Additional information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions may be found at <www.census.gov/retail/how_surveys_are_collected.html>.


[^0]:    * The 90 percent confidence interval includes zero. There is insufficient statistical evidence to conclude that the actual change is different from zero.

