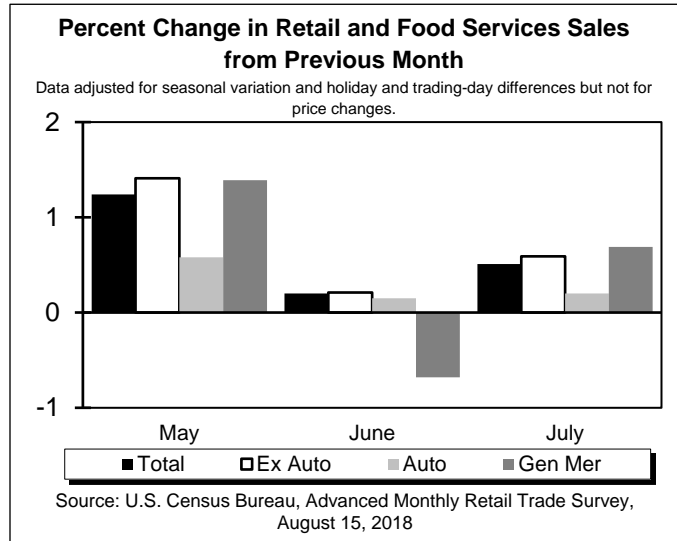# ADVANCE MONTHLY SALES FOR RETAIL AND FOOD SERVICES, JULY 2018

Release Number: CB18-120

August 15, 2018 — The U.S. Census Bureau announced the following advance estimates of U.S. retail and food services sales for July 2018:

ADVANCE MONTHLY SALES		
July 2018	**$507.5 billion**	**0.5%**
June 2018 (revised)	**$504.9 billion**	**0.2%***
Next release: September 14, 2018		

* The 90 percent confidence interval includes zero. There is insufficient statistical evidence to conclude that the actual change is different from zero.
Data adjusted for seasonal variation and holiday and trading-day differences but not for price changes. Source: U.S. Census Bureau, Advanced Monthly Retail Trade Survey, August 15, 2018.

Percent Change in Retail and Food Services Sales from Previous Month
Data adjusted for seasonal variation and holiday and trading-day differences but not for price changes.

Source: U.S. Census Bureau, Advanced Monthly Retail Trade Survey, August 15, 2018

Advance Estimates of U.S. Retail and Food Services

Advance estimates of U.S. retail and food services sales for July 2018, adjusted for seasonal variation and holiday and trading-day differences, but not for price changes, were $507.5 billion, an increase of 0.5 percent (±0.4 percent) from the previous month, and 6.4 percent (±0.5 percent) above July 2017. Total sales for the May 2018 through July 2018 period were up 6.3 percent (±0.5 percent) from the same period a year ago. The May 2018 to June 2018 percent change was revised from up 0.5 percent (±0.4 percent) to up 0.2 percent (±0.2 percent)*.

Retail trade sales were up 0.4 percent (±0.5 percent)* from June 2018, and 6.0 percent (±0.5 percent) above last year. Gasoline Stations were up 22.2 percent (±1.6 percent) from July 2017, while Nonstore Retailers were up 8.7 percent (±1.4 percent) from last year.

General Information

The August 2018 Advance Monthly Retail report is scheduled for release on September 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 5,500 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.

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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 5,500 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 error is 0.9 percent, then the margin of sampling error is ±1.753 x 0.9 percent or ±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 ±1.753 x 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

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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 the FRED App <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.

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

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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]				
		7 Month Total		2018			2017		2018			2017	
		2018	% Chg. 2017	Jul.[3] (a)	Jun. (p)	May (r)	Jul.	Jun.	Jul.[3] (a)	Jun. (p)	May (r)	Jul. (r)	Jun. (r)
	Retail & food services, total	3,427,350	5.5	507,575	510,929	531,011	476,983	483,338	507,533	504,948	503,955	476,961	476,074
	Total (excl. motor vehicle & parts) ...	2,709,852	6.0	401,310	403,923	419,735	373,897	379,823	404,441	402,058	401,215	377,394	376,491
	Total (excl. gasoline stations)	3,131,228	4.7	460,872	464,916	484,362	438,586	444,729	463,967	461,743	460,881	441,309	440,092
	Total (excl. motor vehicle & parts & gasoline stations)	2,413,730	5.0	354,607	357,910	373,086	335,500	341,214	360,875	358,853	358,141	341,742	340,509
	Retail	3,012,134	5.5	445,329	448,433	468,027	419,913	426,090	445,964	444,154	444,141	420,845	419,949
	GAFO[4]	(*)	(*)	(*)	106,833	110,772	102,832	103,232	(*)	109,683	110,515	106,626	106,639
441	**Motor vehicle & parts dealers**	717,498	3.7	106,265	107,006	111,276	103,086	103,515	103,092	102,890	102,740	99,567	99,583
4411, 4412	Auto & other motor veh. dealers .	664,901	4.0	98,510	99,181	103,263	95,489	95,672	95,548	95,366	95,173	92,082	92,170
44111	New car dealers	(*)	(*)	(*)	80,558	84,444	78,070	76,719	(NA)	(NA)	(NA)	(NA)	(NA)
4413	Auto parts, acc. & tire stores......	(*)	(*)	(*)	7,825	8,013	7,597	7,843	(*)	7,524	7,567	7,485	7,413
442	**Furniture & home furn. stores**	68,055	5.0	9,958	10,099	10,286	9,588	9,717	10,141	10,191	10,164	9,794	9,785
4421	Furniture stores	(*)	(*)	(*)	5,637	5,577	5,090	5,059	(NA)	(NA)	(NA)	(NA)	(NA)
4422	Home furnishings stores	(*)	(*)	(*)	4,462	4,709	4,498	4,658	(NA)	(NA)	(NA)	(NA)	(NA)
443	**Electronics & appliance stores**	53,026	2.4	7,713	7,759	7,645	7,400	7,562	8,302	8,290	8,256	7,966	8,062
444	**Building material & garden eq. & supplies dealers**.....................	228,852	4.0	34,408	36,597	40,766	32,515	36,158	32,544	32,540	32,492	31,466	31,109
4441	Building mat. & sup. dealers	(*)	(*)	(*)	31,772	34,446	28,329	30,765	(*)	28,598	28,586	27,083	26,892
445	**Food & beverage stores**..............	426,486	3.9	62,762	62,243	63,951	60,593	59,566	62,264	61,897	61,882	59,504	59,474
4451	Grocery stores	381,549	3.9	56,002	55,338	57,035	53,859	52,941	55,558	55,118	55,106	52,959	52,941
4453	Beer, wine & liquor stores	(*)	(*)	(*)	4,936	4,897	4,798	4,676	(*)	4,778	4,787	4,574	4,566
446	**Health & personal care stores**	197,931	4.3	28,461	29,042	29,592	26,789	27,707	29,221	29,335	29,012	27,818	27,763
44611	Pharmacies & drug stores	(*)	(*)	(*)	24,053	24,709	22,286	23,055	(*)	24,345	24,036	22,975	23,124
447	**Gasoline stations**	296,122	14.8	46,703	46,013	46,649	38,397	38,609	43,566	43,205	43,074	35,652	35,982
448	**Clothing & clothing accessories stores**	146,562	5.2	21,907	21,773	24,144	20,786	20,568	23,252	22,954	23,323	21,859	21,848
44811	Men's clothing stores	(*)	(*)	(*)	827	913	654	757	(*)	807	812	734	745
44812	Women's clothing stores	(*)	(*)	(*)	3,334	3,845	3,099	3,249	(*)	3,406	3,499	3,361	3,353
44814	Family clothing stores	(*)	(*)	(*)	8,721	9,526	8,766	8,439	(NA)	(NA)	(NA)	(NA)	(NA)
4482	Shoe stores	(*)	(*)	(*)	2,876	3,090	2,926	2,718	(*)	3,109	3,109	2,938	2,967
451	**Sporting goods, hobby, musical instrument, & book stores**	43,413	-2.0	6,076	6,543	6,517	6,442	6,658	6,626	6,738	6,882	6,964	6,957
452	**General merchandise stores**.........	391,830	3.3	57,280	58,357	59,796	56,280	56,466	59,503	59,096	59,500	57,664	57,619
4521	Department stores	78,020	-0.3	11,366	11,601	12,406	11,536	11,634	12,567	12,418	12,685	12,528	12,479
4529	Other general merch. stores..... ..	(*)	(*)	(*)	46,756	47,390	44,744	44,832	(*)	46,678	46,815	45,136	45,140
45291	Warehouse clubs & supercenters....................	(*)	(*)	(*)	39,906	40,045	38,376	38,260	(*)	39,787	39,846	38,530	38,607
45299	All oth. gen. merch. stores......	(*)	(*)	(*)	6,850	7,345	6,368	6,572	(*)	6,891	6,969	6,606	6,533
453	**Miscellaneous store retailers**	74,457	5.3	10,889	11,228	12,304	10,517	10,758	10,853	10,884	11,051	10,520	10,326
454	**Nonstore retailers**	367,902	10.0	52,907	51,773	55,101	47,520	48,806	56,600	56,134	55,765	52,071	51,441
4541	Elect. shopping & m/o houses	(*)	(*)	(*)	46,109	48,589	42,449	43,208	(*)	49,580	49,080	45,990	45,387
722	**Food services & drinking places** ...	415,216	5.5	62,246	62,496	62,984	57,070	57,248	61,569	60,794	59,814	56,116	56,125

(*) 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 50%), 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, musical instrument, and book (451), general merchandise (452), office supply, stationery, and gift stores (4532).

Source: U.S. Census Bureau, Advance Monthly Retail Trade Survey, August 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.)

NAICS code	Kind of Business	Percent Change[1]					
		Jul. 2018 Advance from --		Jun. 2018 Preliminary from --		May 2018 through Jul. 2018 from --	
		Jun. 2018 (p)	Jul. 2017 (r)	May 2018 (r)	Jun. 2017 (r)	Feb. 2018 through Apr. 2018	May 2017 through Jul. 2017
	Retail & food services, total	0.5	6.4	0.2	6.1	2.0	6.3
	Total (excl. motor vehicle & parts)	0.6	7.2	0.2	6.8	2.1	7.0
	Total (excl. gasoline stations)	0.5	5.1	0.2	4.9	1.9	5.1
	Total (excl. motor vehicle & parts & gasoline stations)	0.6	5.6	0.2	5.4	2.0	5.6
	Retail	0.4	6.0	0.0	5.8	1.7	6.0
441	Motor vehicle & parts dealers	0.2	3.5	0.1	3.3	1.5	3.7
4411, 4412	Auto & other motor veh. dealers ..	0.2	3.8	0.2	3.5	1.6	3.8
442	Furniture & home furn. stores	-0.5	3.5	0.3	4.1	0.2	4.1
443	Electronics & appliance stores	0.1	4.2	0.4	2.8	1.0	3.0
444	Building material & garden eq. & supplies dealers.........................	0.0	3.4	0.1	4.6	1.3	4.4
445	Food & beverage stores...............	0.6	4.6	0.0	4.1	0.8	4.2
4451	Grocery stores	0.8	4.9	0.0	4.1	0.9	4.3
446	Health & personal care stores	-0.4	5.0	1.1	5.7	3.3	5.1
447	Gasoline stations	0.8	22.2	0.3	20.1	3.7	20.2
448	Clothing & clothing accessories stores	1.3	6.4	-1.6	5.1	3.3	6.6
451	Sporting goods, hobby, musical instrument, & book stores	-1.7	-4.9	-2.1	-3.1	-3.1	-2.8
452	General merchandise stores..........	0.7	3.2	-0.7	2.6	1.0	3.6
4521	Department stores	1.2	0.3	-2.1	-0.5	0.9	0.6
453	Miscellaneous store retailers	-0.3	3.2	-1.5	5.4	0.4	5.2
454	Nonstore retailers	0.8	8.7	0.7	9.1	2.1	8.9
722	Food services & drinking places	1.3	9.7	1.6	8.3	4.6	8.2

(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, August 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 Jul. 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 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.	Current Mo. to same Mo. Last Yr.	Average revision	Median absolute revision
	Retail & food services, total ……………..…………………	0.7	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
	Total (excl. gasoline stations) ……….	0.6	0.3	0.2	0.4	0.1	0.3
	Total (excl. motor vehicle & parts & gasoline stations) ……………………	0.7	0.2	0.2	0.4	0.1	0.1
	Retail, total …..……………………..	0.5	0.3	0.1	0.3	0.1	0.2
441	Motor vehicle & parts dealers ……..	1.1	1.0	0.4	0.9	0.0	0.4
4411, 4412	Auto & other motor veh. dealers .	1.1	1.0	0.4	1.0	0.0	0.5
442	Furniture & home furn. stores…….	2.1	1.1	0.7	1.3	0.3	0.7
443	Electronics & appliance stores …..	1.8	0.7	0.7	1.3	0.6	0.7
444	Building material & garden eq. &…. supplies dealers……………………..	1.8	1.0	0.9	1.3	0.1	0.7
445	Food & beverage stores……………	0.8	0.2	0.3	0.4	0.1	0.2
4451	Grocery stores …………………..	0.8	0.2	0.3	0.5	0.1	0.2
446	Health & personal care stores ……	1.6	0.4	0.6	1.3	0.0	0.4
447	Gasoline stations ………………….	1.8	0.5	0.6	0.9	0.6	0.7
448	Clothing & clothing accessories stores ……………………………..	1.4	0.6	0.7	0.8	0.1	0.4
451	Sporting goods, hobby, musical instrument, & book stores ………..	3.2	0.6	1.2	1.3	0.8	1.0
452	General merchandise stores……….	0.6	0.1	0.2	0.1	0.0	0.1
4521	Department stores ………………..	0.0	0.0	0.0	0.0	0.0	0.1
453	Miscellaneous store retailers ……..	3.4	2.5	1.4	2.4	-0.1	1.7
454	Nonstore retailers …………………..	1.2	0.5	0.3	0.8	0.1	0.6
722	Food services & drinking places ..	2.9	0.8	0.9	1.4	0.1	0.3

(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 period January 2018 - present. For measures of sampling variability where there are not enough months collected on the new sample basis to calculate medians, the last available medians from the prior sample are provided.

(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 with exception to the following: Total (excl. gasoline stations), Total (excl. motor vehicles & parts & gasoline stations), Electronics & appliance stores, and Sporting goods, hobby, musical instrument, & book stores which are based on estimates from April 2018 to present until we have 12 months of revisions.

Source: U.S. Census Bureau, Advance Monthly Retail Trade Survey, August 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>.