ADVANCE MONTHLY SALES FOR RETAIL AND FOOD SERVICES, SEPTEMBER 2018

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

ADVANCE MONTHLY SALES		
September 2018	**$509.0 billion**	**0.1%***
August 2018 (revised)	**$508.5 billion**	**0.1%***

Next release: November 15, 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, October 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, October 15, 2018
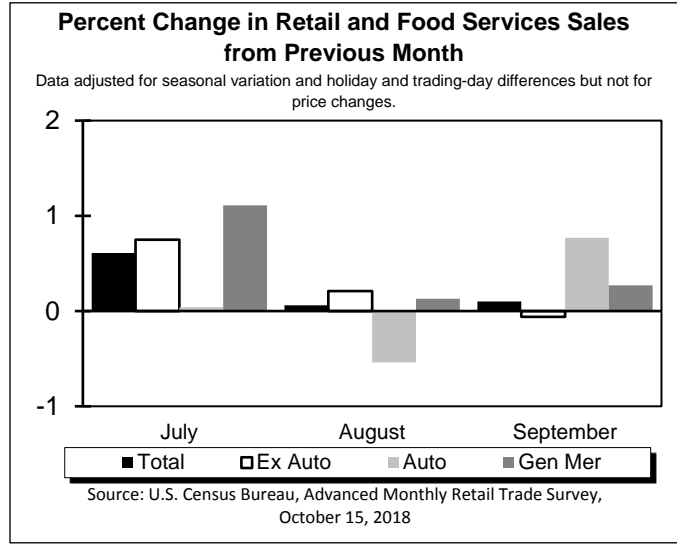
Advance Estimates of U.S. Retail and Food Services

Advance estimates of U.S. retail and food services sales for September 2018, adjusted for seasonal variation and holiday and trading-day differences, but not for price changes, were $509.0 billion, an increase of 0.1 percent (±0.5 percent)* from the previous month, and 4.7 percent (±0.5 percent) above September 2017. Total sales for the July 2018 through September 2018 period were up 5.9 percent (±0.5 percent) from the same period a year ago. The July 2018 to August 2018 percent change was unrevised from up 0.1 percent (±0.1 percent)*.

Retail trade sales were up 0.4 percent (±0.5 percent)* from August 2018, and 4.4 percent (±0.5 percent) above last year. Gasoline Stations were up 11.4 percent (±1.6 percent) from September 2017, while Nonstore Retailers were also up 11.4 percent (±1.4 percent) from last year.

General Information

The October 2018 Advance Monthly Retail report is scheduled for release on November 15, 2018 at 8:30 a.m. EST. 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

United States Census Bureau

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
census.gov

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.

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 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.

Hurricanes

For information on the impact of Hurricane Florence on the compilation of this report, please see the Frequently Asked Questions (FAQs) on our website at: <www.census.gov/retail/marts/www/hurricanessept18faq.pdf>.

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.

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

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]				
		9 Month Total		2018			2017		2018			2017	
		2018	% Chg. 2017	Sep.[3] (a)	Aug. (p)	Jul. (r)	Sep.	Aug.	Sep.[3] (a)	Aug. (p)	Jul. (r)	Sep. (r)	Aug. (r)
	Retail & food services, total	4,440,041	5.4	485,752	525,319	508,776	471,043	492,031	509,041	508,514	508,230	486,103	477,452
	Total (excl. motor vehicle & parts) ...	3,512,852	6.0	386,277	414,695	402,894	370,260	386,372	406,104	406,364	405,525	384,238	379,746
	Total (excl. gasoline stations)	4,052,218	4.6	441,501	477,890	462,185	431,097	452,214	465,401	464,517	464,728	446,940	440,516
	Total (excl. motor vehicle & parts & gasoline stations)	3,125,029	5.0	342,026	367,266	356,303	330,314	346,555	362,464	362,367	362,023	345,075	342,810
	Retail	3,902,605	5.3	426,934	461,937	446,457	415,471	434,961	448,466	446,798	446,711	429,570	421,225
	GAFO[4]	*	*	*	113,198	106,560	101,099	109,093	*	110,543	111,220	107,224	106,960
441	Motor vehicle & parts dealers	927,189	3.2	99,475	110,624	105,882	100,783	105,659	102,937	102,150	102,705	101,865	97,706
4411, 4412	Auto & other motor veh. dealers .	858,881	3.4	92,019	102,466	98,030	93,280	97,717	95,258	94,526	95,082	94,317	90,311
44111	New car dealers	*	*	*	84,836	80,640	77,688	80,710	NA	NA	NA	NA	NA
4413	Auto parts, acc. & tire stores............	*	*	*	8,158	7,852	7,503	7,942	*	7,624	7,623	7,548	7,395
442	Furniture & home furn. stores	88,867	4.6	10,029	10,624	10,113	9,879	10,246	10,276	10,167	10,246	9,849	9,833
4421	Furniture stores	*	*	*	5,772	5,490	5,202	5,227	NA	NA	NA	NA	NA
4422	Home furnishings stores	*	*	*	4,852	4,623	4,677	5,019	NA	NA	NA	NA	NA
443	Electronics & appliance stores	69,238	3.0	7,986	8,175	7,702	7,634	7,826	8,460	8,385	8,335	7,994	8,027
444	Building material & garden eq. & supplies dealers..................................	294,467	3.6	31,287	34,247	34,501	31,394	32,826	32,891	32,853	32,579	32,415	31,358
4441	Building mat. & sup. dealers	*	*	*	30,652	30,818	27,935	28,987	(*)	28,754	28,615	28,160	27,015
445	Food & beverage stores.........................	549,994	3.8	60,535	63,027	62,797	59,275	60,384	62,159	62,033	62,226	60,399	59,801
4451	Grocery stores	491,458	3.7	53,969	56,159	55,872	52,865	53,769	55,240	55,275	55,429	53,779	53,184
4453	Beer, wine & liquor stores	*	*	*	4,900	4,963	4,538	4,647	(*)	4,762	4,791	4,607	4,596
446	Health & personal care stores	255,497	4.1	27,801	29,926	28,497	27,318	28,457	29,264	29,339	29,198	28,105	28,036
44611	Pharmacies & drug stores	*	*	*	24,911	23,811	22,591	23,519	(*)	24,567	24,297	23,362	23,286
447	Gasoline stations	387,823	14.8	44,251	47,429	46,591	39,946	39,817	43,640	43,997	43,502	39,163	36,936
448	Clothing & clothing accessories stores	191,254	5.0	20,660	23,632	22,193	20,038	22,832	22,913	22,795	23,458	21,907	21,940
44811	Men's clothing stores	*	*	*	776	709	733	688	*	820	812	747	727
44812	Women's clothing stores	*	*	*	3,400	3,177	3,081	3,214	*	3,469	3,461	3,236	3,286
44814	Family clothing stores	*	*	*	9,624	9,264	8,135	9,184	NA	NA	NA	NA	NA
4482	Shoe stores	*	*	*	3,775	3,136	2,708	3,870	*	2,931	3,145	2,986	3,012
451	Sporting goods, hobby, musical instrument, & book stores	56,918	-2.7	6,226	7,213	6,133	6,643	7,549	6,659	6,611	6,645	6,920	6,913
452	General merchandise stores..................	509,833	3.7	56,451	60,624	57,907	54,553	57,871	60,294	60,129	60,052	58,209	57,918
4521	Department stores	101,623	-0.3	11,024	12,555	11,381	11,214	12,455	12,360	12,454	12,567	12,554	12,538
4529	Other general merch. stores....	*	*	*	48,069	46,526	43,339	45,416	*	47,675	47,485	45,655	45,380
45291	Warehouse clubs & supercenters................................	*	*	*	41,173	39,796	37,040	38,943	*	40,645	40,525	38,989	38,788
45299	All oth. gen. merch. stores............	*	*	*	6,896	6,730	6,299	6,473	*	7,030	6,960	6,666	6,592
453	Miscellaneous store retailers	96,276	4.4	10,501	11,439	10,680	10,486	11,056	10,910	10,903	10,618	10,602	10,531
454	Nonstore retailers	475,249	9.9	51,732	54,977	53,461	47,522	50,438	58,063	57,436	57,147	52,142	52,226
4541	Elect. shopping & m/o houses	*	*	*	49,075	47,830	41,965	44,818	*	50,750	50,400	45,813	46,014
722	Food services & drinking places	537,436	6.1	58,818	63,382	62,319	55,572	57,070	60,575	61,716	61,519	56,533	56,227

(*) 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, October 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]					
		Sep. 2018 Advance from --		Aug. 2018 Preliminary from --		Jul. 2018 through Sep. 2018 from --	
		Aug. 2018 (p)	Sep. 2017 (r)	Jul. 2018 (r)	Aug. 2017 (r)	Apr. 2018 through Jun. 2018	Jul. 2017 through Sep. 2017
	Retail & food services, total	**0.1**	**4.7**	**0.1**	**6.5**	**1.3**	**5.9**
	Total (excl. motor vehicle & parts)	-0.1	5.7	0.2	7.0	1.6	6.7
	Total (excl. gasoline stations)	0.2	4.1	0.0	5.4	1.2	5.0
	Total (excl. motor vehicle & parts & gasoline stations)	0.0	5.0	0.1	5.7	1.5	5.6
	Retail	0.4	4.4	0.0	6.1	1.0	5.6
441	**Motor vehicle & parts dealers**	**0.8**	**1.1**	**-0.5**	**4.5**	**0.1**	**2.9**
4411, 4412	Auto & other motor veh. dealers ...	0.8	1.0	-0.6	4.7	0.0	2.9
442	**Furniture & home furn. stores**	**1.1**	**4.3**	**-0.8**	**3.4**	**-0.1**	**4.2**
443	**Electronics & appliance stores**	**0.9**	**5.8**	**0.6**	**4.5**	**1.4**	**4.9**
444	**Building material & garden eq. & supplies dealers**............................	**0.1**	**1.5**	**0.8**	**4.8**	**1.6**	**3.3**
445	**Food & beverage stores**..........................	**0.2**	**2.9**	**-0.3**	**3.7**	**0.5**	**3.7**
4451	Grocery stores	-0.1	2.7	-0.3	3.9	0.5	3.8
446	**Health & personal care stores**	**-0.3**	**4.1**	**0.5**	**4.6**	**1.2**	**4.6**
447	**Gasoline stations**	**-0.8**	**11.4**	**1.1**	**19.1**	**2.2**	**17.2**
448	**Clothing & clothing accessories stores**	**0.5**	**4.6**	**-2.8**	**3.9**	**0.1**	**5.4**
451	**Sporting goods, hobby, musical instrument, & book stores**	**0.7**	**-3.8**	**-0.5**	**-4.4**	**-3.2**	**-4.2**
452	**General merchandise stores**....................	**0.3**	**3.6**	**0.1**	**3.8**	**1.6**	**3.9**
4521	Department stores	-0.8	-1.5	-0.9	-0.7	-0.6	-0.6
453	**Miscellaneous store retailers**	**0.1**	**2.9**	**2.7**	**3.5**	**-1.1**	**2.3**
454	**Nonstore retailers**	**1.1**	**11.4**	**0.5**	**10.0**	**3.0**	**10.5**
722	**Food services & drinking places**	**-1.8**	**7.1**	**0.3**	**9.8**	**2.8**	**8.8**

(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, October 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 Sep. 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	0.3	0.2	0.3	0.1	0.1
	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	0.2
	Total (excl. motor vehicle & parts & gasoline stations)	0.7	0.2	0.2	0.4	0.1	0.1
	Retail, total	0.4	0.3	0.1	0.3	0.0	0.1
441	Motor vehicle & parts dealers	1.1	1.0	0.4	0.9	-0.1	0.3
4411, 4412	Auto & other motor veh. dealers	1.1	1.0	0.4	1.0	-0.1	0.4
442	Furniture & home furn. stores................	2.1	0.9	0.7	1.3	0.3	0.7
443	Electronics & appliance stores	1.8	0.6	0.7	1.3	0.3	0.5
444	Building material & garden eq. & supplies dealers....................................	1.7	0.9	0.7	1.3	0.0	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	0.3	0.5	1.3	0.0	0.7
447	Gasoline stations	1.8	0.5	0.5	0.9	0.4	0.5
448	Clothing & clothing accessories stores	1.4	0.6	0.5	0.8	0.1	0.8
451	Sporting goods, hobby, musical instrument, & book stores	3.2	0.6	1.0	1.3	0.3	0.7
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	3.5	2.5	1.4	2.4	-0.2	1.6
454	Nonstore retailers	1.2	0.4	0.3	0.8	0.1	0.6
722	Food services & drinking places	3.0	0.9	0.8	1.4	0.3	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, October 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>.