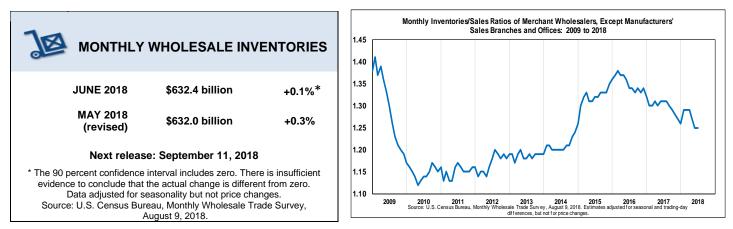
MONTHLY WHOLESALE TRADE: SALES AND INVENTORIES, JUNE 2018

Release Number: CB18-122

August 9, 2018 — The U.S. Census Bureau announced the following new wholesale trade statistics for June 2018:



Sales

June 2018 sales of merchant wholesalers, except manufacturers' sales branches and offices, after adjustment for seasonal variations and trading-day differences but not for price changes, were \$506.7 billion, down 0.1 percent $(\pm 0.4 \text{ percent})^*$ from the revised May level, but were up 10.2 percent $(\pm 3.3 \text{ percent})$ from the June 2017 level. The April 2018 to May 2018 percent change was revised from the preliminary estimate of up 2.5 percent $(\pm 0.4 \text{ percent})$ to up 2.1 percent $(\pm 0.5 \text{ percent})$.

Inventories

Total inventories of merchant wholesalers, except manufacturers' sales branches and offices, after adjustment for seasonal variations but not for price changes, were \$632.4 billion at the end of June, up 0.1 percent (\pm 0.2 percent)* from the revised May level. Total inventories were up 5.1 percent (\pm 3.9 percent) from the revised June 2017 level. The May 2018 to June 2018 percent change was revised from the advance estimate of virtually unchanged (\pm 0.2 percent)* to up 0.1 percent (\pm 0.2 percent)*.

Inventories/Sales Ratio

The June inventories/sales ratio for merchant wholesalers, except manufacturers' sales branches and offices, based on seasonally adjusted data, was 1.25. The June 2017 ratio was 1.31.

General Information

The July 2018 Monthly Wholesale Trade Report is scheduled for release on September 11, 2018. View the full schedule in the Economic Briefing Room: <<u>www.census.gov/economic-indicators/</u>>.

Data Inquiries Economic Indicators Division, Wholesale Indicator Branch 301-763-6856 William Abriatis / Nicole Davis eid.wholesale.indicator.branch@census.gov Media Inquiries Public Information Office 301-763-3030 pio@census.gov



U.S. Department of Commerce Economics and Statistics Administration U.S. CENSUS BUREAU **CENSUS.GOV** For additional survey information, including customizable time series estimates by industry, visit <<u>www.census.gov/wholesale/</u>>.

EXPLANATORY NOTES

Reliability of the 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, as given in Table 2 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 can be used to construct a 90-percent confidence interval. If, for example, the percent change estimate is ± 1.2 percent and its estimated standard error is 0.8 percent, then the margin of sampling error is $\pm 1.753 \times 0.8$ percent or ± 1.4 percent, and the 90 percent confidence interval is 1.2 ± 1.4 or -0.2 percent to 2.6 percent. If the interval contains 0, then one does not have sufficient statistical evidence to conclude at the 90 percent confidence level that the actual change is different from zero. Estimated changes shown in the text are statistically significant unless otherwise noted. For a monthly total, the estimated coefficient of variation is given. The resulting confidence interval is the estimated monthly total $\pm 1.753 \times CV \times$ (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 wholesale businesses, mistakes in the recording and coding of data, model error, 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.

Description of the Survey

The Census Bureau conducts the Monthly Wholesale Trade Survey to provide national estimates of monthly sales, end-of-month inventories, and inventories-to-sales ratios by kind of business for wholesale firms located in the United States. Specifically, the MWTS covers wholesale merchants who sell goods on their own account and include such businesses as wholesale merchants or jobbers, industrial distributors, exporters, and importers. Sales offices and branches maintained by manufacturing, refining, or mining firms for the purpose of marketing their products are not covered in this report. Also excluded is NAICS Industry Group 4251: Wholesale Electronic Markets and Agents and Brokers.

The MWTS sample was selected using a stratified, one-stage design with strata defined by kind of business (e.g., Automotive, Furniture, Lumber, etc.) and annual sales size. The sample includes firms of all sizes and is

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U.S. Department of Commerce Economics and Statistics Administration U.S. CENSUS BUREAU **CENSUS BUREAU** updated on a quarterly basis to account for new wholesale firms, deaths, and other changes to the wholesale universe. Each month, questionnaires are mailed to employer firms selected in a probability sample of approximately 4,200. For surveyed companies, approximately 63.6 percent provided data for this reporting period, resulting in a total quantity response rate of 66.3 percent for sales and 65.8 percent for inventories.

Monthly sales and inventories estimates are obtained by summing weighted data (either reported or imputed). The monthly estimates are benchmarked to annual survey estimates and are adjusted for seasonal variation and trading-day differences. Individuals who use estimates in this report to create new estimates should cite the Census Bureau as the source of only the original estimates. Additional information on the MWTS can be found on the Census Bureau website at: <<u>www.census.gov/wholesale/</u>>.

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.

FRED Mobile App



Receive the latest updates on the nation's key economic indicators by downloading the FRED App <<u>https://fred.stlouisfed.org/fred-mobile/</u>> 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 evidence to conclude that the actual change is different from zero.

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Table 1. Estimates of Monthly Sales, Inventories, and Inventories/Sales Ratios of Merchant Wholesalers, Except Manufacturers' Sales Branches and Offices

[Total sales and inventories estimates are shown in millions of dollars. Estimates are based on data from the Monthly Wholesale Trade Survey.]

	Kind of	Sales						Inventories ⁴							Inventories/Sales		
NAICS ¹		Monthly			Percent change							rcent cha	nge	Ratios			
	Business	Jun.	May	Jun.	Jun./	May/	Jun. 18/	Jun.	May	Jun.	Jun./	May/	Jun. 18/	Jun.	May	Jun.	
code	Dusiness	2018	2018	2017	May	Apr.	Jun. 17	2018	2018	2017	May	Apr.	Jun. 17	2018	2018	2017	
		(p)	(r)	(r)				(p)	(r)	(r)				(p)	(r)	(r)	
<u>Adjustec</u>	<u>d</u> ²																
42	U.S. Total	506,658	506,959	459,614	-0.1	2.1	10.2	632,402	631,955	601,801	0.1	0.3	5.1	1.25	1.25	1.31	
423	.Durable	243,332	242,898	221,504	0.2	1.4	9.9	383,704	380,759	361,148	0.8	0.3	6.2	1.58	1.57	1.63	
4231	Automotive	41,778	41,602	37,949	0.4	2.7	10.1	63,754	64,505	63,628	-1.2	-1.5	0.2	1.53	1.55	1.68	
4232	Furniture	7,278	6,956	6,777	4.6	0.5	7.4	12,953	12,969	12,637	-0.1	0.1	2.5	1.78	1.86		
4233	Lumber	12,063	12,328	11,357	-2.1	0.8	6.2	17,395	17,191	15,466	1.2	1.1	12.5	1.44	1.39	1.36	
4234	Prof. equip.	42,720	43,662	39,748	-2.2	2.8	7.5	44,832	44,351	44,945	1.1	0.6	-0.3	1.05	1.02	1.13	
42343	Comp. equip.	22,503	23,395	20,691	-3.8	4.1	8.8	16,148	16,111	16,490	0.2	0.9	-2.1	0.72	0.69	0.80	
4235	Metals	15,591	15,853	13,199	-1.7	-0.2	18.1	32,430	31,161	26,846	4.1	-0.1	20.8	2.08	1.97	2.03	
4236	Electrical	51,638	50,674	48,156				55,900	55,602	51,860	0.5	-1.0		1.08	1.10		
4237	Hardware	12,078	12,010	11,339				24,313	24,406	23,024	-0.4	0.3		2.01	2.03		
4238	Machinery	39,625	38,789	33,764	2.2	1.4		100,681	99,890	93,500	0.8	1.7		2.54	2.58		
4239	Misc. Durable	20,561	21,024	19,215	-2.2	-1.0	7.0	31,446	30,684	29,242	2.5	1.6		1.53	1.46	_	
424	.Nondurable	263,326	264,061	238,110	-0.3	2.8	10.6	248,698	251,196	240,653	-1.0	0.4	3.3	0.94	0.95	1.01	
4241	Paper	8,270	8,313	8,302	-0.5	0.0	-0.4	9,984	9,863	9,291	1.2	2.5	7.5	1.21	1.19	1.12	
4242	Drugs	59,487	59,798	57,528	-0.5	2.2	3.4	62,505	63,032	62,530	-0.8	2.3	0.0	1.05	1.05	1.09	
4243	Apparel	13,047	13,032	12,372	0.1	2.2	5.5	25,905	26,192	27,051	-1.1	-1.4	-4.2	1.99	2.01	2.19	
4244	Groceries	52,777	52,964	54,936		0.0	-3.9	37,938	37,952	38,179	0.0	0.3		0.72	0.72		
4245	Farm products	20,522	20,329	16,956	0.9	4.7	21.0	25,702	27,478	21,379	-6.5	-2.6	20.2	1.25	1.35	1.26	
4246	Chemicals ³	11,116	10,944	9,660	1.6	-0.6	15.1	12,534	12,472	11,855	0.5	1.7	5.7	1.13	1.14	1.23	
4247	Petroleum	64,474	63,705	44,136	1.2	6.7	46.1	24,365	24,570	21,085	-0.8	1.3	15.6	0.38	0.39	0.48	
4248	Alcohol	12,926	12,801	12,620			2.4	16,521	16,548	16,720	-0.2	-1.0	-1.2	1.28	1.29	_	
4249	Misc. Nondur.	20,707	22,175	21,600	-6.6	3.1	-4.1	33,244	33,089	32,563	0.5	-0.4	2.1	1.61	1.49	1.51	
<u>Not Adj</u>	<u>usted</u>														les to da		
														2018		2017	
42	U.S. Total	517,346	535,537	483,223	-3.4	9.7	7.1	626,097	626,796	596,427	-0.1	-0.9	5.0	2,942	,447 2	2,718,153	
423	.Durable	250,356	249,967	235,755	0.2	6.7	6.2	383,884	381,083	361,364	0.7	0.3	6.2	1,407	,746 1	,296,105	
4231	Automotive	41,945	43,016	39,277	-2.5	5.7	6.8	63,116	63,731	63,119	-1.0	-3.4	0.0	244	,112	226,881	
4232	Furniture	7,169	7,060	6,892	1.5	8.4	4.0	12,862	12,697	12,536	1.3	1.1	2.6	39	,621	39,587	
4233	Lumber	13,028	13,733	12,913	-5.1	10.9	0.9	17,986	17,810	16,007	1.0	0.5	12.4	71	,583	66,967	
4234	Prof. equip.	45,540	43,051	43,763	5.8	8.1	4.1	44,742	43,863	44,810	2.0	0.7	-0.2	246	,531	231,194	
42343	Comp. equip.	25,158	22,623	23,691	11.2	9.3	6.2	16,390	16,030	16,721	2.2	3.3	-2.0		,504	116,651	
4235	Metals	16,090	17,089	14,083	-5.8			32,592	31,223	26,980	4.4	-0.1	20.8		,978	79,060	
4236	Electrical	52,051	49,914	49,890				55,509	55,824	51,549	-0.6	0.3	7.7		,508	270,042	
4237	Hardware	13,177	13,019	12,768		15.2		24,629	24,845	23,323	-0.9	0.2	5.6		,936	67,633	
4238	Machinery	40,774	41,388	36,128				101,285	100,989	94,061	0.3	2.3			,612	203,370	
4239	Misc. Durable	20,582	21,697	20,041	-5.1	6.1	2.7	31,163	30,101	28,979	3.5	1.3			,865	111,371	
424	.Nondurable	266,990	285,570	247,468	-6.5	12.4	7.9	242,213	245,713	235,063	-1.4	-2.6	3.0	1,534	,701 1	,422,048	
4241	Paper	8,361	8,754	8,651	-4.5	6.8	-3.4	10,054	9,902	9,356	1.5	1.8	7.5	49	,035	48,281	
4242	Drugs	59,071	62,429	59,024	-5.4	9.7	0.1	63,505	61,393	63,405	3.4	1.1	0.2		,980	331,026	
4243	Apparel	12,003	12,446	11,753				26,294	25,328	27,457	3.8	0.1	-4.2		,239	69,386	
4244	Groceries	52,830	56,619	55,870				37,103	37,079	37,263	0.1	-0.2			,002	321,927	
4245	Farm products	19,291	21,142	16,413				20,716	24,675	17,381	-16.0	-15.6			,875	103,229	
4246	Chemicals	11,438	11,382	10,220				12,534	12,472	11,855	0.5	1.7			,587	60,263	
4247	Petroleum	66,989	70,139	46,519				24,852	25,823	21,633	-3.8	3.7			,355	278,618	
4248	Alcohol	14,581	14,120	14,740				16,604	17,011	16,820	-2.4	0.0			,267	71,788	
4249	Misc. Nondur.	22,426	28,539	24,278	-21.4	14.1	-7.6	30,551	32,030	29,893	-4.6	-10.8	2.2	139	,361	137,530	

Footnotes:

^p Preliminary estimate.

^r Revised estimate.

¹ For a full description of the NAICS codes used in this table, see the 2012 NAICS manual or <www.census.gov/eos/www/naics>.

² Except where indicated, sales and inventories estimates are adjusted for seasonal variation. Estimates of sales are also adjusted for trading-day differences and moving holidays. See Table 3 for the combined adjustment factors. Adjusted sales-to-date estimates are not tabulated.

³ No significant seasonal pattern for this NAICS code was detected in the latest annual review of the seasonal adjustment for inventories. Consequently, the "Adjusted" inventories estimates are equal to the "Not Adjusted" estimates.

⁴ Adjusted and not adjusted inventories for aggregate NAICS levels 42, 423, and 424 are revised from the Advance Economic Indicators Report.

Data adjusted for seasonality but not price changes. Explanations of confidence intervals and sampling variability can be found on our website at </www.census.gov/wholesale/www/how_surveys_are_collected/monthly_methodology.html>.

Source: U.S. Census Bureau, Monthly Wholesale Trade Survey, August 9, 2018.

Table 2. Estimated Measures of Sampling Variability of Monthly Wholesale Sales and Inventory Estimates

[Estimates are shown as percents and are based on data from the Monthly Wholesale Trade Survey.]

-		Coefficie	nt of variatio	on for mon	thly total	Stand	dard error f	or monthly	Coeffic variatior	Standard error for percent change Current year sales to date to		
NAICS code	Kind of Business	Preliminary	y estimates	Final estimates		Ratio (consecutiv		current m	month to Ionth last ar		Sales to date	
		Sales	Inv.	Sales	Inv.	Sales	Inv.	Sales	Inv.	Current year	Previous year	previous year sales to date
42	U.S. Total	1.2	1.4	1.0	1.4	0.2	0.1	1.9	2.2	1.1	1.1	1.9
423	.Durable	1.6	2.1	1.5	2.1	0.3	0.2	2.8	2.9	1.5	1.5	2.7
4231	Automotive	2.6	2.5	2.6	2.5	0.4	0.3	4.8	4.5	2.3	3.8	4.3
4232	Furniture	4.3	8.7	4.2	8.3	1.7	0.9	11.6	20.1	4.0	6.0	13.5
4233	Lumber	3.5	5.5	3.5	5.6	0.8	0.6	7.9	5.6	3.5	5.0	8.0
4234	Prof. equip.	3.5	5.8	3.0	5.8	1.1	0.3	3.7	5.8	3.3	3.7	3.6
42343	Comp. equip.	4.8	5.9	3.5	5.9	1.6	0.3	5.5	8.5	4.6	4.7	5.7
4235	Metals	4.9	4.4	4.7	4.4	0.8	0.3	8.5	8.5	4.6	4.9	8.5
4236	Electrical	2.9	4.5	2.9	4.4	0.6	0.4	4.4	5.2	3.0	2.5	4.3
4237	Hardware	6.3	9.4	5.5	9.3	1.0	0.3	8.3	13.8	5.6	3.2	7.4
4238	Machinery	3.3	4.3	2.6	4.3	1.4	0.3	6.5	6.3	2.9	2.8	5.3
4239	Misc. Durable	4.3	9.1	4.6	8.5	1.2	0.8	8.6	15.4	4.6	5.1	7.9
424	.Nondurable	1.2	1.4	1.1	1.4	0.3	0.1	2.3	2.0	1.0	1.7	2.2
4241	Paper	5.8	10.3	5.9	10.1	0.7	0.5	7.9	13.0	5.8	4.7	8.8
4242	Drugs	2.7	3.3	2.9	3.5	0.3	0.2	3.3	4.8	2.6	2.4	3.3
4243	Apparel	5.2	4.0	4.3	4.1	2.1	0.5	9.5	9.0	4.3	7.1	9.5
4244	Groceries	3.1	3.6	3.2	3.5	0.3	0.5	5.2	9.9	2.9	4.2	5.3
4245	Farm products	3.6	5.8	3.5	5.8	1.2	0.9	6.3	11.9	3.3	3.5	4.8
4246	Chemicals	5.9	8.5	5.2	8.4	0.8	0.8	7.1	11.9	5.0	3.3	5.8
4247	Petroleum	2.9	2.4	2.8	2.2	0.2	0.2	7.2	5.6	2.8	5.1	6.1
4248	Alcohol	7.3	8.4	6.9	8.7	0.8	0.7	9.0	12.1	6.3	5.3	8.8
4249	Misc. Nondur.	4.6	4.8	3.8	4.6	1.0	0.7	6.1	9.8	4.3	3.1	5.8
Note:	•		•									·

Note:

Estimated measures of sampling variability are based on estimates not adjusted for seasonal variation, trading-day differences, or moving holidays. Additional information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions may be found at <www.census.gov/wholesale/www/how_surveys_are_collected/monthly_methodology.html>.

 $Data \ adjusted \ for \ seasonality \ but \ not \ price \ changes. \ Explanations \ of \ confidence \ intervals \ and \ sampling \ variability \ can \ be \ found \ on \ our \ website \ at \ <www.census.gov/wholesale/www/how_surveys_are_collected/monthly_methodology.html>.$

Source: U.S. Census Bureau, Monthly Wholesale Trade Survey, August 9, 2018.

Table 3. Combined¹ Adjustment Factors for Monthly Wholesale Sales and Inventory Estimates

[Combined adjustment factors are computed using the Census Bureau's X-13 ARIMA-SEATS program and are based on data from the Monthly Wholesale Trade Survey.]

NAICS	Kind of	Sales							Inventories						
code	Business	2018					2017	2018					2017		
		Jul.	Jun.r	May r	Apr.	Mar.	Jun.r	Jul.	Jun.r	May r	Apr.	Mar.	Jun.r		
42	U.S. Total ²	0.983	1.023	1.052	0.983	1.029	1.053	0.991	0.990	0.992	1.002	1.010	0.990		
423	.Durable	0.976	1.027	1.029	0.975	1.034	1.063	1.010	1.000	1.001	1.000	0.997	1.000		
4231	Automotive	0.980	1.004	1.034	1.004	1.055	1.035	0.996	0.990	0.988	1.008	1.015	0.992		
4232	Furniture	0.990	0.985	1.015	0.941	0.967	1.017	1.018	0.993	0.979	0.970	0.973	0.992		
4233	Lumber	1.057	1.080	1.114	1.013	0.998	1.137	1.028	1.034	1.036	1.042	1.029	1.035		
4234	Prof. equip.	0.999	1.066	0.986	0.938	1.053	1.101	1.011	0.998	0.989	0.988	0.973	0.997		
42343	Comp. equip.	1.042	1.118	0.967	0.921	1.041	1.145	1.015	1.015	0.995	0.971	0.968	1.014		
4235	Metals	0.990	1.032	1.078	1.008	1.057	1.067	1.015	1.005	1.002	1.002	0.998	1.005		
4236	Electrical	0.931	1.008	0.985	0.939	1.006	1.036	1.010	0.993	1.004	0.991	0.975	0.994		
4237	Hardware	1.044	1.091	1.084	0.982	1.016	1.126	1.011	1.013	1.018	1.019	1.009	1.013		
4238	Machinery	0.980	1.029	1.067	1.032	1.071	1.070	1.008	1.006	1.011	1.005	1.008	1.006		
4239	Misc. Durable	0.959	1.001	1.032	0.963	1.022	1.043	1.011	0.991	0.981	0.984	0.978	0.991		
424	.Nondurable	0.988	1.017	1.078	0.989	1.025	1.043	0.961	0.973	0.978	1.004	1.027	0.973		
4241	Paper	0.998	1.011	1.053	0.986	1.011	1.042	0.994	1.007	1.004	1.011	0.998	1.007		
4242	Drugs	0.989	0.993	1.044	0.972	1.024	1.026	0.982	1.016	0.974	0.986	1.016	1.014		
4243	Apparel	1.008	0.920	0.955	0.843	0.983	0.950	1.064	1.015	0.967	0.953	0.941	1.015		
4244	Groceries	1.000	1.001	1.069	0.986	1.029	1.017	0.990	0.978	0.977	0.982	0.982	0.976		
4245	Farm products	0.915	0.940	1.040	0.983	1.038	0.968	0.724	0.806	0.898	1.037	1.146	0.813		
4246	Chemicals ³	1.001	1.029	1.040	0.992	1.048	1.058	1.000	1.000	1.000	1.000	1.000	1.000		
4247	Petroleum	1.015	1.039	1.101	0.990	0.995	1.054	0.981	1.020	1.051	1.027	1.022	1.026		
4248	Alcohol	0.958	1.128	1.103	0.945	0.995	1.168	1.011	1.005	1.028	1.018	0.992	1.006		
4249	Misc. Nondur.	0.946	1.083	1.287	1.163	1.111	1.124	0.900	0.919	0.968	1.081	1.132	0.918		
Footnotes:															

·ootnotes:

^r Revised factors.

¹ Combined factors for sales include the effects of seasonal variation, trading day differences, and moving holidays. Combined factors for inventories include only the effects of seasonal variation.

² Adjusted sales and inventories estimates for detailed kind-of-business levels in Table 1 are computed by dividing each "Not Adjusted" estimate by the combined adjustment factor for the corresponding kind of business and month. Adjusted estimates for broad kind-of-business levels are obtained by summing adjusted estimates at the appropriate detailed levels. Combined factors shown for broad kind-of-business levels may be used to approximate adjusted estimates at these levels, but the resulting estimates may differ slightly from the published estimates.

³ No significant seasonal pattern for this NAICS code was detected in the latest annual review of the seasonal adjustment for inventories. Therefore, the combined adjustment factors for inventories are set to one for this NAICS code.

Note:

The seasonal adjustment factors shown are estimates derived from a model that uses sample survey data as input. Therefore, these estimates may contain sampling error and nonsampling error. Additional information on the general form of the model and the X-13 ARIMA-SEATS program may be found at <www.census.gov/srd/www/x13as/>.

 $Data \ adjusted \ for \ seasonality \ but \ not \ price \ changes. \ Explanations \ of \ confidence \ intervals \ and \ sampling \ variability \ can \ be \ found \ on \ our \ website \ at \ <www.census.gov/wholesale/www/how_surveys_are_collected/monthly_methodology.html>.$

Source: U.S. Census Bureau, Monthly Wholesale Trade Survey, August 9, 2018.