

# U.S. Census Bureau News

U.S. Department of Commerce • Washington, D.C. 20233

FOR IMMEDIATE RELEASE  
WEDNESDAY, SEPTEMBER 28, 2016, AT 8:30 A.M. EDT

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M3-1 (16)-8  
CB 16-165

## Advance Report on Durable Goods Manufacturers' Shipments, Inventories and Orders August 2016

### New Orders

New orders for manufactured durable goods in August decreased \$0.1 billion or virtually unchanged to \$226.9 billion, the U.S. Census Bureau announced today. This decrease, down three of the last four months, followed a 3.6 percent July increase. Excluding transportation, new orders decreased 0.4 percent. Excluding defense, new orders decreased 1.0 percent.

Electrical equipment, appliances, and components, down following two consecutive monthly increases, drove the decrease, \$0.2 billion or 2.5 percent to \$9.6 billion.

### Shipments

Shipments of manufactured durable goods in August, down following two consecutive monthly increases, decreased \$0.8 billion or 0.4 percent to \$231.7 billion. This followed a virtually unchanged July increase.

Transportation equipment, down three of the last four months, drove the decrease, \$0.9 billion or 1.1 percent to \$79.9 billion.

### Unfilled Orders

Unfilled orders for manufactured durable goods in August, down three consecutive months, decreased \$1.5 billion or 0.1 percent to \$1,123.4 billion. This followed a 0.2 percent July decrease.

Transportation equipment, also down three consecutive months, drove the decrease, \$1.8 billion or 0.2 percent to \$769.2 billion.

### Inventories

Inventories of manufactured durable goods in August, up two consecutive months, increased \$0.5 billion or 0.1 percent to \$383.7 billion. This followed a 0.4 percent July increase.

Machinery, up two of the last three months, led the increase, \$0.3 billion or 0.5 percent to \$65.7 billion.

### Capital Goods

Nondefense new orders for capital goods in August decreased \$3.1 billion or 4.4 percent to \$66.9 billion. Shipments decreased \$1.4 billion or 1.9 percent to \$70.1 billion. Unfilled orders decreased \$3.1 billion or 0.4 percent to \$696.3 billion. Inventories increased \$0.3 billion or 0.2 percent to \$169.7 billion.

Defense new orders for capital goods in August increased \$2.3 billion or 23.6 percent to \$11.9 billion. Shipments decreased \$0.2 billion or 2.3 percent to \$10.3 billion. Unfilled orders increased \$1.5 billion or 1.1 percent to \$137.2 billion. Inventories decreased \$0.4 billion or 2.0 percent to \$20.7 billion.

### Revised July Data

Revised seasonally adjusted July figures for all manufacturing industries were: new orders, \$452.9 billion (revised from \$454.8 billion); shipments, \$458.4 billion (revised from \$458.9 billion); unfilled orders, \$1,124.9 billion (revised from \$1,126.3 billion); and total inventories, \$620.5 billion (revised from \$620.3 billion).

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Figures in text are adjusted for seasonality, but not for inflation. Figures on new and unfilled orders exclude data for semiconductor manufacturing. For data, call (301) 763-4673 or go to <<http://www.census.gov/m3>>. Revised and more detailed estimates, plus nondurable goods data, will be published on October 5, 2016, at 10:00 a.m. EDT. The Advance Report on durable goods for September is scheduled for release on October 27, 2016 at 8:30 a.m. EDT. See back page for survey description. To receive the latest updates on the Nation's key economic indicators, download the America's Economy app for Apple and Android smartphones and tablets. To learn more about this release and the other indicators the U.S. Census Bureau publishes, join us for the Investigating Economic Indicators Webinar Series. For more information, visit [www.census.gov/econ/webinar](http://www.census.gov/econ/webinar).

“Virtually unchanged” indicates that the change is less than 0.05 percent for a percent increase or decrease.

Table 1. Durable Goods Manufacturers' Shipments and New Orders <sup>1</sup>

[Estimates are shown in millions of dollars and are based on data from the Manufacturers' Shipments, Inventories, and Orders Survey.]

Item	Seasonally Adjusted						Not Seasonally Adjusted					
	Monthly			Percent Change			Monthly			Year to Date		
	Aug 2016 <sup>2</sup>	Jul 2016 <sup>1</sup>	Jun 2016	Jul - Aug <sup>2</sup>	Jun - Jul <sup>1</sup>	May - Jun	Aug 2016 <sup>2</sup>	Jul 2016 <sup>1</sup>	Aug 2015	2016	2015	Percent Change 2016/2015
<b>DURABLE GOODS</b>												
<b>Total:</b>												
Shipments.....	231,717	232,547	232,448	-0.4	0.0	0.4	243,143	213,316	240,804	1,856,048	1,872,002	-0.9
New Orders <sup>4</sup> .....	226,937	227,022	219,055	0.0	3.6	-4.3	229,890	207,242	224,953	1,807,379	1,817,593	-0.6
<b>Excluding transportation:</b>												
Shipments.....	151,809	151,784	151,392	0.0	0.3	0.0	159,103	145,754	156,733	1,214,277	1,235,702	-1.7
New Orders <sup>4</sup> .....	148,814	149,369	147,738	-0.4	1.1	-0.3	152,678	141,885	150,065	1,197,915	1,211,379	-1.1
<b>Excluding defense:</b>												
Shipments.....	219,161	219,937	220,022	-0.4	0.0	0.3	230,835	202,033	228,439	1,760,460	1,778,877	-1.0
New Orders <sup>4</sup> .....	212,776	214,841	208,679	-1.0	3.0	-4.0	218,462	197,584	217,214	1,712,246	1,735,202	-1.3
<b>Manufacturing with unfilled orders:</b>												
Shipments.....	164,698	165,679	165,483	-0.6	0.1	0.3	171,856	152,870	170,249	1,313,668	1,326,575	-1.0
New Orders.....	163,200	163,365	155,169	-0.1	5.3	-6.2	162,308	150,349	157,824	1,289,921	1,297,650	-0.6
<b>Primary metals:</b>												
Shipments.....	17,709	17,868	17,862	-0.9	0.0	1.4	18,908	17,211	19,289	144,238	159,799	-9.7
New Orders.....	17,849	17,817	17,599	0.2	1.2	-1.0	18,509	17,039	18,608	146,005	159,172	-8.3
<b>Fabricated metal products:</b>												
Shipments.....	30,207	30,120	29,826	0.3	1.0	-0.5	32,588	29,105	30,759	240,955	238,391	1.1
New Orders.....	30,186	30,345	29,889	-0.5	1.5	0.0	31,961	29,411	29,630	244,228	238,501	2.4
<b>Machinery:</b>												
Shipments.....	29,874	29,732	29,992	0.5	-0.9	-0.5	30,333	27,844	31,992	243,619	260,057	-6.3
New Orders.....	29,524	29,680	29,390	-0.5	1.0	0.3	29,841	27,653	31,233	240,875	255,324	-5.7
<b>Computers and electronic products<sup>4</sup>:</b>												
Shipments.....	27,248	27,235	26,645	0.0	2.2	0.4	27,505	25,505	26,214	208,503	201,599	3.4
New Orders.....	24,421	24,464	23,865	-0.2	2.5	-1.2	23,092	21,884	22,603	187,727	181,951	3.2
<b>Computers and related products:</b>												
Shipments.....	1,843	1,947	1,750	-5.3	11.3	-5.6	1,603	1,531	1,832	13,920	16,584	-16.1
New Orders.....	1,827	1,939	1,742	-5.8	11.3	-6.3	1,587	1,523	1,823	13,852	16,685	-17.0
<b>Communications equipment:</b>												
Shipments.....	3,445	3,368	3,558	2.3	-5.3	5.4	3,365	2,975	3,319	26,201	26,415	-0.8
New Orders.....	3,728	3,663	3,736	1.8	-2.0	-0.2	3,220	3,110	3,408	28,198	29,187	-3.4
<b>Electrical equipment, appliances, and components:</b>												
Shipments.....	9,542	9,528	9,453	0.1	0.8	0.2	10,072	9,087	10,260	75,481	81,526	-7.4
New Orders.....	9,598	9,846	9,491	-2.5	3.7	1.1	10,071	9,152	10,191	76,859	81,578	-5.8
<b>Transportation equipment:</b>												
Shipments.....	79,908	80,763	81,056	-1.1	-0.4	1.3	84,040	67,562	84,071	641,771	636,300	0.9
New Orders.....	78,123	77,653	71,317	0.6	8.9	-11.5	77,212	65,357	74,888	609,464	606,214	0.5
<b>Motor vehicles and parts:</b>												
Shipments.....	55,024	54,753	55,009	0.5	-0.5	2.6	59,618	45,122	56,782	442,198	427,058	3.5
New Orders.....	55,006	54,598	54,763	0.7	-0.3	2.1	59,858	44,608	56,922	440,142	426,082	3.3
<b>Nondefense aircraft and parts:</b>												
Shipments.....	12,931	14,018	13,862	-7.8	1.1	-4.7	12,663	11,999	14,552	105,372	109,661	-3.9
New Orders.....	8,939	11,446	6,591	-21.9	73.7	-59.7	5,526	11,710	10,663	77,094	94,688	-18.6
<b>Defense aircraft and parts:</b>												
Shipments.....	4,339	4,050	4,156	7.1	-2.6	-3.3	4,134	3,472	4,935	32,584	36,872	-11.6
New Orders.....	5,461	4,396	3,643	24.2	20.7	-7.5	3,824	3,419	3,210	34,477	29,983	15.0
<b>All other durable goods:</b>												
Shipments.....	37,229	37,301	37,614	-0.2	-0.8	-0.1	39,697	37,002	38,219	301,481	294,330	2.4
New Orders.....	37,236	37,217	37,504	0.1	-0.8	-0.5	39,204	36,746	37,800	302,221	294,853	2.5
<b>Capital goods<sup>3</sup>:</b>												
Shipments.....	80,389	82,022	81,898	-2.0	0.2	-0.8	80,792	74,838	85,516	643,689	673,288	-4.4
New Orders.....	78,820	79,638	71,926	-1.0	10.7	-12.4	73,761	72,383	76,086	622,336	651,956	-4.5
<b>Nondefense capital goods:</b>												
Shipments.....	70,051	71,442	71,701	-1.9	-0.4	-1.3	70,537	65,282	75,546	565,121	598,984	-5.7
New Orders.....	66,948	70,029	64,987	-4.4	7.8	-10.9	63,679	64,844	70,107	543,371	584,599	-7.1
<b>Excluding aircraft:</b>												
Shipments.....	61,981	62,204	62,642	-0.4	-0.7	-0.4	62,389	57,498	65,127	498,637	525,498	-5.1
New Orders.....	63,319	62,940	62,437	0.6	0.8	0.5	62,173	57,266	62,984	502,458	523,569	-4.0
<b>Defense capital goods:</b>												
Shipments.....	10,338	10,580	10,197	-2.3	3.8	3.1	10,255	9,556	9,970	78,568	74,304	5.7
New Orders.....	11,872	9,609	6,939	23.6	38.5	-24.3	10,082	7,539	5,979	78,965	67,357	17.2

<sup>1</sup> Revised data due to late receipts and concurrent seasonal adjustment.<sup>2</sup> Estimates of shipments and new orders are for the duration of the period, while estimates of unfilled orders and total inventories are for the end of the period. Not seasonally adjusted estimates of shipments and new orders include adjusted data for non-calendar reporters. Seasonally adjusted estimates include concurrent adjustments for holiday and trading-day differences, where appropriate, as well as seasonal variation, based on the results of the latest annual review of the model parameters. Estimates are not adjusted for price changes.<sup>3</sup> Based on advance sample. Estimates of manufacturers' shipments, inventories, and orders are subject to survey error and revision. One major component of survey error is nonsampling error, which includes errors of coverage, response and nonreporting. Since the survey panel is not a probability sample, estimates of sampling error cannot be calculated. For further details on survey design, methodology, and data limitations, see <http://www.census.gov/manufacturing/m3>.<sup>4</sup> The Capital Goods Industries include Nondefense : small arms and ordnance; farm machinery and equipment; construction machinery; mining, oil, and gas field machinery; industrial machinery; vending, laundry, and other machinery; photographic equipment; metalworking machinery; turbines and generators; other power transmission equipment; pumps and compressors; material handling equipment; all other machinery; electronic computers; computer storage devices; other computer peripheral equipment; communications equipment; search and navigation equipment; electromedical, measuring, and control instruments; electrical equipment; other electrical equipment, appliances, and components; heavy duty trucks; aircraft; railroad rolling stock; ships and boats; office and institutional furniture; and medical equipment and supplies.

Defense Capital Goods include : small arms and ordnance, communications equipment, aircraft; missiles, space vehicles, and parts, ships and boats, and search and navigation equipment.

<sup>5</sup> Estimates and percent changes of shipments and inventories for the semiconductor industry are included in computers and electronic products, and all other applicable aggregate totals. Estimates and percent changes for new orders and unfilled orders exclude semiconductor industry data.

Table 2. Durable Goods Manufacturers' Unfilled Orders and Total Inventories <sup>1</sup>

[Estimates are shown in millions of dollars and are based on data from the Manufacturers' Shipments, Inventories, and Orders Survey.]

Item	Seasonally Adjusted						Not Seasonally Adjusted			
	Monthly			Percent Change			Monthly			Percent Change 2016/ 2015
	Aug 2016 <sup>2</sup>	Jul 2016 <sup>1</sup>	Jun 2016	Jul - Aug <sup>2</sup>	Jun - Jul <sup>1</sup>	May - Jun	Aug 2016 <sup>2</sup>	Jul 2016 <sup>1</sup>	Aug 2015	
<b><u>DURABLE GOODS</u></b>										
<b>Total:</b>										
Unfilled Orders <sup>4</sup> .....	1,123,425	1,124,923	1,127,237	-0.1	-0.2	-0.9	1,115,953	1,125,501	1,138,644	-2.0
Total Inventories.....	383,721	383,211	381,715	0.1	0.4	-0.1	387,169	386,105	395,748	-2.2
<b>Excluding transportation:</b>										
Unfilled Orders <sup>4</sup> .....	354,243	353,956	353,160	0.1	0.2	-0.2	353,402	356,122	352,637	0.2
Total Inventories.....	260,125	259,427	258,568	0.3	0.3	0.2	262,638	261,465	268,860	-2.3
<b>Excluding defense:</b>										
Unfilled Orders <sup>4</sup> .....	949,178	952,281	954,166	-0.3	-0.2	-0.9	943,191	951,859	966,250	-2.4
Total Inventories.....	358,269	357,332	356,624	0.3	0.2	0.0	361,601	359,892	368,368	-1.8
<b>Manufacturing with unfilled orders:</b>										
Unfilled Orders.....	1,123,425	1,124,923	1,127,237	-0.1	-0.2	-0.9	1,115,953	1,125,501	1,138,644	-2.0
Total Inventories.....	311,510	311,125	309,757	0.1	0.4	-0.5	314,746	314,172	323,874	-2.8
<b>Primary metals:</b>										
Unfilled Orders.....	32,565	32,425	32,476	0.4	-0.2	-0.8	32,380	32,779	32,488	-0.3
Total Inventories.....	31,825	31,617	31,253	0.7	1.2	0.1	31,955	31,743	35,305	-9.5
<b>Fabricated metal products:</b>										
Unfilled Orders.....	74,066	74,087	73,862	0.0	0.3	0.1	74,720	75,347	74,224	0.7
Total Inventories.....	49,138	49,122	48,788	0.0	0.7	0.5	49,185	49,520	49,442	-0.5
<b>Machinery:</b>										
Unfilled Orders.....	92,423	92,773	92,825	-0.4	-0.1	-0.6	92,212	92,704	98,984	-6.8
Total Inventories.....	65,662	65,352	65,649	0.5	-0.5	0.4	66,599	65,867	69,204	-3.8
<b>Computers and electronic products<sup>4</sup>:</b>										
Unfilled Orders.....	129,318	128,863	128,423	0.4	0.3	0.2	128,337	129,045	122,205	5.0
Total Inventories.....	42,565	42,569	42,708	0.0	-0.3	0.0	43,411	43,156	43,942	-1.2
<b>Computers and related products:</b>										
Unfilled Orders.....	2,379	2,395	2,403	-0.7	-0.3	-0.3	2,379	2,395	2,381	-0.1
Total Inventories.....	3,650	3,607	3,587	1.2	0.6	0.4	3,829	3,755	3,883	-1.4
<b>Communications equipment:</b>										
Unfilled Orders.....	35,197	34,914	34,619	0.8	0.9	0.5	34,759	34,904	31,775	9.4
Total Inventories.....	4,573	4,576	4,601	-0.1	-0.5	-1.9	4,658	4,568	5,120	-9.0
<b>Electrical equipment, appliances, and components:</b>										
Unfilled Orders.....	17,698	17,642	17,324	0.3	1.8	0.2	17,681	17,682	16,804	5.2
Total Inventories.....	16,181	16,351	16,175	-1.0	1.1	-0.7	16,479	16,638	17,050	-3.3
<b>Transportation equipment:</b>										
Unfilled Orders.....	769,182	770,967	774,077	-0.2	-0.4	-1.2	762,551	769,379	786,007	-3.0
Total Inventories.....	123,596	123,784	123,147	-0.2	0.5	-0.8	124,531	124,640	126,888	-1.9
<b>Motor vehicles and parts:</b>										
Unfilled Orders.....	21,996	22,014	22,169	-0.1	-0.7	-1.1	21,503	21,263	23,019	-6.6
Total Inventories.....	34,769	34,922	34,950	-0.4	-0.1	3.6	34,930	35,049	34,783	0.4
<b>Nondefense Aircraft and parts:</b>										
Unfilled Orders.....	587,132	591,124	593,696	-0.7	-0.4	-1.2	582,358	589,495	600,926	-3.1
Total Inventories.....	62,395	62,134	62,356	0.4	-0.4	-2.3	62,860	62,538	63,753	-1.4
<b>Defense Aircraft and parts:</b>										
Unfilled Orders.....	71,825	70,703	70,357	1.6	0.5	-0.7	70,511	70,821	63,117	11.7
Total Inventories.....	11,292	11,547	10,742	-2.2	7.5	-3.5	11,303	11,629	12,180	-7.2
<b>All other durable goods:</b>										
Unfilled Orders.....	8,173	8,166	8,250	0.1	-1.0	-1.3	8,072	8,565	7,932	1.8
Total Inventories.....	54,754	54,416	53,995	0.6	0.8	0.2	55,009	54,541	53,917	2.0
<b>Capital goods<sup>3</sup>:</b>										
Unfilled Orders.....	833,561	835,130	837,514	-0.2	-0.3	-1.2	829,523	836,554	861,278	-3.7
Total Inventories.....	190,378	190,470	189,734	0.0	0.4	-0.9	193,029	192,394	199,218	-3.1
<b>Nondefense capital goods:</b>										
Unfilled Orders.....	696,324	699,427	700,840	-0.4	-0.2	-0.9	692,722	699,580	722,264	-4.1
Total Inventories.....	169,667	169,344	169,427	0.2	0.0	-0.7	172,213	171,016	176,742	-2.6
<b>Excluding aircraft:</b>										
Unfilled Orders.....	222,312	220,974	220,238	0.6	0.3	-0.1	221,507	221,723	223,850	-1.0
Total Inventories.....	118,569	118,404	118,167	0.1	0.2	0.2	120,771	119,621	123,853	-2.5
<b>Defense capital goods:</b>										
Unfilled Orders.....	137,237	135,703	136,674	1.1	-0.7	-2.3	136,801	136,974	139,014	-1.6
Total Inventories.....	20,711	21,126	20,307	-2.0	4.0	-2.3	20,816	21,378	22,476	-7.4

See footnotes at end of Table 1

## Survey Description

This report is compiled from results of the U.S. Census Bureau's Manufacturers' Shipments, Inventories, and Orders (M3) survey, which is a voluntary survey authorized by Title 13 of the United States Code. This survey provides statistics on a calendar-month basis for manufacturers' value of shipments, new orders (net of cancellations), end-of-month order backlog (unfilled orders), end-of-month total inventory (at current cost or market value), and inventories by stage of fabrication (materials and supplies, work-in-process, and finished goods). Data published from the M3 survey are based on a panel of approximately 4,800 reporting units that represent approximately 3,000 companies and provide an indication of month-to-month change for the Manufacturing Sector. These reporting units may be divisions of diversified large companies, large homogenous companies, or single-unit manufacturers in 92 industry categories, which are combined into 65 publication levels due to the small monthly panel size. The survey methodology assumes that the month-to-month changes of the total operations of the reporting units in the M3 panel effectively represent the month-to-month movements of all establishments that make up the category.

The companies for which shipments data are currently reported or imputed in the M3 survey represent approximately 61 percent of the total value of shipments for manufacturing establishments in the 2012 Economic Census, and these companies include almost two-thirds of the manufacturing companies with \$500 million or more in shipments in the 2012 Economic Census. The companies for which shipments data are currently reported in the M3 survey represent approximately 54 percent of the total value of shipments for manufacturing establishments in the 2012 Economic Census. Statistics based on the M3 panel differ from the results that would be obtained from a complete enumeration of all manufacturing companies. The M3 panel is not based on a probability sample; therefore, the sampling errors that are normally provided with sample surveys cannot be measured. Nonsampling errors are attributable to many sources. The use of company or divisional reports to estimate the monthly change for establishments is one source of nonsampling error. The use of primarily large companies to represent the month-to-month movement of all companies is another potential source. Any corrections will be published in the full report. Corrections received after the full report will be released in the next month's advance report. Any revisions made later than two months will be reflected in the annual benchmark publication.

Additional survey documentation can be found on our web site: <http://www.census.gov/m3>.