

# U.S. Census Bureau News

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

FOR IMMEDIATE RELEASE  
FRIDAY, JANUARY 27, 2017, AT 8:30 A.M. EST

Adriana Stoica  
Economic Indicators Division  
(301) 763-4832

M3-1 (16)-12  
CB 17-12

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

### New Orders

New orders for manufactured durable goods in December decreased \$1.0 billion or 0.4 percent to \$227.0 billion, the U.S. Census Bureau announced today. This decrease, down two consecutive months, followed a 4.8 percent November decrease. Excluding transportation, new orders increased 0.5 percent. Excluding defense, new orders increased 1.7 percent.

Transportation equipment, also down two consecutive months, drove the decrease, \$1.7 billion or 2.2 percent to \$73.7 billion.

### Shipments

Shipments of manufactured durable goods in December, up three of the last four months, increased \$3.3 billion or 1.4 percent to \$238.0 billion. This followed a 0.3 percent November increase.

Transportation equipment, up following two consecutive monthly decreases, led the increase, \$2.0 billion or 2.5 percent to \$82.3 billion.

### Unfilled Orders

Unfilled orders for manufactured durable goods in December, down six of the last seven months, decreased \$7.2 billion or 0.6 percent to \$1,119.4 billion. This followed a 0.3 percent November decrease.

Transportation equipment, also down six of the last seven months, drove the decrease, \$8.6 billion or 1.1 percent to \$759.8 billion.

### Inventories

Inventories of manufactured durable goods in December, up five of the last six months, increased less than \$0.1 billion or virtually unchanged to \$384.4 billion. This followed a 0.2 percent November increase.

Machinery, up four of the last five months, drove the increase, \$0.4 billion or 0.5 percent to \$66.4 billion.

### Capital Goods

Nondefense new orders for capital goods in December increased \$2.4 billion or 3.8 percent to \$66.6 billion. Shipments increased \$1.2 billion or 1.8 percent to \$71.7 billion. Unfilled orders decreased \$5.1 billion or 0.7 percent to \$691.8 billion. Inventories increased \$0.6 billion or 0.3 percent to \$171.1 billion.

Defense new orders for capital goods in December decreased \$4.8 billion or 33.4 percent to \$9.5 billion. Shipments decreased \$0.1 billion or 1.2 percent to \$10.9 billion. Unfilled orders decreased \$1.3 billion or 0.9 percent to \$140.9 billion. Inventories decreased \$0.2 billion or 0.7 percent to \$20.7 billion.

### Revised November Data

Revised seasonally adjusted November figures for all manufacturing industries were: new orders, \$457.5 billion (revised from \$458.3 billion); shipments, \$464.3 billion (revised from \$463.8 billion); unfilled orders, \$1,126.5 billion (revised from \$1,127.8 billion) and total inventories, \$623.3 billion (revised from \$623.1 billion).

---

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 February 3, 2017, at 10:00 a.m. EST. The Advance Report on durable goods for January is scheduled for release on February 27, 2017 at 8:30 a.m. EST. 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. "Virtually unchanged" indicates that the change is less than 0.05 percent for a percent increase or decrease. With the release of the January 2017 Advance Report on Durable Goods Manufacturers' Shipments, Inventories and Orders on February 27, 2017, the presentation of the release will change. The text portion of the release will be removed from Excel and reformatted. The layout and format of the tables are not currently changing, though some explanatory notes may move to the text portion of the document. The full text and tables will be available as a PDF, with the tables available separately in Excel.

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		
	Dec 2016 <sup>2</sup>	Nov 2016 <sup>1</sup>	Oct 2016	Nov - Dec <sup>2</sup>	Oct - Nov <sup>1</sup>	Sep - Oct	Dec 2016 <sup>2</sup>	Nov 2016 <sup>1</sup>	Dec 2015	2016	2015	Percent Change 2016/2015
<b>DURABLE GOODS</b>												
<b>Total:</b>												
Shipments.....	238,049	234,749	233,989	1.4	0.3	-0.2	235,924	227,313	230,858	2,806,101	2,820,620	-0.5
New Orders <sup>4</sup> .....	227,018	227,987	239,530	-0.4	-4.8	5.0	236,035	222,613	237,841	2,745,970	2,754,511	-0.3
<b>Excluding transportation:</b>												
Shipments.....	155,758	154,498	153,417	0.8	0.7	0.6	154,000	148,516	151,813	1,833,408	1,850,934	-0.9
New Orders <sup>4</sup> .....	153,363	152,639	151,198	0.5	1.0	1.1	150,178	144,175	146,983	1,800,228	1,806,060	-0.3
<b>Excluding defense:</b>												
Shipments.....	224,996	221,636	221,422	1.5	0.1	-0.2	221,081	213,712	216,366	2,655,773	2,672,737	-0.6
New Orders <sup>4</sup> .....	215,305	211,698	227,044	1.7	-6.8	5.2	219,205	206,911	221,721	2,592,570	2,616,539	-0.9
<b>Manufacturing with unfilled orders:</b>												
Shipments.....	168,982	166,788	166,255	1.3	0.3	-0.5	170,388	161,316	165,054	1,990,467	1,997,276	-0.3
New Orders.....	161,831	163,880	175,390	-1.3	-6.6	6.7	174,093	160,952	174,754	1,970,694	1,969,407	0.1
<b>Primary metals:</b>												
Shipments.....	18,448	18,204	17,752	1.3	2.5	0.0	16,738	17,234	16,320	214,343	230,646	-7.1
New Orders.....	18,547	18,719	18,191	-0.9	2.9	1.3	17,201	18,159	16,666	216,825	228,144	-5.0
<b>Fabricated metal products:</b>												
Shipments.....	30,785	30,827	30,445	-0.1	1.3	1.2	28,556	29,707	27,549	361,935	355,334	1.9
New Orders.....	30,952	31,191	30,997	-0.8	0.6	3.1	28,011	29,134	27,140	363,045	352,667	2.9
<b>Machinery:</b>												
Shipments.....	30,727	30,255	29,959	1.6	1.0	-0.4	31,729	28,151	32,380	364,212	386,253	-5.7
New Orders.....	30,686	30,561	29,972	0.4	2.0	0.3	30,633	28,404	29,528	360,078	377,492	-4.6
<b>Computers and electronic products<sup>4</sup>:</b>												
Shipments.....	27,920	27,775	27,516	0.5	0.9	0.9	31,166	27,454	29,594	325,048	312,851	3.9
New Orders.....	24,905	24,328	24,116	2.4	0.9	0.2	28,790	22,333	28,226	290,151	282,433	2.7
<b>Computers and related products:</b>												
Shipments.....	1,688	1,767	1,811	-4.5	-2.4	9.5	2,486	1,508	2,740	21,632	25,423	-14.9
New Orders.....	1,673	1,780	1,813	-6.0	-1.8	8.1	2,471	1,521	2,713	21,606	25,590	-15.6
<b>Communications equipment:</b>												
Shipments.....	3,578	3,490	3,348	2.5	4.2	-5.2	4,438	3,223	4,236	41,282	41,043	0.6
New Orders.....	3,951	3,768	3,489	4.9	8.0	-1.4	4,812	3,076	4,386	43,901	44,802	-2.0
<b>Electrical equipment, appliances, and components:</b>												
Shipments.....	9,673	9,514	9,632	1.7	-1.2	0.7	9,677	9,378	9,757	114,600	121,697	-5.8
New Orders.....	10,010	9,950	9,776	0.6	1.8	1.6	10,037	9,569	9,833	116,415	121,248	-4.0
<b>Transportation equipment:</b>												
Shipments.....	82,291	80,251	80,572	2.5	-0.4	-1.6	81,924	78,797	79,045	972,693	969,686	0.3
New Orders.....	73,655	75,348	88,332	-2.2	-14.7	12.3	85,857	78,438	90,858	945,742	948,451	-0.3
<b>Motor vehicles and parts:</b>												
Shipments.....	56,825	55,535	55,277	2.3	0.5	-0.8	51,763	54,136	50,493	664,883	646,521	2.8
New Orders.....	56,757	55,637	54,945	2.0	1.3	-1.1	52,298	54,858	50,725	663,269	646,085	2.7
<b>Nondefense aircraft and parts:</b>												
Shipments.....	13,048	12,274	13,479	6.3	-8.9	-4.5	16,558	12,069	14,261	161,995	168,041	-3.6
New Orders.....	6,122	4,298	21,903	42.4	-80.4	94.5	18,788	8,535	25,485	135,854	162,778	-16.5
<b>Defense aircraft and parts:</b>												
Shipments.....	4,199	4,175	3,931	0.6	6.2	-4.9	5,138	4,334	5,899	50,757	59,037	-14.0
New Orders.....	2,745	7,612	3,823	-63.9	99.1	37.7	5,308	7,732	5,631	54,666	57,649	-5.2
<b>All other durable goods:</b>												
Shipments.....	38,205	37,923	38,113	0.7	-0.5	0.9	36,134	36,592	36,213	453,270	444,153	2.1
New Orders.....	38,263	37,890	38,146	1.0	-0.7	0.6	35,506	36,576	35,590	453,714	444,076	2.2
<b>Capital goods<sup>3</sup>:</b>												
Shipments.....	82,582	81,474	81,832	1.4	-0.4	-0.6	91,676	78,906	90,452	984,049	1,024,839	-4.0
New Orders.....	76,099	78,432	91,266	-3.0	-14.1	12.5	95,238	76,788	91,989	968,463	993,105	-2.5
<b>Nondefense capital goods:</b>												
Shipments.....	71,712	70,467	71,162	1.8	-1.0	-1.1	79,646	67,425	79,187	860,112	906,887	-5.2
New Orders.....	66,577	64,132	80,210	3.8	-20.0	14.8	81,663	63,510	79,001	840,571	884,710	-5.0
<b>Excluding aircraft:</b>												
Shipments.....	63,365	62,759	62,394	1.0	0.6	-0.3	68,081	59,845	70,005	755,747	793,564	-4.8
New Orders.....	64,493	63,972	63,044	0.8	1.5	0.5	67,492	59,712	66,704	759,101	785,471	-3.4
<b>Defense capital goods:</b>												
Shipments.....	10,870	11,007	10,670	-1.2	3.2	3.2	12,030	11,481	11,265	123,937	117,952	5.1
New Orders.....	9,522	14,300	11,056	-33.4	29.3	-1.8	13,575	13,278	12,988	127,892	108,395	18.0

<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
	Dec 2016 <sup>2</sup>	Nov 2016 <sup>1</sup>	Oct 2016	Nov - Dec <sup>2</sup>	Oct - Nov <sup>1</sup>	Sep - Oct	Dec 2016 <sup>2</sup>	Nov 2016 <sup>1</sup>	Dec 2015	
<b><u>DURABLE GOODS</u></b>										
<b>Total:</b>										
Unfilled Orders <sup>4</sup> .....	1,119,363	1,126,514	1,129,422	-0.6	-0.3	0.8	1,119,927	1,116,222	1,139,700	-1.7
Total Inventories.....	384,351	384,349	383,424	0.0	0.2	-0.1	374,061	384,569	377,498	-0.9
<b>Excluding transportation:</b>										
Unfilled Orders <sup>4</sup> .....	359,523	358,038	356,043	0.4	0.6	0.4	352,020	352,248	344,842	2.1
Total Inventories.....	260,844	260,368	259,632	0.2	0.3	-0.1	254,489	260,200	256,142	-0.6
<b>Excluding defense:</b>										
Unfilled Orders <sup>4</sup> .....	943,295	949,106	955,190	-0.6	-0.6	1.0	943,638	941,920	966,483	-2.4
Total Inventories.....	359,060	358,823	357,608	0.1	0.3	-0.1	349,109	359,017	352,500	-1.0
<b>Manufacturing with unfilled orders:</b>										
Unfilled Orders.....	1,119,363	1,126,514	1,129,422	-0.6	-0.3	0.8	1,119,927	1,116,222	1,139,700	-1.7
Total Inventories.....	311,630	312,001	311,370	-0.1	0.2	-0.1	303,103	312,180	307,102	-1.3
<b>Primary metals:</b>										
Unfilled Orders.....	33,748	33,649	33,134	0.3	1.6	1.3	33,095	32,632	30,613	8.1
Total Inventories.....	31,595	31,633	31,558	-0.1	0.2	-0.2	31,486	31,534	33,208	-5.2
<b>Fabricated metal products:</b>										
Unfilled Orders.....	75,215	75,048	74,684	0.2	0.5	0.7	72,557	73,102	71,447	1.6
Total Inventories.....	48,727	48,764	48,886	-0.1	-0.2	-0.1	47,987	48,294	48,341	-0.7
<b>Machinery:</b>										
Unfilled Orders.....	92,650	92,691	92,385	0.0	0.3	0.0	90,822	91,918	94,956	-4.4
Total Inventories.....	66,421	66,062	65,390	0.5	1.0	-0.6	64,008	66,545	64,750	-1.1
<b>Computers and electronic products<sup>4</sup>:</b>										
Unfilled Orders.....	130,760	129,895	129,488	0.7	0.3	0.2	129,652	128,434	124,191	4.4
Total Inventories.....	42,516	42,567	42,508	-0.1	0.1	0.1	41,053	42,759	41,151	-0.2
<b>Computers and related products:</b>										
Unfilled Orders.....	2,421	2,436	2,423	-0.6	0.5	0.1	2,421	2,436	2,447	-1.1
Total Inventories.....	3,883	3,649	3,553	6.4	2.7	-2.6	3,576	3,716	3,255	9.9
<b>Communications equipment:</b>										
Unfilled Orders.....	35,842	35,469	35,191	1.1	0.8	0.4	35,381	35,007	32,762	8.0
Total Inventories.....	4,291	4,459	4,479	-3.8	-0.4	0.1	4,154	4,597	4,579	-9.3
<b>Electrical equipment, appliances, and components:</b>										
Unfilled Orders.....	18,640	18,303	17,867	1.8	2.4	0.8	18,118	17,758	16,303	11.1
Total Inventories.....	16,240	16,223	16,241	0.1	-0.1	-0.7	15,584	16,128	15,805	-1.4
<b>Transportation equipment:</b>										
Unfilled Orders.....	759,840	768,476	773,379	-1.1	-0.6	1.0	767,907	763,974	794,858	-3.4
Total Inventories.....	123,507	123,981	123,792	-0.4	0.2	0.1	119,572	124,369	121,356	-1.5
<b>Motor vehicles and parts:</b>										
Unfilled Orders.....	21,505	21,573	21,471	-0.3	0.5	-1.5	21,945	21,410	23,559	-6.9
Total Inventories.....	34,707	34,853	34,516	-0.4	1.0	-0.1	33,299	35,053	33,680	-1.1
<b>Nondefense Aircraft and parts:</b>										
Unfilled Orders.....	577,388	584,314	592,290	-1.2	-1.3	1.4	584,495	582,265	610,636	-4.3
Total Inventories.....	62,628	62,805	62,622	-0.3	0.3	-0.2	60,545	62,748	61,877	-2.2
<b>Defense Aircraft and parts:</b>										
Unfilled Orders.....	72,044	73,498	70,061	-2.0	4.9	-0.2	72,527	72,357	68,618	5.7
Total Inventories.....	11,021	11,140	11,220	-1.1	-0.7	1.2	10,841	11,145	11,084	-2.2
<b>All other durable goods:</b>										
Unfilled Orders.....	8,510	8,452	8,485	0.7	-0.4	0.4	7,776	8,404	7,332	6.1
Total Inventories.....	55,345	55,119	55,049	0.4	0.1	0.4	54,371	54,940	52,887	2.8
<b>Capital goods<sup>3</sup>:</b>										
Unfilled Orders.....	832,690	839,173	842,215	-0.8	-0.4	1.1	835,290	831,728	850,876	-1.8
Total Inventories.....	191,832	191,409	190,727	0.2	0.4	-0.1	185,572	192,592	186,922	-0.7
<b>Nondefense capital goods:</b>										
Unfilled Orders.....	691,833	696,968	703,303	-0.7	-0.9	1.3	694,931	692,914	714,472	-2.7
Total Inventories.....	171,114	170,540	169,604	0.3	0.6	-0.3	165,013	171,702	166,676	-1.0
<b>Excluding aircraft:</b>										
Unfilled Orders.....	225,498	224,370	223,157	0.5	0.5	0.3	221,040	221,629	217,686	1.5
Total Inventories.....	119,539	118,893	118,212	0.5	0.6	-0.3	115,494	120,237	115,938	-0.4
<b>Defense capital goods:</b>										
Unfilled Orders.....	140,857	142,205	138,912	-0.9	2.4	0.3	140,359	138,814	136,404	2.9
Total Inventories.....	20,718	20,869	21,123	-0.7	-1.2	1.6	20,559	20,890	20,246	1.5

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>.

## Benchmark notice

Revised historical data from the Manufacturers' Shipments, Inventories, and Orders (M3) Survey will be issued on May 18, 2017. These revisions result from:

- benchmarking the M3 shipments and inventories data to the 2015 Annual Survey of Manufactures (ASM) and revised 2014 ASM data on a 2012 NAICS basis;
- incorporating the unfilled orders to shipments ratios obtained from the 2015/2014 Manufacturers' Unfilled Orders (M3UFO) Survey by applying these ratios to the respective ASM shipments data, as well as incorporating revised unfilled orders to shipments ratios for prior years by applying them to the respective ASM data;
- adjusting the new orders data to be consistent with the benchmarked shipments and unfilled orders data;
- correcting monthly data for late receipts, reclassifications of reported data, and revisions to previously reported data;
- updating the seasonally adjusted data based on the results of benchmarking and the recent annual review of the seasonal adjustment models.

These revisions will span the seasonally adjusted data for January 2002 through March 2017 and the data not seasonally adjusted for January 2007 through March 2017. An updated Press Release will contain revised monthly tables for January 2017 through March 2017. Please call M3 staff on (301) 763-4832 with any questions.