

U.S. Census Bureau News

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

FOR IMMEDIATE RELEASE
FRIDAY, FEBRUARY 3, 2017, AT 10:00 A.M. EST

Adriana Stoica
Economic Indicators Division
(301) 763-4832

M3-2 (16)-12
CB 17-13

Full Report on Manufacturers' Shipments, Inventories and Orders December 2016

Summary

New orders for manufactured goods in December, up five of the last six months, increased \$6.1 billion or 1.3 percent to \$464.9 billion, the U.S. Census Bureau reported today. This followed a 2.3 percent November decrease.

Shipments, up nine of the last ten months, increased \$10.4 billion or 2.2 percent to \$475.8 billion. This followed a 0.3 percent November increase.

Unfilled orders, down six of the last seven months, decreased \$7.1 billion or 0.6 percent to \$1,119.5 billion. This followed a 0.2 percent November decrease. The unfilled orders-to-shipments ratio was 6.62, down from 6.75 in November.

Inventories, up five of the last six months, increased \$0.6 billion or 0.1 percent to \$625.6 billion. This followed a 0.5 percent November increase. The inventories-to-shipments ratio was 1.31, down from 1.34 in November.

New Orders

New orders for manufactured durable goods in December, down two consecutive months, decreased \$1.1 billion or 0.5 percent to \$227.1 billion, down from the previously published 0.4 percent decrease. This followed a 4.7 percent November decrease.

Transportation equipment, also down two consecutive months, drove the decrease, \$1.9 billion or 2.5 percent to \$73.5 billion.

New orders for manufactured nondurable goods increased \$7.2 billion or 3.1 percent to \$237.8 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 \$238.1 billion, virtually unchanged from the previously published increase. This followed a 0.4 percent November increase.

Transportation equipment, up following two consecutive monthly decreases, led the increase, \$1.9 billion or 2.4 percent to \$82.2 billion.

Shipments of manufactured nondurable goods, up nine of the last ten months, increased \$7.2 billion or 3.1 percent to \$237.8 billion. This followed a 0.2 percent November increase. Petroleum and coal products, up four of the last five months, led the increase, \$5.4 billion or 14.0 percent to \$44.2 billion.

Unfilled Orders

Unfilled orders for manufactured durable goods in December, down six of the last seven months, decreased \$7.1 billion or 0.6 percent to \$1,119.5 billion, virtually unchanged from the previously published decrease. This followed a 0.2 percent November decrease.

Transportation equipment, also down six of the last seven months, drove the decrease, \$8.7 billion or 1.1 percent to \$759.8 billion.

Inventories

Inventories of manufactured durable goods in December, down two of the last three months, decreased \$0.3 billion or 0.1 percent to \$383.9 billion, down from the previously published virtually unchanged increase. This followed a 0.2 percent November increase.

Transportation equipment, down following three consecutive monthly increases, drove the decrease, \$0.4 billion or 0.4 percent to \$123.5 billion.

Inventories of manufactured nondurable goods, up four of the last five months, increased \$0.9 billion or 0.4 percent to \$241.7 billion. This followed a 1.1 percent November increase. Petroleum and coal products, also up four of the last five months, drove the increase, \$1.2 billion or 4.3 percent to \$28.9 billion.

By stage of fabrication, December materials and supplies decreased 0.4 percent in durable goods and 0.9 percent in nondurable goods. Work in process was virtually unchanged in durable goods and increased 2.9 percent in nondurable goods. Finished goods increased 0.2 percent in durable goods and 0.1 percent in nondurable goods.

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 www.census.gov/m3. The Advance Report on durable goods for January is scheduled for release on February 27, 2017 at 8:30 a.m. EST and the Full Report on March 6, 2017 at 10:00 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 2. Value of Manufacturers' New Orders for Industry Groups¹

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

Industry	Seasonally Adjusted						Not Seasonally Adjusted						
	Monthly			Percent Change			Monthly				Year to date		
	Dec. 2016 ^P	Nov. 2016 ^F	Oct. 2016	Nov. - Dec.	Oct. - Nov.	Sep. - Oct.	Dec. 2016 ^P	Nov. 2016 ^F	Oct. 2016	Dec. 2015	2016 ^P	2015	% Change 2016/2015
All manufacturing industries ²	464,868	458,795	469,636	1.3	-2.3	2.8	466,976	449,678	472,322	458,038	5,473,669	5,553,564	-1.4
Excluding transportation ²	391,395	383,441	381,304	2.1	0.6	0.8	381,313	371,224	384,618	367,180	4,528,105	4,605,113	-1.7
Excluding defense ²	453,158	442,502	457,150	2.4	-3.2	2.8	450,149	433,968	461,239	441,918	5,320,264	5,415,592	-1.8
With unfilled orders ²	161,966	164,099	175,390	-1.3	-6.4	6.7	174,273	161,110	172,649	174,754	1,971,032	1,969,407	0.1
Durable goods industries ²	227,108	228,192	239,530	-0.5	-4.7	5.0	236,154	222,752	238,318	237,841	2,746,228	2,754,511	-0.3
Primary metals.....	18,625	18,754	18,191	-0.7	3.1	1.3	17,286	18,171	17,922	16,666	216,922	228,144	-4.9
Iron and steel mills.....	8,469	8,490	8,211	-0.2	3.4	1.5	8,090	8,267	7,988	7,739	98,826	106,510	-7.2
Aluminum and nonferrous metals.....	8,674	8,726	8,542	-0.6	2.2	2.1	7,790	8,489	8,530	7,344	99,844	102,290	-2.4
Ferrous metal foundries.....	1,482	1,538	1,438	-3.6	7.0	-4.8	1,406	1,415	1,404	1,583	18,252	19,344	-5.6
Fabricated metal products.....	30,946	31,199	30,997	-0.8	0.7	3.1	28,001	29,125	30,913	27,140	363,026	352,667	2.9
Machinery.....	30,929	30,717	29,972	0.7	2.5	0.3	30,927	28,541	29,781	29,528	360,509	377,492	-4.5
Construction machinery.....	2,605	2,709	2,601	-3.8	4.2	9.0	2,696	2,734	2,770	3,198	31,253	40,104	-22.1
Mining, oil field, and gas field machinery.....	812	809	824	0.4	-1.8	-11.6	651	806	917	93	8,926	17,019	-47.6
Industrial machinery.....	2,478	2,545	2,179	-2.6	16.8	2.2	2,872	2,122	2,221	2,641	28,026	27,920	0.4
Photographic equipment.....	469	502	423	-6.6	18.7	-7.8	485	528	423	426	5,212	5,308	-1.8
Ventilation, heating, air-conditioning, and refrigeration equipment.....	3,496	3,550	3,362	-1.5	5.6	2.2	3,303	3,162	3,032	3,467	41,203	43,196	-4.6
Metalworking machinery.....	3,369	3,254	3,219	3.5	1.1	1.8	3,664	3,299	3,333	3,217	38,335	33,140	15.7
Turbines, generators, and other power transmission equipment.....	4,006	3,877	4,006	3.3	-3.2	-2.6	4,010	3,857	3,963	3,793	48,327	50,160	-3.7
Material handling equipment.....	3,204	3,178	3,073	0.8	3.4	-1.6	3,566	2,985	2,914	3,402	36,723	33,716	8.9
Computers and electronic products ²	24,988	24,365	24,116	2.6	1.0	0.2	28,921	22,333	23,190	28,226	290,282	282,433	2.8
Computers.....	568	589	610	-3.6	-3.4	3.0	734	530	615	836	7,177	9,483	-24.3
Nondefense communications equipment.....	3,698	3,484	3,189	6.1	9.3	-1.9	4,570	2,821	3,026	4,069	40,486	41,006	-1.3
Defense communications equipment.....	253	284	300	-10.9	-5.3	4.5	242	255	259	317	3,415	3,796	-10.0
Electronic components.....	4,947	4,855	4,866	1.9	-0.2	-2.6	4,918	4,391	4,835	4,718	57,430	52,169	10.1
Nondefense search and navigation equipment.....	1,777	1,536	1,493	15.7	2.9	1.2	1,516	1,529	1,492	1,334	17,765	17,850	-0.5
Defense search and navigation equipment.....	2,570	2,370	2,442	8.4	-2.9	-1.2	3,414	2,162	2,258	3,587	31,254	29,954	4.3
Electromedical, measuring, and control instruments.....	9,411	9,409	9,340	0.0	0.7	0.7	10,982	8,877	8,924	10,697	110,412	104,719	5.4
Electrical equipment, appliances, and components.....	9,858	9,913	9,776	-0.6	1.4	1.6	9,826	9,569	9,803	9,833	116,204	121,248	-4.2
Electric lighting equipment.....	1,026	1,030	1,014	-0.4	1.6	-8.2	1,047	1,050	1,088	1,120	12,771	12,436	2.7
Household appliances.....	1,367	1,362	1,380	0.4	-1.3	-4.0	1,353	1,453	1,445	1,460	16,790	18,439	-8.9
Electrical equipment.....	2,945	2,985	2,910	-1.3	2.6	3.3	2,852	2,836	2,797	3,019	35,061	38,739	-9.5
Transportation equipment.....	73,473	75,354	88,332	-2.5	-14.7	12.3	85,663	78,454	87,704	90,858	945,564	948,451	-0.3
Motor vehicle bodies, parts, and trailers.....	29,409	29,054	28,541	1.2	1.8	-1.5	26,524	28,700	29,148	24,140	337,903	309,020	9.3
Nondefense aircraft and parts.....	6,102	4,295	21,903	42.1	-80.4	94.5	18,758	8,535	20,299	25,485	135,824	162,778	-16.6
Defense aircraft and parts.....	2,738	7,611	3,823	-64.0	99.1	37.7	5,299	7,732	3,633	5,631	54,657	57,649	-5.2
Ships and boats.....	3,696	3,087	3,060	19.7	0.9	8.5	3,852	2,918	2,888	2,292	34,914	24,204	44.2
Furniture and related products.....	6,419	6,331	6,413	1.4	-1.3	-1.3	5,616	6,105	6,357	5,543	76,188	73,158	4.1
Nondurable goods industries.....	237,760	230,603	230,106	3.1	0.2	0.6	230,822	226,926	234,004	220,197	2,727,441	2,799,053	-2.6

^P Preliminary^F Revised data due to late receipts and concurrent seasonal adjustment.

¹ 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.

² Data on new orders are not available for the semiconductor industry. Estimates and percent changes for new orders exclude semiconductor industry data.

Note: Estimates of manufacturers' shipments, inventories and orders are subject to survey error and revision. One major component of survey error is non-sampling 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/>>.

Table 3. Value of Manufacturers' Unfilled Orders for Industry Groups¹

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

Industry	Seasonally Adjusted						Not Seasonally Adjusted				% Change December 2016/ 2015
	Monthly			Percent Change			Monthly				
	Dec. 2016 ²	Nov. 2016 ²	Oct. 2016	Nov. - Dec.	Oct. - Nov.	Sep. - Oct.	Dec. 2016 ²	Nov. 2016 ²	Oct. 2016	Dec. 2015	
All manufacturing industries ²	1,119,548	1,126,644	1,129,422	-0.6	-0.2	0.8	1,120,121	1,116,295	1,116,586	1,139,700	-1.7
Excluding transportation ²	359,758	358,155	356,043	0.4	0.6	0.4	352,258	352,318	352,253	344,842	2.2
Excluding defense ²	943,494	949,246	955,190	-0.6	-0.6	1.0	943,847	942,004	944,385	966,483	-2.3
Durable goods industries ²	1,119,548	1,126,644	1,129,422	-0.6	-0.2	0.8	1,120,121	1,116,295	1,116,586	1,139,700	-1.7
Primary metals.....	33,791	33,664	33,134	0.4	1.6	1.3	33,135	32,638	31,707	30,613	8.2
Iron and steel mills.....	19,265	19,141	18,784	0.6	1.9	1.5	18,571	18,136	17,541	16,360	13.5
Aluminum and nonferrous metals.....	10,439	10,493	10,441	-0.5	0.5	1.2	10,558	10,611	10,374	10,816	-2.4
Ferrous metal foundries.....	4,087	4,030	3,909	1.4	3.1	1.0	4,006	3,891	3,792	3,437	16.6
Fabricated metal products.....	75,238	75,046	74,684	0.3	0.5	0.7	72,579	73,098	73,675	71,447	1.6
Machinery.....	92,914	92,785	92,385	0.1	0.4	0.0	91,086	91,986	91,665	94,956	-4.1
Construction machinery.....	4,312	4,135	3,888	4.3	6.4	-1.1	4,218	3,981	3,662	5,395	-21.8
Mining, oil field, and gas field machinery.....	5,811	5,806	5,806	0.1	0.0	-0.8	5,617	5,887	5,882	8,170	-31.2
Industrial machinery.....	7,059	7,092	7,060	-0.5	0.5	-3.0	6,744	6,928	7,003	7,917	-14.8
Photographic equipment.....	1,466	1,408	1,313	4.1	7.2	2.1	1,404	1,426	1,323	1,275	10.1
Ventilation, heating, air-conditioning, and refrigeration equipment.....	6,014	6,023	5,952	-0.1	1.2	-1.9	5,787	5,889	5,842	6,328	-8.5
Metalworking machinery.....	7,329	7,356	7,412	-0.4	-0.8	0.5	7,101	7,271	7,322	6,619	7.3
Turbines, generators, and other power transmission equipment.....	25,390	25,674	25,846	-1.1	-0.7	0.5	25,462	25,558	25,685	25,692	-0.9
Material handling equipment.....	12,566	12,415	12,286	1.2	1.0	0.4	12,365	11,996	11,937	11,633	6.3
Computers and electronic products ²	130,812	129,937	129,488	0.7	0.3	0.2	129,719	128,434	129,219	124,191	4.5
Computers.....	2,421	2,436	2,423	-0.6	0.5	0.1	2,421	2,436	2,423	2,447	-1.1
Nondefense communications equipment.....	33,614	33,227	32,939	1.2	0.9	0.4	33,209	32,807	32,901	30,525	8.8
Defense communications equipment.....	2,228	2,242	2,252	-0.6	-0.4	0.9	2,172	2,200	2,253	2,237	-2.9
Electronic components.....	12,089	12,096	12,113	-0.1	-0.1	-0.3	11,914	11,936	12,084	11,954	-0.3
Nondefense search and navigation equipment.....	18,438	18,175	17,996	1.4	1.0	0.5	18,232	18,311	18,146	17,125	6.5
Defense search and navigation equipment.....	28,016	28,006	28,169	0.0	-0.6	-0.3	27,990	27,428	27,955	27,355	2.3
Electromedical, measuring, and control instruments.....	34,006	33,755	33,596	0.7	0.5	0.3	33,781	33,316	33,457	32,548	3.8
Electrical equipment, appliances, and components.....	18,512	18,274	17,867	1.3	2.3	0.8	17,985	17,758	17,567	16,303	10.3
Electric lighting equipment.....	1,339	1,347	1,355	-0.6	-0.6	-2.5	1,297	1,335	1,350	1,268	2.3
Household appliances.....	1,146	1,186	1,188	-3.4	-0.2	-2.2	1,133	1,188	1,161	1,151	-1.6
Electrical equipment.....	7,890	7,859	7,809	0.4	0.6	0.0	7,711	7,789	7,724	7,863	-1.9
Transportation equipment.....	759,790	768,489	773,379	-1.1	-0.6	1.0	767,863	763,977	764,333	794,858	-3.4
Motor vehicle bodies, parts, and trailers.....	21,536	21,586	21,471	-0.2	0.5	-1.5	21,982	21,413	20,688	23,559	-6.7
Nondefense aircraft and parts.....	577,388	584,314	592,290	-1.2	-1.3	1.4	584,495	582,265	585,799	610,636	-4.3
Defense aircraft and parts.....	72,044	73,498	70,061	-2.0	4.9	-0.2	72,527	72,357	68,959	68,618	5.7
Ships and boats.....	17,139	16,555	16,602	3.5	-0.3	0.4	16,662	15,934	16,258	18,590	-10.4
Furniture and related products.....	8,253	8,205	8,241	0.6	-0.4	0.4	7,516	8,160	8,176	7,094	5.9

² Preliminary ¹ Revised data due to late receipts and concurrent seasonal adjustment.¹ 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.² Data on unfilled orders are not available for the semiconductor industry. Estimates and percent changes for unfilled orders exclude semiconductor industry data.

See note at end of Table 2 relating to survey error and revision.

Table 4. Value of Manufacturers' Inventories for Industry Groups¹

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

Industry	Seasonally Adjusted						Not Seasonally Adjusted				% Change December 2016/ 2015
	Monthly			Percent Change			Monthly				
	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Nov. - Dec.	Oct. - Nov.	Sep. - Oct.	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Dec. 2015	
All manufacturing industries.....	625,585	625,011	621,711	0.1	0.5	0.1	609,286	625,743	626,435	608,314	0.2
Excluding transportation.....	502,038	501,027	497,919	0.2	0.6	0.1	489,677	501,376	502,249	486,958	0.6
Excluding defense.....	600,298	599,490	595,895	0.1	0.6	0.0	584,338	600,196	600,721	583,316	0.2
With unfilled orders.....	311,279	311,865	311,370	-0.2	0.2	-0.1	302,707	312,128	311,640	307,102	-1.4
Durable goods industries.....	383,872	384,178	383,424	-0.1	0.2	-0.1	373,512	384,499	383,706	377,498	-1.1
Wood products.....	11,704	11,575	11,462	1.1	1.0	0.5	11,589	11,570	11,404	11,123	4.2
Nonmetallic mineral products.....	13,035	13,083	13,139	-0.4	-0.4	0.1	12,752	12,690	12,817	12,652	0.8
Primary metals.....	31,643	31,656	31,558	0.0	0.3	-0.2	31,533	31,550	31,554	33,208	-5.0
Iron and steel mills.....	17,372	17,359	17,326	0.1	0.2	0.2	17,399	17,384	17,465	18,694	-6.9
Aluminum and nonferrous metals.....	12,246	12,273	12,209	-0.2	0.5	-0.7	12,156	12,170	12,107	12,476	-2.6
Ferrous metal foundries.....	2,025	2,024	2,023	0.0	0.0	0.5	1,978	1,996	1,982	2,038	-2.9
Fabricated metal products.....	48,555	48,698	48,886	-0.3	-0.4	-0.1	47,785	48,294	48,607	48,341	-1.2
Machinery.....	66,305	65,996	65,390	0.5	0.9	-0.6	63,891	66,480	65,388	64,750	-1.3
Farm machinery.....	3,250	3,230	3,144	0.6	2.7	3.1	3,369	3,302	2,836	3,358	0.3
Construction machinery.....	5,302	5,384	5,404	-1.5	-0.4	-1.4	5,191	5,375	5,475	5,663	-8.3
Mining, oil field, and gas field machinery.....	7,677	7,483	7,344	2.6	1.9	-0.6	7,357	7,381	7,249	7,355	0.0
Industrial machinery.....	6,572	6,484	6,337	1.4	2.3	-1.8	6,423	6,582	6,351	6,240	2.9
Photographic equipment.....	1,612	1,603	1,607	0.6	-0.2	1.1	1,543	1,650	1,626	1,488	3.7
Ventilation, heating, air-conditioning, and refrigeration equipment.....	4,632	4,604	4,535	0.6	1.5	-1.0	4,265	4,532	4,456	4,192	1.7
Metalworking machinery.....	5,745	5,727	5,763	0.3	-0.6	0.6	5,594	5,785	5,815	5,514	1.5
Turbines, generators, and other power transmission equipment.....	9,318	9,168	9,020	1.6	1.6	-2.7	8,747	9,418	9,322	9,251	-5.4
Material handling equipment.....	4,624	4,633	4,674	-0.2	-0.9	0.4	4,307	4,710	4,809	4,160	3.5
Computers and electronic products ²	42,432	42,550	42,508	-0.3	0.1	0.1	40,954	42,759	42,729	41,151	-0.5
Computers.....	1,825	1,669	1,596	9.3	4.6	-1.4	1,641	1,650	1,599	1,301	26.1
Computer storage devices.....	1,026	944	942	8.7	0.2	-6.1	973	987	994	949	2.5
Other peripheral equipment.....	1,030	1,035	1,015	-0.5	2.0	-1.1	960	1,079	1,007	1,005	-4.5
Nondefense communications equipment.....	3,737	3,906	3,923	-4.3	-0.4	0.0	3,600	4,044	3,956	3,933	-8.5
Defense communications equipment.....	554	553	556	0.2	-0.5	1.3	554	553	556	646	-14.2
Audio and video equipment.....	784	691	664	13.5	4.1	-1.6	770	740	760	725	6.2
Electronic components.....	7,666	7,852	7,770	-2.4	1.1	1.0	7,411	7,743	7,733	7,343	0.9
Nondefense search and navigation equipment.....	3,043	3,083	3,074	-1.3	0.3	-0.3	2,966	3,050	3,125	3,005	-1.3
Defense search and navigation equipment.....	3,134	3,107	3,080	0.9	0.9	0.0	3,038	3,058	3,037	2,734	11.1
Electromedical, measuring and control instruments.....	14,011	14,063	14,175	-0.4	-0.8	0.2	13,493	14,373	14,250	13,888	-2.8
Electrical equipment, appliances, and components.....	16,217	16,217	16,241	0.0	-0.1	-0.7	15,558	16,128	16,284	15,805	-1.6
Electric lighting equipment.....	2,000	2,006	2,035	-0.3	-1.4	-0.3	1,919	1,988	2,042	1,882	2.0
Household appliances.....	2,211	2,219	2,225	-0.4	-0.3	-0.9	1,992	2,149	2,275	2,052	-2.9
Electrical equipment.....	4,740	4,761	4,786	-0.4	-0.5	-1.5	4,624	4,824	4,768	4,872	-5.1
Batteries.....	1,295	1,305	1,304	-0.8	0.1	-1.8	1,191	1,191	1,327	1,252	-4.9
Transportation equipment.....	123,547	123,984	123,792	-0.4	0.2	0.1	119,609	124,367	124,186	121,356	-1.4
Automobiles.....	4,297	4,274	4,203	0.5	1.7	-2.3	4,016	4,324	4,367	4,321	-7.1
Light trucks and utility vehicles.....	4,220	4,312	4,368	-2.1	-1.3	-1.1	3,746	4,478	4,556	3,966	-5.5
Heavy duty trucks.....	2,090	2,019	1,919	3.5	5.2	2.2	1,960	2,004	1,926	2,049	-4.3
Motor vehicle bodies, parts, and trailers.....	24,114	24,245	24,026	-0.5	0.9	0.3	23,582	24,245	23,973	23,344	1.0
Nondefense aircraft and parts.....	62,655	62,811	62,622	-0.2	0.3	-0.2	60,578	62,748	62,600	61,877	-2.1
Defense aircraft and parts.....	11,021	11,140	11,220	-1.1	-0.7	1.2	10,841	11,145	11,206	11,084	-2.2
Ships and boats.....	2,816	2,853	2,861	-1.3	-0.3	0.2	2,815	2,871	2,836	2,632	7.0
Furniture and related products.....	7,225	7,198	7,219	0.4	-0.3	0.7	7,022	7,207	7,209	6,891	1.9
Miscellaneous durable goods.....	23,209	23,221	23,229	-0.1	0.0	0.3	22,819	23,454	23,528	22,221	2.7
Nondurable goods industries.....	241,713	240,833	238,287	0.4	1.1	0.3	235,774	241,244	242,729	230,816	2.1
Food products.....	53,825	53,815	53,407	0.0	0.8	-0.4	53,384	56,105	57,025	52,449	1.8
Grain and oilseed milling.....	5,939	5,840	5,814	1.7	0.4	0.5	6,113	6,188	6,352	5,924	3.2
Dairy products.....	7,699	7,727	7,397	-0.4	4.5	-0.2	7,198	7,419	7,376	6,978	3.2
Meat, poultry, and seafood products.....	8,786	8,802	8,834	-0.2	-0.4	-0.5	8,529	9,033	9,101	8,790	-3.0
Beverage and tobacco products.....	20,567	20,490	20,475	0.4	0.1	-0.6	20,574	20,960	21,209	20,613	-0.2
Beverages.....	16,814	16,693	16,659	0.7	0.2	-0.6	16,664	16,987	17,309	16,526	0.8
Tobacco.....	3,753	3,797	3,816	-1.2	-0.5	-0.7	3,910	3,973	3,900	4,087	-4.3
Textile mills.....	3,174	3,169	3,177	0.2	-0.3	-0.2	3,118	3,136	3,175	3,052	2.2
Textile products.....	3,076	3,070	3,066	0.2	0.1	0.4	2,995	3,041	3,056	2,988	0.2
Apparel.....	2,406	2,448	2,479	-1.7	-1.3	-0.2	2,263	2,382	2,540	2,355	-3.9
Leather and allied products.....	781	785	786	-0.5	-0.1	0.3	773	788	789	809	-4.4
Paper products.....	16,052	16,124	16,141	-0.4	-0.1	-0.1	15,896	16,011	16,002	16,381	-3.0
Pulp, paper, and paperboard mills.....	6,629	6,631	6,633	0.0	0.0	-0.2	6,612	6,556	6,520	6,840	-3.3
Paperboard containers.....	5,048	5,117	5,115	-1.3	0.0	0.0	5,019	5,081	5,085	5,178	-3.1
Printing.....	6,015	5,957	5,908	1.0	0.8	0.7	5,750	5,925	6,105	5,711	0.7
Petroleum and coal products.....	28,868	27,668	25,543	4.3	8.3	2.3	27,323	27,011	26,976	23,602	15.8
Petroleum refineries.....	24,381	23,193	20,963	5.1	10.6	2.8	22,880	22,639	22,523	19,042	20.2
Chemical products.....	81,478	81,761	81,701	-0.3	0.1	0.4	78,978	80,710	80,620	78,524	0.6
Pesticides, fertilizers, and other agricultural chemicals.....	4,189	4,168	4,232	0.5	-1.5	0.5	4,365	4,191	4,067	4,598	-5.1
Pharmaceuticals and medicines.....	32,461	32,621	32,578	-0.5	0.1	-0.2	30,883	32,077	32,231	30,484	1.3
Paints, coatings, and adhesives.....	3,802	3,783	3,760	0.5	0.6	0.2	3,643	3,641	3,621	3,456	5.4
Plastics and rubber products.....	25,471	25,546	25,604	-0.3	-0.2	0.8	24,720	25,175	25,232	24,332	1.6

^p Preliminary ^r Revised data due to late receipts and concurrent seasonal adjustment.¹ 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.² Estimates of inventories for the semiconductor industry data are included in computers and electronic products, and all other applicable aggregate totals.

See note at end of Table 2 relating to survey error and revision.

Table 5. Value of Manufacturers' Shipments, New Orders, Unfilled Orders, and Total Inventories for Topical Series^{1, 2}

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

Industry	Seasonally Adjusted						Not Seasonally Adjusted						% Change ⁶
	Monthly			Percent Change			Monthly			Year to date			
	Dec. 2016 ⁶	Nov. 2016 ⁷	Oct. 2016	Nov. - Dec.	Oct. - Nov.	Sep. - Oct.	Dec. 2016 ⁶	Nov. 2016 ⁷	Oct. 2016	Dec. 2015	2016 ⁶	2015	
SHIPMENTS													
All manufacturing industries.....	475,843	465,427	464,095	2.2	0.3	0.2	466,743	454,305	469,757	451,055	5,533,605	5,619,673	-1.5
Construction materials and supplies.....	47,847	47,528	46,878	0.7	1.4	1.1	42,292	44,885	48,754	41,177	561,397	549,485	2.2
Information technology.....	23,060	22,862	22,903	0.9	-0.2	0.5	26,536	22,246	22,108	26,083	272,639	270,492	0.8
Computers and related products.....	1,688	1,767	1,811	-4.5	-2.4	9.5	2,486	1,508	1,571	2,740	21,632	25,423	-14.9
Motor vehicle and parts.....	56,730	55,531	55,277	2.2	0.5	-0.8	51,650	54,149	57,339	50,493	664,783	646,521	2.8
Capital goods.....	82,658	81,536	81,832	1.4	-0.4	-0.6	91,742	78,994	79,459	90,452	984,203	1,024,839	-4.0
Nondefense capital goods ³	71,787	70,515	71,162	1.8	-0.9	-1.1	79,711	67,494	69,140	79,187	860,246	906,887	-5.1
Excluding aircraft.....	63,440	62,807	62,394	1.0	0.7	-0.3	68,146	59,914	61,337	70,005	755,881	793,564	-4.7
Defense capital goods ⁴	10,871	11,021	10,670	-1.4	3.3	3.2	12,031	11,500	10,319	11,265	123,957	117,952	5.1
Consumer goods.....	195,782	188,176	188,072	4.0	0.1	0.9	192,425	187,968	193,224	182,679	2,227,264	2,293,126	-2.9
Consumer durable goods.....	38,409	37,525	37,839	2.4	-0.8	0.1	36,901	36,936	38,833	37,646	456,992	461,953	-1.1
Consumer nondurable goods.....	157,373	150,651	150,233	4.5	0.3	1.1	155,524	151,032	154,391	145,033	1,770,272	1,831,173	-3.3
NEW ORDERS													
All manufacturing industries ⁵	464,868	458,795	469,636	1.3	-2.3	2.8	466,976	449,678	472,322	458,038	5,473,669	5,553,564	-1.4
Construction materials and supplies.....	47,965	47,755	47,052	0.4	1.5	2.0	41,870	44,584	48,596	40,916	561,433	549,684	2.1
Information technology.....	24,255	23,790	23,370	2.0	1.8	1.4	28,219	21,826	22,374	27,298	280,159	277,065	1.1
Computers and related products.....	1,673	1,780	1,813	-6.0	-1.8	8.1	2,471	1,521	1,573	2,713	21,606	25,590	-15.6
Motor vehicle and parts.....	56,680	55,646	54,945	1.9	1.3	-1.1	52,219	54,874	56,700	50,725	663,206	646,085	2.6
Capital goods.....	76,189	78,597	91,266	-3.1	-13.9	12.5	95,378	76,933	87,668	91,989	968,748	993,105	-2.5
Nondefense capital goods ³	66,670	64,293	80,210	3.7	-19.8	14.8	81,806	63,647	78,500	79,001	840,851	884,710	-5.0
Excluding aircraft.....	64,586	64,133	63,044	0.7	1.7	0.5	67,635	59,849	61,944	66,704	759,381	785,471	-3.3
Defense capital goods ⁴	9,519	14,304	11,056	-33.5	29.4	-1.8	13,572	13,286	9,168	12,988	127,897	108,395	18.0
Consumer goods.....	195,749	188,116	188,059	4.1	0.0	0.8	192,263	188,040	193,270	182,579	2,227,377	2,292,990	-2.9
Consumer durable goods.....	38,376	37,465	37,826	2.4	-1.0	-0.2	36,739	37,008	38,879	37,546	457,105	461,817	-1.0
Consumer nondurable goods.....	157,373	150,651	150,233	4.5	0.3	1.1	155,524	151,032	154,391	145,033	1,770,272	1,831,173	-3.3
UNFILLED ORDERS													
All manufacturing industries ⁵	1,119,548	1,126,644	1,129,422	-0.6	-0.2	0.8	1,120,121	1,116,295	1,116,586	1,139,700	(X)	(X)	-1.7
Construction materials and supplies.....	45,789	45,671	45,444	0.3	0.5	0.4	44,343	44,765	45,066	44,307	(X)	(X)	0.1
Information technology.....	128,326	127,131	126,203	0.9	0.7	0.4	127,053	125,370	125,790	119,533	(X)	(X)	6.3
Computers and related products.....	2,421	2,436	2,423	-0.6	0.5	0.1	2,421	2,436	2,423	2,447	(X)	(X)	-1.1
Motor vehicle and parts.....	21,536	21,586	21,471	-0.2	0.5	-1.5	21,982	21,413	20,688	23,559	(X)	(X)	-6.7
Capital goods.....	832,807	839,276	842,215	-0.8	-0.3	1.1	835,421	831,785	833,846	850,876	(X)	(X)	-1.8
Nondefense capital goods ³	691,964	697,081	703,303	-0.7	-0.9	1.3	695,077	692,982	696,829	714,472	(X)	(X)	-2.7
Excluding aircraft.....	225,629	224,483	223,157	0.5	0.6	0.3	221,186	221,697	221,762	217,686	(X)	(X)	1.6
Defense capital goods ⁴	140,843	142,195	138,912	-1.0	2.4	0.3	140,344	138,803	137,017	136,404	(X)	(X)	2.9
Consumer goods.....	4,425	4,458	4,518	-0.7	-1.3	-0.3	4,305	4,467	4,395	4,192	(X)	(X)	2.7
Consumer durable goods.....	4,425	4,458	4,518	-0.7	-1.3	-0.3	4,305	4,467	4,395	4,192	(X)	(X)	2.7
TOTAL INVENTORIES													
All manufacturing industries.....	625,585	625,011	621,711	0.1	0.5	0.1	609,286	625,743	626,435	608,314	(X)	(X)	0.2
Construction materials and supplies.....	65,742	65,749	65,765	0.0	0.0	0.1	64,265	64,697	64,919	63,715	(X)	(X)	0.9
Information technology.....	36,917	36,766	36,707	0.4	0.2	-0.2	35,562	37,277	36,965	35,622	(X)	(X)	-0.2
Computers and related products.....	3,881	3,648	3,553	6.4	2.7	-2.6	3,574	3,716	3,600	3,255	(X)	(X)	9.8
Motor vehicle and parts.....	34,721	34,850	34,516	-0.4	1.0	-0.1	33,304	35,051	34,822	33,680	(X)	(X)	-1.1
Capital goods.....	191,584	191,314	190,727	0.1	0.3	-0.1	185,302	192,518	191,243	186,922	(X)	(X)	-0.9
Nondefense capital goods ³	170,870	170,450	169,604	0.2	0.5	-0.3	164,747	171,633	170,208	166,676	(X)	(X)	-1.2
Excluding aircraft.....	119,295	118,803	118,212	0.4	0.5	-0.3	115,228	120,168	118,849	115,938	(X)	(X)	-0.6
Defense capital goods ⁴	20,714	20,864	21,123	-0.7	-1.2	1.6	20,555	20,885	21,035	20,246	(X)	(X)	1.5
Consumer goods.....	180,359	179,269	176,664	0.6	1.5	0.0	175,286	181,164	182,805	170,999	(X)	(X)	2.5
Consumer durable goods.....	29,527	29,522	29,464	0.0	0.2	-0.3	28,280	29,865	30,054	28,536	(X)	(X)	-0.9
Consumer nondurable goods.....	150,832	149,747	147,200	0.7	1.7	0.1	147,006	151,299	152,751	142,463	(X)	(X)	3.2

X Not Applicable ⁶ Preliminary ⁷ Revised data due to late receipts and concurrent seasonal adjustment.

¹ 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.

² Topical series are regroupings of the separate industry categories.

³ Nondefense capital goods industries include: 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.

⁴ Defense capital goods industries include: small arms and ordnance; communications equipment; aircraft; missiles, space vehicles, and parts; ships and boats; and search and navigation equipment.

⁵ Estimates and percent changes exclude semiconductor industry data.

⁶ Based on year-to-date for shipments and new orders, but on same month prior year for unfilled orders and inventories.

See note at end of Table 2 relating to survey error and revision.

Table 7. Ratios of Manufacturers' Inventories to Shipments and Unfilled Orders to Shipments, by Industry Group ¹

[Based on Seasonally Adjusted data from the Manufacturers' Shipments, Inventories, and Orders Survey.]

Industry	Inventory/Shipments ratio				Unfilled Orders/Shipments ratio ²			
	Dec 2016 ³	Nov 2016 ¹	Oct 2016	Sep 2016	Dec 2016 ³	Nov 2016 ¹	Oct 2016	Sep 2016
	All manufacturing industries ³	1.31	1.34	1.34	1.34	(X)	(X)	(X)
Durable goods industries ³	1.61	1.64	1.64	1.64	6.62	6.75	6.79	6.70
Wood products.....	1.32	1.32	1.35	1.35	(X)	(X)	(X)	(X)
Nonmetallic mineral products.....	1.30	1.30	1.32	1.33	(X)	(X)	(X)	(X)
Primary metals.....	1.71	1.74	1.78	1.78	1.83	1.85	1.87	1.84
Fabricated metal products.....	1.58	1.58	1.61	1.63	2.52	2.50	2.52	2.53
Machinery.....	2.15	2.18	2.18	2.19	3.30	3.34	3.37	3.36
Computers and electronic products ³	1.52	1.53	1.54	1.56	5.85	5.89	5.87	5.83
Electrical equipment, appliances, and components.....	1.69	1.71	1.69	1.71	2.09	2.09	2.02	2.01
Transportation equipment.....	1.50	1.55	1.54	1.51	13.84	14.32	14.28	13.85
Furniture and related products.....	1.13	1.13	1.13	1.13	1.54	1.52	1.53	1.53
Miscellaneous products.....	1.80	1.82	1.75	1.77	(X)	(X)	(X)	(X)
Nondurable goods industries.....	1.02	1.04	1.04	1.04	(X)	(X)	(X)	(X)
Food products.....	0.82	0.83	0.83	0.83	(X)	(X)	(X)	(X)
Beverage and tobacco products.....	1.66	1.66	1.64	1.66	(X)	(X)	(X)	(X)
Textiles.....	1.23	1.25	1.26	1.29	(X)	(X)	(X)	(X)
Textile products.....	1.45	1.49	1.52	1.53	(X)	(X)	(X)	(X)
Apparel.....	2.25	2.35	2.42	2.37	(X)	(X)	(X)	(X)
Leather and allied products.....	2.21	2.30	2.37	2.38	(X)	(X)	(X)	(X)
Paper products.....	1.04	1.05	1.06	1.07	(X)	(X)	(X)	(X)
Printing.....	0.87	0.85	0.84	0.82	(X)	(X)	(X)	(X)
Petroleum and coal products.....	0.65	0.71	0.66	0.68	(X)	(X)	(X)	(X)
Chemical products.....	1.20	1.22	1.22	1.22	(X)	(X)	(X)	(X)
Plastics and rubber products.....	1.33	1.33	1.33	1.31	(X)	(X)	(X)	(X)

X Not Applicable ¹ Preliminary ² Revised data due to late receipts and concurrent seasonal adjustment.

² Excludes the following industries with no unfilled orders: Wood products; nonmetallic mineral products; medical equipment and supplies; office supplies; other miscellaneous manufacturing; cutlery and handtools; farm and garden machinery; computer storage and peripheral devices; audio and video equipment; manufacturing and reproducing magnetic and optical media; batteries; automobiles; light trucks and utility vehicles; heavy duty trucks; and miscellaneous furniture.

³ Unfilled orders to shipments ratio excludes semiconductor manufacturing.

Table 8. Revisions to Previously Published Monthly Percent Changes ¹

[Based on Seasonally Adjusted data from the Manufacturers' Shipments, Inventories, and Orders Survey.]

Industry	Shipments		New Orders		Unfilled Orders		Inventories	
	Dec ² 2016	Dec ³ 2015- Nov 2016	Dec ² 2016	Dec ³ 2015- Nov 2016	Dec ² 2016	Dec ³ 2015- Nov 2016	Dec ² 2016	Dec ³ 2015- Nov 2016
	All manufacturing industries.....	(X)	0.2	(X)	0.3	(X)	0.1	(X)
Durable goods industries.....	0.0	0.2	-0.1	0.5	0.0	0.1	-0.1	0.1
Wood products.....	(X)	0.5	(X)	(NA)	(X)	(NA)	(X)	0.2
Nonmetallic mineral products.....	(X)	0.1	(X)	(NA)	(X)	(NA)	(X)	0.1
Primary metals.....	0.2	0.4	0.2	0.7	0.1	0.3	0.1	0.4
Fabricated metal products.....	-0.2	0.3	0.0	0.5	0.1	0.2	-0.2	0.3
Machinery.....	0.0	0.6	0.3	0.6	0.1	0.2	0.0	0.2
Computers and electronic products.....	0.3	0.4	0.2	0.6	0.0	0.1	-0.2	0.2
Electrical equipment, appliances, and components.....	-0.5	0.4	-1.2	0.6	-0.5	0.2	-0.1	0.2
Transportation equipment.....	-0.1	0.3	-0.3	1.0	0.0	0.1	0.0	0.2
Furniture and related products.....	(X)	0.3	(X)	0.9	(X)	0.5	(X)	0.3
Miscellaneous products.....	(X)	0.6	(X)	0.6	(X)	0.3	(X)	0.2
Nondurable goods industries.....	(X)	0.2	(X)	(NA)	(X)	(NA)	(X)	0.3
Food products.....	(X)	0.2	(X)	(NA)	(X)	(NA)	(X)	0.4
Beverage and tobacco products.....	(X)	0.7	(X)	(NA)	(X)	(NA)	(X)	0.3
Textiles.....	(X)	0.6	(X)	(NA)	(X)	(NA)	(X)	0.3
Textile products.....	(X)	0.8	(X)	(NA)	(X)	(NA)	(X)	0.3
Apparel.....	(X)	0.9	(X)	(NA)	(X)	(NA)	(X)	0.4
Leather and allied products.....	(X)	1.1	(X)	(NA)	(X)	(NA)	(X)	0.5
Paper products.....	(X)	0.2	(X)	(NA)	(X)	(NA)	(X)	0.2
Printing.....	(X)	0.3	(X)	(NA)	(X)	(NA)	(X)	0.4
Petroleum and coal products.....	(X)	1.1	(X)	(NA)	(X)	(NA)	(X)	1.7
Chemical products.....	(X)	0.2	(X)	(NA)	(X)	(NA)	(X)	0.1
Plastics and rubber products.....	(X)	0.4	(X)	(NA)	(X)	(NA)	(X)	0.2

X Not Applicable NA Not Available

¹ 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.

² The current month revisions are the difference between the advance percent change and the percent change as shown in this publication.

³ The twelve month revisions are the differences between the month-to-month percent changes of the preliminary and final estimates. The monthly averages are the simple averages of the absolute values of the differences for the months specified. The advance to final percent change revisions for the durable goods industries are shown in the advance report for the month.

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.