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 1. Value of Manufacturers' Shipments for Industry Groups¹

		Sea	asonally Ad	ljusted					Not	Seasonally A	Adjusted		
		Monthly		Per	cent Cha	inge		Moi	nthly			Year to date	
Industry	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Nov Dec.	Oct Nov.	Sep Oct.	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Dec. 2015	2016 ^p	2015	% Change 2016/ 2015
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
Excluding transportation	393,671	385,183	383,523	2.2	0.4	0.6	384,966	375,495	388,670	372,010	4,561,046	4,649,987	-1.9
Excluding defense With unfilled orders	462,789 169,062	452,300 166,877	451,528 166,255	2.3 1.3	0.2 0.4	0.2 -0.5	451,899 170,447	440,685 161,401	457,596 165,729	436,563 165,054	5,383,257 1,990,611	5,471,790 1,997,276	-1.6 -0.3
Durable goods industries	238,083	234,824	233,989	1.4	0.4	-0.2	235,921	227,379	235,753	230,858	2,806,164	2,820,620	-0.5
Wood products	8,891	8,745	8,507	1.7	2.8	1.0	7,754	8,087	8,891	6,989	100,616	95,814	5.0
Nonmetallic mineral products	10,057	10,049	9,971	0.1	0.8	0.8	8,661	9,698	10,681	8,526	119,223	114,180	4.4
Primary metals	18,498	18,224	17,752	1.5	2.7	0.0	16,789	17,240	17,827	16,320	214,400	230,646	-7.0
Iron and steel mills Aluminum and nonferrous metals	8,345 8,728	8,133 8,674	7,937 8,414	2.6 0.6	2.5 3.1	0.6 -0.4	7,655 7,843	7,672 8,252	8,027 8,424	7,364 7,465	96,615 100,102	107,379 103,639	-10.0 -3.4
Ferrous metal foundries	1,425	1,417	1,401	0.6	1.1	-1.6	1,291	1,316	1,376	1,491	17,683	19,628	-9.9
Fabricated metal products	30,754	30,837	30,445	-0.3	1.3	1.2	28,520	29,702	31,131	27,549	361,894	355,334	1.8
Machinery	30,800	30,317	29,959	1.6	1.2	-0.4	31,827	28,220	29,655	32,380	364,379	386,253	-5.7
Farm machinery	1,879	1,821	1,814	3.2	0.4	-0.1	1,667	1,335	1,673	1,722	21,596	24,638	-12.3
Construction machinery	2,428	2,462	2,646	-1.4	-7.0	3.2	2,459	2,415	2,803	3,270	32,430	43,579	-25.6
gas field machinery	807	809	869	-0.2	-6.9	-11.1	921	801	899	1,494	11,479	20,477	-43.9
Industrial machinery	2,511	2,513	2,396	-0.1	4.9	4.9	3,056	2,197	2,416	2,950	29,199	29,049	0.5
Photographic equipment	411	407	396	1.0	2.8	-0.3	507	425	406	539	5,083	5,179	-1.9
Ventilation, heating, air-conditioning,	2.505	0.470	0.477	0.7	0.4	0.4	0.405	0.445	0.400	2 400	44 744	40.470	
and refrigeration equipment Metalworking machinery	3,505 3,396	3,479 3,310	3,477 3,184	0.7 2.6	0.1 4.0	0.1 -1.5	3,405 3,834	3,115 3,350	3,163 3,326	3,426 3,298	41,744 37,853	42,476 33,683	-1.7 12.4
Turbines, generators, and other	5,550	5,510	5,104	2.0	4.0	-1.3	5,054	3,300	5,520	5,230	57,000	55,003	12.4
power transmission equipment	4,290	4,049	3,886	6.0	4.2	-3.5	4,106	3,984	3,910	3,794	48,557	52,096	-6.8
Material handling equipment	3,053	3,049	3,019	0.1	1.0	1.3	3,197	2,926	3,092	3,150	35,991	31,959	12.6
Computers and electronic products ²	27,992	27,770	27,516	0.8	0.9	0.9	31,229	27,454	27,357	29,594	325,111	312,851	3.9
Computers	583	576	608	1.2	-5.3	6.9	749	517	613	863	7,203	9,316	-22.7
Computer storage devices Other peripheral equipment	526 579	571 620	586 617	-7.9 -6.6	-2.6 0.5	22.6 1.6	864 873	464 527	433 525	837 1,040	6,702 7,727	6,600 9,507	1.5 -18.7
Nondefense communications	3/3	020	017	-0.0	0.5	1.0	0/3	321	323	1,040	1,121	9,307	-10.7
equipment	3,311	3,196	3,067	3.6	4.2	-5.1	4,168	2,915	2,780	3,833	37,802	37,195	1.6
Defense communications equipment	267	294	281	-9.2	4.6	-6.0	270	308	283	403	3,480	3,848	-9.6
Audio and video equipment	402	367	368	9.5	-0.3	6.4	543	467	461	445	4,391	3,468	26.6
Electronic components Nondefense search and navigation	4,954	4,872	4,907	1.7	-0.7	-1.1	4,940	4,539	4,854	4,520	57,470	51,612	11.4
equipment	1,514	1,357	1,402	11.6	-3.2	0.5	1,595	1,364	1,334	1,523	16,658	15,537	7.2
Defense search and navigation	.,0	1,001	1,102		0.2	0.0	1,000	1,001	1,001	1,020	10,000	.0,00.	
equipment	2,560	2,533	2,537	1.1	-0.2	-0.2	2,852	2,689	2,581	2,845	30,619	30,420	0.7
Electromedical, measuring,													
and control instruments	9,160	9,250	9,244	-1.0	0.1	0.8	10,517	9,018	8,776	10,222	109,179	103,227	5.8
Electrical equipment, appliances, and components	9,620	9,506	9,632	1.2	-1.3	0.7	9,599	9,378	9,787	9,757	114,522	121,697	-5.9
Electric lighting equipment	1,034	1,038	1,049	-0.4	-1.0	1.5	1,085	1,065	1,116	1,118	12,742	12,441	2.4
Household appliances	1,407	1,364	1,407	3.2	-3.1	-0.4	1,408	1,426	1,455	1,444	16,808	18,508	-9.2
Electrical equipment	2,914	2,935	2,909	-0.7	0.9	0.4	2,930	2,771	2,785	3,138	35,213	38,293	-8.0
Batteries	775	758	775	2.2 2.4	-2.2 -0.4	2.4 -1.6	843 81,777	874 78,810	877 81,087	870 79,045	9,487 972,559	10,141	-6.4 0.3
Transportation equipment Automobiles	82,172 8,852	80,244 8,948	80,572 8,803	-1.1	1.6	-3.7	8,291	9,030	9,082	9,914	114,353	969,686 126,926	-9.9
Light trucks and utility vehicles	16,398	15,594	15,601	5.2	0.0	1.6	15,588	15,214	16,403	14,453	184,678	178,428	3.5
Heavy duty trucks	2,021	2,050	2,000	-1.4	2.5	-4.1	1,816	1,930	2,067	2,218	26,272	31,711	-17.2
Motor vehicle bodies, parts,													
and trailers	29,459	28,939	28,873	1.8	0.2	-0.8	25,955	27,975	29,787	23,908	339,480	309,456	9.7
Nondefense aircraft and parts Defense aircraft and parts	13,028 4,192	12,271 4,174	13,479 3,931	6.2 0.4	-9.0 6.2	-4.5 -4.9	16,528 5,129	12,069 4,334	12,139 3,739	14,261 5,899	161,965 50,748	168,041 59,037	-3.6 -14.0
Ships and boats	3,112	3,134	2,990	-0.7	4.8	-4.1	3,124	3,242	3,085	2,903	36,842		
Furniture and related products	6,371	6,367	6,382	0.1	-0.2	0.5	6,260	6,121	6,263	6,163	75,766	73,234	3.5
Miscellaneous durable goods	12,928	12,765	13,253	1.3	-3.7	1.1	13,505	12,669	13,074	14,535	157,694	160,925	-2.0
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
Food products	GE EG1		64.550	11	0.4	0.6						773,839	0.6
Grain and oilseed milling	65,561 8,164	64,826 8,022	64,553 7,946	1.1 1.8	1.0	-0.6 -0.5	66,255 8,497	67,106 8,667	67,919 8,697	64,376 8,572	778,453 96,612	96,213	0.6 0.4
Dairy products	9,466	9,267	9,061	2.1	2.3	-1.6	9,546	9,790	9,403	9,281	110,368	110,620	-0.2
Meat, poultry, and seafood products	17,750	17,584	17,529	0.9	0.3	-0.7	17,527	17,729	17,995	17,162	213,546	221,948	-3.8
Beverage and tobacco products	12,356	12,339	12,448	0.1	-0.9	0.5	12,055	12,268	12,274	11,623	147,483	145,998	1.0
Beverages	9,095	9,138	9,120	-0.5	0.2	-1.3	8,794	9,067	8,946	8,673	110,894	108,525	2.2
Tobacco Textile mills	3,261 2,581	3,201 2,545	3,328 2,514	1.9 1.4	-3.8 1.2	5.7 1.5	3,261 2,274	3,201 2,425	3,328 2,610	2,950 2,195	36,589 30,319	37,473 30,903	-2.4 -1.9
Textile products	2,118	2,062	2,014	2.7	2.4	1.2	1,871	1,975	2,010	1,732	24,050	24,477	-1.5
Apparel	1,068	1,042	1,025	2.5	1.7	-2.1	1,035	1,196	1,191	999	12,655	12,097	4.6
Leather and allied products	354	341	331	3.8	3.0	0.3	341	329	344	332	4,077	4,668	-12.7
Paper products	15,465	15,355	15,183	0.7	1.1	0.1	15,068	15,023	15,512	15,002	182,935	182,809	0.1
Pulp, paper, and paperboard mills	6,835 4,801	6,778	6,716	0.8 0.5	0.9 1.8	-0.1 0.2	6,729 4,521	6,610 4,642	6,777	6,786 4 394	81,246 56,294	82,250 55,465	-1.2 1.5
Paperboard containers	4,801 6,942	4,778 6,984	4,694 7,041	-0.5	1.8 -0.8	-1.4	4,521 6,875	7,154	4,832 7,383	4,394 7,296	56,294 85,434	55,465 86,058	1.5 -0.7
Petroleum and coal products	44,198	38,763	38,959	14.0	-0.5	5.4	41,552	37,088	39,819	33,698	432,735	525,255	-17.6
Petroleum refineries	39,821	34,526	34,828	15.3	-0.9	5.4	37,917	33,149	35,522	30,961	387,046	485,047	-20.2
Chemical products	67,936	67,190	66,752	1.1	0.7	-0.1	65,980	64,201	65,312	65,476	798,894	783,931	1.9
Pesticides, fertilizers, and other	4.064	4.070	4.400	0.4	4.0	0.5	2 202	2 245	2.024	2 405	40.070	46 600	F 0
agricultural chemicalsPharmaceuticals and medicines	4,061 22,565	4,079 22,147	4,120 21,814	-0.4 1.9	-1.0 1.5	-0.5 0.1	3,393 22,864	3,245 21,973	2,924 21,742	3,485 22,710	49,073 261,462	46,628 236,545	5.2 10.5
Paints, coatings, and adhesives	3,807	3,790	3,713	0.4	2.1	1.5	3,206	3,266	3,652	2,995	44,018	40,950	7.5
			19,286	0.1	-0.7	-0.7	17,516	18,161	19,597	17,468	230,406	229,018	0.6

Preliminary 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.

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

² Estimates and percent changes of shipments for the semiconductor industry are included in computers and electronic products, and all other applicable aggregate totals.

Table 2. Value of Manufacturers' New Orders for Industry Groups¹

[Estimates are shown in millions of do			Seasonally							easonally A	Adjusted		
		Monthly		Pei	cent Chan	ge		Mor	thly		,	ear to date	
Industry	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Nov Dec.	Oct Nov.	Sep Oct.	Dec. 2016 ^p	Nov. 2016 ^r	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 31,199	1,438 30,997	-3.6 -0.8	7.0 0.7	-4.8	1,406	1,415 29,125	1,404	1,583	18,252	19,344	-5.6 2.9
Fabricated metal products	30,946 30,929	31,199	29.972	-0.8 0.7	2.5	3.1 0.3	28,001 30,927	29,125	30,913 29.781	27,140 29,528	363,026 360,509	352,667 377,492	-4.5
Machinery Construction machinery	2,605	2,709	29,972	-3.8	4.2	9.0	2,696	2,734	29,761	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	000	000	010	0.0	0.4	0.0	704	000	010	000	,,,,,	0,400	24.0
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,	9,411	9,409	9,340	0.0	0.7	0.7	10,962	0,077	0,924	10,697	110,412	104,719	5.4
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

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

Note: 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/>.

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.

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

Estimates are shown in millions of dol			Seasonally A			,	,		easonally Adj	usted	
		Monthly		Pe	rcent Chan	ge		Mor	nthly		% Change
Industry	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Nov Dec.	Oct Nov.	Sep Oct.	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Dec. 2015	December 2016/ 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	
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	
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	
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	5 044	5 000					5 0 4 7		5 000	0.470	
gas field machinery	5,811	5,806	5,806	0.1	0.0	-0.8	5,617	5,887	5,882	8,170	
Industrial machinery	7,059	7,092	7,060	-0.5	0.5	-3.0	6,744	6,928	7,003	7,917	
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,	6,014	6.023	5,952	-0.1	1.2	-1.9	5,787	5,889	5,842	6,328	-8.5
and refrigeration equipment		-,	5,952 7,412	-0.1 -0.4	-0.8	0.5	7,101				
Metalworking machinery Turbines, generators, and other	7,329	7,356	7,412	-0.4	-0.8	0.5	7,101	7,271	7,322	6,619	7.3
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	0.3	12,365	11,996	11,937	11,633	
	130,812	129,937	129,488	0.7	0.3	0.4	12,303	128,434	129,219	124,191	4.5
Computers and electronic products ²	2,421	2,436	2,423	-0.6		0.2	2,421	2,436	2,423	2,447	
Nondefense communications	2,421	2,436	2,423	-0.6	0.5	0.1	2,421	2,436	2,423	2,447	-1.1
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	0.4	2,172	2,200	2,253	2,237	-2.9
Electronic components	12,089	12,096	12,113	-0.0	-0.4	-0.3	11,914	11,936	12,084	11,954	
Nondefense search and navigation	12,003	12,030	12,113	-0.1	-0.1	-0.5	11,514	11,550	12,004	11,554	-0.5
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	00.040	00.000	22.422				07.000	07.400	07.055	07.055	
equipment Electromedical, measuring,	28,016	28,006	28,169	0.0	-0.6	-0.3	27,990	27,428	27,955	27,355	2.3
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,	34,000	33,733	33,390	0.7	0.5	0.3	33,761	33,310	33,437	32,340	3.0
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	
Transportation equipment	759,790	768,489	773,379	-1.1	-0.6	1.0	767,863	763,977	764,333	794,858	
Motor vehicle bodies, parts,		,	,		3.0		,500		,500	,500	
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	
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

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 do	niars and ar		Seasonally A		icturers 3	mpments	, inventories		easonally Adi	usted	
		Monthly			rcent Chan	ge		Mon	, ,		% Change
Industry	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Nov Dec.	Oct Nov.	Sep Oct.	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Dec. 2015	December 2016/ 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 With unfilled orders	600,298 311,279	599,490 311,865	595,895 311,370	0.1 -0.2	0.6 0.2	0.0 -0.1	584,338 302,707	600,196 312,128	600,721 311,640	583,316 307,102	0.2 -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 31,643	13,083 31,656	13,139 31,558	-0.4 0.0	-0.4 0.3	0.1 -0.2	12,752 31,533	12,690 31,550	12,817 31,554	12,652 33,208	0.8 -5.0
Iron and steel mills	17,372	17,359	17,326	0.0	0.3	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 Fabricated metal products	2,025 48,555	2,024 48,698	2,023 48,886	0.0 -0.3	0.0 -0.4	0.5 -0.1	1,978 47,785	1,996 48,294	1,982 48,607	2,038 48,341	-2.9 -1.2
Machinery	66,305	65,996	65,390	0.5	0.9	-0.1	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	0.0	-0.6	0.6	5,594	5,785	5,815	5,514	1.5
Turbines, generators, and other	5,1.10	-,	-,				2,22	-,	0,010	-,	
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 42,432	4,633 42,550	4,674 42,508	-0.2 -0.3	-0.9 0.1	0.4 0.1	4,307 40,954	4,710 42,759	4,809 42,729	4,160 41,151	3.5 -0.5
Computers and electronic products ²	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 Nondefense search and navigation	7,666	7,852	7,770	-2.4	1.1	1.0	7,411	7,743	7,733	7,343	0.9
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	5,515	2,222	-,				_,,,,,	0,000	5,125	-,	
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,	14,011	14,000	14,170	0.4	0.0	0.2	10,400	14,070	14,200	10,000	2.0
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 2,211	2,006 2,219	2,035 2,225	-0.3 -0.4	-1.4 -0.3	-0.3 -0.9	1,919 1,992	1,988 2,149	2,042 2,275	1,882 2,052	2.0 -2.9
Household appliances Electrical equipment	4,740	4,761	4,786	-0.4	-0.5	-0.9	4,624	4,824	4,768	4,872	-2.9 -5.1
Batteries	1,295	1,305	1,304	-0.8	0.1	-1.8	1,191	1,270	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
AutomobilesLight trucks and utility vehicles	4,297 4,220	4,274 4,312	4,203 4,368	0.5 -2.1	1.7 -1.3	-2.3 -1.1	4,016 3,746	4,324 4,478	4,367 4,556	4,321 3,966	-7.1 -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 -0.2	23,582	24,245	23,973	23,344	1.0
Nondefense aircraft and parts Defense aircraft and parts	62,655 11,021	62,811 11,140	62,622 11,220	-0.2 -1.1	0.3 -0.7	1.2	60,578 10,841	62,748 11,145	62,600 11,206	61,877 11,084	-2.1 -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 Meat, poultry, and seafood products	7,699	7,727	7,397 8,834	-0.4	4.5	-0.2 -0.5	7,198 8,529	7,419 9,033	7,376	6,978 8,790	3.2 -3.0
Beverage and tobacco products	8,786 20,567	8,802 20,490	20,475	-0.2 0.4	-0.4 0.1	-0.5	20,574	20,960	9,101 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 Textile products	3,174 3,076	3,169 3,070	3,177 3,066	0.2 0.2	-0.3 0.1	-0.2 0.4	3,118 2,995	3,136 3,041	3,175 3,056	3,052 2,988	2.2 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 Paperboard containers	6,629 5,048	6,631 5,117	6,633 5,115	0.0 -1.3	0.0 0.0	-0.2 0.0	6,612 5,019	6,556 5,081	6,520 5,085	6,840 5,178	-3.3 -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 81,478	23,193 81,761	20,963 81,701	5.1 -0.3	10.6 0.1	2.8 0.4	22,880 78,978	22,639 80,710	22,523 80,620	19,042 78,524	20.2 0.6
Pesticides, fertilizers, and other	01,410	31,701	01,701	-0.3	0.1	0.4	10,310	30,710	30,020	10,524	0.0
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 3,802	32,621 3,783	32,578 3,760	-0.5 0.5	0.1	-0.2 0.2	30,883 3,643	32,077 3,641	32,231 3,621	30,484 3,456	1.3 5.4
Paints, coatings, and adhesives Plastics and rubber products	3,802 25,471	3,783 25,546	3,760 25,604	-0.3	0.6 -0.2	0.2	3,643 24,720	3,641 25,175	25,232	3,456 24,332	5.4 1.6
actico una rabboi producto	25,47 1	20,040	25,004	-0.3	-0.2	0.0	27,720	20,170	20,202	24,002	1.0

^p Preliminary ^r Revised data due to late receipts and concurrent seasonal adjustment.

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

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.

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}

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

X Not Applicable Preliminary

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 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; elphotographic equipment; metalworking machinery; elevenses and generators; other power transmission equipment; pumps and compressors; material handling equipment; all other machinery; electronic computers storage devices; other computer peripheral equipment; communications equipment search and navigation equipment; electronedical, 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 6. Value of Manufacturers' Inventories, by Stage of Fabrication, by Industry Group¹

Estimates are shown in millions of d	ollars and a	re based or	n data from Seasonally A		acturers'	Shipment	s, Inventories, and Orders Survey.] Not Seasonally Adjusted					
		Monthly	oeasonany A		rcent Chan	ae		Mon		usteu	% Change	
Industry	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Nov Dec.	Oct Nov.	Sep Oct.	Dec. 2016 ^p	Nov. 2016 ^r	Oct. 2016	Dec. 2015	December 2016/ 2015	
MATERIALS AND SUPPLIES												
All manufacturing industries	207,974	209,224	208,767	-0.6	0.2	0.2	206,822	208,955	209,290	205,987	0.4	
Durable goods industries	129,037	129,583	129,703	-0.4	-0.1	-0.3	128,169	129,503	129,707	128,604	-0.3	
Wood products	4,886	4,811	4,654	1.6	3.4	-0.6	4,996	4,916	4,785	4,676	6.8	
Nonmetallic mineral products Primary metals	5,249 12,612	5,212 12,705	5,297 12,679	0.7 -0.7	-1.6 0.2	0.4 0.0	5,220 12,958	5,162 12,894	5,278 12,838	5,151 13,327	1.3 -2.8	
Fabricated metal products	17,353	17,543	17,739	-1.1	-1.1	-1.2	17,385	17,471	17,663	17,920	-3.0	
Machinery Computers and electronic products Electrical equipment, appliances,	23,323 17,619	23,556 17,575	23,348 17,630	-1.0 0.3	0.9 -0.3	-1.5 1.1	22,602 17,406	23,461 17,537	23,268 17,572	24,450 16,798	-7.6 3.6	
and componentsTransportation equipment	6,485 30,451	6,489 30,614	6,555 30,692	-0.1 -0.5	-1.0 -0.3	-0.3 0.1	6,374 30,286	6,475 30,532	6,552 30,663	6,601 28,858	-3.4 4.9	
Furniture and related products	3,638	3,601	3,631	1.0	-0.8	0.4	3,608	3,583	3,617	3,556	1.5	
Miscellaneous products	7,421	7,477	7,478	-0.7	0.0	0.2	7,334	7,472	7,471	7,267	0.9	
Nondurable goods industries	78,937	79,641 18,541	79,064 18,249	-0.9 -1.6	0.7	0.8 0.9	78,653 18,616	79,452 19,259	79,583 19,088	77,383 18,303	1.6 1.7	
Food products Beverage and tobacco products	18,245 4,789	4,865	4,955	-1.6	1.6 -1.8	-1.3	4,879	4,940	5,005	5,100	-4.3	
Textiles Textile products	1,161 1,027	1,165 1,031	1,159 1,050	-0.3 -0.4	0.5 -1.8	0.2 -0.7	1,150 1,016	1,153 1,018	1,147 1,040	1,163 1,059	-1.1 -4.1	
Apparel	676	671	664	0.7	1.1	1.2	656	658	684	691	-5.1	
Leather and allied products	232 8,178	229 8,256	230 8,291	1.3 -0.9	-0.4 -0.4	-0.9 0.1	233 8,184	227 8,228	231 8,180	251 8,468	-7.2 -3.4	
Paper products	2,771	2,743	2,731	1.0	0.4	1.3	2,687	2,737	2,777	2,729	-3.4	
Petroleum and coal products	6,176	6,387	5,836 25,773	-3.3	9.4	4.3	5,907	6,083	6,085	5,348	10.5	
Chemical productsPlastics and rubber products	25,822 9,860	25,805 9,948	10,126	0.1 -0.9	0.1 -1.8	1.1 0.0	25,525 9,800	25,345 9,804	25,366 9,980	24,314 9,957	5.0 -1.6	
WORK IN PROCESS												
All manufacturing industries	193,580	192,187	191,088	0.7	0.6	-0.3	187,503	192,792	193,292	188,500	-0.5	
Durable goods industries	143,519	143,542	143,262	0.0	0.2	-0.1	138,610	143,618	143,456	142,451	-2.7	
Wood products Nonmetallic mineral products	2,304 1,485	2,278 1,500	2,368 1,480	1.1 -1.0	-3.8 1.4	2.6 0.2	2,246 1,408	2,242 1,420	2,346 1,409	2,165 1,390	3.7 1.3	
Primary metals	9,196	9,124	9,040	0.8	0.9	-1.2	8,789	9,053	9,021	9,593	-8.4	
Fabricated metal products	12,903 19,680	12,880 19,300	12,832 19,240	0.2 2.0	0.4 0.3	-0.1 0.0	12,636 18,667	12,938 19,799	12,927 19,571	12,600 17,406	0.3 7.2	
Computers and electronic products	13,146	13,178	13,130	-0.2	0.4	-0.5	12,434	13,010	13,140	13,346	-6.8	
Electrical equipment, appliances, and components	3,436	3,448	3,437	-0.3	0.3	-0.3	3,313	3,438	3,416	3,330	-0.5	
Transportation equipment	76,243	76,724	76,643	-0.6	0.1	-0.1	74,168	76,604	76,506	77,964	-4.9	
Furniture and related products Miscellaneous products	1,100 4,026	1,130 3,980	1,101 3,991	-2.7 1.2	2.6 -0.3	1.6 0.5	1,091 3,858	1,124 3,990	1,097 4,023	1,038 3,619	5.1 6.6	
Nondurable goods industries	50,061	48,645	47,826	2.9	1.7	-0.7	48,893	49,174	49,836	46,049	6.2	
Food products	6,131	5,818	5,821	5.4	-0.1	-3.9	6,617	6,664	6,902	6,402	3.4	
Beverage and tobacco products Textiles	7,693 661	7,624 661	7,561 668	0.9 0.0	0.8 -1.0	-1.0 -0.3	8,025 640	8,001 657	8,128 675	7,889 653	1.7 -2.0	
Textile products	433	432	434	0.2	-0.5	0.5	406	429	436	410	-1.0	
ApparelLeather and allied products	326 109	331 109	321 108	-1.5 0.0	3.1 0.9	-1.2 0.0	297 108	318 109	322 107	303 98	-2.0 10.2	
Paper products	1,251	1,254	1,255	-0.2	-0.1	-0.1	1,221	1,242	1,234	1,254	-2.6	
Printing Petroleum and coal products	1,476 9,524	1,462 8,840	1,465 8,164	1.0 7.7	-0.2 8.3	-2.2 1.3	1,349 8,684	1,427 8,604	1,572 8,804	1,474 6,952	-8.5 24.9	
Chemical products	19,296	18,962	18,892	1.8	0.4	-0.7	18,510	18,609	18,572	17,793	4.0	
Plastics and rubber products	3,161	3,152	3,137	0.3	0.5	1.9	3,036	3,114	3,084	2,821	7.6	
FINISHED GOODS All manufacturing industries	224,031	223,600	221,856	0.2	0.8	0.3	214,961	223.996	223,853	213,827	0.5	
· ·	·						·	-,				
Durable goods industries Wood products	111,316 4,514	111,053 4,486	110,459 4,440	0.2 0.6	0.5 1.0	0.3 0.6	106,733 4,347	111,378 4,412	110,543 4,273	106,443 4,282	0.3 1.5	
Nonmetallic mineral products	6,301	6,371	6,362	-1.1	0.1	-0.1	6,124	6,108	6,130	6,111	0.2	
Primary metalsFabricated metal products	9,835 18,299	9,827 18,275	9,839 18,315	0.1 0.1	-0.1 -0.2	0.6 0.9	9,786 17,764	9,603 17,885	9,695 18,017	10,288 17,821	-4.9 -0.3	
Machinery	23,302	23,140	22,802	0.7	1.5	-0.1	22,622	23,220	22,549	22,894	-1.2	
Computers and electronic products Electrical equipment, appliances,	11,667	11,797	11,748	-1.1	0.4	-0.8	11,114	12,212	12,017	11,007	1.0	
and components	6,296	6,280	6,249	0.3	0.5	-1.4	5,871	6,215	6,316	5,874	-0.1	
Transportation equipment Furniture and related products	16,853 2,487	16,646 2,467	16,457 2,487	1.2 0.8	1.1 -0.8	1.2 0.7	15,155 2,323	17,231 2,500	17,017 2,495	14,534 2,297	4.3 1.1	
Miscellaneous products	11,762	11,764	11,760		0.0	0.3	11,627	11,992	12,034	11,335	2.6	
Nondurable goods industries	112,715	112,547	111,397	0.1	1.0 0.4	0.4	108,228	112,618	113,310	107,384	0.8	
Food products Beverage and tobacco products	29,449 8,085	29,456 8,001	29,337 7,959	0.0 1.0	0.4	-0.4 0.2	28,151 7,670	30,182 8,019	31,035 8,076	27,744 7,624	1.5 0.6	
Textiles	1,352	1,343	1,350	0.7	-0.5	-0.5	1,328	1,326	1,353	1,236	7.4	
Textile productsApparel	1,616 1,404	1,607 1,446	1,582 1,494	0.6 -2.9	1.6 -3.2	1.1 -0.7	1,573 1,310	1,594 1,406	1,580 1,534	1,519 1,361	3.6 -3.7	
Leather and allied products	440	447	448	-1.6	-0.2	0.9	432	452	451	460	-6.1	
Paper products	6,623 1,768	6,614 1,752	6,595 1,712	0.1 0.9	0.3 2.3	-0.4 2.4	6,491 1,714	6,541 1,761	6,588 1,756	6,659 1,508	-2.5 13.7	
Petroleum and coal products	13,168	12,441	11,543	5.8	7.8	2.0	12,732	12,324	12,087	11,302	12.7	
Chemical productsPlastics and rubber products	36,360 12,450	36,994 12,446	37,036 12,341	-1.7 0.0	-0.1 0.9	0.5 1.1	34,943 11,884	36,756 12,257	36,682 12,168	36,417 11,554	-4.0 2.9	
P	, ,,	,	,				,	,				

^p Preliminary 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.

7			

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.]

	Inve	ntory/Shi _l	oments ra	tio	Unfille	d Orders/	Shipment	s ratio ²
Industry	Dec 2016 ^p	Nov 2016 ^r	Oct 2016	Sep 2016	Dec 2016 ^p	Nov 2016 ^r	Oct 2016	Sep 2016
All manufacturing industries ³	1.31	1.34	1.34	1.34	(X)	(X)	(X)	(X)
Durable goods industries ³	1.61 1.32 1.30 1.71 1.58 2.15 1.52 1.69 1.50 1.13 1.80	1.64 1.32 1.30 1.74 1.58 2.18 1.53 1.71 1.55 1.13 1.82	1.64 1.35 1.32 1.78 1.61 2.18 1.54 1.69 1.54 1.13	1.64 1.35 1.33 1.78 1.63 2.19 1.56 1.71 1.51 1.73	6.62 (X) (X) 1.83 2.52 3.30 5.85 2.09 13.84 1.54 (X)	6.75 (X) (X) 1.85 2.50 3.34 5.89 2.09 14.32 1.52 (X)	(X) (X)	6.70 (X) (X) 1.84 2.53 3.36 5.83 2.01 13.85 1.53 (X)
Nondurable goods industries	1.02 0.82 1.66 1.23 1.45 2.25 2.21 1.04 0.87 0.65 1.20 1.33	1.04 0.83 1.66 1.25 1.49 2.35 2.30 1.05 0.85 0.71 1.22 1.33	1.04 0.83 1.64 1.26 1.52 2.42 2.37 1.06 0.84 0.66 1.22 1.33	1.04 0.83 1.66 1.29 1.53 2.37 2.38 1.07 0.82 0.68 1.22 1.31	\$	(X)	\$\\ \xi \times \	(X)

X Not Applicable

^p Preliminary

^r 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.]

Shipn	nents	New C	Orders	Unfilled	Orders	Inven	tories

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.