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

Summary

New orders for manufactured goods in October, up four consecutive months, increased \$12.5 billion or 2.7 percent to \$469.4 billion, the U.S. Census Bureau reported today. This followed a 0.6 percent September increase.

Shipments, up seven of the last eight months, increased \$1.7 billion or 0.4 percent to \$464.7 billion. This followed a 0.9 percent September increase.

Unfilled orders, up following four consecutive monthly decreases, increased \$8.2 billion or 0.7 percent to \$1,128.5 billion. This followed a 0.2 percent September decrease. The unfilled orders-to-shipments ratio was 6.78, up from 6.70 in September.

Inventories, up three of the last four months, increased \$0.3 billion or virtually unchanged to \$621.4 billion. This followed a 0.1 percent September decrease. The inventories-to-shipments ratio was 1.34, unchanged from September.

New Orders

New orders for manufactured durable goods in October, up four consecutive months, increased \$10.6 billion or 4.6 percent to \$238.8 billion, down from the previously published 4.8 percent increase. This followed a 0.3 percent September increase.

Transportation equipment, also up four consecutive months, led the increase, \$9.4 billion or 12.0 percent to \$88.1 billion.

New orders for manufactured nondurable goods increased \$2.0 billion or 0.9 percent to \$230.7 billion.

Shipments

Shipments of manufactured durable goods in October, down two of the last three months, decreased \$0.3 billion or 0.1 percent to \$234.1 billion, down from the previously published 0.1 percent increase. This followed a 0.8 percent September increase.

Transportation equipment, down three of the last four months, drove the decrease, \$1.2 billion or 1.5 percent to \$80.7 billion.

Shipments of manufactured nondurable goods, up seven of the last eight months, increased \$2.0 billion or 0.9 percent to \$230.7 billion. This followed a 0.9 percent September increase. Petroleum and coal products, also up seven of the last eight months, drove the increase, \$2.3 billion or 6.2 percent to \$39.3 billion.

Unfilled Orders

Unfilled orders for manufactured durable goods in October, up following four consecutive monthly decreases, increased \$8.2 billion or 0.7 percent to \$1,128.5 billion, virtually unchanged from the previously published increase. This followed a 0.2 percent September decrease.

Transportation equipment, also up following four consecutive monthly decreases, led the increase, \$7.4 billion or 1.0 percent to \$773.0 billion.

Inventories

Inventories of manufactured durable goods in October, up four consecutive months, increased less than \$0.1 billion or virtually unchanged to \$383.7 billion, virtually unchanged from the previously published increase. This followed a virtually unchanged September increase.

Transportation equipment, up three of the last four months, drove the increase, \$0.2 billion or 0.2 percent to \$123.8 billion.

Inventories of manufactured nondurable goods, up two of the last three months, increased \$0.3 billion or 0.1 percent to \$237.8 billion. This followed a 0.2 percent September decrease. Chemical products, up following two consecutive monthly decreases, drove the increase, \$0.3 billion or 0.4 percent to \$81.7 billion.

By stage of fabrication, October materials and supplies were virtually unchanged in durable goods and increased 0.6 percent in nondurable goods. Work in process decreased 0.2 percent in durable goods and decreased 0.7 percent in nondurable goods. Finished goods increased 0.3 percent in durable goods and increased 0.2 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 November is scheduled for release on December 22, 2016 at 8:30 a.m. EST and the Full Report on January 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.

Table 1. Value of Manufacturers' Shipments for Industry Groups¹

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

[Estimates are shown in millions of do	mars and		asonally A		ie ivianu	nacture	is onipm	ents, inv		Seasonally A			
		Monthly	,	r e	cent Cha	inge		Мо	nthly	,	_	Year to date	
Industry	Oct. 2016 ^p	Sep. 2016 ^r	Aug. 2016	Sep Oct.	Aug Sep.	July - Aug.	Oct. 2016 ^p	Sep. 2016 ^r	Aug. 2016	Oct. 2015	2016 ^p	2015	% Change 2016/ 2015
All manufacturing industries	464,722	463,070	459,111	0.4	0.9	0.2	470,263	484,161	480,925	474,515	4,613,063	4,722,154	-2.3
Excluding transportation	384,061	381,213	378,875	0.7			389,184	395,350	396,577	390,214	3,801,099	3,912,055	
Excluding defense	452,207	450,581	446,417	0.4			458,119	470,105	468,538	461,401	4,491,196	4,601,622	-2.4 -0.8
With unfilled orders	166,359	167,154	165,300	-0.5		-0.2	165,850	178,853	172,425	167,762	1,658,884	1,672,791	
Durable goods industries	234,062	234,367	232,525	-0.1	0.8	0.0	235,933	250,295	243,977	240,162	2,343,044	2,364,242	-0.9
Wood products	8,499	8,419	8,330	1.0	1.1	0.8	8,898	8,816	9,036	8,395	84,782	81,560	4.0
Nonmetallic mineral products	9,979	9,893	9,890	0.9			10,708	10,716	11,223	10,475	100,891	96,520	
Primary metals	17,716	17,759	17,751	-0.2			17,954	18,252	18,963	18,702	180,498	197,516	
Iron and steel mills Aluminum and nonferrous metals	7,907 8,406	7,891 8,444	7,998 8,299	0.2 -0.5		-1.9 0.3	8,077 8,497	8,036 8,662	8,689 8,706	8,604 8,470	81,338 84,080	92,358 88,474	-11.9 -5.0
Ferrous metal foundries	1,403	1,424	1,454	-1.5		-0.1	1,380	1,554	1,568	1,628	15,080	16,684	-9.6
Fabricated metal products	30,250	30,082	30,159	0.6	-0.3		30,935	31,650	32,569	30,606	303,476	299,916	
Machinery	30,073	30,070	29,896	0.0			29,816	31,098	30,316	31,657	304,493	325,042	
Farm machinery Construction machinery	1,813 2,639	1,816 2,565	1,726 2,496	-0.2 2.9			1,672 2,785	1,652 2,539	1,583 2,462	1,826 3,620	18,593 27,538	21,457 37,146	-13.3 -25.9
Mining, oil field, and	2,039	2,303	2,430	2.5	2.0	2.0	2,700	2,339	2,402	3,020	27,556	37,140	-25.9
gas field machinery	895	978	891	-8.5	9.8	7.3	912	1,017	900	1,520	9,770	17,636	-44.6
Industrial machinery	2,371	2,283	2,449	3.9			2,401	2,618	2,338	2,613	23,931	23,837	0.4
Photographic equipment	403	397	420	1.5	-5.5	-0.2	413	431	433	470	4,158	4,218	-1.4
and refrigeration equipment	3,486	3,472	3,565	0.4	-2.6	3.4	3,163	3,732	3,887	3,333	35,224	35,894	-1.9
Metalworking machinery	3,185	3,234	3,084	-1.5			3,346	3,532	3,226	3,168	30,689		
Turbines, generators, and other													
power transmission equipment	3,884	4,025	3,965	-3.5			3,913	3,989	4,044	3,823	40,470	44,567	
Material handling equipment	3,063 27,549	2,981 27,262	2,960 27,433	2.8 1.1	0.7 -0.6	-1.0 0.6	3,148 27,392	3,095 30,360	3,173 27,680	2,863 26,093	29,924 266,463	26,071 257,171	14.8 3.6
Computers and electronic products ² Computers	616	569	612	8.3			611	657	585	694	5,935	7,757	-23.5
Computer storage devices	583	478	593	22.0			433	725	476	407	5,374	5,312	
Other peripheral equipment	614	607	643	1.2	-5.6	-1.4	525	743	564	659	6,327	7,857	-19.5
Nondefense communications	0.004	0.000	0.440				0.777	0.000	0.050	0.000	00.740	00.400	
equipment Defense communications equipment	3,061 282	3,233 299	3,142 337	-5.3 -5.7	2.9 -11.3	2.1 14.6	2,777 283	3,998 344	3,050 330	2,800 343	30,716 2,902	30,488 3,130	0.7 -7.3
Audio and video equipment	372	346	375	7.5		2.7	461	339	352	437	3,381	2,578	
Electronic components	5,004	4,964	4,950	0.8			4,895	5,211	5,332	4,444	48,032	42,907	11.9
Nondefense search and navigation													
equipment Defense search and navigation	1,405	1,395	1,369	0.7	1.9	-1.9	1,334	1,598	1,417	1,279	13,699	12,627	8.5
equipment	2,542	2,541	2,572	0.0	-1.2	-3.9	2,580	2,741	2,579	2,523	25,077	24,816	1.1
Electromedical, measuring,	_,	_,	_,-,				_,,	_,	_,	_,		,	
and control instruments	9,263	9,169	9,270	1.0	-1.1	0.3	8,786	10,535	9,005	8,529	89,654	84,502	6.1
Electrical equipment, appliances,	9,694	9,567	9,598	1.3	-0.3	0.8	9,828	10,241	10,123	10,161	95,586	102,356	-6.6
and components Electric lighting equipment	1,052	1,034	1,091	1.7		-0.6	1,116	1,075	1,149	1,138	10,592	102,336	3.6
Household appliances	1,429	1,412	1,388	1.2	1.7	1.8	1,478	1,508	1,448	1,561	13,997	15,545	
Electrical equipment	2,913	2,898	2,910	0.5			2,802	3,200	3,028	2,984	29,529	32,289	-8.5
Batteries	778 80,661	757	820 80,236	2.8		3.1	877 81,079	820 88,811	865 84,348	1,023	7,770 811,964	8,320	-6.6 0.2
Transportation equipment	8,806	81,857 9,143	9,471	-1.5 -3.7			9,082	9,797	10,195	84,301 10,940	97,032	810,099 106,862	
Light trucks and utility vehicles	15,666	15,357	15,265	2.0			16,462	16,835	16,731	16,651	153,935	149,072	
Heavy duty trucks	1,979	2,085	2,050	-5.1	1.7	-2.3	2,067	2,220	2,142	2,858	22,526	27,217	-17.2
Motor vehicle bodies, parts,	00.070	00.440	00.000	0.0	0.0	0.5	00.754	20.407	20.000	07.000	005 54.4	200 450	0.0
and trailers Nondefense aircraft and parts	28,870 13,595	29,113 14,112	28,363 12,974	-0.8 -3.7	2.6 8.8		29,751 12,139	30,487 15,783	30,662 12,737	27,808 12,371	285,514 133,368	260,456 138,417	9.6 -3.6
Defense aircraft and parts	3,933	4,132	4,475			10.4	3,740	4,849	4,247	5,332	41,286		
Ships and boats	2,964	3,118					3,053	3,306		3,077	30,444		
Furniture and related products	6,382	6,353	6,292	0.5		-	6,278	6,586	6,789	6,242	63,400		
Miscellaneous durable goods	13,259	13,105	12,940	1.2			13,045	13,765	12,930	13,530	131,491	132,969	
Nondurable goods industries	230,660	228,703	226,586	0.9	0.9	0.5	234,330	233,866	236,948	234,353	2,270,019	2,357,912	-3.7
Food products	64,630	64,940	65,011	-0.5	-0.1	0.1	68,012	66,712	66,389	68,414	645,185	643,433	0.3
Grain and oilseed milling	7,929	7,984	7,870	-0.7	1.4	-2.7	8,700	7,980	8,306	8,854	79,451	79,329	0.2
Dairy products	9,119		9,290	-1.0			9,494	9,515	9,631	9,605	91,123	91,729	
Meat, poultry, and seafood products Beverage and tobacco products	17,535 12,405	17,657 12,386	17,752 12,640	-0.7 0.2		-0.2 1.3	17,995 12,231	17,963 12,853	18,062 13,220	18,767 12,390	178,290 123,117	186,821 122,254	-4.6 0.7
Beverages	9,155	9,237	9,524	-0.9			8,981	9,704	10,104	9,095	93,068		
Tobacco	3,250	3,149	3,116	3.2		2.9	3,250	3,149	3,116	3,295	30,049	31,461	-4.5
Textile mills	2,509	2,476	2,525	1.3		1.0	2,612	2,538	2,670	2,679	25,622	26,247	-2.4
Textile products	2,014 1,043	1,990 1,047	2,018 1,065	1.2 -0.4			2,042 1,220	1,970 1,121	2,131 1,193	2,084 1,205	20,203 10,453	20,786 9,901	-2.8 5.6
ApparelLeather and allied products	325	330	336	-0.4 -1.5			340	333	343	389	3,403	4,002	-15.0
Paper products	15,149	15,164	15,096	-0.1	0.5	0.5	15,518	15,440	15,871	15,805	152,850	153,131	-0.2
Pulp, paper, and paperboard mills	6,693	6,722	6,683	-0.4			6,780	6,822	7,063	7,024	67,910	68,844	
Paperboard containers	4,683	4,686 7,140	4,648	-0.1 -0.9		1.5 0.8	4,832 7,384	4,820 7,461	4,940 7,401	4,845	47,131	46,678	
Petroleum and coal products	7,074 39,266	7,140 36,978	7,171 35,597	-0.9 6.2			7,384 39,815	7,461 37,560	7,401 38,688	7,675 39,028	71,406 354,091	71,494 456,159	
Petroleum refineries	35,150	33,055	31,780	6.3			35,515	33,226	34,050	35,436	315,973		
Chemical products	66,790	66,827	65,918		1.4	0.2	65,393	67,916	68,589	65,148	668,794	656,530	1.9
Pesticides, fertilizers, and other	4.407	4 4 4 4	4 000				0.004	0.050	0.004	0.074	40 405	40.000	
agricultural chemicals Pharmaceuticals and medicines	4,127 21,845	4,141 21,796	4,239 21,381	-0.3 0.2			2,924 21,814	3,653 22,349	3,684 22,295	2,971 21,099	42,435 216,697	40,086 193,329	5.9 12.1
Paints, coatings, and adhesives	3,709	3,658	3,642	1.4		0.7	3,671	3,746	3,931	3,534	37,565		7.2
Plastics and rubber products	19,455	19,425	19,209	0.2		0.0	19,763	19,962	20,453	19,536	194,895		0.5

^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.

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 dollars and are based on data from the Manufacturers' Shipments. Inventories. and Orders Survey.]

[Estimates are shown in millions of do			Seasonally				Not Seasonally Adjusted							
		Monthly		Per	cent Chan	ge		Mon	thly	Year to date				
Industry	Oct. 2016 ^p	Sep. 2016 ^r	Aug. 2016	Sep Oct.	Aug Sep.	July - Aug.	Oct. 2016 ^p	Sep. 2016 ^r	Aug. 2016	Oct. 2015	2016 ^p	2015	% Change 2016/ 2015	
All manufacturing industries ²	469,419	456,907	454,056	2.7	0.6	0.4	472,714	474,982	467,452	470,472	4,557,407	4,651,677	-2.0	
Excluding transportation ²	381,332	378,229	375,953	0.8	0.6	0.3	384,917	390,798	390,113	385,661	3,775,867	3,878,045	-2.6	
Excluding defense ²	457,325	444,487	439,667	2.9	1.1	-0.1	461,886	460,609	455,745	458,159	4,436,794	4,545,001	-2.4	
With unfilled orders ²	174,564	164,356	163,548	6.2	0.5	0.2	172,653	172,822	162,660	167,334	1,635,653	1,634,329	0.1	
Durable goods industries ²	238,759	228,204	227,470	4.6	0.3	0.2	238,384	241,116	230,504	236,119	2,287,388	2,293,765	-0.3	
Primary metals	17,949	17,966	17,827	-0.1	0.8	0.1	17,912	17,591	18,467	19,029	181,455	195,930	-7.4	
Iron and steel mills	8,215	8,088	8,167	1.6	-1.0	0.5	8,069	7,391	8,398	8,786	82,550	91,061	-9.3	
Aluminum and nonferrous metals	8,294	8,368	8,198	-0.9	2.1	-1.2	8,429	8,628	8,567	8,664	83,464	88,441	-5.6	
Ferrous metal foundries	1,440	1,510	1,462	-4.6	3.3	4.9	1,414	1,572	1,502	1,579	15,441	16,428	-6.0	
Fabricated metal products	30,631	30,078	30,223	1.8	-0.5		30,605	30,761	32,019	29,549	305,592	298,389	2.4	
Machinery Construction machinery Mining, oil field, and	29,876 2,541	29,883 2,387	29,672 2,316	0.0 6.5	0.7 3.1	0.0 -2.9	29,813 2,753	30,356 2,285	29,878 2,376	31,512 3,376	301,073 25,806	319,215 33,779	-5.7 -23.6	
gas field machinery	792	932	836	-15.0	11.5	5.7	862	926	895	1,266	7,414	15,783	-53.0	
Industrial machinery	2,147	2,133	2,369	0.7	-10.0		2,206	2,375	2,162	2,577	23,017	23,204	-0.8	
Photographic equipment	417	459	475	-9.2	-3.4		430	512	497	495	4,206	4,480	-6.1	
Ventilation, heating, air-conditioning,		0.004	0.004	0.0			0.004	0.500	0.400	0.404	0.4.707	00.504		
and refrigeration equipment Metalworking machinery	3,322 3,168	3,291 3,162	3,291 3,213	0.9 0.2	0.0 -1.6		3,031 3,285	3,589 3,419	3,498 3,298	3,404 3,017	34,737 31,324	36,534 26,967	-4.9 16.2	
Turbines, generators, and other	3,100	3,102	3,213	0.2	-1.0	0.4	3,203	3,419	3,290	3,017	31,324	20,907	10.2	
power transmission equipment	4,015	4,111	4,030	-2.3	2.0	-0.4	3,959	4,012	4,004	3,932	40,456	42,500	-4.8	
Material handling equipment	3,311	3,124	3,055	6.0	2.3		3,163	3,255	3,100	2,770	30,421	27,374	11.1	
Computers and electronic products ²	24,267	24,075	24,427	0.8	-1.4		23,370	28,043	23,127	22,640	239,208	231,956		
Computers	618	592	615		-3.7	3.4	613	680	588	719	5,911	7,872	_	
Nondefense communications	010	002	010		0.7	0.4	010	000	000	, 10	0,011	7,072	24.0	
equipment	3,106	3,250	3,348	-4.4	-2.9	-1.0	3,024	4,272	2,871	3,240	33,093	33.992	-2.6	
Defense communications equipment	292	287	281	1.7	2.1	6.0	259	346	261	299	2,918	3,211	-9.1	
Electronic components	5,011	4,998	4,900	0.3	2.0	-0.5	4,939	5,106	5,354	4,542	48,225	43,409	11.1	
Nondefense search and navigation														
equipment	1,478	1,476	1,452	0.1	1.7	-3.2	1,482	1,678	1,466	1,545	14,710	14,957	-1.7	
Defense search and navigation														
equipment	2,467	2,472	2,667	-0.2	-7.3	10.5	2,246	2,957	2,343	2,144	25,666	23,996	7.0	
Electromedical, measuring,	9,427	9,273	9,286	1.7	-0.1	4.0	9,033	40.070	8,570	0.205	00.000	05 500	5.9	
and control instruments Electrical equipment, appliances,	9,427	9,273	9,200	1.7	-0.1	-1.2	9,033	10,876	8,570	8,285	90,662	85,590	5.9	
and components	9,779	9,622	9,625	1.6	0.0	-2.2	9,846	10,177	10,058	9,888	96,852	101,977	-5.0	
Electric lighting equipment	1,028	1,105	1,087	-7.0	1.7	0.6	1,088	1,133	1,135	1,150	10,674	10,201	4.6	
Household appliances	1,399	1,437	1,384	-2.6	3.8		1,468	1,552	1,432	1,567	14,007	15,394	-9.0	
Electrical equipment	2,894	2,818	2,849	2.7	-1.1		2,818	2,985	2,901	2,990	29,394	32,853	-10.5	
Transportation equipment	88,087	78,678	78,103	12.0	0.7	0.6	87,797	84,184	77,339	84,811	781,540	773,632	1.0	
and trailers	28,754	28,964	28,321	-0.7	2.3		29,445	30,367	30,873	27,534	282,976	259,072		
Nondefense aircraft and parts	21,829	11,264	8,626	93.8	30.6		20,309	11,354	5,310	14,176	108,541	121,482		
Defense aircraft and parts	3,677	2,776	5,251	32.5	-47.1	18.2	3,637	3,276	4,064	6,420	41,630	44,184	-5.8	
Ships and boats	2,787	2,819	3,439	-1.1	-18.0		2,611	2,898	3,076	1,871	27,867	19,700		
Furniture and related products	6,431	6,495	6,430	-1.0	1.0	3.8	6,388	6,717	6,424	6,285	64,498	61,617	4.7	
Nondurable goods industries	230,660	228,703	226,586	0.9	0.9	0.5	234,330	233,866	236,948	234,353	2,270,019	2,357,912	-3.7	

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 dollars and are based on data from the Manufacturers' Shipments, Inventories, and Orders Survey.]

			Seasonally A		iotaroro c	лиринонио	, Inventorie		easonally Adj	usted	
		Monthly	oouoonung 71	•	rcent Chan	ge		Mor			% Change
Industry	Oct. 2016 ^p	Sep. 2016 ^r	Aug. 2016	Sep Oct.	Aug Sep.	July - Aug.	Oct. 2016 ^p	Sep. 2016 ^r	Aug. 2016	Oct. 2015	October 2016/ 2015
All manufacturing industries ²	1,128,492	1,120,287	1,123,085	0.7	-0.2	-0.2	1,116,469	1,109,666	1,115,697	1,129,107	-1.1
Excluding transportation ²	355,447	354,668	354,287	0.2	0.1	0.1	352,035	351,950	353,354	349,481	0.7
Excluding defense ²	954,600	945,974	948,703	0.9	-0.3	-0.4	944,506	936,387	942,735	959,835	-1.6
Durable goods industries ²	1,128,492	1,120,287	1,123,085	0.7	-0.2	-0.2	1,116,469	1,109,666	1,115,697	1,129,107	-1.1
Primary metals	32,928	32,695	32,488	0.7	0.6	0.2	31,570	31,612	32,273	31,529	0.1
Iron and steel mills	18,818	18,510	18,313	1.7	1.1	0.9	17,572	17,580	18,225	15,932	10.3
Aluminum and nonferrous metals	10,201	10,313	10,389	-1.1	-0.7	-1.0	10,200	10,268	10,302	12,132	-15.9
Ferrous metal foundries	3,909	3,872	3,786	1.0	2.3	0.2	3,798	3,764	3,746	3,465	9.6
Fabricated metal products	74,513	74,132	74,136	0.5	0.0	0.1	73,563	73,893	74,782	72,587	1.3
Machinery	92,175	92,372	92,559	-0.2	-0.2	-0.2	91,536	91,539	92,281	97,890	-6.5
Construction machinery	3,835	3,933	4,111	-2.5	-4.3	-4.2	3,663	3,695	3,949	5,503	-33.4
gas field machinery	5,748	5,851	5,897	-1.8	-0.8	-0.9	5,814	5,864	5,955	9,775	-40.5
Industrial machinery	7,053	7,277	7,427	-3.1	-2.0	-1.1	7,003	7,198	7,441	8,413	-16.8
Photographic equipmentVentilation, heating, air-conditioning,	1,300	1,286	1,224	1.1	5.1	4.7	1,323	1,306	1,225	1,408	-6.0
and refrigeration equipment	5,903	6,067	6,248	-2.7	-2.9	-4.2	5,841	5,973	6,116	6,248	-6.5
Metalworking machinery Turbines, generators, and other	7,360	7,377	7,449	-0.2	-1.0	1.8	7,254	7,315	7,428	6,581	10.2
power transmission equipment	25,857	25,726	25,640	0.5	0.3	0.3	25,678	25,632	25,609	25,561	0.5
Material handling equipment	12,480	12,232	12,089	2.0	1.2	0.8	12,130	12,115	11,955	11,179	8.5
Computers and electronic products ²	129,520	129,294	129,116	0.2	0.1	0.2	129,361	129,031	128,200	123,169	5.0
Computers Nondefense communications	2,423	2,421	2,398	0.1	1.0	0.1	2,423	2,421	2,398	2,395	1.2
equipment	32,862	32,817	32,800	0.1	0.1	0.6	32,902	32,655	32,381	30,218	8.9
Defense communications equipment	2,243	2,233	2,245	0.4	-0.5	-2.4	2,253	2,277	2,275	2,370	-4.9
Electronic components Nondefense search and navigation	12,161	12,154	12,120	0.1	0.3	-0.4	12,147	12,103	12,208	11,899	2.1
equipment Defense search and navigation	17,978	17,905	17,824	0.4	0.5	0.5	18,136	17,988	17,908	17,142	5.8
equipmentElectromedical, measuring,	28,189	28,264	28,333	-0.3	-0.2	0.3	27,944	28,278	28,062	27,001	3.5
and control instruments Electrical equipment, appliances,	33,664	33,500	33,396	0.5	0.3	0.0	33,556	33,309	32,968	32,144	4.4
and components	17,808	17,723	17,668	0.5	0.3	0.2	17,569	17,551	17,615	16,373	7.3
Electric lighting equipment	1,366	1,390	1,319	-1.7	5.4	-0.3	1,350	1,378	1,320	1,250	8.0
Household appliances	1,185	1,215	1,190	-2.5	2.1	-0.3	1,161	1,171	1,127	1,069	8.6
Electrical equipment	7,789	7,808	7,888	-0.2	-1.0	-0.8	7,728	7,712	7,927	7,981	-3.2
Transportation equipment	773,045	765,619	768,798	1.0	-0.4	-0.3	764,434	757,716	762,343	779,626	-1.9
and trailers	21,687	21,803	21,952	-0.5	-0.7	-0.2	21,021	21,327	21,447	22,611	-7.0
Nondefense aircraft and parts	592,100	583,866	586,714	1.4	-0.5	-0.7	585,809	577,639	582,068	598,964	-2.2
Defense aircraft and parts	69,913	70,169	71,525	-0.4	-1.9	1.1	68,962	69,065	70,638	65,850	4.7
Ships and boats	16,355	16,532	16,831	-1.1	-1.8	1.8	16,013	16,455	16,863	20,086	-20.3
Furniture and related products	8,259	8,210	8,068	0.6	1.8	1.7	8,192	8,082	7,951	7,694	6.5

^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.

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

			Seasonally A					Not S	easonally Adj	usted	
		Monthly		Pe	rcent Chan	ge		Mon	thly		% Change
Industry	Oct. 2016 ^p	Sep. 2016 ^r	Aug. 2016	Sep Oct.	Aug Sep.	July - Aug.	Oct. 2016 ^p	Sep. 2016 ^r	Aug. 2016	Oct. 2015	October 2016/ 2015
All manufacturing industries	621,438	621,128	621,552	0.0	-0.1	0.1	626,401	620,659	626,826	634,867	-1.3
Excluding transportation	497,593	497,493	497,959 596,000	0.0 0.0	-0.1 -0.1	0.2 0.2	502,118	497,616	502,410	509,515	-1.5 -1.4
Excluding defense With unfilled orders	595,562 311,733	595,634 311,748	311,286	0.0	-0.1 0.1	0.2	600,674 312,010	595,227 310,521	601,188 314,287	609,129 317,527	-1.4 -1.7
Durable goods industries	383,666	383,629	383,467	0.0	0.0	0.1	383,936	381,889	386,776	388,972	-1.3
Wood products	11,430	11,402	11,384	0.2	0.2	0.9	11,375	11,302	11,281	11,277	0.9
Nonmetallic mineral products	13,139	13,123	13,113	0.2	0.2	0.9	12,789	12,897	13,013	12,411	3.0
Primary metals	31,643	31,609	31,718	0.1	-0.3	0.2	31,664	31,627	31,938	34,138	-7.2
Iron and steel mills	17,321 12,303	17,297 12,299	17,377 12,298	0.1 0.0	-0.5 0.0	0.7 -0.2	17,472 12,210	17,424 12,247	17,516 12,371	19,419 12,670	-10.0 -3.6
Ferrous metal foundries	2,019	2,013	2,043	0.3	-1.5	-1.6	1,982	1,956	2,051	2,049	-3.3
Fabricated metal products Machinery	48,981 65,416	48,939 65,760	48,886 65,645	0.1 -0.5	0.1 0.2	-0.5 0.5	48,641 65,488	48,588 65,653	48,902 66,467	49,107 67,324	-0.9 -2.7
Farm machinery	3,110	3,048	2,967	2.0	2.7	2.6	2,839	2,826	2,871	3,017	-2.7 -5.9
Construction machinery	5,413	5,483	5,554	-1.3	-1.3	1.3	5,477	5,522	5,535	6,027	-9.1
Mining, oil field, and gas field machinery	7,357	7,391	7,364	-0.5	0.4	1.8	7,251	7,384	7,488	7,591	-4.5
Industrial machinery	6,328	6,452	6,439	-1.9	0.2	0.9	6,345	6,499	6,489	6,332	0.2
Photographic equipment	1,615	1,590	1,563	1.6	1.7	-1.3	1,628	1,604	1,619	1,566	4.0
Ventilation, heating, air-conditioning, and refrigeration equipment	4,526	4,582	4,431	-1.2	3.4	2.1	4,457	4,442	4,410	4,509	-1.2
Metalworking machinery	5,829	5,729	5,692	1.7	0.7	0.1	5,862	5,796	5,817	5,685	3.1
Turbines, generators, and other power transmission equipment	9,021	9,275	9,278	-2.7	0.0	-1.1	9,322	9,367	9,565	10,151	-8.2
Material handling equipment	4,681	4,657	4,633	0.5	0.5	0.4	4,807	4,787	4,806	4,542	5.8
Computers and electronic products ²	42,475	42,471	42,651	0.0	-0.4	0.2	42,648	42,122	43,524	42,862	-0.5
Computers Computer storage devices	1,596 945	1,619 1,003	1,642 995	-1.4 -5.8	-1.4 0.8	3.3 1.1	1,601 994	1,689 1,016	1,750 1,028	1,461 1,078	9.6 -7.8
Other peripheral equipment	1,006	1,026	1,061	-1.9	-3.3	2.6	1,007	989	1,098	1,045	-3.6
Nondefense communications	3,924	3,924	3,986	0.0	-1.6	0.4	3,957	3,857	4,078	4,234	-6.5
equipment Defense communications equipment	556	549	565	1.3	-1.8	-6.1	556	549	565	754	-26.3
Audio and video equipment	673	675	792	-0.3	-14.8	-0.1	758	757	854	842	-10.0
Electronic components Nondefense search and navigation	7,774	7,693	7,660	1.1	0.4	-0.3	7,744	7,559	7,709	7,495	3.3
equipment	3,072	3,084	3,069	-0.4	0.5	0.5	3,123	3,085	3,123	3,126	-0.1
Defense search and navigation	0.070	0.000	0.004	0.4	4.0	0.0	0.004	0.000	0.045	0.700	44.4
equipment Electromedical, measuring	3,076	3,080	3,024	-0.1	1.9	2.3	3,034	3,009	3,045	2,723	11.4
and control instruments	14,107	14,146	14,051	-0.3	0.7	0.0	14,143	13,994	14,453	14,573	-3.0
Electrical equipment, appliances, and components	16,337	16,362	16,210	-0.2	0.9	-0.9	16,378	16,172	16,479	16,624	-1.5
Electric lighting equipment	2,049	2,042	2,001	0.3	2.0	0.0	2,042	2,039	2,035	1,934	5.6
Household appliances	2,248	2,246	2,240	0.1	0.3	0.9	2,313	2,262	2,330	2,331	-0.8
Electrical equipment	4,845 1,296	4,860 1,328	4,868 1,306	-0.3 -2.4	-0.2 1.7	0.1 -0.7	4,820 1,327	4,612 1,396	4,905 1,398	5,006 1,407	-3.7 -5.7
Transportation equipment	123,845	123,635	123,593	0.2	0.0	-0.1	124,283	123,043	124,416	125,352	-0.9
AutomobilesLight trucks and utility vehicles	4,207 4,404	4,303	4,361 4,392	-2.2 -0.3	-1.3 0.6	-6.9 2.5	4,367	4,333 4,365	4,398	4,725	-7.6 5.7
Heavy duty trucks	1,906	4,417 1,878	2,028	1.5	-7.4	-3.0	4,572 1,926	1,830	4,418 2,033	4,327 2,060	-6.5
Motor vehicle bodies, parts,											
and trailers Nondefense aircraft and parts	24,081 62,531	23,947 62,765	23,940 62,426	0.6 -0.4	0.0 0.5	0.3 0.5	24,075 62,562	23,817 62,238	24,118 62,707	23,582 63,882	2.1 -2.1
Defense aircraft and parts	11,218	11,090	11,285	1.2	-1.7	-2.3	11,205	11,071	11,300	11,313	-1.0
Ships and boats	2,873 7,223	2,856	2,945	0.6 0.8	-3.0 0.3	-0.2 0.1	2,854	2,851	2,931	2,809	1.6 1.8
Furniture and related products	23,177	7,169 23,159	7,147 23,120	0.6	0.3	0.1	7,216 23,454	7,160 23,325	7,300 23,456	7,085 22,792	2.9
Nondurable goods industries	237,772	237,499	238,085	0.1	-0.2	0.1	242,465	238,770	240,050	245,895	-1.4
· ·	53,224	53,599	53,995	-0.7	-0.7	0.5	56,827	54,435	54,545	57,083	-0.4
Food products	5,783	5,783	5,766	0.0	0.7	0.5	6,286	5,544	5,527	6,294	-0.4 -0.1
Dairy products	7,369	7,409	7,410	-0.5	0.0	0.7	7,376	7,464	7,595	7,381	-0.1
Meat, poultry, and seafood products Beverage and tobacco products	8,854 20,479	8,876 20,599	8,950 20,664	-0.2 -0.6	-0.8 -0.3	-0.5 0.6	9,101 21,222	8,811 20,656	9,053 20,099	9,930 21,106	-8.3 0.5
Beverages	16,659	16,758	16,850	-0.6	-0.5	0.6	17,312	16,894	16,525	17,091	1.3
Tobacco	3,820	3,841	3,814	-0.5	0.7	0.8	3,910	3,762	3,574	4,015	-2.6
Textile mills	3,192 3,053	3,184 3,054	3,183 3,063	0.3 0.0	0.0 -0.3	0.2 -0.2	3,185 3,056	3,186 3,065	3,198 3,076	3,112 3,071	2.3 -0.5
Apparel	2,497	2,485	2,530	0.5	-1.8	-1.2	2,557	2,581	2,694	2,494	2.5
Leather and allied products Paper products	787 16,143	784 16,158	789 16,111	0.4 -0.1	-0.6 0.3	-0.9 -0.5	792 16,002	796 16,145	808 16,168	825 16,379	-4.0 -2.3
Pulp, paper, and paperboard mills	6,639	6,645	6,646	-0.1 -0.1	0.3	-0.5 -0.3	6,527	6,569	6,619	6,653	-2.3 -1.9
Paperboard containers	5,115	5,117	5,070	0.0	0.9	-1.1	5,084	5,118	5,079	5,234	-2.9
Printing Petroleum and coal products	5,895 25,243	5,867 24,973	5,861 25,192	0.5 1.1	0.1 -0.9	-0.1 0.9	6,095 26,976	5,929 26,110	6,062 26,440	6,190 30,911	-1.5 -12.7
Petroleum refineries	20,645	20,388	20,582	1.3	-0.9	1.2	22,514	21,642	21,786	26,407	-14.7
Chemical products	81,691	81,384	81,406	0.4	0.0	-0.1	80,571	80,651	81,744	79,972	0.7
Pesticides, fertilizers, and other agricultural chemicals	4,283	4,209	4,206	1.8	0.1	-0.7	4,067	3,921	3,987	4,233	-3.9
Pharmaceuticals and medicines	32,529	32,652	32,807	-0.4	-0.5	-0.3	32,189	32,366	32,844	31,692	1.6
Paints, coatings, and adhesives	3,757	3,753	3,744	0.1	0.2	1.4	3,619	3,657	3,699	3,461	4.6

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

Testimates 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.]

Estimates are shown in minions of a			sonally Adj					,		Seasonally			
		Monthly		Per	cent Cha	nge		Mon	ithly		Year t	o date	
Industry	Oct. 2016 ^p	Sep. 2016 ^r	Aug. 2016	Sep Oct.	Aug Sep.	July - Aug.	Oct. 2016 ^p	Sep. 2016 ^r	Aug. 2016	Oct. 2015	2016 ^p	2015	% Change ⁶ 2016/ 2015
SHIPMENTS													
All manufacturing industries	464,722	463,070	459,111	0.4	0.9	0.2	470,263	484,161	480,925	474,515	4,613,063	4,722,154	-2.3
Construction materials and supplies Information technology Computers and related products Motor vehicle and parts	46,777 22,962 1,813 55,321	46,383 22,796 1,654 55,698	46,571 22,989 1,848 55,149	0.8 0.7 9.6 -0.7	-0.4 -0.8 -10.5 1.0	0.5 -0.4 -5.1 0.7	48,714 22,113 1,569 57,362	48,996 26,070 2,125 59,339	51,279 22,706 1,625 59,730	48,579 21,959 1,760 58,257	474,180 223,862 17,636 559,007	465,540 222,445 20,926 543,607	1.9 0.6 -15.7 2.8
Capital goods	81,969 71,356 62,511 10,613	82,302 71,965 62,586 10,337	80,679 70,340 62,263 10,339	-0.4 -0.8 -0.1 2.7	2.0 2.3 0.5 0.0	-1.6 -1.5 0.1 -2.3	79,594 69,293 61,490 10,301	90,042 78,469 67,536 11,573	81,075 70,854 62,706 10,221	84,230 73,689 65,483 10,541	813,602 713,194 627,974 100,408	851,821 755,458 662,081 96,363	-4.5 -5.6 -5.2 4.2
Consumer goods	188,550 37,949 150,601	186,446 37,801 148,645	185,049 37,872 147,177	1.1 0.4 1.3	0.8 -0.2 1.0	0.6 0.8 0.6	193,457 38,919 154,538	192,408 40,527 151,881	193,490 40,104 153,386	194,300 40,557 153,743	1,847,104 383,241 1,463,863	1,926,130 386,464 1,539,666	-0.8
NEW ORDERS													
All manufacturing industries ⁵	469,419	456,907	454,056	2.7	0.6	0.4	472,714	474,982	467,452	470,472	4,557,407	4,651,677	-2.0
Construction materials and supplies Information technology Computers and related products Motor vehicle and parts	46,780 23,353 1,815 55,205	46,113 23,041 1,677 55,549	46,206 23,487 1,851 55,107	1.4 1.4 8.2 -0.6	-0.2 -1.9 -9.4 0.8	-0.1 -0.3 -4.6 1.0	48,434 22,456 1,571 57,056	48,354 27,136 2,148 59,219	50,366 21,995 1,628 59,941	47,976 21,751 1,785 57,983	474,817 230,196 17,612 556,469	466,507 228,236 21,041 542,223	1.8 0.9 -16.3 2.6
Capital goods	90,765 79,957 62,864 10,808	81,131 69,877 62,710 11,254	79,511 67,265 63,681 12,246	11.9 14.4 0.2 -4.0	2.0 3.9 -1.5 -8.1	-0.1 -3.9 1.2 27.5	87,512 78,603 62,047 8,909	86,023 73,156 67,124 12,867	74,164 64,043 62,537 10,121	82,510 74,873 64,739 7,637	796,281 695,501 632,000 100,780	817,412 734,714 658,319 82,698	-2.6 -5.3 -4.0 21.9
Consumer goods	188,564 37,963 150,601	186,544 37,899 148,645	185,060 37,883 147,177	1.1 0.2 1.3	0.8 0.0 1.0	0.6 0.6 0.6	193,518 38,980 154,538	192,576 40,695 151,881	193,361 39,975 153,386	194,367 40,624 153,743	1,847,322 383,459 1,463,863	1,925,897 386,231 1,539,666	-4.1 -0.7 -4.9
UNFILLED ORDERS													
All manufacturing industries ⁵	1,128,492	1,120,287	1,123,085	0.7	-0.2	-0.2	1,116,469	1,109,666	1,115,697	1,129,107	(X)	(X)	-1.1
Construction materials and supplies Information technology Computers and related products Motor vehicle and parts	45,273 126,127 2,423 21,687	45,270 125,736 2,421 21,803	45,540 125,491 2,398 21,952	0.0 0.3 0.1 -0.5	-0.6 0.2 1.0 -0.7	-0.8 0.4 0.1 -0.2	44,944 125,867 2,423 21,021	45,224 125,524 2,421 21,327	45,866 124,458 2,398 21,447	45,075 118,751 2,395 22,611	(X) (X) (X) (X)	(X) (X) (X) (X)	-0.3 6.0 1.2 -7.0
Capital goods Nondefense capital goods ³ Excluding aircraft Defense capital goods ⁴	841,577 702,856 222,860 138,721	832,781 694,255 222,507 138,526	833,952 696,343 222,383 137,609	1.1 1.2 0.2 0.1	-0.1 -0.3 0.1 0.7	-0.1 -0.4 0.6 1.4	833,555 696,779 221,712 136,776	825,637 687,469 221,155 138,168	829,656 692,782 221,567 136,874	848,201 715,905 222,017 132,296	(X) (X) (X) (X)	(X) (X) (X) (X)	-1.7 -2.7 -0.1 3.4
Consumer goods Consumer durable goods	4,545 4,545	4,531 4,531	4,433 4,433	0.3 0.3	2.2 2.2	0.2 0.2	4,410 4,410	4,349 4,349	4,181 4,181	4,095 4,095	(X) (X)	(X) (X)	7.7 7.7
TOTAL INVENTORIES	4,545	4,551	4,433	0.3	2.2	0.2	4,410	4,349	4,101	4,093	(^)	(^)	1.1
All manufacturing industries	621,438	621,128	621,552	0.0	-0.1	0.1	626,401	620,659	626,826	634,867	(X)	(X)	-1.3
Construction materials and supplies	65,758	65,667	65,399	0.1	0.4	0.2	64,858	65,022	65,248	64,511	(X)	(X)	
Information technology Computers and related products Motor vehicle and parts	36,665 3,547 34,598	36,776 3,648 34,545	36,743 3,698 34,721	-0.3 -2.8 0.2	0.1 -1.4 -0.5	-0.1 2.5 -0.5	36,874 3,602 34,940	36,602 3,694 34,345	37,633 3,876 34,967	37,551 3,584 34,694	(X) (X) (X)	(X) (X) (X)	-1.8 0.5 0.7
Capital goods Nondefense capital goods ³ Excluding aircraft Defense capital goods ⁴	190,662 169,477 118,179 21,185	190,952 170,159 118,551 20,793	190,693 169,875 118,591 20,818	-0.2 -0.4 -0.3 1.9	0.1 0.2 0.0 -0.1	0.1 0.3 0.2 -1.5	191,187 170,138 118,817 21,049	190,292 169,542 118,367 20,750	193,002 172,113 120,671 20,889	194,669 173,837 120,858 20,832	(X) (X) (X) (X)	(X) (X) (X) (X)	-1.8 -2.1 -1.7 1.0
Consumer goods Consumer durable goods Consumer nondurable goods	176,159 29,492 146,667	176,581 29,551 147,030	177,611 29,713 147,898	-0.2 -0.2 -0.2	-0.6 -0.5 -0.6	0.2 -0.2 0.3	182,605 30,075 152,530	178,639 29,630 149,009	179,568 30,152 149,416	186,329 30,014 156,315	(X) (X) (X)	(X) (X) (X)	-2.0 0.2 -2.4

X Not Applicable Preliminary

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

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 navigatior equipment; electronical, 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.

⁴Defense 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.

Table 6. Value of Manufacturers' Inventories, by Stage of Fabrication, by Industry Group¹

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

			Seasonally A	ajustea				Not 5	easonally Adji	ustea	
		Monthly		Pe	rcent Chan	ge		Mon	ithly		% Change
Industry	Oct. 2016 ^p	Sep. 2016 ^r	Aug. 2016	Sep Oct.	Aug Sep.	July - Aug.	Oct. 2016 ^p	Sep. 2016 ^r	Aug. 2016	Oct. 2015	October 2016/ 2015
MATERIALS AND SUPPLIES											
All manufacturing industries	208,856	208,438	208,409	0.2	0.0	-0.6	209,360	208,333	209,570	209,944	-0.3
Durable goods industries	130,015	130,039	129,925	0.0	0.1	-0.7	129,912	130,264	131,226	130,220	-0.2
Wood products	4,634	4,680	4,694	-1.0	-0.3	1.1	4,773	4,809	4,731	4,808	-0.7
Nonmetallic mineral products Primary metals	5,278 12,704	5,276 12,681	5,259 12,747	0.0 0.2	0.3 -0.5	0.8 1.7	5,250 12,873	5,264 12,785	5,257 12,785	5,139 13,169	2.2 -2.2
Fabricated metal products	17,897	17,955	17,934	-0.3	0.1	-0.3	17,781	17,992	17,957	18,055	-1.5
Machinery Computers and electronic products	23,334 17,677	23,698 17,433	23,664 17,473	-1.5 1.4	0.1 -0.2	-0.5 -1.0	23,274 17,593	23,715 17,311	23,979 17,686	25,551 16,880	-8.9 4.2
Electrical equipment, appliances,	17,077	17,433	17,473	1.4	-0.2	-1.0	17,555	17,311	17,000	10,000	4.2
and components	6,601	6,575	6,470	0.4	1.6	-1.0	6,569	6,465	6,560	6,827	-3.8
Transportation equipment Furniture and related products	30,788 3,631	30,660 3,616	30,553 3,664	0.4 0.4	0.4 -1.3	-2.8 0.6	30,716 3,616	30,824 3,608	30,976 3,693	28,832 3,619	6.5 -0.1
Miscellaneous products	7,471	7,465	7,467	0.1	0.0	0.2	7,467	7,491	7,602	7,340	1.7
Nondurable goods industries	78,841	78,399	78,484	0.6	-0.1	-0.3	79,448	78,069	78,344	79,724	-0.3
Food products	18,070	18,089	18,189	-0.1	-0.5	-0.4	18,943	17,886	17,925	19,081	-0.7
Beverage and tobacco products Textiles	4,933 1,167	5,021 1,157	5,057 1,164	-1.8 0.9	-0.7 -0.6	0.1 -0.1	5,012 1,159	4,924 1,149	4,778 1,171	5,063 1,159	-1.0 0.0
Textile products	1,046	1,057	1,059	-1.0	-0.2	-0.7	1,040	1,064	1,062	1,055	-1.4
Apparel Leather and allied products	666 231	656 232	679 235	1.5 -0.4	-3.4 -1.3	-1.6 -1.3	693 232	683 234	701 241	781 249	-11.3 -6.8
Paper products	8,306	8,281	8,249	0.3	0.4	-0.1	8,186	8,276	8,256	8,357	-2.0
Printing Petroleum and coal products	2,725 5,759	2,697 5,596	2,687 5,802	1.0 2.9	0.4 -3.6	0.4 -2.7	2,767 6,093	2,736 5,761	2,744 6,062	2,882 7,391	-4.0 -17.6
Chemical products	25,795	25,489	25,303	1.2	0.7	-0.1	25,370	25,243	25,363	23,777	6.7
Plastics and rubber products	10,143	10,124	10,060	0.2	0.6	0.3	9,953	10,113	10,041	9,929	0.2
WORK IN PROCESS											
All manufacturing industries	190,973	191,578	191,724	-0.3	-0.1	0.6	193,260	190,252	192,737	199,289	-3.0
Durable goods industries	143,177	143,424	143,327	-0.2	0.1	0.6	143,467	142,605	144,557	148,417	-3.3
Wood products	2,367	2,307	2,260	2.6	2.1	2.9	2,343	2,281	2,235	2,167	8.1
Nonmetallic mineral products	1,480 9,054	1,477 9,146	1,476 9,214	0.2 -1.0	0.1 -0.7	0.5 0.7	1,410 9,061	1,444 9,127	1,471 9,393	1,362 10,487	3.5 -13.6
Primary metals Fabricated metal products	12,818	12,841	12,835	-0.2	0.0	-0.2	12,904	12,868	12,963	13,059	-1.2
Machinery	19,257	19,245	19,177	0.1	0.4	-0.7	19,643	19,284	19,559	18,519	6.1
Computers and electronic products Electrical equipment, appliances,	13,071	13,196	13,277	-0.9	-0.6	2.0	13,067	12,929	13,533	14,245	-8.3
and components	3,427	3,447	3,443	-0.6	0.1	-2.1	3,417	3,413	3,490	3,430	-0.4
Transportation equipment Furniture and related products	76,599 1,107	76,711 1,084	76,621 1,070	-0.1 2.1	0.1 1.3	0.8 0.2	76,494 1,102	76,159 1,082	76,813 1,079	80,402 1,008	-4.9 9.3
Miscellaneous products	3,997	3,970	3,954	0.7	0.4	1.6	4,026	4,018	4,021	3,738	7.7
Nondurable goods industries	47,796	48,154	48,397	-0.7	-0.5	0.8	49,793	47,647	48,180	50,872	-2.1
Food products	5,816	6,058	6,156	-4.0	-1.6	1.2	6,893	5,579	5,655	7,176	-3.9
Beverage and tobacco products Textiles	7,659 669	7,635 670	7,572 660	0.3 -0.1	0.8 1.5	0.3 -1.6	8,168 674	7,585 678	7,088 667	8,016 695	1.9 -3.0
Textile products	434	432	439	0.5	-1.6	-0.7	436	437	443	435	0.2
Apparel	321 109	325 108	332 108	-1.2 0.9	-2.1 0.0	1.8 0.0	325 109	341 110	357 109	335 104	-3.0 4.8
Leather and allied products Paper products	1,255	1,256	1,231	-0.1	2.0	-1.8	1,234	1,257	1,254	1,266	-2.5
Printing	1,458	1,498	1,543	-2.7	-2.9	-2.0	1,555	1,516	1,682	1,672	-7.0
Petroleum and coal products Chemical products	8,072 18,868	8,062 19,031	7,923 19,377	0.1 -0.9	1.8 -1.8	0.5 1.5	8,792 18,526	8,403 18,703	8,350 19,527	9,784 18,487	-10.1 0.2
Plastics and rubber products	3,135	3,079	3,056	1.8	0.8	0.9	3,081	3,038	3,048	2,902	6.2
FINISHED GOODS											
All manufacturing industries	221,609	221,112	221,419	0.2	-0.1	0.3	223,781	222,074	224,519	225,634	-0.8
Durable goods industries	110,474	110,166	110,215	0.3	0.0	0.3	110,557	109,020	110,993	110,335	0.2
Wood products	4,429	4,415	4,430	0.3	-0.3	-0.3	4,259	4,212	4,315	4,302	-1.0
Nonmetallic mineral products	6,381	6,370	6,378	0.2	-0.1	0.5	6,129	6,189	6,285	5,910	3.7
Primary metals Fabricated metal products	9,885 18,266	9,782 18,143	9,757 18,117	1.1 0.7	0.3 0.1	-2.1 -0.7	9,730 17,956	9,715 17,728	9,760 17,982	10,482 17,993	-7.2 -0.2
Machinery	22,825	22,817	22,804	0.0	0.1	2.5	22,571	22,654	22,929	23,254	-2.9
Computers and electronic products Electrical equipment, appliances,	11,727	11,842	11,901	-1.0	-0.5	0.0	11,988	11,882	12,305	11,737	2.1
and components	6,309	6,340	6,297	-0.5	0.7	0.0	6,392	6,294	6,429	6,367	0.4
Transportation equipment	16,458	16,264	16,419	1.2	-0.9	0.3	17,073	16,060	16,627	16,118	5.9
Furniture and related products Miscellaneous products	2,485 11,709	2,469 11,724	2,413 11,699	0.6 -0.1	2.3 0.2	-0.6 0.6	2,498 11,961	2,470 11,816	2,528 11,833	2,458 11,714	1.6 2.1
Nondurable goods industries	111,135	110,946	111,204	0.2	-0.2	0.2	113,224	113,054	113,526	115,299	-1.8
Food products	29,338	29,452	29,650	-0.4	-0.7	0.2	30,991	30,970	30,965	30,826	0.5
Beverage and tobacco products	7,887	7,943	8,035	-0.7	-1.1	1.3	8,042	8,147	8,233	8,027	0.2
Textiles Textile products	1,356 1,573	1,357 1,565	1,359 1,565	-0.1 0.5	-0.1 0.0	1.3 0.3	1,352 1,580	1,359 1,564	1,360 1,571	1,258 1,581	7.5 -0.1
Apparel	1,510	1,504	1,519	0.4	-1.0	-1.6	1,539	1,557	1,636	1,378	11.7
Leather and allied products	447 6 592	444 6 621	446 6 631	0.7	-0.4	-0.9	451 6 592	452 6 612	458 6 659	472 6 756	-4.4
Paper products	6,582 1,712	6,621 1,672	6,631 1,631	-0.6 2.4	-0.2 2.5	-0.8 0.8	6,582 1,773	6,612 1,677	6,658 1,636	6,756 1,636	-2.6 8.4
Printing										,0	
Printing Petroleum and coal products Chemical products	11,412 37,028	11,315 36,864	11,467 36,726	0.9 0.4	-1.3 0.4	3.0 -0.9	12,091 36,675	11,946 36,705	12,028 36,854	13,736 37,708	-12.0 -2.7

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 revisions.

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/Ship	oments ra	tio	Unfille	d Orders/	Shipment	s ratio ²
Industry	Oct 2016 ^p	Sep 2016 ^r	Aug 2016	Jul 2016	Oct 2016 ^p	Sep 2016 ^r	Aug 2016	Jul 2016
All manufacturing industries ³	1.34	1.34	1.35	1.36	(X)	(X)	(X)	(X)
Durable goods industries ³ . Wood products. Nonmetallic mineral products Primary metals. Fabricated metal products. Machinery. Computers and electronic products ³ Electrical equipment, appliances, and components Transportation equipment. Furniture and related products.	1.64 1.34 1.32 1.79 1.62 2.18 1.54 1.69 1.54	1.64 1.35 1.33 1.78 1.63 2.19 1.56 1.71	1.65 1.37 1.33 1.79 1.62 2.20 1.55 1.69 1.54	1.65 1.37 1.32 1.77 1.63 2.20 1.56 1.72 1.53	6.78 (X) (X) 1.86 2.53 3.35 5.84 2.00 14.26 1.53	6.70 (X) (X) 1.84 2.53 3.36 5.83 2.01 13.85 1.53	6.79 (X) (X) 1.83 2.53 3.38 5.80 2.01 14.38 1.52	6.79 (X) (X) 1.81 2.53 3.41 5.83 2.02 14.21 1.50
Miscellaneous products. Nondurable goods industries. Food products. Beverage and tobacco products. Textiles. Textile products. Apparel. Leather and allied products. Paper products. Paper products. Petroleum and coal products. Chemical products. Plastics and rubber products.	1.75 1.03 0.82 1.65 1.27 1.52 2.39 2.42 1.07 0.83 0.64 1.22 1.31	1.77 1.04 0.83 1.66 1.29 1.53 2.37 2.38 1.07 0.82 0.68 1.22 1.31	1.79 1.05 0.83 1.63 1.26 1.52 2.38 2.35 1.07 0.82 0.71 1.23	1.78 1.05 0.83 1.65 1.27 1.55 2.38 2.40 1.08 0.83 0.71 1.24	888888888888888888888888888888888888888	888888888888888888888888888888888888888	8888888888888	\$

X Not Applicable Preliminary

Table 8. Revisions to Previously Published Monthly Percent Changes¹

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

	Ship	ments	New (Orders	Unfilled	Orders	Inventories	
Industry	Oct ² 2016	Oct ³ 2015- Sep 2016	Oct ² 2016	Oct ³ 2015- Sep 2016	Oct ² 2016	Oct ³ 2015- Sep 2016	Oct ² 2016	Oct ³ 2015- Sep 2016
All manufacturing industries	(X)	0.2	(X)	0.3	(X)	0.1	(X)	0.1
Durable goods industries	-0.2 (X) 0.1 -0.5 -0.7 0.2 -0.4 -0.1 (X) (X) (X) (X) (X) (X) (X) (X)	0.2 0.5 0.1 0.4 0.2 0.6 0.3 0.4 0.3 0.5 0.2 0.2 0.7 0.5 0.8	-0.2 (X), (X) 0.0 0.0 4.4 4.0.2 -0.1 -0.7 0.0 (X)	0.5 (NA) (NA) 0.8 0.3 0.6 0.6 0.8 0.9 0.8 (NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)	0.0 (X) (X) -0.1 0.0 0.0 0.0 (X) (X) (X) (X) (X) (X) (X) (X)	0.1 (NA) (NA) 0.4 0.2 0.1 0.3 0.1 0.4 0.3 (NA) (NA) (NA) (NA)	0.0 (X) (X) (X) 0.0 0.0 0.0 0.0 (X)	0.1 0.2 0.2 0.4 0.3 0.1 0.2 0.2 0.2 0.3 0.2 0.3 0.3 0.3
Leather and allied products. Paper products. Printing. Petroleum and coal products. Chemical products. Plastics and rubber products.	() () () () () () () () () () () () () (1.5 0.2 0.3 1.1 0.2	(X) (X) (X) (X) (X) (X) (X)	(NA) (NA) (NA) (NA) (NA) (NA)	\$\$\$\$\$\$\$\$	(NA) (NA) (NA) (NA) (NA) (NA)	(X) (X) (X) (X) (X) (X) (X)	0.5 0.2 0.4 1.1 0.1

X Not Applicable

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.

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.

2017 Release Dates for the M3 Survey

Survey month	Advance Report (8:30 a.m. release time)	Full Report (10:00 a.m. release time)
Nov-16	Thu 12/22/2016	Fri 1/6/2017
Dec-16	Fri 1/27/2017	Fri 2/3/2017
Jan-17	Mon 2/27/2017	Mon 3/6/2017
Feb-17	Fri 3/24/2017	Tue 4/4/2017
Mar-17	Thu 4/27/2017	Thu 5/4/2017
Apr-17	Fri 5/26/2017	Mon 6/5/2017
May-17	Mon 6/26/2017	Wed 7/5/2017
Jun-17	Thu 7/27/2017	Thu 8/3/2017
Jul-17	Fri 8/25/2017	Tue 9/5/2017
Aug-17	Wed 9/27/2017	Thu 10/5/2017
Sep-17	Wed 10/25/2017	Fri 11/3/2017
Oct-17	Wed 11/22/2017	Mon 12/4/2017
Nov-17	Fri 12/22/2017	Not available at this time