

Manufacturers' Shipments, Inventories, and Orders

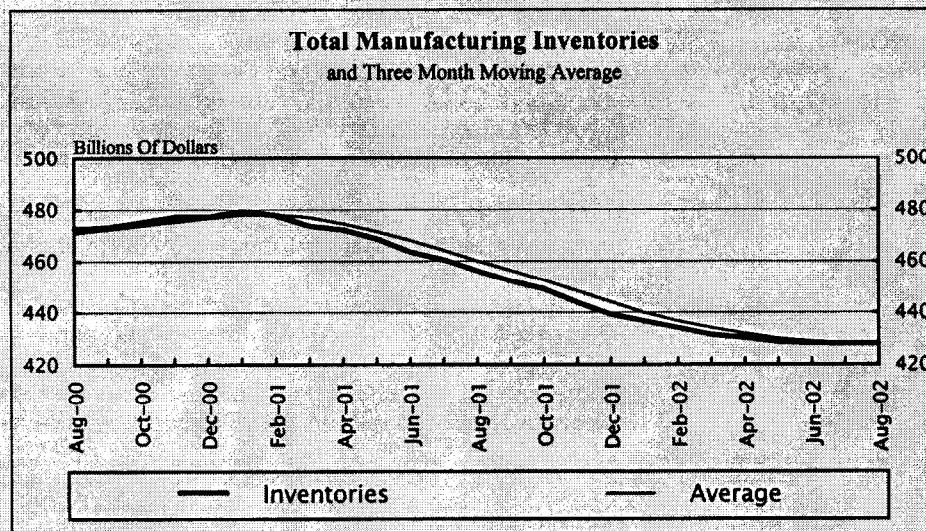
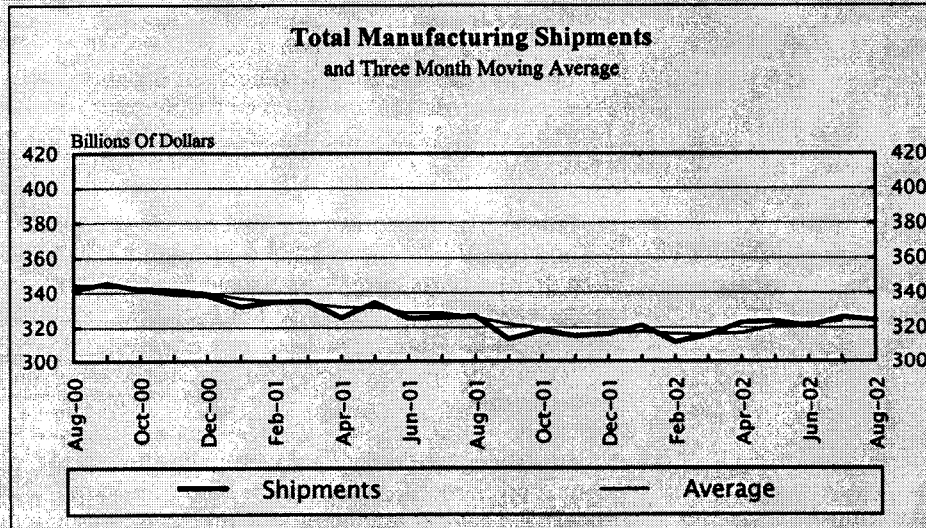
August
2002

M3-1(02)-8

Current
Industrial
Reports

For Wire Transmission 10:00 a.m. E.S.T., October 3, 2002

Charts exclude semiconductor data



For data, call 301-763-4673. For inquiries, contact Dan Sansbury or Derrick Roy, Manufacturers' Shipments, Inventories and Orders Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900 or call 301-763-4832.

The advance report on durable goods for September is scheduled for October 25, 2002 at 8:30 a.m. and the full report on November 4, 2002 at 10:00 a.m. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington.

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All figures in text are in seasonally adjusted current dollars and **exclude data for semiconductor manufacturing**

Summary

New orders for manufactured goods in August decreased slightly to \$326.6 billion, the Department of Commerce, Census Bureau reported today. This followed a 4.4 percent July increase. Year to date, new orders for 2002 were 2.4 percent below the same period a year ago.

Shipments decreased \$1.9 billion or 0.6 percent to \$324.2 billion, following a 1.6 percent July increase. Year to date, shipments for 2002 were 2.8 percent below the same period a year ago.

Unfilled orders increased \$2.4 billion or 0.5 percent to \$491.4 billion, following a 0.1 percent July increase. The unfilled orders-to-shipments ratio was 4.01, up from 3.95 in July.

Inventories, down nineteen consecutive months, decreased slightly to \$427.9 billion, following a 0.1 percent July decrease. The inventories-to-shipments ratio was 1.32, up from 1.31 in July.

New Orders

New Orders for manufactured durable goods in August decreased \$0.7 billion or 0.4 percent to \$178.5 billion, revised from the previously published 0.6 percent decrease.

Fabricated metal products had the largest decrease, \$0.7 billion or 3.4 percent to \$20.5 billion. Machinery decreased \$0.5 billion or 2.3 percent to \$22.5 billion, due to industrial machinery.

New orders for nondurable goods increased \$0.7 billion or 0.5 percent to \$148.1 billion.

Shipments

Shipments of manufactured durable goods in August decreased \$2.6 billion or 1.5 percent to \$176.1 billion, revised from the previously published 1.3 percent decrease.

Transportation equipment had the largest decrease, \$2.0 billion or 3.6 percent to \$53.0 billion, led by automobiles and nondefense aircraft and parts, which both decreased by \$0.9 billion.

Shipments of nondurable goods increased \$0.7 billion or 0.5 percent to \$148.1 billion. Food products had the largest increase, \$1.2 billion or 3.1 percent to \$38.5 billion.

Unfilled Orders

Unfilled Orders for manufactured durable goods in August increased \$2.4 billion or 0.5 percent to \$491.4 billion, revised from the previously published 0.4 percent increase.

Transportation equipment had the largest increase, \$4.8 billion or 1.9 percent to \$255.0 billion, due to nondefense aircraft and parts, which increased \$3.4 billion. Fabricated metal products decreased \$0.8 billion and machinery decreased \$0.7 billion.

Inventories

Inventories of durable goods in August, down nineteen consecutive months, decreased \$0.6 billion or 0.2 percent to \$263.8 billion, unchanged from the previously published 0.2 percent decrease. Durable goods inventories were at their lowest level since December 1995.

Machinery had the largest decrease, \$0.2 billion or 0.5 percent to \$44.8 billion. Computers and electronic products also decreased \$0.2 billion or 0.5 percent to \$42.8 billion, due to nondefense communications equipment.

Inventories of nondurable goods increased \$0.5 billion or 0.3 percent to \$164.1 billion, led by basic chemicals.

By stage of fabrication, August materials and supplies decreased 0.2 percent in both durables and nondurables. Work in process decreased 0.4 percent in durables and increased 2.3 percent in nondurables. Finished goods slightly decreased in both durables and nondurables.

SEE BACK PAGE FOR SURVEY DESCRIPTION

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Table 1. Value of Manufacturers' Shipments for Industry Groups

[Millions of Dollars]

Industry	Seasonally Adjusted						Not Seasonally Adjusted ¹						
	Monthly			Percent Change			Monthly				Percent Change Aug. 02/01	Year to date	
	Aug. 2002 ^p	July 2002 ^r	June 2002	July - Aug.	June - July	May - June	Aug. 2002 ^p	July 2002 ^r	June 2002	Aug. 2001		2002 ^p	2001
All manufacturing industries ²	324,214	326,101	320,810	-0.6	1.6	-0.9	331,988	297,552	339,333	334,992	-0.9	2,545,975	2,617,561
Excluding transportation	271,244	271,144	269,294	0.0	0.7	-0.8	276,668	258,920	283,626	281,240	-1.6	2,130,920	2,223,311
Excluding defense ²	316,442	318,376	312,788	-0.6	1.8	-1.1	324,473	290,757	330,374	328,205	-1.1	2,486,590	2,566,188
With unfilled orders ²	122,559	123,835	121,501	-1.0	1.9	-1.0	123,420	108,369	132,049	125,226	-1.4	964,808	1,011,882
Durable goods industries ²	176,122	178,739	173,205	-1.5	3.2	-1.5	178,941	153,343	188,012	178,600	0.2	1,379,707	1,407,918
Wood products.....	7,262	7,359	7,348	-1.3	0.1	0.1	7,761	7,737	8,053	8,121	-4.4	59,570	59,450
Nonmetallic mineral products.....	8,495	8,419	8,405	0.9	0.2	-1.5	9,282	8,666	8,893	8,440	10.0	65,412	61,643
Primary metals.....	11,404	11,355	11,206	0.4	1.3	-0.9	11,795	10,655	11,605	11,868	-0.6	90,399	94,008
Iron and steel mills.....	5,329	5,255	5,156	1.4	1.9	0.7	5,531	5,014	5,395	5,282	4.7	41,308	41,740
Aluminum and nonferrous metals.....	4,743	4,773	4,714	-0.6	1.3	-2.5	4,874	4,475	4,806	5,083	-4.1	38,257	40,951
Ferrous metal foundries.....	1,332	1,327	1,336	0.4	-0.7	-1.1	1,390	1,166	1,404	1,503	-7.5	10,834	11,317
Fabricated metal products.....	21,238	21,353	21,029	-0.5	1.5	-0.1	22,144	20,336	21,918	22,536	-1.7	168,087	170,913
Machinery.....	23,201	23,257	22,936	-0.2	1.4	-2.5	22,410	21,145	25,427	23,241	-3.6	182,910	194,379
Farm machinery.....	1,558	1,488	1,471	4.7	1.2	6.0	1,425	1,432	1,531	1,296	10.0	12,515	10,851
Construction machinery.....	1,677	1,721	1,623	-2.6	6.0	-8.6	1,587	1,612	1,849	1,660	-4.4	14,030	14,782
Mining, oil field, and gas field machinery.....	711	728	735	-2.3	-1.0	-1.6	702	690	811	822	-14.6	5,830	6,305
Industrial machinery.....	3,403	3,307	3,050	2.9	8.4	-3.3	3,141	3,119	3,360	2,828	11.1	24,334	28,258
Photographic equipment.....	1,489	1,456	1,418	2.3	2.7	2.3	1,442	1,379	1,634	1,466	-1.6	10,856	11,167
Ventilation, heating, air-conditioning, and refrigeration equipment.....	2,648	2,637	2,678	0.4	-1.5	0.8	2,748	2,486	3,151	3,023	-9.1	21,482	23,313
Metalworking machinery.....	2,059	2,070	2,089	-0.5	-0.9	-0.2	1,968	1,727	2,357	2,079	-5.3	15,694	17,699
Turbines, generators, and other power transmission equipment.....	2,907	3,102	3,210	-6.3	-3.4	-9.6	2,811	2,374	3,760	3,196	-12.0	23,919	23,401
Material handling equipment.....	1,353	1,362	1,332	-0.7	2.3	-1.8	1,304	1,324	1,428	1,462	-10.8	11,174	13,023
Computers and electronic products ²	26,769	26,943	26,126	-0.6	3.1	-2.8	25,242	23,069	30,324	24,721	2.1	203,577	228,831
Electronic computers.....	4,026	4,424	3,738	-9.0	18.4	2.3	3,557	3,920	4,564	3,067	16.0	29,580	36,278
Computer storage devices.....	1,130	1,090	1,218	3.7	-10.5	-4.0	1,003	654	1,745	970	3.4	9,079	8,564
Other peripheral equipment.....	1,609	1,558	1,296	3.3	20.2	-21.7	1,442	1,104	1,720	1,338	7.8	11,068	12,714
Nondefense communications equipment.....	5,136	5,140	5,277	-0.1	-2.6	-4.6	4,668	4,298	6,360	5,749	-18.8	41,063	55,626
Defense communications equipment.....	305	307	296	-0.7	3.7	-9.2	300	281	304	326	-8.0	2,468	2,357
Audio and video equipment.....	704	727	757	-3.2	-4.0	-5.0	687	647	718	695	-1.2	5,456	5,279
Semiconductors ³	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electronic components.....	4,303	4,234	4,267	1.6	-0.8	-1.3	4,414	3,901	4,427	4,242	4.1	33,166	38,502
Nondefense search and navigation equipment.....	740	791	776	-6.4	1.9	3.7	752	732	838	816	-7.8	5,954	6,418
Defense search and navigation equipment.....	1,972	1,937	1,958	1.8	-1.1	-0.4	1,858	1,719	2,150	1,769	5.0	15,087	14,564
Electromedical, measuring, and control instruments.....	6,157	6,064	5,896	1.5	2.8	0.3	5,876	5,196	6,890	5,034	16.7	45,564	43,170
Electrical equipment, appliances, and components.....	8,984	9,106	9,012	-1.3	1.0	-2.0	8,928	8,177	9,792	9,858	-9.4	71,221	81,059
Electric lighting equipment.....	1,058	1,076	1,077	-1.7	-0.1	-1.9	1,059	891	1,162	1,108	-4.4	8,380	8,572
Household appliances.....	2,002	2,069	1,985	-3.2	4.2	-3.6	2,050	1,929	2,140	2,199	-6.8	16,137	15,952
Electrical equipment.....	2,558	2,606	2,648	-1.8	-1.6	-1.7	2,572	2,359	2,945	2,756	-6.7	20,478	23,172
Batteries.....	460	505	521	-8.9	-3.1	-7.5	458	394	565	596	-23.2	3,884	4,372
Transportation equipment.....	52,970	54,957	51,516	-3.6	6.7	-1.4	55,320	38,632	55,707	53,752	2.9	415,055	394,250
Automobiles.....	8,381	9,247	7,930	-9.4	16.6	-3.6	8,749	5,392	8,397	8,666	1.0	64,528	59,764
Light trucks and utility vehicles.....	10,749	11,257	9,828	-4.5	14.5	-3.7	11,579	6,516	10,782	10,679	8.4	81,186	73,830
Heavy duty trucks.....	1,306	1,292	1,221	1.1	5.8	2.9	1,396	1,233	1,324	1,132	23.3	9,243	9,120
Motor vehicle bodies, parts, and trailers.....	18,661	18,417	18,143	1.3	1.5	-2.4	20,008	13,612	18,885	18,686	7.1	147,655	140,707
Nondefense aircraft and parts.....	5,678	6,555	6,145	-13.4	6.7	-1.7	5,359	5,066	7,023	7,412	-27.7	50,837	58,484
Defense aircraft and parts.....	2,960	3,142	3,154	-5.8	-0.4	7.6	2,931	2,681	3,650	2,458	19.2	22,257	16,935
Ships and boats.....	1,911	1,759	1,684	8.6	4.5	-5.3	2,017	1,449	1,759	1,647	22.5	14,052	12,712
Furniture and related products.....	5,633	5,721	5,614	-1.5	1.9	-1.0	5,999	5,288	5,683	6,275	-4.4	44,777	46,850
Miscellaneous durable goods.....	10,166	10,269	10,013	-1.0	2.6	-1.4	10,060	9,638	10,610	9,788	2.8	78,699	76,535
Nondurable goods industries.....	148,092	147,362	147,605	0.5	-0.2	-0.1	153,047	144,209	151,321	156,392	-2.1	1,166,268	1,209,643
Food products.....	38,474	37,318	36,972	3.1	0.9	-1.9	38,858	35,330	37,047	39,050	-0.5	296,757	296,690
Grain and oilseed milling.....	4,029	4,094	4,130	-1.6	-0.9	0.9	4,102	3,971	3,963	4,219	-2.8	32,322	31,344
Dairy products.....	4,995	5,036	5,086	-0.8	-1.0	-2.9	5,082	4,814	5,264	6,057	-16.1	41,510	43,977
Meat, poultry, and seafood products.....	10,951	11,064	10,841	-1.0	2.1	-3.7	11,323	10,666	11,040	11,650	-2.8	88,671	88,702
Beverage and tobacco products.....	9,160	9,109	9,101	0.6	0.1	-3.4	9,663	9,350	9,672	10,967	-11.9	74,150	78,496
Beverages.....	5,811	5,822	5,587	-0.2	4.2	-3.2	6,314	6,063	6,158	6,120	3.2	46,103	44,440
Tobacco.....	3,349	3,287	3,514	1.9	-6.5	-3.7	3,349	3,287	3,514	4,847	-30.9	28,047	34,056
Textile mills.....	3,577	3,760	3,513	-4.9	7.0	-3.9	3,771	3,384	3,835	3,939	-4.3	28,555	30,633
Textile products.....	3,054	3,064	3,101	-0.3	-1.2	-1.8	3,330	3,058	3,395	3,108	7.1	24,759	23,154
Apparel.....	4,668	4,852	4,739	-3.8	2.4	-0.2	5,266	4,995	4,588	5,383	-2.2	37,521	38,698
Leather and allied products.....	726	734	728	-1.1	0.8	8.7	754	696	719	712	5.9	5,191	5,748
Paper products.....	12,600	12,651	12,412	-0.4	1.9	-1.4	13,035	12,662	12,511	13,244	-1.6	98,898	103,918
Pulp, paper, and paperboard mills.....	5,908	5,932	5,691	-0.4	4.2	-3.0	6,123	5,986	5,691	6,173	-0.8	45,887	48,912
Paperboard containers.....	3,716	3,737	3,735	-0.6	0.1	0.2	3,896	3,745	3,742	3,850	1.2	29,321	29,536
Printing.....	8,054	7,945	7,867	1.4	1.0	-0.5	8,364	7,528	7,718	8,459	-1.1	61,878	65,214
Petroleum and coal products.....	18,434	18,483	17,944	-0.3	3.0	0.2	20,141	19,511	18,886	19,903	1.2	140,851	152,847
Petroleum refineries.....	16,824	16,867	16,380	-0.3	3.0	0.5	18,230	17,640	17,020	18,126	0.6	128,397	140,253
Basic chemicals.....	34,407	34,387	36,404	0.1	-5.5	3.6	34,419	33,103	37,608	36,256	-5.1	277,970	295,966
Pesticides, fertilizers, and other agricultural chemicals.....	1,680	1,622	2,039	3.6	-20.5	27.0	1,259	1,319	2,141	1,190	5.8	15,427	15,557
Pharmaceuticals and medicines.....	8,073	8,173	9,929	-1.2	-17.7	12.6	7,851	7,499	9,748	9,895	-20.7	68,432	77,941
Paints, coatings, and adhesives.....	2,368	2,389	2,381	-0.9	0.3	1.4	2,513	2,554	2,596	2,532	-0.8	19,445	19,340
Plastics and rubber products.....	14,938	15,059	14,824	-0.8	1.6	-0.7	15,446	14,592	15,342	15,371	0.5	119,738	118,279

^p Preliminary^r Revised

NA Not available.

¹ Shipments and new orders are the totals for the period and are adjusted for trading-day and calendar-month variations.² See footnote at end of Table 2.³ See footnote at end of Table 2.

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

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

[Millions of Dollars]

Industry	Seasonally Adjusted						Not Seasonally Adjusted ¹						
	Monthly			Percent Change			Monthly				Percent Change Aug. 02/01	Year to date	
	Aug. 2002 ^p	July 2002 ^r	June 2002	July - Aug.	June - July	May - June	Aug. 2002 ^p	July 2002 ^r	June 2002	Aug. 2001		2002 ^p	2001
All manufacturing industries ²	326,633	326,636	312,866	0.0	4.4	-2.5	331,169	298,155	327,396	327,147	1.2	2,533,349	2,593,359
Excluding transportation ²	268,866	269,232	268,035	-0.1	1.2	-1.8	272,269	258,131	277,950	276,878	-1.7	2,118,282	2,201,883
Excluding defense ²	318,183	316,202	305,496	0.6	3.5	-2.9	324,446	290,622	320,241	322,947	0.5	2,470,907	2,543,557
With unfilled orders ²	124,978	124,370	113,557	0.5	9.5	-5.3	122,601	108,972	120,112	117,381	4.4	952,182	987,680
Durable goods industries ²	178,541	179,274	165,261	-0.4	8.5	-4.5	178,122	153,946	176,075	170,755	4.3	1,367,081	1,383,716
Primary metals.....	11,409	11,205	11,119	1.8	0.8	-2.8	11,647	10,419	11,404	11,456	1.7	90,317	93,622
Iron and steel mills.....	5,459	5,265	5,176	3.7	1.7	-4.9	5,510	4,888	5,401	4,950	11.3	42,476	41,467
Aluminum and nonferrous metals.....	4,650	4,626	4,645	0.5	-0.4	-1.8	4,741	4,423	4,661	4,935	-3.9	37,237	40,765
Ferrous metal foundries.....	1,300	1,314	1,298	-1.1	1.2	1.9	1,396	1,108	1,342	1,571	-11.1	10,604	11,390
Fabricated metal products.....	20,481	21,212	20,651	-3.4	2.7	-3.1	21,058	21,020	21,230	22,059	-4.5	167,702	170,250
Machinery.....	22,483	23,004	20,863	-2.3	10.3	-8.4	21,680	21,129	22,570	22,728	-4.6	176,676	190,222
Construction machinery.....	1,709	1,694	1,591	0.9	6.5	-9.3	1,605	1,473	1,703	1,671	-3.9	13,957	14,305
Mining, oil field, and gas field machinery.....	710	646	591	9.9	9.3	-19.5	701	608	667	841	-16.6	5,682	6,516
Industrial machinery.....	3,290	3,847	2,709	-14.5	42.0	-19.8	2,948	3,970	2,719	2,627	12.2	25,328	25,909
Photographic equipment.....	1,476	1,433	1,376	3.0	4.1	-4.4	1,429	1,404	1,556	1,470	-2.8	10,983	11,097
Ventilation, heating, air-conditioning, and refrigeration equipment.....	2,571	2,616	2,536	-1.7	3.2	-4.2	2,590	2,501	2,876	3,031	-14.5	21,589	23,513
Metalworking machinery.....	2,078	2,080	2,007	-0.1	3.6	-1.5	1,965	1,786	2,205	1,868	5.2	15,529	17,018
Turbines, generators, and other power transmission equipment.....	2,331	2,419	2,176	-3.6	11.2	-13.6	2,342	1,800	2,704	3,042	-23.0	17,554	23,440
Material handling equipment.....	1,379	1,356	1,302	1.7	4.1	0.6	1,306	1,173	1,425	1,436	-9.1	10,617	12,770
Computers and electronic products ²	26,278	26,359	25,542	-0.3	3.2	-4.6	23,480	21,943	28,814	22,320	5.2	198,959	217,131
Electronic computers.....	3,942	4,122	3,477	-4.4	18.6	-6.3	3,553	3,510	4,195	3,250	9.3	29,056	36,398
Nondefense communications equipment.....	5,088	5,297	4,715	-3.9	12.3	-18.2	3,611	4,172	5,084	4,001	-9.7	39,260	49,163
Defense communications equipment.....	237	247	360	-4.0	-31.4	42.3	232	221	368	165	40.6	2,260	2,201
Semiconductors ³	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electronic components.....	4,256	4,089	4,269	4.1	-4.2	3.7	4,555	3,929	4,510	3,974	14.6	33,101	34,572
Nondefense search and navigation equipment.....	691	727	710	-5.0	2.4	3.0	640	658	777	679	-5.7	5,614	5,766
Defense search and navigation equipment.....	1,717	1,699	2,097	1.1	-19.0	10.0	1,186	1,032	2,306	1,366	-13.2	12,847	13,689
Electromedical, measuring, and control instruments.....	6,217	6,132	5,996	1.4	2.3	1.6	5,886	5,399	6,783	5,167	13.9	46,126	43,426
Electrical equipment, appliances, and components.....	8,895	8,637	9,225	3.0	-6.4	-1.3	8,787	8,066	9,758	9,568	-8.2	70,888	79,115
Electric lighting equipment.....	1,071	1,080	1,059	-0.8	2.0	-5.4	1,084	927	1,147	1,149	-5.7	8,538	8,751
Household appliances.....	1,947	2,059	1,997	-5.4	3.1	-2.0	2,004	1,896	2,040	2,241	-10.6	15,833	15,831
Electrical equipment.....	2,468	2,095	2,833	17.8	-26.1	1.7	2,440	1,959	3,049	2,709	-9.9	20,010	23,029
Transportation equipment.....	57,767	57,404	46,831	0.6	22.6	-6.0	58,900	40,024	49,446	50,269	17.2	415,067	391,476
Motor vehicle bodies, parts, and trailers.....	18,297	18,621	18,251	-1.7	2.0	-2.7	19,386	14,032	18,712	18,378	5.5	147,815	139,530
Nondefense aircraft and parts.....	9,119	6,181	2,663	47.5	132.1	-48.9	8,894	4,943	3,415	6,473	37.4	44,294	56,402
Defense aircraft and parts.....	3,162	6,212	2,620	-49.1	137.1	17.6	2,365	5,077	2,493	1,087	117.6	28,372	16,752
Ships and boats.....	1,962	1,442	1,563	36.1	-7.7	-3.8	1,762	761	1,524	1,246	41.4	14,228	15,162
Furniture and related products.....	5,402	5,478	5,439	-1.4	0.7	-3.0	5,564	5,376	5,472	6,008	-7.4	44,296	46,616
Nondurable goods industries.....	148,092	147,362	147,605	0.5	-0.2	-0.1	153,047	144,209	151,321	156,392	-2.1	1,166,268	1,209,643

^p Preliminary ^r Revised NA Not available.¹ Shipments and new orders are the totals for the period and are adjusted for trading-day and calendar-month variations.² Aggregate estimates and percent changes exclude semiconductor industry data. Due to the number of large semiconductor manufacturers choosing not to participate in this voluntary monthly survey, the Census Bureau cannot currently produce monthly estimates of semiconductor shipments, orders, or inventories.³ Due to the number of large semiconductor manufacturers choosing not to participate in this voluntary monthly survey, the Census Bureau cannot currently produce monthly estimates of semiconductor shipments, orders, or inventories.

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. Further details on survey design, methodology, and data limitations are contained in our most recent annual benchmark publication, Current Industrial Reports: M3-1(01), "Manufacturers' Shipments, Inventories, and Orders: 1992-2001."

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

[Millions of Dollars]

Industry	Seasonally Adjusted						Not Seasonally Adjusted				
	Monthly			Percent Change			Monthly				Percent Change Aug. 02/01
	Aug. 2002 ^a	July 2002 ^a	June 2002	July - Aug.	June - July	May - June	Aug. 2002 ^b	July 2002 ^a	June 2002	Aug. 2001	
All manufacturing industries ¹	491,383	488,964	488,429	0.5	0.1	-1.6	489,332	490,151	489,548	518,727	-5.7
Excluding transportation ¹	236,424	238,802	240,714	-1.0	-0.8	-1.3	235,689	240,088	240,877	261,632	-9.9
Excluding defense ¹	345,301	343,560	345,734	0.5	-0.6	-2.1	345,577	345,604	345,739	389,456	-11.3
Durable goods industries ¹	491,383	488,964	488,429	0.5	0.1	-1.6	489,332	490,151	489,548	518,727	-5.7
Primary metals	15,934	15,929	16,079	0.0	-0.9	-0.5	16,021	16,169	16,405	17,961	-10.8
Iron and steel mills	9,009	8,879	8,869	1.5	0.1	0.2	9,073	9,094	9,220	8,746	3.7
Aluminum and nonferrous metals	4,733	4,826	4,973	-1.9	-3.0	-1.4	4,762	4,895	4,947	6,708	-29.0
Ferrous metal foundries	2,192	2,224	2,237	-1.4	-0.6	-1.7	2,186	2,180	2,238	2,507	-12.8
Fabricated metal products	38,727	39,484	39,625	-1.9	-0.4	-0.9	39,424	40,510	39,826	43,513	-9.4
Machinery	47,229	47,947	48,200	-1.5	-0.5	-4.1	47,180	47,910	47,926	55,809	-15.5
Construction machinery	2,187	2,155	2,182	1.5	-1.2	-1.4	2,070	2,052	2,191	2,277	-9.1
Mining, oil field, and gas field machinery	1,051	1,052	1,134	-0.1	-7.2	-11.3	1,051	1,052	1,134	1,250	-15.9
Industrial machinery	9,451	9,564	9,024	-1.2	6.0	-3.6	9,553	9,746	8,895	9,500	0.6
Photographic equipment	918	931	954	-1.4	-2.4	-4.2	943	956	931	911	3.5
Ventilation, heating, air-conditioning, and refrigeration equipment	4,434	4,511	4,532	-1.7	-0.5	-3.0	4,464	4,622	4,607	5,056	-11.7
Metalworking machinery	3,627	3,608	3,598	0.5	0.3	-2.2	3,684	3,687	3,628	4,631	-20.4
Turbines, generators, and other power transmission equipment	11,877	12,453	13,136	-4.6	-5.2	-7.3	11,860	12,329	12,903	17,351	-31.6
Material handling equipment	4,927	4,901	4,907	0.5	-0.1	-0.6	4,807	4,805	4,956	5,477	-12.2
Computers and electronic products ¹	110,980	111,471	112,055	-0.4	-0.5	-0.5	109,333	111,095	112,221	118,238	-7.5
Electronic computers	6,180	6,264	6,566	-1.3	-4.6	-3.8	6,280	6,284	6,694	7,504	-16.3
Nondefense communications equipment	39,259	39,307	39,150	-0.1	0.4	-1.4	37,885	38,942	39,068	41,897	-9.6
Defense communications equipment	2,357	2,425	2,485	-2.8	-2.4	2.6	2,357	2,425	2,485	2,515	-6.3
Semiconductors ²	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electronic components	16,087	16,134	16,279	-0.3	-0.9	0.0	16,251	16,110	16,082	17,483	-7.0
Nondefense search and navigation equipment	4,093	4,142	4,206	-1.2	-1.5	-1.5	4,085	4,197	4,271	4,861	-16.0
Defense search and navigation equipment	30,000	30,255	30,493	-0.8	-0.8	0.5	29,440	30,112	30,799	31,600	-6.8
Electromedical, measuring, and control instruments	13,004	12,944	12,876	0.5	0.5	0.8	13,035	13,025	12,822	12,378	5.3
Electrical equipment, appliances, and components	14,481	14,570	15,039	-0.6	-3.1	1.4	14,543	14,684	14,795	15,805	-8.0
Electric lighting equipment	1,450	1,437	1,433	0.9	0.3	-1.2	1,544	1,519	1,483	1,622	-4.8
Household appliances	1,068	1,123	1,133	-4.9	-0.9	1.1	975	1,021	954	1,124	-13.3
Electrical equipment	8,463	8,553	9,064	-1.1	-5.6	2.1	8,469	8,601	9,001	9,065	-6.6
Transportation equipment	254,959	250,162	247,715	1.9	1.0	-1.9	253,643	250,063	248,671	257,095	-1.3
Motor vehicle bodies, parts, and trailers	12,618	12,982	12,778	-2.8	1.6	0.9	12,353	12,975	12,555	12,551	-1.6
Nondefense aircraft and parts	116,084	112,643	113,017	3.1	-0.3	-3.0	116,800	113,265	113,388	135,919	-14.1
Defense aircraft and parts	58,062	57,860	54,790	0.3	5.6	-1.0	57,398	57,964	55,568	41,187	39.4
Ships and boats	21,345	21,294	21,611	0.2	-1.5	-0.6	20,748	21,003	21,691	20,882	-0.6
Furniture and related products	5,412	5,643	5,886	-4.1	-4.1	-2.9	5,527	5,962	5,874	6,633	-16.7

^a Preliminary ^a Revised NA Not available.¹ Aggregate estimates and percent changes exclude semiconductor industry data. Due to the number of large semiconductor manufacturers choosing not to participate in this voluntary monthly survey, the Census Bureau cannot currently produce monthly estimates of semiconductor shipments, orders, or inventories.² Due to the number of large semiconductor manufacturers choosing not to participate in this voluntary monthly survey, the Census Bureau cannot currently produce monthly estimates of semiconductor shipments, orders, or inventories.

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

Table 4. Value of Manufacturers' Inventories for Industry Groups

[Millions of Dollars]

Industry	Seasonally Adjusted						Not Seasonally Adjusted				
	Monthly			Percent Change			Monthly				Percent Change Aug. 02/01
	Aug. 2002 ^p	July 2002 ^r	June 2002	July - Aug.	June - July	May - June	Aug. 2002 ^p	July 2002 ^r	June 2002	Aug. 2001	
All manufacturing industries ¹	427,924	427,996	428,230	0.0	-0.1	-0.1	431,705	429,733	425,000	460,030	-6.2
Excluding transportation ¹	356,722	356,637	355,837	0.0	0.2	-0.2	359,093	357,613	353,680	383,570	-6.4
Excluding defense ¹	406,005	406,477	405,818	-0.1	0.2	-0.2	409,090	407,998	402,673	437,962	-6.6
With unfilled orders ¹	214,835	215,198	216,405	0.2	-0.6	-0.4	217,495	216,561	214,744	238,903	-9.0
Durable goods industries ¹	263,779	264,398	265,478	-0.2	-0.4	-0.4	267,048	266,049	263,471	291,555	-8.4
Wood products.....	9,287	9,300	9,379	-0.1	-0.8	-2.2	9,232	9,177	9,220	9,775	-5.6
Nonmetallic mineral products.....	8,827	8,840	8,875	-0.1	-0.4	0.8	8,780	8,854	8,919	9,434	-6.9
Primary metals.....	18,426	18,288	18,282	0.8	0.0	0.7	18,501	18,310	18,106	19,992	-7.5
Iron and steel mills.....	10,490	10,294	10,197	1.9	1.0	1.1	10,593	10,339	10,028	11,315	-6.4
Aluminum and nonferrous metals.....	6,212	6,262	6,275	-0.8	-0.2	-0.5	6,210	6,253	6,248	6,844	-9.3
Ferrous metal foundries.....	1,724	1,732	1,810	-0.5	-4.3	2.5	1,698	1,718	1,830	1,833	-7.4
Fabricated metal products.....	30,581	30,574	30,494	0.0	0.3	-0.6	30,656	30,822	30,624	33,255	-7.8
Machinery.....	44,764	44,973	45,063	-0.5	-0.2	-0.9	45,008	44,872	44,581	48,963	-8.1
Farm machinery.....	1,979	2,018	1,996	-1.9	1.1	0.7	1,924	1,951	1,967	2,062	-6.7
Construction machinery.....	3,920	3,927	3,898	-0.2	0.7	-2.2	3,816	3,846	3,855	3,815	0.0
Mining, oil field, and gas field machinery.....	2,165	2,163	2,204	0.1	-1.9	-2.2	2,205	2,177	2,245	2,454	-10.1
Industrial machinery.....	7,758	7,840	7,813	-1.0	0.3	1.3	7,797	7,815	7,769	8,547	-8.8
Photographic equipment.....	1,916	1,962	1,953	-2.3	0.5	-1.1	1,932	1,956	1,931	2,001	-3.4
Ventilation, heating, air-conditioning, and refrigeration equipment.....	4,092	4,081	4,076	0.3	0.1	0.0	4,163	4,131	4,064	4,483	-7.1
Metalworking machinery.....	5,167	5,126	5,152	0.8	-0.5	-1.6	5,401	5,254	5,144	6,319	-14.5
Turbines, generators, and other power transmission equipment.....	4,804	4,889	4,891	-1.7	0.0	-6.7	4,911	4,949	4,762	5,113	-4.0
Material handling equipment.....	2,655	2,632	2,653	0.9	-0.8	2.1	2,609	2,561	2,627	2,822	-7.5
Computers and electronic products ¹	42,798	42,992	42,992	-0.5	0.0	-1.7	44,130	43,672	42,734	53,984	-18.3
Electronic computers.....	2,946	2,994	3,075	-1.6	-2.6	-2.0	3,154	3,041	3,052	3,638	-13.3
Computer storage devices.....	1,299	1,327	1,343	-2.1	-1.2	-1.0	1,342	1,335	1,261	1,712	-21.6
Other peripheral equipment.....	2,560	2,619	2,636	-2.3	-0.6	2.5	2,769	2,717	2,586	3,490	-20.7
Nondefense communications equipment.....	9,325	9,514	9,372	-2.0	1.5	-2.5	9,520	9,611	9,162	13,833	-31.2
Defense communications equipment.....	768	746	755	2.9	-1.2	-2.7	768	746	755	790	-2.8
Audio and video equipment.....	1,130	1,102	1,069	2.5	3.1	-2.6	1,215	1,160	1,095	1,201	1.2
Semiconductors ²	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electronic components.....	8,690	8,711	8,766	-0.2	-0.6	-3.6	8,915	8,875	8,873	11,177	-20.2
Nondefense search and navigation equipment.....	2,963	2,946	2,982	0.6	-1.2	-1.7	3,003	3,011	2,956	2,979	0.8
Defense search and navigation equipment.....	3,364	3,373	3,403	-0.3	-0.9	3.2	3,477	3,452	3,420	3,565	-2.5
Electromedical, measuring and control instruments.....	9,381	9,292	9,218	1.0	0.8	-1.6	9,569	9,340	9,194	11,116	-13.9
Electrical equipment, appliances, and components.....	12,892	13,048	13,103	-1.2	-0.4	-0.3	12,831	13,011	12,980	13,997	-8.3
Electric lighting equipment.....	1,482	1,481	1,473	0.1	0.5	-0.9	1,509	1,518	1,492	1,563	-3.5
Household appliances.....	2,150	2,182	2,180	-1.5	0.1	1.6	2,098	2,185	2,186	2,099	0.0
Electrical equipment.....	4,315	4,417	4,516	-2.3	-2.2	0.8	4,301	4,351	4,347	4,545	-5.4
Batteries.....	728	719	716	1.3	0.4	-0.4	769	740	730	818	-6.0
Transportation equipment.....	71,202	71,359	72,393	-0.2	-1.4	0.3	72,612	72,120	71,320	76,460	-5.0
Automobiles.....	1,580	1,670	1,693	-5.4	-1.4	-0.9	1,682	1,856	1,666	1,990	-15.5
Light trucks and utility vehicles.....	2,006	2,010	1,972	-0.2	1.9	0.5	2,134	2,136	1,960	2,106	1.3
Heavy duty trucks.....	958	941	866	1.8	8.7	-2.6	975	941	864	987	-1.2
Motor vehicle bodies, parts, and trailers.....	15,694	15,848	15,784	-1.0	0.4	1.1	15,845	16,101	15,627	16,434	-3.6
Nondefense aircraft and parts.....	29,580	29,733	30,094	-0.5	-1.2	-0.6	29,943	29,703	29,442	33,235	-9.9
Defense aircraft and parts.....	10,842	10,613	10,853	2.2	-0.2	2.2	11,300	10,683	10,796	10,401	8.6
Ships and boats.....	2,595	2,599	2,571	-0.2	1.1	3.0	2,610	2,640	2,584	2,487	4.9
Furniture and related products.....	7,030	7,036	7,023	-0.1	0.2	0.5	7,093	7,165	7,145	7,758	-8.6
Miscellaneous durable goods.....	17,972	17,988	17,874	-0.1	0.6	1.2	18,205	18,046	17,842	17,937	1.5
Nondurable goods industries.....	164,145	163,598	162,752	0.3	0.5	0.4	164,657	163,684	161,529	168,475	-2.3
Food products.....	31,905	31,791	31,695	0.4	0.3	0.4	31,950	31,230	30,593	31,555	1.3
Grain and oilseed milling.....	3,483	3,363	3,263	3.6	3.1	4.3	3,286	3,217	3,083	2,897	13.4
Dairy products.....	3,432	3,395	3,436	1.1	-1.2	-1.3	3,476	3,508	3,551	3,485	-0.3
Meat, poultry, and seafood products.....	6,134	6,079	6,023	0.9	0.9	-0.5	6,070	6,023	5,990	5,704	6.4
Beverage and tobacco products.....	14,213	14,271	14,476	-0.4	-1.4	1.1	13,752	13,643	14,011	13,875	-0.9
Beverages.....	8,906	8,935	9,149	-0.3	-2.3	0.9	8,700	8,718	9,057	8,730	-0.3
Tobacco.....	5,307	5,336	5,327	-0.5	0.2	1.5	5,052	4,925	4,954	5,145	-1.8
Textile mills.....	5,040	5,044	5,059	-0.1	-0.3	-1.2	5,093	5,100	5,067	6,009	-15.2
Textile products.....	4,537	4,523	4,478	0.3	1.0	0.4	4,570	4,580	4,564	4,581	-0.2
Apparel.....	7,399	7,422	7,412	-0.3	0.1	-0.1	7,585	7,766	7,742	9,138	-17.0
Leather and allied products.....	1,433	1,472	1,429	-2.6	3.0	2.3	1,490	1,524	1,451	1,685	-11.6
Paper products.....	14,283	14,325	14,475	-0.3	-1.0	0.5	14,234	14,297	14,426	14,742	-3.4
Pulp, paper, and paperboard mills.....	6,315	6,343	6,449	-0.4	-1.6	0.4	6,249	6,278	6,434	6,546	-4.5
Paperboard containers.....	3,898	3,911	3,979	-0.3	-1.7	0.5	3,905	3,932	3,959	4,199	-7.0
Printing.....	5,859	5,934	5,891	-1.3	0.7	2.1	6,235	6,195	5,927	6,958	-10.4
Petroleum and coal products.....	13,011	13,118	12,807	-0.8	2.4	0.9	13,381	13,473	13,070	13,207	1.3
Petroleum refineries.....	11,600	11,685	11,408	-0.7	2.4	0.7	11,918	11,991	11,604	11,760	1.3
Basic chemicals.....	49,607	48,957	48,441	1.3	1.1	0.0	49,685	49,170	48,129	49,704	0.0
Pesticides, fertilizers, and other agricultural chemicals.....	2,343	2,347	2,353	-0.2	-0.3	-2.9	2,015	2,031	2,093	2,351	-14.3
Pharmaceuticals and medicines.....	18,068	17,586	17,219	2.7	2.1	-0.1	18,357	17,788	17,203	16,799	9.3
Paints, coatings, and adhesives.....	2,913	2,918	2,888	-0.2	1.0	1.2	2,923	2,989	2,937	2,974	-1.7
Plastics and rubber products.....	16,858	16,741	16,589	0.7	0.9	0.0	16,682	16,706	16,549	17,021	-2.0

^p Preliminary ^r Revised NA Not available.¹ See footnote at end of Table 3.² See footnote at end of Table 3.

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 Series¹

[Millions of Dollars]

Industry	Seasonally Adjusted						Not Seasonally Adjusted ²						
	Monthly			Percent Change			Monthly				Percent Change Aug. 02/01	Year to date	
	Aug. 2002 ^p	July 2002 ^r	June 2002	July - Aug.	June - July	May - June	Aug. 2002 ^p	July 2002 ^r	June 2002	Aug. 2001		2002 ^p	2001
SHIPMENTS													
All manufacturing industries ⁵	324,214	326,101	320,810	-0.6	1.6	-0.9	331,988	297,552	339,333	334,992	-0.9	2,545,975	2,617,561
Construction materials and supplies.....	36,132	36,257	36,016	-0.3	0.7	-0.1	38,537	36,317	38,844	38,318	0.6	286,224	284,658
Information technology.....	26,861	27,015	26,058	-0.6	3.7	-2.5	25,059	23,151	30,511	25,144	-0.3	203,609	230,487
Computers and related products ⁵	6,765	7,072	6,252	-4.3	13.1	-5.0	6,002	5,678	8,029	5,375	11.7	49,727	57,556
Motor vehicle and parts.....	39,097	40,213	37,122	-2.8	8.3	-2.8	41,732	26,753	39,388	39,163	6.6	302,612	283,421
Capital goods.....	63,686	64,738	63,027	-1.6	2.7	-1.4	61,276	56,991	71,213	62,788	-2.4	496,192	536,163
Nondefense capital goods ³	57,168	58,266	56,314	-1.9	3.5	-2.2	55,018	51,200	63,919	56,723	-3.0	446,208	490,888
Excluding aircraft.....	54,550	54,836	53,312	-0.5	2.9	-2.1	52,604	48,693	60,357	52,956	-0.7	420,117	458,863
Defense capital goods ⁴	6,518	6,472	6,713	0.7	-3.6	6.3	6,258	5,791	7,294	6,065	3.2	49,984	45,275
Consumer goods.....	124,698	125,479	122,851	-0.6	2.1	-1.0	129,250	113,645	126,240	131,827	-2.0	974,601	992,321
Consumer durable goods.....	34,350	35,946	32,793	-4.4	9.6	-3.6	35,640	25,658	34,837	34,688	2.7	266,294	252,173
Consumer nondurable goods.....	90,348	89,533	90,058	0.9	-0.6	0.0	93,610	87,987	91,403	97,139	-3.6	708,307	740,148
NEW ORDERS													
All manufacturing industries ⁵	326,633	326,636	312,866	0.0	4.4	-2.5	331,169	298,155	327,396	327,147	1.2	2,533,349	2,593,359
Construction materials and supplies.....	35,735	36,134	35,526	-1.1	1.7	-1.9	37,821	36,995	38,028	37,992	-0.5	287,252	284,130
Information technology.....	26,447	26,601	25,464	-0.6	4.5	-5.5	23,155	22,208	28,817	22,689	2.1	199,464	220,788
Computers and related products ⁵	6,681	6,770	5,991	-1.3	13.0	-9.7	5,998	5,268	7,660	5,558	7.9	49,203	57,676
Motor vehicle and parts.....	38,733	40,417	37,230	-4.2	8.6	-3.0	41,110	27,173	39,215	38,855	5.8	302,772	282,244
Capital goods.....	67,331	62,423	57,034	7.9	9.4	-7.2	62,509	53,627	62,400	56,680	10.3	478,851	514,532
Nondefense capital goods ³	60,240	56,933	50,774	5.8	12.1	-9.6	56,800	50,181	56,698	52,881	7.4	430,260	472,733
Excluding aircraft.....	54,073	53,798	50,438	0.5	6.7	-6.3	50,837	47,969	55,802	49,976	1.7	411,482	446,227
Defense capital goods ⁴	7,091	5,490	6,260	29.2	-12.3	18.3	5,709	3,446	5,702	3,799	50.3	48,591	41,799
Consumer goods.....	124,274	125,313	122,561	-0.8	2.2	-1.1	128,725	113,853	125,660	131,784	-2.3	973,200	989,789
Consumer durable goods.....	33,926	35,780	32,503	-5.2	10.1	-3.9	35,115	25,866	34,257	34,645	1.4	264,893	249,641
UNFILLED ORDERS													
All manufacturing industries ⁵	491,383	488,964	488,429	0.5	0.1	-1.6	489,332	490,151	489,548	518,727	-5.7	(X)	(X)
Construction materials and supplies.....	31,959	32,356	32,479	-1.2	-0.4	-1.5	32,771	33,487	32,809	35,720	-8.3	(X)	(X)
Information technology.....	99,311	99,725	100,139	-0.4	-0.4	-0.6	97,580	99,484	100,427	105,660	-7.6	(X)	(X)
Computers and related products ⁵	6,180	6,264	6,566	-1.3	-4.6	-3.8	6,280	6,284	6,694	7,504	-16.3	(X)	(X)
Motor vehicle and parts.....	12,618	12,982	12,778	-2.8	1.6	0.9	12,353	12,975	12,555	12,551	-1.6	(X)	(X)
Capital goods.....	341,371	337,726	340,041	1.1	-0.7	-1.7	338,097	336,864	340,228	360,700	-6.3	(X)	(X)
Nondefense capital goods ³	215,976	212,904	214,237	1.4	-0.6	-2.5	214,840	213,058	214,077	248,149	-13.4	(X)	(X)
Excluding aircraft.....	129,408	129,885	130,923	-0.4	-0.8	-2.1	128,272	130,039	130,763	144,939	-11.5	(X)	(X)
Defense capital goods ⁴	125,395	124,822	125,804	0.5	-0.8	-0.4	123,257	123,806	126,151	112,551	9.5	(X)	(X)
Consumer goods.....	11,831	12,255	12,421	-3.5	-1.3	-2.3	11,756	12,281	12,073	13,333	-11.8	(X)	(X)
Consumer durable goods.....	11,831	12,255	12,421	-3.5	-1.3	-2.3	11,756	12,281	12,073	13,333	-11.8	(X)	(X)
TOTAL INVENTORIES													
All manufacturing industries ⁵	427,924	427,996	428,230	0.0	-0.1	-0.1	431,705	429,733	425,000	460,030	-6.2	(X)	(X)
Construction materials and supplies.....	44,908	44,873	44,902	0.1	-0.1	-0.3	44,997	45,135	44,861	48,039	-6.3	(X)	(X)
Information technology.....	40,241	40,492	40,397	-0.6	0.2	-1.3	41,301	40,970	40,017	49,780	-17.0	(X)	(X)
Computers and related products ⁵	6,805	6,940	7,054	-1.9	-1.6	-0.1	7,265	7,093	6,899	8,840	-17.8	(X)	(X)
Motor vehicle and parts.....	20,238	20,469	20,315	-1.1	0.8	0.7	20,636	21,034	20,117	21,517	-4.1	(X)	(X)
Capital goods.....	132,731	133,070	134,537	-0.3	-1.1	-0.5	134,853	133,622	132,931	151,140	-10.8	(X)	(X)
Nondefense capital goods ³	114,200	115,028	115,653	-0.7	-0.5	-0.7	115,791	115,420	114,145	132,017	-12.3	(X)	(X)
Excluding aircraft.....	91,207	91,892	91,946	-0.7	-0.1	-0.9	92,464	92,298	91,046	105,097	-12.0	(X)	(X)
Defense capital goods ⁴	18,531	18,042	18,884	2.7	-4.5	0.8	19,062	18,202	18,786	19,123	-0.3	(X)	(X)
Consumer goods.....	126,481	126,278	125,481	0.2	0.6	0.5	127,371	126,447	124,504	128,203	-0.6	(X)	(X)
Consumer durable goods.....	26,360	26,494	26,263	-0.5	0.9	0.5	26,798	26,923	26,243	27,533	-2.7	(X)	(X)
Consumer nondurable goods.....	100,121	99,784	99,218	0.3	0.6	0.4	100,573	99,524	98,261	100,670	-0.1	(X)	(X)

^p Preliminary ^r Revised X Not Applicable.

¹ Topical series are regroupings of the separate industry categories.

² Shipments and new orders are the totals for the period and are adjusted for trading-day and calendar-month variations.

³ Nondefense capital goods industries include: small arms and ordnance; farm machinery and equipment; construction machinery; mining, oil, and gas field machinery; industrial machinery; vending, laundry, and other machinery; photographic equipment; metalworking machinery; turbines and generators; other power transmission equipment; pumps and compressors; material handling equipment; all other machinery; electronic computers; computer storage devices; other computer peripheral equipment; communications equipment; search and navigation equipment; electromedical, measuring, and control instruments; electrical equipment; other electrical equipment, appliances, and components; heavy duty trucks; aircraft; railroad rolling stock; ships and boats; office and institutional furniture; and medical equipment and supplies.

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

⁵ Aggregate estimates and percent changes exclude semiconductor industry data. Due to the number of large semiconductor manufacturers choosing not to participate in this voluntary monthly survey, the Census Bureau cannot currently produce monthly estimates of semiconductor shipments, orders, or 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 Group

[Millions of Dollars]

Industry	Seasonally Adjusted						Not Seasonally Adjusted				
	Monthly			Percent Change			Monthly				Percent Change Aug. 02/01
	Aug. 2002 ^a	July 2002 ^a	June 2002	July - Aug.	June - July	May - June	Aug. 2002 ^a	July 2002 ^a	June 2002	Aug. 2001	
MATERIALS AND SUPPLIES											
All manufacturing industries ¹	140,230	140,530	140,746	-0.2	-0.2	-0.8	140,970	141,175	139,465	153,337	-8.1
Durable goods industries ¹	84,857	85,068	85,610	-0.2	-0.6	-1.1	85,790	85,684	84,409	95,353	-10.0
Wood products.....	3,611	3,598	3,640	0.4	-1.2	-1.4	3,585	3,424	3,356	3,721	-3.7
Nonmetallic mineral products.....	3,216	3,266	3,296	-1.5	-0.9	0.1	3,244	3,269	3,276	3,472	-6.6
Primary metals.....	6,066	6,029	6,002	0.6	0.4	0.8	6,144	6,052	5,883	6,715	-8.5
Fabricated metal products.....	10,631	10,547	10,458	0.8	0.9	-0.2	10,744	10,695	10,514	11,186	-4.0
Machinery.....	14,980	15,166	15,326	-1.2	-1.0	-1.6	15,080	15,269	15,094	16,804	-10.3
Computers and electronic products ¹	15,544	15,636	15,807	-0.6	-1.1	-3.0	15,967	15,870	15,823	21,023	-24.0
Electrical equipment, appliances, and components.....	4,560	4,639	4,653	-1.7	-0.3	-0.6	4,559	4,641	4,564	5,310	-14.1
Transportation equipment.....	16,792	16,702	17,068	0.5	-2.1	-1.3	16,940	16,931	16,562	17,628	-3.9
Furniture and related products.....	3,072	3,099	3,101	-0.9	-0.1	1.3	3,063	3,120	3,110	3,292	-7.0
Miscellaneous products.....	6,385	6,386	6,259	0.0	2.0	0.4	6,464	6,413	6,227	6,202	4.2
Nondurable goods industries.....	55,373	55,462	55,136	-0.2	0.6	-0.3	55,180	55,491	55,056	57,984	-4.8
Food products.....	10,358	10,275	10,177	0.8	1.0	0.4	10,250	10,170	10,116	10,341	-0.9
Beverage and tobacco products.....	5,835	5,851	5,824	-0.3	0.5	0.9	5,695	5,680	5,694	5,753	-1.0
Textiles.....	1,400	1,412	1,434	-0.8	-1.5	-0.1	1,417	1,429	1,417	1,706	-16.9
Textile products.....	1,526	1,515	1,488	0.7	1.8	0.9	1,555	1,553	1,518	1,593	-2.4
Apparel.....	1,689	1,702	1,708	-0.8	-0.4	0.2	1,668	1,717	1,735	2,044	-18.4
Leather and allied products.....	322	327	317	-1.5	3.2	-0.9	332	343	326	447	-25.7
Paper products.....	6,852	6,875	6,913	-0.3	-0.5	-0.2	6,812	6,851	6,866	7,222	-5.7
Printing.....	2,374	2,449	2,440	-3.1	0.4	2.0	2,443	2,492	2,429	2,858	-14.5
Petroleum and coal products.....	3,075	3,140	3,134	-2.1	0.2	-2.5	3,102	3,204	3,266	3,415	-9.2
Basic chemicals.....	15,235	15,234	15,047	0.0	1.2	-1.5	15,203	15,280	15,049	15,694	-3.1
Plastics and rubber products.....	6,707	6,682	6,654	0.4	0.4	-0.3	6,703	6,772	6,640	6,911	-3.0
WORK IN PROCESS											
All manufacturing industries ¹	127,909	127,620	127,928	0.2	-0.2	0.1	129,488	127,909	126,701	138,987	-6.8
Durable goods industries ¹	98,494	98,872	99,764	-0.4	-0.9	-0.1	99,955	99,230	98,874	110,769	-9.8
Wood products.....	1,989	2,033	2,072	-2.2	-1.9	-0.1	2,004	2,022	2,066	2,014	-0.5
Nonmetallic mineral products.....	1,139	1,152	1,151	-1.1	0.1	1.1	1,136	1,164	1,156	1,223	-7.1
Primary metals.....	6,313	6,258	6,182	0.9	1.2	0.1	6,327	6,277	6,183	6,922	-8.6
Fabricated metal products.....	9,742	9,792	9,771	-0.5	0.2	-1.1	9,870	9,943	9,845	10,832	-8.9
Machinery.....	14,307	14,281	14,395	0.2	-0.8	-0.5	14,569	14,377	14,420	15,875	-8.2
Computers and electronic products ¹	17,341	17,520	17,507	-1.0	0.1	-0.6	17,777	17,759	17,453	20,388	-12.8
Electrical equipment, appliances, and components.....	2,878	2,909	2,969	-1.1	-2.0	-2.1	2,905	2,946	2,977	3,383	-14.1
Transportation equipment.....	40,383	40,524	41,213	-0.3	-1.7	0.6	40,902	40,302	40,251	45,244	-9.6
Furniture and related products.....	1,438	1,477	1,480	-2.6	-0.2	-2.2	1,434	1,487	1,484	1,572	-8.8
Miscellaneous products.....	2,964	2,926	3,024	1.3	-3.2	-0.6	3,031	2,953	3,039	3,316	-8.6
Nondurable goods industries.....	29,415	28,748	28,164	2.3	2.1	1.1	29,533	28,679	27,827	28,218	4.7
Food products.....	2,721	2,631	2,555	3.4	3.0	0.9	2,560	2,413	2,366	2,398	6.8
Beverage and tobacco products.....	3,764	3,775	3,818	-0.3	-1.1	-1.8	3,495	3,456	3,532	3,602	-3.0
Textiles.....	1,192	1,194	1,205	-0.2	-0.9	-1.2	1,188	1,204	1,207	1,455	-18.4
Textile products.....	793	790	795	0.4	-0.6	-1.7	795	793	800	834	-4.7
Apparel.....	1,477	1,462	1,444	1.0	1.2	0.9	1,480	1,508	1,526	1,578	-6.2
Leather and allied products.....	153	163	165	-6.1	-1.2	0.6	155	167	160	222	-30.2
Paper products.....	1,322	1,309	1,283	1.0	2.0	1.1	1,348	1,300	1,282	1,312	2.7
Printing.....	1,873	1,888	1,864	-0.8	1.3	4.3	2,091	2,063	1,871	2,309	-9.4
Petroleum and coal products.....	3,930	3,856	3,764	1.9	2.4	2.1	4,063	3,911	3,788	3,305	22.9
Basic chemicals.....	9,933	9,433	9,076	5.3	3.9	2.6	10,122	9,640	9,132	8,892	13.8
Plastics and rubber products.....	2,257	2,247	2,195	0.4	2.4	-1.1	2,236	2,224	2,163	2,311	-3.2
FINISHED GOODS											
All manufacturing industries ¹	159,785	159,846	159,556	0.0	0.2	0.4	161,247	160,649	158,834	167,706	-3.9
Durable goods industries ¹	80,428	80,458	80,104	0.0	0.4	0.2	81,303	81,135	80,188	85,433	-4.8
Wood products.....	3,687	3,669	3,667	0.5	0.1	-4.2	3,643	3,731	3,798	4,040	-9.8
Nonmetallic mineral products.....	4,472	4,422	4,428	1.1	-0.1	1.2	4,400	4,421	4,487	4,739	-7.2
Primary metals.....	6,047	6,001	6,098	0.8	-1.6	1.2	6,030	5,981	6,040	6,355	-5.1
Fabricated metal products.....	10,208	10,235	10,265	-0.3	-0.3	-0.6	10,042	10,184	10,265	11,237	-10.6
Machinery.....	15,477	15,526	15,342	-0.3	1.2	-0.6	15,359	15,226	15,067	16,284	-5.7
Computers and electronic products ¹	9,913	9,836	9,678	0.8	1.6	-1.5	10,386	10,043	9,458	12,573	-17.4
Electrical equipment, appliances, and components.....	5,454	5,500	5,481	-0.8	0.3	1.0	5,367	5,424	5,439	5,304	1.2
Transportation equipment.....	14,027	14,133	14,112	-0.8	0.1	1.5	14,770	14,887	14,507	13,588	8.7
Furniture and related products.....	2,520	2,460	2,442	2.4	0.7	1.3	2,596	2,558	2,551	2,894	-10.3
Miscellaneous products.....	8,623	8,676	8,591	-0.6	1.0	2.4	8,710	8,680	8,576	8,419	3.5
Nondurable goods industries.....	79,357	79,388	79,452	0.0	-0.1	0.6	79,944	79,514	78,646	82,273	-2.8
Food products.....	18,826	18,885	18,963	-0.3	-0.4	0.3	19,140	18,647	18,111	18,816	1.7
Beverage and tobacco products.....	4,614	4,645	4,834	-0.7	-3.9	3.8	4,562	4,507	4,785	4,520	0.9
Textiles.....	2,448	2,438	2,420	0.4	0.7	-1.9	2,488	2,467	2,443	2,848	-12.6
Textile products.....	2,218	2,218	2,195	0.0	1.0	0.9	2,220	2,234	2,246	2,154	3.1
Apparel.....	4,233	4,258	4,260	-0.6	0.0	-0.5	4,437	4,541	4,481	5,516	-19.6
Leather and allied products.....	958	982	947	-2.4	3.7	3.7	1,003	1,014	965	1,016	-1.3
Paper products.....	6,109	6,141	6,279	-0.5	-2.2	1.3	6,074	6,146	6,278	6,208	-2.2
Printing.....	1,612	1,597	1,587	0.9	0.6	-0.3	1,701	1,640	1,627	1,791	-5.0
Petroleum and coal products.....	6,006	6,122	5,909	-1.9	3.6	2.0	6,216	6,358	6,016	6,487	-4.2
Basic chemicals.....	24,439	24,290	24,318	0.6	-0.1	0.1	24,360	24,250	23,948	25,118	-3.0
Plastics and rubber products.....	7,894	7,812	7,740	1.0	0.9	0.5	7,743	7,710	7,746	7,799	-0.7

^a Preliminary ¹ Revised ² See footnote at end of Table 3.
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

[Based on Seasonally Adjusted data]

Industry	Inventory/Shipments ratio				Unfilled Orders/Shipments ratio ¹			
	Aug 2002 ^p	Jul 2002 ^r	Jun 2002	May 2002	Aug 2002 ^p	Jul 2002 ^r	Jun 2002	May 2002
All manufacturing industries ²	1.32	1.31	1.33	1.32	(X)	(X)	(X)	(X)
Durable goods industries ²	1.50	1.48	1.53	1.51	4.01	3.95	4.02	4.04
Wood products.....	1.28	1.26	1.28	1.31	(X)	(X)	(X)	(X)
Nonmetallic mineral products.....	1.04	1.05	1.06	1.03	(X)	(X)	(X)	(X)
Primary metals.....	1.62	1.61	1.63	1.61	1.40	1.40	1.43	1.43
Fabricated metal products.....	1.44	1.43	1.45	1.46	1.92	1.94	1.98	2.00
Machinery.....	1.93	1.93	1.96	1.93	2.24	2.26	2.31	2.33
Computers and electronic products ²	1.60	1.60	1.65	1.63	4.90	4.87	5.05	5.02
Electrical equipment, appliances, and components.....	1.43	1.43	1.45	1.43	1.70	1.69	1.77	1.72
Transportation equipment.....	1.34	1.30	1.41	1.38	7.84	7.54	7.61	7.73
Furniture and related products.....	1.25	1.23	1.25	1.23	1.08	1.11	1.18	1.21
Miscellaneous products.....	1.77	1.75	1.79	1.74	(X)	(X)	(X)	(X)
Nondurable goods industries.....	1.11	1.11	1.10	1.10	(X)	(X)	(X)	(X)
Food products.....	0.83	0.85	0.86	0.84	(X)	(X)	(X)	(X)
Beverage and tobacco products.....	1.55	1.57	1.59	1.52	(X)	(X)	(X)	(X)
Textiles.....	1.41	1.34	1.44	1.40	(X)	(X)	(X)	(X)
Textile products.....	1.49	1.48	1.44	1.41	(X)	(X)	(X)	(X)
Apparel.....	1.59	1.53	1.56	1.56	(X)	(X)	(X)	(X)
Leather and allied products.....	1.97	2.01	1.96	2.09	(X)	(X)	(X)	(X)
Paper products.....	1.13	1.13	1.17	1.14	(X)	(X)	(X)	(X)
Printing.....	0.73	0.75	0.75	0.73	(X)	(X)	(X)	(X)
Petroleum and coal products.....	0.71	0.71	0.71	0.71	(X)	(X)	(X)	(X)
Basic chemicals.....	1.44	1.42	1.33	1.38	(X)	(X)	(X)	(X)
Plastics and rubber products.....	1.13	1.11	1.12	1.11	(X)	(X)	(X)	(X)

^p Preliminary ^r Revised X Not Applicable

¹ 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.

² See footnote at end of Table 2.

Table 8. Revisions to Previously Published Monthly Percent Changes

[Based on Seasonally Adjusted data]

Industry	Shipments			New Orders			Unfilled Orders			Inventories		
	Aug ¹ 2002	Aug ² 1997-2001	Aug 2001-Jul 2002	Aug ¹ 2002	Aug ² 1997-2001	Aug 2001-Jul 2002	Aug ¹ 2002	Aug ² 1997-2001	Aug 2001-Jul 2002	Aug ¹ 2002	Aug ² 1997-2001	Aug 2001-Jul 2002
All manufacturing industries ³	(X)	(NA)	0.2	(X)	(NA)	0.4	(X)	(NA)	0.2	(X)	(NA)	0.1
Durable goods industries ³	-0.2	(NA)	0.2	0.2	(NA)	0.6	0.1	(NA)	0.2	0.0	(NA)	0.2
Wood products.....	(X)	(NA)	0.9	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.6
Nonmetallic mineral products.....	(X)	(NA)	1.2	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.4
Primary metals.....	-0.1	(NA)	0.4	-0.1	(NA)	0.8	0.0	(NA)	0.4	0.0	(NA)	0.1
Fabricated metal products.....	0.0	(NA)	0.3	0.1	(NA)	0.8	0.0	(NA)	0.4	0.0	(NA)	0.3
Machinery.....	0.0	(NA)	0.6	0.2	(NA)	1.1	0.1	(NA)	0.4	-0.1	(NA)	0.3
Computers and electronic products ³	0.0	(NA)	0.6	0.0	(NA)	0.9	0.0	(NA)	0.3	0.0	(NA)	0.4
Electrical equipment, appliances, and components.....	0.1	(NA)	0.3	0.0	(NA)	1.1	0.0	(NA)	0.6	-0.1	(NA)	0.2
Transportation equipment.....	-0.3	(NA)	0.6	0.4	(NA)	1.2	0.2	(NA)	0.2	-0.2	(NA)	0.3
Furniture and related products.....	(X)	(NA)	0.3	(X)	(NA)	0.8	(X)	(NA)	0.5	(X)	(NA)	0.3
Miscellaneous products.....	(X)	(NA)	0.6	(X)	(NA)	1.2	(X)	(NA)	2.5	(X)	(NA)	0.3
Nondurable goods industries.....	(X)	(NA)	0.5	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.2
Food products.....	(X)	(NA)	0.6	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.3
Beverage and tobacco products.....	(X)	(NA)	1.0	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.2
Textiles.....	(X)	(NA)	1.1	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.6
Textile products.....	(X)	(NA)	0.8	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.3
Apparel.....	(X)	(NA)	0.7	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.4
Leather and allied products.....	(X)	(NA)	4.6	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.6
Paper products.....	(X)	(NA)	0.8	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.4
Printing.....	(X)	(NA)	0.6	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.4
Petroleum and coal products.....	(X)	(NA)	1.5	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.6
Basic chemicals.....	(X)	(NA)	0.8	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.3
Plastics and rubber products.....	(X)	(NA)	0.3	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.3

X Not Applicable

NA Not Available

¹ The current month revisions are the difference between the advance percent change and the percent change as shown in this publication.

² Average revisions of the current month for the past five years.

³ See footnote at end of Table 7

See note at end of Table 2 relating to survey error and revision. In Table 8, the second column for each item represents the average revisions of the current month for the past five years.

NOTE: The five year and 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.