

Manufacturers' Shipments, Inventories, and Orders

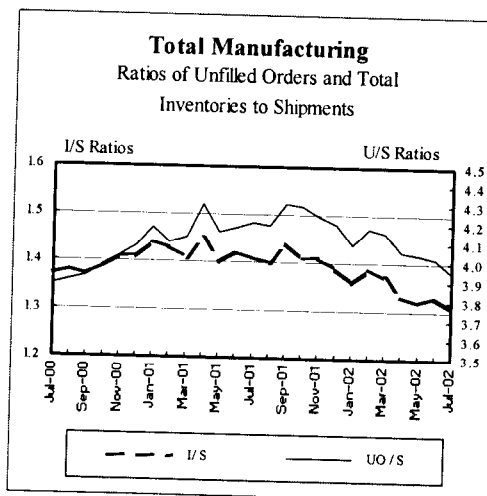
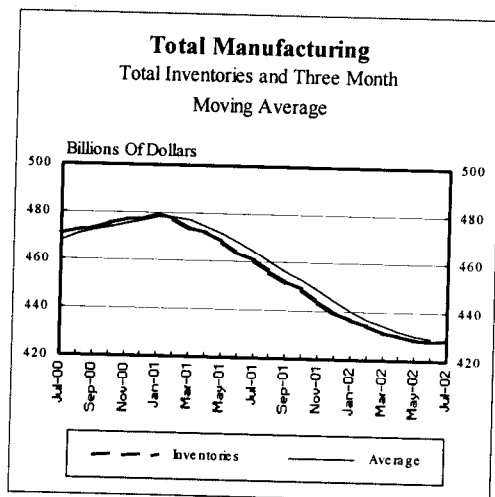
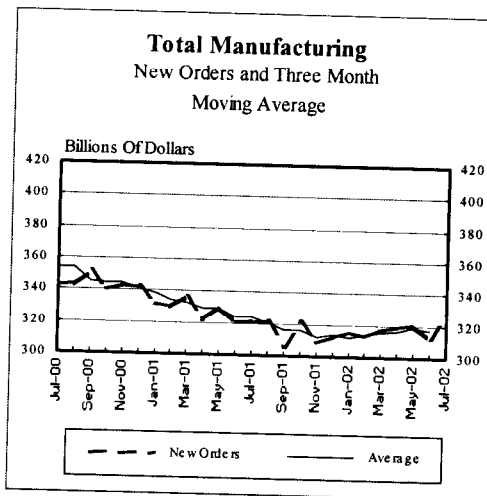
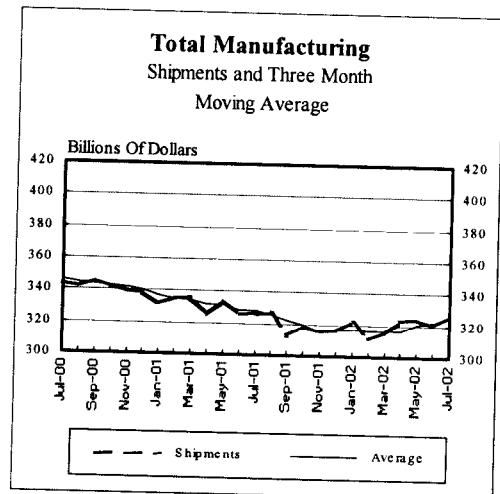
July
2002

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Charts exclude semiconductor data

Current Industrial Reports



For data, call 301-457-4673. 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 or 301-763-4814.
The advance report on durable goods for August is scheduled for September 26, 2002 at 8:30 a.m. and the full report on October 3, 2002 at 10:00 a.m.
For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

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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 July increased \$14.7 billion or 4.7 percent to \$327.6 billion, the Department of Commerce, Census Bureau reported today. This followed a 2.5 percent June decrease and is the largest increase since October 2001. Year to date, new orders for 2002 were 2.9 percent below the same period a year ago.

Shipments increased \$5.1 billion or 1.6 percent to \$325.9 billion, following a 0.9 percent June decrease. Year to date, shipments for 2002 were 3.1 percent below the same period a year ago.

Unfilled orders increased \$1.7 billion or 0.3 percent to \$490.1 billion, following a 1.6 percent June decrease. The unfilled orders-to-shipments ratio was 3.95, the lowest ratio since September 2000 and down from 4.02 in June.

Inventories, down eighteen consecutive months and the lowest level since March 1997, decreased \$0.4 billion or 0.1 percent to \$427.8 billion, following a 0.1 percent June decrease. The inventories-to-shipments ratio was 1.31, the lowest ratio on record and down from 1.33 in June.

New Orders

New Orders for manufactured durable goods in July increased \$15.2 billion or 9.2 percent to \$180.5 billion, revised from the previously published 8.7 percent increase.

Transportation equipment, led by aircraft and parts, had the largest increase, \$10.0 billion or 21.4 percent to \$56.9 billion. Machinery, led by industrial machinery, increased \$2.8 billion or 13.4 percent to \$23.7 billion; this is the largest increase on record.

New orders for nondurable goods decreased \$0.5 billion or 0.3 percent to \$147.1 billion.

Shipments

Shipments of manufactured durable goods in July increased \$5.6 billion or 3.2 percent to \$178.8 billion, revised from the previously published 3.1 percent increase.

Transportation equipment, led by motor vehicles and parts, had the largest increase, \$3.3 billion or 6.4 percent to \$54.8 billion. Computers and electronic products increased \$0.9 billion or 3.4 percent to \$27.0 billion.

Shipments of nondurable goods decreased \$0.5 billion or 0.3 percent to \$147.1 billion, due to pharmaceuticals and medicines, which decreased by \$1.7 billion or 17.2 percent to \$8.2 billion.

Unfilled Orders

Unfilled Orders for manufactured durable goods in July increased \$1.7 billion or 0.3 percent to \$490.1 billion, revised from the previously published \$489.8 billion.

Transportation equipment had the largest increase, \$2.1 billion or 0.8 percent to \$249.8 billion, due to defense aircraft and parts which increased \$3.0 billion.

Inventories

Inventories of durable goods in July, down eighteen consecutive months, decreased \$1.0 billion or 0.4 percent to \$264.4 billion, revised from the previously published \$264.5 billion. Durable goods inventories were at their lowest level since December 1995.

Transportation equipment had the largest decrease, \$0.9 billion or 1.2 percent to \$71.5 billion.

Inventories of nondurable goods, led by pharmaceuticals and medicines and petroleum refineries, increased \$0.6 billion or 0.4 percent to \$163.4 billion.

By stage of fabrication, July materials and supplies decreased 0.7 percent in durables and increased 0.1 percent in nondurables. Work in process decreased 0.7 percent in durables and increased 1.0 percent in nondurables. Finished goods increased 0.3 percent 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	Year to date	
	July 2002 ^p	June 2002 ^r	May 2002	June - July	May - June	Apr. - May	July 2002 ^p	June 2002 ^r	May 2002	July 2001	Change July 02/01	2002 ^p	2001
All manufacturing industries ²	325,911	320,810	323,736	1.6	-0.9	0.2	297,284	339,333	333,386	293,911	1.1	2,213,719	2,282,569
Excluding transportation ²	271,098	269,294	271,469	0.7	-0.8	0.8	258,580	283,626	276,252	258,269	0.1	1,853,912	1,942,071
Excluding defense ²	318,173	312,788	316,151	1.7	-1.1	0.2	290,480	330,374	325,935	287,763	0.9	2,161,840	2,237,983
With unfilled orders ²	124,089	121,501	122,732	2.1	-1.0	-0.2	108,738	132,049	126,180	108,126	0.6	841,757	886,656
Durable goods industries ²	178,789	173,205	175,927	3.2	-1.5	-0.3	153,646	188,012	182,576	149,537	2.7	1,201,069	1,229,318
Wood products.....	7,402	7,348	7,339	0.7	0.1	-1.9	7,765	8,053	7,908	7,738	0.3	51,837	51,329
Nonmetallic mineral products.....	8,392	8,405	8,537	-0.2	-1.5	2.5	8,656	8,893	9,073	7,781	11.2	56,120	53,203
Primary metals.....	11,325	11,206	11,309	1.1	-0.9	-0.1	10,662	11,605	12,062	10,542	1.1	78,611	82,140
Iron and steel mills.....	5,222	5,156	5,121	1.3	0.7	0.2	5,010	5,395	5,477	4,737	5.8	35,773	36,458
Aluminum and nonferrous metals.....	4,773	4,714	4,837	1.3	-2.5	0.1	4,476	4,806	5,087	4,613	-3.0	33,384	35,868
Ferrous metal foundries.....	1,330	1,336	1,351	-0.4	-1.1	-1.2	1,176	1,404	1,498	1,192	-1.3	9,454	9,814
Fabricated metal products.....	21,364	21,029	21,047	1.6	-0.1	-0.6	20,321	21,918	22,005	19,749	2.9	145,928	148,377
Machinery.....	23,342	22,936	23,529	1.8	-2.5	3.6	21,259	25,427	24,373	21,447	-0.9	160,614	171,138
Farm machinery.....	1,463	1,471	1,388	-0.5	6.0	-1.9	1,433	1,531	1,596	1,353	5.9	11,091	9,555
Construction machinery.....	1,801	1,623	1,775	11.0	-8.6	1.4	1,705	1,849	2,000	1,621	5.2	12,536	13,122
Mining, oil field, and gas field machinery.....	738	735	747	0.4	-1.6	-4.1	700	811	690	792	-11.6	5,138	5,483
Industrial machinery.....	3,212	3,050	3,154	5.3	-3.3	3.0	3,035	3,360	2,951	3,002	1.1	21,109	25,430
Photographic equipment.....	1,457	1,418	1,386	2.8	2.3	3.6	1,413	1,634	1,393	1,413	0.0	9,448	9,701
Ventilation, heating, air-conditioning, and refrigeration equipment.....	2,630	2,678	2,658	-1.8	0.8	-1.1	2,480	3,151	2,912	2,643	-6.2	18,728	20,290
Metalworking machinery.....	2,081	2,089	2,094	-0.4	-0.2	-1.6	1,735	2,357	2,066	1,847	-6.1	13,734	15,620
Turbines, generators, and other power transmission equipment.....	3,098	3,210	3,550	-3.5	-9.6	33.0	2,286	3,760	3,523	2,318	-1.4	21,020	20,205
Material handling equipment.....	1,388	1,332	1,357	4.2	-1.8	-4.4	1,373	1,428	1,392	1,410	-2.6	9,919	11,561
Computers and electronic products ²	27,015	26,126	26,872	3.4	-2.8	0.1	23,159	30,324	24,884	23,701	-2.3	178,425	204,110
Electronic computers.....	4,467	3,738	3,654	19.5	2.3	-2.1	3,920	4,564	3,225	4,096	-4.3	26,023	33,211
Computer storage devices.....	1,103	1,218	1,269	-9.4	-4.0	-1.8	664	1,745	998	694	-4.3	8,086	7,594
Other peripheral equipment.....	1,548	1,296	1,655	19.4	-21.7	0.5	1,104	1,720	1,310	1,037	6.5	9,626	11,376
Nondefense communications equipment.....	5,107	5,277	5,533	-3.2	-4.6	-4.0	4,290	6,360	5,082	5,627	-23.8	36,387	49,877
Defense communications equipment.....	319	296	326	7.8	-9.2	5.8	293	304	346	271	8.1	2,180	2,031
Audio and video equipment.....	736	757	797	-2.8	-5.0	6.8	647	718	688	641	0.9	4,769	4,584
Semiconductors ³	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electronic components.....	4,292	4,267	4,324	0.6	-1.3	3.6	3,977	4,427	4,268	3,646	9.1	28,828	34,260
Nondefense search and navigation equipment.....	786	776	748	1.3	3.7	1.5	723	838	736	756	-4.4	5,193	5,602
Defense search and navigation equipment.....	1,935	1,958	1,965	-1.2	-0.4	-1.3	1,720	2,150	1,865	1,657	3.8	13,230	12,795
Electromedical, measuring, and control instruments.....	6,055	5,896	5,880	2.7	0.3	2.1	5,212	6,890	5,728	4,601	13.3	39,704	38,136
Electrical equipment, appliances, and components.....	9,124	9,012	9,199	1.2	-2.0	-0.5	8,179	9,792	9,345	8,711	-6.1	62,295	71,201
Electric lighting equipment.....	1,078	1,077	1,098	0.1	-1.9	-1.1	891	1,162	1,078	890	0.1	7,321	7,464
Household appliances.....	2,080	1,985	2,060	4.8	-3.6	0.7	1,931	2,140	2,185	1,762	9.6	14,089	13,753
Electrical equipment.....	2,623	2,648	2,694	-0.9	-1.7	-0.6	2,359	2,945	2,642	2,432	-3.0	17,906	20,416
Batteries.....	522	521	563	0.2	-7.5	-2.9	394	565	546	495	-20.4	3,426	3,776
Transportation equipment.....	54,813	51,516	52,267	6.4	-1.4	-2.5	38,704	55,707	57,134	35,642	8.6	359,807	340,498
Automobiles.....	9,218	7,930	8,228	16.2	-3.6	-2.0	5,392	8,397	9,136	4,668	15.5	55,779	51,098
Light trucks and utility vehicles.....	11,034	9,828	10,206	12.3	-3.7	-3.0	6,388	10,782	11,637	5,552	15.1	69,479	63,151
Heavy duty trucks.....	1,287	1,221	1,187	5.4	2.9	1.8	1,233	1,324	1,252	1,001	23.2	7,847	7,988
Motor vehicle bodies, parts, and trailers.....	18,507	18,143	18,585	2.0	-2.4	-2.8	13,822	18,885	20,931	12,589	9.8	127,857	122,021
Nondefense aircraft and parts.....	6,626	6,145	6,249	7.8	-1.7	-6.7	5,076	7,023	6,417	5,872	-13.6	45,488	51,072
Defense aircraft and parts.....	3,159	3,154	2,930	0.2	7.6	2.9	2,675	3,650	2,818	1,943	37.7	19,320	14,477
Ships and boats.....	1,721	1,684	1,779	2.2	-5.3	-1.4	1,449	1,759	1,859	1,354	7.0	12,035	11,065
Furniture and related products.....	5,719	5,614	5,668	1.9	-1.0	-0.5	5,272	5,683	5,537	5,354	-1.5	38,762	40,575
Miscellaneous durable goods.....	10,293	10,013	10,160	2.8	-1.4	1.7	9,669	10,610	10,255	8,872	9.0	68,670	66,747
Nondurable goods industries.....	147,122	147,605	147,809	-0.3	-0.1	0.9	143,638	151,321	150,810	144,374	-0.5	1,012,650	1,053,251
Food products.....	37,261	36,972	37,686	0.8	-1.9	0.2	35,144	37,047	37,539	35,831	-1.9	257,713	257,640
Grain and oilseed milling.....	4,098	4,130	4,092	-0.8	0.9	1.2	3,950	3,963	4,157	3,809	3.7	28,199	27,125
Dairy products.....	5,038	5,086	5,239	-0.9	-2.9	-0.9	4,813	5,264	5,370	5,490	-12.3	36,427	37,920
Meat, poultry, and seafood products.....	11,158	10,841	11,254	2.9	-3.7	0.2	10,755	11,040	11,457	10,857	-0.9	77,437	77,052
Beverage and tobacco products.....	9,096	9,101	9,423	-0.1	-3.4	5.6	9,336	9,672	9,986	9,964	-6.3	64,473	67,529
Beverages.....	5,809	5,587	5,774	4.0	-3.2	1.1	6,049	6,158	6,337	5,778	4.7	39,775	38,320
Tobacco.....	3,287	3,514	3,649	-6.5	-3.7	13.5	3,287	3,514	3,649	4,186	-21.5	24,698	29,209
Textile mills.....	3,762	3,513	3,656	7.1	-3.9	-3.9	3,384	3,835	3,689	3,329	1.7	24,784	26,694
Textile products.....	3,079	3,101	3,157	-0.7	-1.8	-1.8	3,066	3,395	3,184	2,926	4.8	21,437	20,046
Apparel.....	4,875	4,739	4,748	2.9	-0.2	0.6	5,003	4,588	4,362	4,713	6.2	32,263	33,315
Leather and allied products.....	731	728	670	0.4	8.7	-6.8	690	719	639	622	10.9	4,431	5,036
Paper products.....	12,462	12,412	12,582	0.4	-1.4	1.4	12,411	12,511	12,673	12,481	-0.6	85,612	90,674
Pulp, paper, and paperboard mills.....	5,756	5,691	5,867	1.1	-3.0	2.2	5,761	5,691	5,822	5,795	-0.6	39,539	42,739
Paperboard containers.....	3,725	3,735	3,726	-0.3	0.2	3.0	3,722	3,742	3,811	3,615	3.0	25,402	25,686
Printing.....	7,895	7,867	7,903	0.4	-0.5	-1.2	7,516	7,718	7,649	7,748	-3.0	53,502	56,755
Petroleum and coal products.....	18,491	17,944	17,904	3.0	0.2	0.6	19,455	18,886	18,850	18,335	6.1	120,654	132,944
Petroleum refineries.....	16,917	16,380	16,306	3.3	0.5	0.3	17,615	17,020	17,125	16,532	6.6	110,142	122,127
Basic chemicals.....	34,416	36,404	35,154	-5.5	3.6	2.1	33,073	37,608	36,314	34,313	-3.6	243,521	259,710
Pesticides, fertilizers, and other agricultural chemicals.....	1,614	2,039	1,605	-20.8	27.0	-2.9	1,320	2,141	2,509	1,230	7.3	14,169	14,667
Pharmaceuticals and medicines.....	8,221	9,929	8,817	-17.2	12.6	3.3	7,500	9,748	8,642	8,878	-15.5	60,582	68,046
Paints, coatings, and adhesives.....	2,393	2,381	2,348	0.5	1.4	2.9	2,554	2,596	2,639	2,461	3.8	16,932	16,808
Plastics and rubber products.....	15,054	14,824	14,926	1.6	-0.7	0.2	14,560	15,342	15,925	14,112	3.2	104,260	102,908

^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	Year to date	
	July 2002 ^p	June 2002 ^r	May 2002	June - July	May - June	Apr. - May	July 2002 ^p	June 2002 ^r	May 2002	July 2001	July 02/01	2002 ^p	2001
All manufacturing industries ²	327,577	312,866	320,873	4.7	-2.5	0.6	298,940	327,396	328,861	288,554	3.6	2,202,965	2,266,212
Excluding transportation ²	270,707	266,035	271,034	1.8	-1.8	0.8	258,946	277,950	275,279	256,460	1.0	1,846,828	1,925,005
Excluding defense ²	317,279	305,496	314,573	3.9	-2.9	0.8	291,301	320,241	323,960	284,310	2.5	2,147,140	2,220,610
With unfilled orders ²	125,755	113,557	119,869	10.7	-5.3	0.8	110,394	120,112	121,655	102,769	7.4	831,003	870,299
Durable goods industries ²	180,455	165,261	173,064	9.2	-4.5	0.4	155,302	176,075	178,051	144,180	7.7	1,190,315	1,212,961
Primary metals.....	11,133	11,119	11,445	0.1	-2.8	1.4	10,415	11,404	12,034	10,361	0.5	78,666	82,166
Iron and steel mills.....	5,156	5,176	5,442	-0.4	-4.9	2.1	4,862	5,401	5,744	4,610	5.5	36,940	36,517
Aluminum and nonferrous metals.....	4,664	4,645	4,729	0.4	-1.8	1.7	4,435	4,661	4,895	4,601	-3.6	32,508	35,830
Ferrous metal foundries.....	1,313	1,298	1,274	1.2	1.9	-2.9	1,118	1,342	1,395	1,150	-2.8	9,218	9,819
Fabricated metal products.....	21,523	20,651	21,312	4.2	-3.1	1.9	21,104	21,230	22,656	20,058	5.2	146,728	148,191
Machinery.....	23,651	20,863	22,772	13.4	-8.4	1.5	21,736	22,570	23,413	20,886	4.1	155,603	167,496
Construction machinery.....	1,763	1,591	1,755	10.8	-9.3	-7.0	1,570	1,703	1,887	1,522	3.2	12,449	12,634
Mining, oil field, and gas field machinery.....	652	591	734	10.3	-19.5	2.1	614	667	677	785	-21.8	4,987	5,675
Industrial machinery.....	3,853	2,709	3,376	42.2	-19.8	0.6	3,934	2,719	3,237	2,843	38.4	22,344	23,282
Photographic equipment.....	1,404	1,376	1,439	2.0	-4.4	1.8	1,401	1,556	1,460	1,501	-6.7	9,551	9,627
Ventilation, heating, air-conditioning, and refrigeration equipment.....	2,631	2,536	2,646	3.7	-4.2	-4.3	2,495	2,876	2,960	2,732	-8.7	18,993	20,482
Metalworking machinery.....	2,082	2,007	2,037	3.7	-1.5	0.6	1,791	2,205	2,044	1,775	0.9	13,569	15,150
Turbines, generators, and other power transmission equipment.....	2,433	2,176	2,518	11.8	-13.6	10.8	1,703	2,704	2,402	2,242	-24.0	15,115	20,398
Material handling equipment.....	1,788	1,302	1,294	37.3	0.6	-2.6	1,629	1,425	1,217	1,207	35.0	9,767	11,334
Computers and electronic products ²	26,499	25,542	26,780	3.7	-4.6	0.0	22,035	28,814	24,231	21,488	2.5	175,571	194,811
Electronic computers.....	4,168	3,477	3,710	19.9	-6.3	6.9	3,510	4,195	3,601	3,877	-9.5	25,503	33,148
Nondefense communications equipment.....	5,262	4,715	5,763	11.6	-18.2	-2.8	4,105	5,084	5,113	4,276	-4.0	35,582	45,162
Defense communications equipment.....	270	360	253	-25.0	42.3	-1.6	244	368	273	253	-3.6	2,051	2,036
Semiconductors ³	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electronic components.....	4,151	4,269	4,115	-2.8	3.7	-2.5	4,041	4,510	3,761	3,574	13.1	28,658	30,598
Nondefense search and navigation equipment.....	706	710	689	-0.6	3.0	-0.7	640	777	690	709	-9.7	4,956	5,087
Defense search and navigation equipment.....	1,825	2,097	1,906	-13.0	10.0	2.0	1,120	2,306	1,383	1,180	-5.1	11,749	12,323
Electromedical, measuring, and control instruments.....	6,063	5,996	5,902	1.1	1.6	-1.2	5,351	6,783	5,776	4,572	17.0	40,192	38,259
Electrical equipment, appliances, and components.....	9,090	9,225	9,346	-1.5	-1.3	-1.6	8,496	9,758	9,421	9,083	-6.5	62,531	69,547
Electric lighting equipment.....	1,079	1,059	1,120	1.9	-5.4	-2.6	927	1,147	1,167	919	0.9	7,454	7,602
Household appliances.....	2,075	1,997	2,038	3.9	-2.0	-6.0	1,991	2,040	2,104	1,950	2.1	13,824	13,590
Electrical equipment.....	2,537	2,833	2,786	-10.4	1.7	0.3	2,391	3,049	2,728	2,643	-9.5	18,002	20,320
Transportation equipment.....	56,870	46,831	49,839	21.4	-6.0	-0.5	39,994	49,446	53,582	32,094	24.6	356,137	341,207
Motor vehicle bodies, parts, and trailers.....	18,564	18,251	18,764	1.7	-2.7	-2.5	14,042	18,712	20,801	12,508	12.3	128,439	121,152
Nondefense aircraft and parts.....	6,198	2,663	5,216	132.7	-48.9	39.5	4,953	3,415	5,411	3,959	25.1	35,410	49,929
Defense aircraft and parts.....	6,157	2,620	2,227	135.0	17.6	3.9	5,070	2,493	1,780	1,275	297.6	26,000	15,665
Ships and boats.....	1,344	1,563	1,625	-14.0	-3.8	-28.6	761	1,524	1,445	1,147	-33.7	12,466	13,916
Furniture and related products.....	5,530	5,439	5,608	1.7	-3.0	-0.6	5,360	5,472	5,552	5,710	-6.1	38,716	40,608
Nondurable goods industries.....	147,122	147,605	147,809	-0.3	-0.1	0.9	143,638	151,321	150,810	144,374	-0.5	1,012,650	1,053,251

^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 July 02/01
	July 2002 ^p	June 2002 ^r	May 2002	June - July	May - June	Apr. - May	July 2002 ^p	June 2002 ^r	May 2002	July 2001	
All manufacturing industries ¹	490,095	488,429	496,373	0.3	-1.6	-0.6	491,204	489,548	501,485	526,572	-6.7
Excluding transportation ¹	240,323	240,714	243,973	-0.2	-1.3	-0.2	241,243	240,877	246,553	265,994	-9.3
Excluding defense ¹	344,840	345,734	353,026	-0.3	-2.1	-0.4	346,560	345,739	355,872	394,714	-12.2
Durable goods industries ¹	490,095	488,429	496,373	0.3	-1.6	-0.6	491,204	489,548	501,485	526,572	-6.7
Primary metals.....	15,887	16,079	16,166	-1.2	-0.5	0.8	16,158	16,405	16,606	18,373	-12.1
Iron and steel mills.....	8,803	8,869	8,849	-0.7	0.2	3.8	9,072	9,220	9,214	9,078	-0.1
Aluminum and nonferrous metals.....	4,864	4,973	5,042	-2.2	-1.4	-2.1	4,906	4,947	5,092	6,856	-28.4
Ferrous metal foundries.....	2,220	2,237	2,275	-0.8	-1.7	-3.3	2,180	2,238	2,300	2,439	-10.6
Fabricated metal products.....	39,784	39,625	40,003	0.4	-0.9	0.7	40,609	39,826	40,514	43,990	-7.7
Machinery.....	48,509	48,200	50,273	0.6	-4.1	-1.5	48,403	47,926	50,783	56,324	-14.1
Construction machinery.....	2,144	2,182	2,214	-1.7	-1.4	-0.9	2,056	2,191	2,337	2,266	-9.3
Mining, oil field, and gas field machinery.....	1,048	1,134	1,278	-7.6	-11.3	-1.0	1,048	1,134	1,278	1,231	-14.9
Industrial machinery.....	9,665	9,024	9,365	7.1	-3.6	2.4	9,794	8,895	9,536	9,701	1.0
Photographic equipment.....	901	954	996	-5.6	-4.2	5.6	919	931	1,009	907	1.3
Ventilation, heating, air-conditioning, and refrigeration equipment.....	4,533	4,532	4,674	0.0	-3.0	-0.3	4,622	4,607	4,882	5,048	-8.4
Metalworking machinery.....	3,599	3,598	3,680	0.0	-2.2	-1.5	3,684	3,628	3,780	4,842	-23.9
Turbines, generators, and other power transmission equipment.....	12,471	13,136	14,170	-5.1	-7.3	-6.8	12,320	12,903	13,959	17,505	-29.6
Material handling equipment.....	5,307	4,907	4,937	8.2	-0.6	-1.3	5,212	4,956	4,959	5,503	-5.3
Computers and electronic products ¹	111,539	112,055	112,639	-0.5	-0.5	-0.1	111,097	112,221	113,731	120,639	-7.9
Electronic computers.....	6,267	6,566	6,827	-4.6	-3.8	0.8	6,284	6,694	7,063	7,321	-14.2
Nondefense communications equipment.....	39,305	39,150	39,712	0.4	-1.4	0.6	38,883	39,068	40,344	43,645	-10.9
Defense communications equipment.....	2,436	2,485	2,421	-2.0	2.6	-2.9	2,436	2,485	2,421	2,676	-9.0
Semiconductors ²	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electronic components.....	16,138	16,279	16,277	-0.9	0.0	-1.3	16,146	16,082	15,999	17,751	-9.0
Nondefense search and navigation equipment.....	4,126	4,206	4,272	-1.9	-1.5	-1.4	4,188	4,271	4,332	4,998	-16.2
Defense search and navigation equipment.....	30,383	30,493	30,354	-0.4	0.5	-0.2	30,199	30,799	30,643	32,003	-5.6
Electromedical, measuring, and control instruments.....	12,884	12,876	12,776	0.1	0.8	0.2	12,961	12,822	12,929	12,245	5.8
Electrical equipment, appliances, and components.....	15,005	15,039	14,826	-0.2	1.4	1.0	15,112	14,795	14,829	16,095	-6.1
Electric lighting equipment.....	1,434	1,433	1,451	0.1	-1.2	1.5	1,519	1,483	1,498	1,581	-3.9
Household appliances.....	1,128	1,133	1,121	-0.4	1.1	-1.9	1,014	954	1,054	1,082	-6.3
Electrical equipment.....	8,978	9,064	8,879	-0.9	2.1	1.0	9,033	9,001	8,897	9,112	-0.9
Transportation equipment.....	249,772	247,715	252,400	0.8	-1.9	-1.0	249,961	248,671	254,932	260,578	-4.1
Motor vehicle bodies, parts, and trailers.....	12,835	12,778	12,670	0.4	0.9	1.4	12,775	12,555	12,728	12,859	-0.7
Nondefense aircraft and parts.....	112,589	113,017	116,499	-0.4	-3.0	-0.9	113,265	113,388	116,996	136,858	-17.2
Defense aircraft and parts.....	57,788	54,790	55,324	5.5	-1.0	-1.3	57,963	55,568	56,725	42,558	36.2
Ships and boats.....	21,234	21,611	21,732	-1.7	-0.6	-0.7	21,003	21,691	21,926	21,283	-1.3
Furniture and related products.....	5,697	5,886	6,061	-3.2	-2.9	-1.0	5,962	5,874	6,085	6,900	-13.6

^p Preliminary ^r Revised NA Not available¹ 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 July 02/01
	July 2002 ^p	June 2002 ^r	May 2002	June - July	May - June	Apr. - May	July 2002 ^p	June 2002 ^r	May 2002	July 2001	
All manufacturing industries ¹	427,813	428,230	428,592	-0.1	-0.1	-0.4	429,586	425,000	430,844	462,192	-7.1
Excluding transportation	356,316	355,837	356,422	0.1	-0.2	-0.4	357,455	353,680	358,887	385,972	-7.4
Excluding defense ¹	406,332	405,818	406,535	0.1	-0.2	-0.3	407,885	402,673	408,851	440,400	-7.4
With unfilled orders ¹	215,454	216,405	217,337	-0.4	-0.4	-0.7	216,753	214,744	218,766	239,999	-9.7
Durable goods industries ¹	264,449	265,478	266,417	-0.4	-0.4	-0.5	265,985	263,471	268,295	292,889	-9.2
Wood products	9,252	9,379	9,591	-1.4	-2.2	0.2	9,150	9,220	9,386	9,793	-6.6
Nonmetallic mineral products	8,816	8,875	8,808	-0.7	0.8	-0.6	8,827	8,919	8,926	9,650	-8.5
Primary metals	18,263	18,282	18,153	-0.1	0.7	-0.8	18,343	18,106	17,991	20,263	-9.5
Iron and steel mills	10,226	10,197	10,084	0.3	1.1	-0.8	10,330	10,028	9,930	11,427	-9.6
Aluminum and nonferrous metals	6,256	6,275	6,304	-0.3	-0.5	-1.3	6,249	6,248	6,271	6,981	-10.5
Ferrous metal foundries	1,781	1,810	1,765	-1.6	2.5	1.0	1,764	1,830	1,790	1,855	-4.9
Fabricated metal products	30,509	30,494	30,687	0.0	-0.6	-1.1	30,766	30,624	30,965	33,601	-8.4
Machinery	45,018	45,063	45,473	-0.1	-0.9	-0.6	44,898	44,581	45,853	48,942	-8.3
Farm machinery	2,006	1,996	1,982	0.5	0.7	1.3	1,938	1,967	1,981	2,090	-7.3
Construction machinery	3,929	3,898	3,984	0.8	-2.2	-1.3	3,846	3,855	3,977	3,847	0.0
Mining, oil field, and gas field machinery	2,156	2,204	2,254	-2.2	-2.2	-1.1	2,180	2,245	2,291	2,391	-8.8
Industrial machinery	7,872	7,813	7,709	0.8	1.3	0.3	7,826	7,769	7,875	8,520	-8.1
Photographic equipment	1,968	1,953	1,975	0.8	-1.1	1.0	1,953	1,931	2,019	1,985	-1.6
Ventilation, heating, air-conditioning, and refrigeration equipment	4,087	4,076	4,075	0.3	0.0	0.0	4,140	4,064	4,231	4,530	-8.6
Metalworking machinery	5,103	5,152	5,238	-1.0	-1.6	-1.5	5,244	5,144	5,323	6,309	-16.9
Turbines, generators, and other power transmission equipment	4,907	4,891	5,244	0.3	-6.7	-1.7	4,947	4,762	5,252	5,062	-2.3
Material handling equipment	2,631	2,653	2,598	-0.8	2.1	0.6	2,567	2,627	2,629	2,815	-8.8
Computers and electronic products ¹	43,094	42,992	43,743	0.2	-1.7	-1.5	43,799	42,734	44,809	54,453	-19.6
Electronic computers	2,993	3,075	3,137	-2.7	-2.0	-0.2	3,041	3,052	3,354	3,486	-12.8
Computer storage devices	1,313	1,343	1,356	-2.2	-1.0	2.6	1,305	1,261	1,491	1,700	-23.2
Other peripheral equipment	2,634	2,636	2,571	-0.1	2.5	-0.5	2,717	2,586	2,713	3,347	-18.8
Nondefense communications equipment	9,543	9,372	9,609	1.8	-2.5	-3.0	9,625	9,162	9,795	14,194	-32.2
Defense communications equipment	745	755	776	-1.3	-2.7	3.5	745	755	776	780	-4.5
Audio and video equipment	1,087	1,069	1,097	1.7	-2.6	-0.8	1,160	1,095	1,072	1,219	-4.8
Semiconductors ²	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electronic components	8,774	8,766	9,096	0.1	-3.6	-1.8	8,964	8,873	9,282	11,603	-22.7
Nondefense search and navigation equipment	2,990	2,982	3,033	0.3	-1.7	-0.2	3,062	2,956	3,082	2,996	2.2
Defense search and navigation equipment	3,362	3,403	3,296	-1.2	3.2	-1.9	3,441	3,420	3,328	3,513	-2.0
Electromedical, measuring and control instruments	9,272	9,218	9,371	0.6	-1.6	-1.8	9,339	9,194	9,516	11,115	-16.0
Electrical equipment, appliances, and components	13,087	13,103	13,143	-0.1	-0.3	-0.5	13,012	12,980	13,444	14,073	-7.5
Electric lighting equipment	1,481	1,473	1,486	0.5	-0.9	-0.1	1,518	1,492	1,520	1,603	-5.3
Household appliances	2,193	2,180	2,145	0.6	1.6	0.1	2,186	2,186	2,270	2,131	2.6
Electrical equipment	4,450	4,516	4,481	-1.5	0.8	-0.6	4,351	4,347	4,480	4,509	-3.5
Batteries	714	716	719	-0.3	-0.4	-0.4	740	730	741	806	-8.2
Transportation equipment	71,497	72,393	72,170	-1.2	0.3	0.0	72,131	71,320	71,957	76,220	-5.4
Automobiles	1,690	1,693	1,709	-0.2	-0.9	1.7	1,856	1,666	1,752	2,067	-10.2
Light trucks and utility vehicles	2,015	1,972	1,962	2.2	0.5	1.8	2,140	1,960	2,043	2,161	-1.0
Heavy duty trucks	945	866	889	9.1	-2.6	3.7	941	864	896	989	-4.9
Motor vehicle bodies, parts, and trailers	15,900	15,784	15,608	0.7	1.1	-0.1	16,105	15,627	15,493	16,653	-3.3
Nondefense aircraft and parts	29,756	30,094	30,279	-1.1	-0.6	0.7	29,700	29,442	30,067	32,837	-9.6
Defense aircraft and parts	10,589	10,853	10,617	-2.4	2.2	-2.1	10,662	10,796	10,561	10,227	4.3
Ships and boats	2,599	2,571	2,495	1.1	3.0	-2.8	2,640	2,584	2,514	2,491	6.0
Furniture and related products	7,042	7,023	6,985	0.3	0.5	0.7	7,172	7,145	7,077	8,021	-10.6
Miscellaneous durable goods	17,871	17,874	17,664	0.0	1.2	0.6	17,887	17,842	17,887	17,873	0.1
Nondurable goods industries	163,364	162,752	162,175	0.4	0.4	-0.1	163,601	161,529	162,549	169,303	-3.4
Food products	31,618	31,695	31,580	-0.2	0.4	0.4	31,056	30,593	30,726	31,008	0.2
Grain and oilseed milling	3,327	3,263	3,129	2.0	4.3	0.8	3,216	3,083	2,952	2,988	7.6
Dairy products	3,387	3,436	3,483	-1.4	-1.3	-1.4	3,509	3,551	3,579	3,603	-2.6
Meat, poultry, and seafood products	6,050	6,023	6,051	0.4	-0.5	0.8	6,009	5,990	6,080	5,627	6.8
Beverage and tobacco products	14,316	14,476	14,318	-1.1	1.1	0.6	13,686	14,011	14,050	13,730	-0.3
Beverages	8,978	9,149	9,068	-1.9	0.9	0.9	8,761	9,057	9,047	8,711	0.6
Tobacco	5,338	5,327	5,250	0.2	1.5	0.0	4,925	4,954	5,003	5,019	-1.9
Textile mills	5,027	5,059	5,122	-0.6	-1.2	-0.2	5,100	5,067	5,240	6,129	-16.8
Textile products	4,523	4,478	4,459	1.0	0.4	0.8	4,583	4,564	4,577	4,620	-0.8
Apparel	7,403	7,412	7,418	-0.1	-0.1	-1.3	7,756	7,742	7,539	9,515	-18.5
Leather and allied products	1,472	1,429	1,397	3.0	2.3	-1.4	1,521	1,451	1,409	1,684	-9.7
Paper products	14,454	14,475	14,399	-0.1	0.5	-0.4	14,452	14,426	14,462	14,862	-2.8
Pulp, paper, and paperboard mills	6,469	6,449	6,425	0.3	0.4	-0.3	6,429	6,434	6,470	6,627	-3.0
Paperboard containers	3,913	3,979	3,959	-1.7	0.5	-1.0	3,937	3,959	3,944	4,214	-6.6
Printing	5,937	5,891	5,770	0.8	2.1	-0.4	6,194	5,927	5,668	6,809	-9.0
Petroleum and coal products	13,104	12,807	12,693	2.3	0.9	-0.7	13,435	13,070	13,190	13,238	1.5
Petroleum refineries	11,655	11,408	11,327	2.2	0.7	-0.7	11,939	11,604	11,741	11,717	1.9
Basic chemicals	48,801	48,441	48,422	0.7	0.0	-0.4	49,123	48,129	48,928	50,412	-2.6
Pesticides, fertilizers, and other agricultural chemicals	2,344	2,353	2,424	-0.4	-2.9	-0.6	2,030	2,093	2,388	2,416	-16.0
Pharmaceuticals and medicines	17,499	17,219	17,229	1.6	-0.1	-0.7	17,788	17,203	17,482	16,705	6.5
Paints, coatings, and adhesives	2,917	2,888	2,855	1.0	1.2	-0.3	2,989	2,937	2,910	3,043	-1.8
Plastics and rubber products	16,709	16,589	16,597	0.7	0.0	0.3	16,695	16,549	16,760	17,296	-3.5

^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 Series ¹

[Millions of Dollars]

Industry	Seasonally Adjusted						Not Seasonally Adjusted ²						
	Monthly			Percent Change			Monthly				Percent Change July 02/01	Year to date	
	July 2002 ^p	June 2002 ^r	May 2002	June - July	May - June	Apr. - May	July 2002 ^p	June 2002 ^r	May 2002	July 2001		2002 ^p	2001
SHIPMENTS													
All manufacturing industries ⁵	325,911	320,810	323,736	1.6	-0.9	0.2	297,284	339,333	333,386	293,911	1.1	2,213,719	2,282,569
Construction materials and supplies.....	36,272	36,016	36,059	0.7	-0.1	0.4	36,299	38,844	38,430	34,642	4.8	247,669	246,340
Information technology.....	27,001	26,058	26,718	3.6	-2.5	-0.4	23,199	30,511	24,903	24,600	-5.7	178,598	205,343
Computers and related products ⁵	7,118	6,252	6,578	13.9	-5.0	-1.4	5,688	8,029	5,533	5,827	-2.4	43,735	52,181
Motor vehicle and parts.....	40,046	37,122	38,206	7.9	-2.8	-2.5	26,835	39,388	42,956	23,810	12.7	260,962	244,258
Capital goods.....	64,881	63,027	63,910	2.9	-1.4	0.8	57,172	71,213	63,056	58,125	-1.6	435,097	473,375
Nondefense capital goods ³	58,392	56,314	57,593	3.7	-2.2	0.7	51,366	63,919	56,765	52,682	-2.5	391,356	434,165
Excluding aircraft.....	54,915	53,312	54,450	3.0	-2.1	1.2	48,859	60,357	53,324	49,786	-1.9	367,679	405,907
Defense capital goods ⁴	6,489	6,713	6,317	-3.3	6.3	1.7	5,806	7,294	6,291	5,443	6.7	43,741	39,210
Consumer goods.....	125,060	122,851	124,106	1.8	-1.0	0.4	113,037	126,240	127,324	112,167	0.8	844,743	860,494
Consumer durable goods.....	35,682	32,793	34,003	8.8	-3.6	-1.0	25,523	34,837	36,517	23,267	9.7	230,519	217,485
Consumer nondurable goods.....	89,378	90,058	90,103	-0.8	0.0	1.0	87,514	91,403	90,807	88,900	-1.6	614,224	643,009
NEW ORDERS													
All manufacturing industries ⁵	327,577	312,866	320,873	4.7	-2.5	0.6	298,940	327,396	328,861	288,554	3.6	2,202,965	2,266,212
Construction materials and supplies.....	36,304	35,526	36,205	2.2	-1.9	0.7	36,932	38,028	39,094	35,087	5.3	249,368	246,138
Information technology.....	26,629	25,464	26,943	4.6	-5.5	0.5	22,188	28,817	24,806	22,491	-1.3	176,289	198,099
Computers and related products ⁵	6,819	5,991	6,634	13.8	-9.7	3.5	5,278	7,660	5,909	5,608	-5.9	43,215	52,118
Motor vehicle and parts.....	40,103	37,230	38,385	7.7	-3.0	-2.4	27,055	39,215	42,826	23,729	14.0	261,544	243,389
Capital goods.....	63,414	57,034	61,466	11.2	-7.2	2.4	54,736	62,400	59,439	52,596	4.1	417,451	457,852
Nondefense capital goods ³	58,037	50,774	56,174	14.3	-9.6	3.6	51,180	56,698	55,269	48,476	5.6	374,459	419,852
Excluding aircraft.....	54,855	50,438	53,837	8.8	-6.3	0.5	48,968	55,802	52,634	47,805	2.4	361,644	396,251
Defense capital goods ⁴	5,377	6,260	5,292	-14.1	18.3	-8.6	3,556	5,702	4,170	4,120	-13.7	42,992	38,000
Consumer goods.....	125,087	122,561	123,940	2.1	-1.1	0.3	113,403	125,660	127,073	112,632	0.7	844,025	858,005
Consumer durable goods.....	35,709	32,503	33,837	9.9	-3.9	-1.5	25,889	34,257	36,266	23,732	9.1	229,801	214,996
UNFILLED ORDERS													
All manufacturing industries ⁵	490,095	488,429	496,373	0.3	-1.6	-0.6	491,204	489,548	501,485	526,572	-6.7	(X)	(X)
Construction materials and supplies.....	32,511	32,479	32,969	0.1	-1.5	0.4	33,442	32,809	33,625	36,046	-7.2	(X)	(X)
Information technology.....	99,767	100,139	100,733	-0.4	-0.6	0.2	99,416	100,427	102,121	108,115	-8.0	(X)	(X)
Computers and related products ⁵	6,267	6,566	6,827	-4.6	-3.8	0.8	6,284	6,694	7,063	7,321	-14.2	(X)	(X)
Motor vehicle and parts.....	12,835	12,778	12,670	0.4	0.9	1.4	12,775	12,555	12,728	12,859	-0.7	(X)	(X)
Capital goods.....	338,574	340,041	346,034	-0.4	-1.7	-0.7	337,792	340,228	349,041	366,808	-7.9	(X)	(X)
Nondefense capital goods ³	213,882	214,237	219,777	-0.2	-2.5	-0.6	213,891	214,077	221,298	251,991	-15.1	(X)	(X)
Excluding aircraft.....	130,863	130,923	133,797	0.0	-2.1	-0.5	130,872	130,763	135,318	147,919	-11.5	(X)	(X)
Defense capital goods ⁴	124,692	125,804	126,257	-0.9	-0.4	-0.8	123,901	126,151	127,743	114,817	7.9	(X)	(X)
Consumer goods.....	12,448	12,421	12,711	0.2	-2.3	-1.3	12,439	12,073	12,653	13,376	-7.0	(X)	(X)
Consumer durable goods.....	12,448	12,421	12,711	0.2	-2.3	-1.3	12,439	12,073	12,653	13,376	-7.0	(X)	(X)
TOTAL INVENTORIES													
All manufacturing industries ⁵	427,813	428,230	428,592	-0.1	-0.1	-0.4	429,586	425,000	430,844	462,192	-7.1	(X)	(X)
Construction materials and supplies.....	44,782	44,902	45,026	-0.3	-0.3	-0.6	45,078	44,861	45,342	48,643	-7.3	(X)	(X)
Information technology.....	40,537	40,397	40,934	0.3	-1.3	-1.3	41,005	40,017	41,979	49,859	-17.8	(X)	(X)
Computers and related products ⁵	6,940	7,054	7,064	-1.6	-0.1	0.2	7,063	6,899	7,558	8,533	-17.2	(X)	(X)
Motor vehicle and parts.....	20,550	20,315	20,168	1.2	0.7	0.4	21,042	20,117	20,184	21,870	-3.8	(X)	(X)
Capital goods.....	133,077	134,537	135,200	-1.1	-0.5	-0.7	133,537	132,931	136,363	150,653	-11.4	(X)	(X)
Nondefense capital goods ³	115,077	115,653	116,460	-0.5	-0.7	-0.6	115,348	114,145	117,574	131,751	-12.5	(X)	(X)
Excluding aircraft.....	91,927	91,946	92,778	0.0	-0.9	-0.7	92,226	91,046	94,298	105,142	-12.3	(X)	(X)
Defense capital goods ⁴	18,000	18,884	18,740	-4.7	0.8	-1.4	18,189	18,786	18,789	18,902	-3.8	(X)	(X)
Consumer goods.....	126,180	125,481	124,905	0.6	0.5	0.0	126,397	124,504	125,192	128,286	-1.5	(X)	(X)
Consumer durable goods.....	26,518	26,263	26,123	1.0	0.5	0.4	26,902	26,243	26,536	27,888	-3.5	(X)	(X)
Consumer nondurable goods.....	99,662	99,218	98,782	0.4	0.4	-0.1	99,495	98,261	98,656	100,398	-0.9	(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 July 02/01
	July 2002 ^p	June 2002 ^r	May 2002	June - July	May - June	Apr. - May	July 2002 ^p	June 2002 ^r	May 2002	July 2001	
MATERIALS AND SUPPLIES											
All manufacturing industries ¹	140,208	140,746	141,879	-0.4	-0.8	-0.8	140,844	139,465	141,317	155,544	-9.5
Durable goods industries ¹	85,024	85,610	86,554	-0.7	-1.1	-1.2	85,633	84,409	85,918	96,459	-11.2
Wood products.....	3,560	3,640	3,691	-2.2	-1.4	-1.0	3,398	3,356	3,306	3,653	-7.0
Nonmetallic mineral products.....	3,274	3,296	3,294	-0.7	0.1	-1.2	3,267	3,276	3,260	3,468	-5.8
Primary metals.....	5,995	6,002	5,952	-0.1	0.8	-0.7	6,041	5,883	5,745	6,719	-10.1
Fabricated metal products.....	10,537	10,458	10,474	0.8	-0.2	-2.2	10,720	10,514	10,469	11,233	-4.6
Machinery.....	15,264	15,326	15,576	-0.4	-1.6	-0.9	15,332	15,094	15,538	16,990	-9.8
Computers and electronic products ¹	15,667	15,807	16,297	0.9	-3.0	-3.0	15,920	15,823	16,551	21,631	-26.4
Electrical equipment, appliances, and components.....	4,646	4,653	4,680	-0.2	-0.6	-1.0	4,639	4,564	4,704	5,348	-13.3
Transportation equipment.....	16,705	17,068	17,294	-2.1	-1.3	-0.7	16,909	16,562	16,949	17,817	-5.1
Furniture and related products.....	3,110	3,101	3,061	0.3	1.3	1.1	3,125	3,110	3,086	3,393	-7.9
Miscellaneous products.....	6,266	6,259	6,235	0.1	0.4	1.3	6,282	6,227	6,310	6,207	1.2
Nondurable goods industries.....	55,184	55,136	55,325	0.1	0.3	-0.3	55,211	55,056	55,399	59,085	-6.6
Food products.....	10,173	10,177	10,133	0.0	0.4	1.4	10,086	10,116	10,087	10,688	-5.6
Beverage and tobacco products.....	5,858	5,824	5,770	0.6	0.9	0.4	5,682	5,694	5,763	5,785	-1.8
Textiles.....	1,408	1,434	1,436	-1.8	-0.1	-0.6	1,428	1,417	1,438	1,744	-18.1
Textile products.....	1,517	1,488	1,475	1.9	0.9	-0.1	1,557	1,518	1,500	1,637	-4.9
Apparel.....	1,700	1,708	1,705	-0.5	0.2	-2.7	1,714	1,735	1,744	2,120	-19.2
Leather and allied products.....	326	317	320	2.8	-0.9	-4.5	339	326	322	471	-28.0
Paper products.....	6,891	6,913	6,930	-0.3	-0.2	0.5	6,871	6,866	6,885	7,259	-5.3
Printing.....	2,463	2,440	2,391	0.9	2.0	0.5	2,490	2,429	2,298	2,870	-13.2
Petroleum and coal products.....	3,145	3,134	3,216	0.4	-2.5	-4.5	3,196	3,266	3,353	3,563	-10.3
Basic chemicals.....	15,021	15,047	15,276	-0.2	-1.5	-1.2	15,078	15,049	15,315	15,958	-5.5
Plastics and rubber products.....	6,682	6,654	6,673	0.4	-0.3	0.8	6,770	6,640	6,694	6,990	-3.1
WORK IN PROCESS											
All manufacturing industries ¹	127,523	127,928	127,765	-0.3	0.1	0.0	127,822	126,701	128,345	138,486	-7.7
Durable goods industries ¹	99,072	99,764	99,913	-0.7	-0.1	-0.2	99,332	98,874	100,536	110,366	-10.0
Wood products.....	2,040	2,072	2,074	-1.5	-0.1	7.3	2,017	2,066	2,066	1,930	4.5
Nonmetallic mineral products.....	1,159	1,151	1,139	0.7	1.1	1.3	1,164	1,156	1,171	1,271	-8.4
Primary metals.....	6,261	6,182	6,178	1.3	0.1	-0.7	6,296	6,183	6,166	7,013	-10.2
Fabricated metal products.....	9,755	9,771	9,883	-0.2	-1.1	-0.2	9,885	9,845	9,920	10,856	-8.9
Machinery.....	14,234	14,395	14,463	-1.1	-0.5	-0.8	14,347	14,420	14,831	15,875	-9.6
Computers and electronic products ¹	17,627	17,507	17,621	0.7	-0.6	0.0	17,841	17,453	18,028	20,258	-11.9
Electrical equipment, appliances, and components.....	2,906	2,969	3,034	-2.1	-2.1	-0.8	2,945	2,977	3,109	3,472	-15.2
Transportation equipment.....	40,632	41,213	40,967	-1.4	0.6	-0.4	40,342	40,251	40,642	44,682	-9.7
Furniture and related products.....	1,480	1,480	1,513	0.0	-2.2	1.6	1,488	1,484	1,525	1,663	-10.5
Miscellaneous products.....	2,978	3,024	3,041	-1.5	-0.6	-0.3	3,007	3,039	3,078	3,346	-10.1
Nondurable goods industries.....	28,451	28,164	27,852	1.0	1.1	0.7	28,490	27,827	27,809	28,120	1.3
Food products.....	2,539	2,555	2,532	-0.6	0.9	-0.9	2,341	2,366	2,301	2,348	-0.3
Beverage and tobacco products.....	3,783	3,818	3,889	-0.9	-1.8	0.6	3,463	3,532	3,717	3,519	-1.6
Textiles.....	1,187	1,205	1,220	-1.5	-1.2	-1.0	1,205	1,207	1,230	1,522	-20.8
Textile products.....	789	795	809	-0.8	-1.7	-1.7	793	800	829	834	-4.9
Apparel.....	1,462	1,444	1,431	1.2	0.9	2.0	1,520	1,526	1,524	1,660	-8.4
Leather and allied products.....	166	165	164	0.6	0.6	0.0	169	160	164	229	-26.2
Paper products.....	1,301	1,283	1,269	1.4	1.1	-1.4	1,302	1,282	1,261	1,273	2.3
Printing.....	1,882	1,864	1,788	1.0	4.3	-0.6	2,064	1,871	1,720	2,231	-7.5
Petroleum and coal products.....	3,830	3,764	3,686	1.8	2.1	1.9	3,888	3,788	3,800	3,376	15.2
Basic chemicals.....	9,257	9,076	8,845	2.0	2.6	1.6	9,515	9,132	9,047	8,804	8.1
Plastics and rubber products.....	2,255	2,195	2,219	2.7	-1.1	0.3	2,230	2,163	2,216	2,324	-4.0
FINISHED GOODS											
All manufacturing industries ¹	160,082	159,556	158,948	0.3	0.4	-0.2	160,920	158,834	161,182	168,162	-4.3
Durable goods industries ¹	80,353	80,104	79,950	0.3	0.2	-0.2	81,020	80,188	81,841	86,064	-5.9
Wood products.....	3,652	3,667	3,826	-0.4	-4.2	-2.2	3,735	3,798	4,014	4,210	-11.3
Nonmetallic mineral products.....	4,383	4,428	4,375	-1.0	1.2	-0.5	4,396	4,487	4,495	4,911	-10.5
Primary metals.....	6,007	6,098	6,023	-1.5	1.2	-1.0	6,006	6,040	6,080	6,531	-8.0
Fabricated metal products.....	10,217	10,265	10,330	-0.5	-0.6	-0.8	10,161	10,265	10,576	11,512	-11.7
Machinery.....	15,520	15,342	15,434	1.2	-0.6	-0.1	15,219	15,067	15,484	16,077	-5.3
Computers and electronic products ¹	9,800	9,678	9,825	1.3	-1.5	-1.8	10,038	9,458	10,230	12,564	-20.1
Electrical equipment, appliances, and components.....	5,535	5,481	5,429	1.0	1.0	0.1	5,428	5,439	5,631	5,253	3.3
Transportation equipment.....	14,160	14,112	13,909	0.3	1.5	2.0	14,880	14,507	14,366	13,721	8.4
Furniture and related products.....	2,452	2,442	2,411	0.4	1.3	-0.3	2,559	2,551	2,466	2,965	-13.7
Miscellaneous products.....	8,627	8,591	8,388	0.4	2.4	0.5	8,598	8,576	8,499	8,320	3.3
Nondurable goods industries.....	79,729	79,452	78,998	0.3	0.6	-0.3	79,900	78,646	79,341	82,098	-2.7
Food products.....	18,906	18,963	18,915	-0.3	0.3	0.1	18,629	18,111	18,338	17,972	3.7
Beverage and tobacco products.....	4,675	4,834	4,659	-3.3	3.8	0.8	4,541	4,785	4,570	4,426	2.6
Textiles.....	2,432	2,420	2,466	0.5	-1.9	0.4	2,467	2,443	2,572	2,863	-13.8
Textile products.....	2,217	2,195	2,175	1.0	0.9	2.3	2,233	2,246	2,248	2,149	3.9
Apparel.....	4,241	4,260	4,282	-0.4	-0.5	-1.8	4,522	4,481	4,271	5,735	-21.2
Leather and allied products.....	980	947	913	3.5	3.7	-0.5	1,013	965	923	984	2.9
Paper products.....	6,262	6,279	6,200	-0.3	1.3	-1.2	6,279	6,278	6,316	6,330	-0.8
Printing.....	1,592	1,587	1,591	0.3	-0.3	-1.5	1,640	1,627	1,650	1,708	-4.0
Petroleum and coal products.....	6,129	5,909	5,791	3.7	2.0	0.0	6,351	6,016	6,037	6,299	0.8
Basic chemicals.....	24,523	24,318	24,301	0.8	0.1	-0.5	24,530	23,948	24,566	25,650	-4.4
Plastics and rubber products.....	7,772	7,740	7,705	0.4	0.5	-0.1	7,695	7,746	7,850	7,982	-3.6

^p Preliminary^r Revised¹ 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			
	Jul 2002 ^p	Jun 2002 ^r	May 2002	Apr 2002	Jul 2002 ^p	Jun 2002 ^r	May 2002	Apr 2002
All manufacturing industries ²	1.31	1.33	1.32	1.33	(X)	(X)	(X)	(X)
Durable goods industries ²	1.48	1.53	1.51	1.52	3.95	4.02	4.04	4.06
Wood products.....	1.25	1.28	1.31	1.28	(X)	(X)	(X)	(X)
Nonmetallic mineral products.....	1.05	1.06	1.03	1.06	(X)	(X)	(X)	(X)
Primary metals.....	1.61	1.63	1.61	1.62	1.40	1.43	1.43	1.42
Fabricated metal products.....	1.43	1.45	1.46	1.47	1.96	1.98	2.00	1.98
Machinery.....	1.93	1.96	1.93	2.01	2.27	2.31	2.33	2.45
Computers and electronic products ²	1.60	1.65	1.63	1.66	4.86	5.05	5.02	5.02
Electrical equipment, appliances, and components.....	1.43	1.45	1.43	1.43	1.74	1.77	1.72	1.69
Transportation equipment.....	1.30	1.41	1.38	1.35	7.51	7.61	7.73	7.60
Furniture and related products.....	1.23	1.25	1.23	1.22	1.12	1.18	1.21	1.22
Miscellaneous products.....	1.74	1.79	1.74	1.76	(X)	(X)	(X)	(X)
Nondurable goods industries.....	1.11	1.10	1.10	1.11	(X)	(X)	(X)	(X)
Food products.....	0.85	0.86	0.84	0.84	(X)	(X)	(X)	(X)
Beverage and tobacco products.....	1.57	1.59	1.52	1.60	(X)	(X)	(X)	(X)
Textiles.....	1.34	1.44	1.40	1.35	(X)	(X)	(X)	(X)
Textile products.....	1.47	1.44	1.41	1.38	(X)	(X)	(X)	(X)
Apparel.....	1.52	1.56	1.56	1.59	(X)	(X)	(X)	(X)
Leather and allied products.....	2.01	1.96	2.09	1.97	(X)	(X)	(X)	(X)
Paper products.....	1.16	1.17	1.14	1.17	(X)	(X)	(X)	(X)
Printing.....	0.75	0.75	0.73	0.72	(X)	(X)	(X)	(X)
Petroleum and coal products.....	0.71	0.71	0.71	0.72	(X)	(X)	(X)	(X)
Basic chemicals.....	1.42	1.33	1.38	1.41	(X)	(X)	(X)	(X)
Plastics and rubber products.....	1.11	1.12	1.11	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		
	Jul ¹ 2002	Jul ² 1997-2001	Jul 2001-Jun 2002	Jul ¹ 2002	Jul ² 1997-2001	Jul 2001-Jun 2002	Jul ¹ 2002	Jul ² 1997-2001	Jul 2001-Jun 2002	Jul ¹ 2002	Jul ² 1997-2001	Jul 2001-Jun 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	0.1	(NA)	0.3	0.5	(NA)	0.5	0.0	(NA)	0.2	0.0	(NA)	0.2
Wood products.....	(X)	(NA)	0.8	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.5
Nonmetallic mineral products.....	(X)	(NA)	1.1	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.4
Primary metals.....	-0.1	(NA)	0.4	-0.1	(NA)	0.7	0.1	(NA)	0.4	0.1	(NA)	0.1
Fabricated metal products.....	0.2	(NA)	0.3	-0.3	(NA)	0.7	-0.2	(NA)	0.3	-0.2	(NA)	0.3
Machinery.....	0.0	(NA)	0.5	1.6	(NA)	0.9	0.6	(NA)	0.3	0.0	(NA)	0.3
Computers and electronic products ³	-0.1	(NA)	0.7	-0.2	(NA)	1.0	-0.1	(NA)	0.3	0.0	(NA)	0.4
Electrical equipment, appliances, and components.....	0.1	(NA)	0.3	0.1	(NA)	0.7	0.0	(NA)	0.4	0.0	(NA)	0.2
Transportation equipment.....	0.2	(NA)	0.6	0.6	(NA)	1.1	0.0	(NA)	0.2	0.1	(NA)	0.3
Furniture and related products.....	(X)	(NA)	0.3	(X)	(NA)	0.7	(X)	(NA)	0.4	(X)	(NA)	0.3
Miscellaneous products.....	(X)	(NA)	0.6	(X)	(NA)	1.1	(X)	(NA)	2.2	(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)	0.2
Beverage and tobacco products.....	(X)	(NA)	1.1	(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)	0.8	(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)	0.7
Paper products.....	(X)	(NA)	0.7	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.3
Printing.....	(X)	(NA)	0.5	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.4
Petroleum and coal products.....	(X)	(NA)	1.7	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.6
Basic chemicals.....	(X)	(NA)	0.9	(X)	(NA)	(NA)	(X)	(NA)	(NA)	(X)	(NA)	0.3
Plastics and rubber products.....	(X)	(NA)	0.4	(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.