

Mineral Industry Surveys

For information, contact:

Candice Tuck, Iron and Steel Scrap Commodity Specialist
National Minerals Information Center
Telephone: (703) 648-4912
Email: ctuck@usgs.gov

Tiffany J. Lin (Data)

Telephone: (703) 648-7963

Email: tjlin@usgs.gov

Internet: <https://www.usgs.gov/centers/national-minerals-information-center/mineral-industry-surveys>

IRON AND STEEL SCRAP IN AUGUST 2023

In August 2023, purchased steel scrap receipts were unchanged, recirculating scrap production increased by 8%, and iron and steel scrap consumption was unchanged compared with those in July. Stocks of purchased and home scrap decreased slightly from those at the end of July. In August 2023, pig iron production increased by 8% and consumption increased 6% from that in July. Direct-reduced iron receipts decreased slightly and consumption increased by 5% from that in July (table 1, fig. 1).

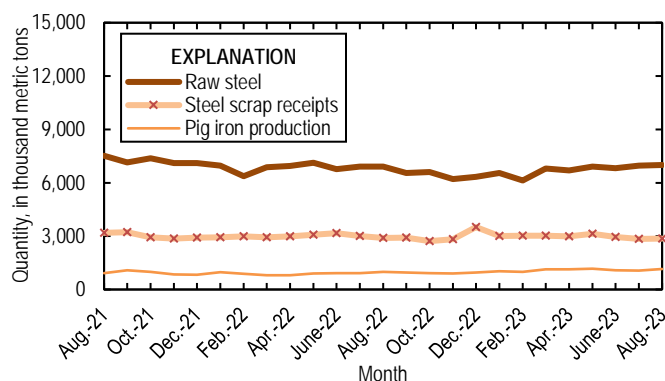


Figure 1. Monthly domestic production of raw steel, receipts of iron and steel scrap, and production of pig iron from August 2021 through August 2023. Sources: U.S. Geological Survey and American Iron and Steel Institute.

Exports of iron and steel scrap in August 2023 increased by 69% from those in July (fig. 2, table 4). In August 2023, Turkey was the leading destination for exports, accounting for 30% of the total tonnage, followed by Mexico (16%) and Bangladesh (13%) (table 4). New York City, NY, was the leading U.S. Customs district by tonnage of exports, accounting for 21% of the total, followed by Los Angeles, CA, (11%) and San Francisco, CA, (8%) (table 5).

Imports of iron and steel scrap in August 2023 increased by 6% compared with those in July (fig. 2, table 7). Canada was the leading country of origin, accounting for 70% of the total tonnage of imports, followed by Mexico (20%) and Sweden (9%) (table 7). Detroit, MI, was the leading U.S. Customs

district by tonnage of imports, accounting for 43% of the total, followed by Laredo, TX, (15%) and Seattle, WA, (13%) (table 8).

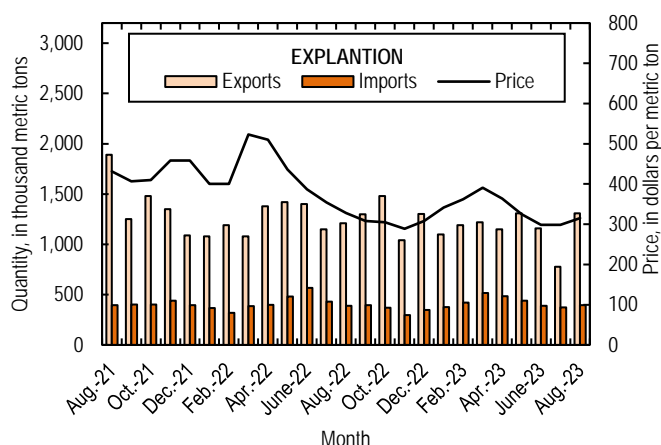


Figure 2. Monthly domestic imports and exports of iron and steel scrap and price for No. 1 heavy melting steel scrap from August 2021 through August 2023. Sources: U.S. Census Bureau and Fastmarkets AMM.

The daily average domestic raw steel production for August, as calculated from the American Iron and Steel Institute's monthly production data, was 226,000 metric tons, unchanged from that in July and essentially unchanged from that in August 2022. Raw steel production capability utilization was 76.6% in August 2023, up from 76.2% in July and down from 78.0% in August 2022 (table 10).

List services and web feed subscribers are the first to receive notification of USGS minerals information publications and data releases. For information on how to subscribe, go to <https://www.usgs.gov/centers/national-minerals-information-center/minerals-information-publication-list-services>.

TABLE 1
IRON AND STEEL SCRAP, PIG IRON, AND DIRECT-REDUCED IRON STATISTICS
FOR STEEL PRODUCERS, IN AUGUST 2023^{1,2}

(Thousand metric tons)

	August	January–August ³
Scrap:		
Receipts:		
From outside sources	2,860	23,800
From other own company plants	198	1,470
Production:		
Recirculating scrap	396	2,660
Obsolete scrap	10	24
Consumption (by type of furnace):		
Blast furnace	146	1,030
Basic oxygen process	243	2,210
Electric furnace	3,090	24,200
Other	--	110
Total consumption	3,470	27,500
Shipments	34	189
Stocks, end of period	3,760	3,760
Pig iron (includes hot metal):		
Receipts	129	1,150
Production	1,160	8,770
Consumption	1,310	9,930
Stocks, end of period	512	512
Direct-reduced iron: ⁴		
Receipts	227	1,750
Consumption	209	1,680
Stocks, end of period	402	402

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes manufacturers of raw steel that also produce steel castings.

³May include revisions to previously published data.

⁴Includes direct-reduced iron, hot-briquetted iron, and iron carbide. Domestic production data are included in "Receipts."

TABLE 2

CEIPTS FROM OUTSIDE SOURCES, PRODUCTION, CONSUMPTION, AND STOCKS OF IRON AND STEEL SCRAP, BY GRADE, FOR STEEL PRODUCERS, IN AUGUST 2021

(Thousand metric tons)

Item	August				January–August ³		
	Receipts of scrap from outside sources	Production of recirculating scrap	Consumption ⁴	Ending stocks	Receipts of scrap from outside sources	Production of recirculating scrap	Consumption ⁴
Carbon steel:							
Low-phosphorus plate and punchings	13	W	16	W	110	W	128
Cut structural and plate	248	26	289	342	2,060	216	2,320
No. 1 heavy melting steel	272	49	326	172	2,350	391	2,640
No. 2 heavy melting steel	329	33	387	235	2,620	222	3,020
No. 1 and electric furnace bundles	101	--	118	119	905	--	917
No. 2 and all other bundles	57	W	57	25	509	W	538
Electric furnace 1 foot and under (not bundles)	W	--	--	W	W	--	W
Railroad rails	17	W	19	98	136	W	140
Turnings and borings	136	W	149	197	1,070	W	1,120
Slag scrap	27	25	55	48	220	202	445
Shredded and fragmentized	872	W	995	1,480	7,090	W	7,690
No. 1 busheling	325	24	362	324	2,860	183	3,070
Steel cans scrap (post consumer)	W	W	W	293	W	W	W
All other carbon steel scrap	138	119	257	203	1,340	851	2,290
Stainless steel scrap	42	19	62	32	334	151	495
Alloy steel scrap	23	8	31	48	187	66	250
Ingot mold and stool scrap	W	W	W	W	W	W	W
Machinery and cupola cast iron	4	--	W	W	W	--	W
Cast iron borings	11	--	12	W	92	W	95
Other iron scrap	75	12	85	37	500	89	547
Other mixed scrap	154	W	237	87	1,230	W	1,620
Total	2,860	396	3,470	3,760	23,800	2,660	27,500

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.²Includes manufacturers of raw steel that also produce steel castings.³May include revisions to previously published data.⁴Includes recirculating scrap.

TABLE 3
RECEIPTS FROM OUTSIDE SOURCES, PRODUCTION, AND CONSUMPTION OF IRON AND STEEL SCRAP,
BY REGION AND STATE, FOR STEEL PRODUCERS, IN AUGUST 2023^{1,2}

(Thousand metric tons)

Region and State	August			January–August ³		
	Receipts of scrap from outside sources	Production of recirculating scrap	Consumption ⁴	Receipts of scrap from outside sources	Production of recirculating scrap	Consumption ⁴
Mid-Atlantic and New England:						
New Jersey, New York, Pennsylvania	164	38	242	1,510	305	2,060
North Central:						
Illinois and Indiana	332	78	427	2,750	615	3,580
Iowa, Nebraska, Wisconsin	201	W	215	1,820	50	1,750
Michigan	32	W	32	252	2	254
Ohio	425	93	512	3,230	660	3,900
Total	989	176	1,180	8,050	1,330	9,480
South Atlantic:						
Georgia, North Carolina, South Carolina	269	W	286	2,160	W	2,310
Virginia, West Virginia	101	W	193	802	W	1,030
Total	371	W	478	2,970	224	3,340
South Central:						
Alabama, Kentucky, Mississippi, Tennessee	599	43	704	5,190	353	5,760
Arkansas and Texas	437	37	521	3,690	305	4,220
Total	1,040	80	1,230	8,880	658	9,980
Mountain and Pacific:						
California, Colorado, Oregon, Utah, Washington	295	W	343	2,360	151	2,640
Grand total	2,860	396	3,470	23,800	2,660	27,500

W Withheld to avoid disclosing company proprietary data; included in “Total.”

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes manufacturers of raw steel that also produce steel castings.

³May include revisions to previously published data.

⁴Includes recirculating scrap.

TABLE 4
U.S. EXPORTS OF IRON AND STEEL SCRAP BY SELECTED REGION AND COUNTRY
OR LOCALITY, IN AUGUST 2023^{1,2}

(Thousand metric tons and thousand dollars)

Country or locality	August		January–August ³	
	Quantity	Value	Quantity	Value
Bangladesh	170	68,100	887	365,000
Belgium	1	285	10	10,400
Canada	49	16,200	349	131,000
China	2	3,740	13	27,500
Ecuador	1	250	100	41,300
Greece	30	10,200	93	34,100
India	144	83,200	832	514,000
Italy	7	714	175	70,500
Korea, Republic of	18	7,610	228	107,000
Malaysia	14	9,730	98	103,000
Mexico	209	74,500	1,500	461,000
Morocco	--	--	41	15,800
Netherlands	(4)	120	6	7,170
Pakistan	34	24,400	188	140,000
Peru	33	11,700	351	140,000
Taiwan	96	35,500	724	303,000
Thailand	17	15,900	204	120,000
Turkey	397	146,000	2,570	1,010,000
Vietnam	42	15,800	627	253,000
Other ⁵	45	12,100	206	79,800
Total	1,310	536,000	9,200	3,930,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats, and other vessels for scrapping. Export valuation is on a free-alongside-ship basis.

³May include revisions to previously published data.

⁴Less than ½ unit.

⁵Includes countries with quantities of less than 500 metric tons for the current year.

Source: U.S. Census Bureau.

TABLE 5
U.S. EXPORTS OF IRON AND STEEL SCRAP BY REGION AND
SELECTED CUSTOMS DISTRICT, IN AUGUST 2023^{1,2}

(Thousand metric tons and thousand dollars)

Customs district	August		January–August ³	
	Quantity	Value	Quantity	Value
Baltimore, MD	62	21,400	310	150,000
Boston, MA	85	30,800	649	261,000
Buffalo, NY	15	6,590	77	40,400
Charleston, SC	5	4,000	39	31,900
Columbia–Snake, OR	78	34,400	469	202,000
Dallas–Forth Worth, TX	--	--	(4)	4
Detroit, MI	13	5,390	124	52,400
Duluth, MN	(4)	177	3	2,340
El Paso, TX	(4)	139	86	1,370
Honolulu, HI, and Anchorage, AK	27	9,430	87	33,900
Houston–Galveston, TX	21	15,300	202	132,000
Laredo, TX	77	29,900	753	219,000
Los Angeles, CA	146	65,500	1,120	517,000
Miami, FL	28	12,600	180	90,800
Mobile, AL	(4)	304	6	5,880
New Orleans, LA	7	1,210	19	6,440
New York City, NY	281	117,000	1,530	715,000
Norfolk, VA	53	30,100	278	180,000
Ogdensburg, NY	2	780	11	3,210
Pembina, ND	4	1,340	156	22,700
Philadelphia, PA	51	18,300	535	205,000
Portland, ME	4	787	69	25,800
Providence, RI	63	21,500	348	133,000
San Diego, CA	23	7,600	179	53,300
San Francisco, CA	107	38,900	968	396,000
San Juan, PR	38	13,600	169	56,400
Savannah, GA	13	10,600	114	93,100
Seattle, WA	32	14,900	361	165,000
St. Albans, VT	3	538	15	3,530
Tampa, FL	55	20,700	272	113,000
U.S. Virgin Islands	--	--	6	2,340
Other ⁵	15	2,260	69	14,700
Total	1,310	536,000	9,200	3,930,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats, and other vessels for scrapping. Export valuation is on a free-alongside-ship basis.

³May include revisions to previously published data.

⁴Less than ½ unit.

⁵Includes countries with quantities of less than 500 metric tons for the current year.

Source: U.S. Census Bureau.

TABLE 6
U.S. EXPORTS OF IRON AND STEEL SCRAP AND OTHER
FERROUS PRODUCTS BY GRADE, IN AUGUST 2023^{1,2}

(Thousand metric tons and thousand dollars)

Item	August		January–August ³	
	Quantity	Value	Quantity	Value
No. 1 heavy melting steel	599	230,000	3,860	1,550,000
No. 2 heavy melting steel	73	31,900	461	219,000
No. 1 bundles	9	3,500	117	22,500
No. 2 bundles	1	205	5	620
Shredded steel scrap	436	162,000	3,040	1,210,000
Borings, shovelings, and turnings	5	1,530	31	8,930
Cut plate and structural	50	19,500	443	187,000
Tinned iron or steel	5	731	64	11,100
Remelting scrap ingots	1	284	4	1,420
Cast iron	24	15,000	322	113,000
Other iron and steel	4	924	29	6,690
Total carbon steel and cast iron	1,210	465,000	8,380	3,340,000
Stainless steel	47	37,900	354	297,000
Other alloy steel	56	33,000	473	296,000
Total stainless and alloy steel	103	70,900	827	593,000
Total carbon, stainless, alloy steel, and cast iron	1,310	536,000	9,200	3,930,000
Ships, boats, and other vessels for breaking up (for scrapping)	--	--	3	426
Used rails	(4)	785	2	4,390
Used rails for rerolling and other uses	--	--	(4)	150
Total scrap exports	1,310	537,000	9,210	3,930,000
Exports of manufactured ferrous products,				
Pig iron < or = 0.5% phosphorus	1	574	14	9,700
Pig iron > or = 0.5% phosphorus	--	--	--	--
Alloy Pig Iron	--	--	(4)	125
Total pig iron	1	574	14	9,820
Direct-reduced iron (DRI)	--	--	5	82
Granules for abrasive cleaning and other uses	2	3,130	15	24,000
Powders of alloy steel	1	6,060	8	47,900
Other ferrous powders	4	6,960	38	58,900
Total DRI, granules, powders	7	16,100	65	131,000
Grand total	1,320	554,000	9,290	4,070,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Export valuation is on a free-alongside-ship basis.

³May include revisions to previously published data.

⁴Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP
BY SELECTED COUNTRY OR LOCALITY, IN AUGUST 2023^{1, 2}

(Thousand metric tons and thousand dollars)

Country or locality	August		January–August ³	
	Quantity	Value	Quantity	Value
Canada	278	113,000	2,400	1,050,000
Cayman Islands	(4)	76	5	794
Colombia	--	--	1	460
Germany	1	100	103	43,500
Japan	2	66	13	426
Mexico	78	35,500	447	226,000
Netherlands	(4)	28	101	44,700
New Zealand	--	--	27	12,100
Portugal	--	--	14	5,610
Spain	--	--	12	4,990
Sweden	37	15,200	180	80,000
United Kingdom	(4)	14	69	33,900
Other ⁵	1	1,410	20	12,500
Total	396	165,000	3,400	1,510,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats, and other vessels for scrapping. Import valuation is on a Customs basis.

³May include revisions to previously published data.

⁴Less than ½ unit.

⁵Includes countries with quantities of less than 500 metric tons for the current year.

Source: U.S. Census Bureau.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP
BY SELECTED CUSTOMS DISTRICT, IN AUGUST 2023^{1, 2}

(Thousand metric tons and thousand dollars)

Customs district	August		January–August ³	
	Quantity	Value	Quantity	Value
Baltimore, MD	(4)	129	1	728
Buffalo, NY	11	5,390	148	83,900
Charleston, SC	37	15,200	313	134,000
Chicago, IL	5	734	16	4,040
Cleveland, OH	(4)	114	(4)	798
Detroit, MI	172	76,800	1,500	704,000
Duluth, MN	15	5,200	79	30,100
El Paso, TX	4	1,860	39	17,000
Great Falls, MT	2	811	20	7,510
Houston-Galveston, TX	--	--	1	1,600
Laredo, TX	58	27,100	298	159,000
Miami, FL	1	214	12	2,890
Mobile, AL	3	2,710	50	33,900
New Orleans, LA	2	51	178	76,100
New York City, NY	(4)	10	8	2,280
Nogales, AZ	4	1,490	35	14,700
Ogdensburg, NY	1	1,250	12	13,700
Pembina, ND	17	6,140	135	54,100
San Diego, CA	8	2,350	54	17,100
Seattle, WA	53	16,200	477	147,000
St. Albans, VT	1	236	8	2,370
Other ⁵	2	974	9	5,500
Total	396	165,000	3,400	1,510,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats and other vessels for scrapping. Import valuation is on a Customs basis.

³May include revisions to previously published data.

⁴Less than ½ unit.

⁵Includes countries with quantities of less than 500 metric tons for the current year.

Source: U.S. Census Bureau.

TABLE 9
U.S. IMPORTS OF IRON AND STEEL SCRAP AND OTHER
FERROUS PRODUCTS BY GRADE, IN AUGUST 2023^{1,2}

(Thousand metric tons and thousand dollars)

Item	August		January–August ³	
	Quantity	Value	Quantity	Value
No. 1 heavy melting steel	11	3,340	99	32,700
No. 2 heavy melting steel	9	3,120	86	31,200
No. 1 bundles	82	37,000	937	441,000
No. 2 bundles	7	2,300	61	22,700
Shredded steel scrap	90	37,400	646	283,000
Borings, shovelings, and turnings	5	1,110	37	9,810
Cut plate and structural	17	4,530	147	45,800
Tinned iron or steel	19	6,780	177	71,400
Remelting scrap ingots	(4)	94	2	1,090
Cast iron	15	4,270	121	42,200
Other iron and steel	53	18,900	509	189,000
Total carbon steel and cast iron	307	119,000	2,820	1,170,000
Stainless steel	17	17,600	140	163,000
Other alloy steel	72	28,600	438	179,000
Total stainless and alloy steel	89	46,200	578	342,000
Total carbon, stainless, alloy steel, and cast iron	396	165,000	3,400	1,510,000
Ships, boats, and other vessels for breaking up (for scrapping)	--	--	(4)	11
Used rails	(4)	47	3	773
Used rails, nonalloyed	--	--	--	--
Used rails other	(4)	166	(4)	747
Total scrap imports	396	165,000	3,400	1,510,000
Imports of manufactured ferrous products:				
Pig iron < or = 0.5% phosphorus	--	--	(4)	8
Pig iron > or = 0.5% phosphorus	419	202,000	2,970	1,550,000
Alloy pig iron	--	--	(4)	23
Total pig iron	419	202,000	2,970	1,550,000
Direct-reduced iron (DRI)	325	95,400	2,380	762,000
Spongy iron products, not DRI	(4)	616	1	2,800
Granules for abrasive cleaning and other uses	2	2,660	12	22,600
Powders of alloy steel	4	12,000	38	93,700
Other ferrous powders	3	7,080	27	63,700
Total DRI, granules, powders	334	118,000	2,450	945,000
Grand total	1,150	485,000	8,830	4,000,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Import valuation is on a Customs basis.

³May include revisions to previously published data.

⁴Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 10
U.S. RAW STEEL PRODUCTION, RAW STEEL CAPABILITY UTILIZATION,
AND CONTINUOUS CAST STEEL PRODUCTION¹

Period	Raw steel production, thousand metric tons		Raw steel capability utilization, percent		Continuous cast steel production, percent	
	Monthly	Year to date ²	Monthly	Year to date ²	Monthly	Year to date ²
2022:						
August	6,910	54,900	78.0	79.7	99.7	99.7
September	6,550	61,400	76.4	79.4	99.7	99.7
October	6,610	68,000	73.7	78.8	99.7	99.7
November	6,200	74,200	71.5	78.1	99.6	99.7
December	6,330	80,500	70.6	77.5	99.7	99.7
2023:						
January	6,550	6,550	73.0	73.0	99.6	99.6
February	6,120	12,700	75.5	74.2	99.7	99.7
March	6,800	19,500	75.7	74.7	99.7	99.7
April	6,690	26,200	76.5	75.1	99.7	99.7
May	6,900	33,100	76.3	75.4	99.7	99.7
June	6,820	39,900	77.9	75.8	99.7	99.7
July	6,970	46,900	76.2	75.9	99.7	99.7
August	7,000	53,800	76.6	76.0	99.7	99.7

¹Data are rounded to no more than three significant digits.

²May include revisions to previously published data.

Source: American Iron and Steel Institute.

TABLE 11
COMPOSITE PRICES FOR STEEL SCRAP AND PIG IRON

Period	Steel Scrap ¹		Pig Iron ²	
	\$/lt	\$/t	\$/lt	\$/t
2022:				
August	333.33	328.07	974.43	959.04
September	313.33	308.38	618.84	609.07
October	310.00	305.11	924.99	910.38
November	293.33	288.70	511.23	503.16
December	313.33	308.38	662.89	652.42
Average, January–December	385.28	379.19	662.64	652.18
2023:				
January	346.67	341.20	560.18	551.33
February	368.33	362.51	439.42	432.48
March	396.67	390.41	600.00	590.53
April	370.00	364.16	492.25	484.48
May	330.00	324.79	510.73	502.67
June	303.33	298.54	518.60	510.41
July	303.33	298.54	509.23	501.19
August	320.00	314.95	438.33	431.41

¹Prices are for No. 1 heavy melting steel scrap. Source: Fastmarkets-AMM.

²Prices are Brazilian basic pig iron, free on board, New Orleans, LA. Source: U.S. Census Bureau.

Note: Long tons = lt; metric tons = t.

TABLE 12
U.S. IRON AND STEEL SCRAP RECEIPTS FROM OUTSIDE SOURCES, PRODUCTION OF PIG IRON,
AND DIRECT-REDUCED IRON (DRI) CONSUMPTION¹

(Thousand metric tons)

Period ²	Receipts of scrap from outside sources		Pig iron production		DRI consumption	
	Monthly	Year to date	Monthly	Year to date	Monthly	Year to date
2022:						
August	2,250	23,700	1,030	7,310	177	1,980
September	2,310	26,000	950	8,260	180	2,160
October	2,120	28,100	918	9,180	107	2,270
November	2,220	30,400	898	10,100	176	2,450
December	2,340	32,700	1,030	11,100	187	2,630
2023:						
January	2,960 ^r	2,960 ^r	1,030	1,030	211 ^r	211 ^r
February	3,020 ^r	5,980 ^r	986	2,020	205 ^r	416 ^r
March	3,020 ^r	9,000 ^r	1,140	3,160	206 ^r	622 ^r
April	2,990 ^r	12,000 ^r	1,140	4,290	198 ^r	821 ^r
May	3,130 ^r	15,100	1,170	5,460	202 ^r	1,020 ^r
June	2,950 ^r	18,100	1,090	6,550	248 ^r	1,270 ^r
July	2,840 ^r	20,900 ^r	1,070	7,620	198 ^r	1,470 ^r
August	2,860	23,800	1,160	8,770	209	1,680

^rRevised.

¹Data are rounded to no more than three significant digits.

²May include revisions to previously published data.