

Mineral Industry Surveys

For information, contact:

E. Lee Bray, Aluminum Commodity Specialist
 National Minerals Information Center
 U.S. Geological Survey
 989 National Center
 Reston, VA 20192
 Telephone: (703) 648-4979, Fax: (703) 648-7757
 Email: lbray@usgs.gov

Susan M. Weaver (Data)
 Telephone: (703) 648-7979
 Fax: (703) 648-7995
 Email: sweaver@usgs.gov

Internet: <http://minerals.usgs.gov/minerals/>

ALUMINUM IN SEPTEMBER 2018

Domestic primary aluminum production in September 2018 was 76,000 metric tons (t). The average daily production in September was 2,550 t, 4% more than that in August 2018, and 26% more than that in September 2017 and September 2016 (fig. 1, table 1).

Total aluminum recovered from scrap in September 2018 was 308,000 t, essentially unchanged from that in August 2018, slightly more than the amount in September 2017, and 3% more than the amount in September 2016. Of this, 177,000 t of aluminum was recovered from new scrap and 131,000 t was recovered from old scrap (fig. 1, table 1).

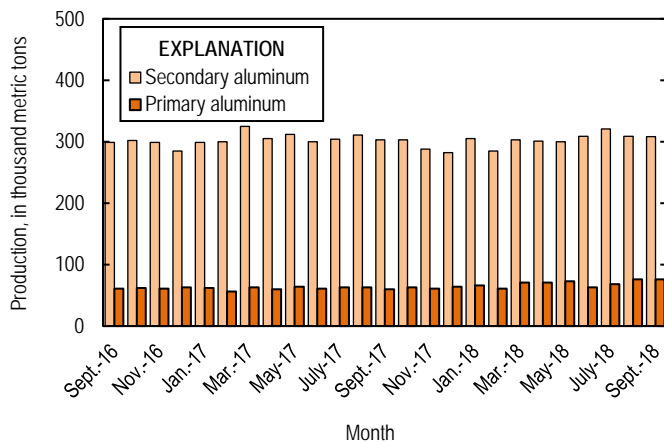


Figure 1. Monthly domestic primary and secondary aluminum production from September 2016 through September 2018.

Prices and Stocks

The September 2018 average U.S. market price and the average cash price on the London Metal Exchange (LME) of primary aluminum ingot decreased slightly from that in August 2018 to \$1.13 per pound and \$0.917 per pound, respectively (fig. 2, table 6).

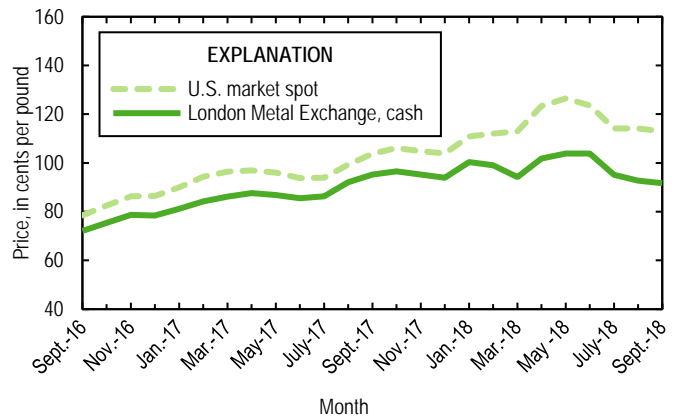


Figure 2. Average monthly prices for primary aluminum from September 2016 through September 2018. Source: Platts Metals Week.

Inventories of primary aluminum in LME-approved warehouses in the United States decreased to 61,450 t at the end of September 2018 from 64,025 t at the end of August 2018. Inventories of secondary aluminum (North American Secondary Aluminum Alloy Contract) in LME-approved warehouses in the United States decreased to 149,040 t at the end of September 2018 from 149,940 t at the end of August 2018 (London Metal Exchange Ltd., 2018a, b).

U.S. Trade

Total imports for consumption of aluminum in the first 9 months of 2018 (table 8) were 9% less than those in the same period in 2017; imports of crude metal and alloys decreased by 13%, scrap imports were essentially unchanged, but imports of semifabricated products increased slightly. Canada continued to be the leading source of imported aluminum materials, supplying 45% of all aluminum imports during the first 9 months of 2018, followed by the United Arab Emirates (10%), Russia (6%), and China (5%). Canada accounted for 51% of crude metal, 18% of semifabricated products, and 57% of scrap

imports. China accounted for 21% of semifabricated product imports. Mexico was the source of 25% of scrap imports.

Total exports of aluminum (table 9) increased by 8% during the first 9 months of 2018 compared with those of the same period in the previous year. Exports of crude metal and alloys and scrap increased by 8% and 12%, respectively, and exports of semifabricated aluminum products increased slightly compared with those in the same period of 2017. The leading destinations for total aluminum products during the first 9 months of 2018, in descending order of quantity, were Mexico (27%), Canada (21%), and China (18%). Mexico and Canada were the leading destination for exports of crude metal and alloys, receiving 50% and 42%, respectively. Mexico and Canada were also the leading destination for exports of semifabricated aluminum products, receiving 45% and 38%, respectively. The leading destinations for scrap were China, the Republic of Korea, Mexico, and India, receiving 31%, 14%, 11%, and 11%, respectively.

Update

The U.S. Department of the Treasury extended the deadline for companies to wind down contracts with United Company RUSAL Plc to January 7, 2019, from November 12, 2018 (U.S. Department of the Treasury, 2018). In April, RUSAL and its principal owner who also was formerly its chief executive officer were sanctioned by the U.S. Department of the Treasury, with an initial wind-down period until June 5, which was extended until October 23, and then to November 12. (See Aluminum in February 2018 and Aluminum in August 2018.)

The U.S. Department of Commerce completed an anti-dumping and countervailing duty investigation into imports of common aluminum alloy sheet from China, which was initiated in November 2017. The investigation determined that producers in China sold aluminum sheet in the United States ranging from 49.85% to 59.72% less than fair market value and that the Government of China provided subsidies to aluminum sheet producers at rates ranging from 46.48% to 116.49%. The U.S. International Trade Commission is scheduled to make a final injury determination by December 20. Antidumping and countervailing duties will be set if an affirmative injury determination is made (U.S. Department of Commerce, 2018). The alloys that were the subject of the investigation included

1000-series, 3000-series, and 5000-series but did not include can stock alloys. The investigation included flat-rolled products with a thickness greater than 0.2 millimeters and up to 6.3 millimeters. Markets for the subject sheet products were appliances, building and construction, electrical applications, and transportation. (See Aluminum in October 2017.)

Century Aluminum Co. continued with the restart of capacity at two smelters in Kentucky. (See Aluminum in May 2018.) One potline at the Hawesville smelter reached full capacity in August. A second was restarted in October and was scheduled to reach full capacity by yearend. A third potline was scheduled to be restarted after the second reached full capacity and would be producing at full capacity in early 2019. The capacity of each of the potlines being restarted at the Hawesville smelter was 50,000 metric tons per year (t/yr), and total capacity of the smelter was 250,000 t/yr. At the 218,000-t/yr Sebree smelter, a potline that was shut down after a power failure in May reached full capacity in September. (See Aluminum in April 2018.) The capacity of the potline was 73,000 t/yr (Matyi, 2018).

References Cited

- London Metal Exchange Ltd., 2018a, Aluminium stocks: London, United Kingdom, London Metal Exchange Ltd., August 31, 3 p.
- London Metal Exchange Ltd., 2018b, Aluminium stocks: London, United Kingdom, London Metal Exchange Ltd., September 28, 3 p.
- Matyi, Bob, 2018, Century's Q3 Al shipments up; restarts Kentucky potlines: Platts Metals Daily, v. 7, no. 212, October 26, p. 10.
- U.S. Department of Commerce, 2018, In historic proceedings, U.S. Department of Commerce finds dumping and subsidization of common alloy aluminum sheet from China: Washington, DC, U.S. Department of Commerce press release, November 7. (Accessed November 7, 2018, at <https://www.commerce.gov/news/press-releases/2018/11/historic-proceedings-us-department-commerce-finds-dumping-and->)
- U.S. Department of the Treasury, 2018, OFAC extends expiration date of general license related to EN+, RUSAL, and GAZ: Washington, DC, U.S. Department of the Treasury press release, November 9. (Accessed November 15, 2018, at <https://home.treasury.gov/news/press-releases/sm544>.)

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 <http://minerals.usgs.gov/minerals/>.

TABLE 1
COMPONENTS OF ALUMINUM SUPPLY¹

(Thousand metric tons)

Period	Primary production	Secondary recovery ²			Imports for consumption			Total new supply ³	Stocks, end of period ⁴
		New	Old	Total	Metals and alloys, crude	Plates, sheets, bars, etc.	Total		
2017 ^p	741	2,050	1,590	3,630	4,830	1,380	6,200	10,600	1,470
2017:									
September	60	170	134	303	338	102	440	804	1,420
October	63	172	131	303	358	122	480	846	1,430
November	61	166	122	288	358	116	474	822	1,420
December	64	165	117	282	400	118	518	864	1,470
January–September	554	1,540	1,220	2,760	3,710	1,020	4,730	8,040	1,470
2018:									
January	66	177	128	305	333	167	500	871	1,460
February	61	161	124	285	374	99	473	819	1,450
March	71	174	129	303	555	126	681	1,060	1,430
April	71	169	132	301	381	122	503	875	1,460
May	73	169	131	300	349	120	469	842	1,490
June	63	175	134	309	297	99	396	767	1,470
July	68	189	132	321	332	105	437	826	1,520 ^r
August	76	180	130	309	292	104	396	781	1,560
September	76	177	131	308	313	105	418	802	NA
January–September	625	1,570	1,170	2,740	3,230	1,050	4,270	7,640	NA

^pPreliminary. ^rRevised. NA Not available.

¹Data are rounded to no more than three significant digits, except "Primary production"; may not add to totals shown.

²Metallic recovery from purchased, tolled, or imported scrap, expanded for full coverage of industry.

³Primary production, secondary recovery, and imports for consumption.

⁴Inventory levels reflect total for U.S. and Canadian producers; data from the Aluminum Association Inc.

TABLE 2
ESTIMATED FULL COVERAGE CONSUMPTION OF AND METALLIC RECOVERY FROM
PURCHASED NEW AND OLD ALUMINUM SCRAP¹

(Thousand metric tons)

Period	Secondary smelters		Independent mill fabricators		Foundries		Other consumers		Total	
	Con-sump-tion	Metal recovery	Con-sump-tion	Metal recovery	Con-sump-tion	Metal recovery	Con-sump-tion	Metal recovery	Con-sump-tion	Metal recovery
	2017 ^P	2,200	1,650	2,060	1,880	101	93	4	4	4,360
2017:										
September	180	136	173	159	8	8	(2)	(2)	362	303
October	188	141	169	154	8	8	(2)	(2)	365	303
November	183	138	154	141	8	8	(2)	(2)	347	288
December	182	138	148	136	8	8	(2)	(2)	339	282
January–September	1,640	1,240	1,590	1,450	76	70	3	3	3,310	2,760
2018:										
January	179	136	175	161	8	8	(2)	(2)	363	305
February	173	130	160	147	8	8	(2)	(2)	342	285
March	164	130	180	166	8	8	(2)	(2)	353	303
April	165	131	177	162	8	8	(2)	(2)	351	301
May	168	134	173	159	8	8	(2)	(2)	350	300
June	179	137	179	164	8	8	(2)	(2)	366	309
July	182	140	188	173	8	8	(2)	(2)	378	321
August	183	142	174	159	8	8	(2)	(2)	366	309
September	181	140	175	160	8	8	(2)	(2)	365	308
January–September	1,570	1,220	1,580	1,450	76	70	3	3	3,240	2,740

^PPreliminary.

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

²Less than ½ unit.

TABLE 3
CONSUMPTION OF AND RECOVERY FROM PURCHASED
NEW AND OLD ALUMINUM SCRAP IN SEPTEMBER 2018¹

(Metric tons)

	Calculated metallic recovery			
	Consumption		metallic recovery	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
Secondary smelters	151,000	181,000	117,000	140,000
Independent mill fabricators	160,000	175,000	147,000	160,000
Foundries	7,040	8,450	6,440	7,730
Other consumers	266	320	266	320
Total	319,000	365,000	270,000	308,000

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

TABLE 4
PURCHASED AND TOLL-TREATED ALUMINUM-BASE SCRAP AND SWEATED
PIG IN SEPTEMBER 2018¹

(Metric tons)

	September			January–September ²		
	Stocks, opening ²	Net receipts ³	Melted or consumed	Stocks, closing	Net receipts ³	Melted or consumed
New scrap:						
Extrusion	15,600	70,800	70,900	15,500	643,000	643,000
Can stock clippings	4,650	20,600	20,500	4,820	194,000	194,000
Other wrought sheet/clippings	16,100	44,700	46,000	14,800	401,000	396,000
Casting	3,110	6,050	6,020	3,140	48,000	48,100
Borings and turnings	3,920	9,450	9,920	3,450	85,500	86,500
Dross and skimmings	10,300	35,900	35,900	10,300	306,000	306,000
Total new scrap	53,700	188,000	189,000	52,000	1,680,000	1,670,000
Old scrap:						
Used castings	8,280	24,400	24,100	8,520	223,000	223,000
Used extrusion	7,830	11,800	11,800	7,830	110,000	111,000
Used cans (shredded, loose, baled)	9,540	52,800	52,700	9,580	465,000	465,000
Other wrought products	12,000	27,800	30,700	9,160	264,000	272,000
Fragmentized shredder (auto shredder)	2,900	10,100	10,000	3,010	86,800	86,300
Total old scrap	40,500	127,000	129,000	38,100	1,150,000	1,160,000
Sweated pig						
Total all classes	94,200	315,000	319,000	90,100	2,830,000	2,830,000

-- Zero.

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

²May include revisions to previously published data.

³Includes data on imported aluminum-base scrap.

TABLE 5
ALUMINUM ALLOYS PRODUCED AT SECONDARY SMELTERS IN THE UNITED
STATES IN SEPTEMBER 2018^{1,2}

(Metric tons)

	September			January–September		
	Stocks, opening ³	Production	Net shipments	Stocks, closing	Production	Net shipments
Die-cast alloys:						
13% Si, 360, etc. (0.6% Cu, max.)	2,940	1,730	1,900	2,780	17,500	16,400
380 and variations	6,190	14,700	14,700	6,190	132,000	132,000
Sand and permanent mold:						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	1,160	2,370	2,370	1,160	21,300	21,300
No. 319 and variations	2,630	3,670	3,670	2,630	33,100	33,100
F-132 alloy and variations	162	196	196	162	1,760	1,760
Al-Zn alloys	243	94	94	243	844	844
Al-Si alloys (0.6% to 2.0% Cu)	103	92	92	103	826	826
Al-Cu alloys (1.5% Si, max.)	178	67	67	178	607	607
Other ⁴	5,870	10,300	10,400	5,760	92,700	91,500
Wrought alloys, extrusion billets	10,100	54,700	54,700	10,100	493,000	492,000
Total all alloys	29,600	87,900	88,100	29,300	794,000	791,000
Less:						
Primary aluminum consumed	XX	15,800	XX	XX	143,000	XX
Primary silicon consumed	XX	1,940	XX	XX	17,900	XX
Other alloying ingredients consumed	XX	936	XX	XX	8,860	XX
Net metallic recovery from aluminum scrap and sweated pig consumed in production of secondary aluminum ingot ⁵	XX	69,100	XX	XX	624,000	XX

XX Not applicable.

¹Excludes integrated aluminum companies.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³May include revisions to previously published data.

⁴Includes alloys No. 12, Al-Mg, Al-Si-Cu-Ni, aluminum-base hardeners, variations of these alloys, plus other aluminum alloys.

⁵No allowance made for melt-loss of primary aluminum and alloying ingredients.

TABLE 6
AVERAGE PRICE OF ALUMINUM IN THE UNITED STATES
AND ON THE LONDON METAL EXCHANGE

(Cents per pound)

Period	Midwest U.S. market price	LME cash price Grade A
2017:		
September	103.810	95.261
October	106.198	96.616
November	104.852	95.280
December	103.908	93.911
January–December	98.298	89.254
2018:		
January	110.830	100.429
February	112.050	99.091
March	112.929	94.173
April	123.388	101.866
May	126.488	103.875
June	123.607	101.603
July	114.136	95.177
August	114.193	92.764
September	112.963	91.739
January–September	116.732	97.857

Source: Platts Metals Week.

TABLE 7
AVERAGE BUYING PRICES FOR ALUMINUM SCRAP

(Cents per pound)

Month	Used beverage cans	Mixed low copper clips	Old sheet	Old cast	Turnings (clean and dry)
2017:					
September	73.12	65.00	58.40	58.95	58.90
October	74.09	65.00	58.00	58.77	58.00
November	72.88	64.08	57.65	59.00	56.60
December	69.95	62.55	56.50	57.95	54.70
January–December	70.93	63.62	58.44	59.63	58.62
2018:					
January	75.57	63.48	58.90	59.90	56.36
February	75.66	65.29	61.21	62.21	58.45
March	75.59	66.00	61.91	63.00	58.95
April	81.81	66.29	60.83	62.76	57.71
May	84.41	68.00	62.00	63.50	63.50
June	85.29	67.79	61.95	63.40	57.31
July	77.40	64.55	57.93	58.52	54.48
August	73.37	60.24	52.87	51.70	49.80
September	65.87	57.37	47.13	46.21	43.84
January–September	77.22	64.33	58.30	59.02	55.60

Source: American Metal Market.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF ALUMINUM IN SEPTEMBER 2018¹

(Metric tons)

Country or locality	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	September	January– September	September	January– September	September	January– September	September	January– September
Argentina	21,200	134,000	--	2	--	--	21,200	134,000
Australia	29,200	81,700	74	443	293	1,660	29,600	83,800
Austria	--	67	4,300	26,400	--	--	4,300	26,500
Bahrain	6,620	98,100	3,940	44,700	--	--	10,600	143,000
Belgium	20	420	619	5,770	--	--	639	6,190
Brazil	--	10,400	3,070	17,900	106	4,800	3,180	33,200
Canada	163,000	1,660,000	16,300	186,000	32,700	301,000	212,000	2,150,000
Chile	--	--	2	2	331	4,620	333	4,620
China	358	3,020	7,920	221,000	--	473	8,280	224,000
Colombia	--	--	709	7,320	202	1,700	911	9,020
Costa Rica	--	--	--	14	244	2,710	244	2,720
El Salvador	--	--	137	1,090	180	2,290	317	3,380
France	461	11,500	2,720	29,000	200	1,950	3,390	42,400
Germany	25	447	5,330	34,600	203	4,700	5,560	39,800
Greece	--	--	3,020	19,400	51	260	3,070	19,700
Guatemala	--	--	--	--	946	10,100	946	10,100
Honduras	--	--	68	107	69	1,300	137	1,410
Hong Kong	--	--	490	5,790	243	627	733	6,420
India	14,000	143,000	3,770	36,500	18	86	17,800	180,000
Indonesia	--	--	8,610	68,300	--	--	8,610	68,300
Italy	--	724	1,640	11,000	--	--	1,640	11,700
Japan	5	15	2,630	27,000	61	230	2,690	27,200
Korea, Republic of	--	43	1,710	15,900	1,660	13,600	3,370	29,500
Malaysia	--	1,990	778	6,880	--	--	778	8,860
Mexico	34	12,200	4,570	36,900	13,600	136,000	18,200	185,000
Netherlands	44	1,060	213	3,290	21	211	278	4,560
New Zealand	127	7,260	--	1	40	96	167	7,360
Norway	19	10,900	42	214	--	--	61	11,100
Oman	1,500	34,400	5,470	41,600	--	--	6,970	76,000
Qatar	16,900	93,100	--	3	--	--	16,900	93,100
Romania	--	--	482	4,190	--	19	482	4,200
Russia	8,540	276,000	1,760	17,500	--	--	10,300	294,000
Saudi Arabia	3,930	40,100	403	7,650	216	2,190	4,550	49,900
South Africa	505	84,000	5,280	45,900	--	--	5,790	130,000
Spain	23	4,630	610	4,510	117	4,430	750	13,600
Sweden	--	--	724	5,770	--	5	724	5,770
Switzerland	--	--	234	2,670	--	--	234	2,670
Taiwan	1	134	3,310	25,000	620	2,500	3,930	27,600
Thailand	82	594	1,510	6,750	152	1,730	1,740	9,070
Turkey	--	--	3,020	17,400	109	3,600	3,130	21,000
United Arab Emirates	43,000	456,000	543	1,910	145	1,700	43,700	460,000
United Kingdom	--	14,700	1,550	7,230	299	2,900	1,850	24,800
Venezuela	3,370	44,600	34	1,470	302	6,010	3,710	52,100
Vietnam	--	253	1,910	19,100	4	663	1,920	20,000
Other	55	1,250	5,890	33,900	1,370	17,700	7,310	52,800
Total	313,000	3,230,000	105,000	1,050,000	54,400	532,000	473,000	4,810,000

-- Zero.

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

Source: U.S. Census Bureau.

TABLE 9
U.S. EXPORTS OF ALUMINUM IN SEPTEMBER 2018¹

(Metric tons)

Country or locality	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	September	January– September	September	January– September	September	January– September	September	January– September
Australia	66	449	153	1,370	--	3	219	1,820
Belgium	--	87	127	957	2,050	6,710	2,170	7,750
Bolivia	--	--	--	638	--	--	--	638
Brazil	18	151	531	2,710	1,430	12,000	1,970	14,800
Canada	9,720	94,800	28,100	301,000	7,690	76,900	45,500	473,000
China	29	958	1,850	20,300	25,700	395,000	27,600	416,000
Colombia	--	82	254	1,380	1	15	255	1,480
Dominican Republic	258	1,690	64	981	--	--	322	2,670
France	692	5,650	660	7,890	178	2,100	1,530	15,600
Germany	122	1,470	579	5,880	313	5,790	1,010	13,100
Guatemala	--	3	656	6,300	--	--	656	6,310
Hong Kong	--	6	65	1,190	4,610	27,000	4,680	28,200
India	43	216	327	3,540	24,200	139,000	24,600	143,000
Indonesia	--	18	3	611	7,080	48,500	7,080	49,200
Ireland	4	42	24	284	--	--	28	326
Israel	1	6	907	7,920	--	48	908	7,970
Italy	4	113	106	1,070	19	614	129	1,800
Jamaica	--	27	15	90	--	--	15	117
Japan	163	1,110	1,660	11,800	2,490	16,900	4,310	29,800
Korea, Republic of	24	413	2,080	23,000	21,200	174,000	23,300	197,000
Malaysia	--	41	381	4,270	16,100	120,000	16,500	125,000
Mexico	11,600	113,000	33,900	357,000	15,100	141,000	60,600	610,000
Netherlands	5	105	32	258	644	3,490	681	3,860
New Zealand	1	7	76	606	--	5	77	618
Norway	--	3	1	115	--	--	1	118
Pakistan	10	13	53	317	2,150	8,840	2,210	9,170
Panama	--	9	14	92	--	160	14	261
Philippines	--	42	9	259	709	3,100	718	3,400
Poland	15	104	91	658	--	171	106	933
Romania	4	126	63	474	--	--	67	600
Russia	1	31	11	112	479	9,520	491	9,670
Saudi Arabia	--	1	221	1,730	--	20	221	1,750
Singapore	71	716	271	3,760	43	425	385	4,900
Spain	--	111	98	930	19	1,020	117	2,060
Taiwan	6	3,300	366	7,010	4,100	38,300	4,470	48,600
Thailand	6	260	297	3,560	2,340	9,800	2,640	13,600
Turkey	--	127	603	3,070	--	272	603	3,470
United Arab Emirates	46	586	25	782	115	1,390	186	2,750
United Kingdom	34	387	995	8,190	226	1,790	1,260	10,400
Vietnam	--	--	--	86	702	3,500	702	3,590
Other	72	480	442	3,910	1,140	7,470	1,660	11,900
Total	23,000	227,000	76,200	796,000	141,000	1,250,000	240,000	2,280,000

-- Zero.

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

Source: U.S. Census Bureau.