

Mineral Industry Surveys

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LEAD IN JANUARY 2020

Domestic mine production (recoverable) of lead in January 2020 was 22,600 metric tons (t). Average daily mine production in January 2020 was 731 t, 4% more than that in the previous month and essentially unchanged from that in January 2019. Total secondary refined lead production in January 2020 was 101,000 t, essentially unchanged from that in the previous month and 5% more than that in January 2019. (fig. 1; tables 1, 2).

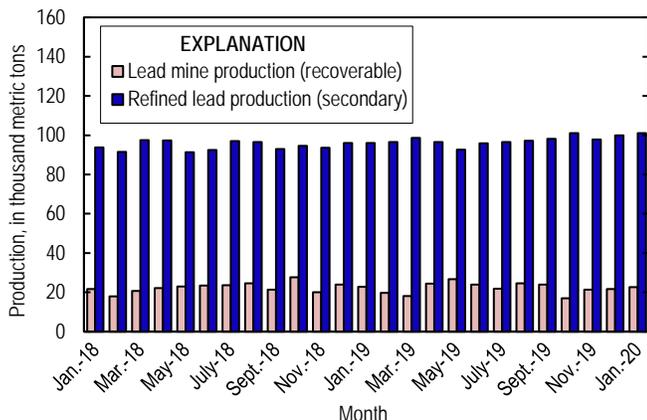


Figure 1. U.S. production of lead from January 2018 through January 2020. Source: U.S. Geological Survey.

The United States is a significant exporter of lead concentrates. U.S. exports of lead in ores and concentrates in January 2020 were 12,800 t, 21% less than those in January 2019. Leading destinations in January 2020 were Italy (62%), the Netherlands (31%), and Canada (7%) (table 8).

Prices and Stocks

The average London Metal Exchange, Ltd. (LME) cash price for lead in January 2020 was 87.3 cents per pound, slightly more than that in the previous month and 3% less than that in January 2019 (table 3). The Platts Metals Week average North American Market price for lead in January 2020 was 96.5 cents per pound,

essentially unchanged from that in the previous month and 3% less than that in January 2019.

The North American premium to the LME cash price in January 2020 averaged 9.16 cents per pound, 4% less than that in December 2019 and slightly less than that in January 2019 (fig. 2, table 3).

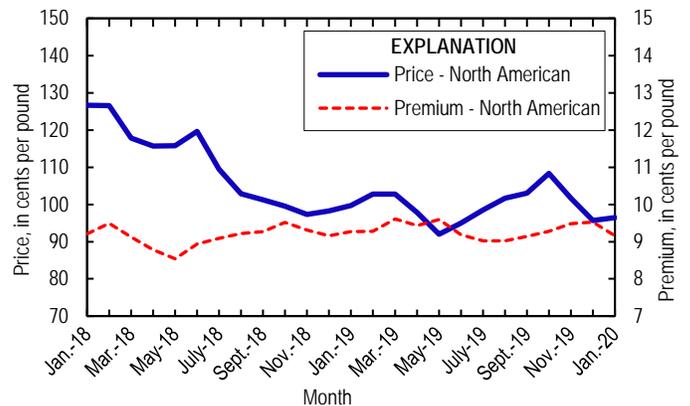


Figure 2. Average monthly North American price and premium for refined lead metal from January 2018 through January 2020. Source: Platts Metals Week.

The Platts average U.S. used lead-acid batteries (Midwest) price in January 2020 was 36.8 cents per pound, slightly more than that in December 2019 and 19% more than that in January 2019 (table 3). Most secondary lead is recovered from used lead-acid batteries.

Global LME lead stocks at the end of January 2020 were 66,800 t, essentially unchanged from those at the end of December 2019 and 8% less than those at the end of January 2019 (table 11).

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TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2019 ^{p, 2}				2020 January
	2018 ^{p, 2}	January	December	January– December	
Production:					
Mine (recoverable)	271,000	22,800	21,700	266,000	22,600
Secondary refinery, reported by smelters/refineries	1,140,000	96,100	100,000	1,170,000	101,000
Consumption of refined lead, apparent ^{e, 3}	1,630,000	141,000	140,000	1,640,000	141,000
Imports for consumption:					
Ore and concentrate	--	--	--	8	--
Bullion	789	--	--	75	--
Unwrought	563,000	54,000	40,200	501,000	42,000
Exports:					
Ore and concentrate	251,000	16,300	22,800	259,000	12,800
Bullion (gross weight)	2,060	34	98	1,230	38
Unwrought (gross weight)	67,200	9,490	805	25,600	1,580
Platts Metals Week North American Market					
price (cents per pound)	110.89	99.70	95.65	99.91	96.46

^eEstimated. ^pPreliminary. -- Zero.

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

²May include revisions to previously published data.

³Smelter production plus imports for consumption minus domestic exports.

TABLE 2
MINE AND SECONDARY REFINERY PRODUCTION OF LEAD
IN THE UNITED STATES¹

(Metric tons)

Period	Mine		Secondary refinery ^c
	Lead in concentrate	Recoverable	
2019:			
January	23,500	22,800	96,100
February	20,300	19,800	96,600
March	18,600	18,100	98,700
April	25,200	24,500	96,600
May	27,400	26,700	92,600
June	24,500	23,900	95,800
July	22,600	21,900	96,600
August	25,300	24,600	97,200
September	24,700	24,000	98,200
October	17,400	17,000	101,000
November	21,900	21,300	97,800
December	22,300	21,700	100,000
January–December	274,000	266,000	1,170,000
2020, January	23,300	22,600	101,000

^cEstimated.

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

TABLE 3
MONTHLY AVERAGE LEAD PRICES

	North	London Metal Exchange		Used lead-acid
	American Market ¹	cash		batteries ²
	¢/lb	¢/lb	\$/t	¢/lb
2019:				
January	99.70	90.43	1,993.73	30.95
February	102.78	93.51	2,061.45	29.94
March	102.78	93.17	2,054.14	31.34
April	97.80	88.37	1,948.26	33.65
May	91.99	82.40	1,816.64	32.25
June	94.96	85.78	1,891.04	31.38
July	98.54	89.52	1,973.50	33.65
August	101.68	92.66	2,042.70	33.75
September	103.05	93.91	2,070.29	34.22
October	108.33	99.05	2,183.67	34.95
November	101.63	92.15	2,031.46	35.47
December	95.65	86.12	1,898.68	35.85
Year	99.91	90.59	1,997.13	33.12
2020, January	96.46	87.30	1,924.69	36.75

¹Platts Metals Week North American Market price. Reflects the LME lead cash price plus the Platts premium for 99.97% lead.

²Platts Metals Week assessment for used lead-acid automotive batteries (50% lead) picked up in U.S. Midwest, suitable for delivery to secondary smelters within 30 days.

Source: Platts Metals Week.

TABLE 4
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP IN JANUARY 2020¹

(Metric tons, gross weight)

Item	Stocks December 31	Net receipts	Consumption	Stocks January 31
	2019			2020
Battery-lead	W	72,500	70,900	W
Other ²	W	5,790	5,780	W
Total	5,720	78,300	76,700	7,280
Percent change from preceding month ³	XX	8.5	4.2	27.1

W Withheld to avoid disclosing company proprietary data; included in "Total." XX Not applicable.

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

²Includes soft lead, solder, drosses and residues, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap.

³Based on unrounded data; preceding monthly data may have been revised.

TABLE 5
LEAD, TIN, AND ANTIMONY RECOVERED FROM
LEAD-BASE SCRAP IN JANUARY 2020¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	83,400	--	--
Remelt lead	W	--	--
Antimonial lead	17,000	W	W
Other ²	W	W	--
Total lead-base	101,000	184	W

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 cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 6
U.S. APPARENT CONSUMPTION OF LEAD¹

(Metric tons)

Period	Production	Imports ^{2,3}	Exports ^{2,3}	Apparent consumption ⁴
2019: ^p				
January	96,100	54,000	9,490	141,000
February	96,600	37,200	1,380	132,000
March	98,700	38,100	1,820	135,000
April	96,600	55,100	918	151,000
May	92,600	34,900	1,320	126,000
June	95,800	41,400	1,860	135,000
July	96,600	32,000	1,770	127,000
August	97,200	58,500	1,130	154,000
September	98,200	45,300	1,290	142,000
October	101,000	35,500	2,360	134,000
November	97,800	28,700	1,460	125,000
December	100,000	40,200	805	140,000
Year	1,170,000	501,000	25,600	1,640,000
2020, January	101,000	42,000	1,580	141,000

^pPreliminary.

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

²Import and export data are for Harmonized Tariff Schedule of the United States (HTS) codes 7801.10.0000, 7801.91.0000, 7801.99.9030, 7801.99.9050.

³Source: U.S. Census Bureau.

⁴Smelter production plus imports for consumption minus domestic exports.

TABLE 7
U.S. EXPORTS OF LEAD, BY CLASS¹

(Metric tons, gross weight, unless otherwise specified)

	2019 ²				2020 January
	2018 ²	January	December	January– December	
Ores and concentrate (lead content)	251,000	16,300	22,800	259,000	12,800
Bullion	2,060	34	98	1,230	38
Unwrought:					
Refined lead	49,300	8,260	--	9,590	172
Refined lead containing antimony as the principal alloying element	654	--	53	651	18
Lead alloys	14,400	1,140	702	13,700	1,310
Other	2,850	90	50	1,620	76
Total	67,200	9,490	805	25,600	1,580
Wrought:					
Bars, rods, profiles, and wire	886	54	30	615	20
Pipes and tubes, including fittings	116	1	20	167	3
Plates, sheets, strip, foil	3,180	412	338	3,460	278
Other	1,770	68	245	2,360	183
Total	5,960	535	633	6,600	484
Powders and flakes	372	44	2	297	36
Tetraethyl lead and tetramethyl lead	502	81	18	507	25
Waste and scrap:					
Spent lead-acid storage batteries for starting engines (units)	26,800,000	2,430,000	2,040,000	27,300,000	2,350,000
Lead waste and scrap obtained from lead-acid storage batteries	9,200	--	--	--	--
Other lead waste and scrap	40,300	2,900	3,710	39,500	4,260

--Zero.

¹Data are rounded to more than three significant digits; may not add to totals shown.

²May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 8
U.S. EXPORTS OF LEAD ORES AND CONCENTRATES, BY COUNTRY OR LOCALITY¹

(Metric tons, lead content)

	2018 ²	2019 ²			2020 January
		January	December	January– December	
Australia	7,310	--	--	--	--
Canada	51,200	929	833	52,400	839
China	73,600	--	--	62,300	--
Dominican Republic	--	--	5	34	--
Germany	15,100	--	--	--	--
Indonesia	--	--	--	5	--
Italy	7,170	7,360	--	23,400	7,920
Japan	19,100	--	1,550	25,100	--
Korea, Republic of	48,700	--	5,130	51,300	--
Laos	--	--	--	11	--
Mexico	19,100	8,010	7,990	24,700	65
Netherlands	7,100	--	5,660	15,000	4,000
Saudi Arabia	27	--	--	--	--
Thailand	2,520	--	513	3,390	--
Vietnam	--	--	1,140	1,760	8
Total	251,000	16,300	22,800	259,000	12,800

-- Zero.

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

²May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 9
U.S. IMPORTS FOR CONSUMPTION OF LEAD, BY CLASS¹

(Metric tons, gross weight, unless otherwise specified)

	2019 ²				2020 January
	2018 ²	January	December	January– December	
Ores and concentrate (lead content)	--	--	--	8	--
Bullion (lead content)	789	--	--	75	--
Unwrought:					
Refined lead	448,000	45,200	32,900	406,000	34,500
Refined lead containing antimony as the principal alloying element (lead content)	45,200	2,720	2,300	27,000	2,040
Lead alloys (lead content)	18,600	1,920	1,090	23,200	1,350
Other (lead content)	50,800	4,150	3,860	44,000	4,130
Total	563,000	54,000	40,200	501,000	42,000
Wrought:					
Bars, rods, profiles, and wire	1,020	152	235	3,420	206
Pipes and tubes, including fittings	29	2	5	77	--
Plates, sheets, strip, foil	1,740	131	122	1,770	129
Other	4,090	263	103	2,770	167
Total	6,890	547	464	8,030	502
Powders and flakes	203	2	49	315	38
Tetraethyl lead and tetramethyl lead	716	1	12	139	46
Waste and scrap:					
Spent lead-acid storage batteries for starting engines (units)	1,050,000	27,600	91,300	528,000	1,670,000
Lead waste and scrap obtained from lead-acid storage batteries (lead content)	1,660	137	383	2,320	125
Other lead waste and scrap (lead content)	2,450	88	464	2,100	360

¹Data are rounded to more than three significant digits; may not add to totals shown.

²May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 10
U.S. IMPORTS FOR CONSUMPTION OF UNWROUGHT LEAD, BY
COUNTRY OR LOCALITY¹

(Metric tons, lead content)

Material and country or locality of origin	2018 ²	2019 ²		January– December	2020 January
		January	December		
Refined lead:					
Argentina	6,050	330	376	4,300	428
Australia	2,780	--	--	--	--
Brazil	15,500	401	2,950	9,920	2,120
Burma	100	--	--	1,400	--
Canada	148,000	13,800	15,200	159,000	13,000
Chile	100	--	--	--	--
China	--	--	--	101	--
Colombia	491	--	--	801	--
Dominican Republic	250	25	--	50	--
Ecuador	10,900	1,050	1,830	19,800	1,630
Germany	--	--	--	50	--
Honduras	199	--	--	--	--
Hong Kong	--	--	--	200	--
India	23,200	99	447	4,090	1,630
Israel	1,820	458	--	2,200	--
Kazakhstan	5,130	--	--	17,800	--
Korea, Republic of	106,000	18,800	2,520	76,000	1,720
Mexico	107,000	9,640	7,060	96,700	6,770
Nigeria	47	--	397	994	771
Panama	125	--	--	400	--
Peru	3,350	--	475	3,030	425
Russia	6,460	--	1,180	6,070	5,790
South Africa	174	20	--	20	--
Sri Lanka	625	--	--	--	200
Thailand	7,500	445	--	1,250	--
United Kingdom	485	--	98	404	--
Venezuela	2,460	25	400	2,080	24
Total	448,000	45,200	32,900	406,000	34,500
Other unwrought lead:³					
Argentina	1,920	--	282	2,080	--
Bolivia	--	--	--	183	--
Brazil	--	--	149	276	81
Canada	93,100	7,990	6,600	86,800	7,260
Chile	1,780	--	--	--	--
China	--	--	--	2	--
Colombia	1,040	--	--	--	--
Costa Rica	4,470	19	--	19	--
Ecuador	125	66	45	378	--
Germany	--	--	--	1	--
Honduras	2,490	--	--	--	--
India	93	18	37	321	37
Korea, Republic of	--	--	--	14	--
Mexico	8,150	678	39	2,700	132
Panama	199	--	--	--	--
Paraguay	--	--	49	49	--
Peru	50	--	--	221	--
Russia	209	--	--	(4)	--
South Africa	95	--	--	--	--
Sweden	--	--	--	11	--
Taiwan	--	--	--	(4)	--
United Kingdom	--	--	--	1,040	--
Venezuela	885	27	52	185	--
Total	115,000	8,800	7,250	94,300	7,510
Grand total	563,000	54,000	40,200	501,000	42,000

-- 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 the lead content (Quantity 2) of Harmonized Tariff Schedule of the United States (HTS) codes 7801.91.0000, 7801.99.9030, 7801.99.9050. Excludes bullion.

⁴Less than ½ unit.

TABLE 11
LONDON METAL EXCHANGE (LME) STOCKS OF LEAD, END OF PERIOD

(Metric tons)

Period	United States	Asia	Europe	Total
2019:				
January	--	19,275	53,175	72,450
February	--	22,625	54,250	76,875
March	--	22,225	56,525	78,750
April	--	22,075	52,350	74,425
May	--	20,600	48,800	69,400
June	--	19,050	46,700	65,750
July	--	27,850	50,650	78,500
August	--	30,875	46,650	77,525
September	--	27,425	42,075	69,500
October	--	27,400	42,675	70,075
November	--	26,250	40,875	67,125
December	--	26,050	40,150	66,200
2020, January	--	26,000	40,800	66,800
-- Zero.				

Source: London Metal Exchange, Ltd.