

# Michigan Iron Ore Shipments Through 1974

## Introduction

The succeeding pages of this report present detailed statistical data pertaining to shipments of iron ore from Michigan's mines by range, year, and total tonnage. While this information is informative to interested readers, the real significance is the fact that sometime during 1975 cumulative shipments of iron ore from Michigan mines exceeded 1 billion tons (one thousand million tons).

Almost half of our earth's crust is made up of oxygen with another quarter composed of silicon. Aluminum, at 7.51 percent, is the most abundant metal followed by iron at 4.7 percent. One might assume then that iron is plentiful and its availability to man would present no problem. While it is true that iron is abundant within the earth's crust, the major portion is contained within the silicate lattice of common rock-forming minerals. In this form, there is no current technology to extract iron from such minerals at a price we would be willing to pay for large-scale use. Fortunately, natural processes at work within certain restricted geologic eras and ancient environments have concentrated iron into an economically usable form and extractable grade.

The major iron formations of the world are found within crystalline shield rocks collectively assigned to the Precambrian Era. Such Precambrian rocks are found exposed in the western portion of the Northern Peninsula of Michigan where they commonly include deposits of banded sedimentary iron formation. This type of rock consists of thin layers of iron minerals alternating with thin layers of silica.

In 1844, when William A. Burt made Michigan's first iron ore discovery on the Marquette Iron Range, this unusual rock formation had been in place for more than 2 billion years. As with other natural resources, it was of little benefit to man until utilized to his advantage. This iron resource was put to use as soon as possible after discovery to supply the steel for the nation's burgeoning industrial revolution. Discovery of iron ore on other iron ranges in Michigan followed with finds on the Menominee Range in 1848 and the Gogebic Range in 1883.

It is difficult to imagine the extent of our economic and technologic progress without the availability and use of these vast iron resources. Iron and steel are the most basic and widely used of the metals and will continue to remain in this preeminent position. Precambrian iron formations providing low-cost iron ore in abundance undoubtedly were a major factor in shaping our nation's superior industrial capabilities.

Shipment of one billion tons of iron ore is a significant milestone in Michigan's mineral contribution to the economic well-being of the nation.

Table 1 - **Iron Ore Shipments In Michigan Through 1974**

Year	Marquette Range	Menominee Range	Gogebic Range	Total Tons
???	73,553			73,553
1854	3,000			3,000
1855	1,449			1,449
1856	6,790			6,790
1857	25,646			25,646
1858	22,876			22,876
1859	68,832			68,832
1860	114,401			114,401
1861	49,909			49,909
1862	124,169			124,169
1863	203,055			203,055
1864	247,059			247,059
1865	198,758			198,758
1866	296,713			296,713
1867	465,504			465,504
1868	506,505			506,505
1869	649,097			649,097
1870	856,245			856,245
1871	818,966			818,966
1872	949,073			949,073
1873	1,174,972			1,174,972
1874	935,604			935,604
1875	898,974			898,974
1876	995,224			995,224
1877	1,013,144	10,405		1,023,51.9
1878	1,039,368	82,824		1,122,192
1879	1,135,396	247,135		1,382,531
1880	1,384,010	537,164		1,921,174
1881	1,579,834	541,076		2,120,910
1882	1,829,394	894,802		2,724,196
1883	1,305,425	1,013,688		2,319,113
1884	1,558,034	861,660	1,022	2,420,716
1885	1,430,422	650,003	114,122	2,194,547
1886	1,627,380	832,749	656,041	3,116,170
1887	1,851,417	1,060,035	1,053,305	3,964,757
1888	1,923,733	986,698	1,249,415	4,159,846
1889	2,642,814	1,486,009	1,555,989	5,684,812
1890	3,000,805	1,944,435	2,226,012	7,221,252
1891	2,512,242	1,640,764	1,559,249	5,712,255

Year	Marquette Range	Menominee Range	Gogebic Range	Total Tons
1892	2,665,169	1,964,140	2,553,035	7,182,344
1893	1,837,140	1,305,272	1,228,138	4,370,550
1894	2,060,260	960,302	1,668,729	4,689,291
1895	2,093,791	1,692,098	2,126,090	5,911,979
1896	2,606,790	1,431,624	1,434,006	5,472,420
1897	2,712,947	1,801,136	1,865,130	6,379,213
1898	3,119,461	2,177,915	2,072,356	7,369,732
1899	3,738,192	3,109,522	2,444,362	9,292,076
1900	3,479,242	3,172,123	2,444,169	9,095,534
1901	3,246,611	3,525,914	2,419,144	9,191,669
1902	3,865,350	4,369,004	3,022,438	11,256,792
1903	3,040,092	3,648,639	2,465,263	9,153,994
1904	2,851,745	2,919,779	2,042,398	7,813,922
1905	4,235,651	4,253,508	3,215,352	11,704,511
1906	4,057,226	4,934,114	3,113,980	12,105,320
1907	4,388,073	4,785,773	3,093,083	12,266,929
1908	2,413,575	2,538,802	2,348,737	7,301,114
1909	4,252,622	4,593,407	3,402,567	12,248,596
1910	4,392,726	3,909,461	3,663,438	11,965,625
1911	2,835,902	3,815,908	2,258,666	8,910,476
1912	4,202,723	4,561,833	4,103,532	12,868,088
1913	3,967,918	4,839,140	3,873,517	12,680,575
1914	2,491,857	3,133,672	3,164,420	8,789,949
1915	4,106,202	4,822,157	4,613,190	13,541,549
1916	5,409,582	6,179,920	7,340,582	18,930,084
1917	4,874,150	5,928,141	7,052,579	17,854,870
1918	4,354,297	6,108,886	7,150,636	17,613,819
1919	2,922,245	4,314,536	5,572,484	12,879,265
1920	4,608,323	6,428,149	7,956,459	18,992,931
1921	1,116,560	1,584,466	2,269,827	4,970,853
1922	2,818,374	4,079,444	5,542,571	12,440,389
1923	3,891,801	4,830,222	5,557,508	14,279,531
1924	3,174,835	3,836,826	4,329,803	11,341,464
1925	4,197,846	5,199,031	5,961,215	15,358,092
1926	4,435,029	5,946,377	6,428,754	16,810,160
1927	4,147,777	5,213,256	5,254,037	14,615,070
1928	4,298,717	4,841,637	5,151,465	14,291,819
1929	5,409,712	5,566,305	5,912,431	16,889,448
1930	3,633,968	3,546,544	3,976,968	11,157,480
1931	1,809,445	1,461,443	2,286,362	5,577,250
1932	357,255	307,721	313,388	978,364
1933	2,807,325	1,510,985	1,757,587	6,075,897

Year	Marquette Range	Menominee Range	Gogebic Range	Total Tons
1934	2,473,847	1,335,027	1,690,897	5,499,771
1935	3,265,537	1,634,022	2,341,985	7,241,544
1936	4,627,889	2,163,679	3,710,468	10,502,036
1937	5,747,812	2,647,042	4,243,391	12,638,245
1938	1,476,257	978,419	1,652,904	4,107,580
1939	4,907,623	2,157,122	4,175,150	11,239,895
1940	5,920,463	3,101,751	4,749,065	13,771,279
1941	6,254,391	4,127,964	4,818,966	15,201,321
1942	6,540,731	4,927,609	4,691,940	16,160,280
1943	5,601,418	4,880,679	4,094,722	14,576,819
1944	4,790,177	4,876,210	4,067,879	13,734,266
1945	4,585,436	4,240,546	3,007,935	11,833,917
1946	3,270,344	2,590,499	2,619,349	8,480,192
1947	5,543,126	3,667,547	3,709,856	12,920,529
1948	4,898,044	4,085,777	3,914,634	12,898,455
1949	4,253,381	3,587,067	3,156,466	10,996,914
1950	4,055,002	4,144,431	3,827,323	12,926,756
1951	5,647,423	4,707,931	3,318,519	13,673,873
1952	4,516,509	4,277,880	3,003,861	11,798,250
1953	5,571,502	4,620,902	3,188,352	13,380,756
1954	3,675,429	3,669,710	2,377,743	9,722,882
1955	6,639,966	4,325,625	3,182,532	14,148,123
1956	5,689,013	3,889,213	2,958,076	12,536,302
1957	5,992,752	4,296,567	2,837,407	13,126,726
1958	3,722,139	3,095,239	1,393,528	8,210,906
1959	3,529,949	2,477,980	1,250,786	7,258,715
1960	4,944,715	4,121,165	1,889,986	10,955,866
1961	4,182,973	3,885,902	1,361,855	9,430,730
1962	4,500,447	3,462,371	1,480,383	9,443,201
1963	5,850,347	4,304,194	812,630	10,967,171
1964	7,944,840	4,624,274	1,403,137	13,972,251
1965	8,925,165	4,360,694	772,569	14,058,428
1966	9,659,989	4,327,914	364,407	14,352,310
1967	10,164,895	3,630,145	238,851	14,033,891
1968	9,366,744	3,448,687		12,815,431
1969	11,162,671	3,389,741		14,552,412
1970	10,335,545	2,924,875		13,260,420
1971	9,330,521	2,834,443		12,164,964
1972	9,250,747	2,577,402		11,828,149
1973	9,940,525	2,373,631		12,314,156
1974	9,008,916	2,521,880		11,530,796
<b>Total</b>	<b>427,183,498</b>	<b>311,232,305</b>	<b>255,224,103</b>	<b>993,639,906</b>

**Table 3 - Marquette Iron Range, Marquette District, Marquette County**

Mine	Gross Tons	Years of Shipments
Adams	242,348	1913 - 1924
American - Boston	1,846,643	1880 ... 1922
Athens - Bunker Hill	16,527,250	1918 - 1966
Barasa	8,768	1903
Barnes - Hecker	419,433	1923 - 1927
Beaufort	354,654	1882 ... 1905
Bessie	59,097	1891 ... 1906
Blueberry	6,077,871	1929 - 1955
Cambria - Jackson	16,165,154	1874 - 1959
Champion	7,012,911	1868 ... 1967
Chase Group	305,263	1883 ... 1916
Cleveland Lake	16,315,316	1854 - 1927
Cliffs Shaft	28,960,406	1868 - 1972
Curry	16,671	1889
Detroit	140,841	1882 - 1890
East Champion	76,002	1873 - 1883
Edison	893	1889
Empire	768,474	1907 - 1928
Empire (Concentration)	32,968,452	1964 - 1974
Excelsior	17,939	1872 - 1879
Fitch	40,263	1890 - 1892
Foster	351,713	1868 - 1903
Foxdale	31,447	1901 - 1905
Gibson	16,357	1885 - 1887
Goodrich	49,754	1873 - 1882
Greenwood	2,365,816	1932 - 1963
Hortense	30,574	1887 - 1890
Howell - Hoppock	2,206	1873 - 1874
Humboldt	1,368,546	1865 ... 1917
Humboldt (Concentrator)	9,433,305	1954 - 1972
Imperial	2,057,781	1882 ... 1933
Jackson	4,357,256	1846 - 1924
Lackawawanna	17,780	1886 - 1888
Lake Angeline	9,319,679	1864 - 1922
Lake Sally	35,434	1865 - 1916
Lake Superior Group	25,103,189	1858 - 1937
Lloyd	9,650,958	1911 - 1957
Lucy	622,797	1870 - 1913
Maas	21,281,386	1907 - 1967
Marquette	268,071	1860 - 1892
Mary Charlotte	6,918,663	1872 - 1948

Mine	Gross Tons	Years of Shipments	Mine	Gross Tons	Years of Shipments
Mather	47,437,707	1888 ... 1974	New York	1,124,182	1864 - 1919
Michigamme	935,880	1872 - 1905	Nonpareil	23,395	1882 - 1887
Michigan	4,439	1872 - 1873	Norwood	5,753	1887 - 1888
Milwaukee - Davis	533,022	1879 - 1915	Ogden	657,024	1897 - 1928
Mitchell	233,750	1872 - 1913	Ohio	477,803	1907 - 1920
Morris	11,013,916	1912 - 1961	Ohio (Concentration)	745,620	1952 - 1962
National	155,884	1878 - 1884	Pascoe	59,806	1882 - 1886
Negaunee	22,735,479	1887 - 1949	Pendill	45,993	1878 - 1884
Negaunee Construction Works	12,708	1882 - 1886	Phoenix	59,114	1881 - 1887
New England	110,506	1866 - 1873	Pioneer	15,409	1886 - 1888
			Portland	272,036	1909 - 1915

... indicate that there was one or more years without production during the time frame listed.