

Mining Tax Guide 2018



2018 Distribution of Production Tax

(Based on 2017 Production Year)

Total Production Tax — \$93,792,543*

Production Tax per taxable ton — \$2.701. Taxable tonnage — 32,109,738 tons.

Cities and Townships \$10,998,266 34.2 cpt	School Districts \$20,440,406 63.6 cpt	Counties \$11,885,958 37.0 cpt	Property Tax Relief and Misc. \$11,064,355 34.5 cpt	Department of Iron Range Resources & Rehabilitation (IRRR) \$30,790,316 95.9 cpt	Other \$8,613,242 26.8 cpt
City and Township Mining & Conc Fund** \$1,867,542 5.8 cpt	Taconite School \$0.0343 Fund** \$1,382,880 4.3 cpt***	Regular County Fund** \$7,267,637 22.6 cpt	Taconite Property Tax Relief \$11,064,355 34.5 cpt	IRRR Fund** \$3,151,470 9.8 cpt	Taconite Economic Development Fund \$8,430,530 26.2 cpt
Township Fund \$1,060,065 3.3 cpt	Regular School \$0.2472 Fund** \$8,823,468 27.5 cpt***	County Road and Bridge Fund** \$3,833,944 12.0 cpt		IRRR Fixed Fund \$1,252,520 3.9 cpt	
Taconite Municipal Aid** \$5,707,956 17.8 cpt	Taconite Railroad \$1,106,935 3.4 cpt ***	Taconite Railroad \$784,377 2.4 cpt		Iron Range Higher Education Acct. \$1,605,486 5.0 cpt	Range Association of Municipalities & Schools** \$118,494 0.4 cpt
Taconite Railroad \$591,142 1.8 cpt	Building Maintenance Fund \$1,284,390 4.0 cpt			Producer Grant & Loan Fund \$2,866,569 8.9 cpt	Hockey Hall of Fame \$64,218 0.2 cpt
Mining Effects** \$1,614,524 5.0 cpt	Taconite Referendum** \$6,178,596 19.2 cpt			Educational Revenue Bonds \$3,990,034 12.4 cpt	
Special City/ Township Fund \$157,055 0.5 cpt	School Bond Payments \$1,379,870 4.3 cpt			Iron Range School Cons. & Cooperatively Operated School Account \$7,453,570 23.2 cpt	
	Taconite Levy Shortfall Payment \$284,267 0.9 cpt			Taconite Env. Protection Fund \$7,508,487 23.4 cpt	Guarantee Fund M.S. 298.225 M.S. 298.293
				Douglas J. Johnson Economic Protection Trust Fund \$2,962,180 9.2 cpt	

* Includes \$7,064,142 from the State General Fund (22.0 cpt).

** Payments to the funds are guaranteed at a percentage level of the base year (1983 or 1999) by M.S. 298.225 for local aids and M.S. 298.293 for Property Tax Relief.

cpt = cents per taxable ton (cpt totals may not add up due to rounding).

Table of Contents

2018 Distribution of Production Tax	Inside front cover
Minerals and Mining Agencies	i
Overview	1
Production Tax	3
Occupation Tax	23
Ad Valorem Tax on Auxiliary Mining Lands for Taconite Operations	27
Ad Valorem Tax on Unmined Taconite	28
Ad Valorem Tax on Unmined Natural Iron Ore	29
Ad Valorem Tax on Taconite Railroads	31
Ad Valorem Tax on Severed Mineral Interests	32
Taxes on Nonferrous Minerals	34
Glossary of Terms	35
Mine Locations and Production Capacity	37
Distribution of Mining Taxes	Last page

Data Charts

Figure

1	Iron Ore Production Comparison	1
2	Minnesota Taconite Production Summary	2
3	Minnesota Taxes Levied on Mining-Related Activity	2

Production Tax

4	Distribution by Fund/Recipient	12
5	2018 Distributions by Fund to Cities and Townships	13
6	2018 Distributions by Fund to School Districts	17
7	School Bond Payments	18
8	2018 Distributions by Fund to Counties	18
9	2017 Taxable Production and Tax by Mine	19
10	2017 Production Tonnage by Product Type	19
11	Changing Trends in Minnesota Taconite Production	20
12	Rate History and Index Summary	21
13	Taconite Produced and Production Tax Collected	21
14	World Direct Reduced Iron Production	22

Figure

Occupation Tax

15	Employment and Mine Value by Mine	24
16	Occupation Tax by Company	25
17	Occupation Tax by Product Type	25
18	Occupation Tax Averages—Taconite Only	26

Ad Valorem Taxes

19	Ad Valorem Tax on Unmined Taconite	28
20	Minimum Valuation Rates on Unmined Natural Iron Ore	30
21	Ad Valorem Tax Payable on Unmined Natural Iron Ore	30
22	Ad Valorem Tax Assessed on Taconite Railroads	31
23	Ad Valorem Tax on Severed Mineral Interests: Collection and Distribution	32

Figures are available in Excel format on our website. Go to www.revenue.state.mn.us and type **Mining Statistics** in the Search Box.

Subscribe for email updates

To be notified when new mining data is posted on the website, go www.revenue.state.mn.us and type **Mining** in the Search box. Select Mineral Taxes then select Subscribe to Mining Taxes updates and information.

The *Minnesota Mining Tax Guide* is available on our website at www.revenue.state.mn.us.

Minerals and Mining Agencies

Minnesota Department of Revenue

600 North Robert Street, St. Paul, MN 55101 mining.taxes@state.mn.us

Cynthia Bauerly, Commissioner 651-556-6003
Gina Amacher, Director, Special Taxes Division 651-556-6781
Steven Helmen, Minerals Taxes Supervisor 651-556-6848
steve.helmen@state.mn.us

Virginia Office

230 1st Street S., Suite 102, Virginia, MN 55792 218-744-7424
Fax: 218-742-9153

Robert Wagstrom, Production Tax bob.wagstrom@state.mn.us

Iron Mining Association of Minnesota

324 West Superior Street: Suite 502 218-722-7724
Duluth, MN 55802 Fax: 218-720-6707

Kelsey Johnson, President kjohnson@taconite.org

Minnesota Department of Iron Range Resources & Rehabilitation

P. O. Box 441 218-735-3000
4261 Highway 53 South Toll Free 1-800-765-5043
Eveleth, MN 55734 Fax: 218-735-3047

Mark Phillips, Commissioner mark.phillips@state.mn.us
Steve Peterson, Exec. Director of Development steve.peterson@state.mn.us
Marianne Bouska, Chief Operating Officer marianne.bouska@state.mn.us
Al Becicka, Legal Counsel al.becicka@state.mn.us
Brian Hiti, Senior Policy Advisor – Mining brian.hiti@state.mn.us

Mining & Mineland Reclamation

1003 Discovery Drive, Chisholm, MN 55719 218-274-7000
Fax: 218-274-7002

Linda Johnson
Mining and Reclamation Program Supervisor linda.l.johnson@state.mn.us

Minnesota Department of Natural Resources (DNR)

500 Lafayette Road, St. Paul, MN 55155 651-259-5555
Tom Landwehr, Commissioner Fax: 651-296-4779

DNR Lands & Minerals Division

500 Lafayette Road, St. Paul, MN 55155 651-259-5959
Fax: 651-296-5939

Jess Richards, Director
Kathy Lewis, Assistant Director
Dennis Martin, Mineral Potential 651-259-5405
Fax: 651-297-3517

Lands & Minerals Division

1525 Third Avenue East, Hibbing, MN 55746 218-231-8484
Fax: 218-262-7328

Peter Clevenstine, Assistant Director 218-231-8443

Natural Resources Research Institute Toll Free 1-800-234-0054

University of Minnesota, Duluth
5013 Miller Trunk Highway, Duluth, MN 55811 218-788-2694
Fax: 218-788-2619

Rolf Weberg, Executive Director
George Hudak, Director, Minerals Division
Larry Zanko, Senior Research Fellow

Coleraine Minerals Research Laboratory

P.O. Box 188, One Gayley Ave, Coleraine, MN 55722

Richard Kiesel, Director 218-667-4201

St. Louis County Inspector of Mines

307 South First St, Virginia, MN 55792 218-742-9840
Fax: 218-471-7270

Steve Manninen, Inspector of Mines

Overview

The *Minnesota Mining Tax Guide* is published to identify all Minnesota mining-related taxes paid by the mining industry.

Production Tax

The Production Tax is the largest tax paid by the ferrous mining industry. It is a major source of revenue to the counties, municipalities and school districts within the Taconite Assistance Area. The Production Tax distributed in 2018 is the tax due for the 2017 production year. The tax rate for concentrates and pellets produced in 2017 was \$2.701 per taxable ton. An additional tax of three cents per ton is imposed for each 1 percent that the iron content exceeds 72 percent. The taxable tonnage for 2017 is the average tonnage produced in 2015, 2016 and 2017. If this tax is imposed on other iron-bearing material, it is applied to the current-year production.

The inside front cover illustrates how the Production Tax is distributed. It shows both the cents per ton (cpt) distribution and the total amount distributed to various funds. The funds to which the Production Tax are distributed are explained on pages 4–9.

Occupation Taxes

Minnesota's Occupation Tax applies to mining and producing both ferrous minerals, such as taconite and iron ore, and nonferrous minerals, such as silver and copper. To date, only mining of ferrous minerals has occurred in Minnesota. More information relating to the Occupation Tax attributable to iron ore and taconite mining is available on pages 23–26.

State Taxes Incidental to Mining

Other state taxes impacted by mining include Sales and Use Tax and withholding on royalties. Go to revenue.state.mn.us and type **Mining** in the Search box. Follow the links to Sales Tax Fact Sheet 147 (Taconite and Iron Mining) or Withholding on Mining and Exploration Royalties.

Aggregate Material Tax

This tax is administered at the county level. For more information, go to www.revenue.state.mn.us and type **Aggregate** in the Search box.

County Taxes

Other Taconite and Iron Ore Ad Valorem (Property) taxes are paid directly to the counties. These are Property taxes assessed on auxiliary mining lands, unmined taconite, unmined natural iron ore, taconite railroads and severed mineral interests. These taxes are explained on pages 28–33.

Taxes on Nonferrous Minerals

While not subject to the Production Tax, nonferrous mining operations are subject to Occupation Tax, Net Proceeds Tax, and Ad Valorem Tax. These taxes are explained on page 34.

Figure 1
Iron Ore Production Comparison

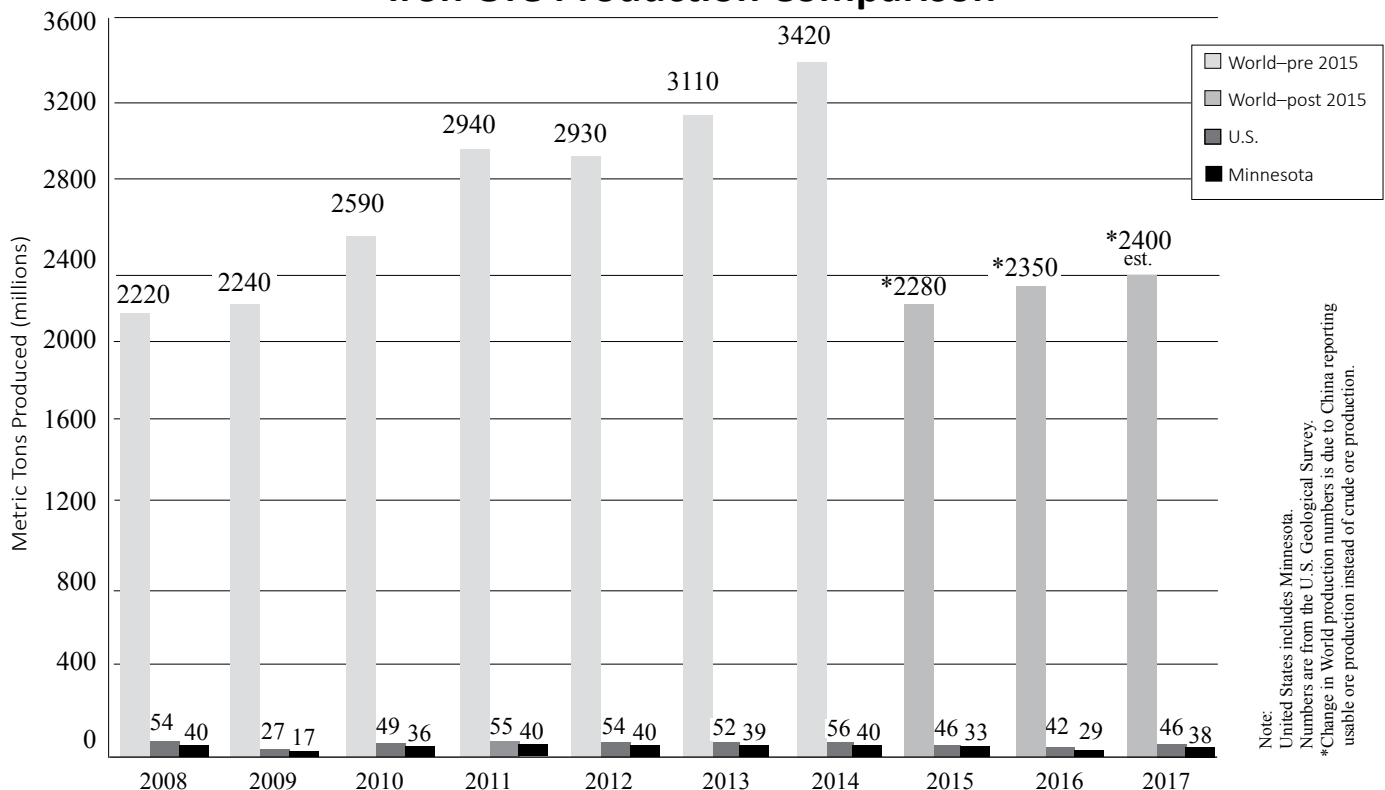


Figure 2
Minnesota Taconite Production Summary (2008–2017)

Year	ArcelorMittal	Hibbing Taconite	Northshore	U.S. Steel–Keewatin Taconite	U.S. Steel–Minntac	United Taconite	Total
2008	2,571,803	8,058,366	5,299,304	4,663,703	13,588,239	4,986,395	39,167,810
2009	1,364,783	1,693,512	3,081,289	74,680	7,087,356	3,777,486	17,079,106
2010	2,604,162	5,697,457	4,599,796	4,883,724	12,226,427	5,028,482	35,040,048
2011	2,625,659	7,604,595	5,591,721	4,969,039	13,047,915	5,095,221	38,934,150
2012	2,658,023	7,753,828	5,140,985	5,144,477	13,063,450	5,220,491	38,981,254
2013	2,645,243	7,312,252	3,776,603	4,956,740	13,448,911	5,081,692	37,221,441
2014	2,508,625	7,338,620	5,123,277	5,153,784	13,705,811	4,823,478	38,653,595
2015	2,490,099	7,760,305	4,168,373	1,702,877	11,491,695	3,011,800	30,625,149
2016	2,585,337	7,928,200	3,153,811	85,899	12,695,781	1,535,192	27,984,220
2017	2,592,807	7,456,883	5,162,815	4,466,520	13,418,112	4,622,710	37,719,847

Note:

- Historical data is available on our website.
- All weights are dry without flux.
- Production Tax report tonnages are used.

Figure 3
Minnesota Taxes Levied on Mining-Related Activity

Production Years	Unmined Taconite Tax	Use Tax (net)	Production Tax	Occupation Tax ¹	Railroad Gross Earnings Tax ²	Total Taxes	Total Tons Produced ³	Total Taxes per Ton
2008	466,991	9,554,673	89,630,648	23,388,181	8,977	123,049,470	39,167,810	3.14
2009	238,274	(2,835,766)	74,255,473	340,000	9,612	72,007,593	17,079,106	4.22
2010	239,518	17,101,895	72,441,708	12,617,000	10,137	102,410,258	35,122,570*	2.92
2011	228,517	24,673,718	73,287,396	22,055,000	10,725	120,255,356	39,120,810*	3.07
2012	297,390	2,579,876	94,204,746	21,817,000	13,632	118,912,644	39,680,723	3.00
2013	279,594	24,636,760	101,214,301	15,776,560	34,082	141,941,297	38,481,228	3.69
2014	291,298	10,873,758	102,369,609	16,401,555	30,352	129,966,572	39,835,029	3.26
2015	299,722	(11,104,636)**	98,728,605	6,370,000	26,466	94,320,157	32,664,481	2.89
2016	296,597	(13,958,786)**	89,141,361	4,599,000	20,600	80,558,968	29,087,625	2.77
2017	281,460	4,857,150	86,728,401	13,051,000	15,394	104,933,405	37,719,847	2.78

Note:

Historical data is available on our website.

Taxes often levied (assessed) for one year and paid in the following year.

1 Amount paid (unaudited). Does not include adjustments.

2 Taconite railroads are taxed on an ad valorem basis.

3 Tons are dry without flux .

* Includes tonnage produced by Mesabi Nugget but not taxed under Production Tax.

** The Use Tax law changed mid 2015. Manufacturers no longer pay Use Tax on equipment used in the production process. As a result, more tax was refunded than collected.

Production Tax

(M.S. 298.24, 298.27 and 298.28)

Definition

The Production Tax is a severance tax paid on iron concentrates or pellets produced by the companies. It is paid in lieu of Ad Valorem (Property) taxes on taconite and lands containing taconite. Land and structures used in the production of the products are also excluded from Property Tax, with some exceptions. Electric power plants principally devoted to the generation of power for taconite mining and concentrating are considered to be used in the production of taconite (or direct reduced ore) and are covered by the *in lieu exemption* for Property taxes. If part of the power is used for other purposes, that proportion of the power plant is subject to the general Property Tax. The power plant must be owned by a company subject to Production Tax to qualify for the exemptions.

Tax Rate

The Production Tax rate for any given year is determined by multiplying the prior year's rate by the percentage change in the Gross Domestic Product Implicit Price Deflator (GDIPI) from the fourth quarter of the second preceding year to the fourth quarter of the preceding year. The U.S. Department of Commerce publishes the GDIPI monthly in *Survey of Current Business*. This escalator takes effect each year unless the rate is frozen or changed by the Minnesota State Legislature. The tax rate for the 2017 production year was \$2.701 per taxable ton. For concentrates produced in 2018, the rate escalated to \$2.751 per taxable ton.

Taxable Tons

The Production Tax is levied on taxable tons, which are the average tons produced during the current year and the previous two production years. This eliminates the peaks and valleys of tax payments by the taconite producers and distribution to the tax recipients. The result is a more stable tax base resembling a Property Tax. The tax for a producer of other iron bearing material is based on the current year production.

Distribution

Under Minnesota law, Production Tax revenues are distributed to various cities, townships, counties and school districts within the Taconite Assistance Area. This is an area comprising the present taconite mining areas plus areas where natural ore was formerly mined.

Funds are also allocated to the Minnesota Department of Iron Range Resources & Rehabilitation, which administers the Taconite Environmental Protection Fund (TEPF), the Douglas J. Johnson Economic Protection Trust Fund (DJJ) and the Taconite Economic Development Fund (TEDF) and other programs for the range cities, townships, schools, and the taconite industry. You can find more information at mn.gov/irrrb.

Payment Dates and Method

Fifty percent of the tax is due on or before February 24 and the remaining 50 percent is due on or before August 24. The Department of Revenue must notify each producer of its tax obligation for the year before February 15.

Each producer must make payments to six counties and Iron Range Resources & Rehabilitation on or before the due date. Payments are made to Aitkin, Cook, Crow Wing, Itasca, Lake and St. Louis Counties, and to Iron Range Resources & Rehabilitation. The county auditors then make payments to cities, townships, school districts, and other recipients.

Taconite Economic Development Fund (M.S. 298.227)

The Taconite Economic Development Fund (TEDF) was first created for production year 1992 at a rate of 10.4 cents per taxable ton.

The rate and qualifications have changed several times since the fund was created and is available only to Minnesota taconite pellet producers.

Currently, each pellet producer has two potential sources of TEDF money:

1. **Taxable production** — The Production Tax amount credited to each producer's share of the TEDF is 25.1 cpt provided they make a matching investment of at least equal size. (No distribution is made under this clause if the total industry production for the year is less than 30 million tons.)
2. **Chips, fines and concentrate** — An additional amount equal to 50 percent of the tax for chips, fines or concentrate sold not exceeding 5/16-inch, is allocated to each company's share of the TEDF. The total amount may not exceed \$700,000 for all companies. If the total claimed exceeds \$700,000, each company's share will be prorated. The determination of this allocation is based on current production year **sales** of chips, fines and concentrate—not the three-year average of production. Sales of crushed pellets *do not* qualify for this credit. [M.S. 298.28, subd. 9a(b).]

Therefore, each pellet producer is eligible to receive 25.1 cents per taxable ton plus an additional amount based on current year tons of chips and fines sold.

Fluxed Pellets

Fluxed pellets have limestone or other basic flux additives combined with the iron concentrates before pelletizing. Some facilities produce fluxed pellets while others produce a partially fluxed pellet containing a low percentage of limestone additives.

Production Tax (cont.)

A flux credit is allowed against Production Tax. M.S. 298.24, subd. 1 (f) allows the weight of flux added to be subtracted from the pellet weight for Production Tax purposes. The taxable weight is the dry weight, less the weight of the flux. The weight of the flux is determined by a metallurgical calculation based on the analyses of the finished pellet, the concentrate and the flux stone. All tables in the *Minnesota Mining Tax Guide* with production statistics use an equivalent or calculated weight for fluxed pellets.

Occupation Tax is based on iron units and uses the full dry weight including flux.

Pellet Weighing

Pellet and concentrate tonnages are reported on a dry weight basis after the flux credit has been applied.

Definition of Taconite Tax Relief Area

One common prerequisite exists for all taconite aids and grants; the recipient must be within the geographic confines of the Taconite Tax Relief Area or the Taconite Assistance Area. This is defined by state laws (M.S. 273.134 and M.S. 273.1341) as follows:

“Taconite Tax Relief Area” means the geographic area contained within the boundaries of a school district that meets the following qualifications:

- (1) It is a school district in which the assessed valuation of unmined iron ore on May 1, 1941, was not less than 40 percent of the assessed valuation of all real property and whose boundaries are within 20 miles of a taconite mine or plant; or
- (2) It is a school district in which, on Jan. 1, 1977, or the applicable assessment date, there is a taconite concentrating plant or where taconite is mined or quarried or where there is located an electric generating plant which qualifies as a taconite facility.

Definition of Taconite Assistance Area

A “Taconite Assistance Area” means the geographic area that falls within the boundaries of a school district that contains a municipality in which the assessed valuation of unmined iron ore on May 1, 1941, was not less than 40 percent of the assessed valuation of all real property, or contains a municipality in which there was a taconite facility or taconite power plant on January 1, 1977. Any area within the Taconite Tax Relief Area is also considered to be within the Taconite Assistance Area.

State Appropriation (M.S. 298.285)

The Department of Revenue determines a state aid amount equal to a tax of 22 cents per taxable ton of iron ore concentrates. It is distributed under M.S. 298.28 as if the aid were Production Tax revenues. The aid is appropriated from the state’s General Fund.

2018 Legislation

The 2018 legislature made the following changes:

- (1) Iron Range School Consolidation and Cooperatively Operated School Account: The cumulative amount distributed in 2017 due to the increase in the tax rate will also be distributed in 2018 and 2019.
- (2) Only Minnesota taconite pellet producers will now qualify for distributions from the Taconite Economic Development Fund.
- (3) Ten cents per taxable ton will be transferred from the Taconite Property Tax Relief account to the Iron Range Resources and Rehabilitation account after August 2018 payments are made.

For the 2023 production year and forward:

- (1) The distribution to the Iron Range School Consolidation and Cooperatively Operated School Account will be reduced from 10 cents per ton to five cents per ton.
- (2) The 10.525 cents per ton distribution to the County road and bridge fund will be increased to 15.525 cents per ton.

2018 Distribution of Funds (M.S. 298.28)

Subd. 2 – Cities and Towns Where Mining & Production is located

- (a) The Taconite Cities and Towns Fund allocates 4.5 cents per ton to cities and towns where mining and concentrating occur. Fifty percent goes to cities and townships in which mining activity occurs. The remaining 50 percent goes to cities and townships in which concentrating occurs. *Note: This is done on a company-by-company basis.*

If both mining and concentrating take place in a single taxing district, the entire 4.5 cents is allocated there. If mining occurs in more than one city or town, the revenue (2.25 cpt) is divided based on either a percentage of taconite reserves or a four-year production average. Most taconite mines have mining in two or more areas.

If concentrating is split between two or more cities or towns, the revenue (2.25 cpt) is divided by the percentage of hours worked in each. The primary crusher is considered the first stage of concentration. Distribution detail is shown in *Figure 5*.

- (b) Mining Effects — Four cents per taxable ton is allocated to cities and organized townships affected by mining because their boundaries are within three miles of a taconite mine pit that was actively mined in at least one of the prior three years. If a city or town is located near more than one mine meeting the criteria, it is eligible to receive aid calculated from only the mine producing the largest taxable tonnage. When more than one municipality qualifies for aid based on one company’s production, the aid must be apportioned among the municipalities in proportion to their populations. The money must be used for infrastructure improvement projects.

Production Tax (cont.)

- (c) If there are excess distributions from the 3.43 cent, 24.72 cent, and taconite railroad school funds after covering the levy reduction in M.S. 126C.48, subd. 8, then the excess money must be distributed to the cities and townships within the school district in the proportion that their taxable net tax capacity within the school district bears to the net tax capacity of the school district for Property taxes payable in the year prior to distribution.

Subd. 3 – Taconite Municipal Aid Account

- (a) The Taconite Municipal Aid is funded at 12.5 cents per taxable ton. The Kinney-White allocation (par. b and c) and the 0.3 cent Range Association of Municipalities and Schools (RAMS) allocation in subd. 8 are subtracted from it. The payment is made on September 15. Each city or township first receives the amount it was entitled to receive in 1975 from the Occupation Tax. The amount is then reduced according to the percentage aid guarantee provisions in M.S. 298.225. For example, if production levels mandate a 90 percent aid guarantee, then the Occupation Tax grandfather amount is also reduced to 90 percent. The remainder of the aid is distributed according to a complex formula using levies, valuation, population and fiscal need factors.

The first step in this formula is to determine the fiscal need factor (FNF). The FNF is a three-year average of the sum of the local government aid (LGA), local levy and Production Tax revenues received by the community. Next, the local effort tax capacity rate equals the fiscal need factor per capita (FNFPC) divided by 17. If the FNFPC is greater than 350, the local effort tax capacity rate (LETGR) is 350 divided by 17 plus the excess over 350 divided by 15. The minimum allowable LETGR is 8.16. The final step in this formula is to compute the distribution index (DI). The DI for a community equals its FNF minus LETGR times the adjusted net tax capacity divided by 100.

If $FNFPC \leq 350$, $LETGR = \frac{FNFPC}{17}$

If $FNFPC > 350$, $LETGR^* = \frac{350}{17} + \frac{(FNFPC - 350)}{15}$

$DI = (FNF \text{ minus } LETGR^*) \times \frac{\text{Adjusted Net Tax capacity}}{100}$

* Minimum allowable LETGR = 8.16

A DI is determined for all eligible communities. A percentage is determined by comparing the DI of a particular community to the total of distribution indexes for all eligible communities. This percentage is then multiplied by the amount of available municipal aid to determine an

amount for each community. Prior to this calculation, the Occupation Tax grandfather amounts and special aid for the city of Kinney and township of White are subtracted from the total available to the Taconite Municipal Aid Fund.

The conditions necessary for a municipality to qualify for this aid are identical to the qualifications for the 66 percent Taconite Property Tax Relief listed under subd. 6 (see page 7). The state laws governing Taconite Municipal Aid are M.S. 273.134, 298.28, subd. 1, Clause 2, and 298.282. Distribution detail is shown in *Figure 5*.

- (b) and (c) - Additional money is allocated to cities and townships if more than 75 percent of the city's assessed valuation consisted of iron ore as of Jan. 2, 1980, or if more than 75 percent of the township's assessed valuation consisted of iron ore on Jan. 2, 1982. The distribution is calculated using certified levies, net tax capacities and population. Currently, only White Township and the city of Kinney qualify.
- (d) The Township Fund was funded at 3 cents per ton for townships located entirely within the Taconite Tax Relief Area for 2009 distributions. For distributions in 2010 and subsequent years, the 3 cents is escalated in the same proportion as the Implicit Price Deflator as provided in M.S. 298.24, subd. 1. However, the escalation was frozen for distributions made in 2015 through 2017. The money is distributed to the townships on a per capita basis with a maximum of \$50,000 per township. If a township would receive more than \$50,000, the portion that exceeds \$50,000 is redistributed among the townships under \$50,000.

Subd. 4 – School Districts

- (a) A total of 32.15 cents per taxable ton is allocated under (b) and (c), plus the amount in paragraph (d).
- (b) (i) **Taconite School Fund (3.43 cents)**

A total of 3.43 cents per taxable ton for each producer is allocated to school districts in which mining and concentrating occurs. If the mining and concentrating take place in separate districts, 50 percent is allocated to the location of mining and 50 percent to concentrating. In addition, if the mining occurs in more than one school district, the 50 percent portion is further split based on either a four-year average of production or a percentage of taconite reserves. If the concentrating function of a company takes place in more than one school district, the 50 percent portion is further split according to hours worked in each district. The primary crusher, tailings basin and power plant owned by a taconite company are considered part of concentrating. When these are in different school districts from the plant, the hours-worked split is used. Distribution detail is shown in *Figure 6*.

Production Tax (cont.)

(b) (ii) School Building Maintenance Fund (4 cents)

Four cents per taxable ton is allocated to specified school districts, based on proximity to a taconite facility, to be used for building maintenance and repairs. The money allocated from each taconite facility shall be apportioned between its recipient school districts based on pupil units.

- a. Keewatin Taconite proceeds are allocated to the Coleraine and Nashwauk-Keewatin districts.
- b. Hibbing Taconite proceeds are allocated to the Chisholm and Hibbing districts.
- c. ArcelorMittal and Minntac proceeds are allocated to the Mountain Iron-Buhl, Virginia, Mesabi East and Eveleth-Gilbert districts.
- d. Northshore Mining proceeds are allocated to the St. Louis County and Lake Superior districts.
- e. United Taconite proceeds are allocated to the St. Louis County and Eveleth-Gilbert districts.

This additional money is not subject to the 95 percent levy limitations in M.S. 126C.48, subd. 8.

(c) Regular School Fund (24.72 cents)

A total of 24.72 cents per taxable ton is split among the 15 school districts in the Taconite Assistance Area. Each school district receives the amount it was entitled to receive in 1975 from the taconite Occupation Tax (under M.S. 298.32). This amount may be increased or reduced by the percentage aid guarantee provisions of M.S. 298.225. The remaining amount in the fund is distributed using an index based on pupil units and tax capacities. Generally, districts with larger tax capacities per pupil unit tend to receive a proportionately smaller amount of this fund. Eleven cents per ton of this distribution is not subject to the 95% levy limitation in M.S. 126C.48, subd. 8. Distribution detail is shown in *Figure 6*.

The index is calculated as follows: The pupil units for the prior school year are multiplied by the ratio of the average net tax capacity per pupil unit of all taconite districts to the adjusted net tax capacity per pupil unit of the district. Each district receives the portion of the distribution that its index bears to the sum of the indexes for all taconite school districts.

(d) Taconite Referendum Fund (21.3 cents)

The Taconite Referendum Fund (TRF) receives an allocation of 21.3 cents per taxable ton. Taconite school districts receive money from the fund on July 15 based on two calculations: (1) an additional \$175 per pupil unit over and above state aids by passing a special levy referendum equal to 1.8 percent of net tax capacity. The pupil units used in the computation are the greater of the previous year or the 1983-84 school year units. The fund pays the difference between the local levy and \$175 per pupil unit. (2) A second calculation equal to 22.5 percent of the amount obtained by subtracting 1.8

percent of the district's net tax capacity from the district's 2012 weighted average daily membership times the sum of (A) \$415, plus (B) the district's fiscal year 2013 referendum allowance. If any money remains in the fund, it is distributed to the Taconite Environmental Protection Fund (two-thirds) and the Douglas J. Johnson Economic Protection Trust Fund (one-third). *Note: A district receiving money from the TRF must reserve the lesser of \$25 or the amount received per pupil unit (of the \$175 authorized) for early childhood programs or outcome-based learning programs. Distribution detail is shown in Figure 6.*

- (e) Each school district is entitled to receive the amount it received in 1975 under M.S. 298.32 (Occupation Tax Grandfather).

Subd. 5 – Counties

- (a) The allocation of 21.05 cents per taxable ton to counties (subject to adjustment by M.S. 298.225) is to be distributed under subd. 5(b) through (d). The amounts listed in (b) and (d) are the statutory amounts prior to any adjustment by M.S. 298.225. Distribution detail is shown in *Figure 8*.

(b) Taconite Counties with Mining or Concentrating

An amount of 10.525 cents per taxable ton is distributed to the county in which the taconite is mined or quarried or in which the concentrate is produced (split in the same manner as taconite cities and towns), less any amount distributed in subd. 5(c). Distribution detail is shown in *Figure 8*.

(c) Counties - Electric Power Plant

If an electric power plant owned by and providing the primary source of power for a taconite plant is located in a county other than the county in which the mining and concentrating processes are conducted, one cent per ton (for that company) is distributed to the county in which the power plant is located. *This one cent is not escalated but is subject to M.S. 298.225 adjustment with variable guarantee.*

Cook County continues to receive aid based on Minnesota Power's power plant, located in Taconite Harbor, due to the guarantee provided by M.S. 298.225. For the 2017 production year, this amounted to \$78,564. The one cent per ton distribution for the 1983 base year was figured on 9,793,639 tons. The current year M.S. 298.225 guarantee percentage is always applied.

$$\text{\$0.01} \times 9,793,639 \times 80.219476\% = \text{\$78,564}$$

There is also a transfer of \$18,072 ($\{1983 \text{ base of } \$22,528\} \times 80.219476\%$) to the county fund covered in subd. 6(b). Therefore, Cook County receives a total of \$96,636 due to the power plant.

Production Tax (cont.)

(d) Taconite County Road and Bridge

Each county receives a portion of the aid that is deposited in the County Road and Bridge Fund in the same manner as taconite cities and towns. The basic allocation is 10.525 cents per taxable ton and will increase to 15.525 cents per taxable ton beginning with the 2024 distributions. It is subject to adjustment as in M.S. 298.225. Distribution detail is shown in *Figure 8*.

Subd. 6 – Taconite Property Tax Relief

(a) Taconite Property Tax Relief

The amount sent to this fund was rebased by the 2013 legislature at 34.8 cents per taxable ton for the 2013 production year. The fund will resume indexing by using the Gross Domestic Product Implicit Price Deflator beginning with the 2017 production year. The qualifications and distribution of Taconite Property Tax Relief are described in the following paragraphs.

The *Taconite Homestead Credit* reduces the tax paid by owners of certain properties located on the Mesabi and Vermillion ranges located within the Taconite Tax Relief Area. The properties receiving this credit are owner-occupied homes and owner-occupied farms.

If an owner-occupied home or farm is located in a city or town that contained at least 40 percent of its valuation as iron ore on May 1, 1941, or which had a taconite mine, processing plant, or electric generating facility on January 1, 1977, or currently has a taconite mine, processing plant, or electric generating facility, the taconite credit is 66 percent of the tax, up to a maximum credit of \$315.10 for taxes payable in 2018.

If the property is not located in such a city or town, but is located in a school district containing such a city or town, the taconite credit is 57 percent of the tax, up to a maximum credit of \$289.80.

The total amount of Taconite Property Tax Relief paid in each county and school district and an example of the calculation are available on our website.

State laws governing Taconite Property Tax Relief are contained in M.S. 273.134 to M.S. 273.136 and M.S. 298.28, subd. 6. This is guaranteed by the Douglas J. Johnson Economic Protection Trust Fund as stated in M.S. 298.293.

(b) Electric Power Plant Aid from Property Tax Relief

For any electric power plant located in another county, as described in 5(c), 0.1875 cent per taxable ton (cpt) from the Taconite Property Tax Relief Account is paid to the county. The distribution is subject to the M.S. 298.225 variable guarantee. For the 2017 production year, \$18,072 was distributed, with the entire amount coming from the M.S. 298.225 guarantee (calculation details under (c) Counties).

(c) Electric Power Plant Aid from Property Tax Relief

This subdivision allocates 0.4541 cent per LTV's taxable tonnage to the Cook County school district due to LTV's power plant in Cook County. The distribution is subject to the M.S. 298.225 guarantee at 31.2 percent or the variable rate, whichever is less. For the 2017 production year, \$21,087 was distributed. This is calculated by multiplying the 1983 base of \$67,586 x .312 = \$21,087.

Subd. 7 – Iron Range Resources & Rehabilitation

An amount of 6.5 cents per taxable ton escalated by the Gross Domestic Product Implicit Price Deflator is allocated to Iron Range Resources & Rehabilitation (subject to M.S. 298.225 guarantee). However, the escalation was frozen for distributions made in 2015 through 2017. The funds are used by Iron Range Resources & Rehabilitation for general operating expenses and community development grants.

Subd. 7a – Iron Range School Consolidation and Cooperatively Operated School Account

This account was created by the 2014 legislature and is managed by Iron Range Resources & Rehabilitation. It will receive distributions from the following:

- (a)** For distribution years 2015 through 2023 it will receive 10 cents per taxable ton. Beginning with distribution year 2024, it will be reduced to 5 cents per ton.
- (b)** For distribution years 2015, 2016, and 2017, the fund received two-thirds of the cumulative amount generated by any increase of the tax rate due to change in the implicit price deflator. The cumulative amount distributed in 2017 will also be distributed in 2018 and 2019.
- (c)** Also, beginning the distribution year after a taconite school bond receives its last taconite payment, an amount equal to what the bond received from the 2012 pay 2013 production year distributions will be added to the fund with the money being deducted from the same sources as the original bond. The first bond eligible was Ely with distributions beginning in 2017.

Subd. 8 – Range Association of Municipalities & Schools (RAMS)

An amount equal to 0.3 cent per taxable ton (subject to M.S. 298.225 guarantee) is paid to the RAMS to provide an area-wide approach to problems that demand coordinated and cooperative actions. All cities, towns and schools in the taconite and iron ore mining area are included. This amount is subtracted from the Taconite Municipal Aid distribution in subd. 3.

Production Tax (cont.)

Subd. 9 – Douglas J. Johnson Economic Protection Trust Fund (DJJ)

In addition to the amount provided in the remainder after all other distributions are completed, 3.35 cents per taxable ton is allocated to the DJJ. The cents per ton is normally increased in the same proportion as the implicit price deflator as provided in M.S. 294.24, subd 1. However, the escalation for this fund was frozen for distributions in 2015 through 2017.

In addition to the above, for distributions in 2015 through 2017, the DJJ received one-third of the cumulative tax generated due to the increase in the tax rate. The amount received in 2017 will also be distributed in 2018 and 2019.

Subd. 9a – Taconite Economic Development Fund

This subdivision is explained on page 3.

Subd. 9b – Producer Grants

Five cents per taxable ton must be paid to the Taconite Environmental Protection Fund (TEPF) for use under M.S. 298.2961, subd. 4. The fund also receives a fixed amount equal to the increased tax proceeds due to the tax rate change for 2005 distributions, as stated in subd. 10 (b).

Subd. 9c – City of Eveleth

The City of Eveleth shall receive 0.20 cents per taxable ton for support of the Hockey Hall of Fame provided that an equal amount of donations have been received. Any amount of the 0.20 cents per ton that exceeds the donations shall be distributed to Iron Range Resources & Rehabilitation.

Subd. 9d – Iron Range Higher Education Account

Five cents per taxable ton must be allocated to Iron Range Resources & Rehabilitation to be deposited in the Iron Range Higher Education Account to be used for higher education programs conducted at educational institutions in the Taconite Assistance Area defined in M.S. 273.1341. The Iron Range Higher Education committee under M.S. 298.2214 and Iron Range Resources & Rehabilitation must approve all expenditures from the account.

Subd. 10 – Indexing

Beginning with distribution in 2000 (1999 production year), the amounts determined under subd. 6, paragraph (a), and subd. 9 are increased in the same proportion as the increase in the implicit price deflator as provided in M.S. 298.24, subd. 1.

Subd. 11 – Remainder

(a) After calculating the initial distributions to the various funds and grandfathered amounts including (b) & (c) below, the remainder is distributed two-thirds to the TEPF and one-third to the DJJ. Any interest earned on money on deposit by the counties is sent to Iron Range Resources & Rehabilitation to be split into the two funds using the same two-thirds/one-third apportionment.

(b) Taconite Railroad

Until 1978, the taconite railroad gross earnings tax was distributed to local units of government based on a formula of 50 percent to school districts, 22 percent city or town, 22 percent county, and six percent to the state. The respective shares were further split based on miles of track in each government unit. Beginning in 1978, the distributions were frozen at the 1977 level and funded from Production Tax revenues. The total amount distributed in 2018 was \$2,482,454. Taconite railroad aids are not subject to the percentage reduction mandated for other aids by M.S. 298.225 and so remain constant from year to year. Beginning with the 2002 production year, the taconite railroad distribution to schools was reduced to 62 percent of the 1977 amount.

(c) Occupation Tax Grandfather Amount to Iron Range Resources & Rehabilitation

In 1978 and each year thereafter, the amount distributed to Iron Range Resources & Rehabilitation was the same as it received in 1977 from the distribution of the taconite and iron ore Occupation taxes: \$1,252,520.

Additional Payments

In Minnesota Laws 2013, Chapter 143, Article 11, Section 11, the legislature authorized the commissioner of Iron Range Resources & Rehabilitation to issue \$38,000,000 in revenue bonds to make grants to school districts within the Taconite Assistance Area. The grants are to be used for various building projects with the exception of ISD 2142 which must use the grant for debt service reduction for a bond passed in 2009. The revenue bonds are paid from Production Tax revenues prior to the calculation of the remainder under M.S. 298.28, subd. 11, with a maximum of 10 cents per ton. Any amount above 10 cents per ton will be paid by the DJJ fund.

Although the following payments are not included in M.S. 298.28 or its subdivisions, they are subtracted after dividing the remainder described in subd. 11.

These payments consist of school bond payments to school districts within the Taconite Tax Relief Area and Taconite Assistance Area. Most are funded 80 percent taconite and 20 percent local efforts.

In Minnesota Laws 2005, Chapter 152, Article 1, Section 39 the legislature authorized the commissioner of Iron Range Resources & Rehabilitation to issue \$15,000,000 in revenue bonds to make grants to school districts in the Taconite Tax Relief Area or Taconite Assistance Area. The bonds are to be used by the school districts to pay for health, safety and maintenance improvements. The bonds are funded in equal shares from the TEPF and the DJJ. Minor amendments were made by the 2006 legislature.

Production Tax (cont.)

Aid Guarantee (M.S. 298.225)

The recipients of the Production Tax, provided in M.S. 298.28, subds. 2 to 5, subd. 6, paragraphs (b) and (c) and subds. 7 and 8, are guaranteed to receive distributions equal to the amount distributed to them with respect to the 1983 production year, provided that production is not less than 42 million taxable tons. If the production is less, the amount distributed from the fund is reduced proportionately by two percent per each 1,000,000 tons by which the taxable tons are less than 42 million tons. For example, if the taxable tonnage (three-year average) is 39.8 million then the proportionate reduction is 4.4 percent. This is calculated by multiplying two percent times 2.2 million tons.

This aid guarantee is funded equally from the initial current year distributions to the TEPF and the DJJ. If the initial distributions are insufficient to fund the difference, the commissioner of Iron Range Resources & Rehabilitation makes the payments of any remaining difference from the existing balance of the TEPF and the DJJ in equal proportions.

The commissioner of the Minnesota Department of Revenue determines the amounts. The aid payments covered by this variable guarantee are listed as follows:

1. 4.5 cents—Taconite Cities and Towns Fund (uses 1999 production year as base year)
2. 12.2 cents—Taconite Municipal Aid Account
3. 21.3 cents— Taconite Referendum Fund
4. 6.5 cents—escalated to Iron Range Resources & Rehabilitation
5. 0.3 cent—RAMS
6. 0.1875 cent—Electric Power Plant Aid is transferred from Taconite Property Tax Relief Account to Cook County
7. 4 cents - Mining Effects Fund (uses 1999 production year as base year)

The following funds are guaranteed at 75 percent or the variable guarantee, whichever is less:

1. 10.525 cents—Taconite County Fund
2. 10.525 cents—Taconite County Road and Bridge Fund

The following funds are guaranteed at 31.2 percent or the variable guarantee, whichever is less:

1. 24.72 cents—Regular School Fund
2. 3.43 cents—Taconite School Fund
3. 0.4541 cent—Electric Power Plant Aid is transferred from Taconite Property Tax Relief Account to School District 166, Cook County

The Taconite Property Tax Relief Account is not covered by M.S. 298.225, but is separately guaranteed by the DJJ, as stated in M.S. 298.293.

Production Tax (cont.)

Production Tax Distribution Calculation (M.S. 298.28)

The producers make the Production Tax payments directly to six counties (Cook, Lake, St. Louis, Itasca, Crow Wing and Aitkin) and Iron Range Resources & Rehabilitation. Each county auditor is responsible for making the taconite aid payments to the various jurisdictions within the county. St. Louis County was designated as fiscal agent for the Taconite Property Tax Relief Account and issues Taconite Property Tax Relief checks to the

other counties. The state of Minnesota also makes a payment of 22 cents per taxable ton (payable 2018). This money was added to the amount available for distribution.

The Minnesota Department of Revenue makes all computations regarding the amount paid by the companies, state and the aid payments due to cities, schools, townships, counties and Iron Range Resources & Rehabilitation. Interest earnings on undistributed funds are remitted by the counties to Iron Range Resources & Rehabilitation.

The proceeds of the 2017 Production Tax (payable 2018) were distributed as follows:

M.S. 298.28	Payment Recipients	Cents per Taxable Ton
Subd. 2a	Taconite cities and towns	4.5
Subd. 2b	Taconite cities and towns (mining effects)	4.0
Subd. 3	Taconite Municipal Aid Account	12.2
Subd. 3(d)	Township Fund	3.0*
Subd. 4	School districts	
	(b)(i) Taconite schools (mining and/or concentrating in the district)	3.43
	(b)(ii) School Building Maintenance Fund	4.0
	(c) Regular School Fund (distributed by formula)	24.72
	(d) Taconite Referendum Fund	(formula amount—see page 6)
Subd. 5	Counties	
	(b and c) Taconite counties (includes electric power plant)	10.525
	(d) Taconite county Road and Bridge	10.525
	Counties total	21.05
Subd. 6	Taconite Property Tax Relief (includes .6416 cents for Cook County and Cook County Schools)	34.8*
Subd. 7	Iron Range Resources & Rehabilitation	6.5*
Subd. 7a	Iron Range School Consolidation and Cooperatively Operated School Account	10.0
Subd. 8	Range Association of Municipalities and Schools	0.3
Subd. 9	Douglas J. Johnson Economic Protection Trust Fund	3.35*
Subd. 9a	Taconite Economic Development Fund	25.1
Subd. 9b	Taconite Environmental Fund for use in Producer Grants	5.0**
Subd. 9c	City of Eveleth (Hockey Hall of Fame)	0.2
Subd. 9d	Iron Range Higher Education Account	5.0
Subd. 10	Indexing provisions	-
Subd. 11	Distribution of remainder	-

* These funds are escalated using the Gross Domestic Product Implicit Price Deflator. After escalation, the cents per ton for Township fund was 3.30 cents, Taconite Property Tax Relief was 35.34 cents, Iron Range Resources & Rehabilitation was 8.89 cents, and the Douglas J. Johnson Economic Protection Trust Fund was 4.51 cents.

** Plus amount of revenue due to tax increase generated in pay 2005.

The full amount distributed, including escalation and M.S. 298.225 guarantees, is available in *Figure 4*.

Taconite Environmental Protection Fund (TEPF) and Douglas J. Johnson Economic Protection Trust Fund (DJJ) (M.S. 298.223 and 298.291)

The TEPF and the DJJ were established by the 1977 Legislature. These two funds receive the remainder of the Production Tax revenues after all distributions are made according to M.S. 298.28. The remainder is split with one-third to the DJJ and two-thirds going to the TEPF.

The TEPF was created for the purpose of reclaiming, restoring and enhancing those areas of Minnesota that are adversely affected by environmentally damaging operations involved in mining and producing taconite and iron ore concentrate. The scope of activities includes local economic development projects. The Minnesota Department of Iron Range Resources & Rehabilitation commissioner administers the fund.

The DJJ is somewhat different in that only interest and dividends earned by the fund may be spent before January 1, 2028. Expenditures from the principal may be made with approval from Iron Range Resources & Rehabilitation for economic development projects.

Note: The DJJ and TEPF Fund Balances table is available on our website as an Excel file. Go to www.revenue.state.mn.us and type **Mining Statistics** in the Search box.

Taconite Property Tax Relief

The taconite homestead credits described on page 7 are administered by the county auditors. The amounts do not equal the total Production Tax allocated for Property Tax Relief shown in the tables as collections or payments. The difference is carried in the Taconite Property Tax Relief Fund balance with St. Louis County as fiscal agent. If the fund balance and Production Tax collections are not sufficient to make the payments, the deficit is made up from the Douglas J. Johnson Economic Protection Trust Fund. The last time this occurred was in 1989.

Note: The Taconite Property Tax Relief Fund Balance, Taconite Property Tax Relief Fund Distribution, and Taconite Residential Homestead Credit Examples tables are available on our website as Excel files. Go to www.revenue.state.mn.us and type **Mining Statistics** in the Search box.

Figure 4
Distribution by Fund/Recipient*

Production Year	2013	2014	2015	2016	2017
City and Township (Mining/Concentrating)	\$2,134,737	\$2,125,786	\$2,062,198	\$1,940,927	\$1,867,524
Cities and Towns (Mining Effects)	1,794,389	1,789,718	1,699,835	1,634,030	1,614,524
Taconite Municipal Aid Account	6,633,334	6,589,995	6,475,364	5,952,563	5,707,956
Taconite Municipal Aid — Special City/ Township Fund	157,055	157,055	157,055	157,055	157,055
Township Fund	1,287,505	1,281,952	1,220,270	1,089,757	1,060,065
County Fund	9,095,093	7,114,672	7,313,951	7,364,487	7,267,637
County Road and Bridge Fund	4,623,110	4,605,134	4,405,415	3,982,835	3,833,944
Regular School Fund	10,676,982	10,634,759	10,165,680	9,173,173	8,823,468
Taconite School Fund	1,610,748	1,604,891	1,539,803	1,423,998	1,382,880
School Building Maintenance Fund	1,535,158	1,531,417	1,420,003	1,296,839	1,284,390
Taconite Levy Shortfall Payment	—	—	—	369,785	284,267
Taconite Referendum Fund	6,178,596	6,178,596	6,178,596	6,178,596	6,178,596
School Bond Payments	2,631,867	2,608,285	2,606,617	2,513,481	1,379,870
Taconite Railroad Aid (total for cities, towns, counties, schools)	2,482,454	2,482,454	2,482,454	2,482,454	2,482,454
Taconite Property Tax Relief Fund	13,783,501	13,724,064	13,063,708	11,296,703	11,064,355
Iron Range Resources & Rehabilitation (IRRR) (Indexed)	3,819,425	3,803,209	3,623,063	3,241,899	3,151,470
IRRR (Fixed)	1,252,520	1,252,520	1,252,520	1,252,520	1,252,520
Taconite Economic Development Fund (TEDF)	12,621,936	10,598,678	10,122,388	700,000	8,430,530
Taconite Environmental Protection Fund (TEPT)	12,938,216	12,993,550	11,392,335	13,619,534	7,508,487
TEPF Producer Grants and Loans	3,241,471	3,232,931	3,138,053	2,937,302	2,866,569
Douglas J. Johnson Economic Protection Trust Fund (DJJ)	5,080,122	5,633,213	5,036,933	6,189,981	2,962,180
Iron Range Higher Education Account	1,980,388	1,971,848	1,876,970	1,676,219	1,605,486
IRRR Educational Revenue Bonds	4,147,804	3,993,464	3,990,434	3,992,134	3,990,034
Iron Range School Consolidation...Acct—	—	4,916,476	5,552,584	5,860,104	7,453,570
Hockey Hall of Fame	79,216	78,874	75,079	67,048	64,218
Range Association of Municipalities and Schools (RAMS)	142,382	142,200	135,963	123,303	118,494
Excess School Levy Replacement Money**	(2,313,588)	(633,976)	(97,157)	0	0
Levy Replacement Money to Cities/Townships**	2,313,588	633,976	97,157	0	0
Unallocated School Levy Replacement Money***	—	—	—	(255,023)	0
School Money to Cities and Towns for Pay 2018 Levy Reduction***	—	—	—	255,023	0
Total	\$109,928,009	\$111,045,741	\$106,987,271	\$96,516,727	\$93,792,543

Dash indicates not eligible.

* The Production Tax is collected and distributed in the year following production. For example, the 2017 Production Tax was collected and distributed during 2018.

** If the combined total of the School District Fund, Regular School Fund and Taconite Railroad exceeds the levy replacement amount, the excess is transferred to cities and townships within the district.

*** If a school district does not allocate all of its eligible levy replacement amount, the unallocated amount is used to reduce the following year's levy for cities and townships within the district.

Figure 5
2018 Distribution by Fund to Cities and Townships
(Based on 2017 production year tax revenues)

	Mining & Concentrating 4.5 cents	Mining Effects 4.0 cents	M.S. 298.28, subd. 3(b)	Township Fund 3.0 cents	Taconite Railroad Aid	Taconite Municipal Aid	Transferred from Schools*	Total
Aitkin County								
Aitkin	–	–	–	–	–	–	\$0	\$0
Aitkin Township	–	–	–	–	–	–	\$0	\$0
Farm Island Township	–	–	–	–	–	–	\$0	\$0
Fleming Township	–	–	–	–	–	–	\$0	\$0
Glen Township	–	–	–	–	–	–	\$0	\$0
Hazelton Township	–	–	–	–	–	–	\$0	\$0
Kimberly Township	–	–	–	–	–	–	\$0	\$0
Lakeside Township	–	–	–	–	–	–	\$0	\$0
Lee Township	–	–	–	–	–	–	\$0	\$0
Libby Township	–	–	–	–	–	–	\$0	\$0
Logan Township	–	–	–	–	–	–	\$0	\$0
Malmö Township	–	–	–	–	–	–	\$0	\$0
Morrison Township	–	–	–	–	–	–	\$0	\$0
Nordland Township	–	–	–	–	–	–	\$0	\$0
Palisade	–	–	–	–	–	–	\$0	\$0
Spencer Township	–	–	–	–	–	–	\$0	\$0
Verdon Township	–	–	–	–	–	–	\$0	\$0
Waukenabo Township	–	–	–	–	–	–	\$0	\$0
Wealthwood Township	–	–	–	–	–	–	\$0	\$0
Workman Township	–	–	–	–	–	–	\$0	\$0
Cook County								
Grand Marais	–	–	–	–	–	–	\$0	\$0
Lutsen Township	–	–	–	\$15,719	–	–	\$0	\$15,719
Schroeder Township	\$7,125	–	–	\$7,841	\$47,700	\$0	\$0	\$62,666
Tofte Township	–	–	–	\$9,708	–	–	\$0	\$9,708
Crow Wing County								
Bay Lake Township	–	–	–	–	–	–	\$0	\$0
Center Township	–	–	–	–	–	–	\$0	\$0
Crosby	–	–	–	–	–	\$184,959	\$0	\$184,959
Crosslake	–	–	–	–	–	–	\$0	\$0
Cuyuna	–	–	–	–	–	–	\$0	\$0
Deerwood	–	–	–	–	–	–	\$0	\$0
Deerwood Township	–	–	–	–	–	–	\$0	\$0
Emily	–	–	–	–	–	–	\$0	\$0
Fairfield Township	–	–	–	–	–	–	\$0	\$0
Irondale Township	–	–	–	–	–	\$23,159	\$0	\$23,159
Ironton	–	–	–	–	–	\$43,709	\$0	\$43,709
Lake Edward Township	–	–	–	–	–	–	\$0	\$0
Little Pine Township	–	–	–	–	–	–	\$0	\$0
Mission Township	–	–	–	–	–	–	\$0	\$0
Nokay Township	–	–	–	–	–	–	\$0	\$0
Oak Lawn Township	–	–	–	–	–	–	\$0	\$0
Pelican Township	–	–	–	–	–	–	\$0	\$0

*Transferred from schools for city/town levy reduction.

2018 Distribution by Fund to Cities and Townships

	Mining & Concentrating 4.5 cents	Mining Effects 4.0 cents	M.S. 298.28, subd. 3(b)	Township Fund 3.0 cents	Taconite Railroad Aid	Taconite Municipal Aid	Transferred from Schools*	Total
Perry Township	—	—	—	—	—	—	\$0	\$0
Rabbitt Lake Township	—	—	—	—	—	\$0	\$0	\$0
Riverton	—	—	—	—	—	\$2,687	\$0	\$2,687
Ross Lake Township	—	—	—	—	—	—	\$0	\$0
Trommald	—	—	—	—	—	\$2,656	\$0	\$2,656
Wolford Township	—	—	—	—	—	\$0	\$0	\$0
Itasca County								
Alvwood Township	—	—	—	—	—	—	\$0	\$0
Arbo Township	\$0	—	—	—	—	—	\$0	\$0
Ardenhurst Township	—	—	—	—	—	—	\$0	\$0
Balsam Township	—	—	—	—	—	—	\$0	\$0
Bearville Township	—	—	—	—	—	—	\$0	\$0
Big Fork	—	—	—	—	—	—	\$0	\$0
Big Fork Township	—	—	—	—	—	—	\$0	\$0
Blackberry Township	—	—	—	—	—	—	\$0	\$0
Bovey	\$0	—	—	—	—	\$66,130	\$0	\$66,130
Calumet	—	—	—	—	—	\$30,380	\$0	\$30,380
Carpenter Township	—	—	—	—	—	—	\$0	\$0
Cohasset	—	—	—	—	—	\$0	\$0	\$0
Coleraine	\$0	—	—	—	—	\$78,098	\$0	\$78,098
Effie	—	—	—	—	—	—	\$0	\$0
Feeley Township	—	—	—	—	—	—	\$0	\$0
Good Hope Township	—	—	—	—	—	—	\$0	\$0
Goodland Township	—	—	—	\$17,101	—	—	\$0	\$17,101
Grand Rapids	—	—	—	—	—	—	\$0	\$0
Grattan Township	—	—	—	—	—	—	\$0	\$0
Greenway Township	\$16,309	—	—	\$31,700	—	\$24,172	\$0	\$72,181
Harris Township	—	—	—	—	—	—	\$0	\$0
Keewatin	\$18,534	\$56,577	—	—	—	\$86,332	\$0	\$161,443
Kinghurst Township	—	—	—	—	—	—	\$0	\$0
LaPrairie	—	—	—	—	—	—	\$0	\$0
Lawrence Township	—	—	—	\$16,652	—	—	\$0	\$16,652
Lone Pine Township	\$4,839	\$21,169	—	\$14,823	—	\$2,262	\$0	\$43,093
Marble	—	—	—	---	—	\$46,384	\$0	\$46,384
Max Township	—	—	—	---	—	—	\$0	\$0
Moose Township	—	—	—	---	—	—	\$0	\$0
Nashwauk	\$17,828	\$52,310	—	---	—	\$64,343	\$0	\$134,481
Nashwauk Township	\$85,680	\$36,740	—	\$25,725	—	\$13,196	\$0	\$161,341
Nore Township	—	—	—	---	—	—	\$0	\$0
Pomroy Township	—	—	—	---	—	—	\$0	\$0
Sago Township	—	—	—	---	—	—	\$0	\$0
Spang Township	—	—	—	---	—	—	\$0	\$0
Splithand Township	—	—	—	---	—	—	\$0	\$0

*Transferred from schools for city/town levy reduction.

Figure 5 (cont.)

2018 Distribution by Fund to Cities and Townships

	Mining & Concentrating 4.5 cents	Mining Effects 4.0 cents	M.S. 298.28, subd. 3(b)	Township Fund 3.0 cents	Taconite Railroad Aid	Taconite Municipal Aid	Transferred from Schools*	Total
Squaw Lake	—	—	—	—	—	—	\$0	\$0
Stokes Township	—	—	—	—	—	—	\$0	\$0
Taconite	\$0	—	—	—	—	\$20,858	\$0	\$20,858
Third River Township	---	—	—	—	—	—	\$0	\$0
Trout Lake Township	\$0	—	—	—	—	—	\$0	\$0
Wabana Township	—	—	—	—	—	—	\$0	\$0
Warba	—	—	—	—	—	—	\$0	\$0
Wawina Township	—	—	—	—	—	—	\$0	\$0
Wildwood Township	—	—	—	—	—	—	\$0	\$0
Lake County								
Beaver Bay	—	—	—	—	—	—	\$0	\$0
Beaver Bay Township	\$1,935	—	—	\$18,333	\$12,565	\$0	\$0	\$32,833
Crystal Bay Township	—	—	—	\$17,026	\$6,951	—	\$0	\$23,977
Fall Lake Township	—	—	—	\$19,229	—	—	\$0	\$19,229
Silver Bay	\$87,809	—	—	—	\$152,706	\$210,216	\$0	\$450,731
Silver Creek Township	—	—	—	\$40,362	\$20,612	—	\$0	\$60,974
Stony River Township	—	—	—	\$5,899	\$19,943	—	\$0	\$25,842
Two Harbors	—	—	—	—	—	—	\$0	\$0
St. Louis County								
Alango Township	—	—	—	\$8,924	—	—	\$0	\$8,924
Alborn Township	—	—	—	\$17,138	—	—	\$0	\$17,138
Alden Township	—	—	—	\$7,915	—	—	\$0	\$7,915
Angora Township	—	—	—	\$8,737	—	—	\$0	\$8,737
Arrowhead Township	—	—	—	—	—	—	\$0	\$0
Ault Township	—	—	—	\$4,256	—	—	\$0	\$4,256
Aurora	\$14,005	\$67,579	—	—	—	\$161,690	\$0	\$243,274
Babbitt	\$97,531	\$161,548	—	—	\$166,767	\$190,014	\$0	\$615,860
Balkan Township	\$14,899	\$11,677	—	\$31,177	—	\$14,682	\$0	\$72,435
Bassett Township	—	\$4,919	—	\$1,680	\$11,745	—	\$0	\$18,344
Beatty Township	—	—	—	\$12,918	—	—	\$0	\$12,918
Biwabik	\$15,722	\$27,543	—	—	—	\$55,583	\$0	\$98,848
Biwabik Township	\$22,242	\$22,056	—	\$30,019	—	\$16,082	\$0	\$90,399
Breitung Township	—	—	—	\$21,656	—	\$0	\$0	\$21,656
Brevator Township	—	—	—	—	—	—	\$0	\$0
Brookston	—	—	—	—	—	—	\$0	\$0
Buhl	—	\$36,849	—	—	—	\$73,283	\$0	\$110,132
Camp 5 Township	—	—	—	\$1,158	—	—	\$0	\$1,158
Cedar Valley Township	—	—	—	—	—	—	\$0	\$0
Cherry Township	—	—	—	\$30,953	—	—	\$0	\$30,953
Chisholm	—	\$69,474	—	—	—	\$474,811	\$0	\$544,285
Clinton Township	—	\$23,150	—	\$37,151	—	—	\$0	\$60,301
Colvin Township	—	—	—	\$11,351	—	—	\$0	\$11,351
Cook	—	—	—	—	—	—	\$0	\$0
Cotton Township	—	—	—	\$16,914	—	—	\$0	\$16,914

*Transferred from schools for city/town levy reduction.

Figure 5 (cont.)

2018 Distribution by Fund to Cities and Townships

	Mining & Concentrating 4.5 cents	Mining Effects 4.0 cents	M.S. 298.28, subd. 3(b)	Township Fund 3.0 cents	Taconite Railroad Aid	Taconite Municipal Aid	Transferred from Schools*	Total
Crane Lake Township	—	—	—	\$2,688	—	—	\$0	\$2,688
Culver Township	—	—	—	\$10,791	—	—	\$0	\$10,791
Duluth Township	—	—	—	\$50,000	—	—	\$0	\$50,000
Eagle's Nest Township	—	—	—	\$8,438	—	\$0	\$0	\$8,438
Ellsburg Township	—	—	—	\$7,953	—	—	\$0	\$7,953
Elmer Township	—	—	—	\$5,377	—	—	\$0	\$5,377
Ely	—	—	—	—	—	\$336,684	\$0	\$336,684
Embarrass Township	—	—	—	\$21,991	—	—	\$0	\$21,991
Eveleth	\$48,709	\$84,549	—	—	—	\$403,131	\$0	\$536,389
Fairbanks Township	—	—	—	\$2,278	—	—	\$0	\$2,278
Fayal Township	\$2,796	\$41,740	—	\$50,000	—	\$25,959	\$0	\$120,495
Field Township	—	—	—	\$14,114	—	—	\$0	\$14,114
French Township	—	—	—	\$20,088	—	—	\$0	\$20,088
Gilbert	\$19,548	\$49,187	—	—	—	\$177,419	\$0	\$246,154
Great Scott Township	\$19,461	\$14,175	—	\$14,263	—	\$11,486	\$0	\$59,385
Greenwood Township	—	—	—	\$33,827	—	—	\$0	\$33,827
Hibbing	\$427,922	\$227,454	—	—	—	\$1,340,757	\$0	\$1,996,133
Hoyt Lakes	\$201,162	\$80,546	—	—	\$152,153	\$197,101	\$0	\$630,962
Industrial Township	—	—	—	\$29,348	—	—	\$0	\$29,348
Iron Junction	—	—	—	—	—	—	\$0	\$0
Kabetogama Township	—	—	—	\$4,630	—	—	\$0	\$4,630
Kelsey Township	—	—	—	\$4,928	—	—	\$0	\$4,928
Kinney	\$11,846	\$6,123	\$33,525	—	—	\$26,469	\$0	\$77,963
Kugler Township	—	—	—	\$6,608	—	—	\$0	\$6,608
Lavell Township	—	—	—	\$11,388	—	—	\$0	\$11,388
Leiding Township	—	—	—	\$14,263	—	—	\$0	\$14,263
Leonidas	\$4,829	\$1,163	—	—	—	\$4,679	\$0	\$10,671
Linden Grove Township	—	—	—	\$4,817	—	—	\$0	\$4,817
McDavitt Township	\$78,615	—	—	\$16,503	—	\$11,791	\$0	\$106,909
McKinley	—	\$3,457	—	—	—	\$10,625	\$0	\$14,082
Meadowlands	—	—	—	—	—	—	\$0	\$0
Meadowlands Township	—	—	—	\$10,977	—	—	\$0	\$10,977
Morcom Township	—	—	—	\$3,323	—	—	\$0	\$3,323
Morse Township	—	—	—	\$44,394	—	—	\$0	\$44,394
Mountain Iron	\$533,624	\$107,354	—	—	—	\$301,536	\$0	\$942,514
Ness Township	—	—	—	\$2,240	—	—	\$0	\$2,240
New Independence TS	—	—	—	\$10,828	—	—	\$0	\$10,828
Northland Township	—	—	—	\$6,459	—	—	\$0	\$6,459
Orr	—	—	—	—	—	—	\$0	\$0
Owens Township	—	—	—	\$9,633	—	—	\$0	\$9,633
Pequaywan Township	—	—	—	\$4,332	—	—	\$0	\$4,332
Pike Township	—	—	—	\$14,748	—	—	\$0	\$14,748
Portage Township	—	—	—	\$5,788	—	—	\$0	\$5,788
Sandy Township	—	—	—	\$12,658	—	—	\$0	\$12,658

*Transferred from schools for city/town levy reduction.

Figure 5 (cont.)
2018 Distribution by Fund to Cities and Townships

	Mining & Concentrating 4.5 cents	Mining Effects 4.0 cents	M.S. 298.28, subd. 3(b)	Township Fund 3.0 cents	Taconite Railroad Aid	Taconite Municipal Aid	Transferred from Schools*	Total
Stoney Brook Township	–	–	–	\$12,433	–	–	\$0	\$12,433
Sturgeon Township	–	–	–	\$4,705	–	–	\$0	\$4,705
Toivola Township	–	–	–	\$6,348	–	–	\$0	\$6,348
Tower	–	–	–	–	–	\$32,582	\$0	\$32,582
Vermillion Lake TS	–	–	–	\$10,417	–	–	\$0	\$10,417
Virginia	\$33,631	\$315,978	–	–	–	\$852,767	\$0	\$1,202,376
Waasa Township	---	\$9,505	–	\$8,811	–	–	\$0	\$18,316
White Township	\$23,411	\$60,773	\$123,530	\$50,000	–	\$80,937	\$0	\$338,651
Willow Valley Township	–	–	–	\$4,555	–	–	\$0	\$4,555
Winton	–	–	–	–	–	–	\$0	\$0
Wuori Township	\$57,512	\$20,929	–	\$21,058	–	\$8,347	\$0	\$107,846
Total	\$1,867,524	\$1,614,524	\$157,055	\$1,060,065	\$591,142	\$5,707,956	\$0	\$10,998,266

Dash indicates not eligible. \$0 indicates eligible, but no payment at current valuation and production.

*Transferred from schools for city/town levy reduction.

Figure 6
2018 Distributions by Fund to School Districts
 (Based on 2017 production year tax revenues)

School Districts	Taconite School Fund \$0.0343	Regular School Fund \$0.2472	Taconite Railroad Aid	School Bldg. Maintenance Fund \$0.04	Taconite Referendum \$0.213	Unallocated Levy Replacement Money Used for City/Town Levy Reduction*	School Levy Replacements/Shortfall Payment**	Total by School District
001 Aitkin	---	\$247,590	---	---	\$62,694	\$0	\$8,253	\$318,537
166 Cook County	\$21,087	\$42,152	\$264,977	---	\$91,498	\$0	\$0	\$419,714
182 Crosby-Ironton	---	\$272,088	---	---	\$222,602	\$0	\$10,282	\$504,972
316 Greenway	\$33,373	\$851,775	---	\$58,733	\$372,009	\$0	\$44,859	\$1,360,749
318 Grand Rapids	\$0	\$968,421	---	---	\$428,400	\$0	\$70,908	\$1,467,729
319 Nashwauk-Keewatin	\$84,788	\$277,577	---	\$24,671	\$268,675	\$0	\$42,459	\$698,170
381 Lake Superior	\$68,571	\$419,242	\$342,720	\$73,336	\$244,417	\$0	\$0	\$1,148,286
695 Chisholm	---	\$842,963	---	\$79,620	\$469,527	\$0	\$0	\$1,392,110
696 Ely	---	\$89,322	---	---	\$213,624	\$0	\$0	\$302,946
701 Hibbing	\$294,732	\$1,716,350	---	\$228,985	\$1,219,547	\$0	\$12,720	\$3,472,334
706 Virginia	\$70,098	\$986,218	---	\$199,218	\$728,472	\$0	\$3,013	\$1,987,019
712 Mtn. Iron-Buhl	\$425,031	\$413,178	---	\$88,693	\$349,776	\$0	\$490	\$1,277,168
2142 St. Louis County	\$123,168	\$491,064	\$284,841	\$175,250	\$429,452	\$0	\$23,877	\$1,527,652
2154 Eveleth-Gilbert	\$78,695	\$682,625	---	\$202,916	\$652,570	\$0	\$67,406	\$1,684,212
2711 Mesabi East	\$183,337	\$522,903	\$214,397	\$152,968	\$425,333	\$0	\$0	\$1,498,938
Total	\$1,382,880	\$8,823,468	\$1,106,935	\$1,284,390	\$6,178,596	0	\$284,267	\$19,060,536

Dashes indicate not eligible. \$0 indicates eligible, but no payment at current valuation and production.

* Unallocated levy replacement money is used to reduce cities and township levies within the district the following year.

**Allocation is made from the Taconite Property Tax Relief Account to the school districts.

Figure 7
School Bond Payments

School Districts	Year Authorized¹	Final Payment Year²	Payment³	Outstanding Balance⁴
316 Greenway	2000	2019	\$144,240	\$345,000
381 Lake Superior	2000	2022	354,790	1,416,910
695 Chisholm	2000	2020	277,747	803,002
712 Mtn. Iron-Buhl	1998	2017	288,260	0
2154 Eveleth-Gilbert	1996	2017	314,833	0
Total			\$1,379,870	\$2,564,912

1 Legislative year in which taconite funding was enacted.

2 Production year from which final bond payment will be deducted.

3 Payments made from 2017 pay 2018 tax distribution.

4 Estimated portion of outstanding bond balance to be paid by taconite funds (not including interest).

5 All taconite bonds funded at 80 percent taconite, 20 percent local effort.

Figure 8
2018 Distribution by Fund to Counties
(Based on 2017 production year tax revenues)

County	Regular County 10.525 cents	Road and Bridge 10.525 cents	Taconite Railroad	Total by County
Cook	\$96,636	—	\$187,190	\$283,826
Itasca	683,061	206,782	—	889,843
Lake	521,027	209,901	243,034	973,962
St. Louis	5,966,913	3,417,261	354,153	9,738,327
Total	\$7,267,637	\$3,883,944	\$784,377	\$11,885,958

Dash indicates not eligible.

Figure 9
2017 Taxable Production and Tax by Mine
(Includes taconite, DRI/iron nuggets and iron-ore concentrate)

Producer	Production Tons	Taxable Tonnage*	Production Tax Rate	Tax Assessed
ArcelorMittal	2,592,807	2,556,081	\$2.701	\$6,903,975
ERP Iron Ore	0	0	2.701	0
Hibbing Taconite	7,456,883	7,715,129	2.701	20,838,563
Mesabi Nugget	0	0	2.701	0
Mining Resources	0	0	2.701	0
Northshore	5,162,815	4,161,666	2.701	11,240,660
U.S. Steel-Keewatin Taconite	4,466,520	2,085,099	2.701	5,631,852
U.S. Steel-Minntac	13,418,112	12,535,196	2.701	33,857,564
United Taconite	4,622,710	3,056,567	2.701	8,255,787
Total	37,719,847	32,109,738	\$2.701	\$86,728,401

* The taxable tonnage is the average production of the current year and previous two years.
ERP Iron Ore and Mining Resources pay on current year only production..

Mesabi Nugget, Mining Resources and Keewatin Taconite were idled throughout 2016. The tonnage shown for Keewatin Taconite was for concentrate normally stored for pellet production but was sold and considered subject to the Production Tax.

Figure 10
2017 Production Tonnage by Product Type

Producer	Pellets			Chips and Fines			DRI	Total by Mine
	Acid	Fluxed	Partial Fluxed	Acid	Fluxed/ Partial Fluxed	Concentrate	Nuggets	
ArcelorMittal	—	2,556,311	—	—	36,496	—	—	2,592,807
ERP Iron Ore, LLC	—	—	—	—	—	—	—	0
Hibbing Taconite	—	—	7,456,883	—	—	—	—	7,456,883
Mesabi Nugget	—	—	—	—	—	—	—	0
Mining Resources	—	—	—	—	—	—	—	0
Northshore	—	—	5,023,891	—	119,681	19,243	—	5,162,815
U.S. Steel-Keewatin Taconite	—	—	4,440,824	—	21,735	3,961	—	4,466,520
U.S. Steel-Minntac	—	13,396,103	—	—	22,009	—	—	13,418,112
United Taconite	—	1,378,211	3,192,920	—	51,579	—	—	4,622,710
Total	0	17,330,625	20,114,518	0	251,500	23,204	0	37,719,847

Dash indicates not produced.

* Partially fluxed pellets contain less than 2 percent flux.

Figure 11

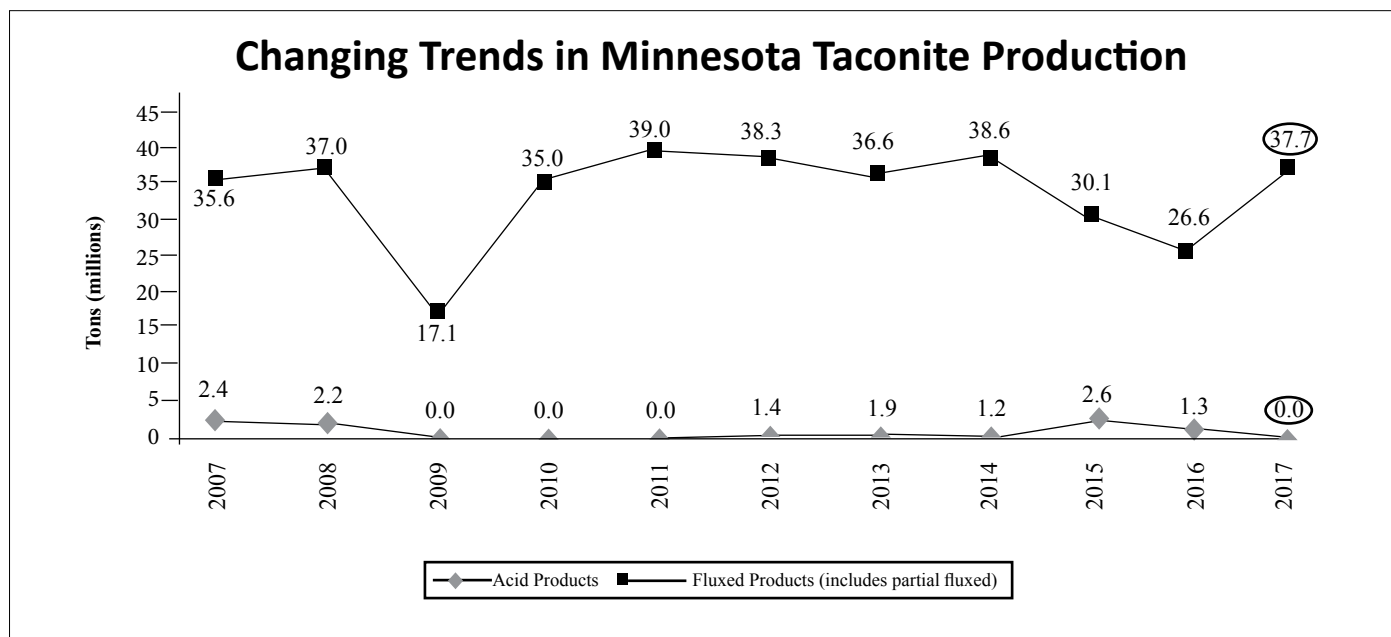


Figure 12
Production Tax Rate
History and Index Summary

Production Year	Statutory	Fe (iron)	Inflation	Total	TEDF
2007	210.3 cents	0	15.5 (IPD) cents	225.8 cents	20.1 cents
2008	210.3 cents	0	21.3 (IPD) cents	231.6 cents	30.1 cents
2009	210.3 cents	0	26.1 (IPD) cents	236.4 cents	30.1 cents
2010	210.3 cents	0	27.7 (IPD) cents	238.0 cents	30.1 cents
2011	210.3 cents	0	30.9 (IPD) cents	241.2 cents	30.1 cents
2012	210.3 cents	0	36.2 (IPD) cents	246.5 cents	30.1 cents
2013	256.0 cents*	0	0.0 (IPD) cents	256.0 cents	30.1 cents
2014	256.0 cents	0	3.7 (IPD) cents	259.7 cents	25.1 cents
2015	256.0 cents	0	7.0 (IPD) cents	263.0 cents	25.1 cents
2016	256.0 cents	0	9.9 (IPD) cents	265.9 cents	25.1 cents
2017	256.0 cents	0	14.1 (IPD) cents	270.1 cents	25.1 cents
2018	256.0 cents	0	19.1 (IPD) cents	275.1 cents	25.1 cents

Historical data available on website.

*The 2013 legislature changed the statutory rate to \$2.560 per ton for the 2013 production year, with indexing to resume with the 2014 production year.

Figure 13
Taconite Produced and Production Tax Collected

Year	Production Tons (000s)	Production Tax (000s)	Collected Rate Per Production Ton	Taxable Tons (000s)	Tax Rate Per Taxable Ton
2007	37,986	85,645	2.255	37,929	2.258
2008	39,168	89,631	2.288	38,701	2.316
2009	17,079	74,255	4.348	31,411	2.364
2010	35,049	72,442	2.067	30,438	2.380
2011	38,968	73,287	1.881	30,384	2.412
2012	39,681	94,205	2.374	38,310	2.465
2013	38,481	101,214	2.630	39,608	2.560
2014	39,835	102,370	2.570	39,437	2.597
2015	32,664	98,729	3.023	37,539	2.630
2016	29,088	89,146	3.065	33,524	2.659
2017	37,720	86,728	2.299	32,110	2.701

Historical data is available on our website.

A three-year average is used, except for other iron-bearing material which uses the current year.

Production Tax (cont.)

Direct Reduced Iron (DRI)

Because it is subject to the Production Tax, a DRI production plant and facilities is exempt from regular ad valorem (Property) taxes. The taxable tonnage is based on a three-year production average. Pig iron is considered DRI for the purpose of Production Tax and incentives.

A steel plant would be subject to ad valorem (Property) taxes as would any other business. If a steel plant were in conjunction with a DRI plant, the DRI portion would be subject to the Production Tax, thus exempt from Ad Valorem (Property) taxes.

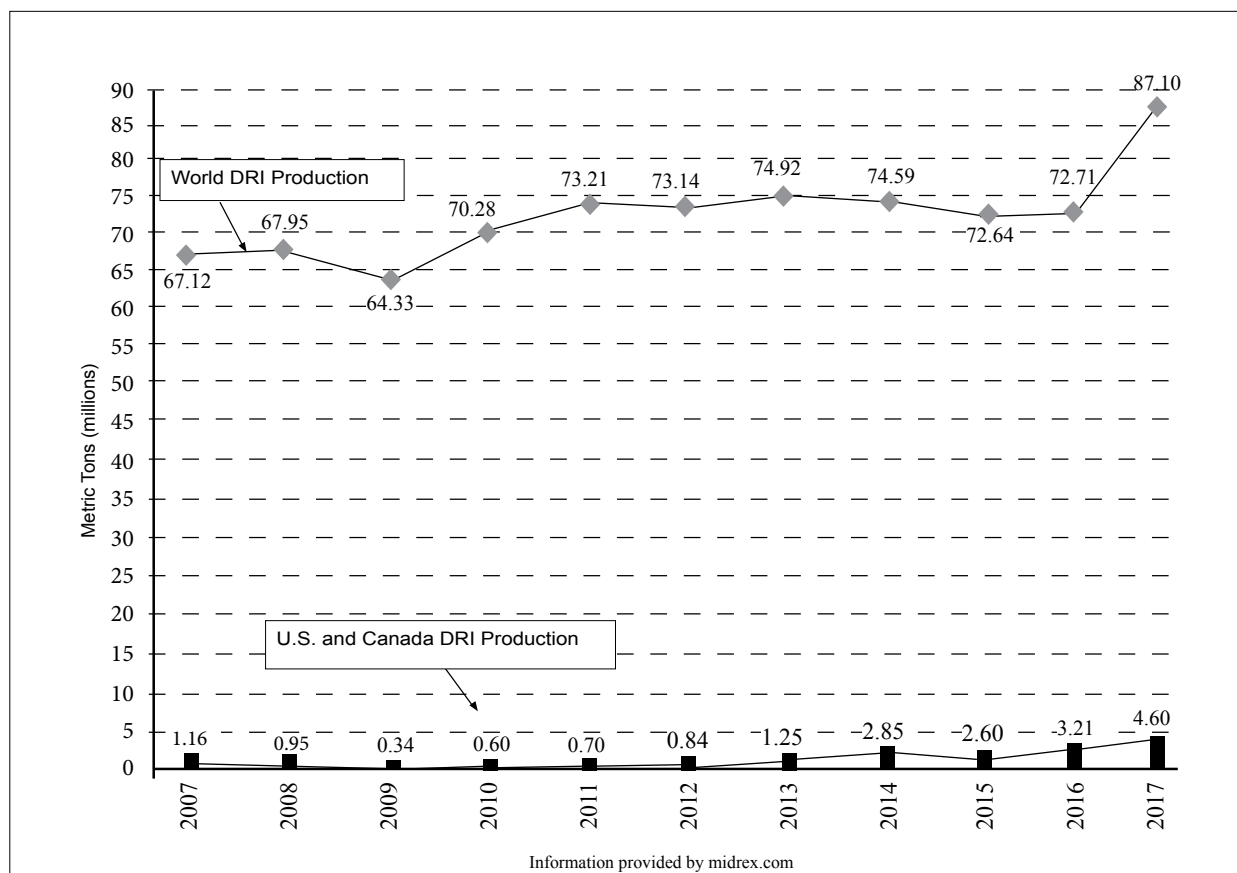
Reduced Production Tax Rate for DRI

The first five years of a DRI plant's commercial production are subject to reduced tax rates if all environmental permits have been obtained and construction has begun before July 2, 2008. Commercial production is defined as more than 50,000 tons.

Years of operation	% of regular rate	Years of operation	% of regular rate
1	0%	4	50%
2	0%	5	75%
3	25%	6	100%

The Production Tax rate for DRI is the regular rate plus an additional three cents per gross ton for each one percent that the iron content exceeds 72 percent when dried at 212 degrees Fahrenheit. Thus, at a base Production Tax rate for 2018 of \$2.751 per ton, the tax rate for 90 percent iron DRI would be \$3.291. The rate for 95 percent DRI would be \$3.441.

Figure 14
World Direct Reduced Iron Production



Occupation Tax

(M.S. 298.01, 298.16 – 298.18)

Minnesota's Occupation Tax applies to mining and producing both ferrous and nonferrous minerals, including taconite and iron ore, and other minerals such as gold, silver, copper, nickel and titanium.

The Occupation Tax is paid in lieu of the Corporate Franchise Tax on mining activities. Generally, it is determined in the same manner as Minnesota's Corporate Franchise Tax under M.S. 290.02 but there are a few exceptions:

- The unitary provisions of the Corporate Franchise Tax law do not apply to Occupation Tax.
- Mining companies may use percentage depletion.
- The alternative minimum tax (AMT) does not apply.
- All sales are Minnesota sales, so 100 percent of net income is assigned to Minnesota.
- The tax rate is 2.45 percent.

Ferrous Minerals

Gross income from mining or producing ferrous minerals is based on "mine value;" i.e., the value of the products produced *after* beneficiation or processing, but *prior* to any stockpiling, transportation, marketing and marine insurance, loading or unloading costs.

The procedure for determining a company's mine value was developed by the Minnesota Department of Revenue and representatives from the taconite industry in 1990. The department sets product values each year, which are generally based on the following:

- 1) Seventy-five percent of the change in the product value is based on the change in the Steel Mill Products Index (SMPI) from June of the previous year to June of the current year; and
- 2) Twenty-five percent of the change in product value is based on actual transaction prices of products sold in nonequity sales as reported by the mining companies.

When ferrous minerals, such as taconite pellets, chips or concentrate, are used by the producer or disposed of or sold in a **non-arms-length transaction**, the company must use the product values set by the department to determine the mine value for Occupation Tax.

Non-arms-length transactions include, but are not limited to, any sales or shipments to: 1) any steel producer having any ownership interest in the selling or shipping company, or 2) any steel producer affiliated or associated with any firm having any ownership or other financial interest in the selling or shipping company.

For **nonequity or arms-length transactions**, a company may choose to determine the mine value by using either 1) actual sales prices (f.o.b. mine) or 2) the product values set by the department. It must select one of these options the first time a nonequity sale is made. *Once it selects an option, however, it must continue to use that option for all nonequity sales in the future.* Requests to change the selected option must receive approval from the department.

Product Values

Acid Pellets: The value of acid pellets is based on the change in the SMPI from June of the previous year to June of the current year (75%), and actual sales prices of nonequity sales (25%).

Flux Pellets: The value of flux pellets is based on the acid pellet value, adjusted based on the amount of flux in the finished pellets.

- *Partial Flux (less than 2 percent flux):* Pellets with 1.99 percent or less flux are valued at \$0.015 per Fe (iron) unit higher than the acid pellet value.
- *Flux:* Pellets with 2 percent or more flux are valued at \$0.015 per Fe (iron) unit higher than the acid pellet value *per each 1 percent of flux* in the finished pellet.

Chips, Fines and Concentrate: Acid chips (fines) and concentrate are valued at 75 percent of the acid pellet value. Flux chips and concentrate are valued at 75 percent of the flux pellet value.

2017 Product Values per Iron Unit

Value per Fe (iron) unit (per dry gross ton) for the period January 1 – December 31, 2017:

	Value
Acid pellets	\$1.168 per iron unit
Pellet chips (fines) and concentrate	75% of acid or fluxed pellet price
Flux pellets – partial flux (.1% – 1.99% flux)	$\$1.168 + \$0.015 = \$1.183$
Flux (2.00% and higher flux) *	$\$1.168 + \0.015 per iron unit for each 1% flux
Direct reduced iron (DRI)	\$4.586 per iron unit

***Example:** Pellet with 4.8% flux in finished pellet: $4.0 \times \$0.015 = \0.060
 Mine value: $\$1.168 + \$0.060 = \$1.228$

Occupation Tax (cont.)

Direct Reduced Iron (DRI): The value of DRI is based on the change in the SMPI from June of the previous year to June of the current year (100%). There are currently insufficient nonequity sales reported to determine a nonequity sales factor.

Acid Pellet and DRI Values 2013–2017		
	Acid Pellets (per iron unit)	DRI (per iron unit)
2013	1.294	4.634
2014	1.336	4.829
2015	1.137	4.250
2016	1.043	4.101
2017	1.168	4.586

Nonferrous Minerals

Gross income from mining or producing nonferrous minerals, such as copper, nickel, gold, etc., is calculated differently from the method used for ferrous minerals.

For **nonequity or arms-length transactions**, gross income is based on actual sales. Generally, for **non-arms-length transactions**, gross income is based on the average annual market price as published in the *Engineering and Mining Journal*.

Occupation Tax Distribution

All Occupation Tax revenue is deposited in the state's General Fund. Ten percent is used for the general support of the University of Minnesota and 40 percent for elementary and secondary schools. Fifty percent remains in the General Fund.

Of the amount remaining in the General Fund, the following appropriations are made based on taxable tonnage. For 2018 the taxable tonnage was 32,109,738 tons.

Region 3 Counties: An amount equal to 1.5 cents per taxable ton is appropriated to the Iron Range Resources & Rehabilitation for counties in Region 3 not qualifying for Taconite Property Tax Relief. Only Carlton and Koochiching counties qualify. These funds must be used to provide economic or environmental loans or grants.

Region 3 Distributions			
2013	\$574,655	2016	\$563,091
2014	\$594,116	2017	\$502,866
2015	\$591,554	2018	\$481,646

Department of Natural Resources. An amount equal to 2.5 cents per taxable ton is appropriated to the Mining Environmental and Regulatory Account managed by the Department of Natural Resources. These funds must be used for work on environmental issues and to provide regulatory services for ferrous and nonferrous mining operations in the state. The distribution is made by July 1 annually. The amount distributed in 2018 was \$802,743.

Iron Range Resources & Rehabilitation. An amount equal to 6 cents per taxable ton is appropriated to the Iron Range School Consolidation and Cooperatively Operated School Account managed by Iron Range Resources & Rehabilitation. The distribution is made on May 15 annually starting in 2015. The amount distributed in 2018 was \$1,926,584.

Figure 15
Employment and Mine Value by Mine
Production Year 2017

Company	Employment	Tons Produced	Mine Value*
ArcelorMittal	356	2,748,139	\$211,330,175
Hibbing Taconite	726	7,480,160	584,477,262
Northshore	550	5,189,737	397,950,379
U.S. Steel-Keewatin Taconite	415	4,550,714	353,383,468
U.S. Steel-Minntac	1,397	13,971,816	1,073,497,802
United Taconite	500	4,739,817	365,198,505
Total – Taconite	3,944	38,680,383	\$2,985,837,591
Mesabi Nugget	0	0	0
Total – DRI	0	0	0
Magnetation	**	**	**
Mining Resources	0	0	0
Total – Natural Ore	0	0	\$0
Total – All	3,944	38,680,383	\$2,985,837,591

* The mine value is based on product values set by the Minnesota Department of Revenue. It does not represent actual sales by companies.

** Information not provided.

Figure 16
Occupation Tax by Company*

	2010 (000s)	2011 (000s)	2012 (000s)	2013 (000s)	2014 (000s)	2015 (000s)	2016 (000s)	2017 (000s)
ArcelorMittal	\$0	\$50	\$700	\$250	\$460	\$0	\$0	\$0
Hibbing Taconite	300	4,550	4,360	3,165	2,320	2,300	2,170	2,030
Northshore	707	2,015	1,545	360	1,350	490	600	1,260
U.S. Steel	9,600	13,400	12,187	9,320	10,622	3,150	1,829	9,186
United Taconite	2,010	2,040	3,000	2,000	1,650	430	0	575
Total – Taconite	\$12,617	\$22,055	\$21,792	\$15,095	\$16,402	\$6,370	\$4,599	\$13,051
Mesabi Nugget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total – DRI	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Magnetation	\$0	\$0	\$25	\$682	\$0	\$0	\$0	\$0
Mining Resources	0	0	0	0	0	0	0	0
Total – Natural Ore	\$0	\$0	\$25	\$682	\$0	\$0	\$0	\$0
Total	\$12,617	\$22,055	\$21,817	\$15,777	\$16,402	\$6,370	\$4,599	\$13,051

* Amount paid by May 1 each year. Does not include adjustments.

** The Occupation Tax by Company total shown for 2016 in the 2017 Mining Tax Guide was incorrect. See breakdown above for correct totals.

Figure 17
Occupation Tax by Product Type*
(Iron Ore, Direct Reduced Ore, Taconite)

	Iron Ore		Direct Reduced Iron		Taconite		Total	
Year	Tons Produced (000s)	Occupation Tax (000s)	Tons Produced (000s)	Occupation Tax (000s)	Tons Produced (000s)	Occupation Tax (000s)	Tons Produced (000s)	Occupation Tax (000s)
2010	90	0	74	0	35,984	12,617	36,148	12,617
2011	168	0	153	0	39,771	22,055	40,092	22,055
2012	704	25	175	0	39,873	21,792	40,752	21,817
2013	1,360	682	211	0	38,064	15,095	39,635	15,777
2014	1,323	0	238	0	39,487	16,402	41,048	16,402
2015	2,182	0	46	0	31,306	6,370	33,534	6,370
2016	**	0	0	0	28,849	4,599	28,849	4,599
2017	0	\$0	0	\$0	38,680	\$13,051	38,680	\$13,051

Dash indicates not applicable. \$0 indicates eligible, but no payment at current valuation and production.

* Amount paid by May 1 each year. Does not include adjustments.

** Information not provided.

Figure 18
Occupation Tax Averages – Taconite Only

Year	Tons Produced (000s)	Average Value	Cost of Beneficiation	Cost of Mining	Development	Production & Property Tax Paid	Sales and Use Tax Paid	Admin. and Misc. Expense	Royalty	Taxable Value of Production	Occupation Tax Paid
2013	38,064	85.38	32.66	13.57	1.64	2.50	0.27	5.15	3.73	25.87	0.40
2014	39,487	88.33	34.49	13.62	1.56	2.39	0.23	5.72	3.58	26.73	0.42
2015	31,306	75.47	29.75	11.67	1.57	2.84	0.24	11.53	2.75	15.13	0.20
2016	28,849	69.44	28.09	11.41	1.30	2.82	0.14	11.19	2.24	12.25	0.18
2017	38,680	77.19	29.41	10.64	2.33	2.37	0.13	9.83	2.74	19.74	0.34

Cost of Beneficiation

Year	Tons Produced (000s)	Beneficiation Labor (000s)	Per Ton	Beneficiation Supplies (000s)	Per Ton	Beneficiation Depr. and Int. (000s)	Per Ton	Beneficiation Misc. Per Ton	Total Beneficiation Per Ton
2013	38,064	192,824	5.07	911,656	23.95	60,179	1.58	2.06	32.66
2014	39,487	204,916	5.19	1,010,582	25.59	68,438	1.73	1.98	34.49
2015	31,306	126,091	4.03	567,283	18.12	59,238	1.89	5.71	29.75
2016	28,849	105,894	3.67	480,282	16.65	56,491	1.96	5.81	28.09
2017	38,680	142,923	3.70	652,943	16.88	74,143	1.92	6.92	29.41

Cost of Mining

Year	Tons Produced (000s)	Mining Labor (000s)	Per Ton	Mining Supplies (000s)	Per Ton	Cost of Mining	Mining Depreciation (per ton)	Total Mining Costs Per Ton
2013	38,064	134,025	3.52	344,632	9.05	12.57	1.00	13.57
2014	39,487	143,213	3.63	353,534	8.95	12.57	1.04	13.62
2015	31,306	95,766	3.06	215,817	6.89	9.94	1.72	11.67
2016	28,849	92,924	3.22	183,053	6.35	9.57	1.85	11.41
2017	38,680	128,235	3.32	235,323	6.08	9.40	1.24	10.64

This information is provided by Minnesota mining companies and is not audited by the Minnesota Department of Revenue.

Ad Valorem Tax on Auxiliary Mining Lands for Taconite Operations

(M.S. 272.01)

Lands and structures actively used for taconite production are exempt from the Ad Valorem Tax and are subject to the Production Tax *in lieu* of Property Tax. Actively used lands include the plant site, mining pit, stockpiles, tailings pond and water reservoirs. Also included are lands stripped and ready for mining, but not lands merely cleared of trees. It is important to note that this exemption applies only to the Ad Valorem Tax on the land and buildings and *not to the Unmined Taconite Tax* described on the following page. Lands adjacent to these facilities, commonly referred to as auxiliary mining lands, are subject to assessment of Ad Valorem Tax administered by the county.

The county assessor is responsible for estimating the market value of auxiliary mining lands and classifying them into one of several property classifications established by Minnesota law. The two most common property classifications used on auxiliary mining lands are industrial and rural vacant land. In general, lands in close proximity to active taconite operations are assigned the industrial classification while those further away are classified as rural vacant land. The classification of property is covered in M.S. 273.13.

Each property classification has a legislatively set percentage called the class rate that is multiplied by the property's taxable market value (TMV) to calculate tax capacity. For taxes payable

2018, the class rate for rural vacant land is 1.00 percent of the estimated market value. For the industrial classification, there are two class rates: 1.50 percent for the first \$150,000 of the TMV and 2.0 percent for the value over \$150,000.

Property taxes are calculated by multiplying a property's tax capacity times the tax extension rate for the jurisdiction where it is located. Tax extension rates are determined by county, local government and school district spending. In St. Louis County within the mining area for taxes payable in 2018, they range from a low of approximately 86 percent to a high of approximately 341 percent. In addition, the market value times the referendum rate must be added to the tax determined above if there is a referendum in the taxing district. For industrial class property, the state general tax rate of 43.865 percent applies in addition to the local tax rate.

The following schedule provides for adjustments in both the valuations and classifications of auxiliary mining lands located on the iron formation versus off-formation lands as well as further refinements based on the proximity of these lands to active mining operations. It outlines valuation adjustments to be made on excess lands where they are located as market conditions and/or Minnesota statutes dictate (see below). This schedule was updated based on market conditions for the 2016 assessment.

St. Louis County Mining Land Assessment Schedule

1. Iron formation land	Value (\$/acre)	Classification
A. Land within ¼ mile of active pit	\$1000	Industrial
B. Excess land (more than ¼ mile from mining activity or outside 15-year pit limit).		
1. Undisturbed	Same as other private land	Rural Vacant Land or current use
2. Disturbed		
a. Stockpiles	75% of other private land	Rural Vacant Land or current use
b. Abandoned Pits	50% of other private land	Rural Vacant Land or current use
2. Off-formation land		
A. Land within ¼ mile of mining activity	\$700	Industrial
B. Excess Land		
1. Undisturbed	Same as other private land	Rural Vacant Land or current use
2. Tailings Ponds		
a. Stockpiles	75% of other private land	Rural Vacant Land or current use
b. Tailings Ponds	30% of other private land	Rural Vacant Land or current use

Ad Valorem Tax on Unmined Taconite

(M.S. 298.26)

A tax not exceeding \$15 per acre may be assessed on the taconite or iron sulfides in any 40-acre tract from which the production of iron ore concentrate is less than 1,000 tons.

The heading in the statute is somewhat misleading since it refers to a *Tax on Unmined Iron Ore or Iron Sulfides*. The tax clearly applies to unmined taconite and has been administered in that manner. The term “iron ore” does not refer to high-grade natural ore in this instance.

The tax, as presently administered, applies to all iron formation lands on the Mesabi Range. The statutory exemption administered by the county assessor provides that in any year in which at least 1,000 tons of iron ore concentrates are produced from a 40-acre tract or government lot, the tract or lot are exempt from the Unmined Taconite Tax. The county assessors have also exempted actual platted townships that are occupied.

The iron formation lands on the Mesabi Range are divided into two categories by the Minnesota Department of Revenue. This is done through the evaluation of exploration drill hole data submitted by the mining companies.

The categories are:

- 1) Lands that are underlain by magnetic taconite of sufficient quantity and grade to be currently economic: They are considered to be economic taconite and are given a market value of \$500 per acre.
- 2) Lands either not believed or not known to be underlain by magnetic taconite of current economic quantity, quality and grade: They are considered to be uneconomic taconite and are given a market value of \$25 per acre.

To be classified as economic taconite, category 1, the taconite must pass the following criteria:

- contain more than 16 percent magnetic iron with the Davis tube test;
- contain less than 10 percent concentrate silica (SiO₂) with the Davis tube test;
- have a 15- to 25-foot minimum mining thickness; and
- have a stripping ratio of less than four-to-one (waste/concentrate), calculated as follows:

$$A) \text{ Surface (ft.)} \times 1.5 = \frac{\text{Equiv. Ft.}}{\text{Surface}}$$

$$B) \text{ Rock (ft.)} \times 2.25 = \frac{\text{Equiv. Ft.}}{\text{Waste}}$$

$$C) \frac{\text{Ore (ft.)} \times 2.5}{3} = \frac{\text{Equiv. Ft.}}{\text{Concentrate}}$$

$$\text{Stripping Ratio} = \frac{A + B}{C}$$

If the material fails any of the above criteria, then it is considered to be *uneconomic* taconite and classified as category 2. Some lands may also be considered as uneconomic due to environmental restrictions.

For taxes payable in 2018, the tax is calculated by multiplying the market value for the parcel of land by the 2.00 percent class rate to obtain the tax capacity. The special rate on the first \$150,000 of market value that applies to class 3 commercial/industrial property does not apply to class 5 unmined taconite. This is then multiplied by the local tax rate. *Note: Call your county auditor for more information.*

Figure 19
Ad Valorem Tax on Unmined Taconite
(Year payable)

County	2011	2012	2013	2014	2015	2016	2017	2018
Itasca	\$ 0	\$ 0	\$ 32,283	\$ 32,468	\$ 31,498	\$ 43,838	\$ 41,697	\$ 45,283
St. Louis	239,518	228,517	265,107	247,126	259,800	255,884	254,900	236,177
Total	\$239,518	\$228,517	\$297,390	\$279,594	\$291,298	\$299,722	\$296,597	\$281,460

Ad Valorem Tax on Unmined Natural Iron Ore

(M.S. 272.03, 273.02, 273.12, 273.13, 273.165, 273.1104)

Since 1909, Minnesota's natural iron ore reserves have been estimated and assessed by the state for Ad Valorem Tax purposes. The actual Ad Valorem Tax levy is set by the county, the school district and the local township or municipality. The county auditor collects the tax levy.

A Minnesota Supreme Court decision in 1936 established the present worth of future profits method for valuing the iron ore reserves. This is accomplished through the use of a complex formula known as the Hoskold Formula. The formula takes into account ore prices and all the various cost factors in determining the value of the unmined ore.

Each year, the Minnesota Department of Revenue uses a five-year average for allowable costs taken from the Occupation Tax report. A five-year average of the Lake Erie iron ore market value is also used. These averages are used to help reduce fluctuation of value due to sudden cost/price changes.

The following expenses are allowed as deductions from the Lake Erie market value on the computation of present worth, which is known as the Hoskold Formula:

- | | |
|---|---|
| 1a. Mining, normal costs | 6. Freight and marine insurance |
| 1b. Mining, special costs | 7. Marketing expense |
| 2. Beneficiation | 8. Social Security tax* |
| 3. Miscellaneous (Property Tax, medical ins., etc.) | 9. Ad Valorem Tax (by formula) |
| 4. Development (future) | 10. Occupation Tax |
| 5. Plant and equipment (future) | 11. Federal income tax |
| | 12. Interest on development and working capital |

* Since 1987, Social Security tax has been included under miscellaneous.

These 12 allowable expense items are deducted from the Lake Erie market value to give the estimated future income (per ton). Note that although royalty is allowable as an Occupation Tax deduction, it is not allowable on Minnesota's Ad Valorem Tax.

The present worth is then determined by multiplying the estimated future income (per ton) by the Hoskold Factor. The Minnesota Department of Revenue presently allows a 12 percent risk rate and six percent safe rate that yields the .33971 Hoskold factor when used with a 20-year life. A 20-year life has been used since 1968 as representative of the remaining life of Minnesota's natural iron ore reserves. The resulting value is considered the market value by the Minnesota Department of Revenue.

The term "class rate" was introduced for taxes payable in 1990. For 2002 and thereafter, this rate is reduced to 2.0 percent.

The tax capacity is the product of the class rate and the market value. The product of the market value and class rate must then be multiplied by the local tax rate plus the state general Property Tax rate to determine the tax. In addition, the market value times

the referendum rate must be added if there is a referendum in the taxing district.

Local tax rates are a function of county, local government, and school district spending. In addition, a statewide general Property Tax levy applies to most types of property with the exception of agricultural and homestead properties. For example, for taxes payable in 2018, tax rates ranged from a low of approximately 86 percent to a high of approximately 341 percent (not including the state general Property Tax rate of 43.865 percent) in St. Louis County. The class rate from 2002–2018 has been 2 percent.

The special rate on the first \$150,000 of market value that applies to class 3 commercial/industrial property does not apply to unmined iron ore that are class 5 properties.

The Minnesota Department of Revenue has tried to maintain all ores on the tax rolls, including the uneconomic, underground and unavailable classifications. A schedule of minimum rates was established in 1963 and revised in 1974, 1986, 1988, 1992 and 1999. The market values for iron ores that do not show a value with the Hoskold Formula are determined from the schedule of minimum rates. The table on the following page (*Figure 20*) lists the current schedule of minimum rates. Most of the iron ore value remaining today was determined using the schedule of minimum rates.

Open pit ores with too high of a cost to show a value with the Hoskold Formula are assigned minimum values from the open pit classification. Underground and uneconomic ores with stripping ratios exceeding five-to-one are assigned minimum values from underground uneconomic classification.

Beginning with the 1999 assessment, the minimum rates for determining market values in Crow Wing County were reduced by 50 percent. This simply recognizes that the potential for mining iron ore is substantially less in Crow Wing County than on the Mesabi Range in St. Louis or Itasca counties (*Figure 19*).

A notice of the market value of unmined ore is sent to each person subject to the tax and to each taxing district affected on or before May 1 (M.S. 273.1104).

According to the provisions of M.S. 273.1104, a public hearing to review the valuations of unmined iron ore must be held on the first secular day following May 20. This hearing provides an opportunity for mining company and taxing district representatives to formally protest any of the ore estimates or valuation procedures they believe to be incorrect.

In addition, current conditions and future trends in the iron ore industry are discussed. Iron ore Ad Valorem taxes are expected to continue their long decline as remaining economic deposits are mined or allowed to go tax forfeit. Reserves in old flooded pits converted to recreational use are classified as underground, low-grade recreational.

Figure 20
Minimum Valuation Rates on Unmined Natural Iron Ore

Ore Classification	Market value/ton (cents)	
	Itasca and St. Louis Counties	Crow Wing County
Wash Ore Concentrate (OPC)	12.0	6.0
Heavy Media Concentrate (HMC)	9.0	4.5
Low Grade (OPPRC)	3.0	1.5
Underground Uneconomic (stripping ratio greater than 5 to 1)		
Underground Concentrate > 60% Fe (UGC)	2.4	1.2
Underground Concentrate < 60% Fe (UGC)	1.8	0.9
Underground Heavy Media (UGHM)	1.5	0.75
Low grade (UGPRC)	0.9	0.45
Low grade (UGR)	0.9	0.45

Figure 21
Ad Valorem Tax Payable on Unmined Natural Iron Ore

Year Assessed	Market Value	Payable Year	Estimated Tax Payable			Total
			Crow Wing	Itasca	St. Louis	
2008	2,345,800	2009	2,200	11,400	70,100	83,700
2009	2,347,000	2010	2,200	12,200	71,500	85,900
2010	2,345,500	2011	2,400	12,700	76,400	91,500
2011	2,341,600	2012	2,600	14,300	87,400	104,300
2012	2,485,800	2013	2,700	13,900	93,200	109,800
2013	2,492,600	2014	2,800	14,100	93,900	110,800
2014	2,501,400	2015	2,800	14,100	95,200	112,100
2015	2,490,700	2016	2,600	14,200	96,600	113,400
2016	2,476,700	2017	2,500	14,300	86,500	103,300
2017	2,495,100	2018	2,500	14,400	92,600	109,500

Ad Valorem Tax on Taconite Railroads

(M.S. 270.80 - 270.88)

Beginning with the Jan. 2, 1989 assessment, taconite railroads have been included in the definitions of common carrier railroads and were assessed and taxed on an ad valorem basis according to Minnesota law. LTV and Northshore were the only railroads classified as taconite railroads. Since the 2003 assessment, Northshore Mining is the only operating railroad.

The Minnesota Department of Revenue developed rules governing the valuation of railroad operating property. The rules have been in effect since 1979 when common carrier railroads went off the gross earnings tax. Each railroad is required to file an annual report containing the necessary information.

The valuation process utilizes the unit value concept of appraisal. For taconite railroads, this involves calculating a weighted cost indicator of value allowing for depreciation and obsolescence.

Personal property is then deducted from the net cost indicator to yield a Minnesota taxable value.

This value is then apportioned to the various taxing districts where the taconite railroad owns property. The amount of value each taxing district receives is based on an apportionment formula involving three factors: land, miles of track, and the cost of buildings over \$10,000.

After the market value is apportioned to each taxing district, the value is equalized with the other commercial and industrial property on a county-wide basis using an estimated median commercial and industrial sales ratio. A commercial and industrial ratio is developed for each county and applied to that county's taconite railroad market values.

Figure 22

Ad Valorem Tax Assessed on Taconite Railroads

Year Payable	Assessed	St. Louis County	Lake County	Total Tax
2008	2007	3,212	9,063	12,275
2009	2008	2,562	6,415	8,977
2010	2009	2,319	7,293	9,612
2011	2010	2,514	7,623	10,137
2012	2011	2,460	8,265	10,725
2013	2012	2,981	10,651	13,632
2014	2013	7,286	26,796	34,082
2015	2014	6,462	23,890	30,352
2016	2015	5,770	20,696	26,466
2017	2016	4,376	16,224	20,600
2018	2017	3,086	12,308	15,394

Ad Valorem Tax on Severed Mineral Interests

(M.S. 272.039, 272.04, 273.165)

Definition

Severed mineral interests are those separately owned from the title to surface interests in real estate. Each year, severed mineral interests are taxed under Minnesota law at 40 cents per acre times the fractional interest owned. The minimum tax on any mineral interest (usually 40-acre tracts or government lots) regardless of the fractional interest owned, is \$3.20 per tract. No tax is due on mineral interests taxed under other laws relating to the taxation of minerals, such as unmined taconite or iron ore, or mineral interests exempt from taxation under constitutional or related statutory provisions.

Ownership of a specific mineral or group of minerals, such as energy minerals or precious metals rather than an actual *fractional interest* of all the minerals, does not constitute a fractional interest. Thus, if one individual reserved all minerals except gas, oil and hydrocarbons, and a second entity reserved the hydrocarbons, each owner would be subject to the full 40 cents per acre tax.

The Severed Mineral Interest Tax is a Property Tax that is levied by local taxing authorities in the same manner as other local Property taxes. Proceeds from the tax are distributed in this manner: 80 percent is returned by the county to local taxing districts where the property is located in the same proportion that the local tax rate of each taxing district bears to the total surface tax rate in the area; and 20 percent to the Indian Business Loan Account in the state treasury for business loans made to Indians by the Department of Employment and Economic Development.

The registration and taxation of severed mineral interests is a county function. Severed mineral interests are registered with the county recorder in the county where the interest is located. The county auditor sends a tax statement similar to any other real estate interest. The tax is normally collected in two increments payable in May and October. If the tax is less than \$50, the taxpayer is required to pay in full with the May payment.

Nonpayment Penalty: Forfeiture

The eventual penalty for not paying the tax is forfeiture. Policies vary somewhat among counties. Specific questions about the tax, interest or penalties should be directed to the county recorder and auditor in the county where the minerals are located.

Tax Imposed

The tax on severed mineral interests was enacted in 1973 as part of an act that required owners to file a document with the county recorder where the interests were located describing the mineral interest and asserting an ownership claim to the minerals. The purpose of this requirement was to identify and clarify the obscure and divided ownership conditions of severed mineral interests in the state (M.S. 93.52). Failure to record severed mineral interests within time limits established by the law results in forfeiture to the state (M.S. 93.55).

History of Litigation

In 1979, the Minnesota Supreme Court ruled that the tax, the recording requirements and the penalty of forfeiture for failing to timely record were constitutional, but also ruled that forfeiture procedures were unconstitutional for lack of sufficient notice and opportunity for hearing. This decision is cited as *Contos, Burlington Northern, Inc. U.S. Steel, et al. v. Herbst, Commissioner of Natural Resources, Korda, St. Louis County Auditor, Roemer, Commissioner of Revenue, and the Minnesota Chippewa Tribe, et al.*, 278 N.W. 2d 732 (1979). The U.S. Supreme Court refused to hear an appeal requested by the plaintiffs. Shortly after this decision, the legislature amended the law to require notice to the last owner of record and a court hearing before a forfeiture for failure to timely record becomes complete. Under these requirements, court orders have been obtained by the state in several counties declaring the forfeiture of particular severed mineral interests to be complete and giving title to the state.

Figure 23

Ad Valorem Tax on Severed Mineral Interests: Collection and Distribution

Period ending	80% retained by local government	20% payment to Indian Business Loan Account	Total collections of affected counties
Dec. 31, 2010	\$448,864	\$112,216	\$561,080
Dec. 31, 2011	444,016	111,004	555,020
Dec. 31, 2012	487,096	121,774	608,870
Dec. 31, 2013	452,376	113,094	565,470
Dec. 31, 2014	436,704	109,176	545,880
Dec. 31, 2015	427,756	106,939	534,695
Dec. 31, 2016	417,991	104,498	522,489
Dec. 31, 2017	513,528	128,382	641,910

Ad Valorem Tax on Severed Mineral Interests (cont.)

In 1988, the legislature amended the law to allow the commissioner of the Minnesota Department of Natural Resources (DNR) to lease unregistered severed mineral interests before entry of the court order determining the forfeiture to be complete. However, mining may not commence under such a lease until the court determines that the forfeiture is complete.

In a 1983 case, the Minnesota Supreme Court ruled that severed mineral interests owned by the Federal Land Bank of St. Paul were exempt from the state Severed Mineral Interest Tax under a federal law exempting Land Bank real estate from local Property taxes. The U.S. Supreme Court denied a petition by the State of Minnesota to review the case.

DNR Lease

If someone buys a DNR mining lease of 3 or more years duration, the Severed Mineral Interest Tax of 40 cents per acre applies. Contact the DNR, Minerals Division, to determine the status of activities under any state metallic minerals lease.

Indian Business Loan Account

The 20 percent portion of the Severed Mineral Interest Tax that is allocated to the Indian Loan Program is reported by the county auditors on the *Severed Mineral Interest Return* (SMI1). Normally, the form is submitted twice each year to correspond with payment of Property taxes.

The money deposited in the Severed Mineral Interest Account is distributed to the Indian Loan Program at the end of each month.

Department of Revenue

The processing and payment of the Severed Mineral Interest Tax is handled by the Special Taxes Division of the Minnesota Department of Revenue, Mail Station 3331, St. Paul, MN 55146-3331. Phone 651-556-4721.

Loan Program

The Indian Business Loan Program is administered by the Department of Employment and Economic Development, 1st National Bank Building, 332 Minnesota Street, Suite E-200, St. Paul, MN 55101-1351. Phone: 651-259-7424.

Taxes on Nonferrous Minerals

Companies mining or exploring for nonferrous minerals or energy resources are also subject to Minnesota taxes. This includes mining or exploring for:

- Base metals, such as copper, nickel, lead, zinc, titanium, etc;
- Precious metals, such as gold, silver and platinum; and
- Energy resources, such as coal, oil, gas and uranium.

Companies that are in the exploration stage, and not actually mining, are NOT subject to Occupation Tax or Net Proceeds Tax, however, they are subject to income taxes (e.g., regular Corporate Franchise Tax, S-Corporate Tax, etc.).

Companies that are mining nonferrous minerals are subject to the same taxes as companies that mine ferrous minerals:

- Occupation Tax (see page 23)
- Sales and Use Tax (see page 1)
- Ad Valorem Tax on severed mineral interests (see page 32)

In addition, they are subject to Ad Valorem Tax (Property Tax) in certain situations and a Net Proceeds Tax.

Ad Valorem Tax (M.S. 272–273)

Companies mining or exploring for nonferrous minerals or energy resources are subject to Property Tax the same as other businesses.

For commercial and industrial property, the assessor's estimated market value is multiplied by a class rate to obtain gross tax capacity. The first \$150,000 of market value is taxed at 1.5 percent, while a 2 percent rate applies to market value over \$150,000. To determine the tax, the product of the market value and class rate must be multiplied by the local tax rate plus the 43.865 percent state general Property Tax rate for taxes payable in 2018. In St. Louis County, where the majority of Minnesota's mining industry is located, the local tax rates payable in 2018 varied from a low of 86 percent to a high of approximately 341 percent. If a referendum tax is passed, the referendum rate times the full market value must be added.

If a company is mining minerals or energy resources subject to the Net Proceeds Tax under M.S. 298.015, then the following property is exempt:

- deposits of ores, metals, and minerals and the lands in which they are contained;
- all real and personal property used in mining, quarrying, producing, or refining ores, minerals, or metals, including lands occupied by or used in connection with the mining, quarrying, production, or ore refining facilities;
- and concentrate.

Net Proceeds Tax (M.S. 298.015–298.018)

The Net Proceeds Tax applies to the mining or producing of nonferrous minerals and energy resources, i.e., all ores, metals and minerals mined, extracted, produced or refined within Minnesota, except for sand, silica sand, gravel, building stone, crushed rock, limestone, granite, dimension granite, dimension stone, horticultural peat, clay, soil, iron ore and taconite concentrates.

The tax is equal to 2 percent of the net proceeds from mining in Minnesota. Net proceeds are the gross proceeds from mining less allowable deductions. Gross income from mining or producing nonferrous minerals or energy resources is calculated differently from the method used for ferrous minerals.

For **non-equity or arms-length transactions**, gross income is based on actual sales. Generally, for **non-arms-length transactions**, gross income is based on the average annual market price as published in the *Engineering and Mining Journal*.

The Net Proceeds Tax was designed to apply to mining and beneficiation, generally to the point of a saleable product. In the case of some hydrometallurgical processes, the saleable product may be a refined metal.

Deductions from the tax include only those expenses necessary to convert raw materials to marketable quality. Expenses such as transportation, stockpiling, marketing or marine insurance that are incurred after marketable ores are produced are not allowed, unless the expenses are included in gross proceeds.

Distribution of the tax. If the minerals or energy resources are mined *outside* the Taconite Assistance Area, the tax is deposited in the state's General Fund. If they are mined or extracted *within* the Taconite Assistance Area, the tax is distributed to:

- Cities and towns (5%), counties (20%), and school districts (10%) where the minerals or energy resources are mined or extracted, or where the concentrate is produced. If concentrating occurs in a different taxing district from where the mining occurs, 50 percent is distributed to the taxing districts where mined and the remainder to those districts where processed. In addition, counties must pay 1 percent of their proceeds to the Range Association of Municipalities and Schools.
- Regular School Fund (20%)
- Taconite Municipal Aid Account (10%).
- Taconite Property Tax Relief (20%), using St. Louis County as fiscal agent.
- Iron Range Resources & Rehabilitation (5%).
- Douglas J. Johnson Economic Protection Trust Fund (5%).
- Taconite Environmental Protection Fund (5%).

Distributions are made annually on July 15; however, there are currently no companies subject to the Net Proceeds Tax.

Glossary of Terms

Acid pellets — Taconite pellets comprised of iron, oxygen and silica held together by a binder such as bentonite (clay) or peridor (organic).

Agglomeration — The term describing the preparation and heat treatment used to prepare iron ore pellets or other iron ore products for shipment and use in a blast furnace.

Arms-length transaction — A sale of iron ore or pellets representing a true free market transaction when the buyer normally does not have an ownership or other special relationship with the seller.

Basic oxygen furnace (BOF) — A steel-making furnace invented in Austria. It replaced open hearth furnaces in the 1960s. It is currently the standard furnace used by the integrated steel producers in the United States.

Beneficiation — The process of improving the grade by removing impurities through concentrating or other preparation for smelting, such as drying, gravity, flotation or magnetic separation. In taconite operations, this includes the first stage of magnetic separation and converting the concentrate into taconite pellets for use in making steel.

Concentrate — The finely ground iron-bearing particles that remain after separation from silica and other impurities.

Douglas J. Johnson Economic Protection Trust Fund (DJJ) — A portion of Production Tax revenues is allocated to this fund with the intent to use the funds to diversify and stabilize the long-range economy of the Iron Range.

Direct reduced iron (DRI) — A relatively pure form of iron (usually 90 percent + Fe), which is produced by heating iron ore in a furnace or kiln with a reducing agent such as certain gases or coal.

Dry weight — The weight of iron ore or pellets excluding moisture. For pellets, the dry weight is normally 1 to 2 percent less than the natural weight.

Electric Arc Furnace (EF or EAF) — A furnace in which an electric current is passed through the charge. These furnaces are much smaller than the conventional BOFs used by the integrated steel producers.

Fe unit — Commonly referred to as an iron unit. An iron unit is a term of measurement denoting one ton containing one percent iron. Iron ore and taconite produced in the United States is measured in long tons (see definition). One long ton of taconite containing 65 percent iron also contains 65 long ton iron units.

Historically, this measurement was and is used for the selling price quoted in cents per iron unit. One example is a currently published price of acid pellets FOB mine at 37.344 cents per dry gross ton iron unit *or* \$.37344 per iron unit.

Fluxed pellets — Taconite pellets containing limestone or another basic flux additive. Fluxed pellets eliminate the need to add limestone in the blast furnace, improving productivity and quality. Adding flux reduces the iron content of a pellet. Fluxed pellets, as used in this guide, mean pellets containing two percent or more limestone or other flux.

Partially fluxed pellets — Fluxed pellets containing 1.99 percent or less limestone or other flux additive.

Gross Domestic Product Implicit Price Deflator (GDIPIPD) — An index maintained by the U.S. Department of Commerce measuring inflation in the overall economy. The Production Tax rate is adjusted annually based on the change in this index.

Integrated steel producer — Term used to describe steel companies that produce steel by starting with raw iron ore, reducing it to molten iron in a blast furnace, and producing steel with a BOF, open hearth, or electric furnace.

Lake Erie value — The traditional and quoted price of iron ore from the earliest days of iron ore mining in Minnesota and Michigan. This price per iron unit included delivery, mainly rail and lake transportation, from the mine to a Lake Erie port.

This was the starting point for Occupation Tax since its 1921 beginning. It was the standard method of pricing domestic iron ore and taconite for Occupation Tax until the mid-1980s (see Mine Value).

Long ton — The standard unit for weighing iron ore and taconite in the United States. A long ton equals 2,240 pounds.

M.S. 298.225 — A Minnesota statute (law) guaranteeing the Production Tax aids received by municipalities, counties, schools and the Iron Range Resources & Rehabilitation. The aid levels are adjusted according to a sliding scale based on production levels.

Metric ton — Standard unit for weighing iron ore and taconite in most areas of the world. A metric ton equals 1,000 kilograms or 2,204.62 pounds.

Mine value — The value of iron or pellets at the mine. This became the starting point for Occupation Tax in 1987. This value per iron unit does not include any rail or lake transportation beyond the mine.

Mini mill — A small steel mill using an electric furnace that produces steel from scrap iron.

Natural ore — Iron ore that can be fed to a blast furnace with less complicated processing than taconite requires. Natural ore typically contains 50 percent +Fe (iron) in its natural state.

Natural weight — The weight of iron ore or pellets including moisture.

Net proceeds tax — A tax equal to two percent of net proceeds from mining. Net proceeds are determined by subtracting certain basic deductions such as labor, equipment, supplies and depreciation from gross proceeds or sales.

Non-equity sales — See Arms-length transaction.

Pellet chip — Broken pellets often cannot be sold as pellets and instead are sold at a reduced price for sinter plants and other uses. For Occupation Tax purposes, chips are defined as individual shipments or stockpiles containing at least 85 percent of pellet chips smaller than one-fourth inch. Such chips cannot be shipped or commingled with regular pellets.

For Occupation Tax purposes, pellet chips are valued at 75 percent of the value of the unbroken pellets.

Percentage depletion — A taxable income deduction in the form of an allowance representing a return on capital investment on a wasting asset subject to a gradual reduction in reserves. This deduction applies to income derived from various mining or oil and gas properties.

Range Association of Municipalities and Schools (RAMS) — An association representing Iron Range cities, towns and schools receiving any funding from the Production Tax.

Region 3 — Koochiching, Itasca, Aitkin, Carlton, St. Louis, Lake and Cook counties.

Royalty — A share of the product or profit reserved by the owner for permitting another to use the property. A lease by which the owner or lessor grants to the lessee the privilege of exploring, mining and operating the land in consideration of the payment of a certain stipulated royalty on the mineral produced.

Short ton — Standard for weighing many commodities in the United States. It equals 2,000 pounds.

Steel Mill Products Index (SMPI) — A United States government index tracking the actual selling price of all steel products in the United States. This index is published monthly by the U.S. Department of Labor. It is part of the formula used to determine a product value for Occupation Tax purposes each year.

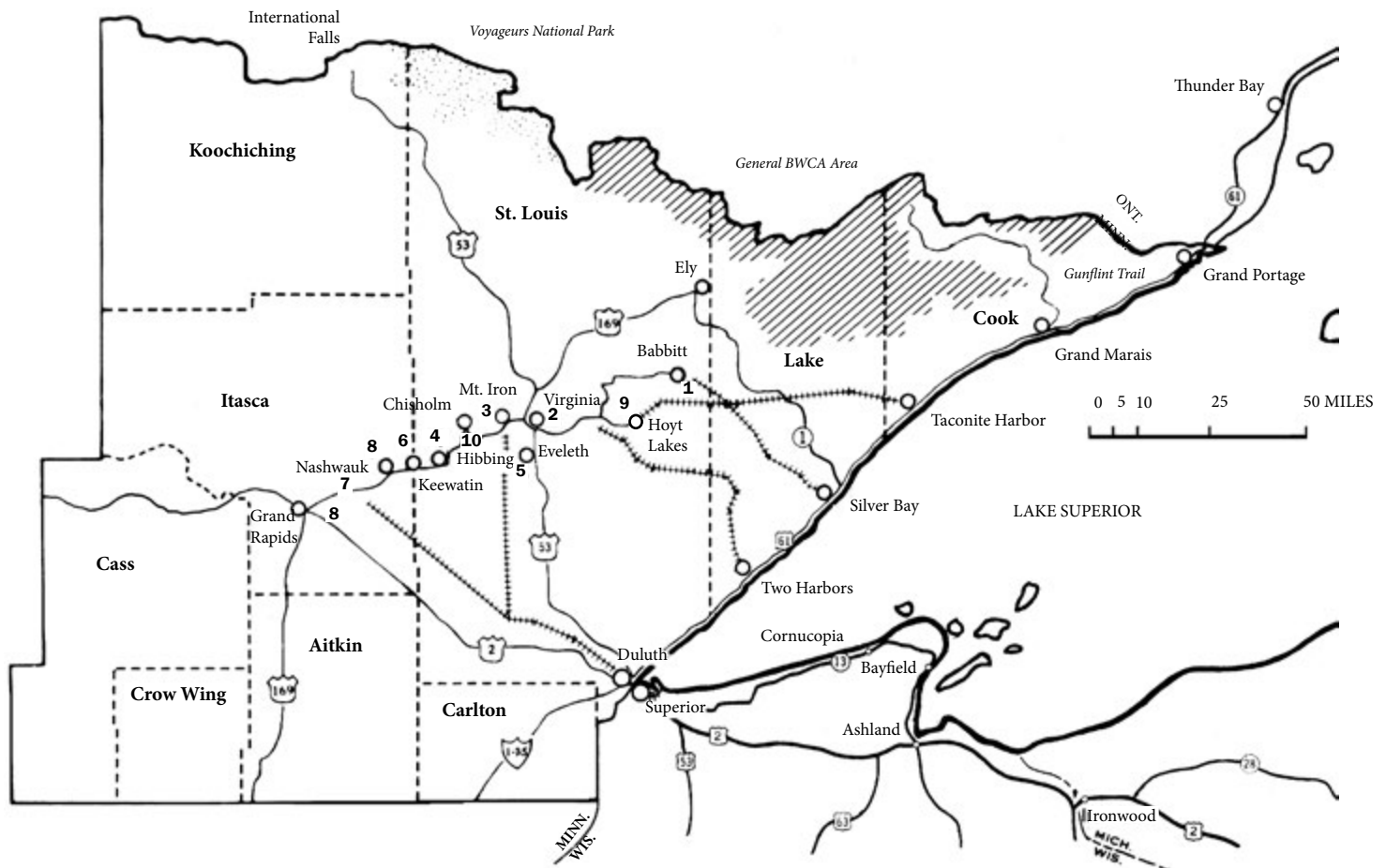
Taconite — Ferruginous chert or ferruginous slate in the form of compact, siliceous rock in which the iron oxide is so finely disseminated that substantially all of the iron-bearing particles are smaller than 20 mesh.

It is not merchantable in its natural state, and it cannot be made merchantable by simple methods of beneficiation involving only crushing, screening, jigging, washing and drying or any combination thereof. (MS 298.001, subd. 4)

Tailing — Small rock particles containing little or no iron, which are separated during various stages of crushing, grinding, and concentration. Most of the separation is done with magnetic separators. Silica is the main mineral constituent of tailings.

Taxable tons — The three-year average of the current and prior two years production. The Production Tax is based on taxable tons. The weight is on a dry basis without any flux additives. For other iron bearing material subject to the Production Tax, only the current year is used.

Mine Locations and Production Capacity



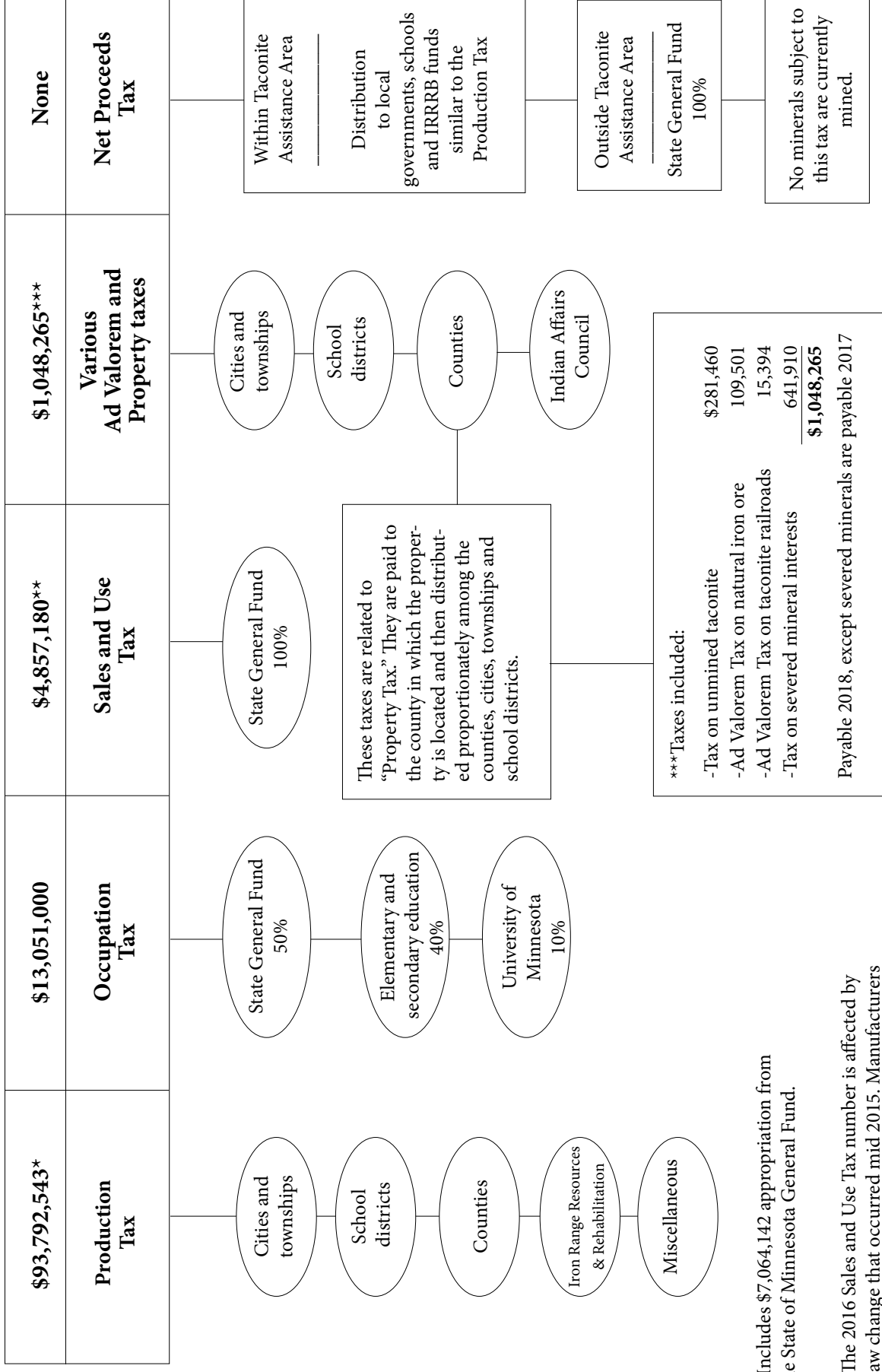
	Effective Capacity* (million tons)		Effective Capacity* (million tons)
1. Northshore Mining Owner: Cleveland-Cliffs, Inc. (100%)	6.2	6. U. S. Steel–Keewatin Taconite Owner: USS Corporation (100%)	6.0
2. ArcelorMittal Minorca Mine Owner: ArcelorMittal (100%)	2.8	7. Mesabi Metallics	Unknown
3. U. S. Steel–Minntac Owner: USS Corporation (100%)	16.0	8. ERP Iron Ore Owner: ERP Iron Ore LCC (100%)	3.0
4. Hibbing Taconite Cliffs-Cleveland Inc., Managing Agent Owners: ArcelorMittal (62.3%) Cleveland-Cliffs, Inc. (23%) U. S. Steel Canada (14.7%)	8.0	9. Mesabi Nugget LLC Owners: Steel Dynamics, Inc (81%) Kobe Steel, Ltd (19%)	0.5
5. United Taconite LLC Owner: Cleveland-Cliffs, Inc.(100%)	5.4	10. Mining Resources LLC Owner: Steel Dynamics, Inc. (100%)	1.0

* Effective capacity is the annual production capacity in natural long tons (including flux) that can be sustained under normal operating conditions.

The ownership percentages shown are the ultimate percentages controlled by parent steel and mining companies. In some instances, various other partnerships and subsidiaries are listed on legal corporate documents.

Distribution of Mining Taxes

Production Year 2017 Tax Obligations - \$112,748,988



* Includes \$7,064,142 appropriation from the State of Minnesota General Fund.

**The 2016 Sales and Use Tax number is affected by a law change that occurred mid 2015. Manufacturers no longer pay Sales and Use Tax on equipment used in the production process. As a result of this change, we refunded more Sales and Use Tax than we collected.