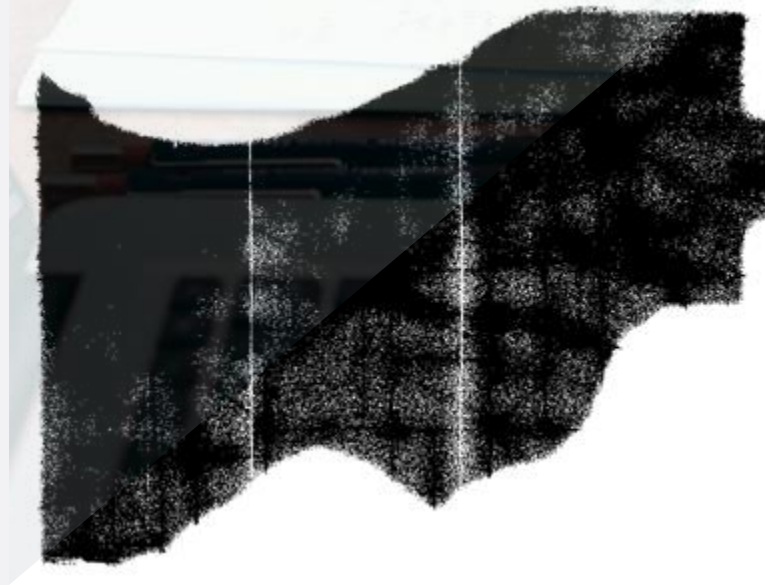


Northwestern Indiana Regional Planning Commission Primary Metals Cluster Drill-down

Section 01



Economic indicators

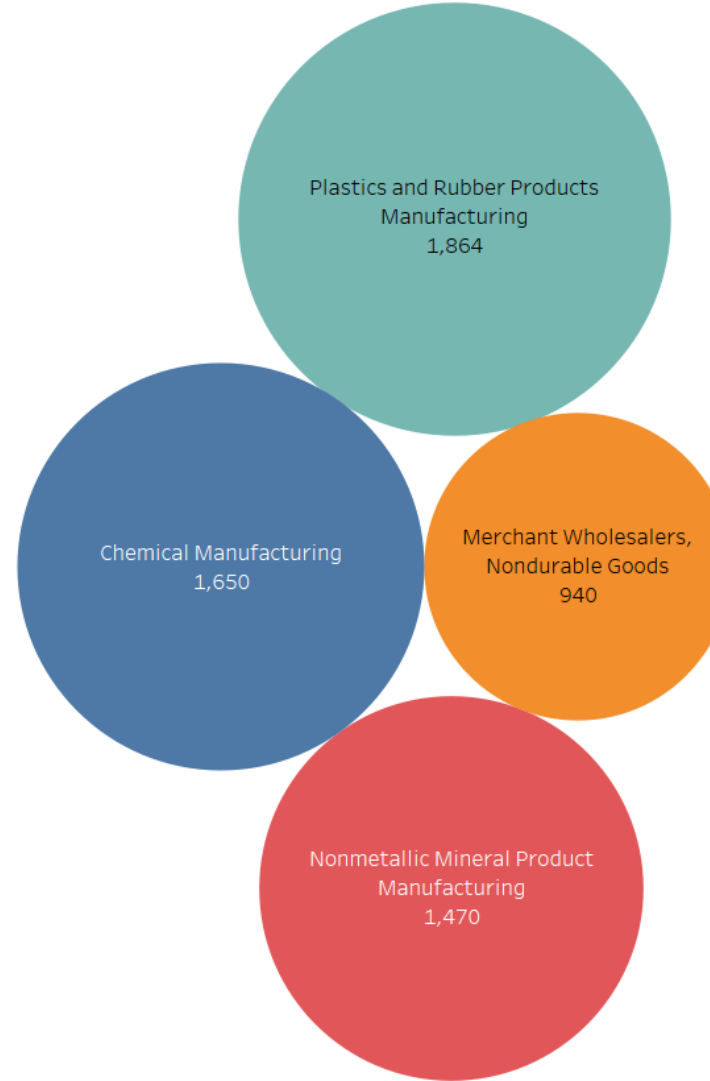


Economic Indicators	Northwestern Indiana Regional Planning Commission (QCEW, non-QCEW, self-employed and proprietors)
Jobs 2023 (% of total jobs)	15,876 (4%)
Job change 2018-2023 (#, %)	-1,687 (-10%)
Average total earnings per job 2023	\$136,925
Cost of Living (COL)	93.8
Est. Establishment 2023 (% of total est.)	32 (0.2%)
GRP (Gross Regional Product) 2023	\$ 8.0 Billion
GRP per job 2023 (productivity)	\$503,894
Total purchases 2023	\$14.5 Billion
<i>Within region</i>	48.2%
<i>Imported from outside of region & state</i>	51.8%
Number of sectors in chemicals and chemical-based cluster	18



Primary Metals

NAICS-4 digit	Description	Jobs 2023
3311	Iron and Steel Mills and Ferroalloy Mfg.	13,422
3315	Foundries	1,163
3314	Nonferrous Metal (except Aluminum) Production and Processing	556
3312	Steel Product Mfg. from Purchased Steel	465
3313	Alumina and Aluminum Production and Processing	295



NAICS 3-digit sectors

- Chemical Manufacturing
- Merchant Wholesalers, Nondurable Goods
- Nonmetallic Mineral Product Manufacturing
- Plastics and Rubber Products Manufacturing

Section 02



Competitiveness, economic leakages and Workforce

Regional Job Growth:

Three Key Components of the Shift-Share Analysis

Expected Change

The sum of the industrial mix and the national growth effects



Note:

The calculations ensure no double counting of job change effects from national to regional levels

National Growth Effect

Explains how much of the regional industry's growth is explained by the overall growth of the national economy

Industrial Mix Effect

Share of regional industry growth explained by the growth of the specific industry sector at the national level

Regional Competitive Effect

Explains how much of the change in a given industry is due to some unique competitive advantage that the region possesses

Shift-Share Analysis (Regional Performance) by Top Industry Sectors

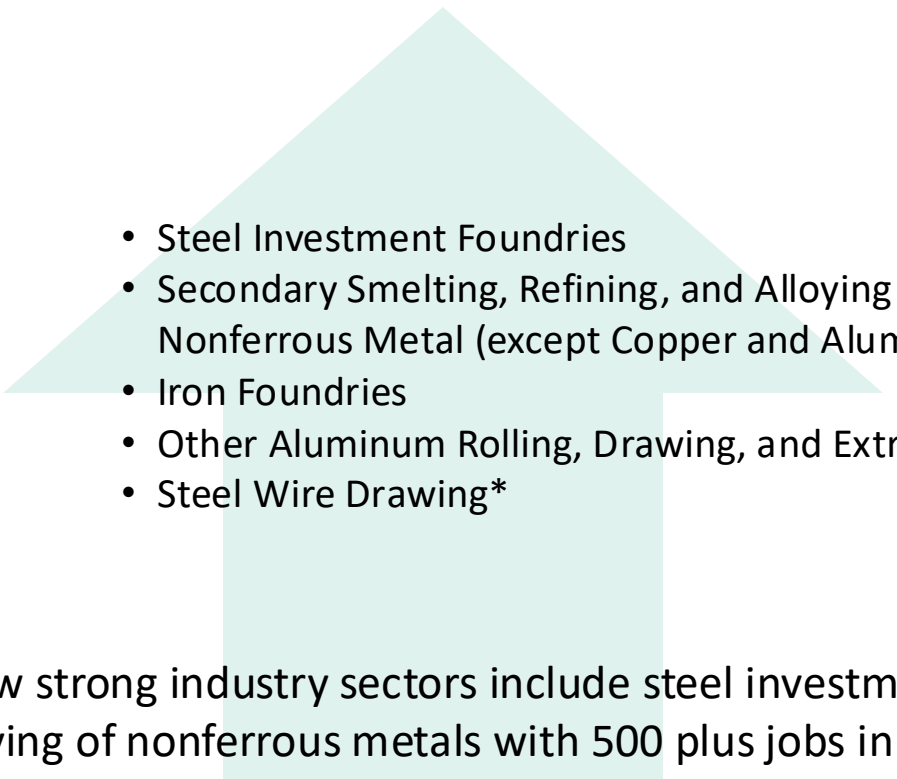
Industries	Jobs 2023	National Trend 2018-2023 (A)	Industry Trend 2018-2023 (B)	Cumulative Expected Growth (C=A+B)	Actual Job Growth 2018-2023 (D)	Regional Performance 2018-2023 (D-C)
Iron and Steel Mills and Ferroalloy Manufacturing	13,422	1,305	-1,174	130	-1,531	-1,661
Steel Investment Foundries	1,001	97	-238	-141	-106	↑ 35
Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum)	546	37	-41	-4	124	↑ 128
Rolled Steel Shape Manufacturing	295	43	-5	38	-202	-240
Aluminum Sheet, Plate, and Foil Manufacturing	215	26	4	30	-87	-117
Iron Foundries	142	10	-20	-10	31	↑ 41
Iron and Steel Pipe and Tube Manufacturing from Purchased Steel	103	12	-15	-2	-39	-37
Other Aluminum Rolling, Drawing, and Extruding*	75	1	-1	0	Insf. Data	↑ 68
Steel Wire Drawing*	67	1	-1	0	Insf. Data	↑ 58

* Other Aluminum Rolling, Drawing and Extruding and Steel Wire Drawing industries appear after 2018 in the region, hence job growth data show “Insf. Data”.

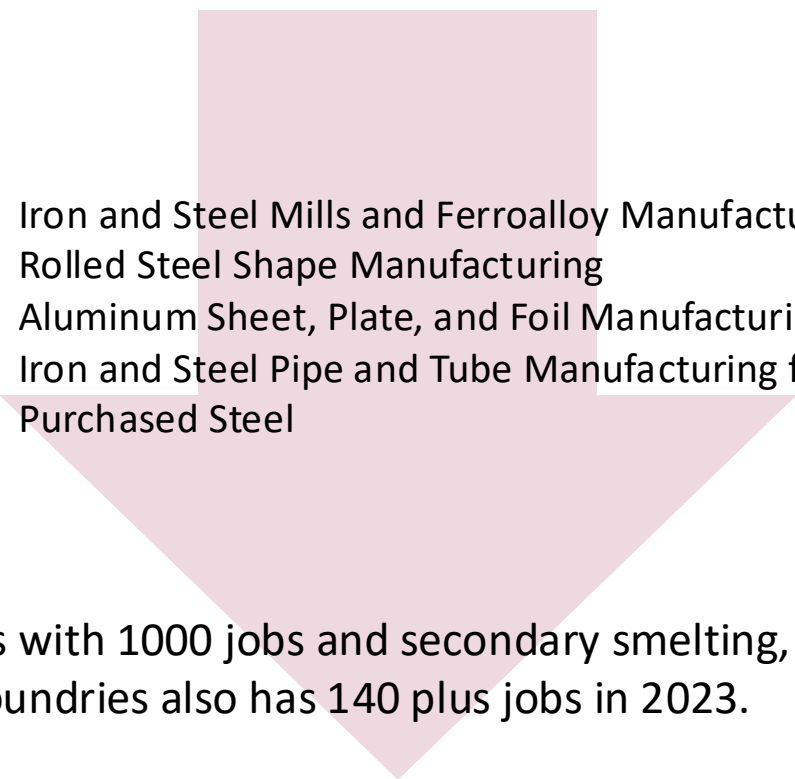
Note: Upward arrow (↑) indicates regional competitiveness.

Shift-Share Analysis 2023

Industries that Outperformed

- 
- Steel Investment Foundries
 - Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum)
 - Iron Foundries
 - Other Aluminum Rolling, Drawing, and Extruding*
 - Steel Wire Drawing*

Industries that Underperformed

- 
- Iron and Steel Mills and Ferroalloy Manufacturing
 - Rolled Steel Shape Manufacturing
 - Aluminum Sheet, Plate, and Foil Manufacturing
 - Iron and Steel Pipe and Tube Manufacturing from Purchased Steel

- A few strong industry sectors include steel investment foundries with 1000 jobs and secondary smelting, refining, and alloying of nonferrous metals with 500 plus jobs in 2023. Iron foundries also has 140 plus jobs in 2023.
- Secondary smelting, refining, and alloying of nonferrous metals has a large competitive shift value of +128. Both, Steel investment and iron foundries have competitive shift values of +35 and +41, respectively.

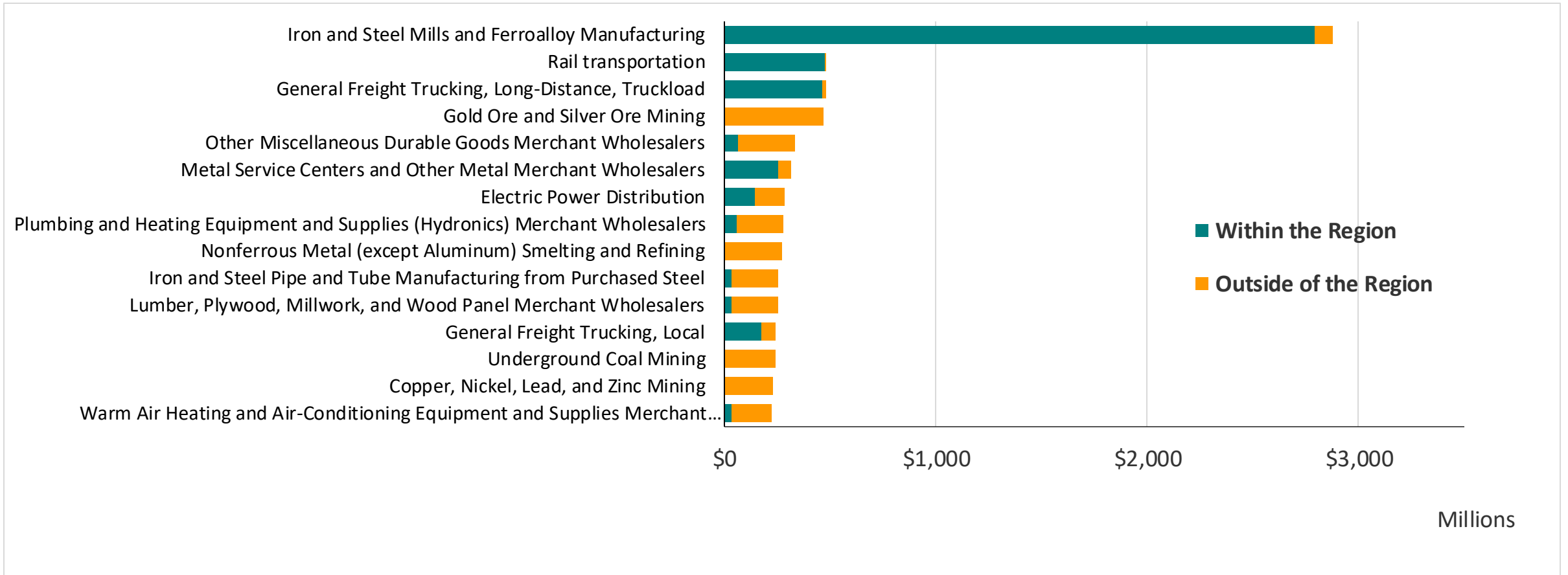


Leakage analysis: Top 15 Industries by Inputs

Industries	Estimated Input (\$ Million), 2023	% In-Region	% Out of Region
Iron and Steel Mills and Ferroalloy Manufacturing	\$2,879.1	97.0%	3.0%
Rail transportation	\$479.9	99.5%	0.5%
General Freight Trucking, Long-Distance, Truckload	\$478.2	96.8%	3.2%
Gold Ore and Silver Ore Mining	\$469.9	0.0%	100.0%
Other Miscellaneous Durable Goods Merchant Wholesalers	\$333.7	19.4%	80.6%
Metal Service Centers and Other Metal Merchant Wholesalers	\$314.3	81.4%	18.6%
Electric Power Distribution	\$281.9	50.8%	49.2%
Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers	\$275.9	22.1%	77.9%
Nonferrous Metal (except Aluminum) Smelting and Refining	\$275.0	0.3%	99.7%
Iron and Steel Pipe and Tube Manufacturing from Purchased Steel	\$256.6	13.0%	87.0%
Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers	\$255.7	14.0%	86.0%
General Freight Trucking, Local	\$242.5	71.7%	28.3%
Underground Coal Mining	\$239.1	0.0%	100.0%
Copper, Nickel, Lead, and Zinc Mining	\$231.8	0.0%	100.0%
Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers	\$222.2	15.5%	84.5%



Leakage analysis 2023



- Gold ore and silver mining had \$470 million economic leakage in 2023. Durable goods merchant wholesalers had \$269 million leakages in 2023. Nonferrous metal (except Aluminum) smelting and refining had \$274 million leakages.



**Other misc.
durable goods
merchant
wholesalers**



**Nonferrous
metal (except
Aluminum)
smelting and
refining**



Iron foundries

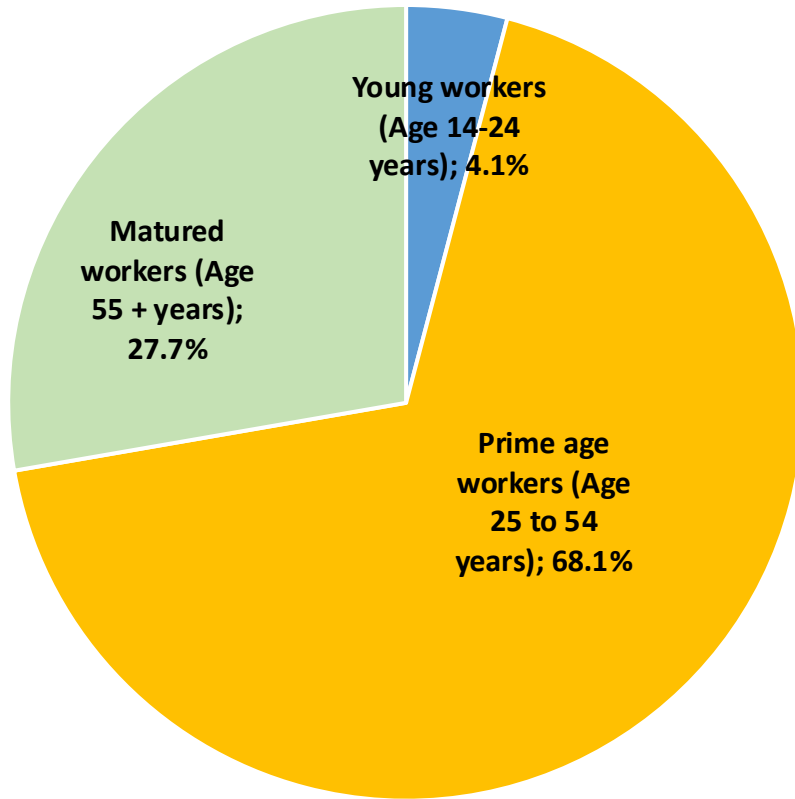




Occupations	Jobs 2023	% Change 2018-2023	% of Total Jobs in Cluster 2023	Median Hour Earnings	Entry level Education	Automation
Metal-Refining Furnace Operators and Tenders	2,521	278%	15.9%	\$37.96	High school diploma or equivalent	117.4
Industrial Machinery Mechanics	1,622	29%	10.2%	\$37.37	High school diploma or equivalent	109.8
Industrial Truck and Tractor Operators	934	58%	5.9%	\$21.54	No formal educational credential	119.5
Laborers and Freight, Stock, and Material Movers, Hand	854	71%	5.4%	\$18.00	No formal educational credential	117.2
First-Line Supervisors of Production and Operating Workers	681	-30%	4.3%	\$31.55	High school diploma or equivalent	88.6
Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	531	-54%	3.3%	\$23.59	High school diploma or equivalent	111.7
Crane and Tower Operators	407	-30%	2.6%	\$28.85	High school diploma or equivalent	121.5
Pourers and Casters, Metal	371	133%	2.3%	\$26.36	High school diploma or equivalent	121.1
Electricians	343	-10%	2.2%	\$38.83	High school diploma or equivalent	110.3
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	319	-52%	2.0%	\$17.84	High school diploma or equivalent	115.9
Inspectors, Testers, Sorters, Samplers, and Weighers	316	-38%	2.0%	\$23.55	High school diploma or equivalent	106.1
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	288	-15%	1.8%	\$17.58	High school diploma or equivalent	119
First-Line Supervisors of Mechanics, Installers, and Repairers	274	47%	1.7%	\$41.87	High school diploma or equivalent	94
Shipping, Receiving, and Inventory Clerks	273	-20%	1.7%	\$20.64	High school diploma or equivalent	109.1
Maintenance and Repair Workers, General	253	-43%	1.6%	\$21.95	High school diploma or equivalent	109.6



Worker demographics 2023



- Hispanic workers (13%)
- Black or African-American workers (15%)
- Asian workers (1%)
- White workers (70%)
- American Indian or Alaska Native (0.2%)
- Others (1%)

- Male workers (85%)
- Female workers (15%)

- Slightly more than one in four workers (28%) are matured (aged 55 years or more) workers in NIRPC in this cluster. Young workers are only 4.1% of the labor force. Talent pipeline strategies are needed!

Section 03

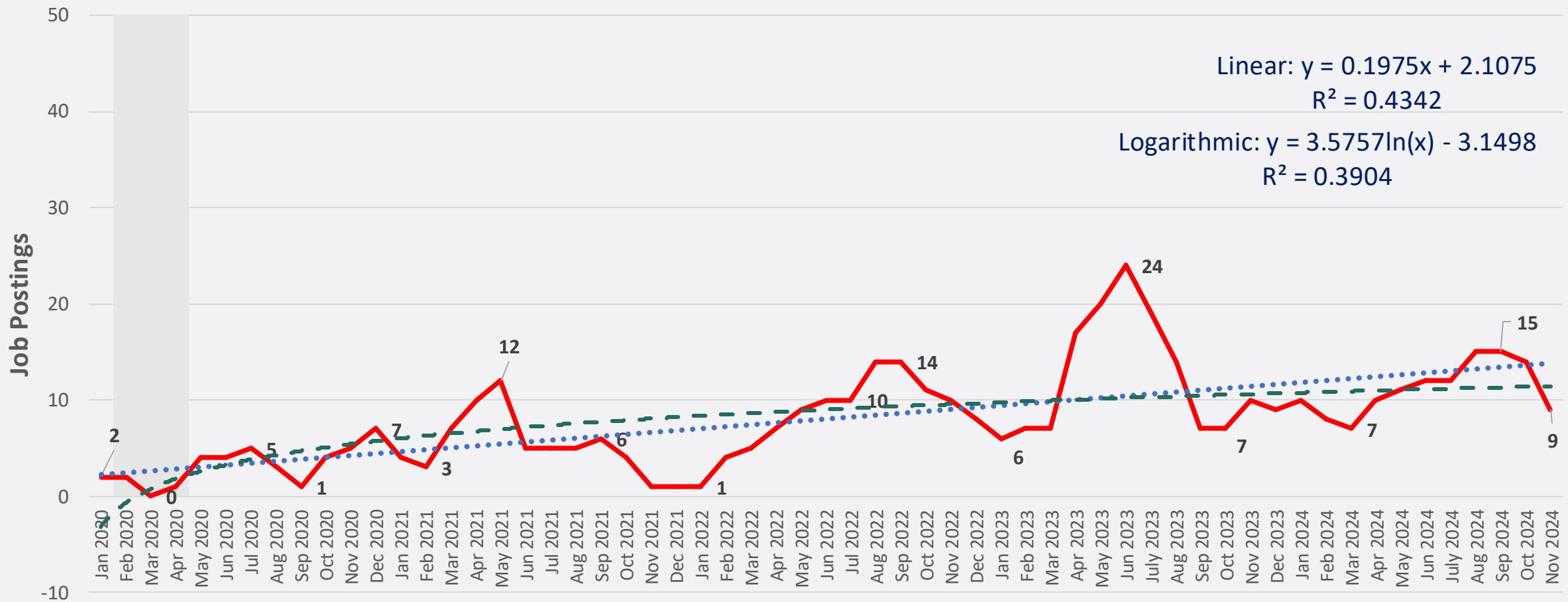


Jobs Postings (Labor demand)

Primary Metal Manufacturing Jobs Postings Overview

- From January 2020 to November 2024, a total of 675 unique jobs postings happened in industries within the Primary Metal Manufacturing. The average monthly unique jobs postings was 8 per month.
- The median posting duration was 24 days. Posting intensity was 2:1.
- Percent change between **January 2020 and November 2024** was **350%**.
- 51 employers in Primary Metal Manufacturing competed for talent during this period.
- Hourly median advertised salary was \$25.54 per hour (27% postings included salaries)
- Job postings were advertised in 16 different industries within NIRPC Region. **Iron and Steel Mills and Ferroalloy Manufacturing** and **Iron Foundries** had more than 75 unique jobs postings during **January 2020 and November 2024**.
- Top companies in Primary metals cluster posting jobs include Big River Steel, Amsted Rail, Central Wire, Silgan, and Jupiter Aluminum Corporation.

Primary Metal Manufacturing: Job Postings Time Series (Jan 2020 to November 2024)



- Unique jobs postings are not seasonally adjusted and hence may show seasonal effects. Jobs postings are in a recovery mode following the COVID-19 induced recession (February 2020 to April 2020).

Primary Metal Manufacturing Latest Unique Jobs Postings

**Latest 1-
Month Unique
Jobs Postings
Oct 2024 - Nov
2024**



**Latest 12-
Month Unique
Jobs Postings
Nov 2023 -
Nov 2024**



Top Companies Postings

1. Big River Steel
2. Amsted Rail
3. Central Wire
4. Silgan
5. Jupiter Aluminum Corporation
6. T&B Tube
7. Arconic
8. Tms
9. Central Steel & Wire Co.
10. Resco Products
11. J W Hicks
12. Feralloy Corp.
13. Castle Metals
14. Accurate Castings

Top Industries

1. Iron and Steel Mills and Ferroalloy Manufacturing
2. Iron Foundries
3. Steel Wire Drawing
4. Aluminum Sheet, Plate, and Foil Manufacturing
5. Steel Foundries (except Investment)
6. Iron and Steel Pipe and Tube Manufacturing from Purchased Steel
7. Alumina Refining and Primary Aluminum Production
8. Other Aluminum Rolling, Drawing, and Extruding
9. Rolled Steel Shape Manufacturing
10. Steel Investment Foundries
11. Nonferrous Metal Die-Casting Foundries

- Farmers, farm hand and manual worker jobs advertisements are based on analog and not online services.

Section 04



Economic Outlook

U.S. Industry Economic Outlook

- **Iron and Steel Manufacturing** in the U.S. had \$140 bn revenue with a profit margin of 7.7% in 2024. The production volumes of iron and steel have been volatile because of pandemic-induced volatility in the construction sector. The revenue and employees are forecast to grow marginally during 2024-2029. Tariff, trade and foreign policies can impact this sector.
- **Ferrous Metal Foundry Products** in the U.S. had \$19.7 bn revenue with a profit margin of 7.3% in 2024. This industry has been experiencing a decline in the U.S. because of consolidations and exits. Growth in industrialization, infrastructure development, and foreign demand can expand this industry in the U.S. The life cycle of this industry is in mature category.
- **Nonferrous Metal Refining** in the U.S. had \$17.5 bn revenue with a profit margin of 4.5% in 2024. The industry is expected to grow by 1.3% in revenue and 0.5% in employees during 2024-2029. Renewed downstream manufacturing and construction activity will boost demand for refined metals. As production resumes amid the recovery economy, so will demand for primary inputs (IBIS World).

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