

CHISAGO COUNTY LABOR FORCE ANALYSIS

December 2021

Chisago County HRA-EDA engaged C&W to develop an assessment of the County's labor force focused on supporting the County's drive to expand manufacturing, warehousing and supply chain businesses.

Approach

- Identified the primary industries operating in Chisago County in the areas of manufacturing, supply chain and warehousing
- Identified the top occupations for employment in Chisago County focused in areas of manufacturing, supply chain and warehousing
- Assessed and compared the volume, concentration, job growth and for these industries and occupations
- Developed groups of target industries and occupations for more detailed analysis
- Assessed the commuting patterns into and out of Chisago County for workers within the target occupations

TARGET AREAS:

- **MANUFACTURING**
- **WAREHOUSING**
- **SUPPLY CHAIN**

CHISAGO COUNTY PROFILE

SELECTED TOP INDUSTRIES

- Chisago County has a critical mass of industries aligned to manufacturing, warehouse and supply chain/distribution
- Current employers in these industries includes: Rosenbauer Minnesota, Polaris Industries, Plastech Corporation, Royal Concrete, Andersen Windows, Smith Metal Products, Branch Manufacturing and Viking Coca-Cola.
- Over the next 5 years, many of these industries are projected to experience double-digit growth within the County

Selected Top Industries Related to Manufacturing, Supply Chain & Warehousing (Jobs, LQ, Projected Growth)

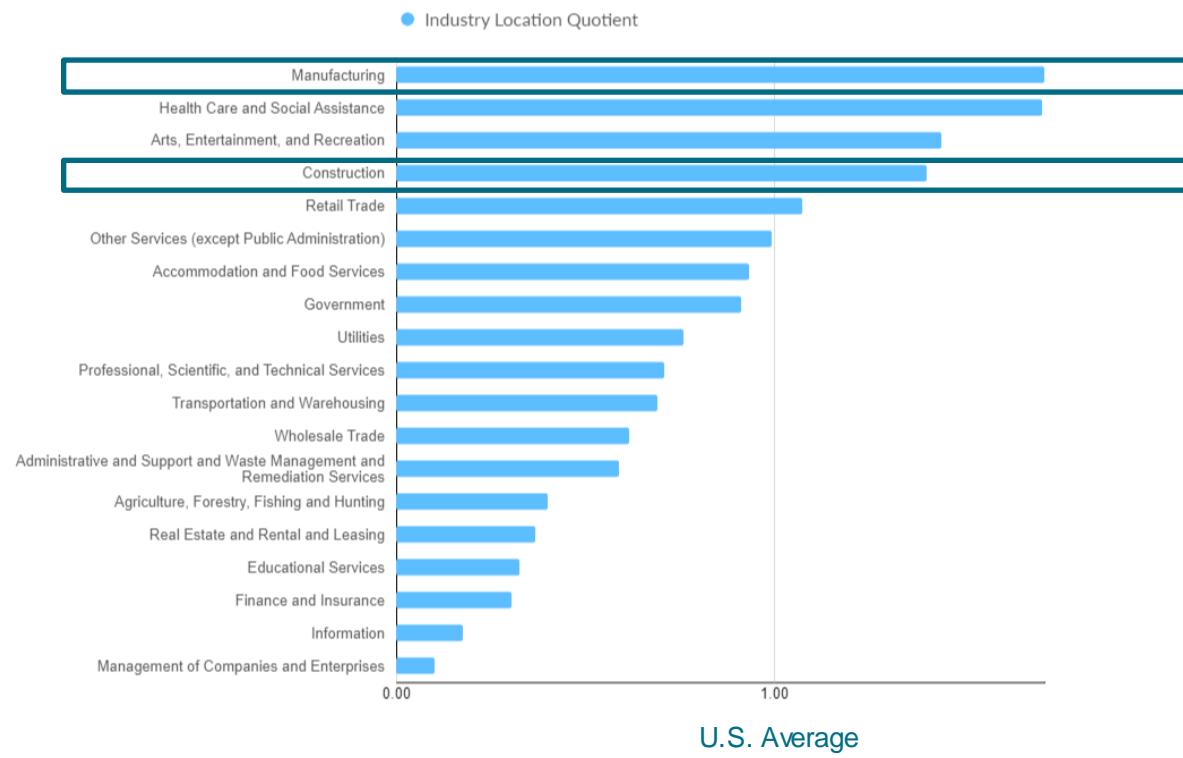
Industry	Jobs	Location Quotient	5 Yr Projected Growth
Heavy Duty Truck Manufacturing	530	140.67	25%
All Other Plastics Product Manufacturing	482	14.95	(12%)
Engineering Services	374	3.16	30%
Footwear Manufacturing	244	196.83	12%
Highway, Street, and Bridge Construction	238	5.88	21%
Site Preparation Contractors	209	3.45	10%
Electronic Shopping and Mail-Order Houses	206	3.47	1%
Machine Shops	192	6.37	4%
Finish Carpentry Contractors	177	5.99	31%
Residential Remodelers	140	1.80	13%
Testing Laboratories	137	6.98	25%
All Other Specialty Trade Contractors	132	2.21	(14%)
Couriers and Express Delivery Services	121	1.21	16%
School and Employee Bus Transportation	119	6.69	101%
Concrete Pipe Manufacturing	115	122.98	16%
Plumbing, Heating, and Air-Conditioning Contractors	101	0.71	(13%)
Electrical Contractors and Other Wiring Installation Contractors	92	0.77	8%
Showcase, Partition, Shelving, and Locker Manufacturing	89	20.42	4%
Sheet Metal Work Manufacturing	87	6.96	1%
Beer and Ale Merchant Wholesalers	86	6.83	25%

Source: EMSI

Location Quotient is the level of specialization for the targeted skillset compared to the U.S. average (1.00). Higher values indicate a greater level of specialization and competition compared to the US average.

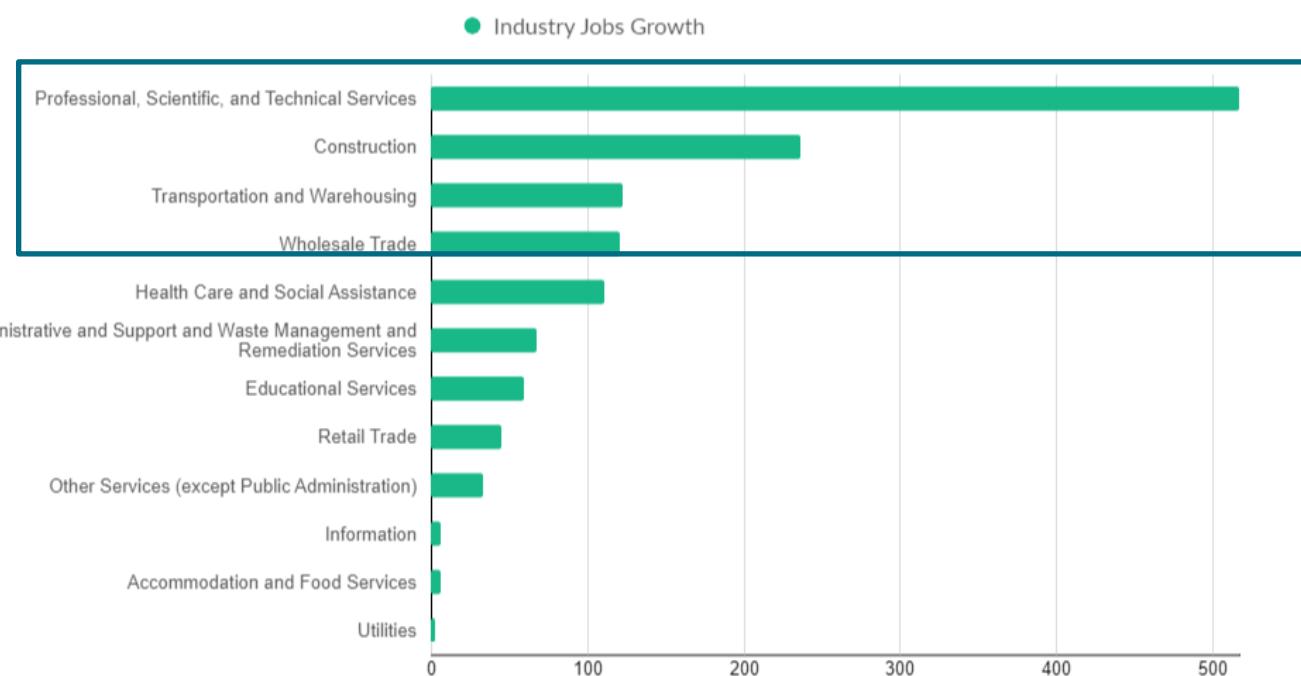
CHISAGO COUNTY LABOR MARKET OVERVIEW - INDUSTRIES

Top Industry Location Quotient



Source: EMSI

Top Growing Industries



Source: EMSI

Industry Specialization

- Chisago County is substantially more specialized for manufacturing and construction industries compared to the US average (LQ = 1.00 above) and to the State of Minnesota
- LQ for Manufacturing: Chisago County 1.72, State of Minnesota 1.33
- LQ for Construction: Chisago County 1.41, State of Minnesota 0.87

Industry Growth

- Over the past five years, the top growing industry segments include:
 - Professional, scientific and technical services (+155% in Chisago County vs. 6% in State of Minnesota)
 - Construction (+20% in Chisago County vs. 7% in State of Minnesota)
 - Transportation and Warehousing (+33% in Chisago County vs. 5% in State of Minnesota)
 - Wholesale Trade (+44% in Chisago County, vs. -6% in State of Minnesota)

CHISAGO COUNTY PROFILE

SELECTED TOP OCCUPATIONS

- Chisago County's workforce is highly specialized for manufacturing and engineering jobs
- Over the next 5 years, occupations related to manufacturing and engineering are growing

Selected Top Occupations Related to Manufacturing, Supply Chain & Warehousing (Jobs, LQ, Projected Growth)

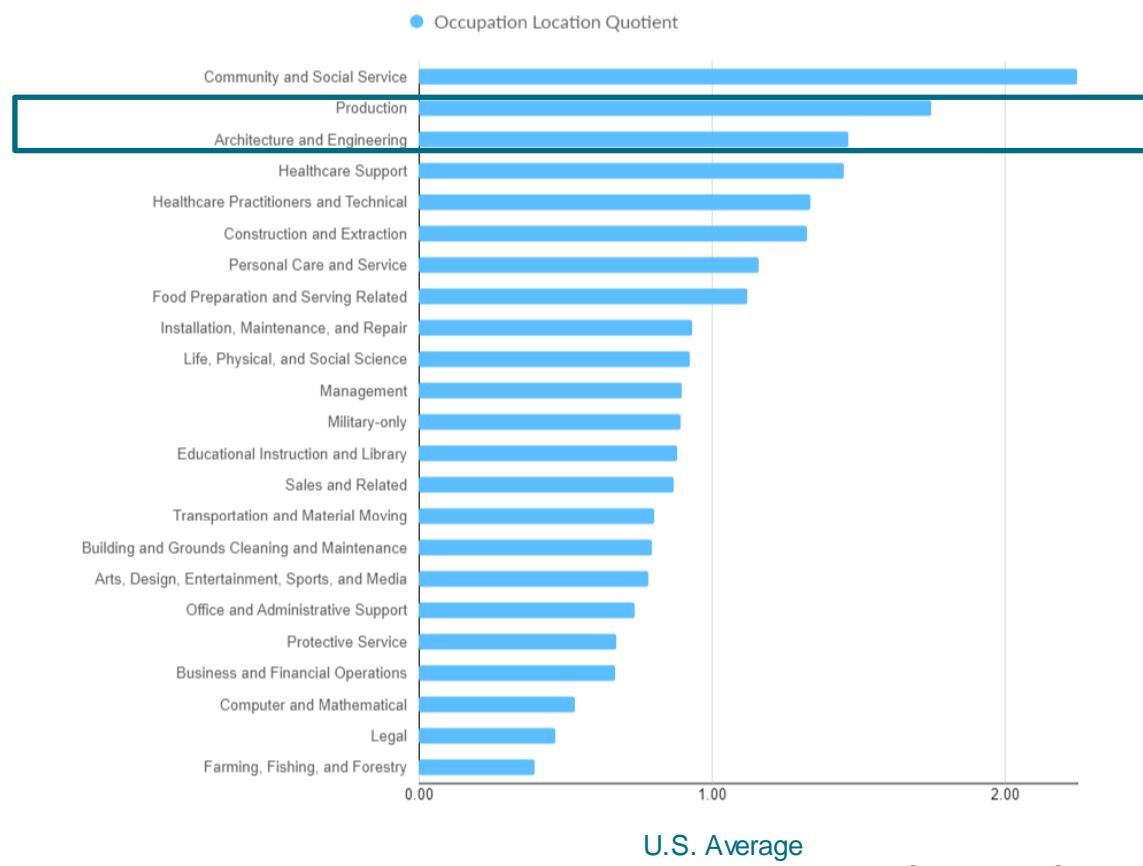
Occupation	Jobs	Location Quotient	5 Yr Projected Growth
Miscellaneous Assemblers and Fabricators	509	3.55	9%
Office Clerks, General	255	0.75	4%
Customer Service Representatives	223	0.68	6%
General and Operations Managers	220	0.79	10%
Heavy and Tractor-Trailer Truck Drivers	219	0.93	2%
Carpenters	212	1.77	8%
Construction Laborers	212	1.35	7%
Laborers and Freight, Stock, and Material Movers, Hand	211	0.63	16%
Stockers and Order Fillers	169	0.66	9%
Project Management Specialists and Business Operations Specialists, All Other	139	0.78	10%
Operating Engineers and Other Construction Equipment Operators	121	2.55	7%
Maintenance and Repair Workers, General	119	0.71	5%
Automotive Service Technicians and Mechanics	115	1.35	12%
Shoe Machine Operators and Tenders	106	210.59	8%
Machinists	104	2.51	7%
Light Truck Drivers	87	0.75	13%
Civil Engineers	86	2.36	26%
First-Line Supervisors of Production and Operating Workers	84	1.23	6%
Construction Managers	84	1.58	6%
Industrial Engineers	78	2.34	14%
Inspectors, Testers, Sorters, Samplers, and Weighers	76	1.21	3%
First-Line Supervisors of Construction Trades and Extraction Workers	76	0.98	6%
Shipping, Receiving, and Inventory Clerks	70	0.84	4%

Source: EMSI

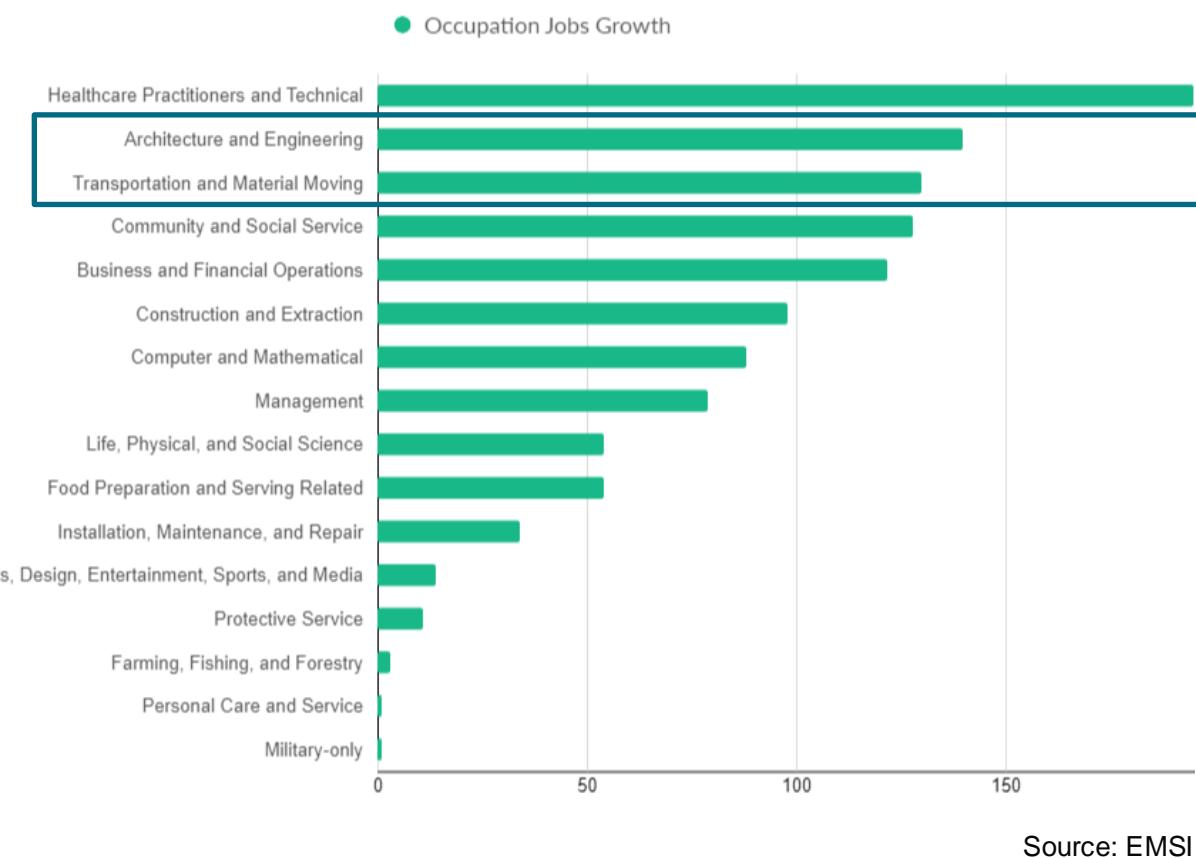
Location Quotient is the level of specialization for the targeted skillset compared to the U.S. average (1.00). Higher values indicate a greater level of specialization and competition compared to the US average.

CHISAGO COUNTY LABOR MARKET OVERVIEW OCCUPATIONS

Top Occupation Location Quotient



Top Growing Occupations



Occupation Specialization

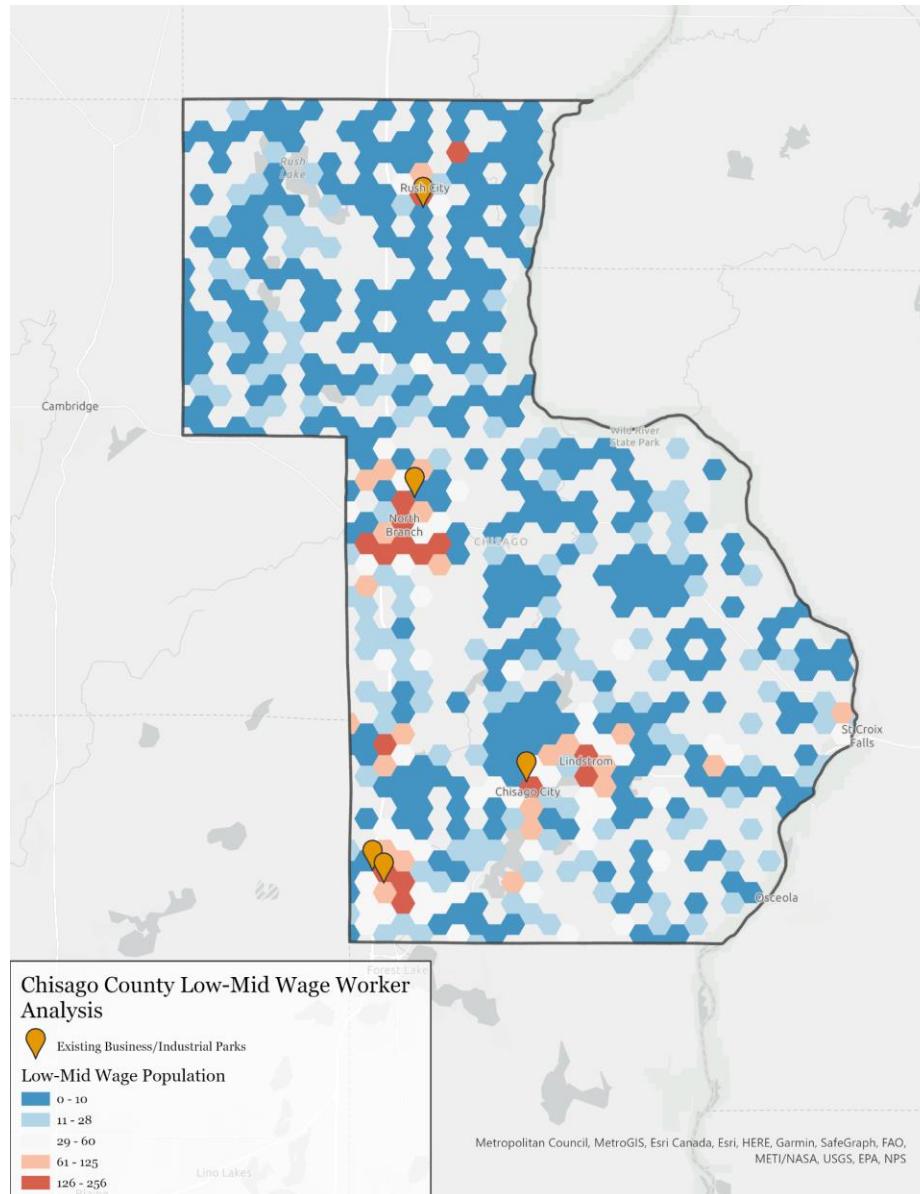
- Chisago County is substantially more specialized for Production and Architecture/Engineering compared to the US average (1.00 above) and the State of Minnesota
- LQ for Production: Chisago County 1.72, State of Minnesota 1.22
- LQ for Architecture & Engineering: Chisago County 1.41, State of Minnesota 1.11

Occupation Growth

- Over the past five years, some of the strongest growing occupations include:
 - Architectural and Engineering: 48% in Chisago County vs. 1% State of Minnesota
 - Transportation and Material Moving: 12% in Chisago County vs. 3% State of Minnesota

CHISAGO COUNTY DEMOGRAPHIC OVERVIEW

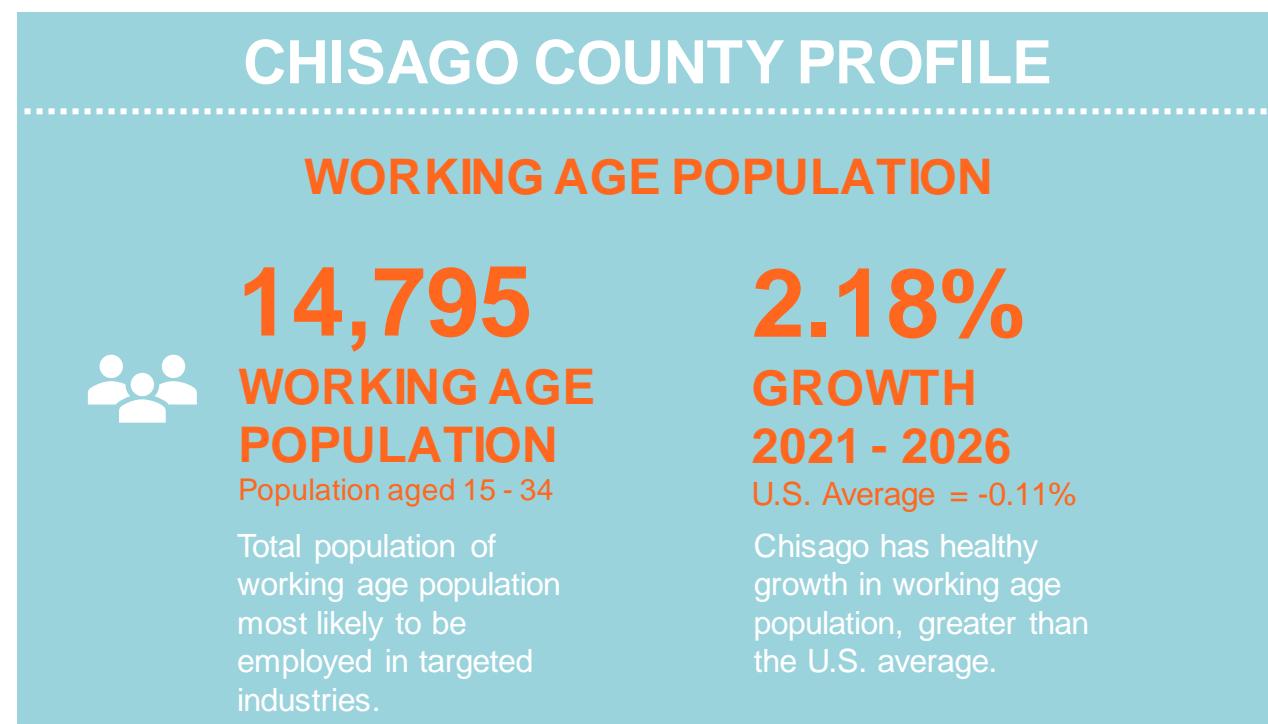
Low-Mid Wage Resident Population



Source: U.S. Census Bureau

Demographic Overview

- The primary workforce for the targeted industries and occupations in Chisago County is between the ages of 15 – 34
- Along with age, the workforce labor pool also includes residents earning less than \$3,333 a month, defined as “Low-Mid wage” residents



Source: ESRI



TARGET INDUSTRY PROFILES

TARGET INDUSTRY PROFILES

To understand the strengths of Chisago County's labor pool C&W identified target industries where continued growth equating to jobs and industrial demand should be prioritized.

Approach

- Identified the primary industries operating in Chisago County and the surrounding areas¹ in the areas of manufacturing, supply chain and warehousing.
- Assessed and compared the volume, concentration, job growth and average earnings for these industries in Chisago County to other counties in the surrounding area.
- Categorized the industries into groups with similar process, material and skillset requirements.
- Each of these target industry groups was analyzed to develop a target job skills profile, the total volume of jobs, the concentration and the top companies hiring within the industry type.

Job Skills

- For each targeted industry, C&W created a target job skills profile to reflect the key skillsets required for jobs in each of the target industries.
- Defining key job profiles will allow for analysis of the regional labor pool's ability to support long-term industry growth.

TARGET INDUSTRIES:

- HEAVY MANUFACTURING
- PRODUCT MANUFACTURING
- SUPPLY CHAIN

Notes:

- For the purposes of this report, the surrounding areas were categorized into a Regional group. This Regional Group includes the 15 counties in the Minneapolis-St. Paul MSA, plus 4 additional neighboring counties to Chisago County. They are:

- Minnesota Counties: Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Kanabec, Le Sueur, Mille Lacs, Pine County, Ramsey, Scott, Sherburne, Washington, Wright
- Wisconsin Counties: Burnett, Pierce, Polk, St. Croix

HEAVY MANUFACTURING

Chisago County has a strong base of Heavy Manufacturing which has been growing over the past five years. Heavy trucks, sheet metal, and other related manufacturing is a particular strength.

Industries Comprising Heavy Manufacturing (6-digit NAICS):

- Heavy Duty Truck Manufacturing (336120)
- Machine Shops (332710)
- Motor and Generator Manufacturing (335312)
- Mechanical Power Transmission Equipment Manufacturing (333613)
- Sheet Metal Manufacturing (332322)
- Showcase, Partition, Shelving and Locker Manufacturing (337215)
- Bolt, Nut, Screw, Rivet, and Washer Manufacturing (332722)

Target Job Skills Profile for Heavy Manufacturing

Miscellaneous Assemblers and Fabricators	51-2098
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	51-4081
Industrial Engineers	17-2112
First-Line Supervisors of Production and Operating Workers	51-1011
Laborers and Freight, Stock, and Material Movers, Hand	53-7062
Machinists	51-4041
Inspectors, Testers, Sorters, Samplers, and Weighers	51-9061
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	51-9124
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	51-4031
Computer Numerically Controlled Tool Operators	51-9161

Source: C&W Methodology and Emsi

CHISAGO COUNTY PROFILE

JOBS IN THE HEAVY MANUFACTURING INDUSTRY



962

TOTAL JOBS

in Heavy Manufacturing (2021)

Total jobs in the industry have grown 80% over the past 5 years compared to a 2% decline nationally

16.80
CONCENTRATION

U.S. Average = 1.00

Chisago is specialized in the heavy manufacturing industry

TARGET SKILLS IN THE WORKFORCE



1,262

TOTAL JOBS

With Skill Profiles Aligned with Heavy Manufacturing (2021)

Total jobs with the target skills profile are projected to grow 9% over the next 5 years

1.70
CONCENTRATION

U.S. Average = 1.00

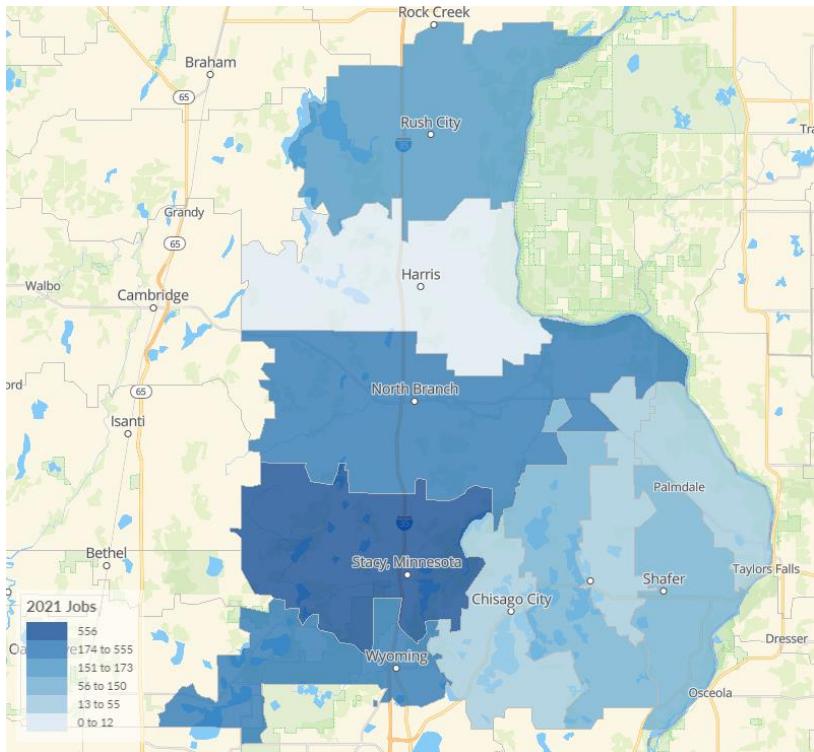
Chisago is specialized with target skills for the heavy manufacturing industry

HEAVY MANUFACTURING – JOB SKILL PROFILES

The following represent companies actively hiring target skillsets for Heavy Manufacturing Companies, and their largest market concentrations. The list was developed based on job postings for target skillsets as well as top companies in the industry.

CHISAGO COUNTY

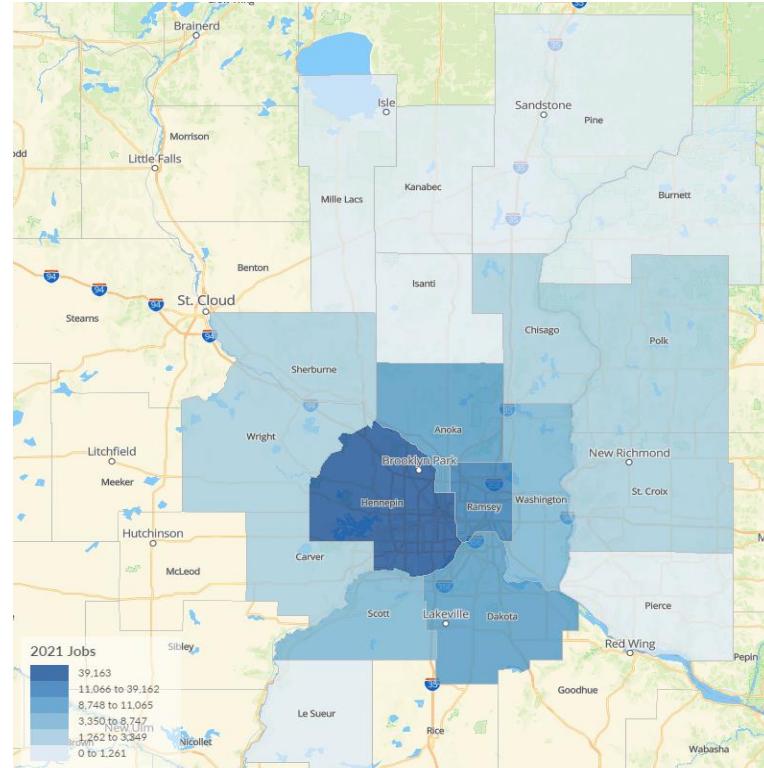
5 Year Growth Rate For Target Skill Profiles: 14%



In Chisago County, heavy manufacturing is clustered in the Stacy, Wyoming and North Branch Areas

REGIONAL VIEW

5 Year Growth Rate For Target Skill Profiles: 0%



In region, the majority of the heavy manufacturing is found in Hennepin and Ramsey counties.

Target Talent Map shows the location of target talent within the County and Region

The most active companies in the Region hiring talent with skillsets aligned for Heavy Manufacturing are Amazon, FedEx, Boston Scientific, UPS, and Medtronic.

PRODUCT MANUFACTURING

The Product Manufacturing Industry in Chisago County is driven by manufacturing of footwear, concrete pipes, stationary products and plastic products.

Industries Comprising Product Manufacturing (6-digit NAICS):

- All Other Plastics Manufacturing (326199)
- Concrete Pipe Manufacturing (327332)
- Stationery Product Manufacturing (322230)
- Footwear Manufacturing (316210)
- Other Animal Food Manufacturing (311119)

Target Job Skills Profile for Product Manufacturing

Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	51-4072
Miscellaneous Assemblers and Fabricators	51-2098
Crushing, Grinding, and Polishing Machine Setters, Operators and Tenders	51-9021
Inspectors, Testers, Sorters, Samplers, and Weighers	51-9061
First-Line Supervisors of Production and Operating Workers	51-1011
Industrial Engineers	17-2112
Shoe Machine Operators and Tenders	51-6042
Paper Goods Machine Setters, Operators, and Tenders	51-9196
Laborers and Freight, Stock, and Material Movers, Hand	53-7062
Helpers--Production Workers	51-9198

Source: C&W Methodology and Emsi

CHISAGO COUNTY PROFILE

JOBS IN THE PRODUCT MANUFACTURING INDUSTRY



902

TOTAL JOBS

in Product Manufacturing (2021)

Total jobs in the industry have grown 27% over the past 5 years compared to a 3% decline nationally

23.30

CONCENTRATION

U.S. Average = 1.00

Chisago is specialized in the product manufacturing industry



1,160

TOTAL JOBS

With Skill Profiles Aligned with Product Manufacturing (2021)

Total jobs with the target skills profile are projected to grow 9% over the next 5 years

1.67

CONCENTRATION

U.S. Average = 1.00

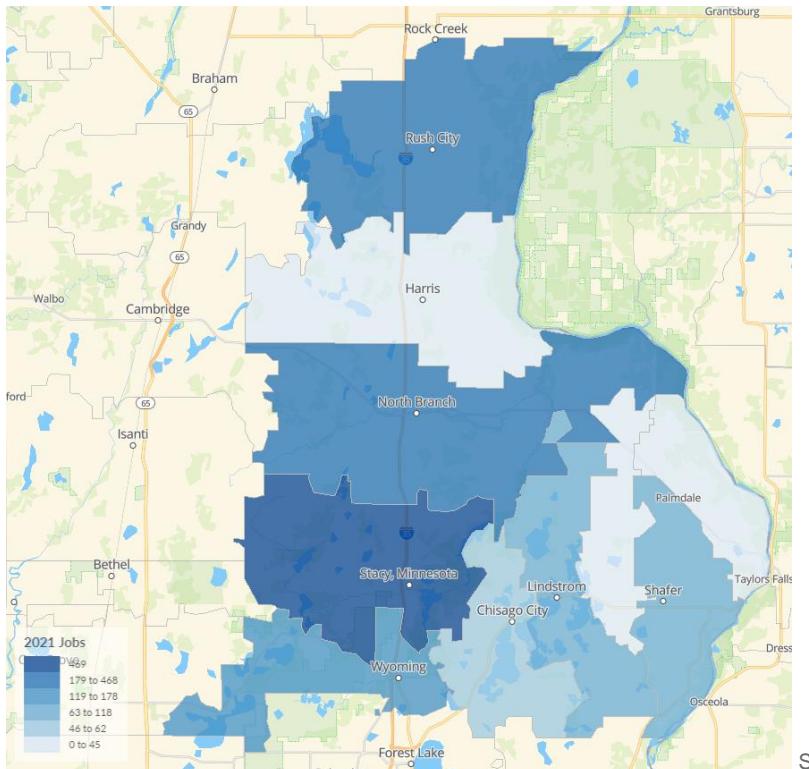
Chisago is specialized with target skills for the product manufacturing industry

PRODUCT MANUFACTURING – JOB SKILL PROFILES

The following represent companies actively hiring target skillsets for Product Manufacturing Companies, and their largest market concentrations. The list was developed based on job postings for target skillsets as well as top companies in the industry.

CHISAGO COUNTY

5 Year Growth Rate For Target Skill Profiles: 9%

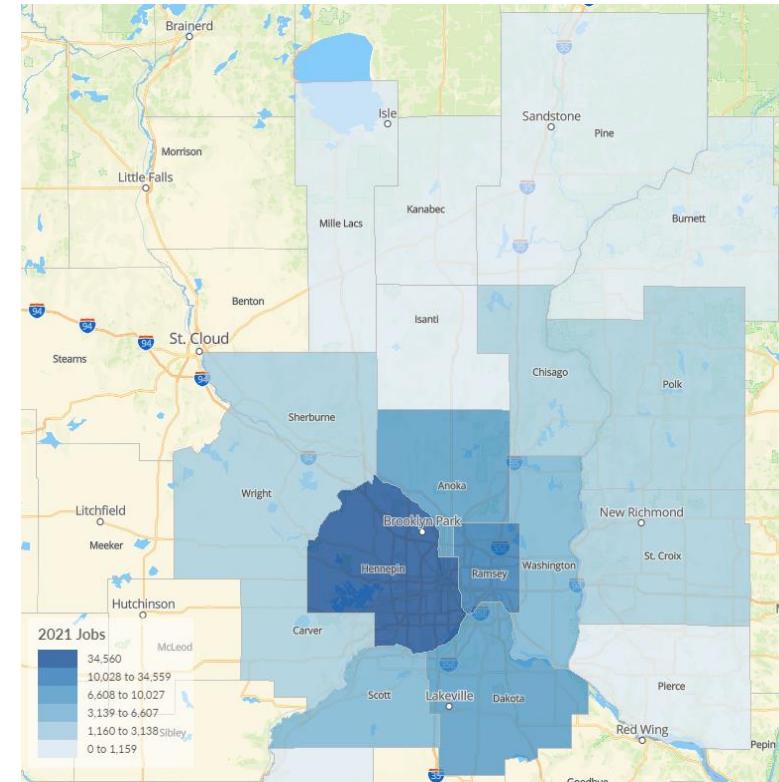


Source: Emsi

In Chisago County, product manufacturing is clustered in the Stacy, Wyoming, Rush City, and North Branch Areas

REGIONAL VIEW

5 Year Growth Rate For Target Skill Profiles: -1%



Source: Emsi

In region, the majority of the product manufacturing is found in Hennepin and Ramsey counties.

Target Talent Map shows the location of target talent within the County and Region.

The most active companies in the Region hiring talent with skillsets aligned for Product Manufacturing are Amazon, FedEx, Boston Scientific, UPS, and Medtronic.

SUPPLY CHAIN

Chisago County has a small, but growing, presence of supply chain industry and labor.

Industries Comprising Supply Chain (6-digit NAICS):

- Rail Transportation (482110)
- General Freight Trucking, Long Distance, Less than Truckload (484122)
- General Freight Trucking, Long Distance, Truckload (484121)
- Couriers and Express Delivery Services (492110)
- Electronic Shopping and Mail Order Houses (454110)

Target Job Skills Profile for Supply Chain

Laborers and Freight, Stock, and Material Movers, Hand	53-7062
Light Truck Drivers	53-3033
Heavy and Tractor-Trailer Truck Drivers	53-3032
First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	53-1047
Shipping, Receiving, and Inventory Clerks	43-5071
Stockers and Order Fillers	53-7065
Order Clerks	43-4151
Packers and Packagers, Hand	53-7064
General and Operations Managers	11-1021
Industrial Truck and Tractor Operators	53-7051

Source: C&W Methodology and Emsi

CHISAGO COUNTY PROFILE

JOBS IN THE SUPPLY CHAIN INDUSTRY



460

TOTAL JOBS
in Supply Chain (2021)

Total jobs in the industry have grown 45% over the past 5 years compared to 18% nationally

1.85
CONCENTRATION

U.S. Average = 1.00

Chisago is not specialized for the supply chain industry

TARGET SKILLS IN THE WORKFORCE



1,118

TOTAL JOBS
With Skill Profiles Aligned with Supply Chain (2021)

Total jobs with the target skills profile are projected to grow 9% over the next 5 years

0.73
CONCENTRATION

U.S. Average = 1.00

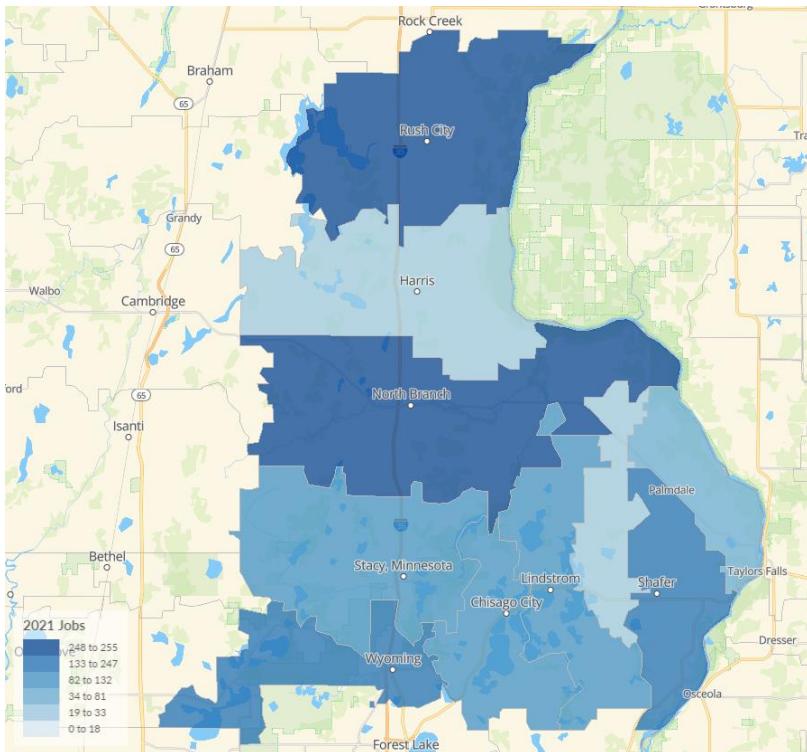
Chisago is specialized with target skills for the Supply Chain industry

SUPPLY CHAIN – JOB SKILL PROFILES

The following represent companies actively hiring target skillsets for Supply Chain Companies, and their largest market concentrations. The list was developed based on job postings for target skillsets as well as top companies in the industry.

CHISAGO COUNTY

5 Year Projected Growth Rate for Target Skill Profiles : 9%

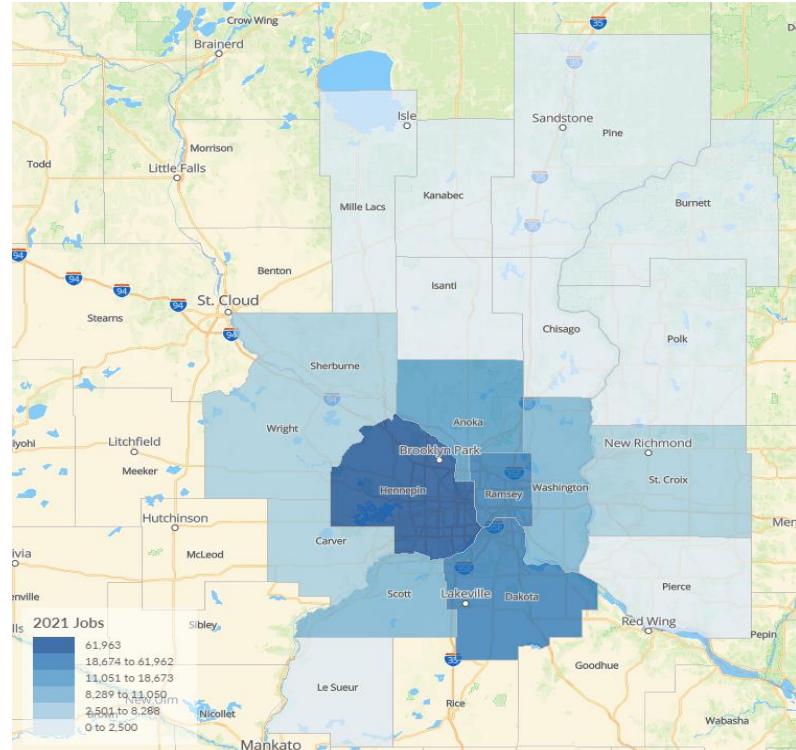


Source: Emsi

In Chisago County, supply chain is clustered in the Rush City, Wyoming, and North Branch Areas

REGIONAL VIEW

5 Year Growth Rate: 1%



Source: Emsi

In the region, the largest volume of supply chain is found in Hennepin, Dakota and Ramsey counties.

Target Talent Map shows the location of target talent within the County and Region.

The most active companies in the Region hiring talent with skillsets aligned for Supply Chain are Roehl Transportation, Amazon, US Xpress, C.R. England and Door Dash.

Chisago County's workforce is aligned with the target skills for the warehousing jobs. Many of the manufacturing and supply chain industry segment include warehousing-type positions.

Target Job Skills Profile for Warehousing

Stockers and Order Fillers	53-7065
Laborers and Freight, Stock, and Material Movers, Hand	53-7062
Industrial Truck and Tractor Operators	53-7051
Heavy and Tractor-Trailer Truck Drivers	53-3032
Packers and Packagers, Hand	53-7064
Shipping, Receiving, and Inventory Clerks	43-5071
First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft	53-1047
Cargo Handling Supervisors	
Maintenance and Repair Workers, General	49-9071
Transportation, Storage, and Distribution Managers	11-3071
Light Truck Drivers	53-3033
Production, Planning, and Expediting Clerks	43-5061

CHISAGO COUNTY PROFILE

TARGET SKILLS IN THE WORKFORCE



1,043

TOTAL JOBS

With Skill Profiles Aligned with
Warehousing (2021)

Total jobs with the target
skills profile are projected
to grow 8% over the next
5 years

0.73

CONCENTRATION

U.S. Average = 1.00

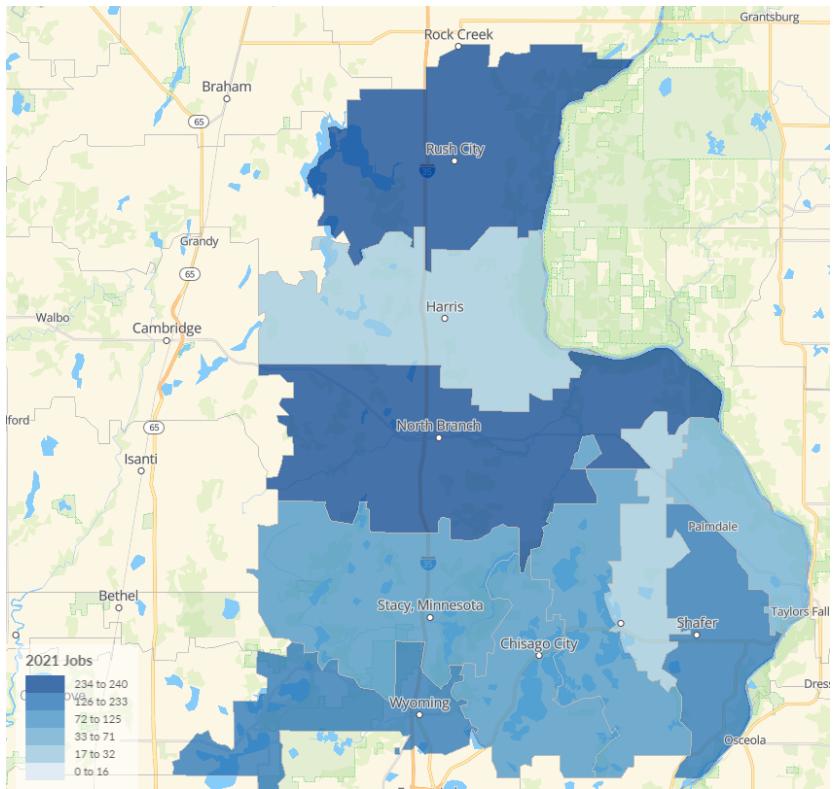
Chisago is less specialized for
Warehousing jobs, but has a
substantial workforce with
these types of skills.

WAREHOUSING – JOB SKILL PROFILES

The following represent companies actively hiring the target skillsets for Warehousing Companies, and their largest market concentrations. The list was developed based on job postings for target skillsets as well as top companies in the industry.

CHISAGO COUNTY

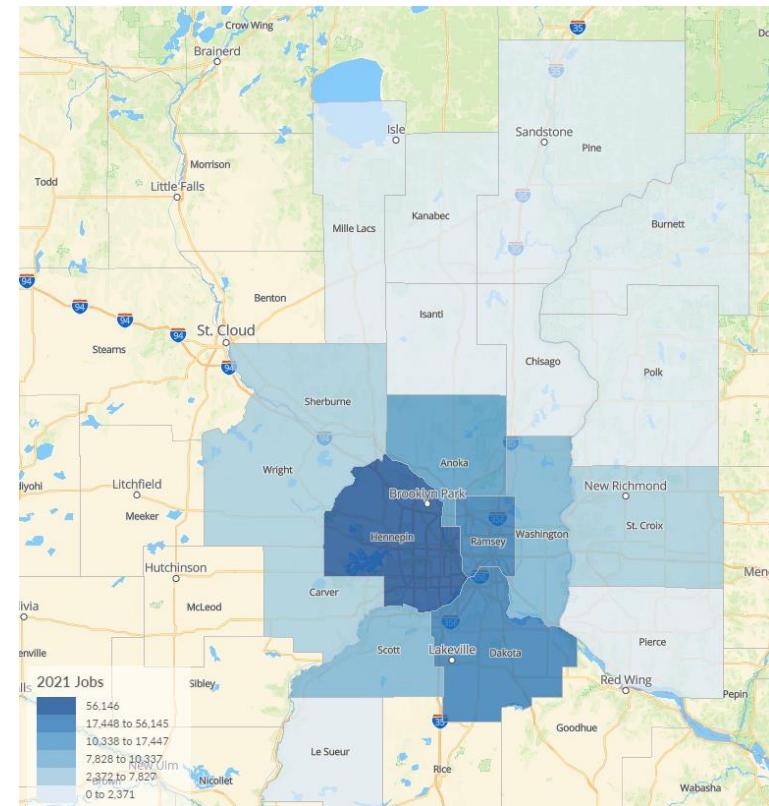
5 Year Growth Rate: 8%



In Chisago County, warehousing is clustered in the Rush City, Wyoming, and North Branch Areas

REGIONAL VIEW

5 Year Growth Rate: 1%



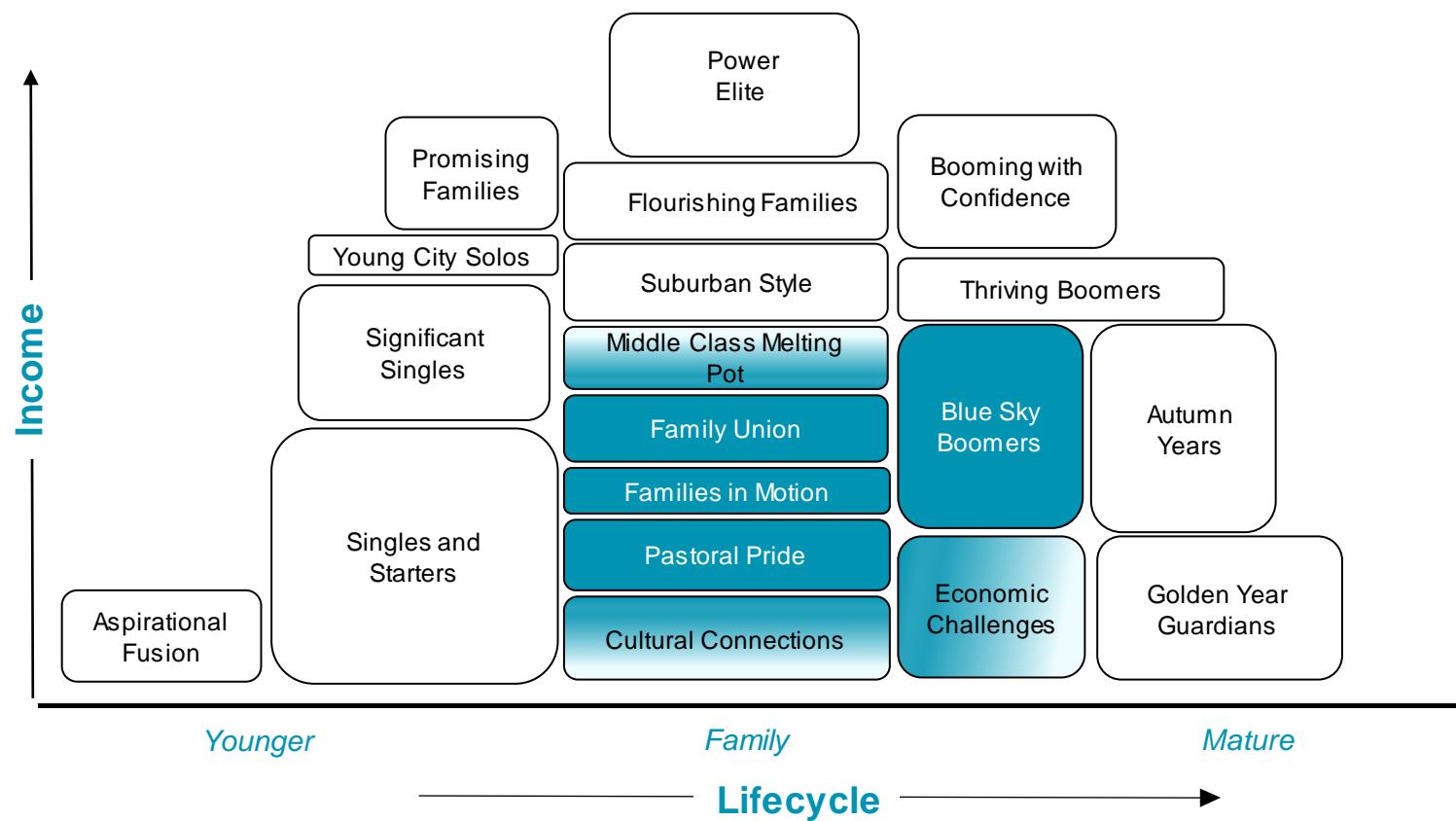
In region, the largest volume of warehousing is found in Hennepin, Dakota and Ramsey counties.

Target Talent Map shows the location of target talent within the County and Region

The most active companies in the Region hiring talent with skillsets aligned for Warehousing are Roehl Transportation, Amazon, US Xpress, C.R. England and Door Dash.

Targeted Demographics of the Civilian Labor Force, Ages 16+

The following target segments (highlighted in teal) represent the civilian population (ages 16+) that exhibit traits of manufacturing/ warehouse/distribution center workers and are selected to quantify depth and concentration of the labor force.



Targeted Demographic Summary	
Characteristic	Description
Household Income	Lower Midscale (\$25,000 - \$45,000)
Education	High School, Some College
Occupation	Blue Collar, Service
Householder Age	25 - 64

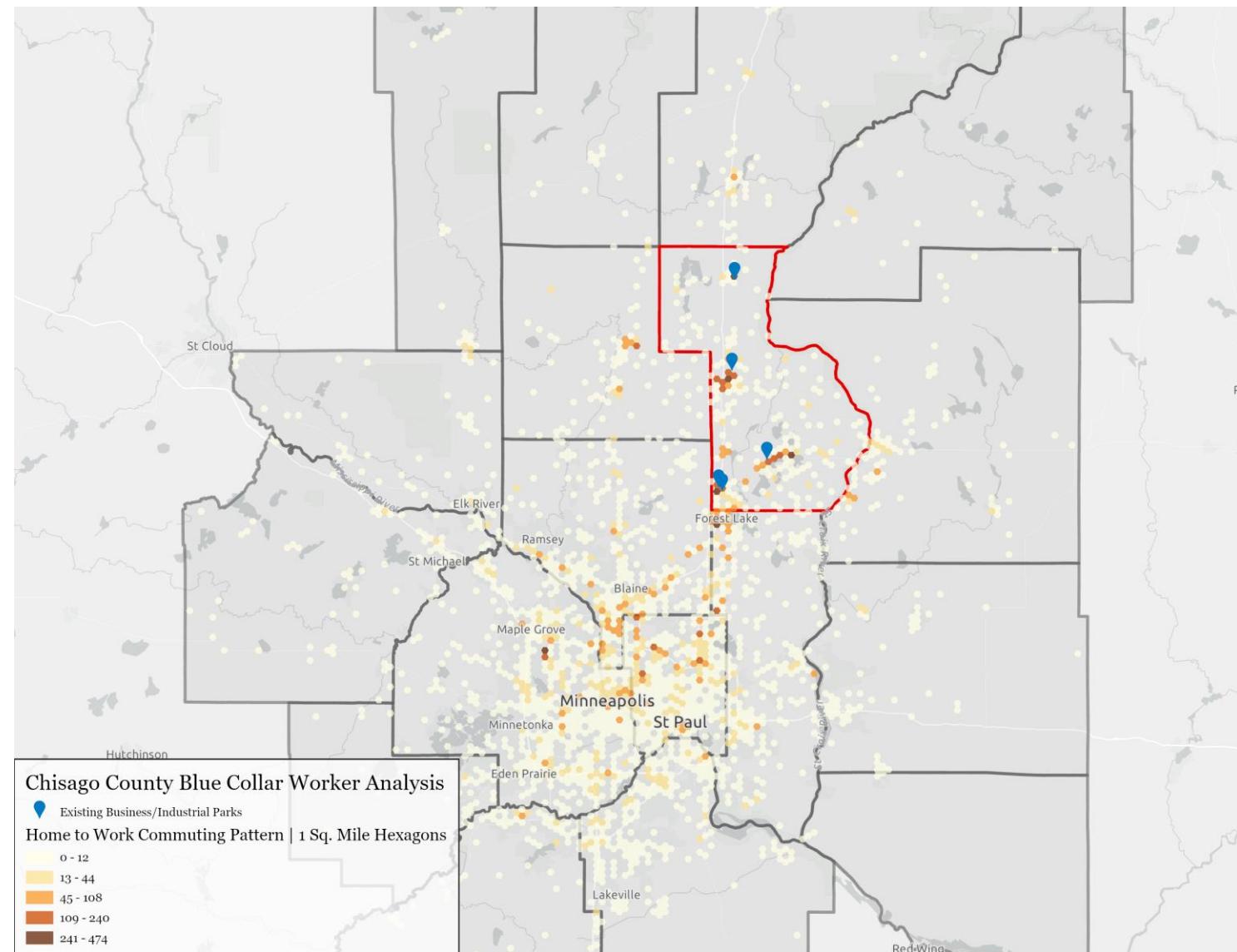
Data Source: 2018 Experian Information Solutions, Inc.
Experian defines working age as those aged 16 to 64.

BLUE COLLAR WORKER COMMUTING ANALYSIS

Workplace Locations of Blue Collar Workers that Reside in Chisago County

Home to Work Commuting Pattern

- The map to the right illustrates the workplace locations of persons employed in blue-collar occupations that live in Chisago County.
- Large concentrations are found in the Chisago industrial parks
- Many residents however are commuting into the Minneapolis metro area.



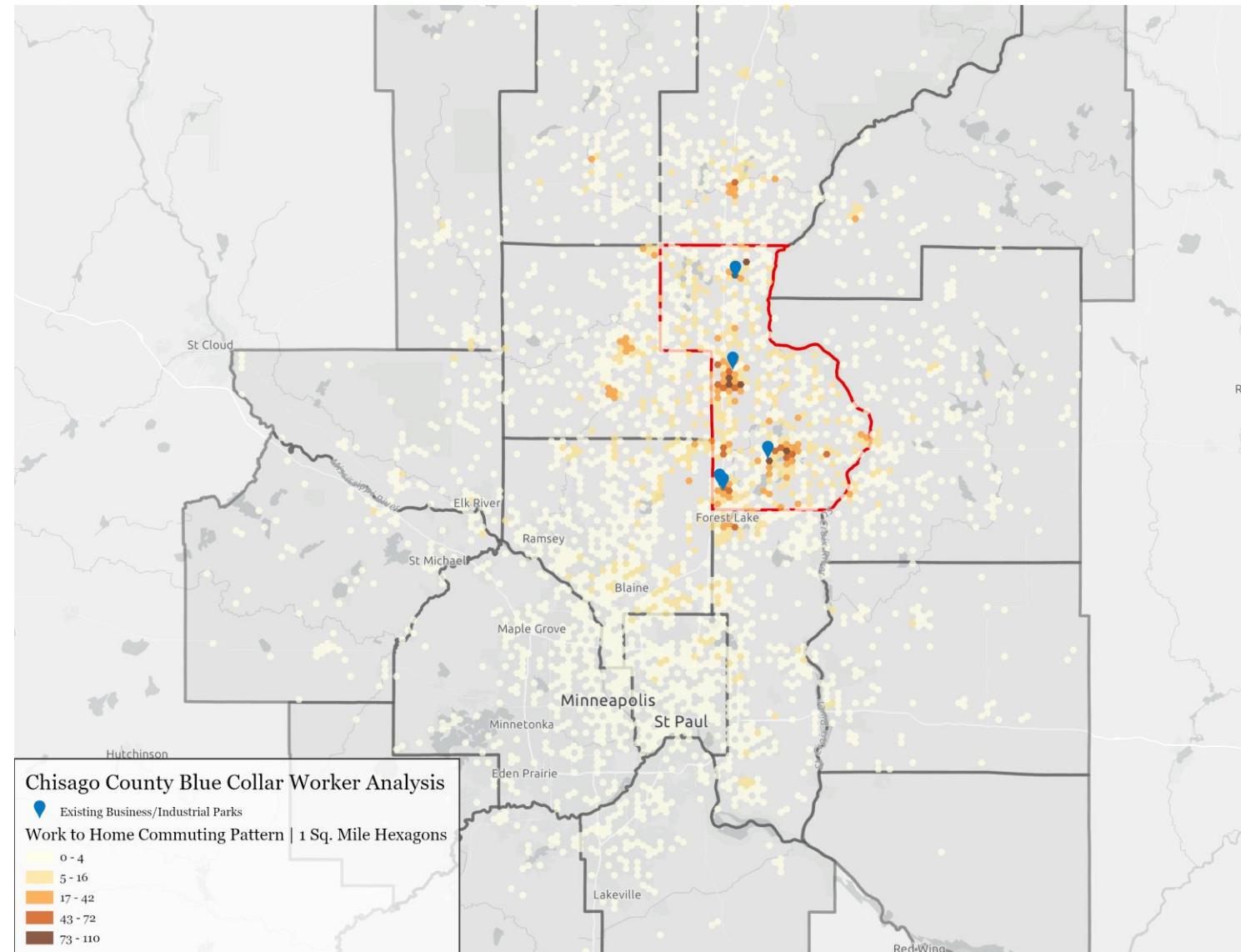
Source: U.S. Census Bureau

BLUE COLLAR WORKER COMMUTING ANALYSIS

Residence Locations of Blue Collar Workers that Work in Chisago County

Work to Home Commuting Pattern

- The map to the right illustrates resident locations of persons employed in blue collar occupations who work in Chisago County
- Chisago appears to attract workers in a radius around the county to a larger extent than pulling workers from Minneapolis



Source: U.S. Census Bureau



INDUSTRY AND TARGET
LABOR DETAIL

HEAVY MANUFACTURING PERFORMANCE BY NAICS CODE

		Heavy Duty Truck Manufacturing (336120)	Machine Shops (332710)	Motor and Generator Manufacturing (335312)	Mechanical Power Transmission Equipment Manufacturing (333613)	Sheet Metal Manufacturing (332322)	Showcase, Partition, Shelving and Locker Manufacturing (337215)	Bolt, Nut, Screw, Rivet, and Washer Manufacturing (332722)			TOTAL
Jobs 2021	Chisago County, MN	530	192	87	0	27	89	40			966
	Region	587	8,654	1,857	293	4,559	769	232			16,950
	U.S. Average	33,666	269,984	35,976	13,336	112,389	39,042	35,011			539,409
Historical Growth Rate (17'-21')	Chisago County, MN	35%	(3%)	(9%)	0%	18%	(11%)	n/a			19%
	Region	50%	1%	(1%)	(9%)	(3%)	(23%)	(32%)			(1%)
	U.S. Average	14%	(4%)	2%	2%	2%	(16%)	(11%)			(3%)
Projected Growth Rate (21'-26')	Chisago County, MN	25%	4%	1%	0%	30%	4%	18%			19%
	Region	28%	5%	(5%)	(1%)	0%	(8%)	(30%)			2%
	U.S. Average	14%	3%	3%	5%	2%	(2%)	(6%)			2%
Location Quotient	Chisago County, MN	140.67	6.37	6.96	0.00	18.31	20.42	10.17			16.80
	Region	1.37	2.51	4.04	1.72	3.18	1.54	0.52			4.90
	U.S. Average	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00
Average Earnings	Chisago County, MN	\$66,631	\$70,819	\$61,461	n/a	\$55,683	\$57,816	\$68,379			\$64,710
	Region	\$69,122	\$83,514	\$114,822	\$83,905	\$76,469	\$67,446	\$75,528			\$83,786
	U.S. Average	\$82,352	\$68,578	\$90,951	\$80,304	\$68,316	\$61,948	\$77,976			\$71,253

Source: Emsi

¹Region includes the following countries: Anoka County, MN, Carver County, MN, Chisago County, MN, Dakota County, MN, Hennepin County, MN, Isanti County, MN, Kanabec County, MN, Le Sueur County, MN, Mille Lacs County, MN, Pine County, MN, Ramsey County, MN, Scott County, MN, Sherburne County, MN, Washington County, MN, Wright County, MN, Burnett County, WI, Pierce County, WI, Polk County, WI, St. Croix County, WI

²Location Quotient is the level of specialization for the targeted skillset compared to the U.S. average (1.00). Higher values indicate a greater level of specialization and competition compared to the US average.

HEAVY MANUFACTURING – KEY POSITIONS IN THE MARKET

	Chisago County				Regional				Typical Entry Level Education	Work Experience Required	Average Annual Openings
	Total Jobs 2021	5 Yr. Project Growth (2021-2026)	Avg. Hourly Earnings	Location Quotient	Total Jobs 2021	5 Yr. Project Growth (2021-2026)	Avg. Hourly Earnings	Location Quotient			
Industrial Engineers	78	14%	\$44.60	2.34	8,278	4%	\$46.62	2.17	Bachelor's degree	None	791
First-Line Supervisors of Production and Operating Workers	84	6%	\$29.90	1.23	7,645	2%	\$33.45	0.97	High school diploma or equivalent to 2 yr certification	Less than 5 years	843
Miscellaneous Assemblers and Fabricators	509	9%	\$16.81	3.55	20,035	(4%)	\$18.42	1.22	High school diploma or equivalent to 2 yr certification	None	2,582
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	56	1%	\$18.52	2.74	3,550	(2%)	\$20.50	1.52	High school diploma or equivalent	None	427
Machinists	104	7%	\$23.29	2.51	7,694	3%	\$25.72	1.63	High school diploma or equivalent to 2 yr certification	None	944
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	50	13%	\$18.60	3.16	2,331	3%	\$20.69	1.29	High school diploma or equivalent to 2 years	None	378
Inspectors, Testers, Sorters, Samplers, and Weighers	76	3%	\$20.80	1.21	7,057	(5%)	\$22.97	0.98	High school diploma or equivalent to 2 yr certification	None	1,017
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	46	5%	\$18.91	2.76	2,632	4%	\$20.88	1.39	High school diploma or equivalent to 2 yr certification	None	354
Computer Numerically Controlled Tool Operators	46	2%	\$21.38	2.78	3,651	(1%)	\$23.89	1.92	High school diploma or equivalent to 2 yr certification	None	539
Laborers and Freight, Stock, and Material Movers, Hand	211	16%	\$16.98	0.63	27,706	1%	\$18.80	0.73	No formal educational credential	None	4,420
Heavy Manufacturing Position Summary	1,262	9%	\$20.61		90,580	0%	\$23.75				12,296

PRODUCT MANUFACTURING PERFORMANCE BY NAICS CODE

		Other Animal Food Manufacturing (311119)	Footwear Manufacturing (316210)	Stationery Product Manufacturing (322230)	All Other Plastics Product Manufacturing (326199)	Concrete Pipe Manufacturing (327332)		TOTAL
Jobs 2021	Chisago County, MN	61	244	0	482	115		902
	Region	559	256	747	8,674	137		10,413
	U.S. Average	36,600	11,078	15,038	288,384	8,371		359,471
Historical Growth Rate (17'-21')	Chisago County, MN	41%	73%	0%	1%	128%		26%
	Region	(1%)	63%	16%	(2%)	(27%)		0%
	U.S. Average	4%	(19%)	(14%)	(4%)	8%		(4%)
Projected Growth Rate (21'-26')	Chisago County, MN	25%	12%	0%	(12%)	16%		1%
	Region	14%	12%	(1%)	(7%)	2%		(5%)
	U.S. Average	4%	(14%)	(8%)	(6%)	6%		(5%)
Location Quotient	Chisago County, MN	14.88	196.83	0.00	14.95	122.98		23.30
	Region	1.28	1.81	3.89	2.36	1.28		5.85
	U.S. Average	1.00	1.00	1.00	1.00	1.00		1.00
Average Earnings	Chisago County, MN	\$44,717	\$75,578	\$0	\$62,878	\$56,485		\$64,217
	Region	\$103,874	\$72,287	\$77,192	\$69,996	\$58,809		\$72,228
	U.S. Average	\$77,033	\$58,871	\$68,048	\$68,424	\$81,699		\$69,255

Source: Emsi

¹Region includes the following counties: Anoka County, MN, Carver County, MN, Chisago County, MN, Dakota County, MN, Hennepin County, MN, Isanti County, MN, Le Sueur County, MN, Mille Lacs County, MN, Pine County, MN, Ramsey County, MN, Scott County, MN, Sherburne County, MN, Washington County, MN, Wright County, MN, Pierce County, WI, Polk County, WI, St. Croix County, WI

²Location Quotient is the level of specialization for the targeted skillset compared to the U.S. average (1.00). Higher values indicate a greater level of specialization and competition compared to the US average.

PRODUCT MANUFACTURING – KEY POSITIONS IN THE MARKET

	Chisago County				Regional				Typical Entry Level Education	Work Experience Required	Average Annual Openings
	Total Jobs 2021	5 Yr. Project Growth (2021-2026)	Avg. Hourly Earnings	Location Quotient	Total Jobs 2021	5 Yr. Project Growth (2021-2026)	Avg. Hourly Earnings	Location Quotient			
Industrial Engineers	78	14%	\$44.60	2.34	8,278	4%	\$46.62	2.17	Bachelor's degree	None	791
First-Line Supervisors of Production and Operating Workers	84	6%	\$29.90	1.23	7,645	2%	\$33.45	0.97	High school diploma or equivalent to 2 yr certification	Less than 5 years	843
Miscellaneous Assemblers and Fabricators	509	9%	\$16.81	3.55	20,035	(4%)	\$18.42	1.22	High school diploma or equivalent to 2 yr certification	None	2,582
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	57	(10%)	\$16.39	3.24	2,517	(4%)	\$17.66	1.26	High school diploma or equivalent to 2 yr certification	None	326
Shoe Machine Operators and Tenders	106	8%	\$18.12	210.59	116	7%	\$18.05	2.02	High school diploma or equivalent to 2 yr certification	None	31
Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	<10	n/a	n/a	1.84	400	1%	\$21.88	0.94	High school diploma or equivalent to 2 yr certification	None	67
Inspectors, Testers, Sorters, Samplers, and Weighers	76	3%	\$20.80	1.21	7,057	(5%)	\$22.97	0.98	High school diploma or equivalent to 2 yr certification	None	1,017
Paper Goods Machine Setters, Operators, and Tenders	<10	n/a	n/a	0.33	1,305	(7%)	\$18.94	1.03	High school diploma or equivalent to 2 yr certification	None	224
Helpers--Production Workers	27	3%	\$15.43	1.02	3,200	(4%)	\$17.18	1.04	High school diploma or equivalent	None	658
Laborers and Freight, Stock, and Material Movers, Hand	211	16%	\$16.98	0.63	27,706	1%	\$18.80	0.73	No formal educational credential	None	4,420
Product Manufacturing Position Summary	1,160	9%	\$20.01		78,259	(1%)	\$23.32				10,959

SUPPLY CHAIN PERFORMANCE BY NAICS CODE

		Electronic Shopping and Mail-Order Houses (454110)	Rail transportation (482110)	General Freight Trucking, Long-Distance, Truckload (484121)	General Freight Trucking, Long-Distance, Less Than Truckload (484122)	Couriers and Express Delivery Services (492110)		TOTAL
Jobs 2021	Chisago County, MN	206	103	71	< 10	121		503
	Region	6,923	2,118	6,819	3,170	10,430		28,662
	U.S. Average	529,792	207,738	635,826	274,028	898,492		2,545,876
Historical Growth Rate (17'-21')	Chisago County, MN	11%	9%	15%	n/a	41%		17%
	Region	(3%)	(10%)	(10%)	4%	22%		3%
	U.S. Average	11%	(7%)	2%	2%	43%		15%
Projected Growth Rate (21'-26')	Chisago County, MN	1%	9%	7%	n/a	16%		7%
	Region	(4%)	(6%)	(4%)	1%	4%		(1%)
	U.S. Average	13%	(4%)	1%	2%	10%		6%
Location Quotient	Chisago County, MN	3.47	4.43	0.99	0.06	1.21		1.85
	Region	1.02	0.80	0.84	0.91	0.91		0.88
	U.S. Average	1.00	1.00	1.00	1.00	1.00		1.00
Average Earnings	Chisago County, MN	\$52,027	\$99,710	\$77,433	n/a	\$67,426		\$68,664
	Region	\$86,402	\$101,444	\$82,253	\$80,865	\$53,229		\$74,459
	U.S. Average	\$94,224	\$101,346	\$69,462	\$80,214	\$55,230		\$73,477

Source: Emsi

¹Region includes the following counties: Anoka County, MN, Carver County, MN, Chisago County, MN, Dakota County, MN, Hennepin County, MN, Isanti County, MN, Kanabec County, MN, Le Sueur County, MN, Mille Lacs County, MN, Pine County, MN, Ramsey County, MN, Scott County, MN, Sherburne County, MN, Washington County, MN, Wright County, MN, Burnett County, WI, Pierce County, WI, Polk County, WI, St. Croix County, WI

²Location Quotient is the level of specialization for the targeted skillset compared to the U.S. average (1.00). Higher values indicate a greater level of specialization and competition compared to the US average.

SUPPLY CHAIN LABOR – KEY POSITIONS IN THE MARKET

	Chisago County				Regional				Typical Entry Level Education	Work Experience Required	Average Annual Openings
	Total Jobs 2021	5 Yr. Project Growth (2021-2026)	Avg. Hourly Earnings	Location Quotient	Total Jobs 2021	5 Yr. Project Growth (2021-2026)	Avg. Hourly Earnings	Location Quotient			
General and Operations Managers	220	10%	\$55.48	0.79	29,913	2%	\$63.17	0.95	Bachelor's degree	5 years or more	2,832
Order Clerks	16	(7%)	\$16.66	1.12	1,803	(10%)	\$18.90	1.12	Some college, no degree	None	303
Shipping, Receiving, and Inventory Clerks	70	4%	\$17.46	0.84	8,984	(4%)	\$19.86	0.94	High school diploma or equivalent	None	949
First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	41	13%	\$26.45	0.74	4,985	2%	\$30.05	0.78	High school diploma or equivalent	Less than 5 years	743
Heavy and Tractor-Trailer Truck Drivers	219	2%	\$25.40	0.93	21,798	2%	\$27.57	0.81	Postsecondary nondegree award	None	2,847
Light Truck Drivers	87	13%	\$21.72	0.75	10,954	4%	\$22.53	0.83	High school diploma or equivalent	None	1,445
Industrial Truck and Tractor Operators	33	11%	\$20.76	0.43	5,770	1%	\$23.53	0.67	No formal educational credential	None	882
Laborers and Freight, Stock, and Material Movers, Hand	211	16%	\$16.66	0.63	27,706	1%	\$18.80	0.73	No formal educational credential	None	4,420
Packers and Packagers, Hand	52	5%	\$12.71	0.74	5,655	(2%)	\$14.46	0.70	No formal educational credential	None	973
Stockers and Order Fillers	169	9%	\$14.41	0.66	28,443	0%	\$16.38	0.98	High school diploma or equivalent	None	5,185
Supply Chain Position Summary	1,118	9%	\$26.25		146,012	1%	\$29.45				20,579

Source: Emsi

WAREHOUSING – KEY POSITIONS IN THE MARKET

	Chisago County				Regional				Typical Entry Level Education	Work Experience Required	Average Annual Openings
	Total Jobs 2021	5 Yr. Project Growth (2021-2026)	Avg. Hourly Earnings	Location Quotient	Total Jobs 2021	5 Yr. Project Growth (2021-2026)	Avg. Hourly Earnings	Location Quotient			
Transportation, Storage, and Distribution Managers	13	8%	\$49.63	0.81	2,048	2%	\$54.79	1.11	High school diploma or equivalent	5 years or more	247
Production, Planning, and Expediting Clerks	28	6%	\$24.18	0.66	4,135	2%	\$26.74	0.86	High school diploma or equivalent	None	477
Shipping, Receiving, and Inventory Clerks	70	4%	\$17.79	0.84	8,984	(4%)	\$19.86	0.94	High school diploma or equivalent	None	949
Maintenance and Repair Workers, General	119	5%	\$22.27	0.71	15,217	2%	\$24.76	0.79	High school diploma or equivalent	None	1,602
First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	41	13%	\$26.95	0.74	4,985	2%	\$30.05	0.78	High school diploma or equivalent	Less than 5 years	743
Heavy and Tractor-Trailer Truck Drivers	219	2%	\$25.88	0.93	21,798	2%	\$27.57	0.81	Postsecondary nondegree award	None	2,847
Light Truck Drivers	87	13%	\$22.13	0.75	10,954	4%	\$22.53	0.83	High school diploma or equivalent	None	1,445
Industrial Truck and Tractor Operators	33	11%	\$21.16	0.43	5,770	1%	\$23.53	0.67	No formal educational credential	None	882
Laborers and Freight, Stock, and Material Movers, Hand	211	16%	\$16.98	0.63	27,706	1%	\$18.80	0.73	No formal educational credential	None	4,420
Packers and Packagers, Hand	52	5%	\$12.95	0.74	5,655	(2%)	\$14.46	0.70	No formal educational credential	None	973
Stockers and Order Fillers	169	9%	\$14.68	0.66	28,443	0%	\$16.38	0.98	High school diploma or equivalent	None	5,185
Warehousing Position Summary	1,043	8%	\$20.53		135,696	1%					19,769

Source: Emsi

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