



Washington County Labor Demand & Supply Study

Washington County CDA Board Meeting

Highlights of Report Developed by RealTime Talent

April 18, 2023



Author of this Report



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- With RealTime Talent since 2015
- Intersectional approaches to addressing labor market and talent pipeline challenges in Minnesota

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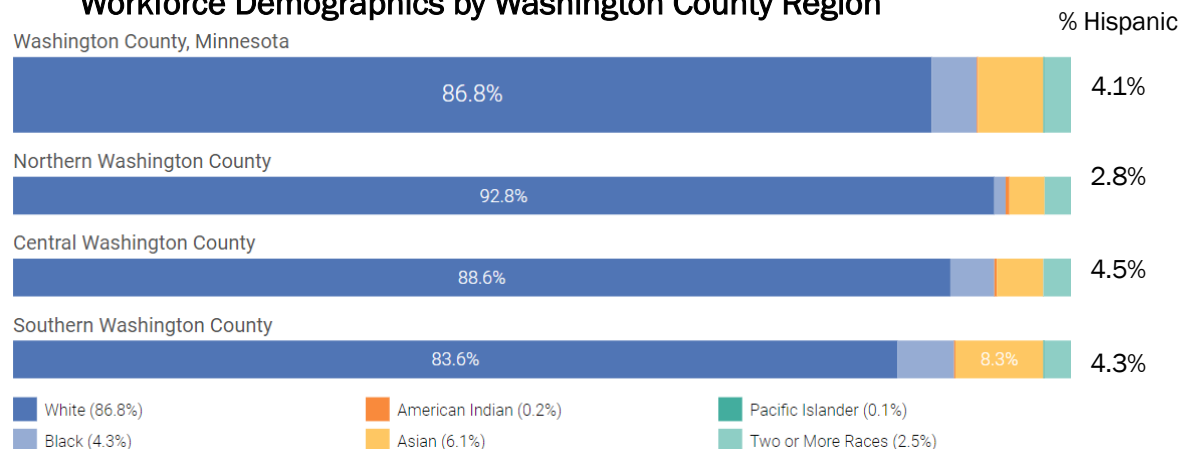
The strengths of Washington County's workforce and recommended next steps

Regional Demographics – Race and Ethnicity

Southern Washington County is the most diverse of the three regions, with 18.8% of residents being Black, Indigenous, or People of Color (BIPOC) as defined by race; an additional 4.6% identify as Hispanic or Latinx. Nearly one in ten Southern Washington County residents are foreign-born. Similar statistics are reflected in the local workforce (see the chart to the right).

Central Washington County has the highest share of the population that are veterans.

Workforce Demographics by Washington County Region



Population Race, Ethnicity, Foreign Born, and Veteran Status by Region

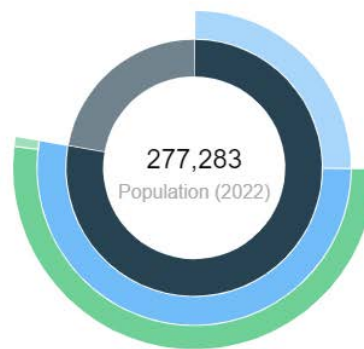
	% BIPOC Race	% Hispanic/Latinx	% Foreign Born	% Veterans
Northern Washington County	9.8%	3.1%	2.9%	3.6%
Central Washington County	14.3%	4.4%	5.5%	4.5%
Southern Washington County	18.8%	4.6%	9.2%	3.7%
Washington County, MN	15.8%	4.3%	6.9%	3.9%

Population and Labor Force Trends

Washington County is home to an estimated 277,283 residents of all ages as of 2022, growing by 21,566 over the last 5 years and is projected to grow by 23,061 over the next five years. Unemployment is low at an estimated 1.9% county-wide as of 2022Q3 (2,728 people). A larger share of Black and African American adults are unemployed than their share of the local workforce (9.3% of the unemployed compared to 4.7% of the population and 4.3% of the workforce).

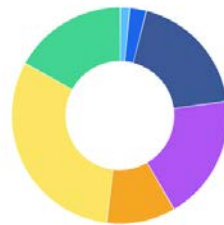
Approximately three in ten adult residents hold a bachelor's degree (31.1%, which is 10.2% above the national average).

Labor Force Participation Summary Statistics



	Population
16+ Civilian Non-Institutionalized Population	215,494
Not in Labor Force (16+)	69,318
Labor Force	146,176
Employed	143,635
Unemployed	2,541
Under 16, Military, and institutionalized Population	61,789

Educational Attainment of the Prime Working Age Population



	% of Population	Population
Less Than 9th Grade	1.4%	2,652
9th Grade to 12th Grade	2.5%	4,722
High School Diploma	18.9%	35,778
Some College	18.8%	35,468
Associate's Degree	10.3%	19,557
Bachelor's Degree	31.1%	58,737
Graduate Degree and Higher	17.0%	32,250

Source: Lightcast 2023Q1 Dataset.

Unemployment by Race, Nov 2022	
American Indian/Alaska Native	37 (1.5%)
Asian	79 (3.1%)
Black or African American	236 (9.3%)
Native Hawaiian/Pacific Islander	6 (0.2%)
White	2,182 (85.9%)

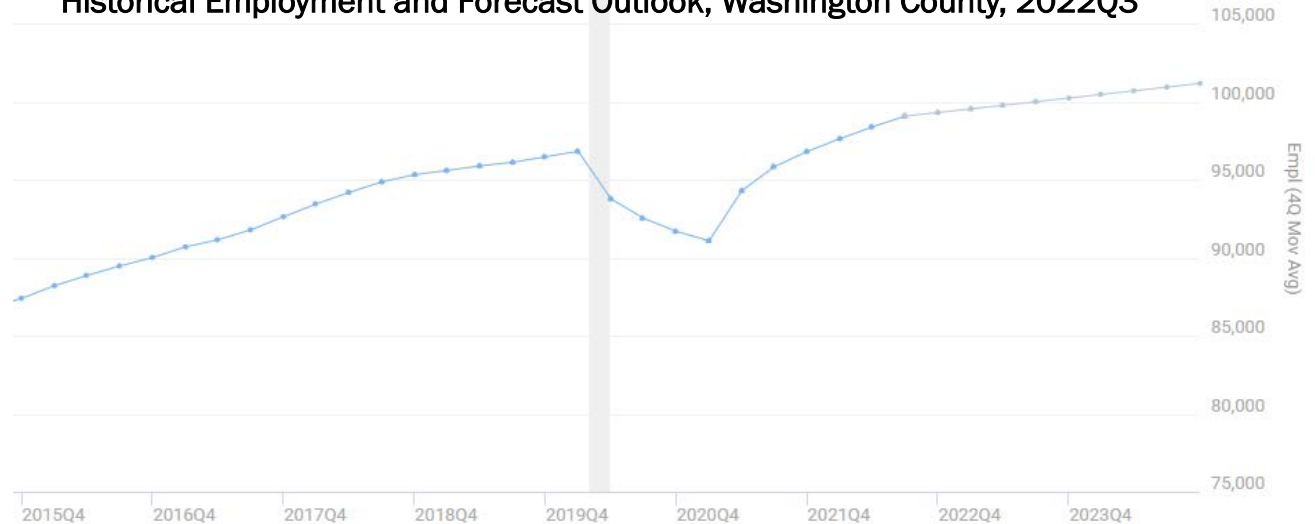
Employment Trends

Washington County employment has followed the trends observed at the MSP Metro and statewide levels, with employment increasing 2.8% between 2021Q3 and 2022Q3.

A total of 99,098 workers are employed in Washington County, representing 5% of the total MSP Metro workforce.

The employment outlook for the county is strong, with an estimated average annual growth of 0.9% over the next five years.

Historical Employment and Forecast Outlook, Washington County, 2022Q3

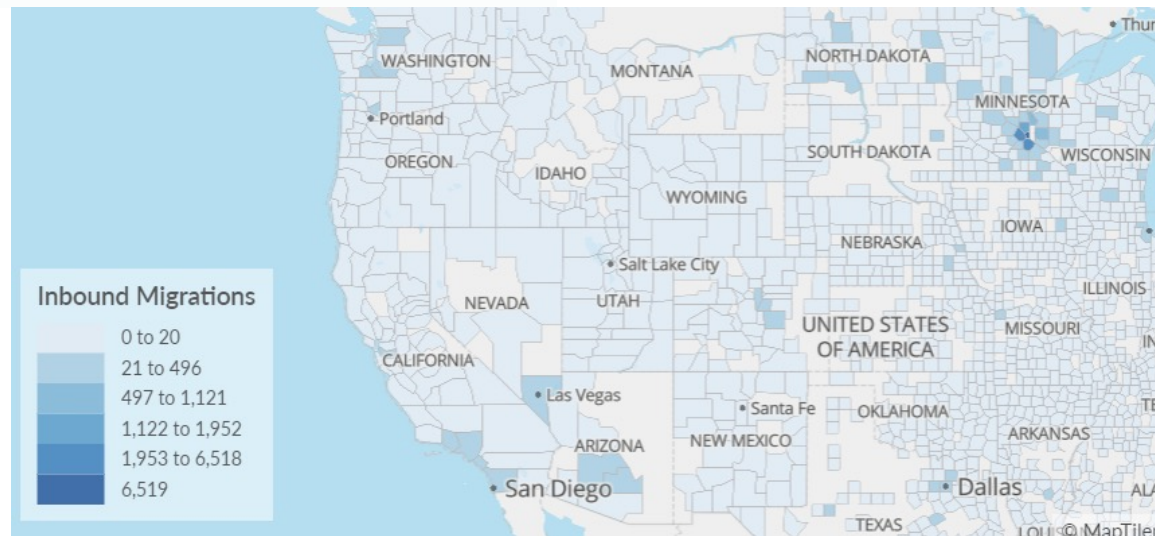


Total Employment: 99,098
Unemployment Rate: 1.9% (2,728 people)
Historical 5-Year Average Annual Growth: 1.5%
Forecast 5-Year Average Annual Growth: 0.9%

Talent Migration

Top Counties by Resident Migration	Inbound Migrations	Outbound Migrations	Net Migrations
Ramsey County, MN	6,519	3,207	3,312
Hennepin County, MN	2,022	1,318	704
Dakota County, MN	1,953	1,520	433
Anoka County, MN	1,122	991	131
Chisago County, MN	536	737	-200
St. Croix County, WI	497	999	-501
Scott County, MN	130	118	12
Pierce County, WI	121	201	-80
St. Louis County, MN	108	83	26
Cook County, IL	98	48	50
Isanti County, MN	84	142	-58
Maricopa County, AZ	79	193	-114
Total Migrations	17,219	14,296	2,923

Regional Migration Patterns, 2020

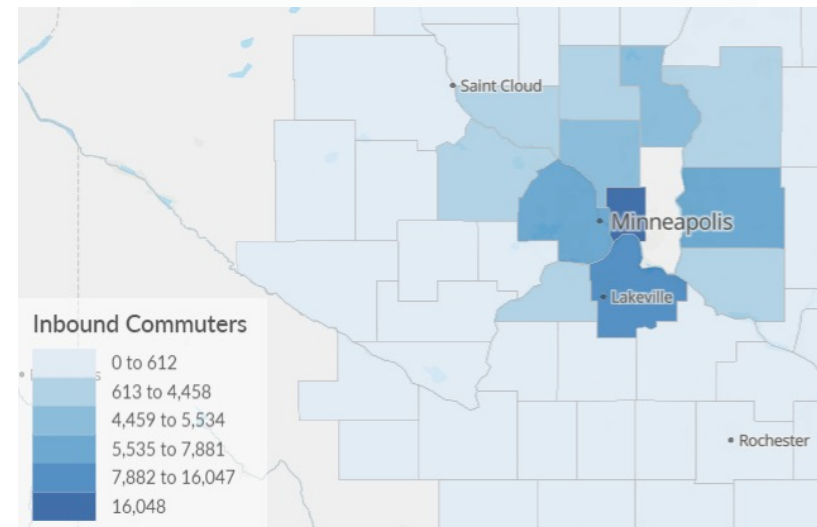


This dataset shows the amount of domestic taxpayer migration among all states, MSAs, and counties in the United States. The source and design of this taxpayer-based dataset excludes certain groups of people and thus does not represent the entire population, but rather is a good indicator of migrating workers within the labor force.

Talent Commute

Top Counties by Resident Migration	Inbound Commuters	Outbound Commuters	Net Commuters
Ramsey County, MN	16,048	40,941	-24,893
Dakota County, MN	7,882	12,414	-4,532
Hennepin County, MN	6,387	36,361	-29,974
St. Croix County, WI	5,535	2,040	3,494
Anoka County, MN	4,858	5,977	-1,119
Chisago County, MN	4,459	1,552	2,907
Polk County, WI	1,443	382	1,061
Pierce County, WI	1,143	466	677
Wright County, MN	703	309	394
Sherburne County, MN	662	286	376
Isanti County, MN	640	176	463
Scott County, MN	613	889	-276
Goodhue County, MN	437	397	40
	55,316	106,058	-50,742

Regional Commute Patterns, 2022



This dataset shows the number of inbound, outbound, and net commuters for Washington County. Approximately 55,316 workers commute into Washington County from surrounding counties, while approximately 106,058 residents of Washington County commute out from the county to others.

Industry and Career Pathway Selection

Approach for Selection of Industries and Pathways of Focus

- 1) Strong demand indicators in at least two of the following five areas (high historical employment, high job posting volumes, low unemployment rate, high forecast growth, high total demand, labeled by HD)
- 2) Higher than average local concentration of roles (LQ-Location Quotient above 1.0)
- 3) Significant impact on local or regional economy by GDP contribution, high average wage offerings, or high employment of county residents (HW)

Prioritized Industries of Focus

- 1) **Healthcare***—Offices of Physicians, Mental Health, Older Adult Services
- 2) **Manufacturing**—Wood, Paper, Chemical, Pharmaceutical, Printed Circuit and Industrial Control Manufacturing
- 3) **Construction**—Nonresidential Drywall Contractors, Nonresidential Structural Steel Contractors, Power Line Construction

Prioritized Career Fields and Pathways of Focus

- 1) **Health Science**—Therapeutic Services
- 2) **Manufacturing**—STEM, Production, Maintenance and Machining
- 3) **Architecture and Construction**—Carpentry, Insulation, Drywall Installation

Regional Industry and Career Highlights

Northern

Top Industries

- 1) Retail Trade (HD, LQ, HW)
- 2) Manufacturing (HD, LQ, HW)
- 3) Other Services (HD, LQ)
- 4) Construction (HD, LQ, HW)
- 5) Educational Services (HD, LQ)

Top Detailed Industries

- 1) Custom Architectural Woodwork and Millwork Manufacturing
- 2) Die and Tool Manufacturing
- 3) Industrial Mold Manufacturing

Top Career Clusters

- 1) Manufacturing
- 2) Architecture and Construction
- 3) Marketing, Sales, and Service
- 4) Business, Management, and Admin
- 5) Human Services

Central

Top Industries

- 1) Manufacturing (HD, LQ, HW)
- 2) Management* (HD, LQ, HW)
- 3) Arts and Entertainment (HD, LQ)
- 4) Retail Trade (HD, LQ)
- 5) Public Admin. (HD, LQ HW)

Top Detailed Industries

- 1) Wood Window and Door Manufacturing
- 2) Chemical Product Manufacturing
- 3) In-Vitro Diagnostic Substance Manufacturing

Top Career Clusters

- 1) Manufacturing
- 2) Health Science
- 3) Human Services
- 4) Hospitality and Tourism
- 5) Marketing, Sales, and Service

Southern

Top Industries

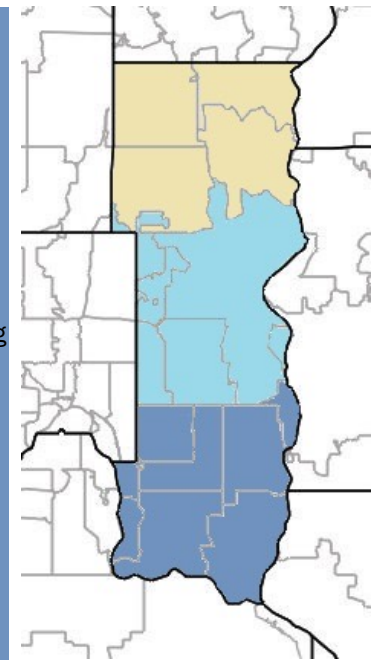
- 1) Retail Trade (HD, LQ)
- 2) Arts and Entertainment (HD, LQ)
- 3) Other Services (HD, LQ)
- 4) Accommodations and Food (HD, LQ)
- 5) Agriculture (HD, LQ)

Top Detailed Industries

- 1) Wood Window and Door Manufacturing
- 2) Unlaminated Plastics Manufacturing
- 3) Petroleum Refineries

Top Career Clusters

- 1) Health Science
- 2) Human Services
- 3) Marketing, Sales, and Service
- 4) Hospitality and Tourism
- 5) Education and Training



Healthcare Industry Detail

3-Digit Industry	Empl	Avg Ann Wages	LQ	North LQ	Central LQ	South LQ	5yr History	Annual Demand	Forecast Ann Growth
Ambulatory Health Care Services	6,835	\$72,607	1.27	0.82	1.27	1.41		766	1.6%
Nursing and Residential Care Facilities	2,576	\$35,725	1.32	0.80	1.43	1.35		353	1.2%
Hospitals	2,049	\$78,994	0.51	0.02	0.56	0.60		196	0.9%
Healthcare Industry	11,460	\$65,458	1.01	0.53	1.05	1.11		1,316	1.4%

Industry Staffing Pattern



Jobs in the Healthcare Industry

11,460 Total Employment

+2.8% average annual growth over the past ten years compared to -0.1% statewide and +1.2% nationally

11.6% of Total Employment compared to 11.4% nationally

1.01 Location Quotient

\$65,458 average wages compared to \$69,454 nationally

Healthcare Industry Occupational Employment

Occupation Distribution for Healthcare in Washington County, Minnesota, Baseline

SOC	Occupation	Current		5-Year Demand			Total Demand
		Empl	Avg Ann Wages	Exits	Transfers	Empl Growth	
29-1141	Registered Nurses	1,270	\$80,600	213	167	70	450
31-1122	Personal Care Aides	901	\$28,300	360	317	87	764
31-1131	Nursing Assistants	540	\$36,600	184	240	28	452
43-6013	Medical Secretaries and Administrative Assistants	520	\$42,000	156	159	31	346
31-9092	Medical Assistants	440	\$42,600	110	221	45	376
43-4171	Receptionists and Information Clerks	362	\$34,400	119	141	22	281
29-2061	Licensed Practical and Licensed Vocational Nurses	337	\$49,500	71	73	20	163
31-1121	Home Health Aides	320	\$28,300	93	100	31	224
31-9091	Dental Assistants	318	\$52,300	92	148	19	260
29-1292	Dental Hygienists	242	\$77,400	54	29	15	98
43-9061	Office Clerks, General	219	\$40,800	70	70	2	142
11-9111	Medical and Health Services Managers	214	\$103,000	35	62	36	133
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	204	\$50,700	41	63	24	128
35-3041	Food Servers, Nonrestaurant	200	\$30,400	87	81	13	181
29-1171	Nurse Practitioners	163	\$117,500	24	29	50	104
	Other Occupations	5,185		1,075	1,340	297	2,713
	Total	11,434		2,784	3,239	789	6,814

Jobs in the Health Science Cluster

8,731 Total Employment

+3.3% average annual growth over the past ten years compared to +0.3% statewide

1.0% unemployment rate (133 people) compared to 1.2% statewide (3,416 people)

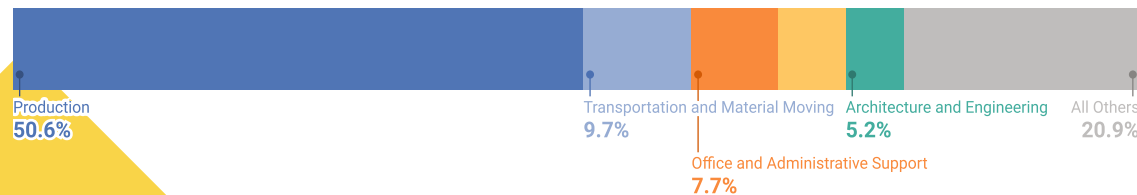
0.98 Location Quotient

\$82,500 average wages compared to \$83,700 statewide

Manufacturing Industry Detail

3-Digit Industry	Empl	Avg Ann Wages	LQ	North LQ	Central LQ	South LQ	5yr History	Annual Demand	Forecast Ann Growth
Wood Product Manufacturing	4,329	\$99,520	15.75	7.60	21.06	12.95		515	0.6%
Chemical Manufacturing	1,155	\$104,890	2.07	1.60	3.23	1.08		126	0.6%
Machinery Manufacturing	835	\$85,509	1.23	4.71	0.85	0.58		79	-0.8%
Fabricated Metal Product Manufacturing	808	\$65,298	0.90	2.49	0.52	0.81		88	0.2%
Plastics and Rubber Products Manufacturing	781	\$60,721	1.69	1.18	1.38	2.14		91	0.8%
Miscellaneous Manufacturing	765	\$64,297	1.84	1.15	2.29	1.62		88	0.7%
Food Manufacturing	601	\$38,116	0.57	0.30	0.56	0.65		80	0.7%
Petroleum and Coal Products Manufacturing	415	\$159,611	6.37	0.29	0.14	14.23		44	0.5%
Computer and Electronic Product Manufacturing	352	\$58,759	0.53	0.48	0.97	0.11		35	0.6%
Printing and Related Support Activities	254	\$64,047	1.03	3.02	1.36	0.13		22	-2.4%
Remaining Component Industries	814	\$49,374	0.43	0.28	0.36	0.34		92	-0.5%
Manufacturing	11,108	\$75,300	1.39	1.56	1.56	1.16		1,255	0.4%

Industry Staffing Pattern



Jobs in the Manufacturing Industry

11,108 Total Employment

+3.9% average annual growth over the past ten years compared to +0.5% statewide and +0.6% nationally

11.2% of Total Employment compared to 8.1% nationally

1.39 Location Quotient

\$75,300 average wages compared to \$79,193 nationally

Manufacturing Industry Occupational Employment

Occupation Distribution for Manufacturing in Washington County, Minnesota, Baseline							
SOC	Occupation	Current		5-Year Demand			
		Empl	Avg Ann Wages	Exits	Transfers	Empl Growth	Total Demand
51-2092	Team Assemblers	1,131	\$37,500	221	410	-62	569
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	547	\$41,900	101	187	31	320
51-1011	Supervisors of Production/Operating Workers	425	\$66,400	79	147	15	241
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	385	\$37,500	97	185	19	300
11-1021	General and Operations Managers	264	\$117,800	31	87	10	129
41-4012	Sales Representatives, Wholesale and Manufacturing	261	\$75,000	46	89	9	144
47-2031	Carpenters	252	\$43,200	45	78	14	138
51-9061	Inspectors, Testers, Sorters, and Weighers	232	\$44,600	47	88	-13	123
17-2112	Industrial Engineers	224	\$93,800	28	46	17	91
51-4041	Machinists	221	\$52,000	43	76	3	122
51-7011	Cabinetmakers and Bench Carpenters	206	\$42,000	48	68	11	127
53-7051	Industrial Truck and Tractor Operators	189	\$46,200	33	79	10	121
43-9061	Office Clerks, General	186	\$41,400	58	58	-2	114
53-3032	Heavy and Tractor-Trailer Truck Drivers	175	\$51,500	42	65	9	116
49-9071	Maintenance and Repair Workers, General	173	\$51,900	37	50	8	95
	Other Occupations	6,214		1,283	2,151	134	3,570
	Total	11,084		2,237	3,865	214	6,318

Jobs in the Manufacturing Cluster

8,855 Total Employment

+2.8% average annual growth over the past ten years compared to -0.1% statewide

2.0% unemployment rate (194 people) compared to 2.3% statewide (6,242 people)

1.12 Location Quotient

\$50,600 average wages compared to \$52,400 statewide

Construction Industry Detail

6-Digit Industry	Empl	Avg Ann Wages	LQ	North LQ	Central LQ	South LQ	5yr History	Annual Demand	Forecast Ann Growth
Nonresidential drywall contractors	534	\$80,296	6.43	9.72	6.78	5.12		52	0.7%
Residential Remodelers	487	\$57,175	1.11	0.91	1.18	1.09		49	0.6%
Power and Communication Line and Related Structures Construction	481	\$74,480	3.39	17.37	1.01	1.63		52	1.2%
Highway, Street, and Bridge Construction	424	\$73,697	1.33	0.97	2.61	0.17		47	1.0%
Commercial and Institutional Building	400	\$106,011	0.88	1.18	1.29	0.40		40	0.6%
Residential plumbing and HVAC contractors	345	\$71,685	0.77	1.28	2.29	0.62		37	0.5%
Nonresidential plumbing and HVAC contractors	304	\$103,599	0.85	1.15	0.82	0.67		32	0.5%
New Single-Family Housing Construction (except For-Sale Builders)	293	\$70,867	0.91	1.34	0.90	0.81		30	0.6%
Residential site preparation contractors	229	\$51,153	1.30	1.96	1.37	1.04		24	0.6%
All other residential trade contractors	220	\$48,666	1.05	1.04	1.11	0.85		24	0.6%
Remaining Component Industries	2,031	\$59,972	0.71	1.02	0.73	0.59		210	0.6%
Construction	5,747	\$68,943	0.98	1.63	1.07	0.70		603	0.7%

Industry Staffing Pattern



Jobs in the Construction Industry

5,747 Total Employment

+3.8% average annual growth over the past ten years compared to +2.4% statewide and +2.7% nationally

5.8% of Total Employment compared to 5.9% nationally

0.98 Location Quotient

\$68,943 average wages compared to \$65,968 nationally

Construction Industry Occupational Employment

Occupation Distribution for Manufacturing in Washington County, Minnesota, Baseline

SOC	Occupation	Current		5-Year Demand			
		Empl	Avg Ann Wages	Exits	Transfers	Empl Growth	Total Demand
47-2061	Construction Laborers	772	\$51,800	146	252	43	440
47-2031	Carpenters	732	\$65,200	127	220	17	364
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	348	\$84,100	60	108	14	182
11-9021	Construction Managers	238	\$100,900	29	67	18	114
47-2152	Plumbers, Pipefitters, and Steamfitters	221	\$80,200	38	78	8	123
47-2073	Operating Engineers and Other Construction Equipment Operators	193	\$72,200	36	66	8	110
47-2111	Electricians	177	\$69,800	32	64	11	106
43-9061	Office Clerks, General	176	\$44,800	55	55	-3	107
47-2141	Painters, Construction and Maintenance	169	\$53,700	30	45	6	81
11-1021	General and Operations Managers	153	\$113,300	18	51	6	74
47-2081	Drywall and Ceiling Tile Installers	153	\$63,600	21	42	6	70
13-1082	Project Management Specialists	147	\$83,000	17	43	5	66
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	128	\$63,000	20	42	4	66
47-2051	Cement Masons and Concrete Finishers	117	\$62,400	15	36	0	52
53-3032	Heavy and Tractor-Trailer Truck Drivers	98	\$55,600	23	36	4	63
	Other Occupations	1,899		358	628	54	1,041
	Total	5,720		1,026	1,833	201	3,060

Jobs in the Architecture and Construction Cluster

6,818 Total Employment

+2.3% average annual growth over the past ten years compared to +1.1% statewide

2.3% unemployment rate (164 people) compared to 2.9% statewide (5,425 people)

1.01 Location Quotient

\$64,400 average wages compared to \$66,600 statewide

Architecture and Construction Talent Demographics

Workforce and Graduate Demographics of the Top Fifteen Occupations of Employment in Architecture and Construction

SOC	Occupation	2022Q3 Empl	Unempl Rate	Talent Shortage	Workforce BIPOC by Race	Workforce Hispanic/ Latinx	Workforce Female	Workforce 45+	Award Gap	SY2021 Graduates BIPOC by Race or Ethnicity	SY2021 Graduates Female
47-2031	Carpenters	912	2.4%	Y	6.3%	10.7%	2.9%	45.2%	Y		
47-2061	Construction Laborers	859	3.6%		7.3%	14.8%	4.2%	41.8%			
37-3011	Landscaping and Groundskeeping Workers	837	2.4%		7.2%	14.1%	5.8%	43.7%			
47-1011	Supervisors of Construction and Extraction Workers	454	1.1%	Y	4.1%	5.4%	3.7%	55.8%	Y		
47-2111	Electricians	422	1.8%	Y	6.1%	5.3%	1.6%	47.0%	Y		
11-9021	Construction Managers	362	1.3%	Y	4.1%	3.3%	7.7%	57.0%	Y		
47-2152	Plumbers, Pipefitters, and Steamfitters	313	2.4%	Y	6.6%	5.8%	2.1%	46.5%	Y		
17-2051	Civil Engineers	278	1.3%		15.0%	2.4%	14.3%	48.1%	Y		
49-9021	HVAC and Refrigeration Mechanics and Installers	215	0.9%	Y	6.1%	6.7%	10.4%	53.0%		26.2%	3.3%
47-2073	Operating Engineers and Equipment Operators	211	4.0%	Y	5.1%	5.0%	3.4%	54.1%			
13-1051	Cost Estimators	198	1.0%		6.4%	2.0%	13.7%	56.9%	Y		
47-4051	Highway Maintenance Workers	173	2.9%	Y	6.2%	3.6%	3.7%	62.4%			
47-2141	Painters, Construction and Maintenance	152	2.7%	Y	6.2%	21.2%	10.1%	47.8%			
17-1011	Architects, Except Landscape and Naval	129	1.3%		16.6%	1.6%	25.7%	50.3%	Y		
17-3022	Civil Engineering Technologists and Technicians	113	1.2%		10.3%	3.3%	19.8%	53.4%	Y		
	All Architecture and Construction Careers	6,986	2.3%		7.5%	8.9%	7.4%	48.0%			
	Total – All Occupations	140,319	1.9%		13.2%	4.1%	48.6%	46.8%		31.7%	62.1%

Source: Chmura JobsEQ 2022Q3 Dataset. Names of Industry NAICS or Occupation SOC may be abbreviated. Talent shortage is estimated based on historical talent pipelines in the region, typical job changes, and the likelihood of retirements. Red highlighting indicates lower than overall share of workforce or graduate pool, or existence of occupation or award gap.

Priorities by Pathway

Health Science

CRITICAL ISSUE: Address the growing local shortage of talent in key roles that provide direct care to aging and high-need populations.

- Ramp up volume of graduates coming through critical postsecondary programs that train:
 - Registered Nurses
 - Medical and Health Services Managers
 - Nurse Practitioners
- Support employers in talent retention efforts in origin and gateway occupations

Manufacturing

CRITICAL ISSUE: Bolster the Wood Product and Chemical Manufacturing Industries by growing talent pipelines in occupations of high shortages.

- Grow the volume of graduates at the two-year level for critical roles including:
 - Industrial Engineering Techs
 - Chemical Techs
 - Welders and Solderers
 - Industrial Machinery Mechanics
 - Chemical Equipment Operators
- Build career advancement pathways into critical supervisory positions including:
 - Production Supervisors
 - Mechanics Supervisors

Architecture and Construction

CRITICAL ISSUE: Grow the base of talent needed to support the important Drywall and Nonresidential Structural Steel Industries, as well as the Power Line Construction Industry.

- Accelerate talent attraction into origin and gateway occupations in high-demand in these core industries that are forecasting shortages, such as Drywall Installers.
- Address talent shortages through expanding career advancement pathways to ensure sufficient talent:
 - Construction Managers
 - Construction Supervisors

Summary

We're at a turning point

Our industry needs are clear

Top industries of need have diversity challenges

Our community is becoming more diverse

Diversity is an opportunity

Workplaces are changing

Growth will continue

More post-high school programming is needed

We can lead by example