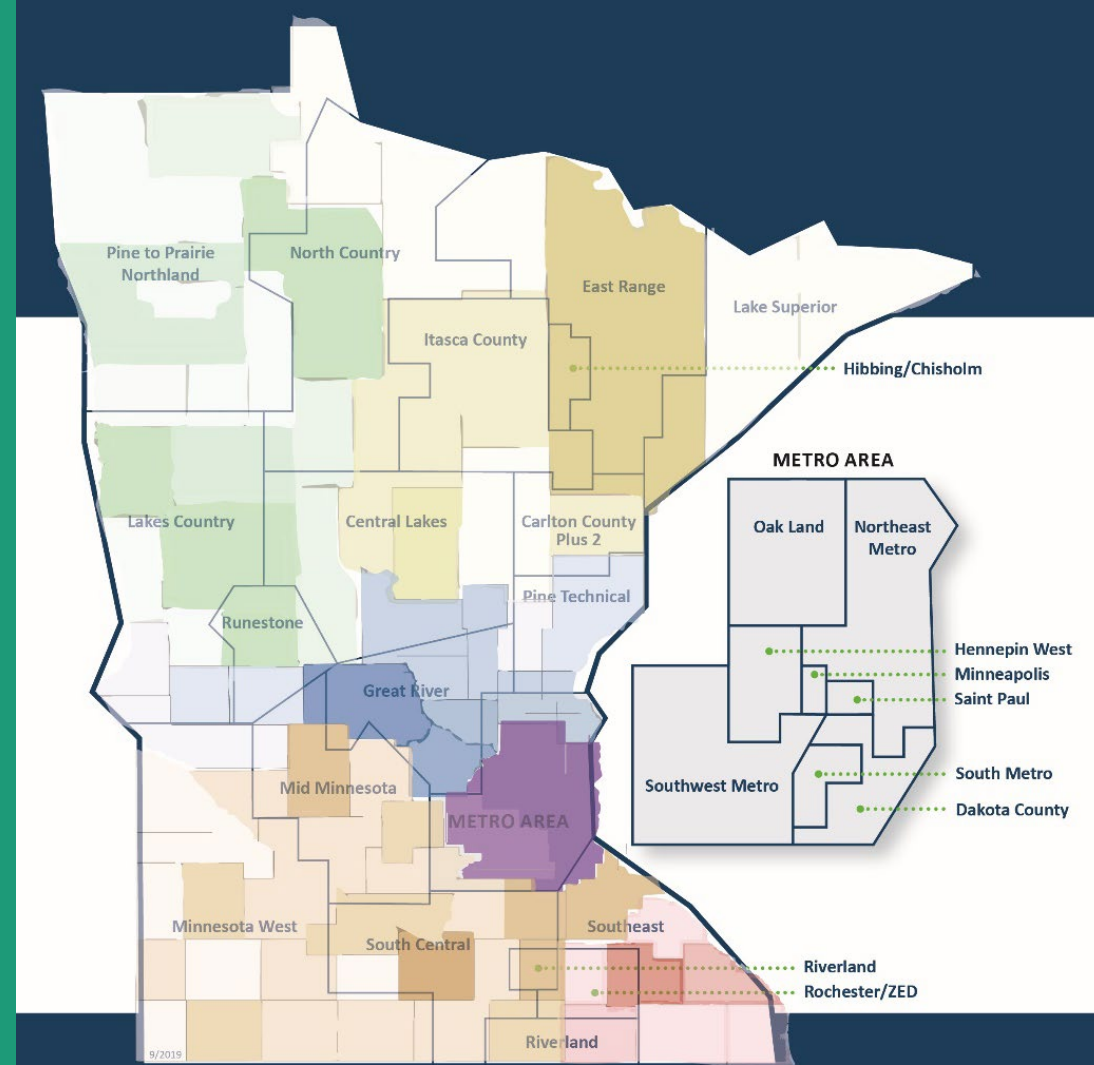


# Workforce Trends & Careers of Tomorrow For Career & Technical Education

## RealTime Talent

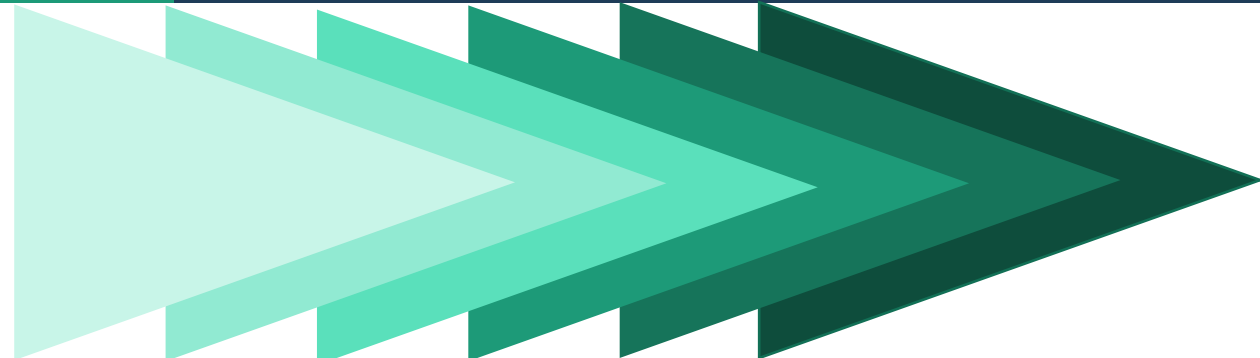
Erin Olson, Director of Strategic Research  
December 5<sup>th</sup>, 7<sup>th</sup>, and 14<sup>th</sup> 2022

The contents of this series were made possible through the Strengthening Career and Technical Education for the 21st Century Act (Perkins V) Federal grant from the United States Department of Education administered through Minnesota State Colleges and Universities.



**RealTime Talent**

Using data to build the  
world's best workforce



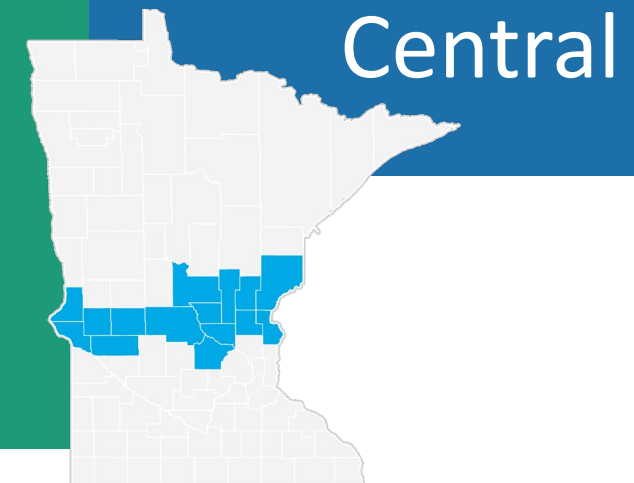
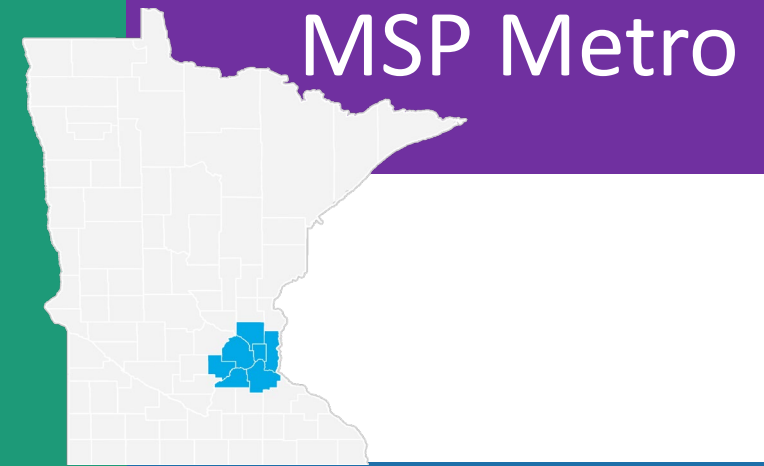
## Who's in the Virtual "Room"

In the chat field,  
please share your name, your  
role, and the organization that  
you represent.

# Workforce Trends & Careers of Tomorrow

For Career & Technical Education

# MSP Metro & Central Minnesota



## RealTime Talent

Erin Olson, Director of Strategic Research  
December 7, 2022



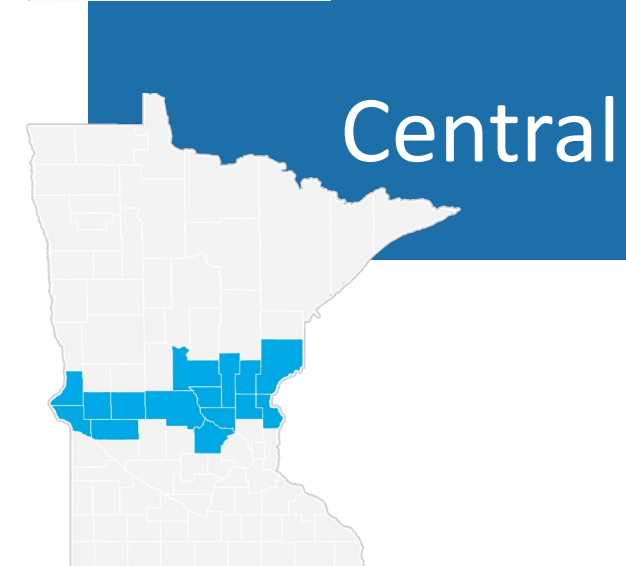
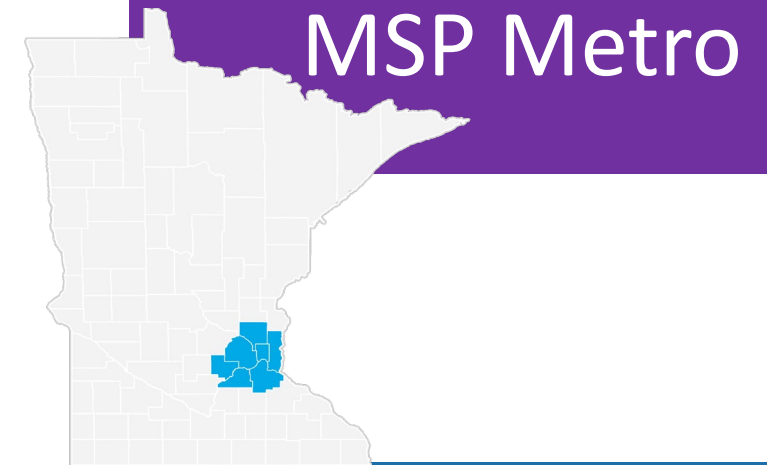
Access the full report here:  
<http://www.realtimetalent.org>

# Overview

- Community Profile
- Workforce Forecast
- Talent Shortage
- Emerging Career Paths
- Career Cluster Overview
- Career Field Insights

Access the full reports here:

<http://www.realtimetalent.org>

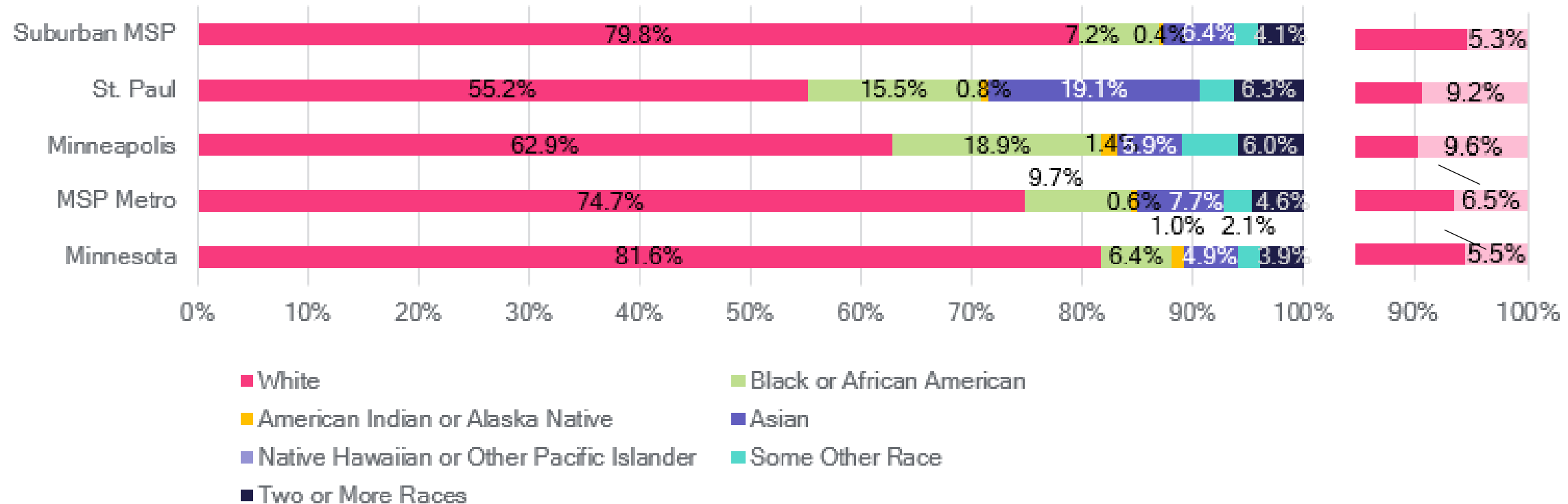


# Community Profile

## MSP Metro Minnesota

Population Race, All Ages

Population of Hispanic/Latinx

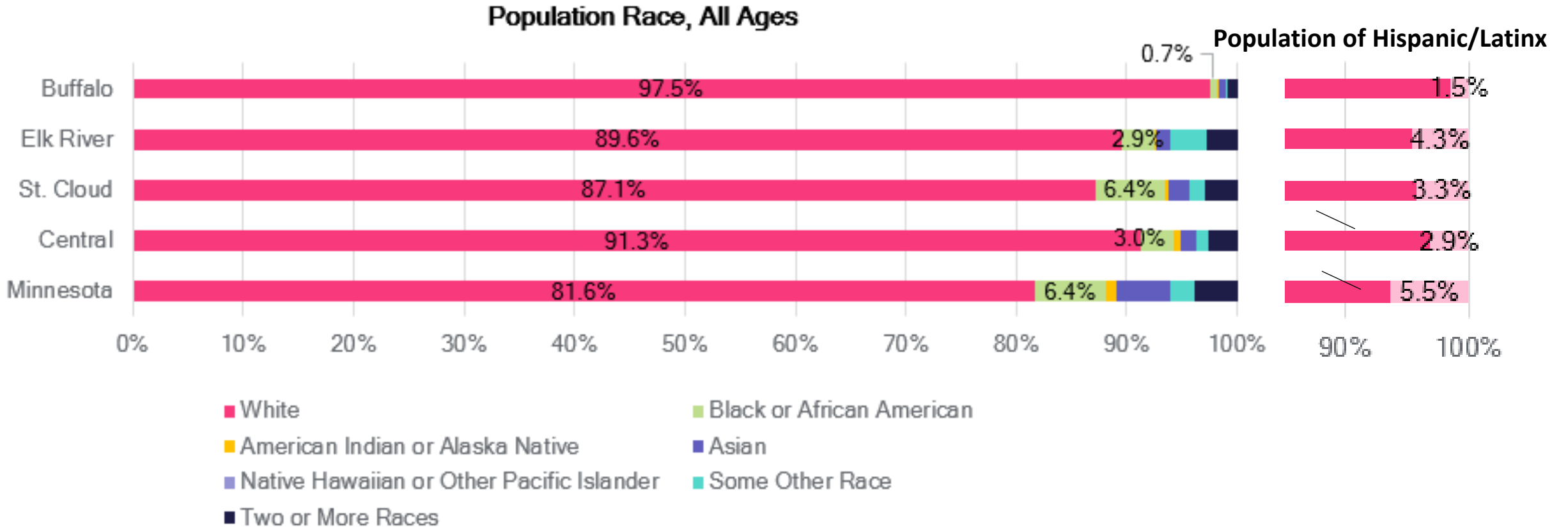


American Community Survey 2016-2020.



# Community Profile

## Central Minnesota

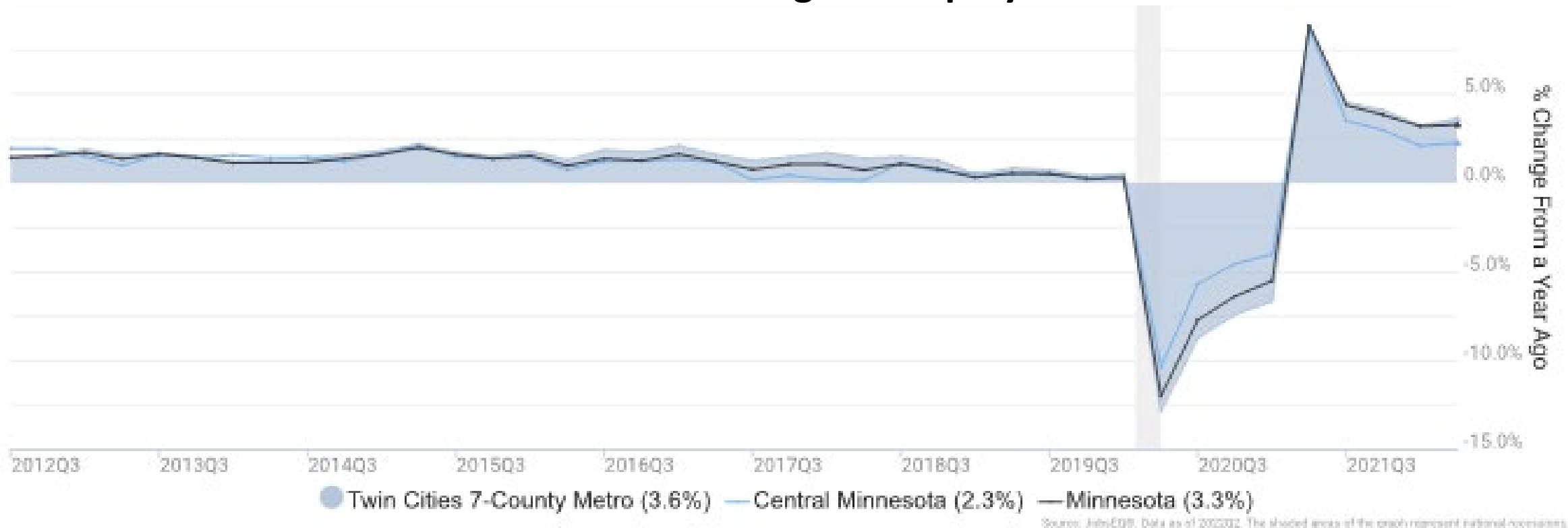


American Community Survey 2016-2020.



# Community Profile

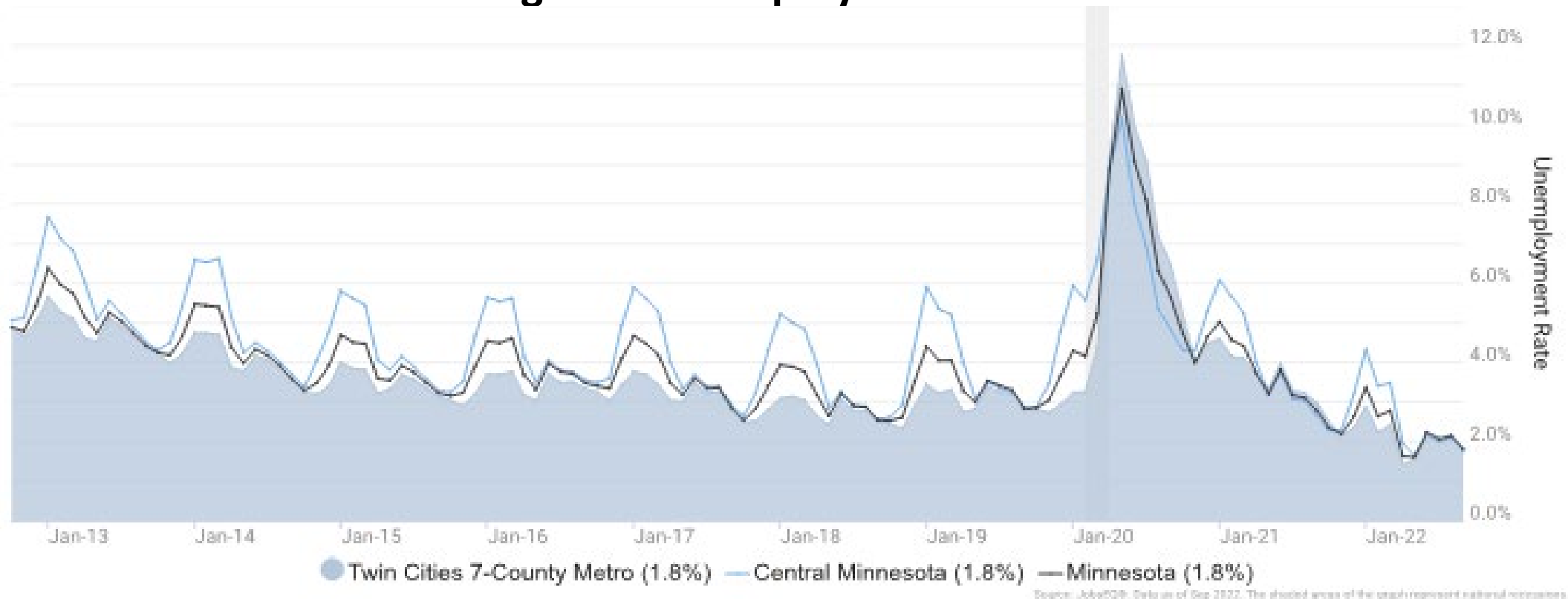
### Annual Percent Change in Employment



Employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2022Q1

# Community Profile

### Regional Unemployment Rate

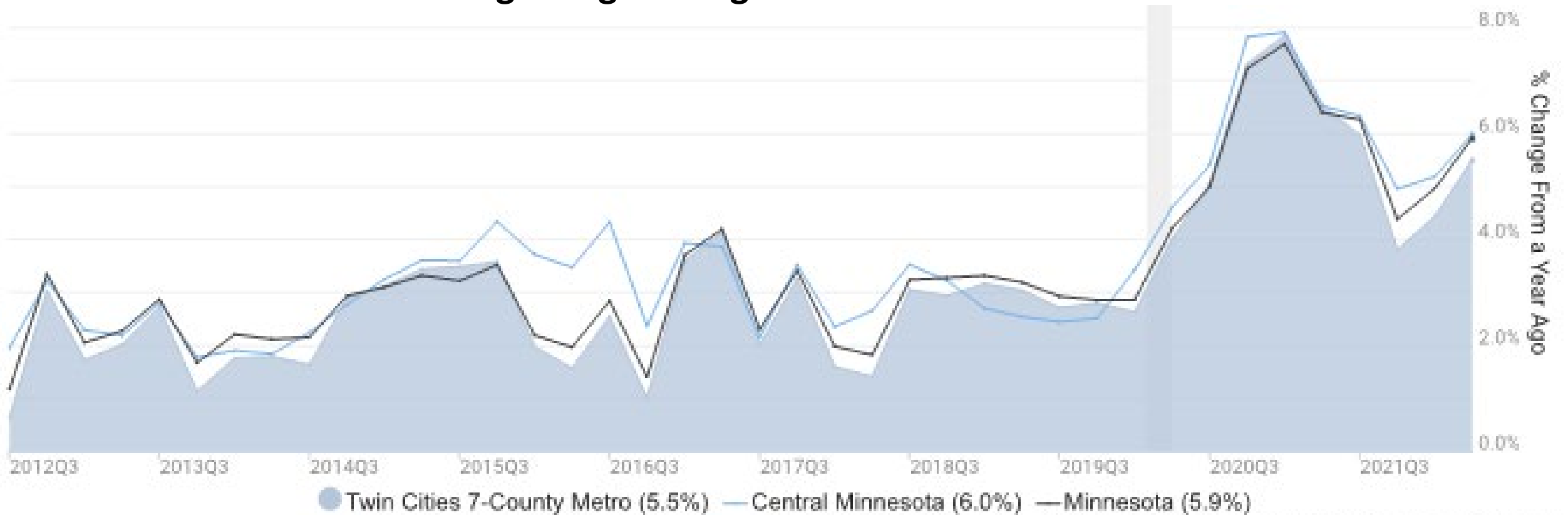


Unemployment rate data are from the Local Area Unemployment Statistics, provided by the Bureau of Labor Statistics and updated through September 2022.



# Community Profile

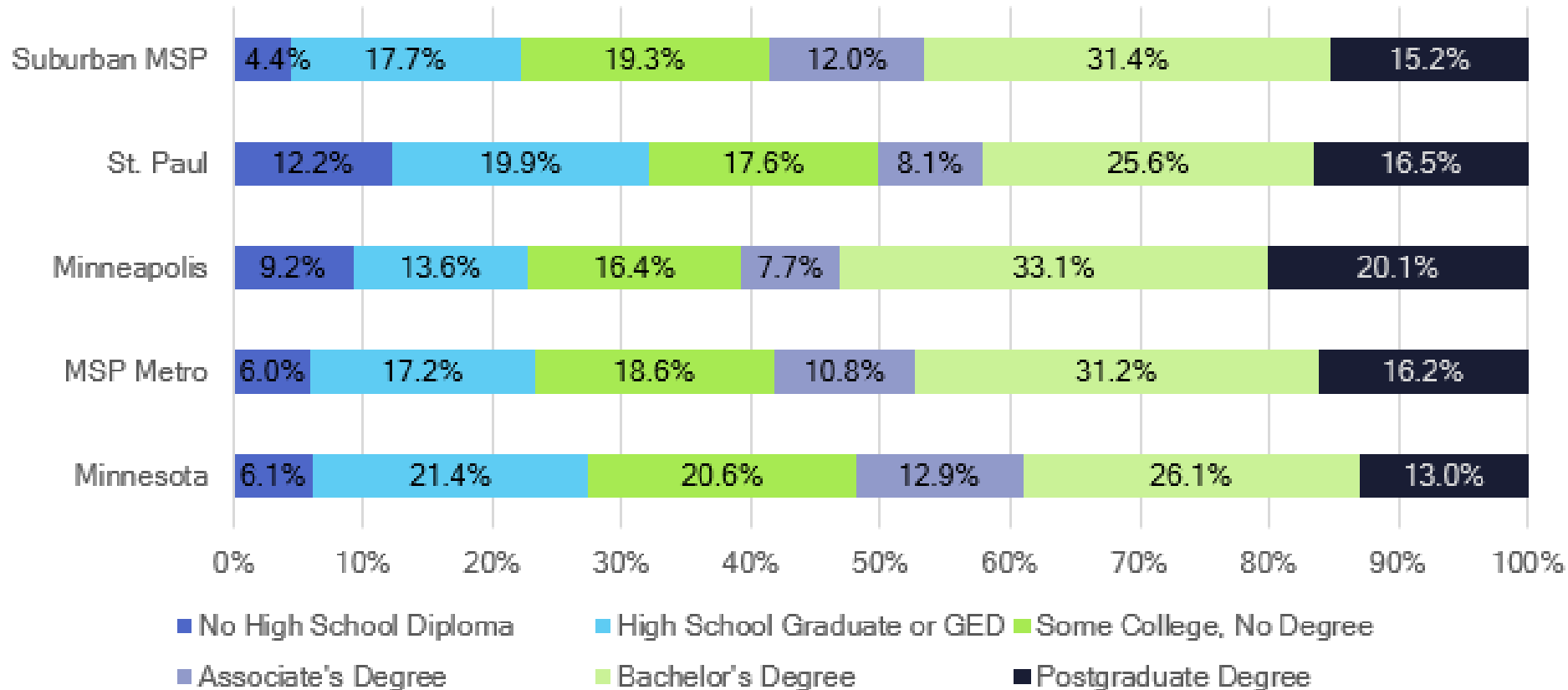
### Average Wage Changes from Prior Year



Source: Jobvigor. Data as of 2022Q1. The shaded area of the graph represents national recessions.

# Community Profile

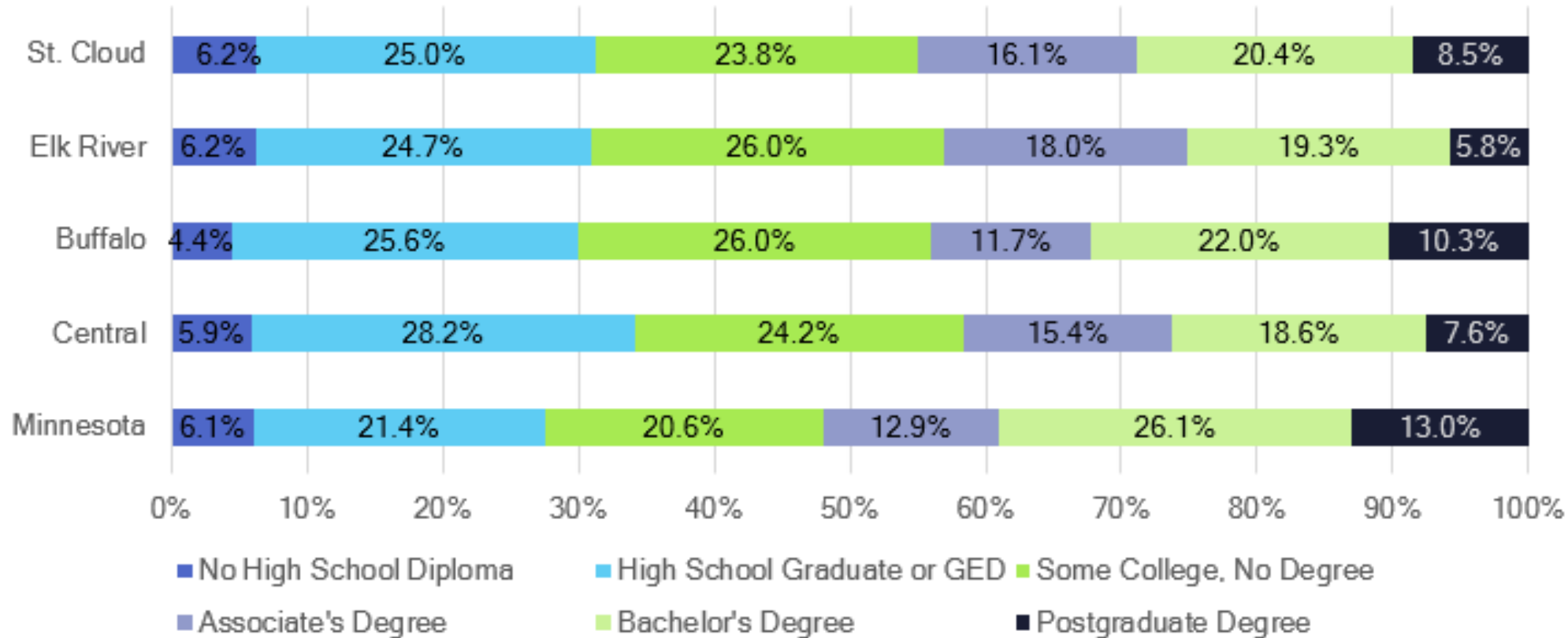
### Educational Attainment, Age 25-64



# Community Profile

## Central Minnesota

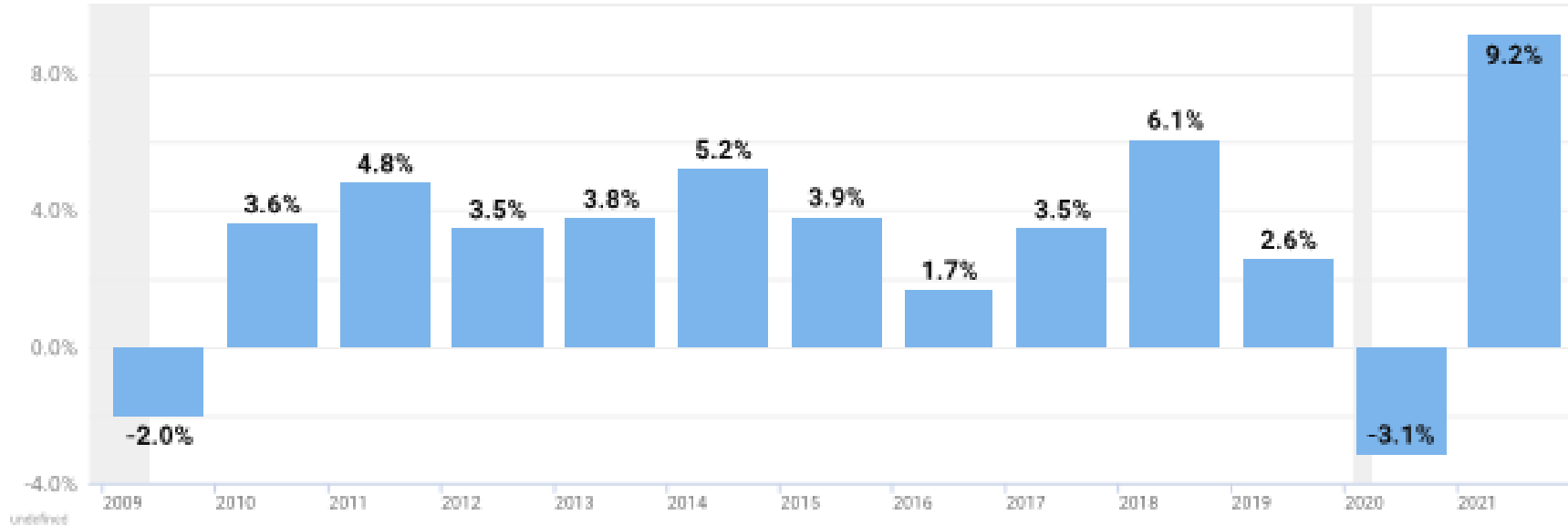
### Educational Attainment, Age 25-64



# Community Profile

## MSP Metro Minnesota

One-Year % Change in GDP, MSP Metro



- Gross Regional Product (GRP) rose +9.2%
- Real Estate and Leasing contributes most to GRP

Gross Domestic Product data are provided by the Bureau of Economic Analysis, imputed by Chmura where necessary, updated through 2021.

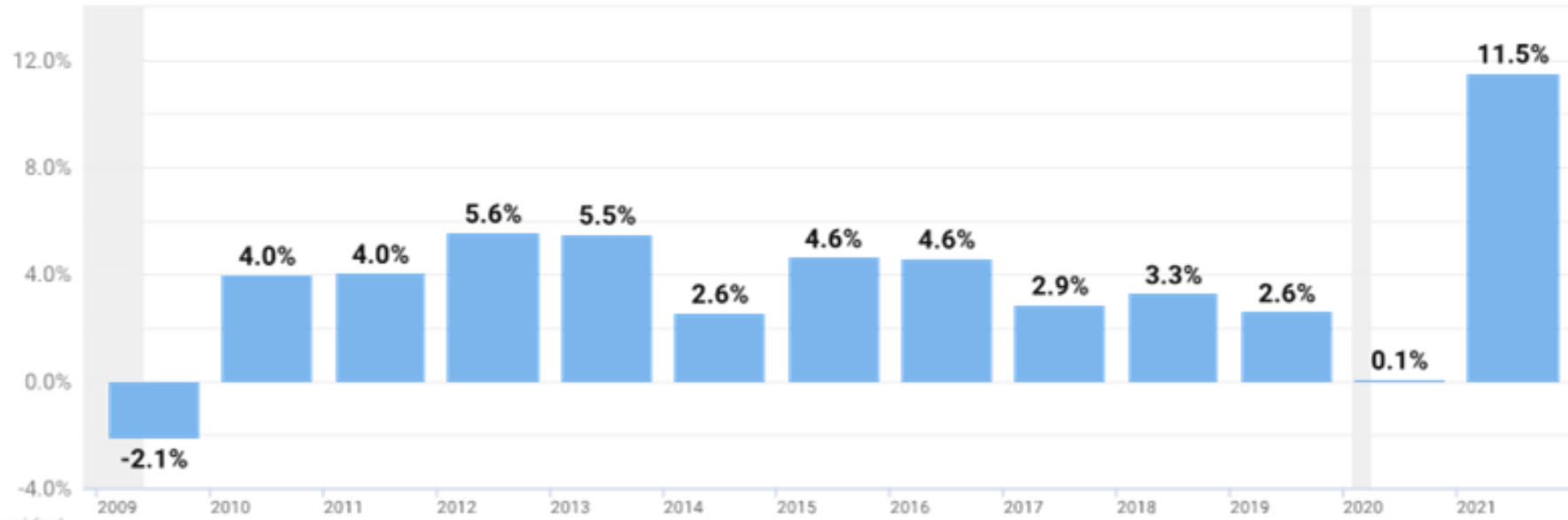
GDP (in \$ millions)  
Twin Cities 7-County Metro, 2021



# Community Profile

## Central Minnesota

One-Year % Change in GDP, Central Minnesota



Gross Domestic Product data are provided by the Bureau of Economic Analysis, imputed by Chmura where necessary, updated through 2021.<sup>4</sup>

GDP (in \$ millions)  
Central Minnesota, 2021



- Gross Regional Product (GRP) rose +11.5%
- Manufacturing and Healthcare contribute most to GRP

# Workforce of Today & Tomorrow *Forecast*

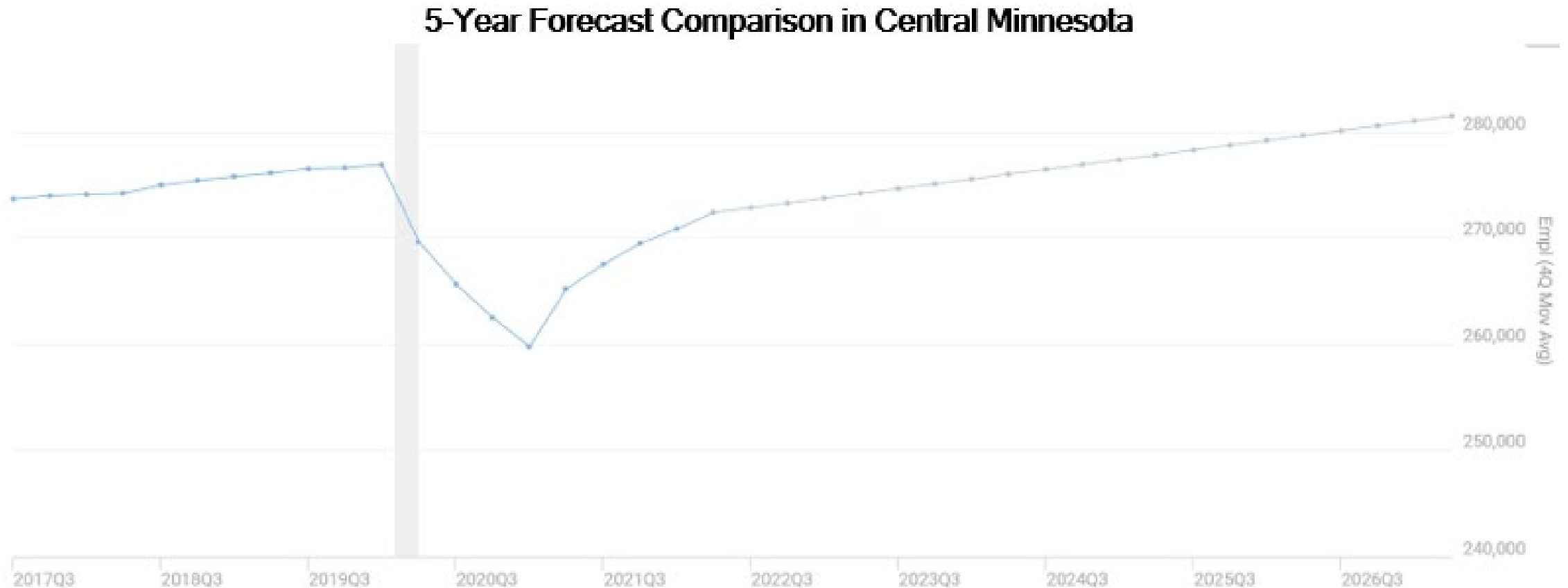
5-Year Forecast Comparison in the MSP Metro



0.7% Average Annual Employment Growth Forecast

# Workforce of Today & Tomorrow *Forecast*

## Central Minnesota



0.7% Average Annual Employment Growth Forecast

# Polling Question

When you think about the current economic situation in your community, which of the following career fields do you feel has the most challenging or pressing workforce needs to be addressed right now? (select up to two)

1. Agriculture, Food, and Natural Resources
2. Arts, Communications, and Information Systems
3. Business, Management, and Administration
4. Engineering, Manufacturing, and Technology
5. Health Science Technology
6. Human Services



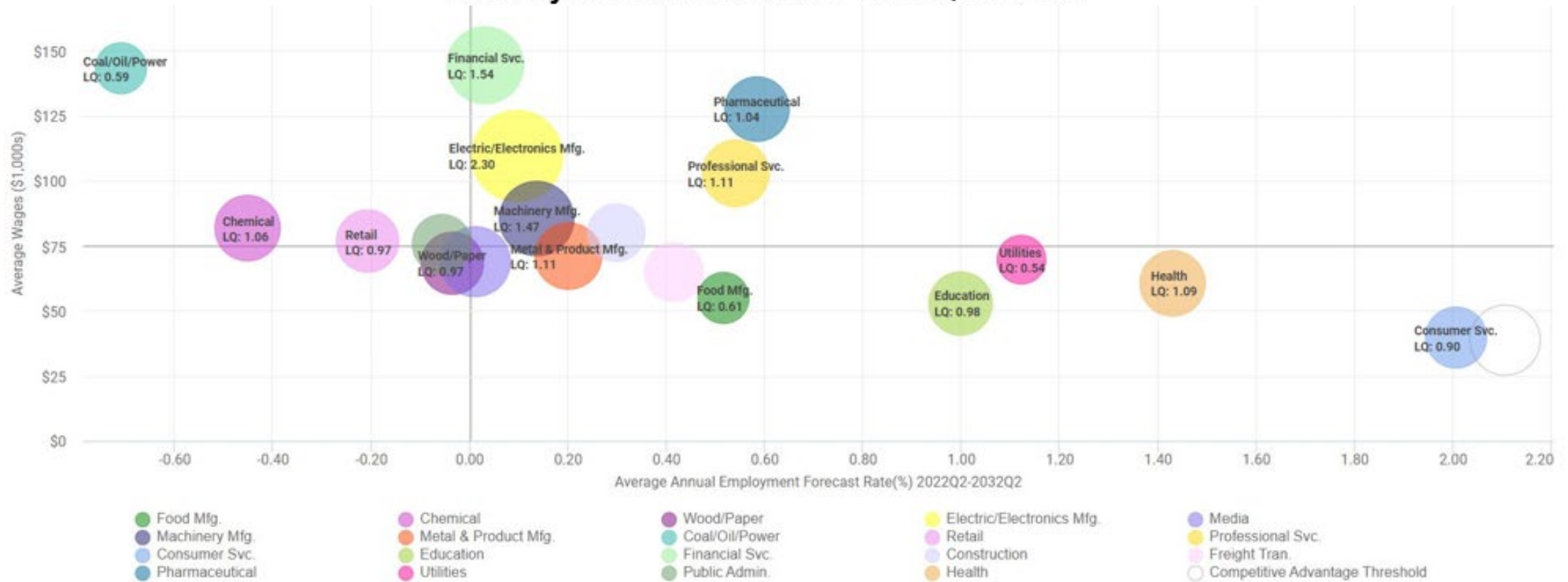
# Polling Question

When you think about your local school, district, or consortium's programming, how well do you feel current program offerings address your community's most challenging or pressing workforce needs right now?

1. To a Great Extent
2. Somewhat
3. Very Little
4. Not At All
5. I Do Not Know

# Workforce of Today & Tomorrow *Forecast*

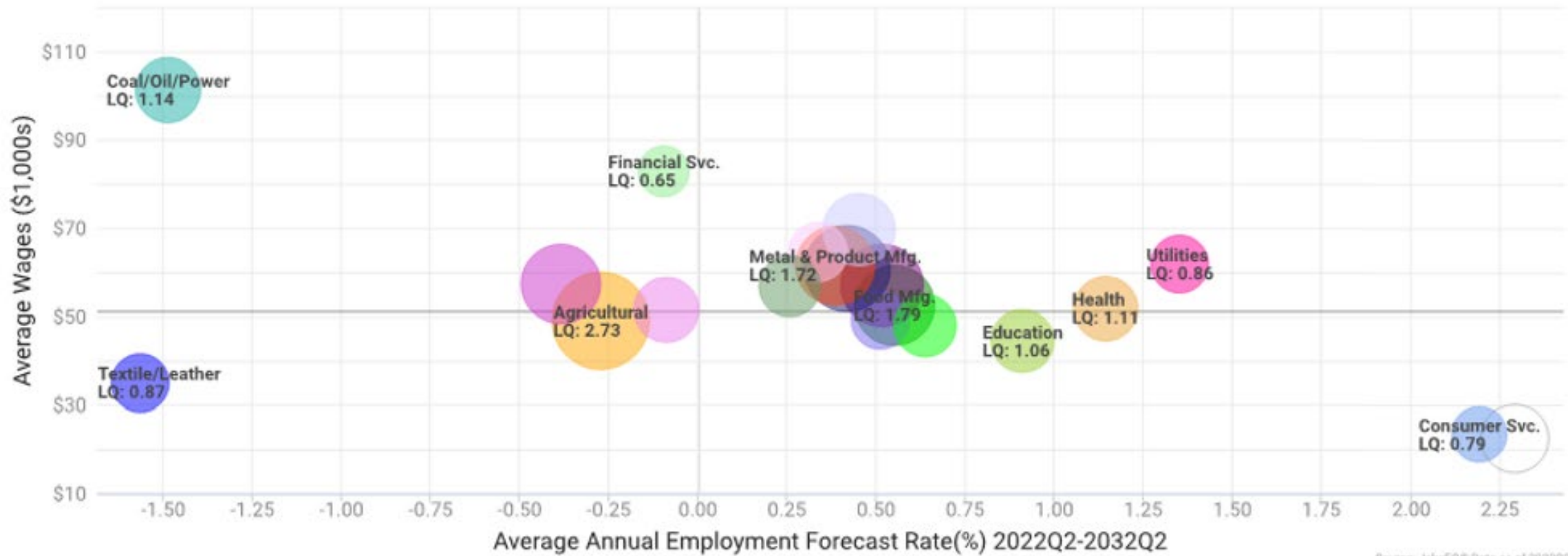
Industry Clusters in the MSP Metro, 2022Q2



# Workforce of Today & Tomorrow *Forecast*

## Central Minnesota

Industry Clusters for Central Minnesota as of 2022Q2



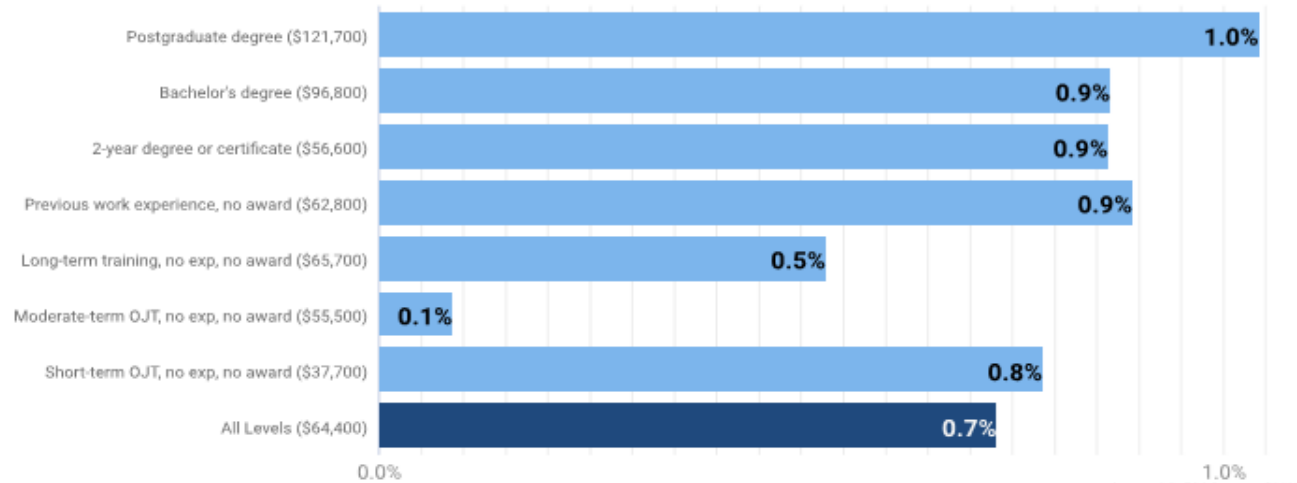
Source: JobsEQ®, Data as of 2022Q2

# Workforce of Today & Tomorrow

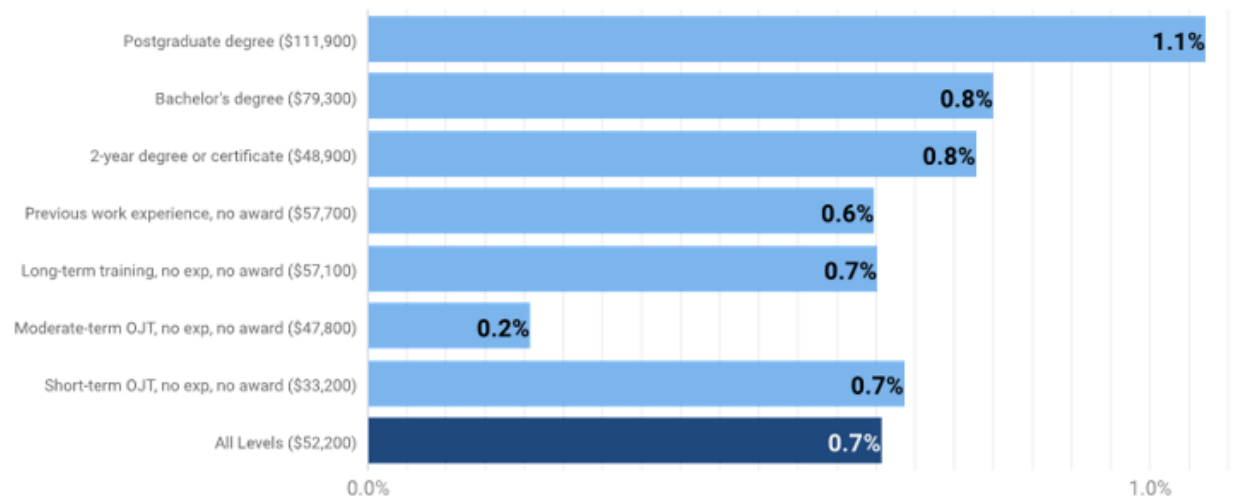
## Forecast

### MSP Metro Central

Annual Average Projected Job Growth by Training Required for the MSP Metro



Annual Average Projected Job Growth by Training Required for Central Minnesota  
Annual Average Projected Job Growth by Training Required



MSP Metro  
unemployment rate:

**2.4%**

Central  
unemployment rate:

**2.8%**

\*As of 2022Q2



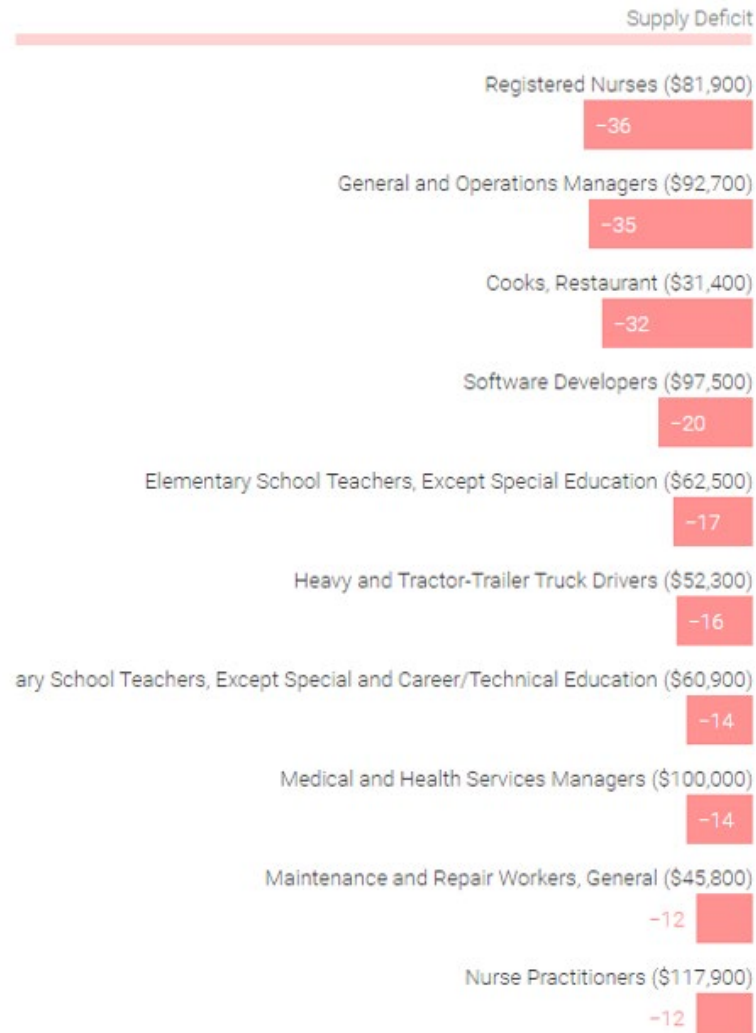
# Talent Shortage *Occupation Gaps*

## MSP Metro Central

### MSP Metro



### Central



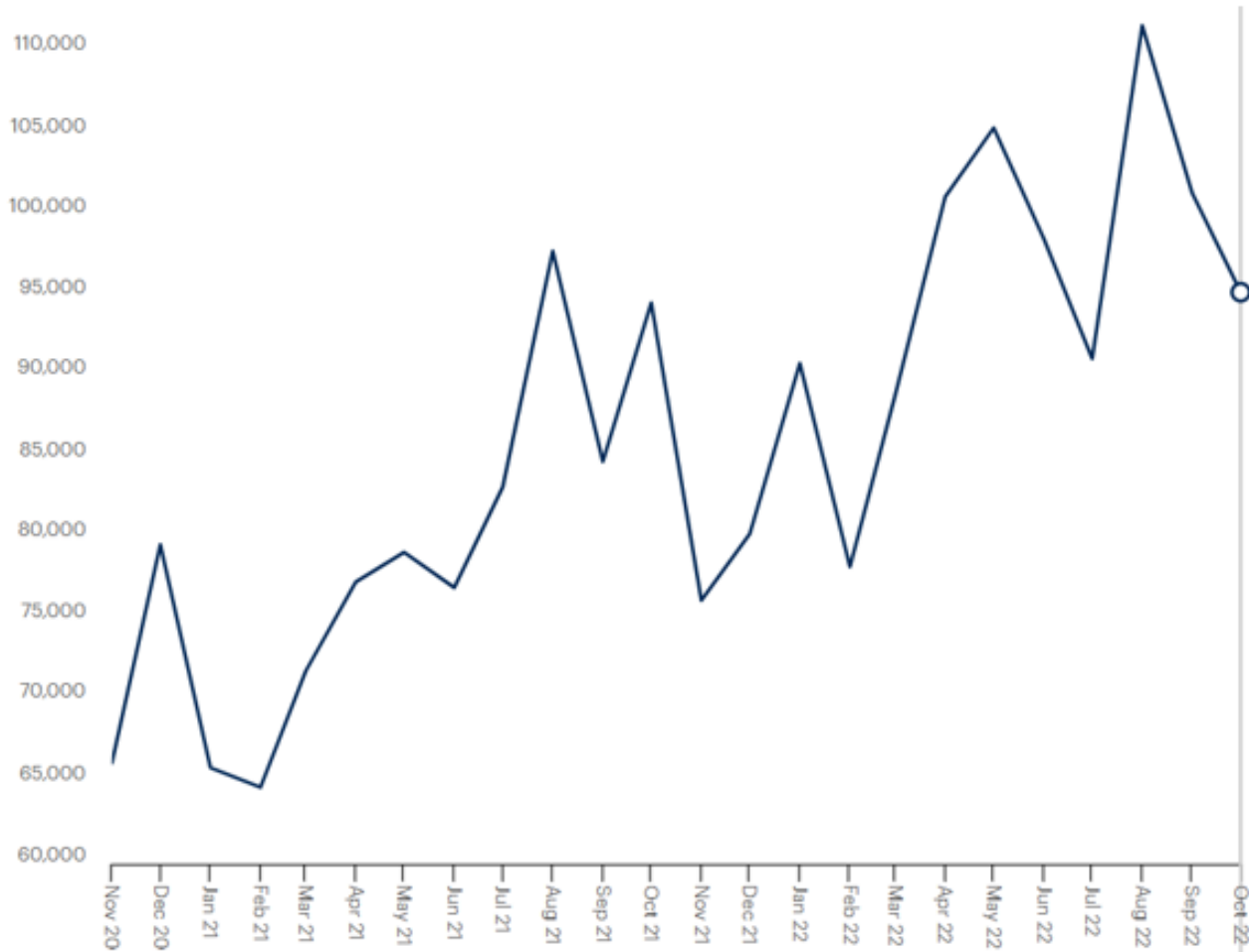
### New in 2022

- 1) Software Developers now ranks as top occupation of shortage statewide, and in the MSP Metro
- 2) Two new occupations of the top 10 roles in highest talent shortage are Origin and Gateway Careers that typically require an industry credential: Restaurant Cooks and Maintenance and Repair Workers



# Emerging Career Paths

Total Jobs Advertised Monthly in Minnesota,  
October 2021-2022



SOURCE: Gartner TalentNeuron Plan accessed 11/3/2022

666,152 unique job postings in  
the MSP Metro (+17%)

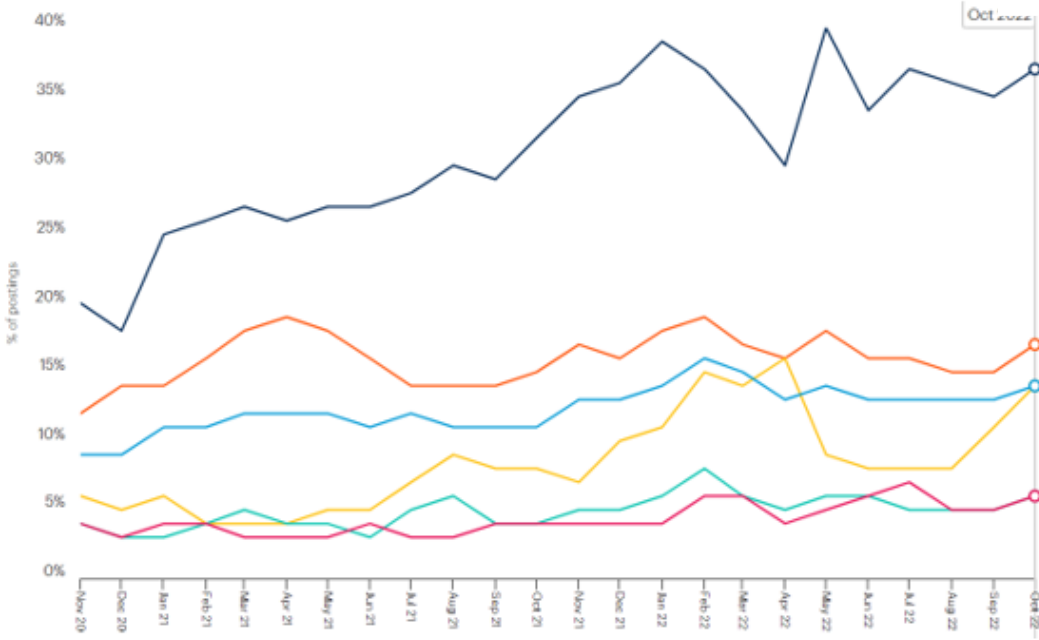
87,738 unique job postings in  
the Central region (+19%)





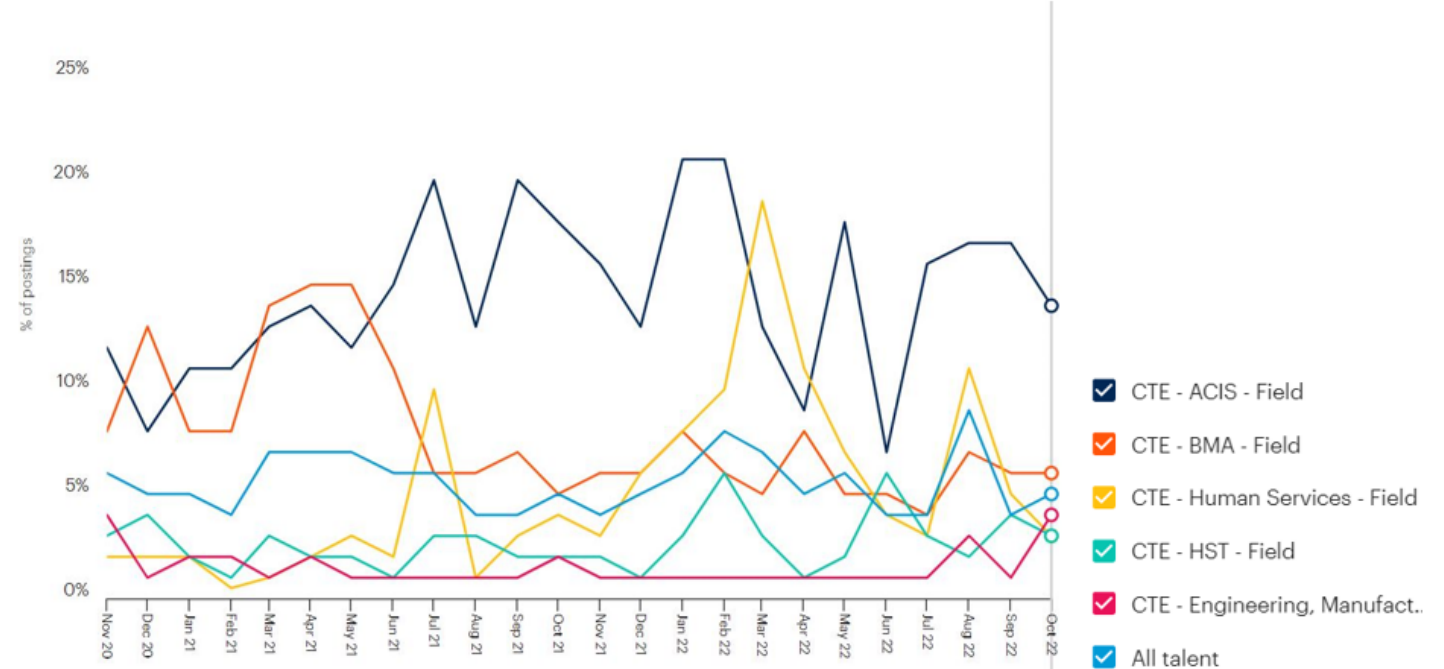
# Emerging Career Paths

Total Remote Job Postings Advertised Monthly in the MSP Metro,



SOURCE: Gartner TalentNeuron Plan accessed 11/10/2022

Total Remote Job Postings Advertised Monthly in Central Minnesota, October 2021-2022



SOURCE: Gartner TalentNeuron Plan accessed 11/3/2022

# Career Cluster Overview

## MSP Metro Central

### Cluster Forecasts by Region

Career Cluster	Minnesota	MSP Metro	Northeast	Northwest	Central	Southwest	Southeast
Science, Technology, Engineering & Mathematics	6.2% (+)	6.5% (+)	-3.3%	3.0% (+)	6.8% (+)	2.1% (+)	2.9% (+)
Information Technology	11.6% (+)	11.0% (+)	0.3%	4.7% (+)	8.4% (+)	1.1% (+)	5.7% (+)
Finance	1.8% (+)	1.4%	-4.8%	-0.5% (+)	2.0%	-4.2%	0.8% (+)
Health Science	10.1% (+)	12.0% (+)	2.0%	6.9% (+)	10.3% (+)	4.3% (+)	10.5% (+)
Law, Public Safety, Corrections & Security	5.4% (+)	6.1% (+)	-1.1%	3.5% (+)	6.4%	0.6% (+)	5.8% (+)
Government & Public Administration	2.8% (+)	2.9% (+)	-3.2%	2.2% (+)	4.9% (+)	-0.4% (+)	2.5% (+)
Business, Management & Administration	-0.3% (+)	0.1% (+)	-7.0%	-3.1% (+)	0.2% (+)	-6.2% (+)	2.5% (+)
Architecture & Construction	3.7% (+)	4.6% (+)	-2.8%	2.0% (+)	6.1% (+)	-0.8% (+)	2.7% (+)
Arts, A/V Technology & Communications	3.9% (+)	4.9% (+)	-2.1% (+)	0.2% (+)	4.0% (+)	-6.3% (+)	0.2% (+)
Education & Training	10.3% (+)	12.9% (+)	3.5% (+)	7.0% (+)	10.0% (+)	3.2% (+)	7.1% (+)
Agriculture, Food & Natural Resources	6.0% (+)	7.0% (+)	-3.0% (+)	-1.0% (+)	2.0% (+)	-5.0% (+)	-1.0% (+)
Marketing, Sales & Service	-0.6% (+)	0.8% (+)	-9.5%	-4.5% (+)	-1.0%	-7.5% (+)	-4.3% (+)
Transportation, Distribution & Logistics	7.1% (+)	8.6% (+)	-1.4% (+)	2.9% (+)	7.7% (+)	0.6% (+)	3.9% (+)
Manufacturing	-0.7% (+)	0.3% (+)	-6.5% (+)	-3.6% (+)	2.2% (+)	-5.1% (+)	-2.9% (+)
Human Services	20.0% (+)	22.6% (+)	11.5% (+)	15.8% (+)	19.2% (+)	13.2% (+)	16.8% (+)
Hospitality & Tourism	17.3% (+)	18.4% (+)	12.5% (+)	16.5% (+)	19.6% (+)	13.2%	16.2% (+)
<b>Total - All Occupations</b>	<b>6.0% (+)</b>	<b>7.0% (+)</b>	<b>0.0% (+)</b>	<b>3.0% (+)</b>	<b>7.0% (+)</b>	<b>0.0% (+)</b>	<b>5.0% (+)</b>





# Zero Unemployment

# MSP Metro Minnesota

Occupations with No Unemployed Workforce and Employing over 75 Workers, MSP Metro Minnesota

SOC	Occupation	Current						5-Year History		5-Year Forecast				
		Empl	Mean Ann Wages <sup>2</sup>	LQ	Unempl	Unempl Rate	30-Day Online Job Ads <sup>3</sup>	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
33-1012	First-Line Supervisors of Police and Detectives	916	\$112,400	0.65	0	0.0%	7	1	0.0%	313	102	191	19	0.4%
51-5111	Prepress Technicians and Workers	676	\$49,800	2.19	0	0.0%	27	-321	-7.5%	313	114	287	-88	-2.7%
29-1041	Optometrists	431	\$140,800	0.80	0	0.0%	105	66	3.4%	83	40	27	16	0.7%
29-1211	Anesthesiologists	360	\$352,400	0.91	0	0.0%	20	-46	-2.4%	46	29	20	-2	-0.1%
11-1031	Legislators	314	\$61,800	0.73	0	n/a	n/a	-2	-0.1%	123	37	79	8	0.5%
29-1223	Psychiatrists	283	\$302,500	0.91	0	0.0%	46	3	0.2%	58	24	16	18	1.2%
29-1214	Emergency Medicine Physicians	267	\$280,500	0.59	0	0.0%	4	136	15.2%	44	22	15	7	0.5%
53-4031	Railroad Conductors and Yardmasters	267	\$76,300	0.50	0	0.0%	7	-66	-4.3%	123	30	88	5	0.4%
29-1218	Obstetricians and Gynecologists	256	\$296,800	0.92	0	0.0%	21	-10	-0.8%	30	20	14	-4	-0.3%
29-1242	Orthopedic Surgeons, Except Pediatric	237	\$325,800	1.17	0	0.0%	9	120	15.0%	27	19	13	-4	-0.4%
29-1213	Dermatologists	233	\$339,600	1.92	0	0.0%	6	118	15.2%	38	19	13	6	0.5%
29-1212	Cardiologists	228	\$350,100	0.98	0	0.0%	17	115	15.2%	37	19	13	6	0.5%
53-4011	Locomotive Engineers	200	\$83,000	0.49	0	0.0%	1	-83	-6.7%	96	23	67	7	0.7%
11-9131	Postmasters and Mail Superintendents	177	\$83,400	1.21	0	0.0%	n/a	-14	-1.5%	52	19	41	-9	-1.0%
29-1241	Ophthalmologists, Except Pediatric	160	\$212,500	1.09	0	0.0%	5	83	15.6%	27	13	9	4	0.5%
23-1012	Judicial Law Clerks	140	\$59,200	0.97	0	0.0%	186	-64	-7.3%	47	22	26	-1	-0.1%
29-1222	Physicians, Pathologists	123	\$284,000	0.94	0	0.0%	3	64	15.8%	22	10	7	5	0.8%
31-9095	Pharmacy Aides	120	\$36,300	0.23	0	0.0%	11	-18	-2.8%	64	29	43	-9	-1.5%
29-1224	Radiologists	118	\$374,500	0.32	0	0.0%	13	61	15.7%	20	10	7	3	0.6%
23-1021	Administrative Law Judges, Adjudicators, and Hearing Officers	109	\$103,700	0.69	0	0.0%	n/a	4	0.7%	23	12	13	-3	-0.5%
29-1291	Acupuncturists	102	\$72,200	0.67	0	0.0%	3	47	13.0%	38	23	8	7	1.3%
29-1217	Neurologists	96	\$300,300	0.99	0	0.0%	25	47	14.6%	16	8	5	2	0.5%
51-8012	Power Distributors and Dispatchers	75	\$99,600	0.69	0	0.0%	n/a	4	1.1%	31	9	24	-2	-0.7%
00-0000	<b>Total - All Occupations</b>	<b>1,812,189</b>	<b>\$64,300</b>	<b>1.00</b>	<b>42,138</b>	<b>2.4%</b>	<b>120,050</b>	<b>-11,066</b>	<b>-0.1%</b>	<b>1,062,080</b>	<b>389,807</b>	<b>607,261</b>	<b>65,012</b>	<b>0.7%</b>



# Zero Unemployment

**Occupations with No Unemployed Workforce and Employing over 75 Workers, Central Minnesota 2022Q2**

SOC	Occupation	Current						5-Year History		5-Year Forecast				
		Empl	Mean Ann Wages <sup>2</sup>	LQ	Unempl	Unempl Rate	30-Day Online Job Ads <sup>3</sup>	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann % Growth
21-2021	Directors, Religious Activities and Education	306	\$56,500	1.08	0	0.0%	1	-8	-0.5%	193	64	116	13	0.9%
29-1021	Dentists, General	194	\$165,300	0.85	0	0.0%	31	11	1.2%	35	18	8	9	0.9%
33-1012	First-Line Supervisors of Police and Detectives	189	\$94,800	0.89	0	0.0%	1	4	0.4%	67	21	40	6	0.6%
29-1131	Veterinarians	188	\$97,800	1.20	0	0.0%	13	32	3.8%	46	16	16	14	1.4%
29-1215	Family Medicine Physicians	175	\$230,600	0.90	0	0.0%	20	-19	-2.0%	28	14	10	4	0.5%
29-1216	General Internal Medicine Physicians	146	\$296,800	1.28	0	0.0%	10	-3	-0.3%	19	12	8	-1	-0.1%
21-1092	Probation Officers and Correctional Treatment Specialists	139	\$69,500	0.91	0	0.0%	2	-3	-0.4%	61	16	43	3	0.5%
49-9043	Maintenance Workers, Machinery	136	\$51,900	1.32	0	0.0%	0	-3	-0.4%	70	24	39	7	1.1%
19-3034	School Psychologists	131	\$74,700	1.26	0	0.0%	14	4	0.6%	49	18	26	5	0.8%
33-3021	Detectives and Criminal Investigators	131	\$77,400	0.72	0	0.0%	3	1	0.2%	50	17	31	3	0.4%
25-2051	Special Education Teachers, Preschool	125	\$60,400	3.37	0	0.0%	1	4	0.6%	55	22	26	7	1.0%
15-1242	Database Administrators	117	\$85,800	0.62	0	0.0%	3	47	10.8%	46	14	29	3	0.5%
33-1021	First-Line Supervisors of Firefighting and Prevention Workers	108	\$66,900	0.82	0	0.0%	0	6	1.2%	40	13	22	4	0.8%
<b>00-0000</b>	<b>Total - All Occupations</b>	<b>272,364</b>	<b>\$52,200</b>	<b>1.00</b>	<b>9,934</b>	<b>2.8%</b>	<b>14,106</b>	<b>-1,152</b>	<b>-0.1%</b>	<b>163,771</b>	<b>61,440</b>	<b>93,334</b>	<b>8,998</b>	<b>0.7%</b>

# Career Field Analysis



## Target Occupations

*High wage* (above regional average)

*High-skill* (require some credential)

*High-demand* (2/4 indicators: under 3% unempl, higher than average 5-year growth, total 5-year demand >50% of current empl, high job posting volume)

\*Often also high occupation gap and award gap

## Gateway Occupations

*Mid-wage* (\$42,000 – regional average)

*Low-middle skills* (HS diploma, some OJT)

*Sufficient demand* (3-5% unemployment and/or high volumes of current opportunities)

## Origin Occupations

*Low wage* (<\$42,000/year)

*Low skill* (no credential)

*Low demand* (over 5% unemployment, low growth, low replacement demand, and/or low job postings)

# Career Field Analysis

## Occupation Characteristics for Consideration

- High-Wage: Paying above the area mean wage
- High-Skill: Requiring some form of credential
- High-Demand: 2/4 of the following requirements met:
  - Low unemployment
  - High volume of job postings in the past 3 months
  - Forecasted growth outpaces average regional forecasted growth
  - Forecasted total demand equal to or greater than 50% of total current employment
- Occupation Gaps
- Award Gaps

# Gateway Occupations of Focus

### Regional Summary of Top High-Demand Industries and Gateway Occupations

	Overall Unemployment Rate 2022Q2	Overall Mean Wage	Gateway Occupation Unemployment Rate 2022Q2	Top 4-Digit Sub-Industries of High Local Concentration (LQ) and High Demand (replacement or growth)	Top Gateway Occupations with Occupation Gaps and/or Award Gaps in Order of Total Employment, including Unemployment Rate*
MSP Metro	2.4%	\$64,300	2.3%	<ul style="list-style-type: none"> <li>• Medical Equipment &amp; Supplies Manufacturing (4.25)</li> <li>• Scheduled Air Transportation (2.37)</li> <li>• Insurance Carriers (2.35)</li> <li>• Electrical Equipment Manufacturing (2.33)</li> </ul>	<ul style="list-style-type: none"> <li>• Customer Service Representatives (2.8%)</li> <li>• Office Clerks, General (2.2%)</li> <li>• Secretaries &amp; Administrative Assistants (1.7%)</li> <li>• Heavy &amp; Tractor Trailer Truck Drivers (2.2%)</li> <li>• Bookkeeping, Accounting, &amp; Auditing Clerks (1.8%)</li> </ul>
Central	2.8%	\$52,200	2.4%	<ul style="list-style-type: none"> <li>• Household &amp; Institutional Furniture &amp; Kitchen Cabinet Manufacturing (5.01)</li> <li>• Machine Shops; Turned Product; &amp; Screw, Nut, &amp; Bolt Manufacturing (4.58)</li> <li>• Highway, Street, &amp; Bridge Construction (3.45)</li> <li>• Residential Intellectual &amp; Developmental Disability, Mental Health, &amp; Substance Abuse Facilities (3.02)</li> </ul>	<ul style="list-style-type: none"> <li>• Supervisors of Retail Sales Workers (1.3%)</li> <li>• Maintenance &amp; Repair Workers, General (1.5%)</li> <li>• Light Truck Drivers (2.2%)</li> <li>• Welders, Cutters, Solderers, &amp; Brazers (3.0%)</li> <li>• Machinists (2.2%)</li> </ul>
Minnesota Statewide	2.5%	\$60,300	2.3%	<ul style="list-style-type: none"> <li>• Hog and Pig Farming (6.05)</li> <li>• Metal Ore Mining (5.13)</li> <li>• Other Residential Care Facilities (3.28)</li> <li>• Farm Product Raw Material Merchant Wholesalers (3.18)</li> </ul>	<ul style="list-style-type: none"> <li>• Heavy Tractor-Trailer &amp; Truck Drivers (OG, AG; 2.2%)</li> <li>• Bookkeeping, Accounting, &amp; Auditing Clerks (AG; 1.8%)</li> <li>• Maintenance &amp; Repair Workers (OG; 1.4%)</li> <li>• Carpenters (OG; 3.2%)</li> <li>• Light Truck Drivers (AG; 2.2%)</li> </ul>

# Polling Question – Choose A Field!

Which ONE career field would you like to learn more about in further detail today?

The top 3 selections by the group will be highlighted now through the end of today's presentation.

(all fields are detailed in the full report)

1. Agriculture, Food, and Natural Resources
2. Arts, Communications, and Information Systems
3. Business, Management, and Administration
4. Engineering, Manufacturing, and Technology
5. Health Science Technology
6. Human Services

# Health Science Technology

## *Summary Statistics*

MSP Metro  
Central

### MSP Metro

- **2022Q2 Employment:** 164,131 (9.1% of MSP employment)
- **Average Wage:** \$79,900 (compared to \$64,300 across all occupations)
- **Location Quotient:** 1.00
- **2022Q2 Unemployment:** 2,005 (1.3% rate)
- **30-Day Job Ads:** 14,567\*
- **5-Year Ann Avg Employment Change:** 0.6%
- **Forecast 5-Year Ann Employment Change:** 1.1%
- **Total 5-Year Demand:** 75,366

### Central

- **2022Q2 Employment:** 25,166 (9.2% of Central employment)
- **Average Wage:** \$73,300 (compared to \$52,200 across all occupations)
- **Location Quotient:** 1.02
- **2022Q2 Unemployment:** 456 (1.4% rate)
- **30-Day Job Ads:** 2,965\*
- **5-Year Ann Avg Employment Change:** -1.4%
- **Forecast 5-Year Ann Employment Change:** 1.0%
- **Total 5-Year Demand:** 11,198





# Health Science Technology

## *Top Occupation & Award Gaps*

MSP Metro  
Central

### MSP Metro

### Central

#### Top Occupation Gaps

- Registered Nurses
- Medical & Health Services Managers
- Nurse Practitioners
- Licensed Practical & Licensed Vocational Nurses
- Medical Assistants

#### Top Award Gaps

- Medical Assistants
- Registered Nurses
- Licensed Practical & Licensed Vocational Nurses
- Medical Records Specialists
- Medical & Health Services Managers

#### Top Occupation Gaps

- Registered Nurses
- Medical & Health Services Managers
- Nurse Practitioners
- Licensed Practical & Licensed Vocational Nurses
- Speech-Language Pathologists

#### Top Award Gaps

- Medical & Health Services Managers
- Nursing Assistants
- Nurse Practitioners
- Physical Therapists
- Pharmacists



# Health Science Technology

## MSP Metro

### Target Occupations (all HW, HD, HS)

Registered Nurses (OG, AG)

Medical & Health Services Managers (OG, AG)

Dental Hygienists (OG)

Nurse Practitioners (OG, AG)

Physical Therapists (OG, AG)

### Gateway Occupations

Medical Secretaries & Administrative Assistants (HD, OG, AG)

Licensed Practical Nurses (HS, HD, OG, AG)

Medical Assistants (HS, HD, OG, AG)

Pharmacy Technicians (HD, OG, AG)

Dental Assistants (HS, HD, OG)

### Origin Occupations

#### *Likely*

Home Health Aides (HD, AG)

Nursing Assistants (HS, HD, OG)

Veterinary Technologists & Technicians (HS, HD, OG, AG)

Healthcare Support Workers, All Other (HD, AG)

Psychiatric Technicians (HS, HD, OG)

#### *Aligned*

Customer Service Reps

Childcare Workers

# Health Science Technology

## Central

### Target Occupations (all HW, HD, HS, OG)

Registered Nurses

Medical & Health Services Managers (AG)

Dental Hygienists (AG)

Nurse Practitioners (AG)

Speech-Language Pathologists

### Gateway Occupations (all HS)

Licensed Practical Nurses (HD, OG)

Dental Assistants (HD, OG, AG)

Medical Dosimetrists (OG)

Occupational Therapy Assistants (HD, OG, AG)

Recreational Therapists (AG)

### Origin Occupations

#### *Likely*

Nursing Assistants (HS, HD, OG, AG)

Home Health Aides (HD)

Medical Secretaries (HD, OG, AG)

Medical Assistants (HS, HD, OG)

Pharmacy Technicians (OG)

#### *Aligned*

Personal Care Aides

Childcare Workers

Secretaries

Cashiers

Cooks

# Health Science Technology

## MSP Metro Central

### High Location Quotient

MSP Metro
<ul style="list-style-type: none"> <li>• Bioengineers &amp; Biomedical Engineers</li> <li>• Genetic Counselors</li> <li>• Dermatologists</li> <li>• Orthotists &amp; Prosthetists</li> <li>• Nurse Anesthetists</li> </ul>

	MSP Metro	Central
Avg. Wage	Region: \$63,000 Field: \$79,900	Region: \$52,200 Field: \$73,300
Unempl Rate	Region: 2.4% Field: 1.3%	Region: 2.8% Field: 1.4%
Origin Occupations	<ul style="list-style-type: none"> <li>• Home Health Aides</li> <li>• Nursing Assistants</li> <li>• Veterinary Technologists &amp; Technicians</li> <li>• Healthcare Support Workers, All Other</li> <li>• Psychiatric Technicians</li> </ul>	<ul style="list-style-type: none"> <li>• Nursing Assistants</li> <li>• Home Health Aides</li> <li>• Medical Secretaries</li> <li>• Medical Assistants</li> <li>• Pharmacy Technicians</li> </ul>
Gateway Occupations	<ul style="list-style-type: none"> <li>• Medical Secretaries</li> <li>• LPNs</li> <li>• Medical Assistants</li> <li>• Pharmacy Technicians</li> <li>• Dental Assistants</li> </ul>	<ul style="list-style-type: none"> <li>• LPNs</li> <li>• Dental Assistants</li> <li>• Medical Dosimetrists</li> <li>• Occupational Therapy Assistants</li> <li>• Recreational Therapists</li> </ul>
Target Occupations	<ul style="list-style-type: none"> <li>• Registered Nurses</li> <li>• Medical &amp; Health Services Managers</li> <li>• Dental Hygienists</li> <li>• Nurse Practitioners</li> <li>• Physical Therapists</li> </ul>	<ul style="list-style-type: none"> <li>• Registered Nurses</li> <li>• Medical &amp; Health Services Managers</li> <li>• Dental Hygienists</li> <li>• Nurse Practitioners</li> <li>• Speech-Language Pathologists</li> </ul>

### High Location Quotient

Central
<ul style="list-style-type: none"> <li>• Genetic Counselors</li> <li>• Chiropractors</li> <li>• Nurse Anesthetists</li> <li>• Pediatric Surgeons</li> <li>• Dermatologists</li> </ul>



# Human Services

## *Summary Statistics*

## MSP Metro Central

### MSP Metro

- **2022Q2 Employment:** 289,455 (16.0% of MSP employment)
- **Average Wage:** \$57,600 (compared to \$64,300 across all occupations)
- **Location Quotient:** 1.03
- **2022Q2 Unemployment:** 5,572 (1.9% rate)
- **30-Day Job Ads:** 12,689\*
- **5-Year Ann Avg Employment Change:** 0.8%
- **Forecast 5-Year Ann Employment Change:** 1.4%
- **Total 5-Year Demand:** 180,512

### Central

- **2022Q2 Employment:** 42,448 (15.6% of Central employment)
- **Average Wage:** \$49,700 (compared to \$52,200 across all occupations)
- **Location Quotient:** 1.00
- **2022Q2 Unemployment:** 1,052 (2.1% rate)
- **30-Day Job Ads:** 1,497\*
- **5-Year Ann Avg Employment Change:** 2.4%
- **Forecast 5-Year Ann Employment Change:** 1.2%
- **Total 5-Year Demand:** 25,034



### MSP Metro

#### Top Occupation Gaps

- Elementary School Teachers
- Middle School Teachers
- Hairdressers, Hairstylists, & Cosmetologists
- Lawyers
- Preschool Teachers

#### Top Award Gaps

- Teaching Assistants
- Hairdressers, Hairstylists, & Cosmetologists
- Childcare Workers
- Coaches & Scouts
- Substance, Behavioral, & Mental Counselors

### Central

#### Top Occupation Gaps

- Elementary School Teachers
- Secondary School Teachers
- Substance, Behavioral, & Mental Counselors
- Preschool Teachers
- Middle School Teachers

#### Top Award Gaps

- Childcare Workers
- Exercise Trainers & Group Fitness Instructors
- Coaches & Scouts
- Lawyers
- Substitute Teachers, Short-Term

# Human Services

## MSP Metro

### Target Occupations (all HW, HD, HS, OG)

Elementary School Teachers

Lawyers

Secondary School Teachers

Middle School Teachers

Compliance Officers (AG)

### Gateway Occupations

Social & Human Service Assistants (HD)

Self-Enrichment Teachers (HD, OG, AG)

Substance, Behavioral, & Mental Health Counselors (HS, HD, OG, AG)

Child, Family, & School Social Workers (HS, HD, OG, AG)

Paralegals & Legal Assistants (HS, HD, OG, AG)

### Origin Occupations

#### *Likely*

Personal Care Aides (HD, AG)

Teaching Assistants (HS, HD, AG)

Childcare Workers (HD, AG)

Security Guards (HD, AG)

Preschool Teachers (HS, HD, OG, AG)

#### *Aligned*

Retail Sales Workers

Secretaries

Cashiers

Cooks

Customer Service Reps

# Human Services

## Central

**Target Occupations** (all HW, HD, HS, OG)  
Child, Family, & School Social Workers (AG)  
Educational, Guidance, & Career Counselors (AG)  
Social & Community Service Managers (AG)  
Kindergarten Teachers  
Instructional Coordinators (AG)

**Gateway Occupations** (all HD)  
Substance Abuse & Mental Health Counselors (HS, OG, AG)  
Court, Municipal, & License Clerks (OG)  
Clergy (HS, OG)  
Coaches and Scouts (HS, OG, AG)  
Rehabilitation Counselors (HS, OG, AG)

### Origin Occupations

#### *Likely*

Personal Care Aides (HD, AG)  
Teaching Assistants (HS, HD)  
Childcare Workers (AG)  
Preschool Teachers (HS, HD, OG)  
Social & Human Service Assistants (HD)

#### *Aligned*

Home Health Aides  
Medical Assistants  
Waiters and Waitresses  
Cashiers  
Cooks

# Human Services

# MSP Metro Central

## High Location Quotient

MSP Metro
<ul style="list-style-type: none"> <li>• Preschool Special Ed Teachers</li> <li>• Postsecondary Area Ethnic &amp; Cultural Studies Teachers</li> <li>• Court, Municipal, &amp; License Clerks</li> <li>• Postsecondary Social Work Teachers</li> <li>• Social Workers, All Other</li> </ul>

	MSP Metro	Central
<b>Avg. Wage</b>	Region: \$64,300 Field: \$57,600	Region: \$52,200 Field: \$49,700
<b>Unempl Rate</b>	Region: 2.4% Field: 1.9%	Region: 2.8% Field: 2.1%
<b>Origin Occupations</b>	<ul style="list-style-type: none"> <li>• Personal Care Aides</li> <li>• Teaching Assistants</li> <li>• Childcare Workers</li> <li>• Security Guards</li> <li>• Preschool Teachers</li> </ul>	<ul style="list-style-type: none"> <li>• Personal Care Aides</li> <li>• Teaching Assistants</li> <li>• Childcare Workers</li> <li>• Preschool Teachers</li> <li>• Social &amp; Human Service Assistants</li> </ul>
<b>Gateway Occupations</b>	<ul style="list-style-type: none"> <li>• Social &amp; Human Service Assistants</li> <li>• Self-Enrichment Teachers</li> <li>• Substance Abuse &amp; Mental Health Counselors</li> <li>• Child, Family, &amp; School Social Workers</li> <li>• Paralegals &amp; Legal Assistants</li> </ul>	<ul style="list-style-type: none"> <li>• Substance Abuse &amp; Mental Health Counselors</li> <li>• Court, Municipal, &amp; License Clerks</li> <li>• Clergy</li> <li>• Coaches &amp; Scouts</li> <li>• Rehabilitation Counselors</li> </ul>
<b>Target Occupations</b>	<ul style="list-style-type: none"> <li>• Elementary School Teachers</li> <li>• Lawyers</li> <li>• Secondary School Teachers</li> <li>• Middle School Teachers</li> <li>• Compliance Officers</li> </ul>	<ul style="list-style-type: none"> <li>• Child, Family, &amp; School Social Workers</li> <li>• Educational, Guidance, &amp; Career Counselors</li> <li>• Social &amp; Community Service Managers</li> <li>• Kindergarten Teachers</li> <li>• Instructional Coordinators</li> </ul>

## High Location Quotient

Central
<ul style="list-style-type: none"> <li>• Preschool Special Ed Teachers</li> <li>• Court, Municipal, &amp; License Clerks</li> <li>• Secondary Special Ed Teachers</li> <li>• Residential Advisors</li> <li>• Teaching Assistants</li> </ul>





# Arts, Communications, & Information Systems

## *Summary Statistics*

## MSP Metro Central

### MSP Metro

- **2022Q2 Employment:** 110,861 (6.1% of MSP employment)
- **Average Wage:** \$89,200 (compared to \$64,300 across all occupations)
- **Location Quotient:** 1.28
- **2022Q2 Unemployment:** 1,837 (1.7% rate)
- **30-Day Job Ads:** 12,619\*
- **5-Year Ann Avg Employment Change:** 2.0%
- **Forecast 5-Year Ann Employment Change:** 0.9%
- **Total 5-Year Demand:** 50,389

### Central

- **2022Q2 Employment:** 8,226 (3.0% of Central employment)
- **Average Wage:** \$70,400 (compared to \$52,200 across all occupations)
- **Location Quotient:** 0.63
- **2022Q2 Unemployment:** 227 (2.1% rate)
- **30-Day Job Ads:** 508\*
- **5-Year Ann Avg Employment Change:** 1.0%
- **Forecast 5-Year Ann Employment Change:** 0.6%
- **Total 5-Year Demand:** 3,771



## *Top Occupation & Award Gaps*

### MSP Metro

### Central

#### Top Occupation Gaps

- Software Developers
- Information Security Analysts
- Computer Systems Analysts
- Software Quality Assurance Analysts & Testers
- Computer Network Support Specialists

#### Top Award Gaps

- Software Developers
- Computer Systems Analysts
- Computer User Support Specialists
- Musicians & Singers
- Computer Occupations, All Other

#### Top Occupation Gaps

- Software Developers
- Photographers
- Information Security Analysts
- Musicians & Singers
- Writers & Authors

#### Top Award Gaps

- Computer Systems Analysts
- Computer User Support Specialists
- Music Directors & Composers
- Musicians & Singers
- Photographers

# Arts, Communications, & Information Systems

## MSP Metro

### Target Occupations (all HW, HD, HS, OG, AG)

Software Developers

Computer Systems Analysts

Computer Network Support Specialists

Computer Occupations, All Other

Network & Computer Systems Administrators

### Gateway Occupations

Computer User Support Specialists (HS, HD, AG)

Graphic Designers (HS, AG)

Printing Press Operators (AG)

Photographers (HD, OG, AG)

Telecommunications Equipment Installers & Repairers (HS, HD, AG)

### Origin Occupations

#### *Likely*

Floral Designers

Broadcast Announcers & Radio Disc Jockeys (HS, HD, OG, AG)

Costume Attendants (HD, AG)

#### *Aligned*

Library Technicians

Hosts & Hostesses

Customer Service Representatives

Photo Process Machine Operators

# Arts, Communications, & Information Systems

## Central

### Target Occupations (all HW, HD, HS)

Software Developers (OG)

Computer Network Support Specialists (OG)

Writers & Authors (OG)

Telecommunications Equipment Installers (AG)

Software Quality Assurance Analysts (OG)

### Gateway Occupations

Graphic Designers (HS, AG)

Photographers (HD, OG, AG)

Telecommunications Line Installers (HD, OG)

Prepress Technicians & Workers (HS, AG)

News Analysts, Reporters, & Journalists (HS)

### Origin Occupations

#### *Likely*

Printing Press Operators (AG)

Print Binding & Finishing Workers

Floral Designers

Broadcast Announcers & Radio Disc Jockeys (HS)

Disc Jockeys, Except Radio (AG)

#### *Aligned*

Library Technicians

Recreation Attendants

Hosts and Hostesses

Customer Service Reps

Photo Process Machine Ops

# Arts, Communications, & Information Systems

## MSP Metro Central

### High Location Quotient

MSP Metro
<ul style="list-style-type: none"> <li>• Computer Network Support Specialists</li> <li>• Print Binding &amp; Finishing Workers</li> <li>• Printing Press Operators</li> <li>• Prepress Technicians</li> <li>• Computer Systems Analysts</li> </ul>

	MSP Metro	Central
Avg. Wage	Region: \$64,300 Field: \$89,200	Region: \$52,200 Field: \$70,400
Unempl Rate	Region: 2.4% Field: 1.7%	Region: 2.8% Field: 2.1%
Origin Occupations	<ul style="list-style-type: none"> <li>• Floral Designers</li> <li>• Broadcast Announcers &amp; Radio Disc Jockeys</li> <li>• Costume Attendants</li> </ul>	<ul style="list-style-type: none"> <li>• Printing Press Operators</li> <li>• Print Binding &amp; Finishing Workers</li> <li>• Floral Designers</li> <li>• Broadcast Announcers</li> <li>• Disc Jockeys</li> </ul>
Gateway Occupations	<ul style="list-style-type: none"> <li>• Computer User Support Specialists</li> <li>• Graphic Designers</li> <li>• Printing Press Operators</li> <li>• Photographers</li> <li>• Telecommunications Equipment Installers</li> </ul>	<ul style="list-style-type: none"> <li>• Graphic Designers</li> <li>• Photographers</li> <li>• Telecommunications Line Installers</li> <li>• Prepress Technicians</li> <li>• News Analysts, Reporters, &amp; Journalists</li> </ul>
Target Occupations	<ul style="list-style-type: none"> <li>• Software Developers</li> <li>• Computer Systems Analysts</li> <li>• Computer Network Support Specialists</li> <li>• Computer Occupations, All Other</li> <li>• Network &amp; Computer Systems Administrators</li> </ul>	<ul style="list-style-type: none"> <li>• Software Developers</li> <li>• Computer Network Support Specialists</li> <li>• Writers &amp; Authors</li> <li>• Telecommunications Equipment Installers</li> <li>• Software Quality Assurance Analysts</li> </ul>

### High Location Quotient

Central
<ul style="list-style-type: none"> <li>• Printing Press Operators</li> <li>• Print Binding &amp; Finishing Workers</li> <li>• Prepress Technicians</li> <li>• Commercial &amp; Industrial Designers</li> <li>• Broadcast Announcers</li> </ul>



# Business, Management, & Admin *Summary Statistics*

MSP Metro  
Central

## MSP Metro

## Central

- **2022Q2 Employment:** 812,613 (44.8% of MSP employment)
  - **Average Wage:** \$62,400 (compared to \$64,300 across all occupations)
  - **Location Quotient:** 1.02
  - **2022Q2 Unemployment:** 21,419 (2.7% rate)
  - **30-Day Job Ads:** 58,255\*
  - **5-Year Ann Avg Employment Change:** -1.0%
  - **Forecast 5-Year Ann Employment Change:** 0.4%
  - **Total 5-Year Demand:** 512,475
- **2022Q2 Employment:** 109,789 (40.3% of Central employment)
  - **Average Wage:** \$47,400 (compared to \$52,200 across all occupations)
  - **Location Quotient:** 0.91
  - **2022Q2 Unemployment:** 4,734 (3.3% rate)
  - **30-Day Job Ads:** 5,894\*
  - **5-Year Ann Avg Employment Change:** -0.4%
  - **Forecast 5-Year Ann Employment Change:** 0.5%
  - **Total 5-Year Demand:** 74,996



# Business, Management, & Admin *Top Occupation & Award Gaps*

MSP Metro  
Central

## MSP Metro

## Central

### Top Occupation Gaps

- General & Operations Managers
- Restaurant Cooks
- Market Research Analysts & Specialists
- Financial Managers
- Management Analysts

### Top Award Gaps

- General & Operations Managers
- Management Analysts
- Business Operations Specialists, All Other
- Human Resources Specialists
- Accountants & Auditors

### Top Occupation Gaps

- General & Operations Managers
- Restaurant Cooks
- Financial Managers
- Market Research Analysts & Specialists
- Management Analysts

### Top Award Gaps

- General & Operations Managers
- Human Resources Specialists
- Business Operations Specialists, All Other
- Project Management Specialists
- Management Analysts



# Business, Management, & Administration

## MSP Metro

### Target Occupations (all HW, HD, HS, OG, AG)

General & Operations Managers

Accountants & Auditors

Business Operations Specialists, All Other

Management Analysts

Market Research Analysts & Marketing Specialists

### Gateway Occupations

Customer Service Representatives (HD, AG)

Office Clerks, General (HD, AG)

Secretaries and Administrative Assistants (HD, AG)

Bookkeeping, Accounting, and Auditing Clerks (HS, HD, AG)

Supervisors of Retail Workers (HD)

Supervisors of Food Preparation & Serving Workers (HD, OG, AG)

### Origin Occupations

#### *Likely*

Retail Salespersons (HD)

Cashiers (HD)

Fast Food & Counter Workers (HD)

Janitors & Cleaners (HD)

Stockers & Order Fillers (HD)

#### *Aligned*

Library Technicians

Eligibility Interviewers

Childcare Workers



# Business, Management, & Administration

## Central

### Target Occupations (all HW, HD, HS, OG)

General & Operations Managers (AG)

Project Management Specialists (AG)

Market Research Analysts & Marketing Specialists

Human Resource Specialists (AG)

Management Analysts (AG)

### Gateway Occupations

Supervisors of Retail Sales Workers (HD, AG)

Bookkeeping, Accounting, & Auditing Clerks (HS, HD)

Real Estate Sales Agents (OG)

Supervisors of Housekeepers & Janitorial Workers (HD)

Loan Interviewers & Clerks

### Origin Occupations

#### *Likely*

Cashiers

Retail Salespersons (HD)

Fast Food & Counter Workers (HD) Childcare Workers

Office Clerks, General (HD, AG)

Janitors & Cleaners, Except Maids

#### *Aligned*

Personal Care Aides

Eligibility Interviewers

Library Technicians

# Business, Management, & Admin



## High Location Quotient

MSP Metro
<ul style="list-style-type: none"> <li>• Gambling &amp; Sports Book Writers &amp; Runners</li> <li>• Gambling Service Workers, All Other</li> <li>• Brokerage Clerks</li> <li>• Labor Relations Specialists</li> <li>• New Accounts Clerks</li> </ul>

	MSP Metro	Central
<b>Avg. Wage</b>	Region: \$64,300 Field: \$62,400	Region: \$52,200 Field: \$47,400
<b>Unempl Rate</b>	Region: 2.4% Field: 2.7%	Region: 2.8% Field: 3.3%
<b>Origin Occupations</b>	<ul style="list-style-type: none"> <li>• Retail Salespersons</li> <li>• Cashiers</li> <li>• Fast Food &amp; Counter Workers</li> <li>• Janitors &amp; Cleaners</li> <li>• Stockers &amp; Order Fillers</li> </ul>	<ul style="list-style-type: none"> <li>• Cashiers</li> <li>• Retail Salespersons</li> <li>• Fast Food &amp; Counter Workers</li> <li>• Office Clerks, General</li> <li>• Janitors &amp; Cleaners</li> </ul>
<b>Gateway Occupations</b>	<ul style="list-style-type: none"> <li>• Customer Service Representatives</li> <li>• Office Clerks, General</li> <li>• Secretaries &amp; Administrative Assistants</li> <li>• Bookkeeping Clerks</li> <li>• Supervisors of Retail Workers</li> </ul>	<ul style="list-style-type: none"> <li>• Supervisors of Retail Workers</li> <li>• Bookkeeping, Accounting, &amp; Auditing Clerks</li> <li>• Real Estate Sales Agents</li> <li>• Supervisors of Housekeeping &amp; Janitorial Workers</li> <li>• Loan Interviewers &amp; Clerks</li> </ul>
<b>Target Occupations</b>	<ul style="list-style-type: none"> <li>• General &amp; Operations Managers</li> <li>• Accountants &amp; Auditors</li> <li>• Business Operations Specialists</li> <li>• Management Analysts</li> <li>• Market Research Analysts</li> </ul>	<ul style="list-style-type: none"> <li>• General &amp; Operations Managers</li> <li>• Project Mgmt Specialists</li> <li>• Market Research Analysts</li> <li>• Human Resource Specialists</li> <li>• Management Analysts</li> </ul>

## High Location Quotient

Central
<ul style="list-style-type: none"> <li>• Gambling Service Workers, All Other</li> <li>• Gambling &amp; Sports Book Writers &amp; Runners</li> <li>• Supervisors of Gambling Service Workers</li> <li>• Bartenders</li> <li>• Food Servers, Nonrestaurant</li> </ul>



# Engineering, Manufacturing, & Technology *Summary Statistics*

## MSP Metro Central

### MSP Metro

- **2022Q2 Employment:** 417,324 (23.0% of MSP employment)
- **Average Wage:** \$60,200 (compared to \$64,300 across all occupations)
- **Location Quotient:** 0.94
- **2022Q2 Unemployment:** 10,787 (2.8% rate)
- **30-Day Job Ads:** 20,876\*
- **5-Year Ann Avg Employment Change:** 0.1%
- **Forecast 5-Year Ann Employment Change:** 0.4%
- **Total 5-Year Demand:** 228,264

### Central

- **2022Q2 Employment:** 76,228 (28.0% of Central employment)
- **Average Wage:** \$51,200 (compared to \$52,200 across all occupations)
- **Location Quotient:** 1.14
- **2022Q2 Unemployment:** 3,225 (2.9% rate)
- **30-Day Job Ads:** 3,260\*
- **5-Year Ann Avg Employment Change:** 0.4%
- **Forecast 5-Year Ann Employment Change:** 0.5%
- **Total 5-Year Demand:** 42,304



# Engineering, Manufacturing, & Technology

## *Top Occupation & Award Gaps*

MSP Metro  
Central

### MSP Metro

#### Top Occupation Gaps

- Maintenance & Repair Workers
- Heavy & Tractor Trailer Truck Drivers
- Industrial Machinery Mechanics
- Industrial Engineers
- Construction Managers

#### Top Award Gaps

- Welders, Cutters, Solderers, & Brazers
- Industrial Engineers
- Industrial Engineering Technicians
- Civil Engineers
- Automotive Service Technicians & Mechanics

### Central

#### Top Occupation Gaps

- Heavy & Tractor Trailer Truck Drivers
- Maintenance & Repair Workers, General
- Industrial Machinery Mechanics
- Carpenters
- Construction Managers

#### Top Award Gaps

- Welders, Cutters, Solderers, & Brazers
- Automotive Service Technicians & Mechanics
- Cost Estimators
- Civil Engineers
- Heavy & Tractor Trailer Truck Drivers

# Engineering, Manufacturing, & Technology

## MSP Metro

**Target Occupations** (all HW, HD, HS)  
 Industrial Engineers (OG, AG)  
 Purchasing Agents, Except Wholesale, Retail (AG)  
 Construction Managers (OG, AG)  
 Mechanical Engineers (OG)  
 Architectural & Engineering Managers (OG)

### Gateway Occupations

Heavy & Tractor Trailer Drivers (HS, HD, OG, AG)  
 Maintenance & Repair Workers, General (HD, OG)  
 Light Truck Drivers (HD, AG)  
 Construction Laborers (HD)  
 Carpenters (OG)

<b>Origin Occupations</b>	<b><i>Likely</i></b>	<b><i>Aligned</i></b>
	Laborers & Freight, Stock Movers (HD)	Parking Lot Attendants
	Team Assemblers	Retail Sales Workers
	Landscaping & Groundskeeping Workers (HD)	Stockers and Order Fillers
	Packers & Packagers, Hand	Janitors and Cleaners
	Packaging & Filling Machine Operators & Tenders (OG)	

# Engineering, Manufacturing, & Technology

## Central

**Target Occupations** (all HW, HD, HS, OG, AG)  
 Heavy & Tractor-Trailer Truck Drivers  
 Construction Managers  
 Industrial Engineers  
 Heating, AC, & Refrigeration Mechanics  
 Mechanical Engineers

### Gateway Occupations

Construction Laborers (HD)  
 Maintenance & Repair Workers, General (HD, OG, AG)  
 Light Truck Drivers (HD, AG)  
 Automotive Service Technicians & Mechanics (HS, OG, AG)  
 Welders, Cutters, Solderers, & Brazers (HD, OG, AG)

### Origin Occupations

#### *Likely*

Laborers & Freight, Stock Movers (HD)  
 Team Assemblers  
 Landscaping & Groundskeeping Workers (HD, AG)  
 Bus Drivers, School (HD, AG)  
 Packaging & Filler Machine Operators (OG)

#### *Aligned*

Parking Lot Attendants  
 Retail Sales Workers  
 Stockers and Order Fillers  
 Janitors and Cleaners

# Engineering, Manufacturing, & Technology

## MSP Metro Central

### High Location Quotient

MSP Metro
<ul style="list-style-type: none"> <li>• Timing Device Assemblers &amp; Adjusters</li> <li>• Photographic Process Workers &amp; Processing Machine Operators</li> <li>• Industrial Engineering Techs</li> <li>• Airline Pilots, Copilots, &amp; Flight Engineers</li> <li>• Hydrologists</li> </ul>

	MSP Metro	Central
Avg. Wage	Region: \$64,300 Field: \$60,200	Region: \$52,200 Field: \$51,200
Unempl Rate	Region: 2.4% Field: 2.8%	Region: 2.8% Field: 2.9%
Origin Occupations	<ul style="list-style-type: none"> <li>• Laborers &amp; Stock Movers</li> <li>• Team Assemblers</li> <li>• Landscaping &amp; Groundskeeping Workers</li> <li>• Packers &amp; Packagers</li> <li>• Packaging &amp; Filling Machine Operators</li> </ul>	<ul style="list-style-type: none"> <li>• Laborers &amp; Stock Movers</li> <li>• Team Assemblers</li> <li>• Landscaping &amp; Groundskeeping Workers</li> <li>• School Bus Drivers</li> <li>• Packaging &amp; Filling Machine Operators &amp; Tenders</li> </ul>
Gateway Occupations	<ul style="list-style-type: none"> <li>• Heavy &amp; Tractor Trailer Drivers</li> <li>• Maintenance &amp; Repair Workers, General</li> <li>• Light Truck Drivers</li> <li>• Construction Laborers</li> <li>• Carpenters</li> </ul>	<ul style="list-style-type: none"> <li>• Construction Laborers</li> <li>• Maintenance &amp; Repair Workers, All Other</li> <li>• Light Truck Drivers</li> <li>• Automotive Service Techs</li> <li>• Welders, Cutters, Solderers, &amp; Brazers</li> </ul>
Target Occupations	<ul style="list-style-type: none"> <li>• Industrial Engineers</li> <li>• Purchasing Agents</li> <li>• Construction Managers</li> <li>• Mechanical Engineers</li> <li>• Architectural &amp; Engineering Managers</li> </ul>	<ul style="list-style-type: none"> <li>• Heavy &amp; Tractor Trailer Truck Drivers</li> <li>• Construction Managers</li> <li>• Industrial Engineers</li> <li>• HVAC Mechanics</li> <li>• Mechanical Engineers</li> </ul>

### High Location Quotient

Central
<ul style="list-style-type: none"> <li>• Nuclear Power Reactor Operators</li> <li>• Nuclear Technicians</li> <li>• Slaughterers &amp; Meat Packers</li> <li>• Nuclear Engineers</li> <li>• Motorcycle Mechanics</li> </ul>





# Agriculture, Food, & Natural Resources

## *Summary Statistics*

MSP Metro

Central

### MSP Metro

- **2022Q2 Employment: 68,191** (3.8% of MSP employment)
- **Average Wage: \$61,700** (compared to \$64,300 across all occupations)
- **Location Quotient: 0.71**
- **2022Q2 Unemployment: 1,594** (2.4% rate)
- **30-Day Job Ads: 3,537\***
- **5-Year Ann Avg Employment Change: 0.0%**
- **Forecast 5-Year Ann Employment Change: 0.7%**
- **Total 5-Year Demand: 41,749**

### Central

- **2022Q2 Employment: 20,372** (7.5% of Central employment)
- **Average Wage: \$54,000** (compared to \$52,200 across all occupations)
- **Location Quotient: 1.41**
- **2022Q2 Unemployment: 556** (2.3% rate)
- **30-Day Job Ads: 457\***
- **5-Year Ann Avg Employment Change: -0.6%**
- **Forecast 5-Year Ann Employment Change: 0.2%**
- **Total 5-Year Demand: 11,920**





## *Top Occupation & Award Gaps*

#### MSP Metro

##### Top Occupation Gaps

- Aircraft Mechanics & Service Technicians
- Plumbers, Pipefitters, & Steamfitters
- Veterinary Technologists & Technicians
- HVAC Mechanics & Installers
- Farmers, Ranchers, & Agricultural Managers

##### Top Award Gaps

- Veterinary Technologists & Technicians
- Veterinary Assistants
- Environmental Scientists & Specialists
- Environmental Engineers
- Telecommunications Equipment Installers

#### Central

##### Top Occupation Gaps

- Farmers, Ranchers, & Agricultural Managers
- Plumbers, Pipefitters, & Steamfitters
- Supervisors of Landscaping & Groundskeepers
- Chefs & Head Cooks
- Veterinary Technologists & Technicians

##### Top Award Gaps

- Farmers, Ranchers, & Agricultural Managers
- Veterinarians
- Veterinary Technologists & Technicians
- Veterinary Assistants
- Food Scientists & Technologists

# Agriculture, Food, & Natural Resources

## MSP Metro

### Target Occupations (all HW, HD, HS)

Aircraft Mechanics & Service Technicians (OG, AG)

Environmental Scientists & Specialists (OG, AG)

Veterinarians (OG)

Life, Physical, & Social Science Technicians (AG)

Biological Science Teachers, Postsecondary (OG)

### Gateway Occupations

Supervisors of Groundskeeping Workers (HD, OG)

Telecommunications Equipment Installers & Repairers (HS, HD, AG)

Chefs & Head Cooks (HD, OG, AG)

Refuse and Recyclable Material Collectors- (HD, AG)

Chemical Technicians (HS, HD)

### Origin Occupations

#### *Likely*

Landscaping & Groundskeeping Workers (HD)

Animal Caretakers (HD, AG)

Bakers (HD, AG)

Farmworkers & Laborers

Veterinary Techs (HS, HD, OG, AG)

#### *Aligned*

Compliance Officers

Laborers & Freight Movers

Stockers & Order Fillers

Customer Service Reps

Cooks

# Agriculture, Food, & Natural Resources

## Central

### Target Occupations (all HW, HD, HS)

HVAC Mechanics (OG, AG)

Veterinarians (OG, AG)

Telecomms Equipment Installers & Repairers (AG)

Conservation Scientists

Food Scientists & Technologists (AG)

Wind Turbine Service Technicians (OG, AG)

### Gateway Occupations

Supervisors of Landscaping, Lawn Service (HD, OG, AG)

Refuse & Recyclable Material Collectors (HD)

Farm Equipment Mechanics & Service Technicians (HD, OG, AG)

Chefs & Head Cooks (HD, OG, AG)

Tree Trimmers & Pruners

### Origin Occupations

#### *Likely*

Landscaping & Groundskeeping Workers (HD, AG)

Farmworkers, Farm, Ranch, & Aquacultural Animals

Farmworkers & Crop Laborers

Animal Caretakers (HD)

Food Batchmakers

#### *Aligned*

Compliance Officers

Laborers and Freight Movers

Stockers and Order Fillers

Cooks

Customer Service Reps

# Agriculture, Food, & Natural Resources

## MSP Metro Central

### High Location Quotient

MSP Metro
<ul style="list-style-type: none"> <li>• Animal Scientists</li> <li>• Hydrologists</li> <li>• Food Scientists &amp; Technologists</li> <li>• Stationary Engineers &amp; Boiler Operators</li> <li>• Agricultural Sciences Teachers, Postsecondary</li> </ul>

	MSP Metro	Central
Avg. Wage	Region: \$64,300 Field: \$61,700	Region: \$52,200 Field: \$54,000
Unempl Rate	Region: 2.4% Field: 2.4%	Region: 2.8% Field: 2.3%
Origin Occupations	<ul style="list-style-type: none"> <li>• Landscaping &amp; Groundskeeping Workers</li> <li>• Animal Caretakers</li> <li>• Bakers</li> <li>• Farmworkers &amp; Laborers, Crop, Nursery, &amp; Greenhouse</li> <li>• Veterinary Technicians</li> </ul>	<ul style="list-style-type: none"> <li>• Landscaping &amp; Groundskeeping Workers</li> <li>• Farmworkers, Farm, Ranch, &amp; Aquacultural Animals</li> <li>• Farmworkers &amp; Laborers</li> <li>• Animal Caretakers</li> <li>• Food Batchmakers</li> </ul>
Gateway Occupations	<ul style="list-style-type: none"> <li>• Supervisors of Groundskeeping Workers</li> <li>• Telecommunications Equipment Installers</li> <li>• Chefs &amp; Head Cooks</li> <li>• Refuse &amp; Recyclable Material Collectors</li> <li>• Chemical Technicians</li> </ul>	<ul style="list-style-type: none"> <li>• Supervisors of Landscaping &amp; Lawn Service Workers</li> <li>• Refuse &amp; Recyclable Material Collectors</li> <li>• Farm Equipment Mechanics</li> <li>• Chefs &amp; Head Cooks</li> <li>• Tree Trimmers &amp; Pruners</li> </ul>
Target Occupations	<ul style="list-style-type: none"> <li>• Aircraft Mechanics &amp; Service Technicians</li> <li>• Environmental Scientists</li> <li>• Veterinarians</li> <li>• Life, Physical, &amp; Social Science Technicians</li> <li>• Biological Science Teachers, Postsecondary</li> </ul>	<ul style="list-style-type: none"> <li>• HVAC Mechanics</li> <li>• Veterinarians</li> <li>• Telecommunications Equipment Installers &amp; Repairers</li> <li>• Conservation Scientists</li> <li>• Food Scientists</li> </ul>

### High Location Quotient

Central
<ul style="list-style-type: none"> <li>• Nuclear Power Reactor Operators</li> <li>• Nuclear Technicians</li> <li>• Animal Breeders</li> <li>• Farmworkers, Farm, Ranch, &amp; Aquacultural Animals</li> <li>• Nuclear Engineers</li> </ul>



# Summary and Discussion

## Discussion Question 1

What piece of the data surprised, inspired, validated, or challenged you?

## Discussion Question 2

From your perspective, what are the most important considerations in these data for Career and Technical Education programs?

## Discussion Question 3

What is one barrier that you can help remove for BIPOC students?



## Discussion Question 4

What additional information  
will you seek out next?

## Discussion Question 5

What changes or evaluations to your program will you prioritize next as a result of this data?

Thank you!

If you have questions about this report, please contact:  
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# Appendix