



MSP Sector Analysis Construction

Focus on Commercial Trades

Managers, Supervisors, & Specialized Skills in Demand

Approximately 650,000 positions will open up across all industries by the end of 2020, with about 24,000 roles opening in the Commercial Trades. Due to slowing pipeline growth, the 7-county metro anticipates a 3-year construction talent shortage of between 600 and 2,750 workers, including occupations such as pipefitters, carpenters, operating engineers, and supervisors. Mid and high-level skills are most in-demand. Approximately 13.3% of the 7-county metro area is a member of a union, compared to 10.7% of the nation overall. In some metro zip codes, union membership is as high as 28% (55372) and 31% (55417).

Commercial Building

Top Occupations in Demand in the 7-County Metro (sorted by Q1 2018 Employment)	Employment Q1 2018	Mean Wage Q1 2018	Forecasted Annual Growth	Pathway Action*
Electricians	3,872	\$76,300	1.0%	AP
Carpenters	2,834	\$54,700	0.7%	AP
Construction Laborers	2,533	\$55,000	1.1%	E/AP
Plumbers, Pipefitters, & Steamfitters	2,376	\$76,800	1.7%	AP
Supervisors of Construction Trade & Extraction Workers	1,692	\$78,100	1.0%	AP/BA
Construction Managers	1,352	\$96,300	1.1%	AA
Sub-Sector Total	37,679		1.0%	

Highway, Civil, & Transportation

Top Occupations in Demand in the 7-County Metro (sorted by Q1 2018 Employment)	Employment Q1 2018	Mean Wage Q1 2018	Forecasted Annual Growth	Pathway Action*
Construction Laborers	960	\$55,000	1.5%	E/AP
Operating Engineers & Construction Equipment Operators	852	\$66,900	1.4%	E/AP
Heavy & Tractor-Trailer Truck Drivers	425	\$51,200	1.5%	AA
Supervisors of Construction Trades & Extraction Workers	332	\$78,100	1.4%	AP/BA
Paving, Surfacing, & Tamping Equipment Operators	278	\$59,700	1.4%	E
Cement Masons & Concrete Finishers	268	\$55,200	1.5%	E/AP
Sub-Sector Total	5,464		1.3%	

Federal, Heavy, & Industrial

Top Occupations in Demand in the 7-County Metro (sorted by Q1 2018 Employment)	Employment Q1 2018	Mean Wage Q1 2018	Forecasted Annual Growth	Pathway Action*
Construction Laborers	155	\$55,000	1.3%	E/AP
Carpenters	146	\$54,700	1.1%	AP
Construction Managers	93	\$96,300	1.4%	BA
Supervisors of Construction Trade & Extraction Workers	89	\$78,300	1.5%	AP/BA
Operating Engineers & Construction Equipment Operators	72	\$66,900	1.4%	E/AP
General & Operations Managers	34	\$122,200	2.0%	BA
Civil Engineers	33	\$89,100	2.0%	BA
Cost Estimators	30	\$70,200	1.1%	BA
Plumbers, Pipefitters, & Steamfitters	26	\$76,800	1.4%	AP
Sub-Sector Total	1,203		1.3%	

Utilities

Top Occupations in Demand in the 7-County Metro (sorted by Q1 2018 Employment)	Employment Q1 2018	Mean Wage Q1 2018	Forecasted Annual Growth	Pathway Action*
Construction Laborers	359	\$55,000	3.3%	E/AP
Operating Engineers & Construction Equipment Operators	301	\$66,900	3.3%	E/AP
Electrical Power-Line Installers & Repairers	138	\$83,700	3.6%	E
Supervisors of Construction Trades & Extraction Workers	128	\$78,100	3.4%	AP/BA
Pipelayers	109	\$66,400	3.1%	E
Plumbers, Pipefitters, & Steamfitters	89	\$76,100	3.4%	AP
Construction Managers	74	\$96,300	3.6%	BA
Welders, Cutters, Solderers, & Brazers	67	\$47,500	3.5%	E
Telecommunications Line Installers & Repairers	65	\$46,500	3.6%	AP
Sub-Sector Total	2,413		3.2%	

Industry Detail

	Current			Historical			Forecast	
	Employment Q1 2018	Avg. Annual Wages	Location Quotient	Total 3-Year Employment Change	7-County Metro	Minnesota	Total Growth Demand	Est. Avg. Annual Growth
Commercial Building	37,679	\$80,618	0.97	4,521	4.4%	3.9%	1,094	1.0%
Federal, Heavy, & Industrial	1,203	\$81,315	0.35	-665	-13.6%	-10.3%	47	1.3%
Highway, Civil, & Transportation	5,464	\$73,834	0.85	180	1.1%	2.1%	221	1.3%
Utilities	2,413	\$79,053	0.4	135	1.9%	1.2%	236	3.2%
Residential Building	33,832	\$50,863	0.71	2,695	2.8%	2.5%	941	0.9%
Total Construction	80,593	\$67,411	0.79	6,867	3.0%	2.6%	2,551	1.0%
Total - All Industries	1,839,839	\$60,902	1	89,119	1.7%	1.4%	39,993	0.7%

*The color of the Pathway Action column is based on the Est. Annual Supply Gap (or surplus) is for all employers hiring for this occupation, not only construction roles. Employment rates are modeled by Chmura JobsEQ using the Quarterly Census of Employment and Wages (QCEW) and are quarterly estimates, not annual. Unemployment rate by occupation is modeled by Chmura JobsEQ from the American Community Survey 2016 Estimates, and includes people that did not have work at the time of the survey but were active members of a union or actively searching for work in that occupation; it does not include people who were not looking for work at the time of survey. Analysis does not include residential construction.

Pathway Action Key

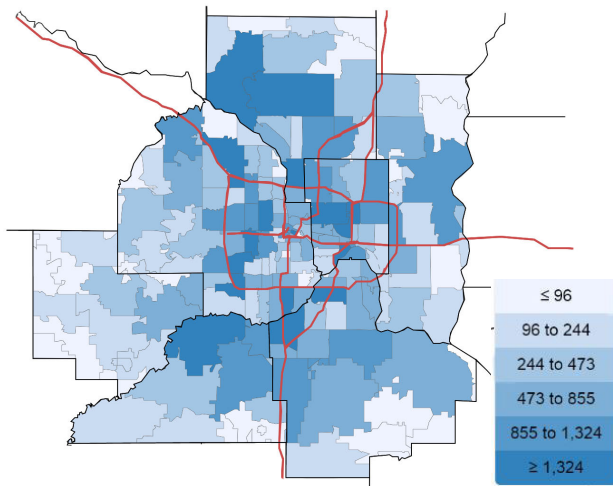
- Critical Pathway Opportunity
- Moderate Pathway Opportunity
- Small Pathway Opportunity
- E Entry-Level/High School/GED
- AP Apprenticeships
- AA Associate Level Training
- BA Bachelor's Level Training
- + Master's/Professional Level Training



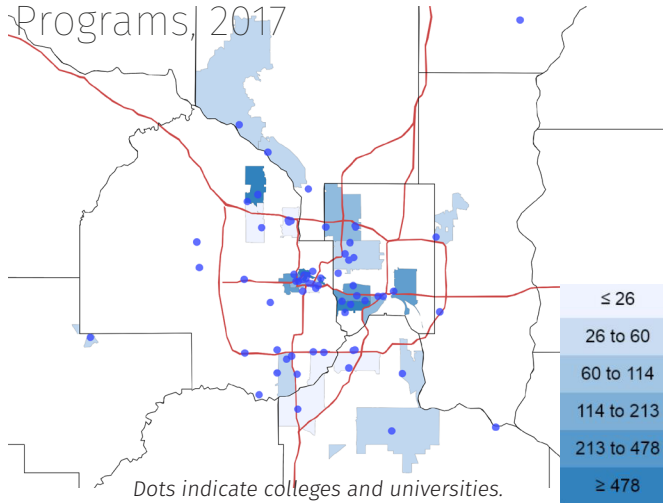
MSPWin MINNEAPOLIS SAINT PAUL REGIONAL WORKFORCE INNOVATION NETWORK

RealTime Talent Using data to build the world's best workforce

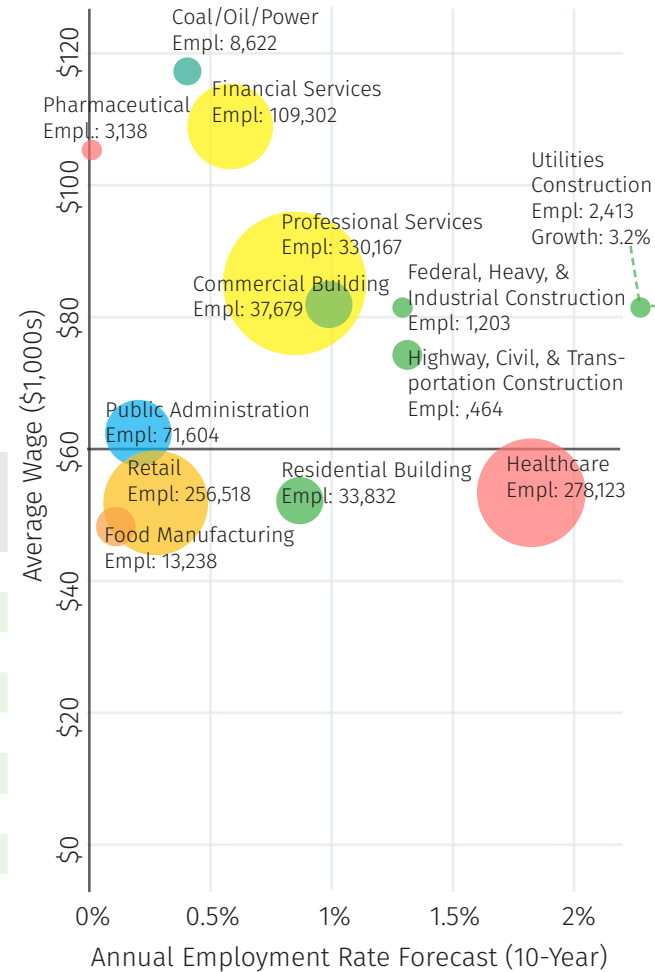
Employees Working in Construction



Graduates of Construction-Related Programs, 2017



Baseline Forecasted Demand By Industry Cluster



Key Trades - Pipeline Complexity, Apprenticeships, & Shortage

Trade	Complexity	Pipeline Time	% 55+ (2014)	Employment Q1 2018	Unempl. Rate	Mean Wage Q1 2018	Est. Shortage 2020	Pathway Action
Pipefitters	High (L)	5-6 Yr	11%	4,710	4.1%	\$76,800	High	AP
Operating Engineers	Mod. (S)	3-6 Yr	18%	4,009	7.4%	\$66,900	High	AP
Carpenters	Low (U)	4-6 Yr	9%	9,997	4.9%	\$54,700	High	AP
Electricians	High (L)	5-8 Yr	13%	6,175	4.0%	\$76,300	Moderate	AP
Ironworkers	Low (S)	3-4 Yr	9%	9,078	4.9%	\$47,000	Moderate	AA/AP
Boilermakers	Low (S)	4-5 Yr	8%	155	12.8%	\$79,600	Moderate	AP
Construction Painters	Low (U)	3-4 Yr	10%	3,803	5.0%	\$49,800	Moderate	E/AP
Concrete Finishers	Low (U)	1-2 Yr	8%	2,009	9.3%	\$55,200	Moderate	E/AP
Construction Laborers	Low (U)	0-1 Yr	8%	8,995	7.9%	\$55,000	Low	E/AP

U: Unlicensed Trades; L: Licensed Trades; S: Specialty Trades.

Pathway Action Key
 ■ Critical Pathway Opportunity
 ■ Moderate Pathway Opportunity
 ■ Small Pathway Opportunity

AP Apprenticeships
 AA Associate Level Training
 BA Bachelor's Level Training

Industry Demographics

MN

Metro Area

Age**

- 19% over age 55 (23% all ind.)

Diversity

- Minority Employment: 20%***
- Female Employment: 9%**

Apprenticeships****

- 11,400 (90% in construction)

Employment in the 9 Key Trades

- 48,931 workers (Q1 2018)

Annual Pathways to Prosperity Training Graduates

- 16 (<10 employed in construction)

For more information:

- Industry Contact: **John O'Phelan, Workforce Development Specialist, Ramsey County Workforce Solutions**
- MSPWin Career Map: <http://mbspwin.org/wp-content/uploads/2016/06/Career-Pathway-Maps.pdf>
- RealTime Talent Reports: realtimetalent.org/research/reports

*Degree programs map to multiple occupations, not all graduates will become employed in the indicated occupation. ** CES Quarterly Workforce Indicators (QWI) Q4 2016. ***Elevate Minnesota, www.elevateminnesota.org/about. ****Apprenticeship Minnesota, as of Feb 2018. Developed by Erin Olson (erin@realtimetalentmn.org). Published 8/20/2018 by RealTime Talent. Sources: Employment, wage, and education data modeled from IPEDS, OES, and BLS data by JobsEQ. Maps modeled using custom occupation clusters in EMSI.