

Introduction

In the last few years, a range of online analytical tools have enabled a clear view of our dynamic and constantly changing labor market. For the first time, this data is available to job counselors not just as information for reflection, but as a real-time action tool to direct jobseekers to the best opportunities. Using data analytics on a regular basis creates stronger coordination between organizations and the best results for both jobseekers and employers.

These Sector Analysis Reports – the regional overview document and its one-page profiles of IT, manufacturing, construction, healthcare, business and financial services, and government – provide an analytical methodology to know and react to demand, supply, and training program outcomes. In other words, these tools can help us more efficiently close the worker gap. We hope that you see value in this data and decide to replicate this kind of analysis in your own sectors and communities.

Our Approach

To demonstrate our method for these sector reports, here's how we analyzed the best middle skill (Associate degree or less) and living wage jobs (over \$30k annually) in IT.

- 1) We ran a **sector overview**. Employment is at 80k workers, and the sector is averaging almost 2% annual growth. 98% of jobs in the sector currently require some postsecondary education. Also, minority growth in the sector has grown by 72% over the last 7 years, outpacing overall hiring by 2.5 times. Entry-level salary is much higher than the region's living wage at \$61,300.
- 2) We then ran list of the **top 25 occupations in demand** by number of online job postings advertised in Q2 2017. Based on that list, we looked at the share of jobs in each occupation requiring an Associate degree or less that also pay a living wage.
- 3) Taking the top three occupations, we considered the short and long-term **employment outlook**, connecting career pathways, and number of degree completions locally. We then reflected on whether we could advise someone in good faith to pursue these careers. The number of people employed as Computer User Support Specialists, for example, is projected to grow over next two years by 1% and there are a range of training programs available.
- 4) We also looked at the **top employers** recruiting candidates with an Associate degree or less. With demand for IT workers very high, it's possible candidates could get hired without a degree, or could work in the field while also pursuing a degree. Reviewing immediate job opportunities with those employers would definitely be recommended.
- 5) Finally, we looked at several **training options** to obtain industry-recognized credentials (such as A+ certification) outside of a 2 or 4-year program.

There's also a whole range of training program outcome tools we highly recommend using to get a sense of how well training programs are working, and how likely it is that trained jobseekers are hired in the sector. The best approach will take into consideration multiple sources and types of data. Even after you are familiar with all of the information above, it is still wise to get out in the field and talk to employers, training program managers, and postsecondary directors get their take on the accuracy of the data and your conclusions from it.

Each sector report addresses similar questions tailored to the unique nature of the sector. These initial drafts will be honed and adjusted over the next few quarters. If you have thoughts about what should and should not be included, or have a correction, or think we are missing something, please let us know.

Project Contacts

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Additional industry contacts, career pathways fund investor information, and meeting dates coming soon.



MSP Sector Analysis Regional Forecast Overview

Updated January 2018

Estimated Labor Shortage in the 7-County Metro

62,250 workers by 2020

Occupations	2020 Shortage Based on Official Forecasts (or surplus)	2020 Shortage Based on Continued GDP Growth
Healthcare	4,014	8,500
Finance	(1,680)	6,250
IT	1,521	2,250
Manufacturing	(2,910)	4,000
Construction	564	2,750
Government	-	7,000
All Other Sectors	(6,254)	31,500

If current rates of economic growth continue, the 7-county Minneapolis-Saint Paul region may face a worker shortage of over 62,000 by 2020. We need “all hands on deck” if we are to maintain our region's growth and competitiveness.

We believe workforce development must now be based on a real-time feedback loop. If you don't know the analytics and if you can't easily answer the top two jobseeker questions in an informed way, you can't advise jobseekers well and you can't help close the gap. So let's start doing things differently. Take a look at our historic employment trends and where we are expected to grow by 2020, and we guarantee that it will have implications for how you serve your clients.

Sincerely,



Bryan Lindsley
Executive Director of MSPWin
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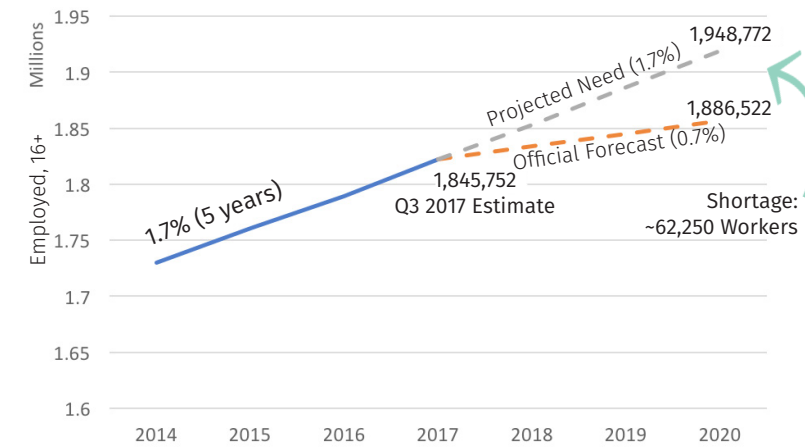
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MSP Sector Analysis Regional Forecast Overview

7-County Labor Shortage Forecast



Industry Hiring Trends

Industry	2010-2016 Employment Growth		2016 Share of Sector Employment	
	Total Growth	Minority Growth	Total Employment	Share of Total Employment
Total - All Sectors	174,166 (11%)	86,036 (39%)	1,727,977	100%
Healthcare	46,310 (22%)	24,676 (50%)	259,263	15%
Finance & Insurance	2,001 (2%)	2,029 (18%)	106,557	6%
Professional, Scientific, and Technical Services	29,320 (28%)	7,781 (72%)	133,356	8%
Manufacturing	16,091 (10%)	8,183 (33%)	171,927	10%
Construction	22,167 (43%)	2,506 (119%)	73,615	4%
Public Administration	7,778 (13%)	2,961 (52%)	68,121	4%
All Other Sectors	50,499 (5.8%)	37,900 (17%)	915,138	53%

7-County Metro Supply & Demand Outlook

	Current Year through Q3 2017				Immediate Need Q3 2017			Baseline Employment Forecast 2020					If Economic & Employment Growth Continues		In a scenario where the Gross Metro Product (GDP) continues to grow at a rate comparable to 2013-2017, employment would be estimated to grow at about 1.7% annually overall, with the following approximate breakdown by key sectors.
	Employment	Average Annual % Change in Employment ³	Government Jobs (%)	LQ	Job Postings	Requiring Some College or More (%)	Full-Time, Permanent (%)	Growth Demand	Replacement Openings ⁴	Separations (Replacements + Occ Transfers)	Annual Change (%)	Estimated Baseline Mismatch (by 2020)	Additional Possible Shortfall ⁵ (by 2020)		
Total - All Sectors	1,845,752	2.1% Δ	22%	1.00	237,488	59%	82%	40,770	138,319	612,534	0.7%	(4,745 unempl.)	62,250		
Healthcare	206,310	2.9% Δ	6%	1.07	30,803	78%	78%	12,527	11,712	59,224	2.0%	4,014	8,500		
Finance	211,742	2.0% Δ	6%	1.15	19,645	63%	84%	3,503	17,664	69,005	0.5%	(1,680)	6,250		
Information Technology	80,110	1.5% Δ	7%	1.45	28,508	98%	80%	2,611	3,485	16,510	1.1%	1,521	2,250		
Manufacturing	114,234	1.3% Δ	1%	1.05	9,379	24%	79%	-1,872	8,946	37,574	-0.5%	(2,910)	4,000		
Construction	91,116	3.7% Δ	22%	0.79	3,751	33%	91%	2,920	5,306	28,294	1.1%	564	2,750		
Government ¹	203,472	1.5% Δ	100%	0.80	13,749	23%	20%	3,175	14,168	57,214	0.5%		7,000		
All Other Sectors ²	965,117	1.6% Δ	0%	1.01	141,728	52%	81%	18,160	91,366	350,384	0.5%	(6,254)	31,500		

Sector Salaries & Educational Awards

	Salary Levels			Award Level										Dislocated Worker Program		Pathways to Prosperity		WIOA Adult Program			
	Entry Level Salary	Median Salary	Experienced Salary	Award < 1 academic year	Award > 1 but < 2 academic years	Associates degree	Award > 2 but < 4 academic years	Bachelors degree	Postbaccalau reate certificate	Masters degree	Post-masters certificate	Doctors degree	All Certificates	All Degrees	All Completions	Attained a Credential	Credentialed with Related Employment	Attained a Credential	Credentialed with Related Employment	Attained a Credential	Credentialed with Related Employment
Total - All Sectors	\$36,000	\$50,700	\$62,900	4,268	2,604	9,785	312	21,896	2,316	20,528	382	5,097	9,882	57,306	67,188	929	30%	607	41%	166	51%
Healthcare	\$44,500	\$60,800	\$70,000	10%	5%	14%	0.1%	20%	2%	38%	0.1%	9%	18%	82%	16,067 (24%)	55	67%	294	81%	79	90%
Finance	\$42,000	\$61,300	\$81,200	2%	0%	0.5%	0%	89%	0%	8%	0%	1%	2%	98%	650 (1%)	400	44%			11	
Information Technology	\$61,300	\$89,100	\$107,500	8%	3%	20%	0%	41%	6%	20%	0%	3%	16%	84%	2,639 (4%)	148	39%	52	25%	34	38%
Manufacturing	\$28,500	\$38,700	\$45,900	20%	34%	32%	13%	0.3%	0%	0%	0%	0%	68%	32%	1,122 (2%)	61	16%	86			
Construction	\$39,300	\$57,200	\$67,900	38%	30%	16%	11%	4%	0%	0%	0%	0%	79%	21%	561 (1%)			32			
Government	\$43,500	\$62,500	\$76,700													14					
All Other Sectors	\$33,300	\$50,700	\$62,900	4%	2%	14%	0.2%	37%	4%	30%	1%	8%	12%	88%	46,149 (69%)	251		143		42	

1-Overlaps with jobs by industry sector, except all other. 2-Private employment and self-employment not classified into the above 6 critical sectors. 3-Average annual % change over a 3-year period. 4-Replacement demand has been discontinued by the Bureau of Labor Statistics (BLS) because of "statistical and conceptual issues with the implementation of this method that compromised the accuracy and validity of the resulting estimates" (www.bls.gov/emp/ep_replacements.htm). BLS developed a new method that estimates this concept by measuring occupational separations, which include both replacements due to exits from the labor force and occupational transfers from a major occupation group (2-digit SOC). 5-Rounded estimates. Developed by Erin Olson (erin@realtimentalentmn.org). Published 1/15/2018 by RealTime Talent. Sources: TalentNeuron Recruit aggregate online job postings. www.wantedanalytics.com accessed October 27, 2017. Counts of job

postings in 2017 by employer were available July 1 - September 30, 2017 in the 7-County Minneapolis-Saint Paul Metro Area. Includes staffing agencies. Employment counts are modeled from Bureau of Labor Statistics Occupational Employment Statistics (OES) from 2002 to 2017 and the Employment Outlook 2024, by JobsEQ. Graduate counts for government jobs were not able to be determined and were omitted from the Educational Awards table.