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

MSPWin Contact: Bryan Lindsley, MSPWin 651-325-4242 bryan@mspwin.org

Research Contact: Erin Olson, RealTime Talent 651-325-4277 erin@realtimetalentmn.org

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

MSP Sector Analysis

Regional Forecast Overview

Updated January 2018
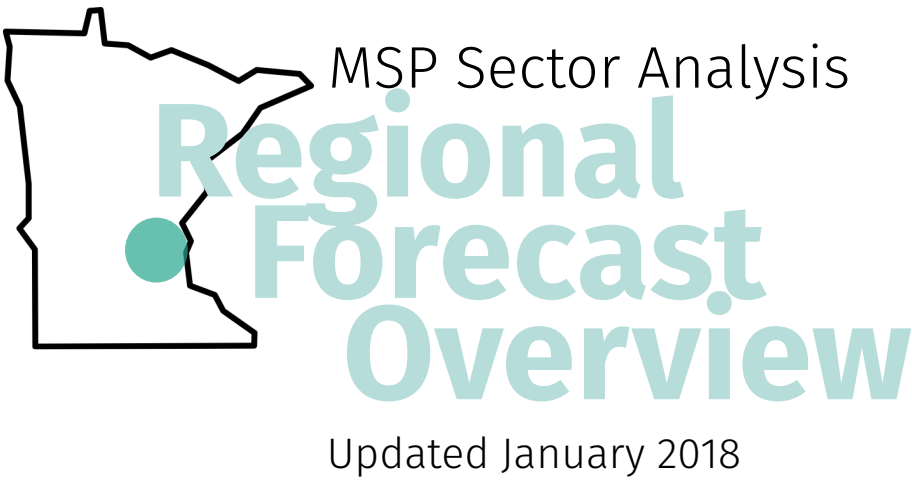
Estimated Labor Shortage in the 7-County Metro

62,250 workers by 2020		
Occupations	**2020 Shortage Based on Official Forecasts (in labor shortage)**	**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
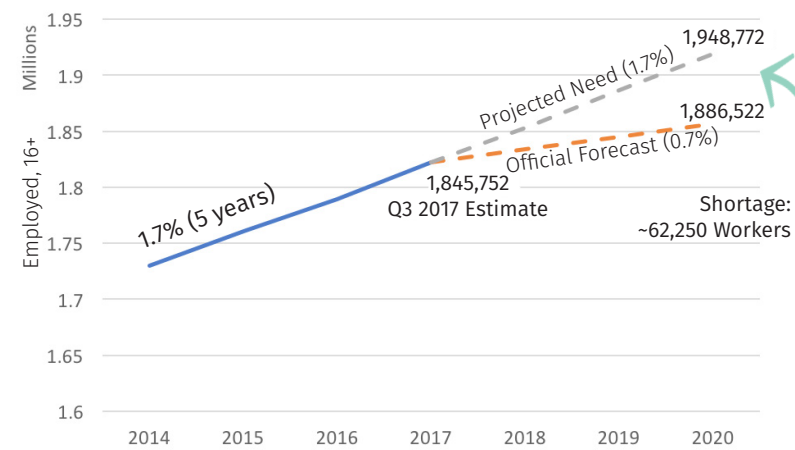Executive Director of MSPWin
www.mspwin.org

Erin Olson
Research Strategist at RealTime Talent
www.realtimetalent.org

MSPWin
MINNEAPOLIS SAINT PAUL REGIONAL WORKFORCE INNOVATION NETWORK

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

MSP Sector Analysis
Regional Forecast Overview

7-County Labor Shortage Forecast

Chart — Employed, 16+ (Millions), 2014–2020:
- 1.7% (5 years)
- 1,845,752 Q3 2017 Estimate
- Projected Need (1.7%) — 1,948,772
- Official Forecast (0.7%) — 1,886,522
- Shortage: ~62,250 Workers

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	
	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% △	22%	1.00	237,488	59%	82%	40,770	138,319	612,534	0.7%	(4,745 unempl.)	62,250	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.
Healthcare	206,310	2.9% △	6%	1.07	30,803	78%	78%	12,527	11,712	59,224	2.0%	4,014	8,500	
Finance	211,742	2.0% △	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% △	7%	1.45	28,508	98%	80%	2,611	3,485	16,510	1.1%	1,521	2,250	
Manufacturing	114,234	1.3% △	1%	1.05	9,379	24%	79%	-1,872	8,946	37,574	-0.5%	(2,910)	4,000	
Construction	91,116	3.7% △	22%	0.79	3,751	33%	91%	2,920	5,306	28,294	1.1%	564	2,750	
Government[1]	203,472	1.5% △	100%	0.80	3,674	85%	76%	3,175	14,168	57,214	0.5%		7,000	
All Other Sectors[2]	965,117	1.6% △	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	Postbaccalaureate 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	

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