Review

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REGIONAL SPOTLIGHT Northeast the as bubble as em the mean has in present laboration in the mean has in the mean

Northeast's Construction Industry

The construction industry in Northeast Minnesota is rebuilding from the aftermath of the housing bubble and recession of 2009 as employment has gained, and the number of hours worked has increased. A new barrier presents itself, however, as the labor market has tightened in the region, and an older and aging population pressures the

aging population pressures the labor force system with the need to replace workers who may soon retire. With any challenge comes opportunity, and the construction industry will be home to many of these in the region.

Employment in the construction industry bottomed out in 2010 with only 5,616 employed in Northeast Minnesota. This was a 20.9 percent drop of employment from 2006 when there were

nearly 1,500 more workers in the industry. This precipitous drop reflects the severity of the recession in the construction industry but since the low-water mark of 2010, the industry has rebounded and nearly recovered all jobs lost in 2015 before a decrease in jobs the following year. In 2016 there were 6,400 people with covered employment in the construction industry in the 7-county Arrowhead region (see Figure 1).

Employment trends for construction in Northeast Minnesota follow the statewide industry direction with greater employment during the housing boom of the early 2000s followed by a sharp decline in employment with the housing bust and recession of 2009. But the region's construction employment declined by only 2.1 percent

since 2001, compared to a 6.1 percent loss of construction jobs statewide during the same time frame. Despite annual statewide gains in construction jobs since 2010, the state of Minnesota is at only 90 percent of its prerecession peak of employment with more than 13,500 more jobs needed to match. Northeast Minnesota nearly recovered all construction jobs lost to the recession in 2016 before a big decline in the past year (see Figure 1).

The drop in employment from 2015 to 2016 in Northeast Minnesota can be attributed to the completion of some major construction projects in the region. In Duluth the new 11-story downtown building was completed in the spring of 2016. On the Mesabi Range in Nashwauk work restarted on the

Features:

New Separations Methodology and Its Impact on Occupational Employment Projections

County Snapshots: Lac Qui Parle, Lake, Lake of the Woods, Le Sueur

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Figure 1. Employment in Construction Industry, 2001-2016

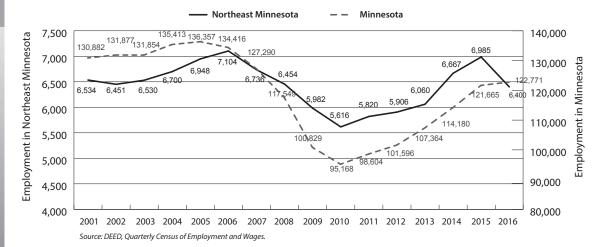




Figure 2. Construction Industry, Annual Median Hours Worked per Quarter

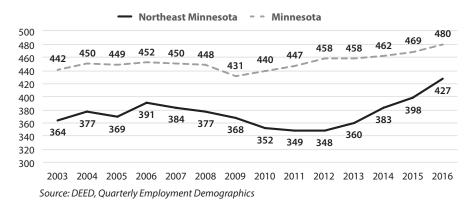
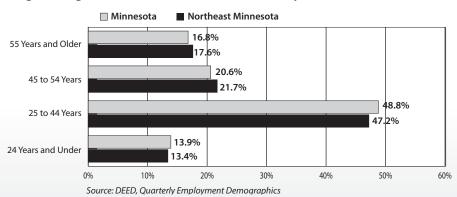


Figure 3. Age Distribution of Construction Industry, 2016



completion of a new iron-ore processing plant. This project had upwards of 800 construction workers at a given time in 2015, but because of financing issues, the processing plant is yet to be completed.

The construction industry only accounts for 4.5 percent of covered employment in the region but provides substantially higher wages with an average annual wage of \$55,986, more than \$14,000 more than the average salary in the region. The largest subsector of the construction industry is that of specialty trade contractors with more than 55 percent of employment of the overall construction sector.

The highest paying subsector is heavy and civil engineering construction, which provides an average annual wage of more than \$70,000. This subsector has also seen its employment grow by nearly 25 percent since 2006 with an increase of nearly 300 jobs primarily from the highway, street, and bridge construction subsector.

While employment in the construction of building subsector is nearly evenly split between residential and non-residential, the latter has significantly better wages and has also experienced considerable growth in employment since 2006. Residential building construction, on the other hand, has lost 300 jobs since 2006, a 30 percent decline, and has average annual wages of \$32,358. However, this subsector has gained over 100 jobs in the past five years, providing evidence of a recovering economy (see Table 1).

Table 1. Northeast Minnesota Construction Industry Employment Statistics, 2016

		2016		2011	-2016	2006	-2016
	Number of Firms	Number of Employed	Average Annual Wage	Numeric Change	Percent Change	Numeric Change	Percent Change
Total, All Industries	8,454	141,802	\$41,755	3,979	2.9%	165	0.1%
Construction	906	6,400	\$55,986	580	10.0%	-704	-9.9%
Construction of Buildings	254	1,323	\$47,619	89	7.1%	-184	-12.3%
Residential Building Construction	229	692	\$32,358	108	18.3%	-300	-30.3%
Nonresidential Building Construction	26	631	\$64,332	-19	-2.9%	116	22.5%
Heavy and Civil Engineering Construction	73	1,498	\$72,730	276	22.6%	295	24.5%
Utility System Construction	23	328	\$79,768	19	6.1%	52	18.8%
Highway, Street, and Bridge Construction	40	1,036	\$71,552	254	32.5%	172	19.9%
Specialty Trade Contractors	579	3,579	\$52,071	215	6.4%	-814	-18.5%
Foundation, Structure, Exterior Contractors	118	945	\$51,636	31	3.4%	-57	-5.7%
Building Equipment Contractors	185	1,507	\$57,668	77	5.4%	-676	-31.0%
Building Finishing Contractors	92	448	\$47,632	135	43.1%	-25	-5.3%
Other Specialty Trade Contractors	183	679	\$42,068	-27	-3.8%	-55	-7.5%

Source: DEED Quarterly Census of Employment and Wages (QCEW)



Another way to analyze the construction industry is to measure the median hours worked per quarter. Ask any of Northeast Minnesota's construction workers, and they will tell you it's the number of hours on the job that determines the success of the season and with DEED's new data tool, Quarterly Employment Demographics (QED), we can do just that.

Not only did the number of construction jobs decrease, so did the number of hours available to those who kept their jobs. The annual median hours worked per quarter in Northeast Minnesota dropped to about 350 hours worked per quarter - the equivalent of about 27 hours per week from 2010 to 2012 following the recession, down from a pre-recession peak of 391 hours worked per quarter in 2006. For 2016 the median hours worked per quarter jumped to 427, a 22 percent increase from the post-recession drought and a 36 hour increase from the pre-recession peak, indicating an industry being put back to work and workers receiving bigger paychecks (see Figure 2).

With a median wage of \$27.26 for construction and extraction occupations in the region, an increase of six hours of work

a week – the difference between 350 hours and 427 hours worked per quarter – is equal to an increase of \$8,500 to paychecks over the course of an entire year.

Compared to the state overall, workers in Northeast Minnesota's construction industry still have fewer annual hours worked per quarter, however. After the 2009 recession, the difference in hours worked between the state and Northeast Minnesota was about 100 hours per quarter for 2011, 2012, and 2013. In 2016 the region's construction industry had narrowed the gap to 53 hours, still lagging behind (see Figure 2).

The northeast region had fewer hours worked per quarter than the five other planning areas in the state for every year of the QED database and had the biggest difference between the median hours worked in Quarter 1 and in Quarter 3 in any given year since 2003, signifying the effects winter has on this sector (see Table 2).

The future outlook of the construction industry suggests that there will be opportunities in this field moving forward. DEED's Employment Outlook data tool

projects that the construction industry will grow by 2.1 percent in the next decade with an increase of nearly 140 jobs, which matches the projected growth rate of the overall economy in the region. The projected growth of the construction industry in Northeast Minnesota pales compared to the statewide construction employment growth rate of 9.5 percent, where the state is projected to increase over 10,000 new construction jobs in the next decade (see Table 3).

Unlike other regions of the state which have seen considerable population growth which has fueled the demand for construction, Northeast Minnesota's population has remained stable with less than 1 percent growth since 2000 and is projected to remain around 325,000 people into 2030. Much of the opportunity in the construction industry will come from replacing an aging workforce in the Arrowhead region.

In Northeast Minnesota 17.6 percent of employment in the construction industry is 55 years and older, suggesting considerable hiring demand in the near future to replace those who will retire from the field. Interestingly, the percentage of older

Table 2. Construction Industry Statistics, 2016 Annual

Region	Northeast	Central	Northwest	Southeast	Southwest	Seven County
	Minnesota	Minnesota	Minnesota	Minnesota	Minnesota	Mpls-St Paul, MN
Median Hours Per Quarter	427	490	480	484	484	480

Source: DEED's Quarterly Employment Demographics

Table 3. Northeast Minnesota Industry Employment Projections, 2014-2024

NAICS Code	Industry	Estimated Employment 2014	Projected Employment 2024	Percent Change 2014-2024	Numeric Change 2014-2024
0	Total, All Industries	159,860	163,078	2.0%	3,218
23	Construction	6,468	6,606	2.1%	138
236	Construction of Buildings	1,476	1,509	2.2%	33
2361	Residential Building Construction	646	628	-2.7%	-18
2362	Nonresidential Building Construction	830	881	6.1%	51
237	Heavy and Civil Engineering Construction	1,134	1,070	-5.6%	-64
2371	Utility System Construction	383	328	-14.3%	-55
2373	Hwy, Street, and Bridge Construction	583	562	-3.6%	-21
238	Specialty Trade Contractors	3,858	4,027	4.3%	169
2381	Building Foundation/Exterior Contractors	1,033	1,105	6.9%	+72
2382	Building Equipment Contractors	1,666	1,717	3.0%	51
2383	Building Finishing Contractors	379	335	-11.6%	-44
2389	Other Specialty Trade Contractors	780	870	11.5%	90

Source: DEED Employment Outlook

workers in the Arrowhead construction industry nearly matches the state's 16.8 percentage of 55 year and older workers, indicating an industry wide dilemma and not just a localized issue. Meanwhile, the percentage of workers who are 24 and younger in the industry hovers between 13 and 14 percent for the Northeast region and the state of Minnesota (see Figure 3).

Because of a stable population and an aging workforce in Northeast Minnesota, much of the opportunities for construction careers will come for replacing workers instead of adding additional jobs. In fact, of the 1,480 projected openings in construction and extraction occupations over the next decade, 1,310 of them will be replacement openings (see Table 4).

Local efforts to attract the next generation of construction workers include the annual Construct Tomorrow events which bring representatives from multiple trade organizations to a local site to provide hands-on experiences for regional high school students to connect and share opportunities in these fields. The local Northeast Minnesota workforce development boards (WDBs), which direct federal, state, and local funding to workforce development programs, have identified the construction industry in their regional plans, a requirement of the Workforce Innovation Opportunity Act (WIOA)-federal legislation that guides the activities of these local links to the public workforce system-for targeted development of sector strategies because of the opportunities that await in this high-pay, high-demand industry.

The WDBs have begun to reach out to the various trade organizations in the region to highlight the apprenticeships attainable and the application processes required of those eager to begin their journey into a career in the construction industry. Reaching out to underrepresented populations, such as women and minorities, and attracting and welcoming immigrants may hold answers to forthcoming workforce challenges in this industry. In response the WDBs have initiated conversations with the various trade organizations in the region to highlight and disseminate the apprenticeship and application processes associated with entry into the trades. They have also applied to DEED's Minnesota Women and High-wage, High-Demand, Nontraditional Jobs Grant Program, a step in the right direction towards a more inclusive construction workforce in Northeast Minnesota

by Erik White

Table 4. Northeast Minnesota Construction-Related Occupational Employment Projections, 2014-2024

SOC Code	Occupation	Median Hourly Wage	Estimated Employment 2014	Projected Employment 2024	Percent Change 2014-2024	Numeric Change 2014-2024	2014-2024 Replacement Openings*	2014-2024 Total Openings**
0	Total, All Occupations	\$17.25	159,860	163,078	2.0%	3,218	38,200	44,660
470000	Construction and Extraction Occupations	\$27.26	8,114	8,252	1.7%	138	1,310	1,480
471011	First-Line Spvsrs. of Construction Workers	\$33.72	480	481	0.2%	1	30	30
472021	Brickmasons and Blockmasons	\$30.59	103	122	18.4%	19		20
472031	Carpenters	\$24.37	1,313	1,326	0.9%	13	150	160
472051	Cement Masons and Concrete Finishers	\$26.13	176	190	7.9%	14	20	30
472061	Construction Laborers	\$22.83	1,127	1,170	3.8%	43	220	260
472073	Construction Equipment Operators	\$33.46	1,120	1,134	1.2%	14	180	200
472111	Electricians	\$32.12	863	872	1.0%	9	130	140
472141	Painters, Construction and Maintenance	\$24.68	269	271	0.7%	2	40	40
472151	Pipelayers	\$32.45	71	72	1.4%	1		10
472152	Plumbers, Pipefitters, and Steamfitters	\$33.66	416	417	0.2%	1	50	50
472211	Sheet Metal Workers	\$29.85	284	287	1.0%	3	60	60
473012	HelpersCarpenters	\$17.99	51	53	3.9%	2		
474011	Construction and Building Inspectors	\$32.08	68	68	0.0%		10	10
474051	Highway Maintenance Workers	\$24.31	410	405	-1.2%	-5	100	100
474071	Septic Tank Svcs. and Sewer Pipe Cleaners	\$17.62	91	98	7.6%	7	20	20
475021	Earth Drillers, Except Oil and Gas	\$26.65	58	51	-12.0%	-7	10	10

^{*}Replacement Openings: Net replacement openings is an estimate of the need for new work force entrants to replace workers who leave an occupation. It estimates the net movement of

Source: DEED Employment Outlook



¹⁾ experienced workers who leave an occupation and start working in another occupation, stop working altogether, or leave the geographic area, minus 2) experienced workers who move into such an opening. It thus does not represent the total number of jobs to be filled caused by the need to replace workers.

^{**} Total Openings: Total job openings represent the sum of employment increases and net replacements. If employment change is negative, job openings from growth are zero and total job openings equals net replacements.

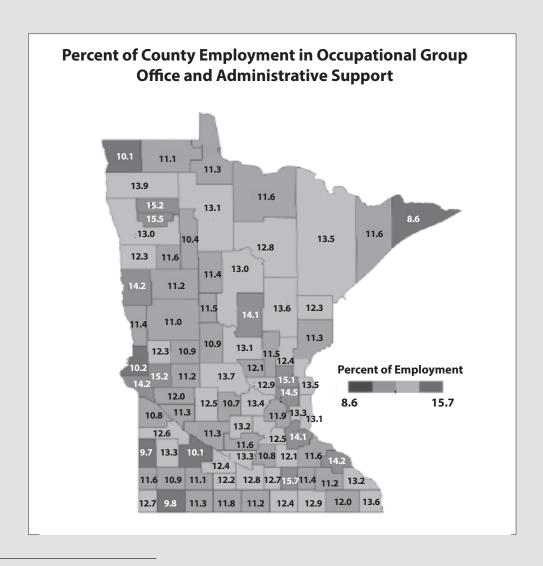
Fun With Statistics

What is the Most Common Major Occupational Group in Your County?

The most common occupations in Minnesota as reported by Minnesotans on the American Community Survey are office and administrative support occupations such bookkeepers, customer service representatives, and secretaries. The 365,700 jobs in the Office and Administrative Support Occupational Group accounted for 12.8 percent of all employment in Minnesotans. The smallest occupational group is farming, fishing, and forestry. About 21,500 jobs exist in Minnesota in this occupational group, or about 0.8 percent of all employment. Farmers aren't included in this major group but are counted in the management occupational group.

Share of employment accounted for by major occupational groups at the county level can differ significantly from statewide numbers. Office and administrative support occupations account for 8.6 percent of jobs in Cook County and 15.7 percent in Steele County.

Below is a map that shows the Office and Administrative Support employment by county in Minnesota based on 2012-2016 American Community Survey data. For other occupational groups go: to https://public.tableau.com/profile/magda.olson#!/vizhome/2012-2016CountyOccupationalMix/Dashboard1?publish = yes



¹Data is from the 2012-2016 ACS Table C24010 – Sex By Occupation for the Civilian Employed Population 16 Years and Over.

by Dave Senf

Labor Force Estimates

County/	L	abor Fo	orce	Eı	mploym	nent	Une	employ	ment	Une	Rate o	
Area	Dec 2017	Nov 2017	Dec 2016	Dec 2017	Nov 2017	Dec 2016	Dec 2017	Nov 2017	Dec 2016	Dec 2017	Nov 2017	Dec 2016
United States ('000s) (Seasonally adjusted) (Unadjusted)	160,597 159,880	160,533 160,466	159,736 158,968	154,021 153,602	153,917 154,180	152,233 151,798	6,576 6,278	6,616 6,286	7,502 7,170	4.1% 3.9	4.1% 3.9	4.7% 4.5
Minnesota				•			:					
(Seasonally adjusted) (Unadjusted)	3,081,549 3,066,881	3,079,776 3,067,812	3,003,239 2,994,599	2,987,322 2,964,896	2,982,697 2,986,322	2,881,845 2,872,658	94,227 101,985	97,079 81,490	121,394 121,941	3.1 3.3	3.2 2.7	4.0 4.1
Metropolitan												
Statistical Areas (MSA)* MplsSt. Paul MSA	: 1,990,904	1,994,774	1,931,869	: : 1,933,296	1,946,499	1,862,169	: : 57,608	48,275	69,700	2.9	2.4	3.6
Duluth-Superior MSA	144,118	144,506	141,000	137,885	139,091	133,216	6,233	5,415	7,784	4.3	3.7	5.5
Rochester MSA	119,391	119,463	118,462	115,992	116,840	114,520	3,399	2,623	3,942	2.8	2.2	3.3
St. Cloud MSA	111,726	111,839	110,029	: 107,751	108,881	105,373	3,975	2,958	4,656	3.6	2.6	4.2
Mankato-N Mankato MSA Fargo-Moorhead MSA	61,052 139,151	61,517 139,890	59,848 137,685	59,524 135,765	60,344 137,115	57,992 133,938	1,528 3,386	1,173 2,775	1,856 3,747	2.5 2.4	1.9 2.0	3.1 2.7
Grand Forks MSA	56,310	56,740	57,749	54,766	55,460	56,055	1,544	1,280	1,694	2.7	2.3	2.9
Region One	48,968	48,376	49,346	46,387	46,598	46,029	2,581	1,778	3,317	5.3	3.7	6.7
Kittson	2,390	2,372	2,415	2,294	2,302	2,294	96	70	121	4.0	3.0	5.0
Marshall	5,811	5,690	5,757	5,323	5,332	5,189	488	358	568	8.4	6.3	9.9
Norman Pennington	3,436 9,432	3,427 9,113	3,530 9,252	3,263 8,825	3,297 8,825	3,345 8,370	: 173 : 607	130 288	185 882	5.0 6.4	3.8 3.2	5.2 9.5
Polk	17,075	17,137	17,479	16,369	16,610	16,695	706	527	784	4.1	3.1	4.5
Red Lake	2,410	2,332	2,372	2,248	2,242	2,167	162	90	205	6.7	3.9	8.6
Roseau	8,414	8,305	8,541	8,065	7,990	7,969	349	315	572	4.1	3.8	6.7
Region Two	43,570	43,612	42,839	40,989	41,453	39,968	2,581	2,159	2,871	5.9	5.0	6.7
Beltrami	24,422	24,371	23,568	23,200	23,317	22,242	1,222	1,054	1,326	5.0	4.3	5.6
Clearwater	4,883	4,778	4,757	4,414	4,417	4,255	469	361	502	9.6	7.6	10.6
Hubbard Lake of the Woods	9,603 2,326	9,752 2,369	9,682 2,434	8,938 2,214	9,213 2,241	8,925 2,289	: 665 : 112	539 128	757 : 145 :	6.9 4.8	5.5 5.4	7.8 6.0
Mahnomen	2,336	2,342	2,398	2,223	2,265	2,257	113	77	141	4.8	3.3	5.9
Region Three	162,531	163,021	160,203	154,387	156,025	150,024	8,144	6,996	10,179	5.0	4.3	6.4
Aitkin	7,327	7,181	7,058	6,753	6,758	6,441	: 574	423	617 :	7.8	5.9	8.7
Carlton Cook	17,797 2,672	17,759 2,840	17,334 2,911	16,907 2,515	17,058 2,723	16,349 2,737	890 157	701 117	985 174	5.0 5.9	3.9 4.1	5.7 6.0
Itasca	21,326	21,320	21,312	19,894	20,012	19,347	1,432	1,308	1,965	6.7	6.1	9.2
Koochiching	5,745	5,917	6,116	5,367	5,499	5,572	378	418	544	6.6	7.1	8.9
Lake	5,129	5,209	5,166	4,896	5,025	4,875	233	184	291	4.5	3.5	5.6
St. Louis	102,535	102,795	100,306	98,055	98,950	94,703	4,480	3,845	5,603	4.4	3.7	5.6
City of Duluth Balance of St. Louis County	45,648 56,887	45,900 56,895	44,499 55,807	44,322 53,733	44,727 54,223	42,807 51,896	1,326 3,154	1,173 2,672	1,692 3,911	2.9 5.5	2.6 4.7	3.8 7.0
Region Four	128,465	127,815	126,144	123,410	124,226	120,370	5,055	3,589	5,774	3.9	2.8	4.6
Becker	18,895	18,575	18,188	17,969	17,869	17,180	926	706	1,008	4.9	3.8	5.5
Clay	36,414	36,548	35,982	35,302	35,743	34,616	1,112	805	1,366	3.1	2.2	3.8
Douglas	20,194	20,181	19,933	19,450	19,633	19,083	744	548	850	3.7	2.7	4.3
Grant Ottor Tail	3,390	3,325	3,334	3,235	3,220	3,140	: 155	105	194	4.6	3.2	5.8
Otter Tail Pope	31,474 6,509	31,337 6,431	31,066 6,299	29,942 6,285	30,288 6,273	29,435 6,018	1,532 224	1,049 158	1,631 281	4.9 3.4	3.3 2.5	5.3 4.5
Stevens	5,845	5,758	5,722	5,686	5,662	5,511	159	96	211	2.7	1.7	3.7
Traverse	1,837	1,815	1,875	1,745	1,762	1,783	92	53	92	5.0	2.9	4.9
Wilkin	3,907	3,845	3,745	3,796	3,776	3,604	111	69	141	2.8	1.8	3.8
Region Five	83,755	83,543	82,438	78,605	79,717	76,859	5,150	3,826	5,579	6.1	4.6	6.8
Cass	14,094	14,361	14,074	13,061	13,533	12,918	1,033	828	1,156	7.3	5.8	8.2
Crow Wing Morrison	31,950 18,271	31,950 17,960	31,139 17,868	30,147	30,595 17,112	29,161 16,569	1,803 1,263	1,355 848	1,978 1,299	5.6 6.9	4.2 4.7	6.4 7.3
Todd	13,177	13,103	13,089	12,521	12,594	12,352	: 1,203	509	737	5.0	3.9	7.5 5.6
Wadena	6,263	6,169	6,268	5,868	5,883	5,859	395	286	409	6.3	4.6	6.5
Region Six East	66,456	65,857	65,036	63,887	64,104	61,887	2,569	1,753	3,149	3.9	2.7	4.8
Kandiyohi	24,593	24,424	24,134	23,698	23,833	23,076	895	591	1,058	3.6	2.4	4.4
McLeod	19,224	19,211	19,187	18,493	18,696	18,227	731	515	960	3.8	2.7	5.0
Meeker Renville	; 13,268 9,371	13,182 9,040	13,136 8,579	: 12,705 8,991	12,793 8,782	12,459 8,125	: 563 380	389 258	677 : 454 ·	4.2 4.1	3.0 2.9	5.2 5.3
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^{*}Minneapolis-St. Paul Metropolitan Statistical Area (MSA) now includes Sherburne County in Minnesota and Pierce County in Wisconsin. St. Cloud MSA is now comprised of Benton and Stearns counties.

Numbers are unadjusted unless otherwise labeled. Source: Department of Employment and Economic Development, Local Area Unemployment Statistics, and North Dakota Job Service, 2017.

County/	La	bor Fo	rce	Er	nploym	ent	Une	employi	ment	Une	Rate of	
Area	Dec 2017	Nov 2017	Dec 2016	Dec 2017	Nov 2017	Dec 2016	Dec 2017	Nov 2017	Dec 2016	Dec 2017	Nov 2017	Dec 2016
Region Six West	24,284	23,947	24,122	23,284	23,296	22,938	1,000	651	1,184	4.1%	2.7%	4.9%
Big Stone	2,681	2,681	2,681	2,548	2,595	2,521	133	86	160	5.0	3.2	6.0
Chippewa	7,104	7,022	7,079	6,814	6,827	6,743	290	195	336	4.1	2.8	4.7
Lac Qui Parle	3,696	3,640	3,685	3,565	3,558	3,512	131	82	173	3.5	2.3	4.7
Swift Yellow Medicine	5,241 5,562	5,126 5,478	5,184 5,493	: 4,996 : 5,361	4,982 5,334	4,899 5,263	: 245 : 201	144 144	285 230	4.7 3.6	2.8 2.6	5.5 4.2
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Region Seven East	88,746	87,837	85,979	84,042	84,469	80,774	4,704	3,368	5,205	5.3	3.8	6.1
Chisago Isanti	29,722 20,986	29,590 20,891	28,948 20,377	28,521 20,011	28,711 20,156	27,510 19,297	1,201 975	879 735	1,438 1,080	4.0 4.6	3.0 3.5	5.0 5.3
Kanabec	9,294	9,098	8,951	8,620	8,644	8,226	674	454	725	7.3	5.0	8.1
Mille Lacs	13,153	12,963	12,791	12,293	12,378	11,870	860	585	921	6.5	4.5	7.2
Pine	15,591	15,295	14,912	14,597	14,580	13,871	994	715	1,041	6.4	4.7	7.0
Region Seven West	237,254	237,019	232,092	228,722	230,710	222,024	: 8,532	6,309	10,068	3.6	2.7	4.3
Benton	22,040	21,949	21,696	21,078	21,291	20,593	962	658	1,103	4.4	3.0	5.1
Sherburne	51,108	50,950	49,723	49,175	49,537	47,397	1,933	1,413	2,326	3.8	2.8	4.7
Stearns	89,686	89,890	88,333	86,673	87,590	84,780	3,013	2,300	3,553	3.4	2.6	4.0
Wright	74,420	74,230	72,340	71,796	72,292	69,254	2,624	1,938	3,086	3.5	2.6	4.3
Region Eight	64,525	64,527	65,741	62,426	63,018	62,994	2,099	1,509	2,747	3.3	2.3	4.2
Cottonwood	4,776	4,903	5,436	4,575	4,719	5,141	201	184	295	4.2	3.8	5.4
Jackson	6,041	6,008	6,035	5,857	5,869	5,780	184	139	255	3.0	2.3	4.2
Lincoln	3,373	3,342	3,459	3,246	3,273	3,300 14,637	127 443	69 292	159 606	3.8 2.9	2.1 1.9	4.6 4.0
Lyon Murray	15,377 4,879	15,273 4,840	15,243 5,000	: 14,934 : 4,648	14,981 4,699	4,691	231	141	309	4.7	2.9	6.2
Nobles	11,195	11,225	11,358	10,887	10,985	10,938	308	240	420	2.8	2.1	3.7
Pipestone	4,815	4,813	4,806	4,661	4,710	4,612	154	103	194	3.2	2.1	4.0
Redwood	8,241	8,255	8,465	7,913	8,019	8,103	328	236	362	4.0	2.9	4.3
Rock	5,828	5,868	5,939	5,705	5,763	5,792	123	105	147	2.1	1.8	2.5
Region Nine	134,421	134,437	132,578	129,803	131,155	127,249	4,618	3,282	5,329	3.4	2.4	4.0
Blue Earth	40,286	40,607	39,461	39,239	39,787	38,208	1,047	820	1,253	2.6	2.0	3.2
Brown	14,814	14,805	14,709	14,308	14,445	14,095	506	360	614	3.4	2.4	4.2
Faribault	7,142	7,176	7,277	6,843	6,961	6,926	299	215	351	4.2	3.0	4.8
Le Sueur Martin	16,195 10,512	15,941 10,406	15,773 10,404	: 15,258 : 10,145	15,371 10,130	14,782 10,001	937 367	570 276	991 403	5.8 3.5	3.6 2.7	6.3 3.9
Nicollet	20,766	20,910	20,387	20,285	20,557	19,784	481	353	603	2.3	1.7	3.0
Sibley	8,646	8,595	8,578	8,316	8,398	8,165	330	197	413	3.8	2.3	4.8
Waseca	9,432	9,420	9,383	9,036	9,142	8,974	396	278	409	4.2	3.0	4.4
Watonwan	6,628	6,577	6,606	6,373	6,364	6,314	255	213	292	3.8	3.2	4.4
Region Ten	283,818	282,996	279,386	275,536	276,699	269,393	: 8,282	6,297	9,993	2.9	2.2	3.6
Dodge	11,454	11,418	11,436	11,090	11,182	10,992	364	236	444	3.2	2.1	3.9
Fillmore	11,352	11,356	11,424	10,959	11,055	10,925	393	301	499	3.5	2.7	4.4
Freeborn	16,426	16,370	16,227	15,776	15,798	15,513	650	572	714	4.0	3.5	4.4
Goodhue	26,938	26,822	26,740	26,097	26,218	25,680	: 841	604	1,060	3.1	2.3	4.0
Houston	10,714	10,739	10,620	10,375	10,509	10,141	339 531	230	479 645	3.2	2.1	4.5
Mower Olmsted	20,556 84,587	20,566 84,706	20,478 83,639	20,025 82,364	20,162 82,929	19,833 81,080	2,223	404 1,777	645 2,559	2.6 2.6	2.0 2.1	3.1 3.1
City of Rochester	62,074	62,184	61,322	60,452	60,867	59,510	1,622	1,777	1,812	2.6	2.1	3.0
Rice	36,903	36,891	36,145	35,813	36,106	34,815	1,090	785	1,330	3.0	2.1	3.7
Steele	23,319	22,651	21,462	22,649	22,169	20,655	670	482	807	2.9	2.1	3.8
Wabasha	11,998	11,983	11,963	11,579	11,674	11,523	419	309	440	3.5	2.6	3.7
Winona	29,571	29,494	29,252	28,809	28,897	28,236	: 762 :	597	1,016	2.6	2.0	3.5
Region Eleven	1,700,094	1,704,823	1,648,696		1,664,849	1,592,147	46,672	39,974	56,549	2.7	2.3	3.4
Anoka	195,688	195,901	189,975	189,642	191,001	182,630	6,046	4,900	7,345	3.1	2.5	3.9
Carver	56,816	56,941	55,257	55,288	55,687	53,356	1,528	1,254	1,901	2.7	2.2	3.4
Dakota	239,356	239,909	232,091	232,780	234,462	224,152	6,576	5,447	7,939	2.7	2.3	3.4
Hennepin City of Bloomington	697,414 47,600	699,917 47,707	675,817 46,108	678,994 46,264	683,488 46,570	653,645 44 537	: 18,420 : 1 336	16,429 1,137	22,172 1,571	2.6 2.8	2.3 2.4	3.3 3.4
City of Minneapolis	238,256	239,227	230,952	231,987	233,522	44,537 223,326	1,336 6,269	5,705	7,626	2.8	2.4	3.4
Ramsey	287,725	288,608	279,149	279,666	281,578	269,283	8,059	7,030	9,866	2.8	2.4	3.5
City of St. Paul	157,708	158,198	153,035	153,216	154,264	147,528	4,492	3,934	5,507	2.8	2.5	3.6
Scott	81,728	81,743	79,251	79,467	80,034	76,538	2,261	1,709	2,713	2.8	2.1	3.4
Washington	141,367	141,804	137,156	137,585	138,599	132,543	3,782	3,205	4,613	2.7	2.3	3.4











Industrial Analysis

Overview

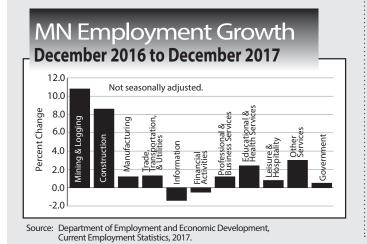
Minnesota added 8,900 jobs (0.3 percent) in December on a seasonally adjusted basis. This was on the heels of declines of 3,300 and 2,400 in November and October, respectively. December's increase was driven largely by Goods Producers, which added a substantial 5,200 jobs (1.2 percent), while Service Providers added 3,700 (0.1 percent). As such, the gains came primarily in the private sector, up 8,700 jobs (0.3 percent) while public sector employment was largely flat, up by just 200 (0.0 percent). Annually the state added 44,200 jobs (1.5 percent). As with the over-the-month estimates, annual growth was proportionally larger among Goods Producers, which grew by 13,960 jobs or 3.2 percent. Service Providers added more total jobs (30,240), although it represented growth of only 1.2 percent on the year. Private sector employment grew by 42,080 jobs (1.7 percent) while public sector employers added 2,120 jobs (0.5 percent).

Mining and Logging

Mining and Logging employment was up by 100 jobs (1.4 percent) in December. This is the second straight month with seasonally-adjusted job growth in the supersector. It represents the highest employment level in Mining and Logging since early 2015. Over the year Mining and Logging employers added 677 jobs (10.8 percent). The supersector had over-the-year employment growth of greater than 8 percent for every month in 2017 after having over-the-year job losses in every month of 2016.

Construction

Employment in Construction was up by 5,700 (4.5 percent) in December. It was the largest proportional over-the-month growth for any supersector in the state.



November's seasonally adjusted estimate was also revised up, from 1,800 to 2,100 jobs added. The supersector lost jobs in every month from July through October. Annually Construction employment was up by 9,394 (8.6 percent). Specialty Trade Contractors drove the growth, adding 8,403 jobs or 11.7 percent. Those marked the largest total and proportional growth of any component sector, although all three component sectors showed over-the-year gains.

Manufacturing

Employment in the Manufacturing supersector was off slightly in December, down 600 or 0.2 percent. It was the second consecutive month of declines in the industry group and came on the heels of five straight months of job growth. Annually Manufacturing employers added 3,889 jobs (1.2 percent). Durable Goods employers added 2,149 jobs (1.1 percent), while Non-Durable Goods employers added 1,740 (1.5 percent).

Trade, Transportation, and Utilities

Trade, Transportation, and Utilities employment was up by 1,800 (0.3 percent) in December. The gains came entirely in Transportation, Warehousing, and Utilities, which added 2,800 jobs (2.8 percent) over the holiday month. It was the largest single-month gain ever for the sector, which had shown seasonal losses in each of the previous three months. Wholesale Trade employers lost 1,000 jobs (0.7 percent), and Retail Trade employment was flat after losing 400 jobs (0.1 percent) in November. Annually the supersector added 7,027 jobs (1.3 percent). All three component sectors grew on the year. Wholesale Trade added 1,931 jobs (1.5 percent), Retail Trade added 3,516 (1.1 percent), and Transportation, Warehousing, and Utilities added 1,580 (1.5 percent).

Information

The Information supersector added 100 jobs (0.2 percent) in December. In November the supersector lost 700 jobs (1.4 percent). Annually Information employment was down by 696 (1.4 percent). It was the fifth consecutive month of over-the-year employment losses of more than 1 percent in the supersector.

^{*}Over-the-year data are not seasonally adjusted because of small changes in seasonal adjustment factors from year to year. Also, there is no seasonality in over-the-year changes.

Financial Activities

Employment in the Financial Activities supersector was down by 200 (0.1 percent) in December. Finance and Insurance added 100 jobs (0.1 percent), but Real Estate and Rental and Leasing lost 300 (0.9 percent). Annually the supersector lost 808 jobs (0.5 percent). It showed over-the-year job losses in five of the last six months of 2017. As with the monthly declines, the annual job loss was driven by Real Estate and Rental and Leasing which was off by 1,999 (5.9 percent) on the year.

Professional and Business Services

Professional and Business Services employment was down by 1,400 (0.4 percent) in December. Administrative and Support and Waste Management and Remediation Services lost the lion's share of the jobs, off by 1,600 (1.1 percent). Professional, Scientific, and Technical Services and Management of Companies and Enterprises had much more modest changes of +300 (0.2 percent) and -100 (0.1 percent), respectively. Annually the supersector added 4,424 jobs (1.2 percent). Administrative and Support and Waste Management and Remediation Services led the growth, adding 6,485 jobs (4.7 percent), with 5,067 of that coming from Employment Services. Management of Companies and Enterprises added 761 jobs (1 percent), while employment in Professional, Scientific, and Technical Services continued to show sharp over-the-year declines, off by 2,822 (1.8 percent) from December of 2016.

Educational and Health Services

Educational and Health Services employment was up by 2,500 (0.5 percent) in December. The gains came entirely from Health Care and Social Assistance (up 3,100 or 0.7 percent) as Educational Services employers shed jobs on the month (down 600 or 0.9 percent). Over the year the supersector added 12,626 jobs (2.4 percent). As with the monthly change, this growth came entirely from Health Care and Social Assistance, which added 16,200 jobs (3.5 percent), with growth in all four of its component sectors – Ambulatory Health Care, Hospitals, Nursing and Residential Care Facilities, and Social Assistance. Educational Services employment dropped by 3,574 (5.1 percent).

Leisure and Hospitality

Leisure and Hospitality employment was up by 1,800 (0.7 percent) in December. November's sharp decline was also revised upward slightly, settling in at a loss of 6,600,

Industrial Analysis

from a preliminary estimate of -7,500. Both component sectors added jobs In December, as Arts, Entertainment, and Recreation was up by 1,400 (3.4 percent), and Accommodation and Foods Services was up 400 (0.2 percent). Annually employment in the supersector was up by 2,095 (0.8 percent), a marked recovery from November's over-the-year decline of 0.5 percent and another sign that Minnesota's seasonal patterns in this industry may have been somewhat askew in 2017. Arts, Entertainment, and Recreation added 3,150 jobs (9.1 percent) while Accommodation and Food Services lost 1,055.

Other Services

Other Services employment was down by 1,100 (0.9 percent) in December, its second consecutive month of seasonally adjusted declines. Annually the supersector added 3,452 jobs (3 percent). All three component sectors – Repair and Maintenance, Personal and Laundry Services, and Religious, Grantmaking, Civic, Professional, and Similar Organizations – grew over the year.

Government

Government employers added 200 jobs (0.0 percent) in December. State Government added 500 (0.5 percent), Local Government lost 300 (0.1 percent), and Federal Government was flat. Annually Government employment was up by 2,120 (0.5 percent). State Government saw the largest total and proportional increases, up by 1,478 or 1.5 percent.

by Nick Dobbins

Seasonally Adjusted

Nontarm Employn	nent	In '	1,000's
Industry	Dec 2017	Nov 2017	Sept 2017
Total Nonagricultural	2,949.8	2,958.7	2,953.1
Goods-Producing	450.5	455.7	448.8
Mining and Logging	7.1	7.2	7.0
Construction	121.6	127.3	119.5
Manufacturing	321.8	321.2	322.3
Service-Providing	2,499.3	2,503.0	2,504.3
Trade, Transportation, and Utilities	540.4	542.2	539.7
Information	49.4	49.5	50.1
Financial Activities	176.3	176.1	175.8
Professional and Business Services	381.4	380.0	379.2
Educational and Health Services	540.6	543.1	539.6
Leisure and Hospitality	261.1	262.9	267.7
Other Services	119.6	118.5	121.1
Government	430.5	430.7	431.1

Source: Department of Employment and Economic Development Current Employment Statistics, 2017.

St. Cloud MSA

Regional Analysis

Minneapolis-St. Paul-Bloomington Metropolitan Statistical Area (MSA)

Employment in the Minneapolis-St. Paul MSA was down by 7,491 (0.4 percent) in December. This was well within the normal range for declines, which have fallen between -0.2 and -0.6 in every December since 2009. Mining, Logging, and Construction lost 5,977 jobs (7.2 percent), and Professional and Business Services lost 3,498 (1 percent) with a loss of 2,469 (4.2 percent) in Employment Services. Leisure and Hospitality employment, which was off by 4.3 percent in November and by 1.8 percent last December, was flat. Trade, Transportation, and Utilities saw the most notable increase, up 4,250 (1.2 percent) with a gain of 3,088 (4.3 percent) in Transportation, Warehousing, and Utilities. That represents the largest December increase the component sector has ever seen, by a relatively large margin - the previous biggest December increase in Transportation, Warehousing, and Utilities was 2.2 percent in 2015 - although the sector also had an uncharacteristic decline in November (down 0.8 percent). Annually the metro area added 46,639 jobs (2.4) percent). Over-the-year growth has been above 2 percent in every month since May. Two supersectors maintained their annual job losses, Information (down 1.3 percent) and Financial Activities (down 1.2 percent). Every other supersector in the metro added jobs on the year. Notable increases included Educational and Health Services (up 12,275 or 3.7 percent on the strength of 14,564 new jobs in Health Care and Social Assistance), and Leisure and Hospitality (up 6,966 or 4.1 percent with growth split between component sectors Arts, Entertainment, and Recreation and Accommodation and Food Services).

Duluth - Superior MSA

The Duluth-Superior MSA lost 815 jobs (0.6 percent) in December. This is the lowest over-the-month decline in the area since 2012. The biggest loss, both proportionally and in actual jobs, came in Mining, Logging, and Construction (down 278 or 2.7 percent). The largest gain came in Financial Activities (up 72 or 1.2 percent). Over the year the Duluth MSA added 2,868 jobs (2.1 percent), with almost every supersector adding employment. The lone exception was the long-struggling Information supersector which lost 26 jobs (1.8 percent). Mining, Logging, and Construction continued to post the most impressive over-the-year growth, adding 1,080 jobs or 11.9 percent. The next largest proportional growth came in Financial Activities which added 226 jobs or 3.8 percent. The same supersector has had over-the-year job losses at the state level since October.

Rochester MSA

Employment in the Rochester MSA was down by 406 (0.3 percent) in December. Mining, Logging, and Construction led the decline, losing 375 jobs (7.7 percent). Other notable declines occurred in Trade, Transportation, and Utilities (off by 106 or 0.6 percent with a loss of 101 or 0.8 percent in Retail Trade) and Leisure and Hospitality (down 104 or 1 percent). It was the first December since 2008 where Retail Trade employment declined in December. Over the year Rochester added 159 jobs (0.1 percent). Mining, Logging, and Construction added 353 jobs (8.5 percent), but that growth was countered by a loss of 491 (1 percent) in Educational and Health Services. Also of note, Other Services added 136 jobs or 3.4 percent.

Employment in the Saint Cloud MSA was off by 697 or 0.6 percent in December. The only supersector to add 100 or more jobs was Manufacturing (up 225 or 1.5 percent). Notable job losses occurred in Mining, Logging, and Construction (down 494 or 6.7 percent) and Trade, Transportation, and Utilities which lost jobs for the first time since 2012 (down 122 or 0.5 percent). Employment in the Transportation, Warehousing, and Utilities component, however, was up by 2.2 percent (85 jobs). Annually the Saint Cloud MSA added 1,345 jobs (1.2 percent). As was common across the state, Mining, Logging, and Construction led the growth, adding 538 jobs (8.5 percent). Leisure and Hospitality added 227 jobs (2.8 percent).

Mankato-North Mankato MSA

The Mankato-North Mankato MSA lost 591 jobs (1 percent) in December. All reported industry groups lost jobs on the month. Annually the Mankato area added 967 jobs (1.7 percent). All reported industry groups gained employment on the year. The largest proportional increase came among Goods Producers which added 452 jobs (4.6 percent) while Service Providers added 515 (1.1 percent).

Fargo-Moorhead MSA

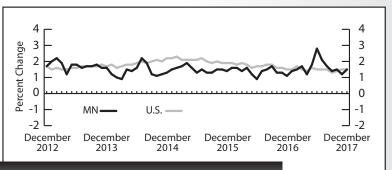
The Fargo-Moorhead MSA lost 1,277 jobs (0.9 percent) in December. As is the norm this month, Mining, Logging, and Construction led the declines, off 937 or 9.2 percent. Manufacturing had the largest proportional gain, up 366 or 3.6 percent. Annually the MSA added 1,244 jobs (0.9 percent). Mining, Logging, and Construction added 560 jobs (6.5 percent). Leisure and Hospitality lost 425 (3 percent).

Grand Forks-East Grand Forks MSA

The Grand Forks-East Grand Forks MSA lost 650 jobs (1.1 percent) in December. This was the largest proportional over-the-month decline of any MSA in the state. Educational and Health Services (up 62 or 0.6 percent) was the only supersector to gain doubledigit jobs on the month. Annually the Grand Forks-East Grand Forks MSA lost 1,758 jobs (3 percent). It remained the only MSA in the state to lose employment on an overthe-year basis. As with November's estimates, much of the trouble was caused by a loss of 1,007 (24.5 percent) in the Mining, Logging, and Construction supersector.

by Nick Dobbins

Source: Department of **Employment** and Economic Development, Current **Employment** Statistics, 2017: Bureau of Labor Statistics, U.S. Department of Labor, Current **Employment** Statistics, 2017.



Total Nonfarm Jobs

U.S. and MN over-the-year percent change

Employer Survey of Minnesota Nonfarm Payroll Jobs, Hours and Earnings

Numbers are unadjusted. Note: State,	•	Jobs*		Percent	Change	Prod	uction \	Norkers	Hours a	and Earr	nina
	(Thousand		Fror	_					Average	
Industry	(mousanc	13)			Earn		Ho		Earn	
illaastiy	Dec	Nov	Dec	Nov	Dec	Dec	Dec	Dec	Dec	Dec	D
	2017	2017	2016	2017	2016	2017	2016	2017	2016	2017	20
OTAL NONFARM WAGE AND SALARY	2,959.2	2,967.2	2,915.0	-0.3%	1.5%	<u> </u>	_	<u> </u>	_	_	_
OODS-PRODUCING	446.2	454.6	432.2	-1.9	3.2	: – : –	_	<u> </u>	_	_	_
Mining, Logging, and Construction	125.7	133.1	115.6	-5.6	8.7	<u> </u>	_	_	_	_	_
Mining and Logging	6.9	7.2	6.2	-4.4	10.8	<u>:</u> –	_	· —	_	_	_
Construction	118.7	125.8	109.3	-5.6	8.6	: 		:	:		_
Specialty Trade Contractors	80.2 320.5	83.1 321.5	71.8 316.6	-3.6 - 0.3	11.7 1.2	\$1,288.90 895.99	\$1,236.66 827.83	39.2 41.5	37.6 40.6	\$32.88 21.59	\$32 20
Manufacturing Durable Goods	202.7	203.2	200.5	-0.3	1.1	939.66	866.81	41.8	40.6	22.48	21
Wood Product Manufacturing	11.7	11.5	11.3	1.2	3.4	: 757.00	_	: II.0	_	_	_
Fabricated Metal Production	42.0	41.9	41.7	0.3	0.6	: _	_	: _	_	_	_
Machinery Manufacturing	32.0	31.8	32.8	0.5	-2.6	: –	_	-	_	_	-
Computer and Electronic Product	45.7	45.5	45.7	0.5	0.0	: -	_	_	_	_	-
Navigational, Measuring, Electromedical and Control	26.7 10.6	26.6 10.6	26.4 10.8	0.3	0.9 -1.9	-	_	<u> </u>	_	_	-
Transportation Equipment Medical Equipment and Supplies Manufacturing	16.2	16.3	16.2	-0.2	0.2	=	_	<u> </u>	_	_	-
Nondurable Goods	117.8	118.4	116.1	-0.4	1.5	822.09	 761.81	40.9	40.5	20.10	1
Food Manufacturing	47.2	48.4	46.3	-2.4	1.9	-	_	_	_	_	-
RVICE-PROVIDING	2,513.1	2,512.6	2,482.8	0.0	1.2	<u> </u>	_	<u> </u>	_	_	-
Frade, Transportation, and Utilities	553.2	548.8	546.2	0.8	1.3	<u>:</u> –	_	: : –	_	_	
Wholesale Trade	133.0	134.5	131.0	-1.1	1.5	955.30	879.73	39.2	38.5	24.37	2
Retail Trade	312.5	310.9	309.0	: 0.5	1.1	: 448.80	416.18	30.0	29.6	14.96	1
Motor Vehicle and Parts	36.5	36.3	35.9	0.7	1.6	: -	_	: –	- :	_	
Building Material and Garden Equipment	25.5 56.8	25.8 55.9	25.5 56.4	-1.2 1.7	0.2 0.7	: -	_	: -	- :	_	
Food and Beverage Stores Gasoline Stations	25.6	25.8	25.1	-0.6	2.1	: _	_	: _	_	_	
General Merchandise Stores	65.7	64.7	65.4	1.5	0.5	433.29	382.76	33.0	32.3	13.13	1
Transportation, Warehouse, Utilities	107.8	103.3	106.2	4.3	1.5	: –	_	: –	_	_	
Transportation and Warehousing	95.5	91.0	93.8	5.0	1.8	734.50	725.70	35.5	35.4	20.69	2
nformation	50.0	49.9	50.7	0.2	-1.4	1,047.46	1,014.54	33.8	34.9	30.99	2
Publishing Industries	18.2	18.3	19.1	-0.2	-4.5	: -	_	: -	-	_	-
Telecommunications	11.9 176.2	11.8 175.4	11.9 177.0	1.1 0.4	0.4 - 0.5	: -	_	<u> </u>	_	_	
Financial Activities Finance and Insurance	144.1	143.0	142.9	0.8	0.8	. — : 1,122.32	1.073.48	. — 37.2	36.7	30.17	2
Credit Intermediation	63.1	63.0	63.0	0.0	0.1	804.29	746.67	35.4	34.6	22.72	2
Securities, Commodity Contracts, and Other	19.7	19.3	19.5	2.0	0.8	<u> </u>	_	: -	_	_	-
Insurance Carriers and Related	61.3	60.7	60.4	1.1	1.6	_	_	· –	_	_	
Real Estate and Rental and Leasing	32.1	32.4	34.1	-0.9	-5.9	<u> </u>	_	_	_	_	
Professional and Business Services	380.5	381.9	376.1	-0.4	1.2	<u> </u>	_	-	_	_	-
Professional, Scientific, and Technical Services	155.1 18.3	153.6	157.9 18.3	0.9 1.1	-1.8	: –	_	_	_	_	
Legal Services Accounting, Tax Preparation	17.2	18.1 16.3	17.2	5.8	0.2 0.0	: -	_	<u> </u>	_	_	
Computer Systems Design	36.9	37.5	38.0	-1.5	-2.9	: -	_	_	_ :	_	
Management of Companies and Enterprises	80.7	80.5	79.9	0.2	1.0	_	_	_	_	_	
Administrative and Support Services	144.8	147.8	138.3	-2.0	4.7	: _	_	_	_	_	-
Educational and Health Services	544.0	545.1	531.4	-0.2	2.4	: –	_	_	_	_	
Educational Services	66.2	69.4	69.8	-4.6	-5.1	: –	_	· –	- :	_	
Health Care and Social Assistance	477.8 159.8	475.7 158.8	461.6 152.2	0.4	3.5 5.0	: — : 1 274 00	1 221 01		— 36.1	— 36.86	
Ambulatory Health Care Offices of Physicians	75.2	74.9	73.0	0.8	3.0	1,374.88	1,331.01	37.3	30.1		3
Hospitals	109.2	109.4	107.8	-0.2	1.3	=		<u> </u>		_	
Nursing and Residential Care Facilities	110.3	108.6	108.6	1.6	1.6	470.49	472.12	28.9	29.0	16.28	1
Social Assistance	98.5	98.8	93.1	-0.4	5.8	<u> </u>	_	· –	_	_	
eisure and Hospitality	251.2	251.2	249.1	0.0	0.8	<u> </u>	_	: -	_	_	
Arts, Entertainment, and Recreation	37.8	35.9	34.6	5.2	9.1	; –	_	<u> </u>	- :	_	
Accommodation and Food Services	213.5 191.6	215.3 192.8	214.5 190.0	-0.8 -0.6	-0.5 0.8	: — 273.00	— 271.69	. — 19.5	20.2	 14.00	1
Food Services and Drinking Places Other Services	191.6 119.8	192.8 120.9	190.0 116.3	-0.6 - 0.9	0.8 3.0	2/3.00	2/1.09	: 19.5	20.2	14.00	
Religious, Grantmaking, Civic, Professional Organizations	66.4	67.4	64.5	-1.4	2.9	<u> </u>	_	: -	_ :	_	
Sovernment	438.2	439.5	436.0	-0.3	0.5						
Federal Government	32.2	32.0	32.6	0.3	-1.3						
State Government	102.9	104.5	101.4	-1.5	1.5	Note: 1	Not all indu	stry subgrou	ups are show	vn for every	majo
State Government Education	63.6	65.3	62.8	-2.7	1.1	i	ndustry cat	egory.			
Local Government	303.1	302.9	302.1	0.1	0.4	* -	Totale near	not add be	auco of so	nding	
Local Government Education	153.9	155.5	153.4	: -1.1	0.3	1	i Utais IIIdy I	not add bec	ause oi roul	iuli ig.	

Source: Department of Employment and Economic Development, Current Employment Statistics, 2017.

Employer Survey of Twin Cities Nonfarm Payroll Jobs, Hours and Earnings

ndustry	(1	Thousand	ls)	Fror	n**	Average Earn		Average Hou		Average Earni	
iiddsti y	Dec 2017	Nov 2017	Oct 2016	Nov 2017	Dec 2016	Dec 2017	Dec 2016	Dec 2017	Dec 2016	Dec 2017	De 201
TAL NONFARM WAGE AND SALARY	2,019.1	2,026.6	1,972.5	-0.4%	2.4%		_	_	_	_	_
GOODS-PRODUCING	278.6	285.1	267.1	-2.3	4.3		_	_ 	_		_
Mining, Logging, and Construction	77.3	83.2	70.1	-7.2	10.2	<u> </u>	_	<u> </u>	_	: –	_
Construction of Buildings	17.2	17.2	16.9	-0.2	1.9	: -		: –	- :	:	_
Specialty Trade Contractors	54.1	56.9	48.8	-4.9		\$1,377.79		38.8	36.8	\$35.51	\$35.5
Manufacturing Durable Goods	2 01.3	201.9 138.0	197.0 134.1	- 0.3 -0.4	2.2 2.5	976.27	893.08 919.64	42.2 42.8	41.5 41.5	22.07 22.81	21. 22.
Fabricated Metal Production	29.6	29.7	29.0	-0.5	2.2	- 770.27	—	: -	-		
Machinery Manufacturing	20.0	19.7	20.3	1.7	-1.8	-	_	:	_	: -	_
Computer and Electronic Product	37.1	36.9	37.2	0.4	-0.3	: -	_	: -	-	: -	_
Navigational, Measuring, Electromedical and Control	25.0	24.9	24.8	0.4	0.7	<u> </u>	_	: <u> </u>	_	: <u> </u>	_
Medical Equipment and Supplies Manufacturing	14.7 63.9	14.9	14.9 62.9	-0.9 0.2	-1.4 1.6	:		40.9			20.2
Nondurable Goods Food Manufacturing	14.9	63.8 15.4	15.1	-3.3	-1.7	: 837.63 : —	844.06	. 40.9 : —	41.6	20.48	20.2
Printing and Related	14.7	14.7	15.0	0.0	-2.0	: -	_	: –	_ :	· —	_
SERVICE-PROVIDING	1,740.5	1,741.5	1,705.4	-0.1	2.1	<u> </u>	_	_	_	_	_
Trade, Transportation, and Utilities	373.4	369.1	364.3	1.2	2.5	<u> </u>	_	_	_	_	_
Wholesale Trade	98.3	98.8	96.7	-0.4	1.7	943.71	851.21	38.3	39.1	24.64	21.
Merchant Wholesalers - Durable Goods	49.1	49.5	48.5	-1.0	1.1	<u> </u>	-	: -	-	-	_
Merchant Wholesalers - Nondurable Goods	28.5	28.5	27.9	-0.1	2.1		-	_	_	_	_
Retail Trade	199.5 35.4	197.9 34.8	194.9 34.9	0.8	2.4 1.3	465.74	436.49	31.3	31.2	14.88	13.
Food and Beverage Stores General Merchandise Stores	40.4	39.3	40.4	2.8	0.0	421.94	361.56	34.0	34.5	12.41	10.
Transportation, Warehouse, Utilities	75.6	72.5	72.7	4.3	3.9	: -	_	: -	_ :	: - <u>-</u>	_
Utilities	7.5	7.6	7.5	-1.0	1.0	: -	_	: —	- :	: —	_
Transportation and Warehousing	68.0	64.9	65.2	4.9	4.3	756.89	712.22	37.6	35.7	20.13	19.
Information	37.7	37.7	38.2	: -0.1	- 1.3 -5.1	: _	_	: _	_	: _	_
Publishing Industries Telecommunications	14.3	14.4 8.7	15.1 8.6	-0.4 0.7	-5.1 1.1	: _	_	_	_	_	_
Financial Activities	141.3	141.0	142.9	0.2	-1.2	: –	_	· —	_	_	_
Finance and Insurance	114.9	114.7	115.1	0.2	-0.1	1,212.43	1,152.55	37.7	37.0	32.16	31.
Credit Intermediation	46.2	46.4	46.7	-0.4	-1.1	-	_	: -	-	· –	_
Securities, Commodity Contracts, and Other	17.0	17.0	17.4	-0.2	-2.5	-	_ :	=	_	=	_
Insurance Carriers and Related	51.7	51.3 26.3	50.9 27.9	0.8	1.6 -5.5	_	_	: _	_ :	: <u> </u>	_
Real Estate and Rental and Leasing Professional and Business Services	329.7	333.2	326.2	-1.0	-3.3 1.1		_	: _	_	: _	_
Professional, Scientific, and Technical Services	139.0	139.6	141.9	-0.5	-2.0	: -	-	: –	_	: –	_
Legal Services	15.7	15.5	15.7	1.1	0.2	: -	-	· —	-	: -	_
Architectural, Engineering, and Related	18.9	19.1	18.5	-0.7	2.5	: -	-	: -	-	: –	_
Computer Systems Design	33.4	34.1	35.2	-2.1	-5.2	: _	_ :	: _	_ :	: _	_
Management of Companies and Enterprises Administrative and Support Services	73.5 117.3	73.3 120.3	72.3 112.0	0.2 -2.5	1.6 4.7	: _	_	_	_	=	
Employment Services	56.7	59.2	54.3	-4.2	4.3	: —	_	· —	_	<u> </u>	_
Educational and Health Services	339.9	340.1	327.7	0.0	3.7	: -	_	: -	_	<u> </u>	_
Educational Services	45.1	46.1	47.4	-2.1	-4.8	: -	_	-	_	_	_
Health Care and Social Assistance	294.8	294.0	280.3	0.3	5.2	<u> </u>	_	: _	- :	<u> </u>	_
Ambulatory Health Care	95.1 64.2	94.5 64.1	90.1 62.9	0.6	5.5 2.0	<u> </u>	_ :	: <u> </u>	_	: _	
Hospitals Nursing and Residential Care Facilities	61.5	61.3	59.9	0.1	2.6	_	_	: _	_	: _	_
Social Assistance	74.1	74.0	67.3	0.1	10.0	-	_	: –	_	· —	_
Leisure and Hospitality	178.3	178.3	171.3	0.0	4.1	: -	-	· —	-	: -	_
Arts, Entertainment, and Recreation	32.3	31.8	29.9	1.6	7.9	:		: -	_ :		_
Accommodation and Food Services	146.0	146.6	141.4	-0.4	3.2	299.31	298.28	20.8	21.2	14.39	14.
Food Services and Drinking Places Other Services	132.4 81.3	132.3 81.9	129.6 79.7	0.1 - 0.7	2.2 2.0	294.55	291.35 —	20.3	20.9	14.51 —	13.
Repair and Maintenance	15.4	15.4	14.9	-0.7	3.7	: -	_	<u> </u>	_	<u> </u>	_
Religious, Grantmaking, Civic, Professional Organizations	•	42.6	41.7	-0.3	1.7						
Government	258.9	260.2	255.1	-0.5	1.5						
Federal Government	21.5	21.4	21.7	0.4	-0.8					major	
	: 67.5	68.7	66.6	: -1.8	1.3	Industry category					
State Government		42.0	40.0	. 40	0.0	1	iliuusti y cat	egory.			
State Government State Government Education Local Government	41.2	42.9 170.1	40.8 166.9	-4.0 -0.1	0.9 1.8			not add beca	auco of ro	ading	

Source: Department of Employment and Economic Development, Current Employment Statistics, 2017.

Employer Survey

Industry

GOODS-PRODUCING

Mining, Logging, and Construction Manufacturing

SERVICE-PROVIDING

Trade, Transportation, and Utilities Wholesale Trade

Retail Trade

Transportation, Warehouse, Utilities

Information

Financial Activities

Professional and Business Services

Educational and Health Services

Leisure and Hospitality

Other Services

Government

:	[Duluth-	-Superi	or MSA		•	Rock	nester l	MSA	
:		Jobs		% Chg.	From	•	Jobs		% Chg. l	From
	Dec 2017	Nov 2017	Dec 2016	Nov 2017	Dec 2016	Dec 2017	Nov 2017	Dec 2016	Nov 2017	Dec 2016
:	138,401	139,216	135,533	-0.6%	2.1%	119,165	119,571	119,006	-0.3%	0.1%
:	17,521	17,869	16,387	-1.9	6.9	14,976	15,382	14,627	-2.6	2.4
:	10,188	10,466	9,108	-2.7	11.9	4,487	4,862	4,134	-7.7	8.5
:	7,333	7,403	7,279	-0.9	0.7	10,489	10,520	10,493	-0.3	0.0
:	120,880	121,347	119,146	-0.4	1.5	104,189	104,189	104,379	0.0	-0.2
:	26,072	26,051	25,550	0.1	2.0	18,272	18,378	18,419	-0.6	-0.8
:	3,246	3,286	3,140	-1.2	3.4	2,699	2,730	2,721	-1.1	-0.8
:	16,300	16,318	15,929	-0.1	2.3	12,661	12,762	12,757	-0.8	-0.8
:	6,526	6,447	6,481	1.2	0.7	2,912	2,886	2,941	0.9	-1.0
:	1,380	1,364	1,406	1.2	-1.8	1,869	1,868	1,871	0.1	-0.1
:	6,137	6,065	5,911	1.2	3.8	2,730	2,725	2,662	0.2	2.6
:	8,138	8,242	8,043	-1.3	1.2	5,531	5,576	5,458	-0.8	1.3
:	32,241	32,311	31,898	-0.2	1.1	48,489	48,385	48,980	0.2	-1.0
:	13,055	13,285	12,738	-1.7	2.5	10,216	10,320	10,139	-1.0	0.8
:	6,251	6,218	6,153	0.5	1.6	4,116	4,130	3,980	-0.3	3.4
	27,606	27,811	27,447	-0.7	0.6	12,966	12,807	12,870	1.2	0.7

Employer Survey

Industry

TOTAL NONFARM WAGE AND SALARY

GOODS-PRODUCING

Mining, Logging, and Construction Manufacturing

SERVICE-PROVIDING

Trade, Transportation, and Utilities

Wholesale Trade

Retail Trade Transportation, Warehouse, Utilities

Information

Financial Activities

Professional and Business Services

Educational and Health Services

Leisure and Hospitality

Other Services Government

C+			MSA
ST.	u	ошо	IVIDA

110

22,

15

88.451

22.535

5.017

13,581

3.937

1.595

4.934

8.679

22.858

8,437

3.848

15,565

88,879

22.657

5.050

13,755

3,852

1,584

4,932

8.719

22,848

8,550

3,836

15,753

	Jobs		% Chg.	From
Dec 2017	Nov 2017	Dec 2016	Nov 2017	Dec 2016
0,587	111,284	109,242	-0.6%	1.2%
,136 5,853 5,283	22,405 7,347 15,058	21,375 6,315 15,060	- 1.2 -6.7 1.5	3.6 8.5 1.5

87,867

22,818

4,718

14.074

4.026

1,634

4.973

8,627

22,253

8,210

3.751

15,601

-	3.6		
3	0.0		
9	3.5		
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	16		

2.7

2.8

2.6

-0.2

-0.5

-0.7

-1.3

2.2

0.7

0.0

-0.5

0.0

-1.3

0.3

-1.2

Mankato MSA

	Jobs		% Chg.	From
Dec 2017	Nov 2017	Dec 2016	Nov 2017	Dec 2016
58,865	59,456	57,898	-1.0	1.79
10,193	10,367	9,741	-1.7	4.6
48,672	49,089	48,157	-0.8	1.1
10,644	10,900	10,443	-2.3	1.9

Employer Survey

Industry

GOODS-PRODUCING

Mining, Logging, and Construction Manufacturing

SERVICE-PROVIDING

Trade, Transportation, and Utilities

Wholesale Trade Retail Trade

Transportation, Warehouse, Utilities

Information

Financial Activities

Professional and Business Services

Educational and Health Services

Leisure and Hospitality

Other Services Government

Fargo-Moorhead MSA

Jobs % Chg. From Dec Nov Dec Nov Dec 2017 2017 2016 2017 2016 145,799 144,522 19,800 20,371 9,214 10,151 10,586 10,220 124,722 125,428 30,861 30,895 9,222 9.215

5.530

19,388

143,278	-0.9%	0.9%
18,639	-2.8	6.2
8,654	-9.2	6.5
9,985	3.6	6.0
124,639	-0.6	0.1
31,430	-0.1	-1.8
9,099	0.1	1.4
16,632	-0.4	-4.6
5,699	0.4	1.4
3,225	1.5	-2.4
11,309	0.6	2.7
15,985	-3.5	1.3
23,696	-0.1	1.8
14,076	-1.2	-3.0

-0.1

0.0

0.7

0.9

Grand Forks-East Grand Forks MSA

	Jobs		% Chg. I	rom
Dec 2017	Nov 2017	Dec 2016	Nov 2017	Dec 2016
57,340	57,990	59,098	-1.1%	-3.0%
7,496	7,800	8,267	-3.9	-9.3
3,101	3,410	4,108	-9.1	-24.5
4,395	4,390	4,159	0.1	5.7
49,844	50,190	50,831	-0.7	-1.9
11,947	11,956	12,281	-0.1	-2.7
1,879	1,861	1,887	1.0	-0.4
7,863	7,881	8,045	-0.2	-2.3
2,205	2,214	2,349	-0.4	-6.1
579	578	595	0.2	-2.7
1,875	1,868	1,854	0.4	1.1
2,939	3,004	3,054	-2.2	-3.8
9,990	9,928	9,785	0.6	2.1
5,915	5,988	6,265	-1.2	-5.6
1,944	1,945	1,962	-0.1	-0.9
14,655	14,923	15,035	-1.8	-2.5

Source: Department of Employment and Economic Development, Current Employment Statistics, and North Dakota Job Service, 2017.

15.861

5,778

3,148

11.613

16,196

24,131

13.651

5,568

19,554

15.927

5,753

3,103

11.547

16.788

24,143

13,816

5,575

19,561

Minnesota Economic Indicators

Highlights

The Minnesota Index spiked again in December, advancing 0.6 percent. Over the last three months the index has increased on average 0.7 percent which is the highest three-month average since early 1994. The index's advance was powered by another drop in the unemployment rate which fell from 3.2 percent to 3.1 percent in December, increasing wage and salary employment, a bump in average weekly manufacturing hours, and rising paychecks. The U.S. index advanced 0.2 percent.

Minnesota's index was up 4.9 percent over the year which was the highest gain since August 2014. The index's overthe-year growth rate slowed in 2016, reaching a low of 2.0 percent in June 2016. Since then the state's economy has gained momentum aided by a rebounding Manufacturing sector. The U.S. index over-the-year growth in December was 2.7 percent. Minnesota's index trailed the national index during the first half of 2017 but raced ahead during the second half of the year.

Minnesota's adjusted **Wage and Salary Employment** rose for the first time in three months in December, adding 8,900 positions. Private sector employment increased by 8,700 jobs while public sector employment was up 200 jobs. The private sector job gain was the highest since April. Job growth was strong in Construction, Educational and Health Services, Leisure and Hospitality, and Trade, Transportation, and Utilities. Professional and Business Services and Other Services cut the most jobs.

Minnesota's unadjusted over-the-year job growth increased to 1.5 percent in December, matching the unadjusted U.S. job growth. Minnesota's annual average job growth for 2017 was 1.7 percent compared to 1.6 percent for the U.S. Last year's employment numbers, however, will be revised over the next few months and released in March as survey data are compared to actual unemployment insurance employment records.

Early indications suggest that
Minnesota's job growth will be revised
downward for 2017 and fall below the U.S.
rate for the fourth year in a row.

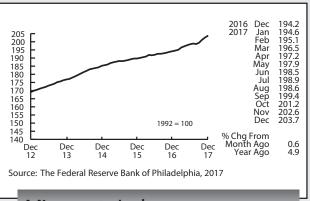
Annual average 2017 job growth for Minnesota's neighbors before the coming benchmarking was 1.0 percent in Iowa, 0.7 percent in North Dakota, 0.9 percent in South Dakota, and 1.2 percent in Wisconsin.

Online Help-Wanted Ads climbed in December to 140,400, the highest level since May 2016. Online job postings increased 5.1 percent in Minnesota while nationwide postings jumped 5.2 percent. Minnesota's share of U.S. online help-wanted ads inched down to 2.8 percent from 2.9 percent. The state's share of wage and salary employment in December remained at 2.0 percent. Minnesota's share of nationwide online help-wanted ads continues to be disproportionately higher than its share of national employment.

Minnesota's **Purchasing Managers' Index (PMI)** zigzagged down in
December, tailing off to 56.8. The index
has been slipping since peaking early

in 2017, indicating that Minnesota's manufacturing activity, after having accelerated in the first half of 2017, has settled into a steady healthy expansion path. The corresponding national index increased to 59.7 while the Mid-American index rose to 59.0.

Adjusted **Manufacturing Hours** rose for the second straight month to 41.1 in December. The factory



Minnesota Index

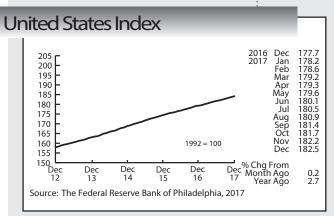
workweek for 2017 average 41.0 hours up from 40.6 and 40.7 in 2015 and 2016 but short of the 41.7 hours averaged in 2014. Average weekly **Manufacturing Earnings** skyrocketed in December to \$891.47. That is the highest real factory paycheck ever recorded over the 47-years of manufacturing earnings data. December's real earnings topped the previous high of \$887.24 recorded in March 2016. Annual average manufacturing earnings were up 2.7 percent in real terms from 2016.

The Minnesota Leading Index dipped in December for the second consecutive month to 2.7 but remains elevated by historical standards. The high reading suggests robust economic growth in Minnesota during the first half of 2018. The leading index, however, is based on several indicators - wage and salary employment and unemployment rate - that will be revised early in 2018.

Adjusted **Residential Building Permits** edged down slightly to 1,905 in December. Home-building permits have been essentially flat since August. Building permits in 2017 topped 2016 but by just 4.2 percent after having increased 20.5 and 15.3 percent respectively in 2015 and 2016

Adjusted **Initial Claims for Unemployment Benefits (UB)** inched down to 16,737. Initial claims for all of 2017 were 10.9 percent lower than the 2016 total. Initial claim levels have dropped for eight straight years which is easily the longest streak of falling annual initial claim totals. The previous longest streak was only four years long, 1996-1999.

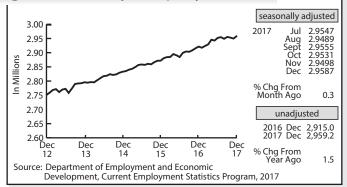
by Dave Senf



Note: All data except for Minnesota's PMI have been seasonally adjusted. See the feature article in the Minnesota Employment Review, May 2010, for more information on the Minnesota Index.

Minnesota Economic Indicators

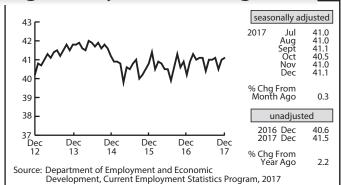
Wage and Salary Employment



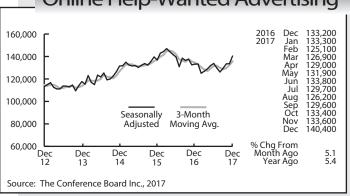
Purchasing Managers' Index



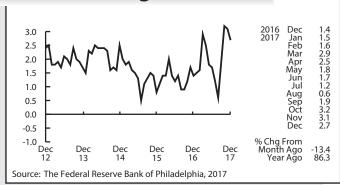
Average Weekly Manufacturing Hours



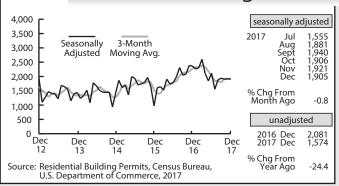
Online Help-Wanted Advertising



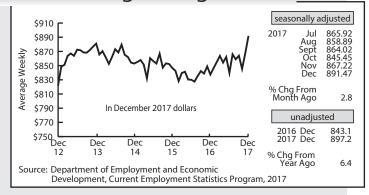
Minnesota Leading Index



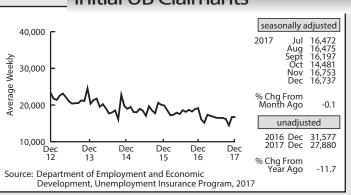
Residential Building Permits



Manufacturing Earnings



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U.S. Consumer Price Index

for All Urban Consumers (CPI-U)

The Consumer Price Index for All Urban Consumers (CPI-U) increased 0.1 percent in December on a seasonally adjusted basis the U.S. Bureau of Labor Statistics reported today. An increase of 0.4 percent in the shelter index accounted for almost 80 percent of the one-month all items increase. The food index rose in December, as did the indices for food at home and food away from home.

The all items index rose 2.1 percent for the 12 months ending December, compared to 2.2 percent for the 12 months ending November. The index for all items less food and energy increased 1.8 percent over the last year; the 12-month change has now been either 1.7 or 1.8 percent for eight consecutive months.

https://www.bls.gov/cpi/#news



For more information on the U.S. CPI or the semi-annual Minneapolis-St. Paul CPI, call: 651.259.7384 or toll free 1.888.234.1114.

The employment and unemployment data in this publication were produced in cooperation with the Bureau of Labor Statistics, U.S. Department of Labor. © 2018 by the Department of Employment and Economic Development, Labor Market Information Office

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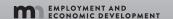
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The Last Word

EED is focused on connecting diverse groups to employment and training opportunities to ensure their success. For job seekers with a criminal record, finding a job is tough but not impossible. New Leaf workshops, offered at Minnesota WorkForce Centers, are tailored for job seekers who must address a criminal record in their job search process and are having a difficult time obtaining employment because of their barriers and/or records.

Here are additional resources from CareerOne-Stop:

- Job Search Help for Ex-Offenders provides specialized career, training, and job search resources.
- The Job Search Guide for People with a Criminal Record, a printable document containing all content from the above website.
- Directory of Ex-Offender Local Resources, a printable collection of local service providers in all 50 states. Minnesota resources begin on p. 65.



New Separations Methodology and Its Impact on Occupational Employment Projections



What are employment projections?

Employment projections are defined by the Bureau of Labor Statistics (BLS) as "...likely employment patterns in the U.S. economy". This article discusses a major shift occurring in how long-term occupational employment projections will be developed moving forward. The "new separations methodology" has been created and executed by BLS. National long-term occupational projections for 2016-2026 employing the new separations methodology was rolled out by BLS as of October 24, 2017. This article aims to inform interested parties in Minnesota in a preliminary way about the new separations methodology with a planned roll-out at the state level set for 2018.

Occupational employment projections

The process of employment projection consists of a series of steps that produces occupational job openings projections caused by **growth** and **separation**.

Step 1. Growth projections of GDP. The employment projections process begins with projecting the future growth of the Gross Domestic Product (GDP). In this step economic growth rate and the Gross Domestic Product and its various components of final demand are projected. This step is the main source for estimating how much output the economy will produce in the future. This in turn is the foundation for projecting patterns of employment that will emerge in the projection year.

<u>Step 2. Industry employment projections.</u> The projected GDP is divided into various components of final demand for products and services. Final demand is then converted into industry level projected demand for their primary output.

Step 3. Occupational employment projections. The industry level projected outputs are converted into the resulting projected industry employment that would be needed to produce the projected output. A predicted distribution of occupations across industries is then used to create occupational employment projections.

<u>Step 4. Occupational openings from growth.</u> The occupational employment projections of the previous step feed into this step as the growth component of occupational job openings.

<u>Step 5. Occupational employment caused by separations.</u> To this is added occupational employment projections from separations. Separations occur owing to labor force exits (retirement, enrolling in school, geographic movement, job loss) and occupational transfers (an incumbent worker switching from one occupation to another).

<u>Step 6.</u> In the final step **total occupational openings** are calculated as the sum of occupational openings caused by growth and separations.

How are occupational employment projections developed? A simple example

Let's begin with a highly simplified example to explain the basic principles of how projections of occupational openings will be developed.

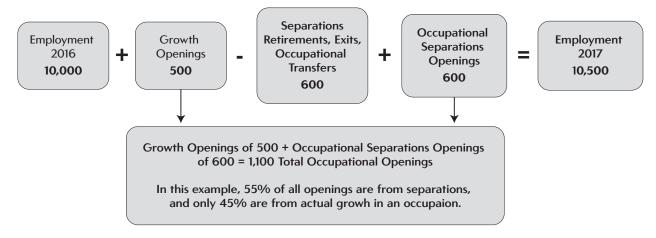
Jobs Growth (Stock concept): Let's say that in 2016 there were 10,000 accountants. Because of business expansion and growth prospects, in 2017 the economy will need 10,500 accountants. Hence, the accounting occupation will add 500 jobs over the next year caused by growth.

Job openings (Flow concept): The workforce is not static, it is dynamic, i.e., it is characterized by "churn". For various reasons current incumbent accountants may leave over the next year. Let's say that between 2016 and 2017, 400 accountants will retire or drop out of the labor force. So apart from the 500 new openings caused by growth, 400 accountants have to be replaced because of labor force exits. Another 200 accountants will separate from the accounting occupation for some other occupation with better job and career prospects. These 200 vacancies created by occupational transfer will also have to be filled.

Thus now the total number of job openings over the next year in the accounting occupation is actually 1,100, of which 500 or 45 percent are from growth, 400 are from accountants dropping out of labor force or retiring, and another 200 are from occupational transfer. Note that although the number of jobs increases by 500, the total number of job openings is more than double at 1,100. This is because job opportunities arise not just from growth, but also from labor force exits and occupational transfers.

If you now imagine the entire economy consisting of millions of workers across hundreds of occupations, it is easy to understand that the large volume of labor market churn means that the number of job openings is usually much larger than the actual employment levels.

Figure 1. Hypothetical Example of Occupational Projections Using the New Separations Methodology



What changes are happening in projections methodology?

The changes occurring concern projection of job openings caused by separations and hence affect only occupational employment projections, steps 5 and 6 of the projections process. Industry projections are not affected. Hence the remainder of the document focuses on changes in occupational employment projections caused by replacement needs.

Definitions

Employment vs. Job openings: Employment is the total stock of jobs, and the growth in employment is from expansion in the occupation. Job openings on the other hand are not just caused by growth in an occupation but also caused by separations. In other words, job openings include any and all "opportunities to enter an industry or occupation for individuals not currently employed in the industry or occupation".

Occupational Separation = Labor Force Exit + Retirement + Occupational Transfer

Occupational Openings = Growth Openings + Occupational Separations

Old Methodology: Employment Projections Owing To Replacement Needs

Since the 1990s BLS has used the old methodology for projecting job openings caused by labor market churn. Known as the Replacement methodology, the argument is that replacement needs arise when workers retire, die, or otherwise leave an occupation. It assumed a particular structure of a labor market where workers enter an occupation at a young age, stay in their chosen occupation for their whole career, and then age out or die at retirement, thus creating replacement needs to be filled by younger cohorts of workers. The idea was that job opportunities are only created when workers exit the labor force, thus ignoring the large



volumes of inter-occupational flows that also create substantial number of job openings. There were several disadvantages to the old method.

- 1. It excludes occupational separations as a source of job openings, thus undercounting the number of openings.
- 2. It assumes that labor market behavior (entry rate, exit rate) of younger cohorts will mirror that of older cohorts.
- 3. It posited that a specific age cohort has a replacement need only if more of its members exited than entered. In cases where entry exceeded exit, the replacement need is set to zero, thus undercounting job openings in a second way.
- 4. By focusing only on age, it ignores many other variables that together determine labor market churn and thus job openings.

How the new separations methodology differs from old replacement methodology

1. Rather than assume a static nature in the labor market, the new methodology allows for a far more current and dynamic labor market, where job openings are created not just from retirements and exits, but also from incumbent workers separating from their current occupation and moving on to another.

- 2. The new separations methodology takes into account a much broader set of factors that influence occupational separations, including not just age but also gender, race/ethnicity, education, location, industry type, class of worker, and full-time/part-time work status.
- 3. It also expects a high percentage of all occupational openings to arise from separations. The projected number of job openings will increase under the new separations methodology. This is because the new separations methodology counts more job openings, because of its inclusion of occupational transfers as a major source of job openings. The old replacement methodology did not count this. In the example with accountants, the growth in the occupation results in additional 500 jobs, but another 600 openings are created from separations, i.e., 55% of all openings are from separations and only 45% from actual growth in an occupation.

New Separations Methodology in action

The example below is reproduced and extended from Table 1.1 of BLS Employment Projections - https://www.bls.gov/emp/ep_table_110.htm - and shows a highly abridged version of the national occupational employment and openings projections for 2016-2026. Released on October 24, 2017, using the new separations methodology, the following steps break down the numbers using the "all occupations" category as the example.

Employment change caused by growth (10 year projection converted to annual average)

Employment in base year 2016 = 156,064

Steps 1 through 4 (see page 1) produce occupational employment in projection year 2026 = 167,582

Calculate employment change from 2016 to 26 =11,519. This is the employment change from growth.

Calculate percentage change in employment caused by growth from 2016 to 2026 = 11519/156064 x 100=7.4%

Occupational openings from growth, annual average = 11,519 / 10 = 1152

Employment change caused by occupational separations (all annual averages only)

New separations methodology uses regression method to project labor force exit rate = 4.7%

New separations methodology uses regression to project occupational transfer rate = 6.2%

Calculate total occupational separation rate (4.7 + 6.2 = 10.9%)

Labor force exit: $4.7\% \times (156,064+167,582)/2 = 7,549$

Occupational transfer: 6.2% x (156,063.8+167,582.3)/2 = 10,040

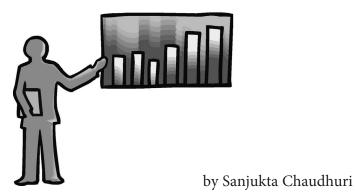
Total occupational separations = 7,549 + 10,040 = 17,589

Occupational openings owing to growth and separation (annual average) = 17,589 + 1152 = 18,740

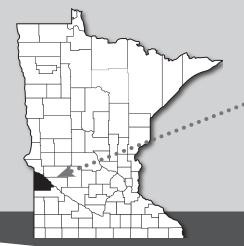
With the new methodology, 94% of all occupational openings annually will be from occupational separations, and 6% will be from growth.

What comes next for Minnesota Employment Projections?

With the release of national long-term Employment Projections, the stage has been set to roll out the new separations methodology at the state level. As the Labor Market Information office creates and rolls out the Minnesota long-term projections numbers in 2018, watch this space for more concrete occupational employment numbers and their interpretation under the new separations methodology.



EMPLOYMENT AND ECONOMIC DEVELOPMENT



CountySnapshot Lacqui Parle

Past

Lac Qui Parle County was established in 1871 in Southwestern Minnesota. Like most of the state, the county is often identified by water as its northern border is the Minnesota River. The name Lac Qui Parle is French for "lake which talks" – a depiction bestowed by Dakota Indians who were struck by the echoes reverberating among the bluffs where the river widens. In 1886 the county seat was moved from Lac Qui Parle village to Madison to meet the new rail line established there. As part of the transition, a group of 150 men and 40 horse-drawn wagons hauled the county courthouse 15 miles during a harsh November blizzard. More recently Lac Qui Parle was ranked the healthiest county in Minnesota in a study by the Robert Wood Johnson Foundation in 2011.1

Future

In November 2017 Lac Qui Parle was one of several rural Minnesota counties to receive a grant from DEED's Office of Broadband Development. The project, expected to be completed in 2018, is projected to reach 136 unserved households and 15 unserved businesses in the southwestern corner of the county.²

Economy

2016 Estimates	Lac qui Parle County	Minnesota
Population	6,916	5,450,868
Labor Force	3,628	3,026,752
Average Unemployment	4.3%	3.8%
Median Household Income	\$49,210	\$63,217
Cost of Living, Individual	\$24,854	\$29,856
Cost of Living, Average Family	\$43,698	\$55,200

Source: DEED Local Area Unemployment Statistics, Cost of Living; U.S. Census Bureau, 2016 American Community Survey

Trends

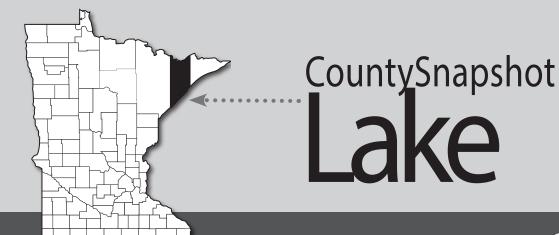
Thanks to its beautiful natural resources and ample opportunities for outdoor recreation, the Accommodation and Food Services industry provides the highest number of jobs in Lac Qui Parle County. Despite a 9.7 percent countywide loss in employment since 2007, Accommodation and Food Services grew by 2.0 percent and raised average annual wages by 34.1 percent to over \$35,000 in 2016. The largest employment losses in the county came from the Manufacturing industry, which shed 212 jobs from 2007-2016. Still, the Manufacturing industry paid the highest average annual wages in Lac Qui Parle County in 2016 (\$47,929 annually). Educational Services (312 jobs) and Retail Trade (243 jobs) rounded out the top four industries in terms of employment last year.

Industry

	industry					
	Top Industries of Employment	Total 2016 Employment	Percent Change 2007-2016	Average Annual Wages	Percent Change 2007-2016	
	Total, All Industries	2,207	-9.7%	\$33,132	20.4%	
1	Accommodation and Food Services	506	2.0%	\$35,440	34.1%	
2	Educational Services	312	-3.7%	\$34,542	3.6%	
3	Retail Trade	243	-20.8%	\$22,159	-19.0%	
4	Manufacturing	155	-42.2%	\$47,929	43.7%	

Source: DEED Quarterly Census of Employment and Wages 2006-2015

 $^{^1} http://www.startribune.com/king-jake-norwegian-born-minnesotan-reigned-in-lac-qui-parle/433354283/^2 http://www.wctrib.com/news/4364271-rural-broadband-grants-awarded-lac-qui-parle-pope-counties$



Past

Lake County was first established as Superior County in 1855, but changed names twice before settling on Lake County in 1856. In 1868 iron ore was discovered on the Vermillion Range, and after considerable work the first shipment of iron ore was made from Agate Bay in 1884. Verging on the county's western border, the Vermillion range averaged over a million tons of iron ore yearly from 1892 through 1952, most of which was shipped through the port at Two Harbors, the county seat. In 1902 five businessmen from Two Harbors established a new mining company named 3M, which today has grown into a Fortune 100 company with over 70,000 employees and 50,000 products.³

Future

Today tourism has replaced mining as the major source of employment in Lake County. The Superior National Forest and the Boundary Waters Canoe Area are both partly in Lake County and attract an estimated 250,000 visitors every year. Canoeing and biking are the main attractions, but rock climbers are starting to converge on the North Shore Adventure Park, which opened in the summer of 2017 and is gaining praise nationwide. In addition to rock climbing, the park is expanding to include a Minnesota-shaped climbing tower and several rope-sporting activities next year.⁴

Economy

Economy							
2016 Estimates	Lake County	Minnesota					
Population	10,721	5,450,868					
Labor Force	5,373	3,026,752					
Average Unemployment	6.5%	3.8%					
Median Household Income	\$52,320	\$63,217					
Cost of Living, Individual	\$28,723	\$29,856					
Cost of Living, Average Family	\$51,003	\$55,200					

Source: DEED Local Area Unemployment Statistics; Cost of Living; U.S. Census Bureau, 2016 American Community Survey

<u>Industry</u>

1110	industry					
	Top Industries of Employment	Total 2016 Employment	Percent Change 2007-2016	Average Annual Wages	Percent Change 2007-2016	
	Total, All Industries	3,928	-9.2%	\$39,238	19.5%	
1	Accommodation and Food Services	704	-12.5%	\$18,072	43.6%	
2	Manufacturing	537	0.9%	\$59,553	23.6%	
3	Public Administration	399	0.5%	\$43,785	22.0%	
4	Retail Trade	340	-9.6%	\$27,812	31.1%	

Source: DEED Quarterly Census of Employment and Wages 2006-2015

Trends

In addition to tourism jobs in Accommodation and Food Services, there are over 500 Manufacturing jobs in Lake County, which paid the highest average annual wage in 2016. Manufacturing jobs held steady in Lake County from 2007-2016 despite a 9.2 percent decrease in jobs overall. Another major county industry, Public Administration, also maintained its jobs over the 10 year period. The largest challenge for Lake County will be keeping up despite low labor force participation. At 56 percent in 2016, Lake County had the second lowest labor force participation rate in the state.

³https://en.wikipedia.org/wiki/Lake_County,_Minnesota

⁴http://www.duluthnewstribune.com/business/4281476-north-shore-adventure-park-breaks-ground



CountySnapshot Lake of the Woods

Past

Lake of the Woods County separated from Beltrami County and was established in November, 1922. The county owes its name to the 1,679 square mile lake that covers the northern tip of Minnesota. Prior to its official designation, Lake of the Woods was a major link in the voyageur's highway with all of the trade returning from the north and west destined to cross the lake. This throughway became a point of contention in the 1820's as the U.S. and Canada drew borders following the Revolutionary War. Negotiations ended with the U.S. maintaining the Northwest Angle, a relatively small piece of land northwest of the Lake, which juts out from the international border as an easily identifiable trademark of Minnesota geography.⁵ There were also rumors of gold in the area, but nothing came of them.

Future

In winter of 2017 representatives from both the Fremont-Winema and the Rogue-Siskiyou National Forests met with Lake of the Woods and Fish Lake resorts and others to discuss the development of groomed trails for cross country skiers. In addition to the enthusiastic fishing and hunting activities in the region, the effort looks to bolster even further the tourism industry in Lake of the Woods County.⁶

Economy

2016 Estimates	Lake of the Woods County	Minnesota
Population	3,901	5,450,868
Labor Force	2,406	3,026,752
Average Unemployment	4.7%	3.8%
Median Household Income	\$45,732	\$63,217
Cost of Living, Individual	\$25,044	\$29,856
Cost of Living, Average Family	\$43,889	\$55,200

Source: DEED Local Area Unemployment Statistics; Cost of Living; U.S. Census Bureau, 2016 American Community Survey

Trends

Over a quarter of the jobs in Lake of the Woods County are in Accommodation and Food Services, a nod to avid tourism in the county. Like other parts of northern Minnesota, Lake of the Woods County leverages its beautiful natural resources to attract those who enjoy outdoors sports and recreation activities. Overall, employment increased in Lake of the Woods County since 2007, a very positive trend for a rural Minnesota county. But recreation opportunities may not be the only thing attracting outsiders. While average annual wages in Lake of the Woods County grew by almost 20 percent since 2007, the cost of living for the average family remained over \$10,000 less than the state average.

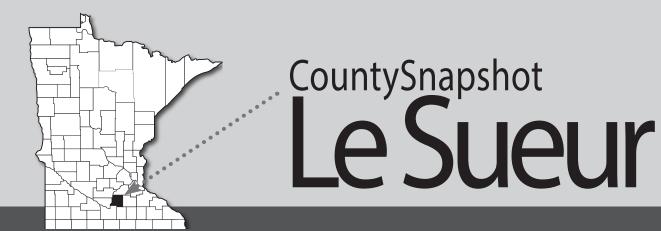
Industry

1111	mastry						
	Top Industries of Employment	Total 2016 Employment	Percent Change 2007-2016	Average Annual Wages	Percent Change 2007-2016		
	Total, All Industries	1,596	5.1%	\$32,410	19.2%		
1	Accommodation and Food Services	440	3.5%	\$19,490	54.3%		
2	Retail Trade	193	-2.5%	\$22,241	36.9%		
3	Health Care and Social Assistance	163	-7.9%	\$39,881	22.8%		
4	Public Administration	158	0.0%	\$42,932	22.6%		

Source: DEED Quarterly Census of Employment and Wages 2006-2015

 $^{^5} http://www.lake of the woods historical society.com/history.html\\$

⁶ https://www.heraldandnews.com/news/local_news/winter-trail-improvements-discussed-at-lake-of-woods/article_22b162e3-ef40-5460-9ce3-c51421dcb54e.html



Past

Le Sueur County is named after Pierre Charles Le Sueur, the French explorer who in 1700 traveled up the Minnesota River which makes a major turn just south of the county and subsequently runs northeast along Le Sueur County's western border. Railroad activity flourished in Le Sueur county beginning in 1870 which strengthened the agriculture and livestock industries. Le Sueur County is also known for its history of severe weather, especially tornadoes. Since 1950 Le Sueur County has had 129 tornadoes touch down, an average of two per year. In 1965 an F4 tornado ravaged the county, injuring 175 and causing three deaths.⁷

Future

Le Sueur County is becoming a state leader in soil and water quality, an important distinction for an agriculture-heavy county with over 1,000 farms. At the tail end of 2017 the Le Sueur County Soil and Water Conservation District received a \$387,100 grant from the state of Minnesota for wetland restorations, water and sediment control basins, and grade stabilization projects. The projects aim to improve the quality of water in the Jefferson German chain of lakes.⁸

Economy

Leonomy						
2016 Estimates	Le Sueur County	Minnesota				
Population	27,650	5,450,868				
Labor Force	15,564	3,026,752				
Average Unemployment	4.9%	3.8%				
Median Household Income	\$62,462	\$63,217				
Cost of Living, Individual	\$27,950	\$29,856				
Cost of Living, Average Family	\$49,116	\$55,200				
Average Unemployment Median Household Income Cost of Living, Individual	4.9% \$62,462 \$27,950	3.8% \$63,217 \$29,856				

Source: DEED Local Area Unemployment Statistics; Cost of Living; U.S. Census Bureau, 2016 American Community Survey

Trends

Over a third of the jobs in Le Sueur County are in the Manufacturing industry, which has grown by over 42 percent since 2007. Manufacturing, along with Retail Trade (up 23.3 percent) and Healthcare and Social Assistance (up 8.3 percent), have driven growth in Le Sueur County, where overall jobs have increased by over 16 percent since 2007. The recent job growth may be resulting from an improvement in wages in the county. In 2016 the median household income in Le Sueur was just shy of the state median, but the cost of living remained well below that statewide.

Industry

	Top Industries of Employment	Total 2016 Employment	Percent Change 2007-2016	Average Annual Wages	Percent Change 2007-2016	
	Total, All Industries	9,141	16.1%	\$39,937	36.3%	
1	Manufacturing	3,344	42.2%	\$50,551	39.6%	
2	Retail Trade	842	23.3%	\$20,011	15.6%	
3	Health Care and Social Assistance	702	8.3%	\$29,939	21.9%	
4	Educational Services	672	2.8%	\$35,175	11.4%	

Source: DEED Quarterly Census of Employment and Wages 2006-2015

by Chet Bodin

https://www.homefacts.com/tornadoes/Minnesota/Le-Sueur-County.html

http://www.southernminn.com/le_center_leader/news/article_db4f3010-4a0d-5189-9d9e-69070e738bf1.html