

Northeast Minnesota – Construction Industry Overview



According to DEED’s [Quarterly Census of Employment and Wages](#) (QCEW) data, the 7-county Northeast Minnesota region was home to 909 construction firms providing 6,402 jobs in 2016. At that level, construction accounted for 4.5 percent of total employment in the region, making it the seventh largest industry behind health care and social assistance (33,662 jobs), retail trade (17,779 jobs), accommodation and food services (16,109 jobs), public administration (11,408 jobs), educational services (10,127 jobs), and manufacturing (8,565 jobs). However, construction also accounted for 10.8 percent of all establishments in the region, giving it the second largest number of firms, behind only retail trade (1,330 firms), and just ahead of accommodation and food services (902 firms) and health care and social assistance (895 firms).

Northeast Minnesota has 5.2 percent of the state’s total jobs in construction, and 5.0 percent of all jobs, meaning construction employment is slightly more concentrated in the Arrowhead than expected. Statewide, construction accounted for about 4.4 percent of total jobs, meaning the region still shows a location quotient of 1.0. However, the region has a higher location quotient in a couple industry sectors, including heavy and civil engineering construction – most notably highway, street, and bridge construction – residential building construction, and foundation, structure, and building exterior contractors (see Table 1).

Table 1. Northeast Minnesota Construction Industry Employment Statistics, 2016

NAICS Code	NAICS Industry Title	Number of Firms, 2016	Number of Jobs, 2016	Location Quotient	Industry Payroll, 2016	Avg. Annual Wages, 2016
0	Total, All Industries	8,426	141,683	1.0	\$5,916,014,961	\$41,755
23	Construction	909	6,402	1.0	\$358,421,962	\$55,986
236	Construction of Buildings	259	1,322	1.0	\$62,952,857	\$47,619
2361	Residential Building Construction	233	691	1.2	\$22,359,570	\$32,358
2362	Nonresidential Building Construction	26	631	0.9	\$40,593,287	\$64,332
237	Heavy & Civil Engineering Construction	73	1,498	1.3	\$108,949,484	\$72,730
2371	Utility System Construction	23	328	0.9	\$25,967,011	\$79,168
2373	Highway, Street, & Bridge Construction	40	1,036	1.4	\$76,155,567	\$73,509
238	Specialty Trade Contractors	578	3,582	1.0	\$186,519,621	\$52,071
2381	Foundation, Structure & Bldg. Exterior Contractors	118	945	1.4	\$48,343,384	\$51,157
2382	Building Equipment Contractors	186	1,514	0.9	\$87,444,625	\$57,757
2383	Building Finishing Contractors	92	448	0.6	\$21,614,950	\$48,248
2389	Other Specialty Trade Contractors	182	675	1.0	\$29,116,662	\$43,136

Source: DEED [Quarterly Census of Employment & Wages \(QCEW\)](#) program

These construction firms paid out \$358 million in total payroll in 2016, making it the sixth largest industry payroll. Average annual wages in construction were \$55,986 in 2016, which was 34 percent higher than the total of all industries. The highest earning was the region’s heavy and civil engineering construction sector, where wages topped \$72,500 per year.

Specialty trade contractors was easily the largest construction sector in Northeast Minnesota, both in number of firms and employment, with 3,582 jobs at 578 establishments. This included 1,514 jobs at 186 building equipment contractors, such as electrical and wiring and plumbing, heating, and air conditioning contractors. This subsector also had the highest payroll and the highest average annual wages in the sector, at just over \$57,750 per year.

With 945 jobs at 118 firms, the next largest subsector was foundation, structure, and building exterior contractors, which includes concrete and structural steel framing, masonry, glass, roofing, and siding contractors. The location quotient of 1.4 shows that the region has a higher-than-expected concentration of employment in this subsector than the rest of the state, with wages just above \$51,000.

The region has smaller shares of employment in other specialty trade contractors, such as site preparation, driveway paving, crane rental, and swimming pool construction, which has 675 jobs at 182 firms; and 448 jobs at 92 firms operating in building finishing, including drywall and insulation, painting, flooring and tile installers, and finish carpentry.

The next largest employing sector is heavy and civil engineering construction, which had 1,498 jobs at 73 establishments. While specialty trade contractors had an average of 6.2 employees per establishment, heavy and civil engineering firms averaged 20.5 employees. With 1,036 jobs and a location quotient of 1.4, the highway, street, and bridge construction subsector is more strongly concentrated in Northeast Minnesota than the rest of the state. Average annual wages were just below \$80,000 at the 328 jobs in utility system construction, which includes water and sewer lines, oil and gas pipelines, and power and communication lines construction.

The smallest sector in Northeast Minnesota was construction of buildings, which had employment split nearly down the middle between residential and nonresidential building construction. Residential building construction had 691 jobs at 233 firms, an average of about 3 employees per firm; while nonresidential building construction had 631 jobs at 26 firms, an average of 24 employees per site. Wages were twice as high in nonresidential building construction as compared to the residential side.

In addition to the more than 900 employer establishments covered by the QCEW program, there were also 2,374 non-employers in the construction industry in Northeast Minnesota, with total sales receipts of just under \$116.5 million in 2015. Nonemployers are defined by the U.S. Census Bureau as “businesses without paid employees that are subject to federal income tax, originating from tax return information of the Internal Revenue Service (IRS).” Data shows that more than half of those – 1,222 nonemployers – were located in in St. Louis County, with another 364 in Itasca County. There were also 229 construction nonemployers in Carlton County, and less than 200 self-employed construction firms in the other four counties (see Table 2).

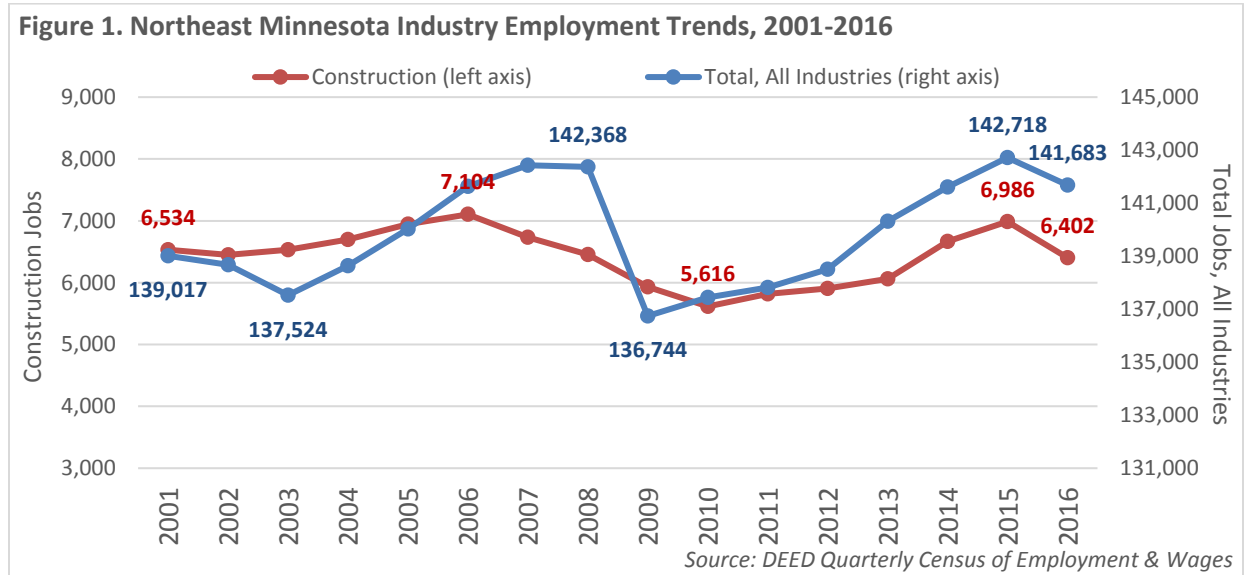
Table 2. Northeast Minnesota Construction Industry Nonemployer Statistics, 2015

	Number of Construction Nonemployers	Total Sales Receipts (\$1000s)
St. Louis Co.	1,222	\$56,478
Itasca Co.	364	\$19,165
Carlton Co.	229	\$10,337
Aitkin Co.	184	\$10,723
Lake Co.	135	\$8,733
Koochiching Co.	123	\$4,087
Cook Co.	117	\$6,935
Northeast MN	2,374	\$116,458

Source: U.S. Census Bureau

Industry Trends

Much like other industries, the construction industry in Northeast Minnesota has experienced employment fluctuations over the past 15 years. Construction accounted for 4.7 percent of total jobs in 2001, but after gaining nearly 600 jobs from 2001 to 2006, the industry comprised just over 5.0 percent of total employment, the highest share recorded. Growth in the construction industry outpaced the total of all industries every year from 2002 to 2006. Employment then dropped by nearly 1,500 jobs during the Great Recession, to a low of 5,616 jobs in 2010, accounting for just 4.1 percent of total employment, the lowest mark on record. The industry has since recovered, regaining 1,370 jobs from 2010 to 2015, before suffering a setback in 2016 (see Figure 1).



Construction has remained an important part of Northeast Minnesota’s economy over the past decade. In sum, the construction industry had about 130 fewer jobs in 2016 than it had in 2001, a 2 percent decline. In comparison, the region’s economy added about 2,700 net new jobs over the past decade and a half, a 1.9 percent increase.

Though it’s still the largest employing sector, specialty trade contractors also saw the largest decline in jobs over the past decade, dropping 811 jobs from 2006 to 2016. Most of that decline occurred in building equipment contractors, which cut employment by just over 30 percent during that timeframe. In contrast, the smallest subsector – building finishing contractors – saw the smallest decline since 2006 and the biggest increase in jobs in the past year, adding 87 jobs from 2015 to 2016.

Despite a loss of 144 jobs in the last year, heavy and civil engineering construction was still up 295 additional jobs in 2016 as compared to 2006, making it the only sector that saw growth over the decade. The largest amount of growth was concentrated in the region’s highway, street, and bridge construction subsector, which added 172 net new jobs from 2006 to 2016. Utility system construction gained 52 jobs in the past 10 years, but that included a drop of 114 jobs from 2015 to 2016.

Severe job losses (-301 jobs) in residential building construction led to a decline in the construction of buildings sector over the past decade, which otherwise saw job gains (+116 jobs) in nonresidential building construction. Strangely, the exact opposite happened in the past 5 years, with residential adding just over 100 jobs, and nonresidential losing 84 jobs in the past year (see Table 3).

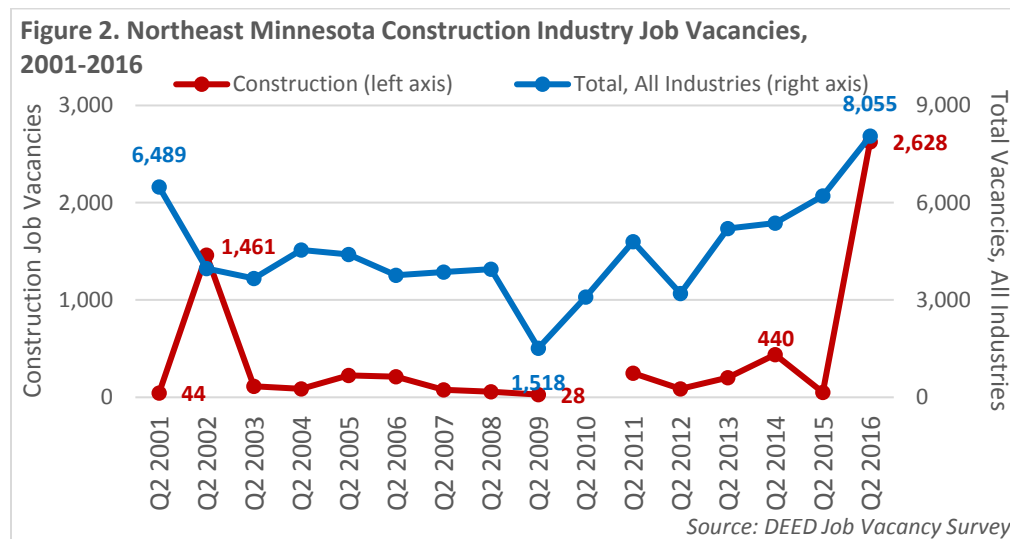
Table 3. Northeast Minnesota Construction Industry Trends, 2006-2016

NAICS Industry Title	Number of Jobs, 2016	1-Year Trend, 2015-2016		5-Year Trend, 2011-2016		10-Year Trend, 2006-2016	
		Numeric Change	Percent Change	Numeric Change	Percent Change	Numeric Change	Percent Change
Total, All Industries	141,683	-1,035	-0.7%	+3,860	+2.8%	+46	0.0%
Construction	6,402	-584	-8.4%	+582	+10.0%	-702	-9.9%
Construction of Buildings	1,322	-57	-4.1%	+88	+7.1%	-186	-12.3%
Residential Building Construction	691	+28	+4.2%	+107	+18.3%	-301	-30.3%
Nonresidential Building Construction	631	-84	-11.7%	-19	-2.9%	+116	+22.5%
Heavy & Civil Engineering Construction	1,498	-144	-8.8%	+276	+22.6%	+295	+24.5%
Utility System Construction	328	-114	-25.8%	+19	+6.1%	+52	+18.8%
Highway, Street, & Bridge Construction	1,036	+23	+2.3%	+254	+32.5%	+172	+19.9%
Specialty Trade Contractors	3,582	-383	-9.7%	+218	+6.5%	-811	-18.5%
Foundation, Structure & Bldg. Ext. Contr.	945	-127	-11.8%	+31	+3.4%	-57	-5.7%
Building Equipment Contractors	1,514	-221	-12.7%	+84	+5.9%	-669	-30.6%
Building Finishing Contractors	448	+87	+24.1%	+135	+43.1%	-25	-5.3%
Other Specialty Trade Contractors	675	-121	-15.2%	-31	-4.4%	-59	-8.0%

Source: DEED [Quarterly Census of Employment & Wages \(QCEW\)](#) program

Industry Demand

The fluctuations in construction employment has led to a significant fluctuation in the number of [job vacancies](#) across the Northeast Minnesota region as well, with the almost a complete lack of hiring demand during the Great Recession from 2007 to 2010. However, the 2,628 job vacancies reported by construction employers in the second quarter of 2016 was the highest number ever posted, besting the record set back in 2002 (see Figure 2).



The median wage offer for these vacancies rose to \$14.49 per hour in the second quarter of 2016, which was about \$1.00 above the median wage offer in the second quarter of 2015, and about \$0.50 above the median wage offer across all industries. Twenty-one percent of the construction postings were temporary or seasonal, compared to 15 percent of all openings. Prior work experience was required in 41 percent of the construction job vacancies, but just 8 percent required postsecondary education; compared to 42 and 26 percent, respectively, across all vacancies (see Table 4).

Table 4. Northeast Minnesota Construction Job Vacancy Survey, 2nd Quarter 2016

NAICS Industry Title	Number of Job Vacancies	Median Wage Offer	Percent Temporary or Seasonal	Percent Requiring Postsecondary Education	Percent Requiring 1+ Years Work Experience	Percent Requiring Certificate or License
Total, All Industries	8,055	\$14.03	15%	26%	42%	33%
Construction	2,628	\$14.49	21%	8%	41%	23%

Source: DEED [Job Vacancy Survey](#)

The largest number of construction vacancies were for construction laborers, which were primarily lower-paying, entry level positions. In addition, the region also had high demand for motor vehicle operators, especially heavy and tractor-trailer truck drivers, which had over 500 vacancies and a median wage offer just below \$16.00 per hour. There was also significant demand for vehicle and mobile equipment mechanics, which had 465 vacancies and a median wage offer of \$15.31 (see Table 4).

Table 5. Northeast Minnesota Construction-Related Job Vacancy Survey, 2nd Quarter 2016

SOC Occupational Title	Number of Job Vacancies	Median Wage Offer	Percent Part-time	Percent Requiring Postsecondary Education	Percent Requiring 1+ Years Work Experience	Percent Requiring Certificate or License
Total, All Occupations	8,055	\$14.03	30%	26%	42%	33%
Construction & Extraction Occupations	1,638	\$13.55	0%	5%	32%	5%
Construction Trades Workers	1,632	\$13.20	0%	5%	31%	4%
Construction Laborers	1,139	\$12.43	N/A	N/A	N/A	N/A
Installation, Maintenance & Repair Occs.	535	\$15.73	1%	12%	95%	7%
Vehicle & Mobile Equip. Mechanics	465	\$15.31	0%	3%	98%	3%
Transportation & Material Moving Occs.	623	\$15.68	9%	6%	18%	90%
Motor Vehicle Operators	555	\$15.68	1%	6%	18%	100%
Heavy & Tractor-Trailer Truck Drivers	535	\$15.95	0%	6%	16%	100%

Source: DEED [Job Vacancy Survey](#)

Industry Occupational Employment

DEED’s [Occupational Employment Statistics](#) (OES) program provides detailed employment and wage data for a wide range of occupations involved in construction. In sum, there were an estimated 5,950 people working in construction and extraction occupations in Northeast Minnesota, accounting for about 4.2 percent of total employment in the region, giving it a slightly higher location quotient compared to the state. Wages were relatively high for these occupations, and in many cases they were actually higher in the region than in the state.

The largest construction and extraction occupations in the region include carpenters (1,020 jobs), operating engineers and other construction equipment operators (890 jobs), construction laborers (710 jobs), electricians (510 jobs), highway maintenance workers (410 jobs), and plumbers, pipefitters, and steamfitters (410 jobs). All those occupations except plumbers had higher location quotients in the region than the state, as did other construction occupations including construction and building inspectors, civil engineers, and septic tank servicers and sewer pipe cleaners, which were all twice as concentrated (or more) in Northeast Minnesota than the rest of the state. The region also had a larger share of mobile heavy equipment mechanics, millwrights, excavating and loading machine operators, and electrical power-line installers and repairers.

Median hourly wages for construction occupations ranged from around \$18 an hour at the low end to more than \$40 an hour at the high end. Civil Engineers and construction managers were the highest-earning occupations in the industry, pulling in over \$80,000 per year. Twenty-five different occupations had median wages above \$50,000 per year in the region, representing over 6,500 jobs (see Table 6).

Table 6. Northeast Minnesota Construction-related Occupational Wage & Employment, 2017		Northeast Minnesota			Minnesota
SOC Code	SOC Title	Estimated Regional Employment	Median Hourly Wage	Location Quotient	Median Hourly Wage
00-0000	Total, All Occupations	141,910	\$17.25	1.0	\$19.62
11-9021	Construction Managers	180	\$40.34	0.9	\$41.76
13-1051	Cost Estimators	210	\$27.36	1.0	\$29.60
17-1011	Architects	70	\$34.74	0.8	\$39.09
17-1021	Cartographers & Photogrammetrists	10	\$26.45	0.5	\$28.83
17-1022	Surveyors	60	\$27.02	1.5	\$31.95
17-2051	Civil Engineers	410	\$41.60	1.9	\$40.20
17-3011	Architectural & Civil Drafters	70	\$20.68	0.6	\$25.11
17-3022	Civil Engineering Technicians	170	\$29.66	1.5	\$29.67
47-0000	Construction & Extraction Occupations	5,950	\$27.26	1.2	\$26.55
47-1011	First-Line Supervisors of Construction Trades Workers	370	\$33.72	1.2	\$34.05
47-2031	Carpenters	1,020	\$24.37	1.4	\$23.07
47-2051	Cement Masons & Concrete Finishers	200	\$26.13	0.8	\$23.88
47-2061	Construction Laborers	710	\$22.83	1.2	\$21.35
47-2073	Operating Engineers & Construction Equip. Operators	890	\$33.46	1.7	\$29.31
47-2111	Electricians	510	\$32.12	1.0	\$32.46
47-2141	Painters, Construction & Maintenance	120	\$24.68	0.6	\$20.47
47-2151	Pipelayers	30	\$32.45	0.8	\$31.42
47-2152	Plumbers, Pipefitters, & Steamfitters	410	\$33.66	0.9	\$34.08
47-2211	Sheet Metal Workers	170	\$29.85	1.2	\$32.04
47-2221	Structural Iron & Steel Workers	30	\$35.48	0.4	\$35.17
47-3012	Helpers--Carpenters	30	\$17.99	1.0	\$18.49
47-3013	Helpers--Electricians	20	\$17.74	1.7	\$13.69
47-4011	Construction & Building Inspectors	110	\$32.08	2.0	\$32.16
47-4051	Highway Maintenance Workers	410	\$24.31	1.6	\$24.29
47-4071	Septic Tank Servicers & Sewer Pipe Cleaners	70	\$17.62	1.9	\$22.09
47-5021	Earth Drillers, Except Oil & Gas	70	\$26.65	2.5	\$21.93
49-0000	Installation, Maintenance, & Repair Occupations	6,970	\$21.63	1.4	\$22.41
49-2022	Telecommunications Equipment Installers & Repairers	70	\$29.38	0.4	\$29.55
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	620	\$24.12	3.5	\$27.13
49-9044	Millwrights	160	\$29.36	3.4	\$22.49
49-9021	Heating, Air Cond. & Refrig. (HVAC) Mechanics/Install	150	\$21.61	1.1	\$25.12
49-9051	Electrical Power-Line Installers & Repairers	230	\$38.27	1.8	\$38.17
53-0000	Transportation & Material Moving Occupations	7,550	\$16.56	0.8	\$17.06
53-3032	Heavy & Tractor-Trailer Truck Drivers	2,060	\$19.76	1.2	\$21.28
53-7021	Crane & Tower Operators	30	\$31.37	0.6	\$33.71
53-7032	Excavating & Loading Machine & Dragline Operators	110	\$25.22	1.9	\$24.64
53-7051	Industrial Truck & Tractor Operators	340	\$18.21	0.7	\$18.31
53-7061	Cleaners of Vehicles & Equipment	320	\$10.17	0.9	\$11.14

Source: DEED Occupational Employment Statistics (OES) program

Despite the relatively high wages, all but six of these construction-related occupations can be gained with a high school diploma or less and some level of on-the-job training. According to DEED’s [Educational Requirements for Occupations](#) data, of the list of construction-related occupations, only construction managers, civil engineers, surveyors, architects, and cartographers and photogrammetrists required a bachelor’s degree, and only civil engineering technicians, architectural and civil drafters, and radio, cellular, and tower equipment installers and repairers required an associate’s degree. Beyond that, just mobile heavy equipment mechanics, electricians, HVAC mechanics and installers, and wind turbine service technicians required vocational training.

Cost estimators and first-line supervisors also tended to have higher amounts of workers with college degrees, but the postsecondary training was not necessary for entry into the occupation. Likewise, while not required, several other construction-related occupations also benefited from having some vocational training, including carpenters, plumbers, electrical powerline installers and repairers, construction and building inspectors, home appliance repairers, and telecommunications equipment installers and repairers. Some other occupations, such as heavy and tractor-trailer truck drivers, construction equipment operators, and highway maintenance workers, typically require a license in order to hold the job, but no postsecondary requirements (see Table 7).

Occupation Title	Current Educational Attainment for Minnesota Workers						Northeast Minnesota	
	No Formal Educ. Req.	High School	Vocat. Training	Associate Degree	Bachelor Degree	Graduate or Prof. Degree	Estimated Regional Employment	Median Hourly Wage
Heavy & Tractor-Trailer Truck Drivers	37%	43%	20%	0%	0%		2,060	\$19.76
Carpenters	28%	40%	32%		0%		1,020	\$24.37
Operating Engineers & Other Construction Equipment Operators	9%	78%	12%	0%	1%		890	\$33.46
Construction Laborers	64%	26%	1%	8%	0%		710	\$22.83
Mobile Heavy Equipment Mechanics	6%	6%	48%	40%	0%		620	\$24.12
Electricians	1%	7%	76%	10%	6%	0%	510	\$32.12
Civil Engineers		2%	14%	5%	76%	3%	410	\$41.60
Plumbers, Pipefitters, & Steamfitters	20%	28%	49%	0%		2%	410	\$33.66
Highway Maintenance Workers	22%	59%	18%	1%			410	\$24.31
First-Line Supervisors of Construction Trades & Extraction Workers	16%	23%	21%	3%	37%	0%	370	\$33.72
Industrial Truck & Tractor Operators	29%	50%	19%	2%			340	\$18.21
Cleaners of Vehicles & Equipment	57%	42%	1%	0%	0%		320	\$10.17
Electrical Powerline Installers/Repairers	9%	42%	47%	3%	0%		230	\$38.27
Cost Estimators	7%	19%	22%	19%	30%	1%	210	\$27.36
Cement Masons & Concrete Finishers	60%	37%	3%				200	\$26.13
Construction Managers	1%	8%	13%	3%	74%	0%	180	\$40.34
Sheet Metal Workers	15%	46%	39%	1%			170	\$29.85
Civil Engineering Technicians	28%	15%	25%	32%	0%		170	\$29.66
Millwrights	14%	64%	19%	4%			160	\$29.36
Painters, Construction & Maintenance	28%	70%	1%	0%			120	\$24.68
Construction & Building Inspectors	44%	15%	6%	20%	15%		110	\$32.08
Excavating, Loading Machine Operators							110	\$25.22
Architectural & Civil Drafters		8%	29%	60%	3%		70	\$20.68
Surveyors	7%	10%	8%	11%	64%		70	\$27.44

Architects, except Landscape & Naval	1%	1%	0%	0%	70%	29%	70	\$34.74
Septic Tank Svcs. & Sewer Pipe Cleaners							70	\$17.62
Earth Drillers, Except Oil & Gas							70	\$26.65
Pipelayers							30	\$32.45
Structural Iron & Steel Workers							30	\$35.48
Helpers--Carpenters							30	\$17.99
Crane & Tower Operators							30	\$31.37
Helpers--Electricians							20	\$17.74
Cartographers & Photogrammetrists							20	\$29.80
Landscape Architects		2%	8%	3%	61%	27%		
Heating, Air Conditioning (HVAC) & Refrigeration Mechanics & Installers	8%	42%	49%	1%	0%			
Home Appliance Repairers		49%	40%	5%	5%			
Security & Fire Alarm Systems Installers	1%	68%	25%	6%				
First-Line Supervisors of Mechanics, Installers, & Repairers	7%	31%	21%	14%	26%			
Roofers	71%	13%	16%		0%			
Structural Metal Fabricators & Fitters	9%	75%	15%	1%				
Hazardous Materials Removal Workers	26%	30%	13%	6%	25%			
Telecommunications Equipment Installers & Repairers	16%	69%	7%	7%	1%			
Telecomm. Line Installers/Repairers	54%	25%	7%	15%				
Paving, Surfacing Equipment Operators	25%	71%	4%					

Source: DEED [Educational Requirements for Occupations](#), [Occupational Employment Statistics](#)

Occupations in Demand

Because of the huge spike in demand for construction workers last summer, several construction-related occupations are in high demand in Northeast Minnesota. According to DEED’s [Occupations in Demand](#) tool, six of the top 10 occupations in highest demand in the region are health care related, including the top three in the list. Of the 273 occupations that have exhibited high demand in the region – having three, four, or five stars in the current demand indicator – 21 are construction-related occupations (see Table 8).

Table 8. Northeast Minnesota Construction-Related Occupations in Demand

SOC Code	SOC Occupational Title	Current Demand Rank	Current Demand Indicator	Median Annual Wage	Projected 10-year Growth Rate	Projected 10-year Total Openings
533032	Heavy & Tractor-Trailer Truck Drivers	8	Five Stars	\$41,101	-1.5%	+370
472111	Electricians	13	Five Stars	\$66,825	+1.0%	+140
172051	Civil Engineers	40	Five Stars	\$86,533	+8.8%	+90
472031	Carpenters	50	Five Stars	\$50,676	+0.9%	+160
493042	Mobile Heavy Equipment Mechanics	101	Four Stars	\$50,164	-1.0%	+250
173022	Civil Engineering Technicians	106	Four Stars	\$61,703	+0.4%	+50
472141	Painters, Construction & Maintenance	111	Four Stars	\$51,337	+0.7%	+40
472152	Plumbers, Pipefitters, & Steamfitters	113	Four Stars	\$70,025	+0.2%	+50
472073	Construction Equipment Operators	115	Four Stars	\$69,601	+1.2%	+200
472061	Construction Laborers	116	Four Stars	\$47,477	+3.8%	+260
131051	Cost Estimators	148	Four Stars	\$56,906	+3.3%	+60

119021	Construction Managers	156	Four Stars	\$83,899	-1.4%	+30
171011	Architects, Except Landscape & Naval	191	Three Stars	\$72,265	+9.0%	+10
471011	First-Line Supervisors of Construction Workers	198	Three Stars	\$70,140	+0.2%	+30
499044	Millwrights	199	Three Stars	\$61,065	+13.3%	+10
473012	Helpers--Carpenters	206	Three Stars	\$37,408	+3.9%	0
472082	Tapers	207	Three Stars	\$66,793	-4.1%	0
472181	Roofers	210	Three Stars	\$52,587	+7.2%	+60
537032	Excavating & Load Machine & Dragline Operators	211	Three Stars	\$52,451	+1.5%	+20
472121	Glaziers	255	Three Stars	\$47,501	-6.9%	+10
472044	Tile & Marble Setters	261	Three Stars	\$35,820	-1.5%	0

Source: DEED [Occupations in Demand](#)

Industry Outlook

According to DEED’s [2014 to 2024 Employment Outlook](#) data, the Northeast Minnesota construction industry is projected to gain about 140 net new jobs over the next decade, a 2.1 percent increase. That is right in line with the projected growth rate in the region, which is expected to expand 2.0 percent across all industries. In both cases, the region is expected to lag the statewide growth rate, which is expected to increase 4.3 percent overall and by 9.5 percent in the construction industry.

Specialty trade contractors are projected to be the fastest and largest growing sector in the region, climbing by 4.3 percent, or 169 new jobs. The job growth is expected to be split between other specialty trade contractors, which could add 90 jobs; building foundation and exterior contractors, which may gain 72 jobs; and building equipment contractors, which could mean 51 new jobs; while building finishing contractors are expected to lose 44 jobs through 2024.

Construction of buildings is also expected to see some employment gains in the region, with a 2.2 percent projected growth rate. This includes a 6.1 percent increase in nonresidential building construction but a 2.7 percent decline in residential building construction. Interestingly, the only sector that grew in the past decade is expected to see a decline in the next decade, as heavy and civil engineering construction is projected to shrink by 5.6 percent (see Table 9).

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 & Civil Engineering Construction	1,134	1,070	-5.6%	-64
2371	Utility System Construction	383	328	-14.3%	-55
2373	Highway, Street, & 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](#)

Occupational Outlook

The projected job growth in the construction industry is expected to carry over into construction-related occupations as well, with most expected to see small gains in Northeast Minnesota through 2024. Construction laborers are expected to see the most new job growth from 2014 to 2024, followed by steady growth for brickmasons and blockmasons, cement masons and concrete finishers, construction equipment operators, and carpenters. Civil engineers are also expected to see rapid growth and more than 20 new openings.

But rather than new jobs being created, the region is expected to have more demand for replacement openings – jobs that become available because the existing worker retires out of the labor force or changes careers. There may be as many as 1,480 total openings for construction and extraction workers in the region, with 1,310 of them being replacement openings.

Most construction-related occupations in the region will have more replacement openings than new jobs created, requiring new workers to replace existing workers. For example, the largest number of replacement openings is for heavy and tractor-trailer truck drivers, who could have 370 total openings, despite a projected loss of jobs overall. The region is projected to need 260 construction laborers due to 220 replacement openings, as well as 250 mobile heavy equipment mechanics and 200 construction equipment operators, almost entirely from replacement openings. Carpenters, electricians, electrical powerline installers and repairers, highway maintenance workers, and civil engineers are also projected to see steady demand in Northeast Minnesota in the next 10 years (see Table 10).

Table 10. Northeast Minnesota Construction-related Occupational Employment Projections, 2014-2024

SOC Code	Occupation	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	159,860	163,078	+2.0%	+3,218	+38,200	+44,660
119021	Construction Managers	277	273	-1.4%	-4	+30	+30
131051	Cost Estimators	210	217	+3.3%	+7	+60	+60
170000	Architecture & Engineering Occupations	2,361	2,441	+3.3%	+80	+590	+710
171011	Architects, Except Landscape & Naval	66	72	+9.0%	+6	+10	+10
171021	Cartographers & Photogrammetrists	15	17	+13.3%	+2		
171022	Surveyors	76	73	-3.9%	-3	+20	+20
172051	Civil Engineers	249	271	+8.8%	+22	+70	+90
173011	Architectural & Civil Drafters	45	44	-2.2%	-1		
173022	Civil Engineering Technicians	226	227	+0.4%	+1	+50	+50
173031	Surveying & Mapping Technicians	40	37	-7.5%	-3		
470000	Construction & Extraction Occupations	8,114	8,252	+1.7%	+138	+1,310	+1,480
471011	First-Line Spvsrs. of Construction Workers	480	481	+0.2%	+1	+30	+30
472021	Brickmasons & Blockmasons	103	122	+18.4%	+19		+20
472031	Carpenters	1,313	1,326	+0.9%	+13	+150	+160
472051	Cement Masons & Concrete Finishers	176	190	+7.9%	+14	+20	+30
472061	Construction Laborers	1,127	1,170	+3.8%	+43	+220	+260
472073	Construction Equipment Operators	1,120	1,134	+1.2%	+14	+180	+200
472111	Electricians	863	872	+1.0%	+9	+130	+140
472141	Painters, Construction & Maintenance	269	271	+0.7%	+2	+40	+40
472151	Pipelayers	71	72	+1.4%	+1		+10

472152	Plumbers, Pipefitters, & Steamfitters	416	417	+0.2%	+1	+50	+50
472211	Sheet Metal Workers	284	287	+1.0%	+3	+60	+60
473012	Helpers--Carpenters	51	53	+3.9%	+2		
474011	Construction & Building Inspectors	68	68	0.0%		+10	+10
474051	Highway Maintenance Workers	410	405	-1.2%	-5	+100	+100
474071	Septic Tank Svcs. & Sewer Pipe Cleaners	91	98	+7.6%	+7	+20	+20
475021	Earth Drillers, Except Oil & Gas	58	51	-12.0%	-7	+10	+10
490000	Installation, Maintenance, & Repair Occs.	7,842	8,063	+2.8%	+221	+1,900	+2,240
493042	Mobile Heavy Equipment Mechanics	1,068	1,057	-1.0%	-11	+250	+250
499021	Heating, Air Cond., & Refrig. Mechanics	169	175	+3.5%	+6	+20	+30
499044	Millwrights	30	34	+13.3%	+4		+10
499051	Electrical Power-Line Installers/Repairers	343	323	-5.8%	-20	+130	+130
530000	Transportation & Material Moving Occs.	9,419	9,285	-1.4%	-134	+2,150	+2,260
533032	Heavy & Tractor-Trailer Truck Drivers	2,205	2,170	-1.5%	-35	+370	+370
537061	Cleaners of Vehicles & Equipment	352	374	+6.2%	+22	+120	+140

* *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*

- 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 due to 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 due to growth are zero and total job openings equals net replacements.*

Source: DEED [Employment Outlook](#)

For more information about Construction in Northeast Minnesota, contact:

Erik White | Northeast Minnesota Regional Analyst

218-302-8413 | erik.white@state.mn.us

<http://www.mn.gov/deed/data/regional-lmi/northeast-lmi.jsp>

published: July 7, 2017