The Case for Diversifying Construction

Construction is among the industries that are finding it increasingly difficult to find skilled workers. People of color and women hold the key to filling future job openings.



The construction industry is attractive for job seekers because of the wages, job availability and low educational requirements. This fast-growing, medium-sized industry pays above-average wages to its 121,741 workers in Minnesota. The vast majority of job openings require only a high school diploma, and the industry

offers many opportunities for on-the-job training and formal apprenticeships.

Construction is among many industries that are finding it increasingly difficult to fill open positions. Baby boomer retirements combined with smaller post-baby boom generations are causing labor

force growth to slow and even stall out entirely in some parts of the state.

Retirement is hitting even sooner in construction than in other industries in Minnesota because construction workers tend to retire at younger ages. Will employers be able to fill construction jobs with qualified workers over the next several decades?

Although construction has many attractive characteristics for job seekers and career explorers, it is the third-least-diverse industry in Minnesota (behind the much smaller mining and utilities industries). Since most of the current growth in Minnesota's labor force is in nonwhite populations, diversification is essential for this growing industry and an especially good fit for an industry that relies on younger-than-average workers.

Thanks to partnerships with colleges, the industry is beginning to benefit from a new,

young and diverse workforce with a little experience and education already under its belt. This article will explore what it will take for Minnesota's construction industry to stay fully staffed and continue to grow over the next 10 to 20 years.

Help Wanted!

Construction is the 10th-largest of the 20 industrial sectors in Minnesota. It was hit harder during the Great Recession than any other industry. Construction employment fell more than 32 percent (down 37,600 jobs) in just five years between 2006 and 2010. Since then, construction has grown steadily but is still off 5.9 percent from its 2005 peak of 129,400 jobs.

Construction in Minnesota grew 7 percent annually in 2014 and 2015, followed by some slowing in 2016. These growth rates were far faster than Minnesota's all-industry growth of 1.4 percent in 2014 and 1.5 percent in 2015 and are consistent with a slight slowing of overall growth in 2016.

Construction is projected to be the second-fastest-growing industry sector, after health care and social assistance, between 2014 and 2024, with the addition of almost 10,300 jobs in Minnesota. In fact, the industry is on track to exceed that projection in 2016 if it continues to hold steady in the last quarter of the year. (Data was only available through October at the time this article was written.)

Other dynamics in Minnesota's construction industry are compounding the demand for new workers. First, construction tends to be a young industry, with more people retiring or leaving the industry before age 55 then is typical across all industries. The largest group of workers by age, however, is those 45 to 54. This group represented a slightly higher share of the industry (22.6 percent) than across all industries (21.8 percent) in 2015. This means that within the next decade a larger share of workers in construction will retire than across all industries. These are also the workers with the most skill and experience.

Second, as the industry shed jobs during the Great Recession, many people left it altogether, retiring or finding jobs in other industries. At the same time, many high schools and colleges dropped construction and vocational programs that helped to feed the workforce pipeline. Without any experience or background in the field, fewer young people are showing interest and the sector is having a more difficult time recruiting.

The industry is now attempting

to rebuild its workforce. The number of job vacancies in construction grew from 710 during second quarter 2009 to 6,700 during second quarter 2016, despite slower overall employment growth in 2016.

This 841 percent increase in openings compares with a 211 percent increase in openings overall in Minnesota over the eight-year period. These 6,700 construction vacancies translate into an above-average vacancy rate of 5.5, meaning that for every 100 filled jobs, 5.5 were vacant in the industry. This compares to an overall vacancy rate of 3.6 percent, another indicator that construction firms are in hiring mode. This strong demand for workers explains why construction employers are having a difficult time staying fully staffed.

A Good Career Option?

Construction is an attractive industry for workers, particularly those who want a career option that does not require post-secondary education. The industry pays above-average wages. In 2015 the average weekly wage in construction was \$1,178 compared with \$1,030 for all industries in Minnesota. Median hourly wage offers in construction occupations were \$17.99 compared with \$14 for all jobs during second quarter 2016.

Despite above-average wages, only about 20 percent of construction vacancies required post-secondary education compared with 36 percent across all industries in Minnesota during second quarter 2016. Fifty percent of construction vacancies required experience of at least a year, and 25 percent required a license or certificate.



Education requirements in construction tend to be low because the industry follows a different model for training workers, not because the jobs are low skilled. Employers and unions routinely provide training in the form of entry-level jobs that provide informal training as well as more formal on-the-job training arrangements such as apprenticeships.

Formal apprenticeships are available in a range of construction occupations, including electrical, plumbing, carpentry, cement masonry, drywall installation, painting, roofing and other occupations.

Construction-related certificates and associate degrees are available through technical schools and community colleges in a number of different programs, including carpentry, electrical and power transmission installation, building/construction, finishing, management and inspection, and plumbing and related water supply services. But many workers pursue these only after years on the job as a way to qualify for more skilled and higher-paying positions.

Construction is a highly seasonal industry in Minnesota, which is a downside for many workers. Industry employment regularly shrinks by 73 percent between August and February of the following year, amounting to, for example, a drop of 30,000 jobs between August 2015 and February 2016. These seasonal patterns are offset, however, by the fact that most workers in the industry qualify for unemployment insurance, providing some income stability. Another downside to working in construction is the need to move from site to site and sometimes from employer to employer as

jobs end and others become available.

Demographics of the Workforce

Minnesota's construction workforce has several unique aspects. The median age of Minnesota construction workers was approximately 40 in 2015, compared with 43 across all industries in the state. While younger on average, industry workers also tend to be more clustered into the prime working-age years - with 72 percent between the ages of 25 and 54 compared with only 64.5 percent of workers across industries. This is partly because of labor laws that keep very young workers from the industry due to safety concerns, and partly because construction workers tend to retire from or leave the industry at younger ages than workers across all industries. Only 18 percent of construction workers were 55 or over, while 22.2 percent of all workers fell into that age category in Minnesota in 2015.

It will not come as a surprise that the construction industry is still dominated by men, who represented 86.4 percent of the workforce in 2015. This is down less than 2 percentage points from 1995. Currently, 17,300 women work in the industry in Minnesota, comprising 13.6 percent of the workforce.

With only 4.8 percent of its workforce comprised of people of color, the construction industry was the third-least-diverse industry sector in Minnesota in 2015, behind mining and utilities. This is up from 3.5 percent just five years ago, when the industry was the second-least-diverse sector statewide. The industry was slightly more racially diverse, relative to the diversity of the total labor force, in 2005 prior to the recession.

The industry has increased its share of people of color each year since 2011, when it began to rebuild its workforce after the recession in Minnesota. Minority hiring in construction, however, has just barely kept pace with the rate of diversification of Minnesota's workforce overall. The share of minority-held jobs in construction in 2015 was 4.8 percent, compared with 11.7 percent across all industries. In 2010, the share of minorityheld jobs in construction was 3.3 compared with 10.3 percent across all industries.

Diversification

As hiring continues, the industry inevitably will diversify, both in terms of the race and gender of its workers. The current slow pace of diversification, however, means that the industry is losing out on a young and growing workforce.

While the white working-age population (age 18 to 64) in Minnesota continues to shrink, down 6,875 people from 2013 to 2014 alone, the number of workers who are people of color, including immigrant populations, continues to grow, up 27,900 over that period.

Between now and 2030, Minnesota's younger minority population will grow by 37.3 percent, while the white alone population will grow by only 4.1 percent, mostly among people 65 and older.

The reasons for these stark differences by race in growth of working-age populations are at least twofold. For one, the white population is "aging out" into its retirement years at a much faster rate than Minnesota's minority population.

Secondly, there continues to be a significant influx of foreign-born immigrants who are typically in that working-age cohort. In most cases, industries that are not hiring minority workers will not be able to fill open jobs.

Help for Employers

Construction is not an industry that women or certain minority groups, including blacks, traditionally have seen as a viable career option. Many within these demographic groups are not familiar enough with the work to feel comfortable applying for jobs or feel excluded based on the current and historic demographics of the industry. This might make it more difficult for employers to recruit and even retain workers from these groups.



Moreover, the construction industry imposes barriers to entry, primarily in the form of an opaque hiring process and work culture that can serve to keep people unfamiliar with the industry out and that can lead to high turnover among new hires. Other barriers to retention are the layoff cycle that can make it easy to lose new entrants.

Trading Up at Saint Paul
College, a collaboration between
government, employers, unions
and education, is directly
addressing these issues. The
program was first funded in 2014
through a grant from DEED's
Minnesota Job Skills Partnership
and includes partnerships with
the Saint Paul Building &
Construction Trades Council,
Minnesota Department of Labor
& Industry, Workforce Solutions

(Ramsey County), Helmets to Hardhats, Washington County Workforce Center and construction trades companies.

Participating businesses include the following: Collins Electrical Construction Co., Hunt Electric Corp., Muska Electric Co., Muska Plumbing LLC, Harris Mechanical, McGough, Corval Group, Swanson & Youngdale, International Union of Painters and Allied Trades District Council #82, Nasseff Mechanical, Total Construction, Medina Electrical, CBI, Pioneer Power, Rainbow, Scheck Mechanical and Mechanical Operations.

To qualify, applicants must be receiving public assistance in Minnesota or have a household income at or below 200 percent of poverty. Trading Up participants receive individualized assessment and career guidance counseling from a career navigator to make sure each trainee finds the trade that best suits his or her abilities and interests. During the training phase of the program, participants explore a variety of skilled trades through visits to apprenticeship training centers and hands-on experience.

"The goal of Trading Up is to provide a bridge for students to enter construction who would otherwise not have either the qualifications to succeed in the industry or even the knowledge of how to apply for construction jobs," said program director Sarah Lechowich.

Lechowich said the industry as a whole is very concerned about workforce and skills shortages as it attempts to replace retirees and grow its workforce.

"It takes a while to get an apprentice through a program, three to five years," she said. "Unions and employers realize that you need to get people trained and ready before you lose the institutional knowledge."



Trading Up welding class participants.

Q&A With Sarah Lechowich

The following interview was conducted with Sarah Lechowich, Trading Up program director.

Trends: Do your contacts in construction say that it is difficult to find qualified workers?

Lechowich: Finding skilled workers and retention are both difficult. We use the Multi-Craft Core (MC3) Curriculum designed by and for the construction industry. The curriculum addresses hard and soft skills. We also introduce students to union culture and the apprenticeship structure.

Construction is very different from other industries. You have to learn how to live and breathe within the culture. You have to understand how layoffs work, what is collective bargaining, what is an apprenticeship training, what am I signing? We try to set the students up for success by answering those types of questions.

Each student has a trainer/ mentor, mostly retired or older construction workers. Students can get real answers about what they're walking into and what it is going to be like. Things like what was it like your first day, what do you wish you would have known? What is the best lunch box? What brand of boots should I avoid? A big part of the program is really about building relationships.

Trends: What are the barriers to entry imposed by the construction industry? How do you work with the industry and your students to mitigate these?

Lechowich: What I've learned is that the entry points are different for each different specialty area in construction. This can create a convoluted process for job seekers. In some specialty areas you have to be hired by a union and then a contractor takes you on. In some it is the opposite. In some areas hiring is done year-round and in others there are special times or days or even years when you can bring your application. You need to know someone who knows what those windows are to be able to know when to even apply.

We take an individualized path — where do you want to be at the end of this program? We visit JATC — apprenticeship training centers — basically like a university system. We talk about different pathways. Depending on their construction interests, some students might need to take specific classes — math or welding, for example — to make



themselves more competitive. Or we just help them figure out entry points or entry dates, help them find pre-apprentice or helper jobs to get their foot in the door.

Trends: What is your success rate with job retention?

Lechowich: We serve a wide variety of people, and some just aren't ready to enter construction when they start with us. People who don't have driver's licenses, I can't place in construction. We place them in employment, help with some wrap-around services to get them stabilized, then set them on the path toward construction once they can get a driver's license and a reliable vehicle. You have to have some personal wealth before you can

work a construction job. That is one problem with retention. If that vehicle fails, retention suffers.

Each wave is unique. Of five waves, we've had 133 folks recruited, 45 placed, we lost 41 who didn't complete. Of the 41 who didn't complete, sometimes it is a lack of interest, sometimes it is due to other barriers like losing housing, an arrest, the need to care for a sick mom.

Trends: In your own words, what are some reasons people of color and women don't apply for construction jobs in the first place? Is it lack of experience, lack of role models, or barriers to entry imposed by the industry, like simply not knowing how to apply for the jobs?

Lechowich: I think everyone agrees that there are barriers. There are barriers on different sides of the coin. Participants in Trading Up lack knowledge and understanding of the industry. Many lack the stability needed to hold down a demanding job. Many lack a driver's license — an absolute must in any construction job - or child care. Many do not understand financial planning to accommodate regular layoffs. If you don't have any family history of that, you may have difficulty planning the financial aspect of a construction career. We spend a lot of time on how to plan. You have to have a lot of structure to



function well in the construction industry, so part of it is learning that structure.

On the employer side, I don't think there is much debate that it is a traditional industry. But construction employers do realize they need to work on inclusion, in part because retention is difficult. Inclusion is the difference between being invited to the party and being asked to dance once you arrive. Some of the questions I ask them is, "Do we expect new employees to act like us or are we welcoming of different ways of doing things, seeing things?" Diversity doesn't always have to mean your traditional gender and race but also geographic diversity. Growing up in a rural environment, you might have a different viewpoint than growing up in an urban environment.

One goal of the program is to try to get people to relate and have conversation. We have a Minnesota state grant to do bias training. We work with students to name, label and identify things that are happening so that they can then decide what to do about it, if anything.

On the flip side, we are working with industry. A part of the training we do is that we are not always fair to people who did not grow up the way we did. We've worked with 48 people in industry — using a curriculum called Measuring Stick. How do you measure yourself and, knowing that, how do you measure other folks? We try to get people to understand other perspectives and implicit bias.

I've led a total of 11 workshops — it's been a really rewarding experience. I expected more pushback, but if you conduct the discussions without judgment or shame, it can be very rewarding for everyone involved. A unique workshop on implicit bias had both employers and workers. The conversation was both unique and beautiful. Everyone walked away smiling. Both journeymen and employers admitted that they came with bias. That is when the magic took place.