

BUILT TO LAST?

*The State of Metro Milwaukee's
Construction Workforce*



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ABOUT THE WISCONSIN POLICY FORUM

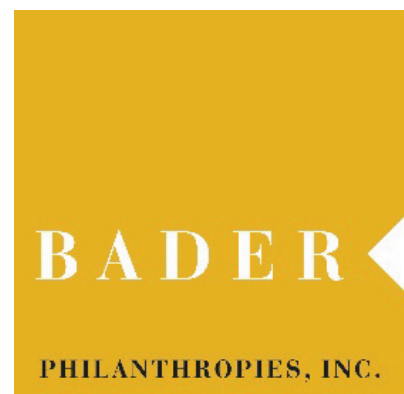
The Wisconsin Policy Forum was created on January 1, 2018, by the merger of the Milwaukee-based Public Policy Forum and the Madison-based Wisconsin Taxpayers Alliance. Throughout their long histories, both organizations engaged in nonpartisan, independent research and civic education on fiscal and policy issues affecting state and local governments and school districts in Wisconsin. The Wisconsin Policy Forum is committed to those same activities and to that spirit of nonpartisanship.

PREFACE AND ACKNOWLEDGMENTS

This report was undertaken to provide policymakers and economic and workforce development leaders in the Milwaukee metropolitan area with an assessment of the state of the regional construction workforce. We hope our findings will be used to inform upcoming policy discussions in the region.

Report authors would like to thank the leaders of the Wisconsin Department of Workforce Development, Milwaukee Department of Public Works and Office of Equity and Inclusion, Building Trades United Pension Trust Fund, WRTP|BIG STEP, and Cross Management Services for providing us with data used in this report; the Milwaukee Building and Construction Trades Council for its assistance in distributing our survey to area unions; and the many other individuals in the Milwaukee area who we interviewed or who otherwise provided us with additional information and insight.

Finally, we wish to thank Gilbane Building Company for commissioning this research and Bader Philanthropies for its generous support of the Forum's economic and workforce development research portfolio, which helped make this report possible.





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INTRODUCTION

The Milwaukee area continues to experience a steady flow of large, high-profile development projects, including the \$456 million expansion of the downtown [convention center](#), construction of the 44-story [Couture](#) residential tower near the lakefront, a new [chemistry building](#) on UWM's East Side campus, and a [31-story apartment building](#) in the Historic Third Ward. Several additional large projects recently have been announced, and numerous mid-sized projects also are underway or planned in the downtown area and beyond.

While this strong pace of development activity will change the city's skyline and produce benefits throughout the regional economy, it has raised questions as to whether the region has enough construction workers to meet current and upcoming demand. Certain projects also carry targeted hiring requirements often connected to the city's Residents Preference Program, which is designed to ensure that a portion of the jobs produced by city-supported construction projects are filled by qualifying city residents. Long-term concerns have been raised that the pipeline of new construction workers may not be sufficient to replace those expected to retire in the coming years.

In this report, we seek to shed light on these challenges. Our analysis is guided by the following key research questions:

- *Is the current supply of construction workers and the pipeline of new workers in metro Milwaukee strong enough to meet the demand for labor in the next several years?*
- *How are the demographics (age, race/ethnicity, gender) of metro Milwaukee's construction workforce changing over time?*
- *Are workforce challenges greater in some construction trades than others?*
- *Are current efforts to recruit and retain construction workers in metro Milwaukee sufficient, including those who qualify for the city of Milwaukee's Residents Preference Program (RPP)?*

To help answer these questions, we collected and analyzed data from numerous sources, including the U.S. Bureau of Labor Statistics, Wisconsin Department of Workforce Development, Milwaukee Department of Public Works and Office of Equity and Inclusion, Building Trades United Pension Trust Fund, and WRTP|BIG STEP. We complement these data sources with information and insight gathered through a survey of Milwaukee area construction labor unions and a series of interviews with area construction contractors and industry leaders.

As development and infrastructure projects continue to transform downtown Milwaukee and the broader city and metro area, we hope this analysis assists leaders across sectors who are working to cultivate and fortify the region's current and future construction workforce.



BACKGROUND

Development Activity

Current and planned development projects seem to grab headlines in metro Milwaukee¹ every week. As shown in **Table 1**, at least 21 major commercial and residential projects valued at \$50 million or more are under construction in the area or planned for completion by 2025. Together, these projects are valued at roughly \$3 billion and will require thousands of construction workers to complete. The Wisconsin Center expansion alone, for example, is projected to employ 350 to 400 workers at peak construction. Numerous smaller development projects are under construction or planned as well.

Table 1: Current and planned Milwaukee area development projects valued at \$50 million or more

Project	Estimated Value	Location	Expected Completion
Wisconsin Center expansion	\$456 million	Milwaukee	2024
Children's Hospital campus improvement project	\$385 million	Wauwatosa	2023
Milwaukee Public Museum	\$240 million	Milwaukee	2025
The Couture	\$191 million	Milwaukee	2023
333 N. Water apartments (Third Ward)	\$165 million	Milwaukee	2024
Iron District mixed use development	\$160 million	Milwaukee	2024
MCW Cancer Research Building	\$153 million	Wauwatosa	2024
Forensic Science Center	\$153 million	Wauwatosa	2025
Harbor Yards	\$150 million	Milwaukee	TBD
Goerke's Corners mixed use redevelopment	\$120 million	Waukesha	2024
UWM Chemistry building	\$118 million	Milwaukee	2023
ThriveOn King mixed use development	\$110 million	Milwaukee	2023
Potawatomi renovation project	\$100 million	Milwaukee	2023
Marquette wellness and recreation facility	\$80 million	Milwaukee	2024
Kaeding apartment development (Third Ward)	\$80 million	Milwaukee	TBD
Marquette College of Business	\$70 million	Milwaukee	TBD
Goll House apartment high rise	\$69 million	Milwaukee	TBD
Milwaukee Public Schools Esser renovations	\$63 million	Milwaukee	2024
Admiral's Wharf apartments (Third Ward)	\$51 million	Milwaukee	TBD
Drew Tower	\$50 million	Wauwatosa	TBD
Frank Productions music venues (Deer District)	\$50 million	Milwaukee	2024

Source: WPF analysis of Milwaukee Journal Sentinel's [Land and Space Development Database](#); additional web research
 Note: Projects with expected completion dates sooner than summer 2023 are excluded from this table.

While our analysis focuses primarily on commercial and multi-family residential construction, infrastructure and utility projects and single-family residential construction also employ large numbers of craft workers in the region. For example, the Wisconsin Department of Transportation's

¹ Throughout this report, "metro Milwaukee" generally refers to the four-county metropolitan area, which includes Milwaukee, Waukesha, Ozaukee, and Washington counties.

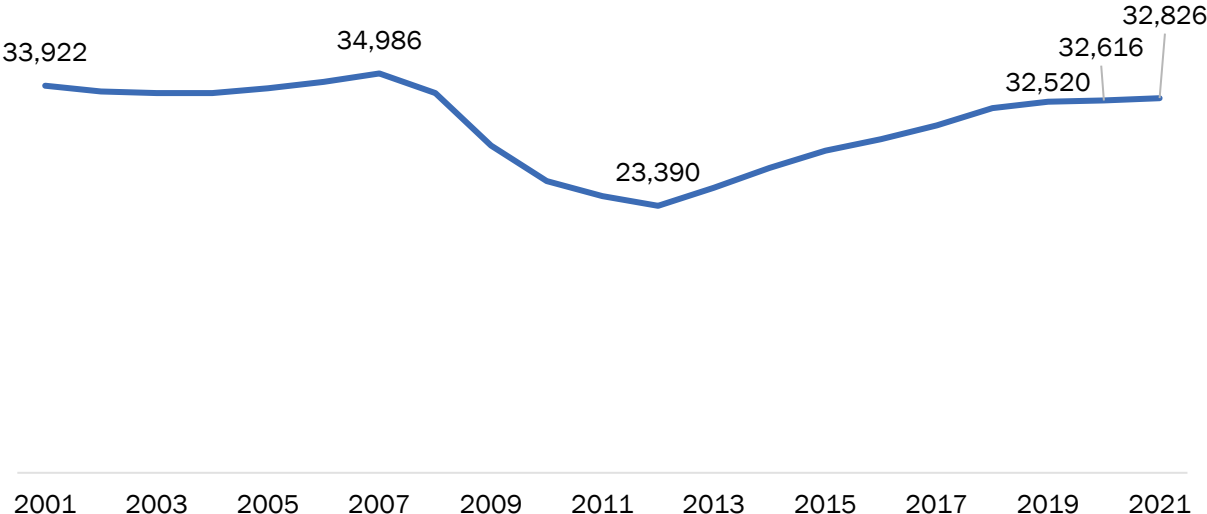


\$550 million [reconstruction and expansion](#) of a 14-mile section of Interstate 43 from Glendale to Grafton is currently underway and slated for completion in 2025. The federal Infrastructure Investment and Jobs Act and local infrastructure investments by the Milwaukee Metropolitan Sewerage District (MMSD) and others could increase demand for skilled construction workers in certain trades in the coming years.

Construction Employment

Employment in metro Milwaukee’s construction sector – while still slightly below pre-Great Recession levels – has remained remarkably steady throughout the pandemic. In fact, average annual construction employment actually rose slightly (0.3%) from 2019 to 2020 and increased another 0.6% from 2020 to 2021 (**Figure 1**). This was likely influenced by the state’s [designation](#) of construction as an “essential service,” which exempted it from Governor Tony Evers’ “Safer at Home” executive order at the height of the pandemic. The steadiness of the construction sector is notable given average employment in the Milwaukee metro area across all industries dropped by 6.6% from 2019 to 2020 and remained 5.1% below 2019 levels in 2021.

Figure 1: Total construction employment in the Milwaukee metro area (annual averages)



Source: U.S. Bureau of Labor Statistics – Quarterly Census of Employment and Wages

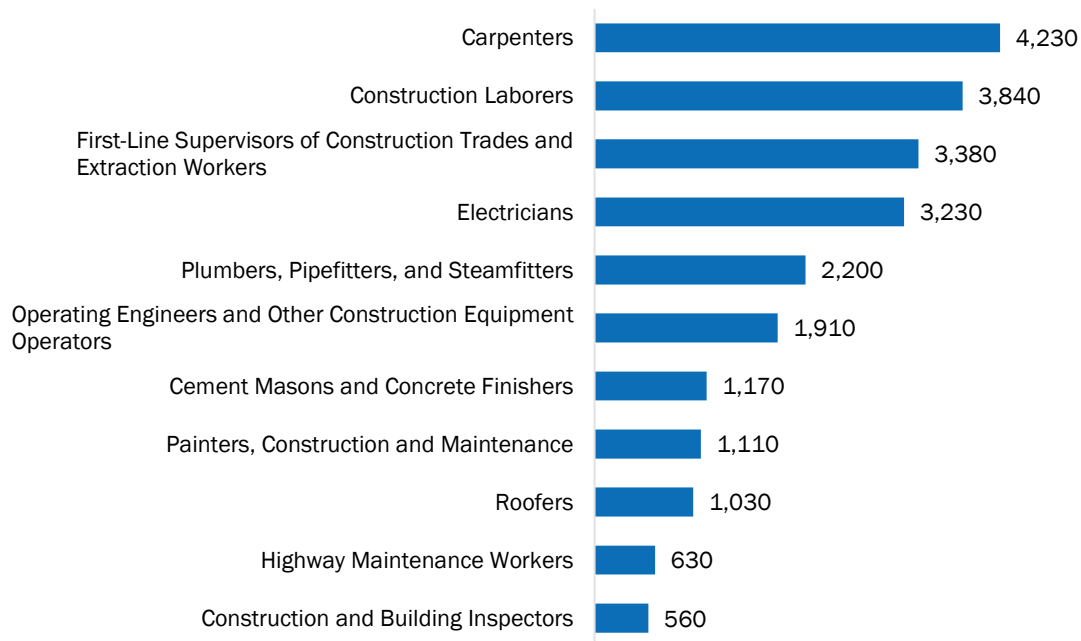
Nationally, there is some evidence that employment in residential building construction (single-family and multi-family housing) has been stronger than in nonresidential (commercial and industrial) building construction. According to [monthly data](#) from the U.S. Bureau of Labor Statistics (BLS), employment in residential building construction was 10.1% higher in July 2022 than in July 2019, while nonresidential building construction remained 3.8% below 2019 levels at that time.

In metro Milwaukee, the largest numbers of construction workers are employed as carpenters, laborers, electricians, and first-line supervisors. As shown in **Figure 2**, more than 3,000 workers were employed in each of those occupations in 2021, while at least 500 workers were employed in



several other construction occupations. [Employment data](#) from the BLS also show strong job growth in many of these occupations, with more than 1,200 laborers and 1,000 carpenters added to the regional workforce since 2011.

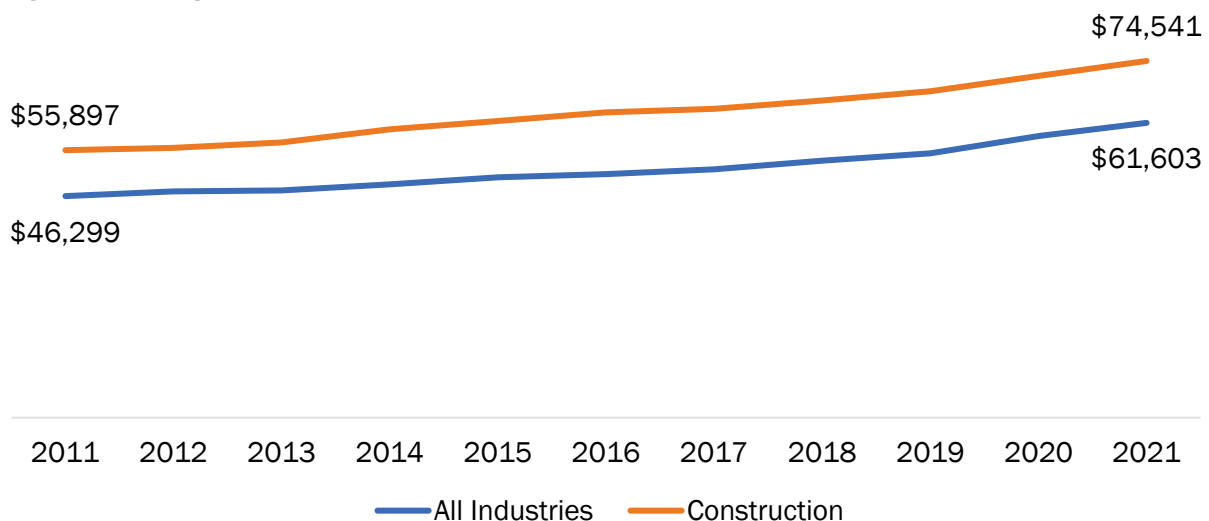
Figure 2: Construction occupations employing the most workers in metro Milwaukee, 2021



Source: U.S. Bureau of Labor Statistics – Occupational Employment and Wage Statistics

Average wages in metro Milwaukee’s construction sector have consistently exceeded averages for the economy overall. In 2021, the average annual pay in the construction sector was 21% higher than the average for all private sector jobs, as shown in **Figure 3**. The difference was similar in 2011.

Figure 3: Average annual private sector pay in construction vs. all sectors (Milwaukee metro area)

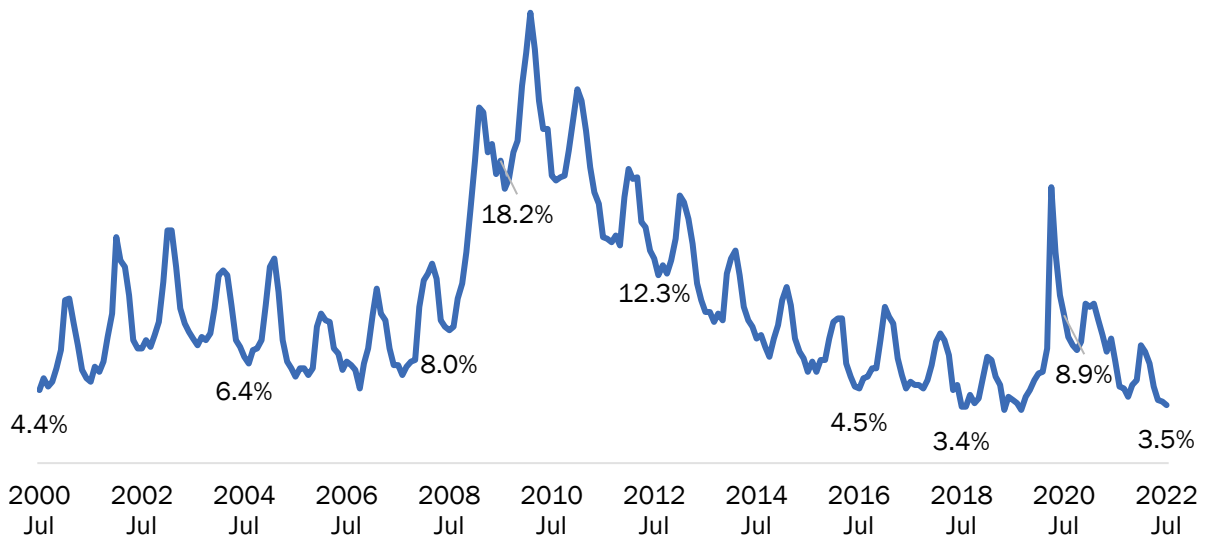


Source: U.S. Bureau of Labor Statistics – Quarterly Census of Employment and Wages



Meanwhile, following a brief spike at the onset of the pandemic, the unemployment rate in the construction sector has fallen to near its lowest point in at least two decades. As shown in **Figure 3**, the national unemployment rate in construction was 3.5% in July 2022, which was similar to pre-pandemic levels.

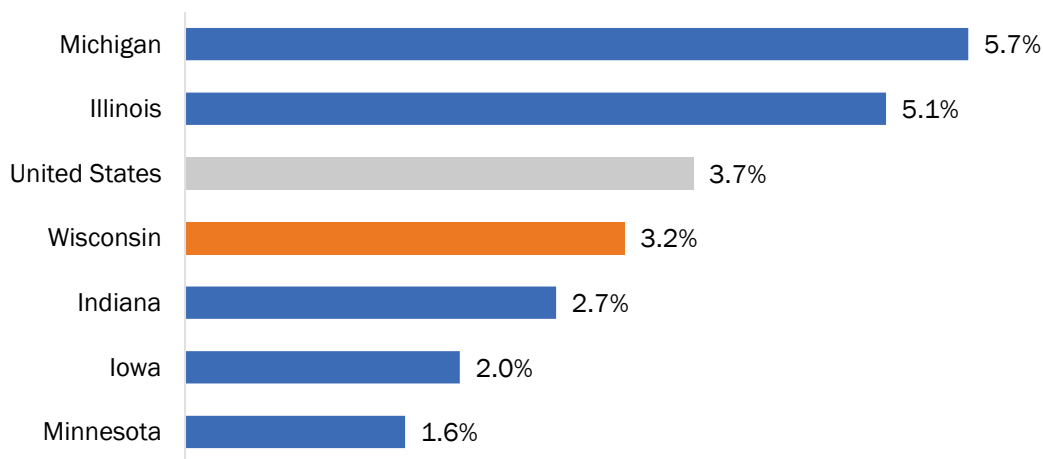
Figure 3: National unemployment rate in the construction sector (not seasonally adjusted)



Source: U.S. Bureau of Labor Statistics – Current Population Survey (labels for July in each year)

At 3.2%, Wisconsin’s June 2022 unemployment rate in the construction sector was even lower than the national rate, according to Associated Builders and Contractors [estimates](#) that used federal BLS data (**Figure 4**). On this measure, Wisconsin was in the middle of the pack among neighboring states.

Figure 4: Estimated construction unemployment rates in Wisconsin and select states, June 2022

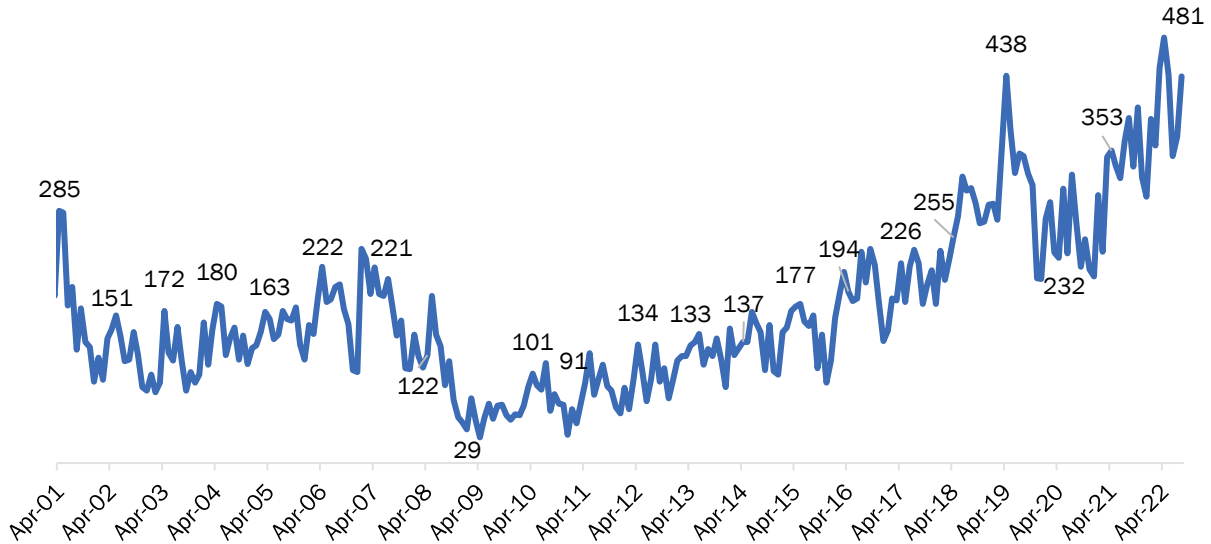


Source: Associated Builders & Contractors (based largely on U.S. Bureau of Labor Statistics data)



Alongside historically low unemployment, the number of job openings in the construction sector nationally reached its highest point in at least two decades in April 2022 (Figure 5). Job opening data are only available at the national level, but this trend is likely similar in Wisconsin.

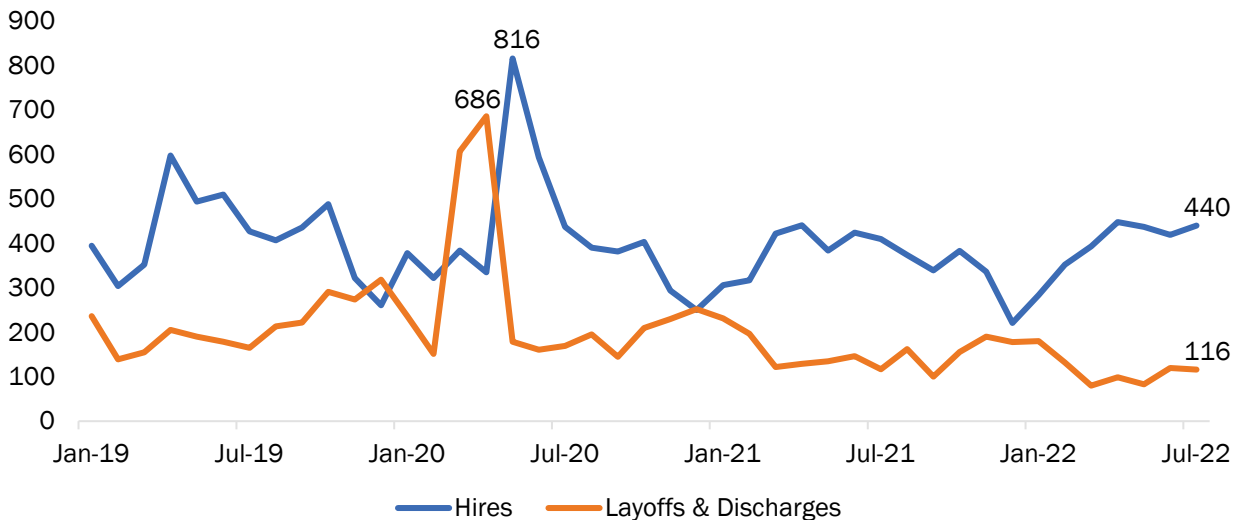
Figure 5: Construction job openings in the U.S., in thousands (labels are for April of each year)



Source: U.S. Bureau of Labor Statistics – Job Openings and Labor Turnover Survey

Nationally, after an initial spike in construction layoffs and discharges in March and April 2020, there was an even larger hiring spike in May 2020, and hires have exceeded layoffs and discharges in nearly every month since (Figure 6). For example, between January and July 2022, hires exceeded layoffs and discharges by nearly two million. These data also are only available at the national level.

Figure 6: Monthly construction hires, layoffs, and discharges in the United States (in thousands)



Source: U.S. Bureau of Labor Statistics – Job Openings and Labor Turnover Survey



Milwaukee's RPP and Other Forms of Construction Workforce Inclusion

Established in 1991, the city of Milwaukee's Residents Preference Program (RPP) originally was designed to increase construction employment opportunities for unemployed and underemployed individuals living in distressed Milwaukee neighborhoods. At its inception, the program required that at least 14% of the hours worked on public works contracts – including street, sewer, and building improvement projects – were completed by city residents living within the areas of the city eligible for Community Development Block Grant (CDBG) funding.

Since that time, the RPP has been modified in several ways. Program eligibility has been expanded citywide and to low-income individuals regardless of employment status. The RPP's percentage requirement for resident participation has increased several times – [most recently in 2009](#) to 40% of a project's total work hours. In 2009, the program also was expanded beyond public works contracts to apply to private development projects that receive at least \$1 million in direct financial support from city government. Direct financial support could include grants, below-market land sales or loans, or funds provided through tax incremental financing (TIF). When the city directly contributes to a private development project in one of those ways, a development agreement is created that includes the project's RPP requirements.

Two provisions in the [RPP ordinances](#) make it easier for contractors to meet the program's 40% resident participation requirement. First, hours worked by individuals who live outside of Wisconsin are not included in calculating resident participation rates on a project. This is done to avoid legal challenges; federal policy prohibits discrimination based on state of residence, and legal challenges have arisen elsewhere. Also, contractors can employ RPP workers on projects when it is not required and use those hours for up to one-third of the total RPP worker hours needed for the project.

For qualifying private development projects, the city of Milwaukee's Department of City Development (DCD) is responsible for negotiating with developers to create development agreements that include specific RPP requirements. The city's Office of Equity and Inclusion plays the primary role in monitoring, enforcing, and reporting on the RPP as it relates to those projects.

Certification and hiring process - To become RPP-certified, an individual simply has to fill out an affidavit form and provide documentation verifying that he or she is a city of Milwaukee resident who meets the program's unemployment, underemployment, or income guidelines. Individuals can become certified through four agencies: Milwaukee's Department of Public Works, WRTP|BIG STEP, Riverworks, and Mindful Staffing. WRTP|BIG STEP, a nonprofit organization that recruits, prepares, and connects individuals with employers, plays the largest role in certifying RPP workers, partnering with numerous community organizations in the city to do so.² Notably, the agencies receive no funding specifically designated to support the work they do to certify individuals for the RPP.

The process of gaining employment in construction varies by trade. For entry-level workers, each trade has an apprenticeship committee (comprised of both union and contractor members) that is

² WRTP|BIG STEP is an acronym for Wisconsin Regional Training Partnership/Building Industry Group - Skilled Trades Employment Program.



responsible for maintaining a list of individuals who are eligible for apprenticeships. Those lists are sometimes ranked, with individuals placed higher on the list if they have stronger credentials. For skilled journey workers, union halls maintain lists based on work status; those who are not working tend to be prioritized when new opportunities become available.

When contractors are looking for workers, they often turn to the appropriate committee or union hall for a list of eligible workers. If a contractor specifically is seeking workers who are RPP-certified, they are allowed to choose those individuals even if they are ranked further down on the lists. WRTP | BIG STEP also assists employers in certifying workers for the RPP, recruiting RPP workers, and maintaining records for RPP certification. Some contractors also maintain unique lists of RPP workers with whom they have worked in the past.

Other forms of workforce inclusion – Some development projects not required to comply with the city’s RPP ordinance – but still receiving some form of public financial assistance or approval – include voluntary targeted hiring goals within development agreements. Those agreements may establish commitments for utilizing firms and/or workers that meet certain criteria. For example, the principal contractor on Milwaukee’s Wisconsin Center expansion project [has made a commitment](#) that at least 40% of on-site construction labor hours will be performed by trade workers who are RPP-certified or at least live in the city of Milwaukee. The project also has set goals for inclusion of minority-, women-, and veteran-owned firms and for tradespeople in each of those categories.

Likewise, the plan to develop two new music venues next to Fiserv Forum in downtown Milwaukee’s Deer District includes [recently-announced labor agreements](#) that establish a 40% RPP goal. Those agreements also commit contractors to ensuring that at least 15% of the project’s construction labor hours are tied to job training and apprenticeship and that at least 5% of on-site construction hours are completed by female workers.

Summary

While the COVID-19 pandemic caused total employment to decline in the Milwaukee area and nationally, the construction sector remained resilient, with employment in metro Milwaukee inching upward to average nearly 1% more workers in 2021 than in 2019. Meanwhile, the unemployment rate in Wisconsin’s construction sector has dropped back to historically low levels and national job openings in construction are at a historic high. Taken together, these data suggest the construction labor market is tight both locally and nationally.

The city of Milwaukee’s Residents Preference Program has expanded considerably since its creation in 1991 and now applies to all public works projects and a subset of private development projects supported by city funds. The RPP currently requires that at least 40% of the hours worked on those projects are completed by city residents who qualify for the program based on their income or employment status. Some projects not covered by the RPP ordinance also set voluntary workforce inclusion goals. Thus, in addition to the tight labor market for construction workers in general, contractors working on projects with RPP requirements or other targeted hiring goals have the added challenge of employing sufficient numbers of workers who meet those criteria.



WORKER SUPPLY AND DEMAND

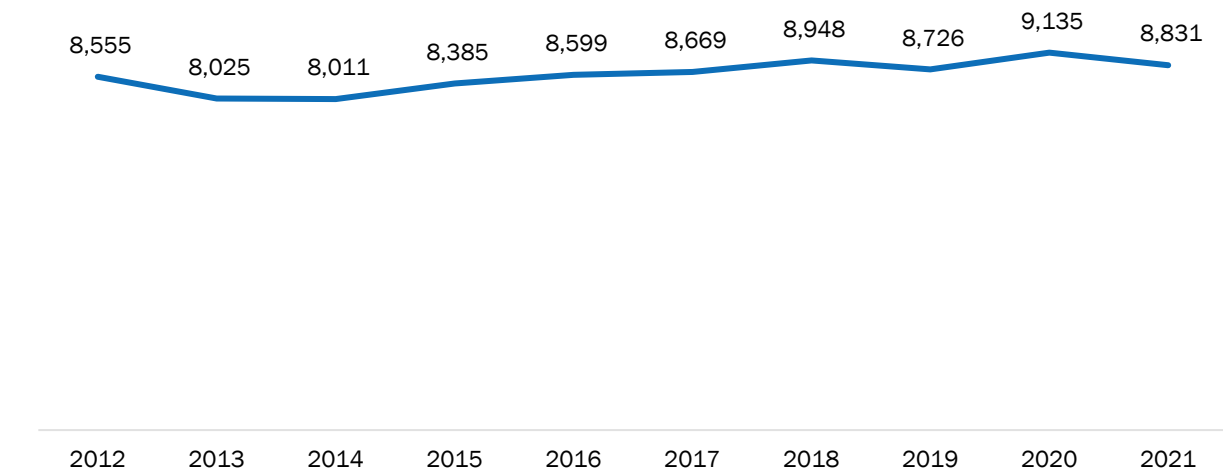
To gauge the current supply and demand for construction workers in the Milwaukee area and the pipeline of new workers coming into the field, we collected and analyzed data from several sources. Those include employment data from the Building Trades United Pension Trust Fund; apprenticeship data from the Wisconsin Department of Workforce Development; and data on RPP workers and projects with RPP requirements from the city of Milwaukee’s Department of Public Works and Office of Equity and Inclusion.

Active Workers and Hours Worked

Most unionized craft workers in metro Milwaukee who are engaged in commercial construction activity participate in the Building Trades United Pension Trust Fund.³ The pension fund only includes *commercial building* construction workers and not those who work on infrastructure or utility projects. Additionally, most small-scale *residential* construction is completed by non-union workers who are not part of the pension fund.⁴

As shown in **Figure 7**, the total number of active union construction workers in the pension fund has fluctuated somewhat but was at its highest point of the last decade in 2020 and remained relatively high in 2021 despite the pandemic. Notably, this data only includes workers who reside in metro Milwaukee and not those who work here but live elsewhere.

Figure 7: Number of active union construction workers in the Milwaukee area pension fund



Source: Building Trades United Pension Trust Fund

The total number of hours worked across all trades also increased in the years leading up to the pandemic, rising steadily between 2013 and 2020 before ticking downward in 2021, as shown in

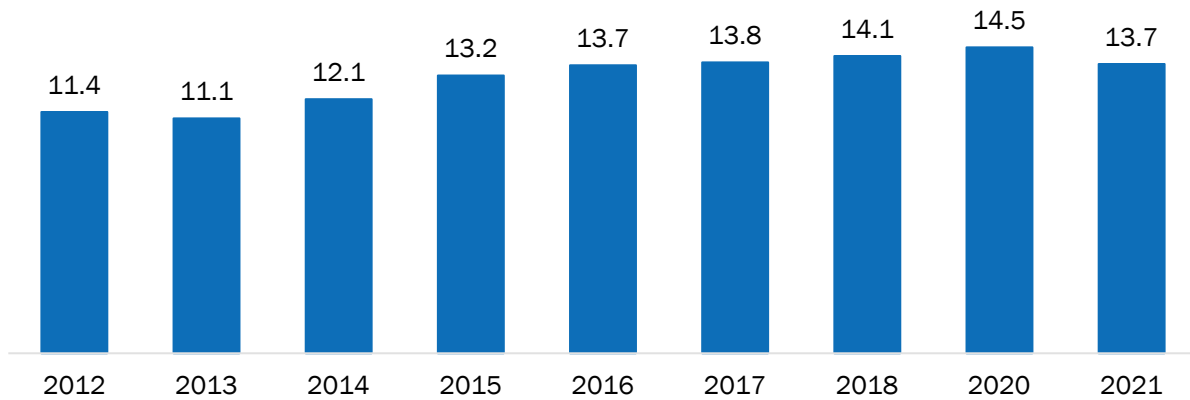
³ Operating engineers and electricians are two major crafts that do not participate in this local pension fund.

⁴ We also attempted to obtain data from the Wisconsin Department of Safety and Professional Services on the number of licensed and credentialed workers in the construction trades but were unable to secure it in time to include in this analysis.



Figure 8. It is too early to know whether the decline in 2021 in both active workers and hours worked was a one-year dip or may be part of a longer-term trend.

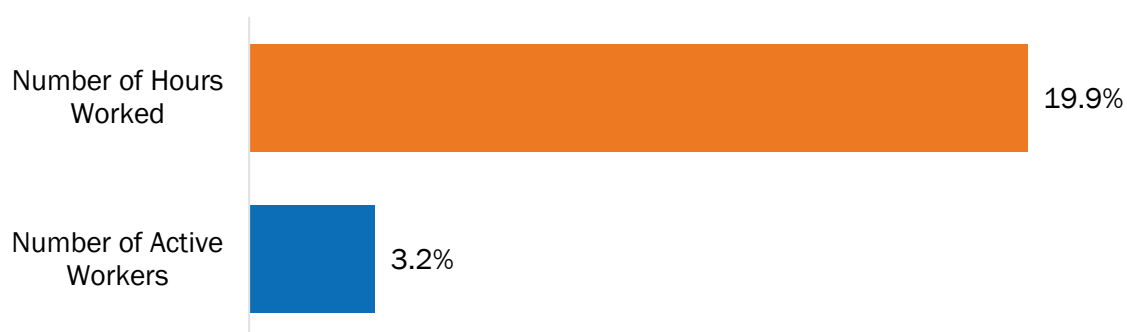
Figure 8: Total hours worked by Milwaukee area union construction workers (in millions)



Source: Building Trades United Pension Trust Fund. Note: Hours worked were not available for 2019.

Over the last decade, the combined hours worked by pension fund participants has grown faster than the number of active workers, meaning the average hours completed per worker has increased. In 2021, there were 3.2% more active workers than in 2012, but those workers completed 19.9% more hours (**Figure 9**). These dynamics may reflect a tightening of the labor market as demand outpaces supply.

Figure 9: Change in Active Union Construction Workers and Hours Worked, 2012-2021



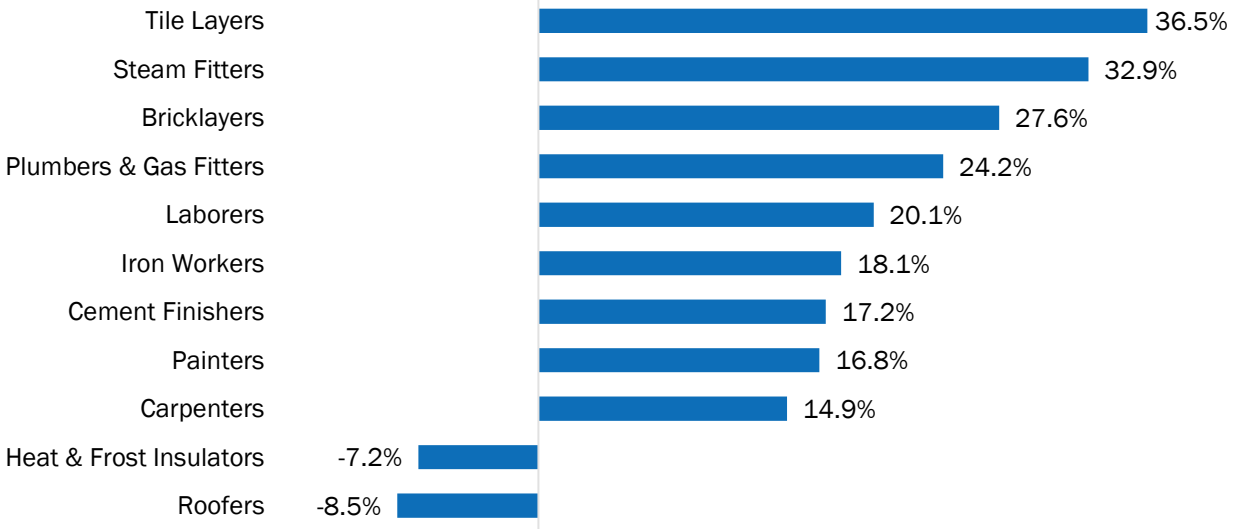
Source: WPF analysis of Building Trades United Pension Trust Fund data

These trends vary considerably by trade, however, with craft labor hours climbing in most trades but falling in a few others. As shown in **Figure 10**, the fastest growth has occurred in tile laying and steam fitting, while fewer hours were completed by heat and frost insulators and roofers in 2021 than in 2012. Increases in hours completed during this period may primarily reflect greater demand but also could be influenced by growing unionization of workers in some trades.

Market forces influence the number of labor hours by trade in various ways. According to industry leaders we interviewed, for example, the roofers had a larger jurisdiction in the past, which could explain why their work hours have declined. The work hours completed by heat and frost insulators may be down due to a shift that has occurred in that trade toward more prefabrication work.



Figure 10: Change in total hours worked by trade, 2012-2021



Source: Building Trades United Pension Trust Fund

Apprenticeships

Apprenticeships play a critical role in career development in the construction industry. Typically lasting three to five years (depending on the trade), apprenticeships involve paid on-the-job training coupled with classroom instruction. Once workers complete apprenticeships, they achieve journey worker status and are able to earn higher wages.

Candidates must secure a job with an employer to begin a registered apprenticeship. For each trade, joint apprenticeship committees also play an important role in establishing the standards and procedures with which applicants must comply to be eligible to begin apprenticeships. For example, some trade committees require aspiring apprentices to have earned more certifications and to demonstrate more competencies than others. Some trade committees rank eligible candidates based on their qualifications, while others give all eligible candidates a “letter of introduction,” which they are free to use to pursue work opportunities with any prospective employer.

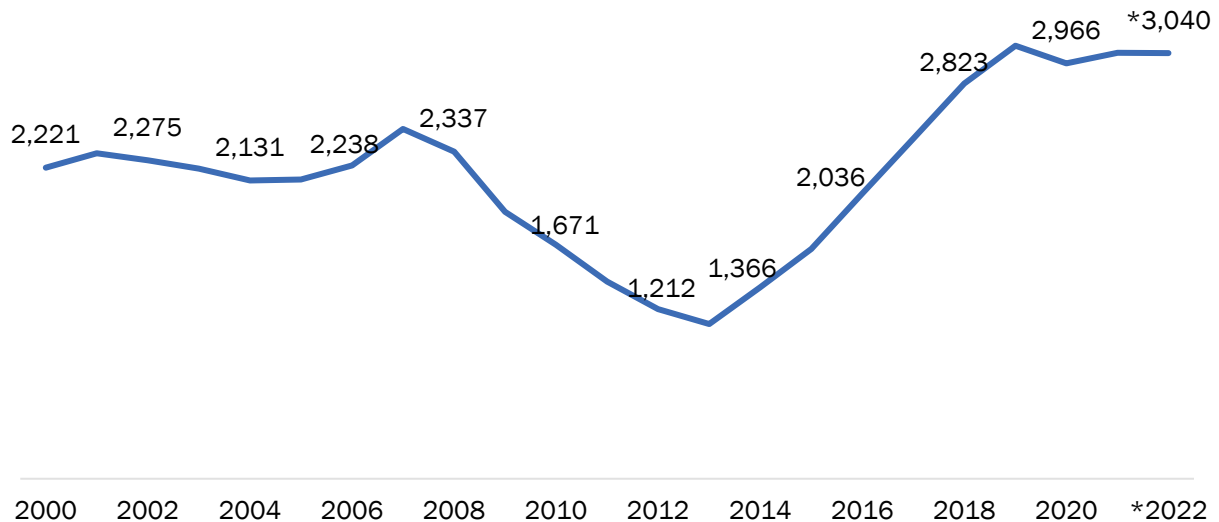
To gauge the strength of the worker pipeline into the construction sector, we examined apprenticeship data from the Wisconsin Department of Workforce Development (DWD) for committees that serve metro Milwaukee or southeast Wisconsin. We excluded two committees that serve Milwaukee from our analysis because one (Wisconsin Operating Engineers) serves the entire state and the other (Southern Wisconsin Heat and Frost Insulators JAC) serves a large area of southern Wisconsin, and data were not available for Milwaukee-area apprentices alone.

Overall, the number of active apprentices across all construction trades increased for several years leading up to the pandemic and has plateaued since 2019 at a relatively high level that exceeds all previous years dating back to 2000 (Figure 11). Most apprenticeships tracked by DWD are union apprenticeships, but some are non-union, with the largest concentration of non-union



apprenticeships tied to the Milwaukee/Waukesha chapter of the Associated Builders and Contractors (ABC) of Wisconsin.

Figure 11: Active apprentices in construction trades for committees serving metro Milwaukee



Source: Wisconsin Department of Workforce Development
*2022 figure is preliminary as reported in October 2022

Differences by trade

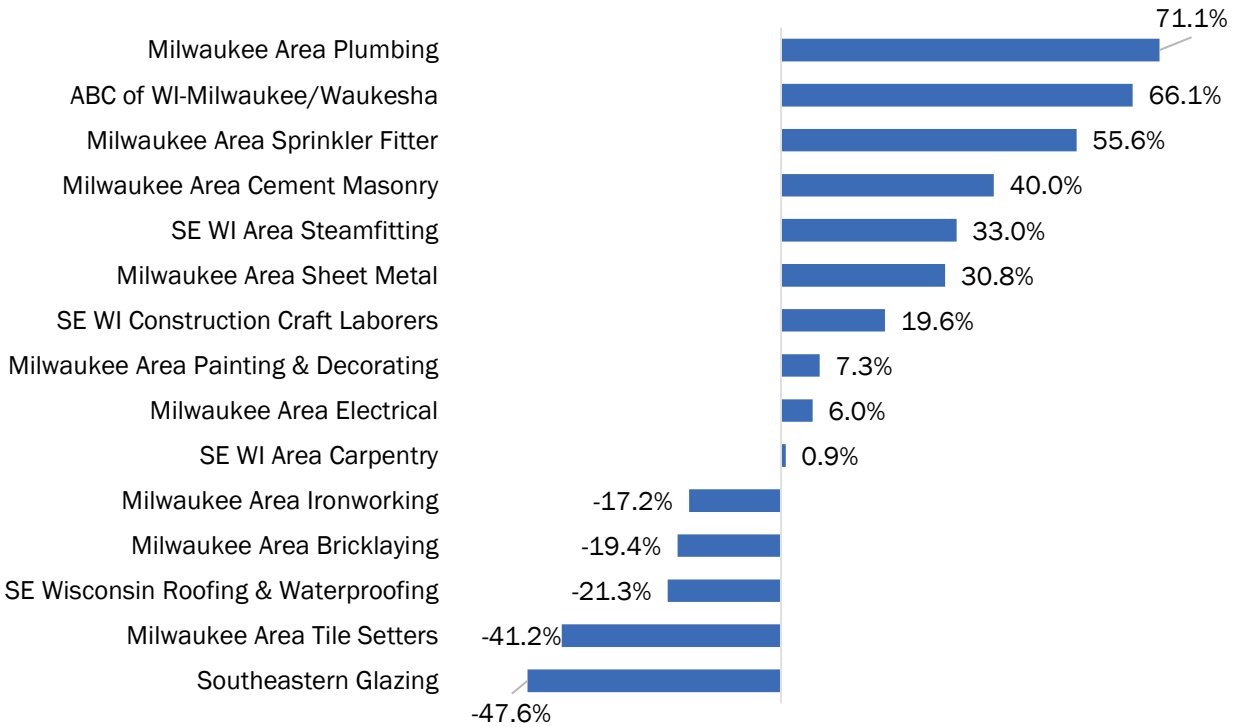
For 10 of the 15 trades for which DWD tracks data, the number of active apprentices was higher in 2022 than in 2017 (**Figure 12**).⁵ During that period, plumbing led the way in apprenticeship growth on a percentage basis and was second only to ABC of Milwaukee/Waukesha in the numeric increase in active apprentices (+101 for plumbers and +320 for ABC). The sprinkler fitters also saw an increase of over 50%.

During that same period, the tile setters and glazers both saw their active apprentice numbers decline by over 40%. Among the committees that saw their apprenticeship numbers decline, the ironworkers had the largest numeric drop (-45). Given that the pension fund data showed the number of hours worked in most of these trades has increased over time, these apprenticeship declines could reflect challenges in recruiting enough new workers.

⁵ We compare 2022 with 2017 here because apprenticeships typically last 3-5 years, so most of the apprentices included in the 2017 cohort would have completed their apprenticeships by 2022.



Figure 12: Change in active apprentices for committees that serve metro Milwaukee, 2017-*2022



Source: WPF analysis of Wisconsin Department of Workforce Development data
 *2022 figures are preliminary as reported in October 2022

Apprentice demographics

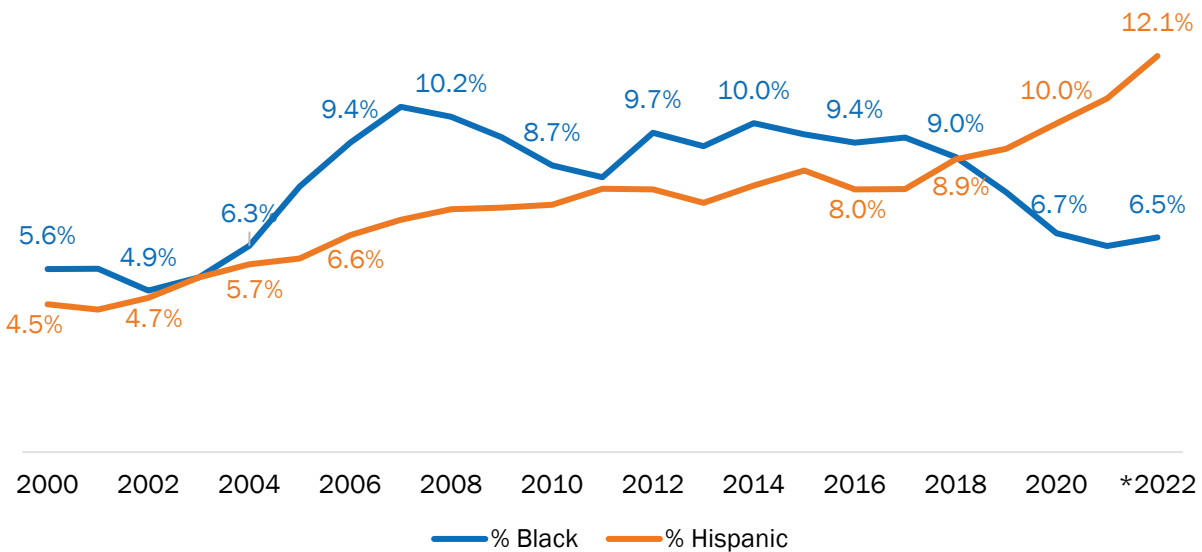
As the population of metro Milwaukee has grown more diverse, the importance of expanding workforce diversity in the construction trades has become increasingly clear. While Hispanic representation among active apprentices has increased steadily over the last two decades, from 4.5% in 2000 to 12.1% in 2022, the region has seen previous progress in Black representation fade during the pandemic (**Figure 13**). After increasing from 5.6% in 2000 to 10.5% in 2007, Black representation among active apprentices generally remained in the 9% to 10% range for several years before falling to the 6% to 7% range from 2020 to 2022.

Approximately 11.6% of the Milwaukee metro area’s population is Hispanic,⁶ so their representation among apprentices has grown to be in line with their representation in the overall population. Black residents account for 16.3% of the Milwaukee metro area’s population, however, which means that Black apprentices remain highly underrepresented in the construction trades. This continued underrepresentation and the recent decrease in Black apprentices in the area are concerning trends that warrant attention.

⁶ Demographic estimates are from the 2020 Decennial Census. <https://data.census.gov/cedsci/>



**Figure 13: Black and Hispanic representation among active apprentices
(committees that serve metro Milwaukee)**



Source: WPF analysis of Wisconsin Department of Workforce Development data
*2022 figures are preliminary as reported in October 2022

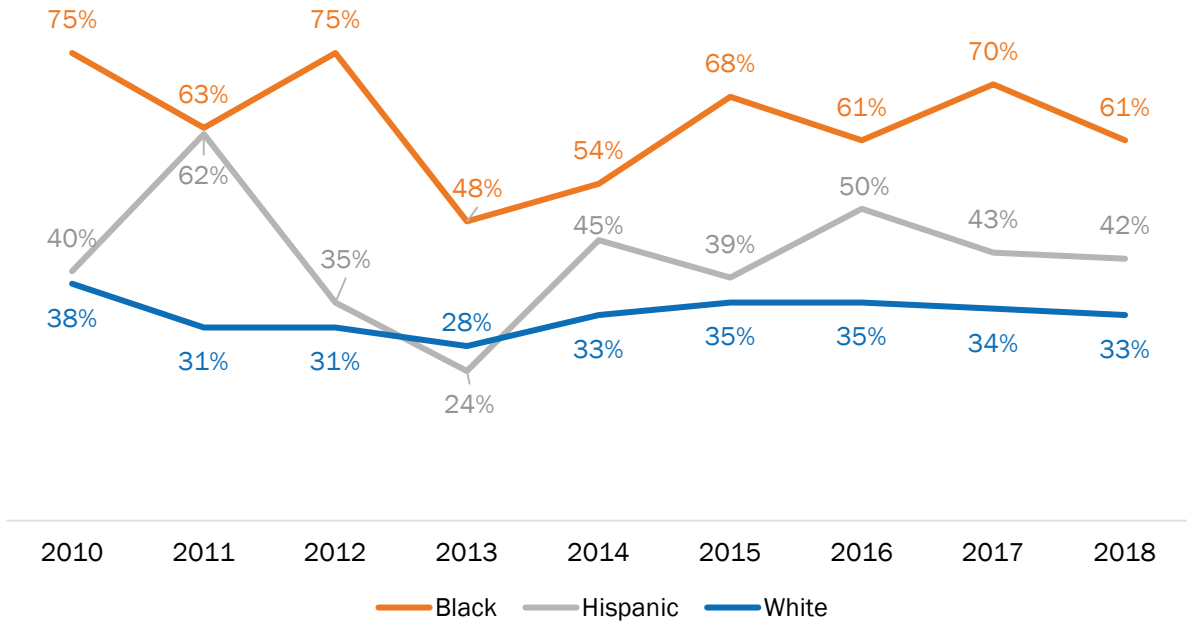
Cancellation rates

Black workers in southeast Wisconsin are also far less likely to complete the apprenticeships they begin than their white and Hispanic counterparts. With the exception of the cohort that started in 2013, a majority of the Black workers who began apprenticeships in every year between 2010 and 2018 have canceled before completion, as shown in **Figure 14**.⁷ Hispanic workers also have experienced higher cancellation rates than white workers, but the difference typically has been much smaller. These disparities have long been known, but efforts to address them have not had a major impact. This chart only includes data through 2018 to give each cohort sufficient time to be comparable across years.

⁷ In addition to the 16 unions that serve the Milwaukee area or southeast Wisconsin alone, our analysis of cancellation rates includes the statewide Wisconsin Operating Engineers and the Southern Wisconsin Heat and Frost Insulators JAC.



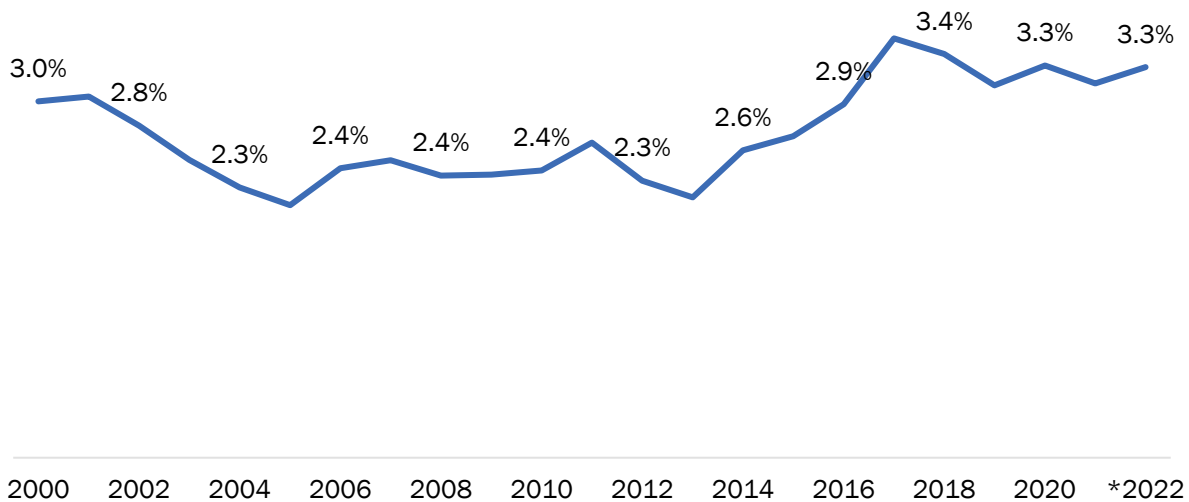
**Figure 14: Apprenticeship cancellation rates by race and start year
(committees that serve metro Milwaukee)**



Source: Wisconsin Department of Workforce Development

Both locally and nationally, women are even more underrepresented than racial minorities in the construction workforce, and little progress has been made in changing that. State data show female workers have never accounted for more than 3.5% of the active apprentices in metro Milwaukee in any year dating back to at least 2000 (Figure 15). To the extent that labor shortages exist in the local construction sector, women continue to represent a largely untapped labor pool.

**Figure 15: Female representation among apprentices
(committees that serve metro Milwaukee)**



Source: Wisconsin Department of Workforce Development
*2022 figures are preliminary as reported in October 2022



Workforce Development Pipeline

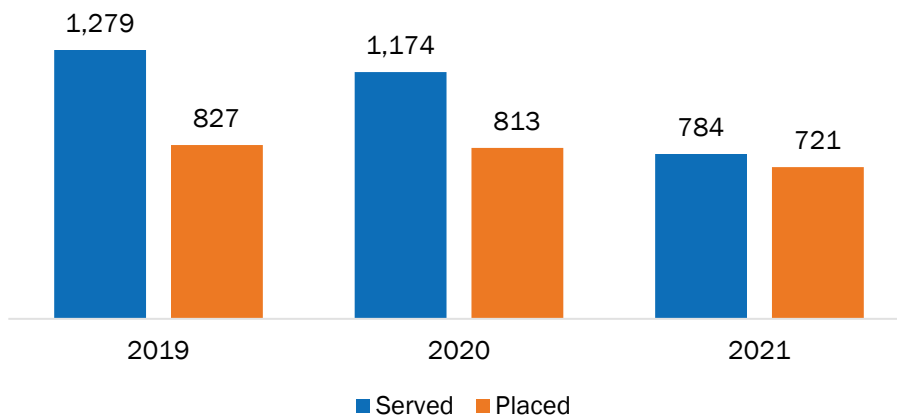
WRTP|BIG STEP is a local nonprofit workforce intermediary that [prepares workers](#) for employment in the construction and manufacturing industries. The organization provides a wide range of services, from tutoring to training to job placement, and has established strong partnerships with area unions and employers. In Milwaukee, WRTP|BIG STEP is perhaps the most prominent organization involved in construction workforce training and placement.

Perhaps unsurprisingly, the pandemic caused the number of individuals served by WRTP|BIG STEP to decline. Although construction was deemed an essential service, it still created disruption and uncertainty for workforce development services. In-person training programs were shut down temporarily and limited digital literacy and access among the workforce made virtual training a challenge. Also, many organizations that typically refer people to WRTP|BIG STEP were temporarily closed, causing referral numbers to drop.

The number of individuals who received any type of services at WRTP|BIG STEP's Milwaukee location decreased from 1,279 in 2019 to 784 in 2021, a drop of nearly 39% (**Figure 16**). However, the number of individuals served in 2022 has rebounded and is on pace to be back near 2019 levels, according to the organization's CEO. While WRTP|BIG STEP prepares workers for both the construction and manufacturing sectors, these numbers do not include those who participated in programming exclusive to manufacturing.

The number of workers placed into jobs by WRTP|BIG STEP has remained more stable during the pandemic, dipping by only 12.8% in 2021 relative to 2019. One factor behind that stability may be the strategic focus the organization put on career management and placement in 2021, which included hiring two new placement coordinators.

Figure 16: Individuals served and placed by WRTP|BIG STEP at its Milwaukee location



Source: WRTP|BIG STEP

There was a notably precipitous decline in the number of Black individuals served between 2019 and 2021 (-63%), and a much smaller dip in Hispanic individuals served (-15%). The number of Black workers served has rebounded considerably in 2022, however, with nearly as many served as of July 31, 2022 (228) as during the entire year in 2021 (234).



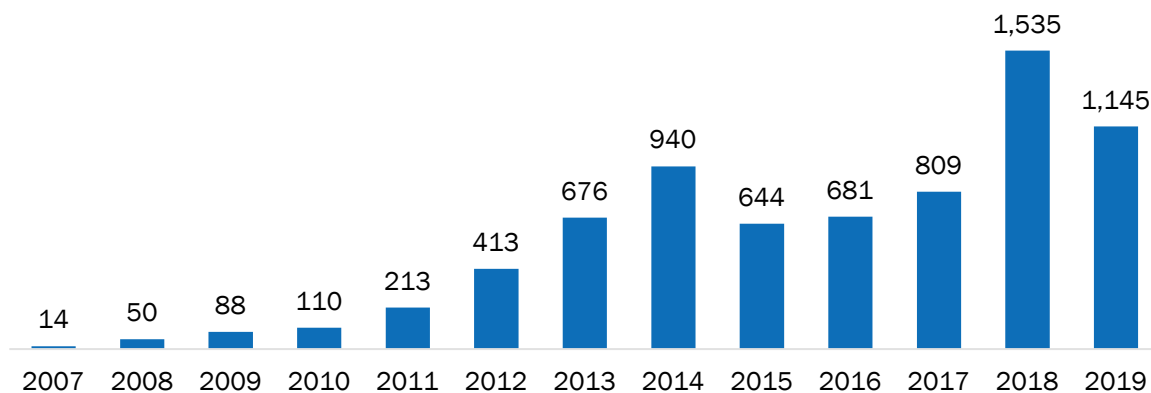
RPP Workers

Demand

As previously noted, demand for RPP-certified workers is driven by city of Milwaukee policies that cover all public works contracts and a small number of private development projects that are supported by city funding.

The number of RPP workers active on public works contracts has generally increased over time and was at its highest (1,535) for contracts awarded in 2018 (**Figure 17**). That number declined for contracts awarded in 2019, though it is possible the 2019 figure could rise as DPW contracts tend to remain open for multiple years as work is still being performed and/or payroll reports remain outstanding. For this reason, we are not showing data for contracts awarded in 2020 or after.

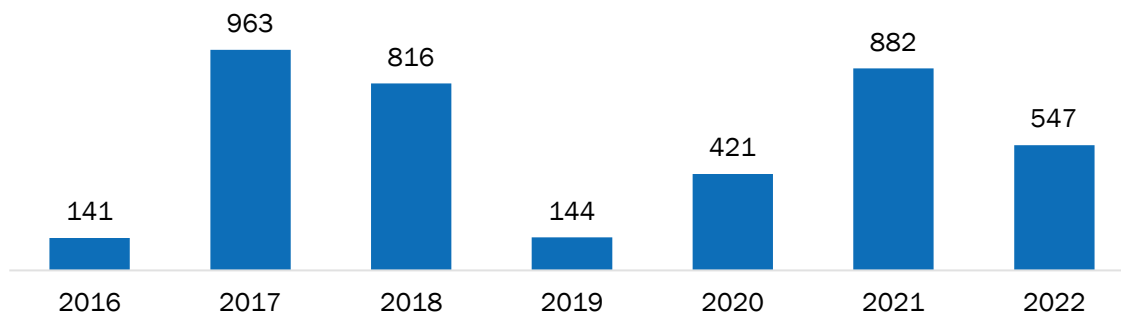
Figure 17: Active RPP workers on city of Milwaukee public works projects by contract year



Source: WPF analysis of data from the city of Milwaukee's Department of Public Works

The number of RPP-certified workers employed on private development projects has varied more dramatically from year to year, from fewer than 150 in 2016 and 2019 to nearly 1,000 in 2017 (**Figure 18**). In 2017 and 2018, the development of Fiserv Forum and its associated public plaza and parking structure helped drive a two-year spike in active RPP workers.

Figure 18: Active RPP workers on private development projects



Source: WPF analysis of LCPtracker data

Note: includes both closed and active projects as of 10/31/22



As of July 2022, eight private development projects were under construction and subject to the city’s Chapter 355,⁸ which requires that at least 40% of project hours are completed by RPP-certified workers. These projects (listed below in **Table 2**) each received at least \$1 million in direct financial support from the city of Milwaukee, often in the form of tax increment financing (TIF).

Four of the eight projects were exceeding the 40% RPP requirement as of July, while the other four were falling short. It is important to note, however, that these projects are at various stages in the development process and many have plenty of time to increase their RPP percentages before completion.

Table 2: Private development projects with RPP requirements as of July 2022

Project	Developer/General Contractor	City Funding Support	Current RPP %
Cathedral Square	Friends of Cathedral Square/JCP Construction	\$1,850,000	29%
Community within the Corridor	Scott Crawford, Inc. and Roers Companies LLC/Greenfire	\$3,150,000	43%
Couture	Barrett Lo Visionary/Findorff	\$17,500,000	*9%
Journal Square (JS 1924)	JS Developers (J. Jeffers & Co., LLC)/CGSchmidt	\$1,075,000	50%
Phillis Wheatley	Royal Capitol Group/Greenfire	\$3,862,787	32%
Red Beacon	Milwaukee Tool/Mortenson	\$20,000,000	46%
ThriveOn	Royal Capital/CGSchmidt	\$15,187,500	*0%
Washington Park United Homes	FIT Investment Group, LLC/CMS Contracting, LLC	\$1,355,000	67%

Source: City of Milwaukee – Office of Equity and Inclusion

*Note: the percentages listed for these and other projects likely have changed since July and will continue to change until they are completed.

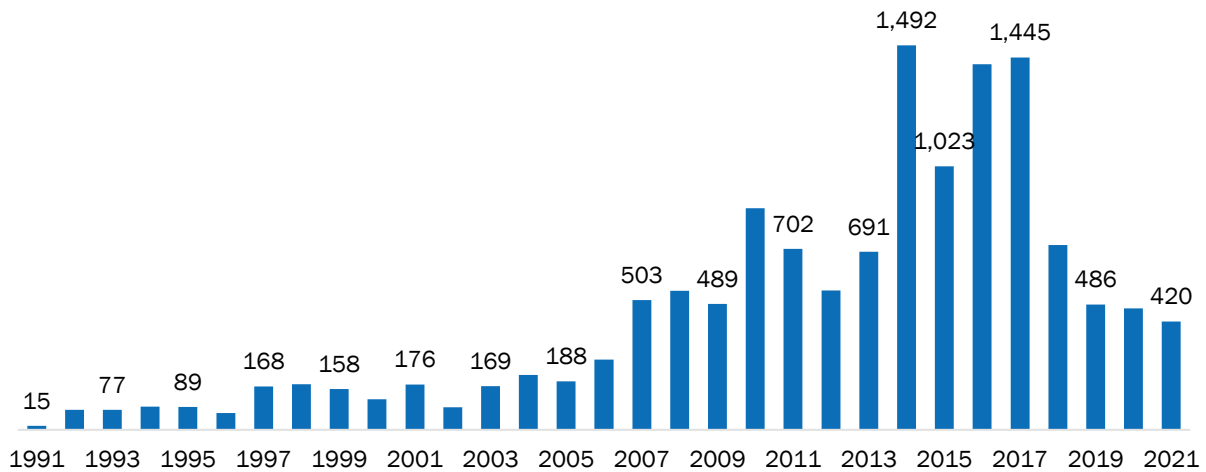
Supply

On the supply side, the number of workers becoming RPP-certified started to increase rapidly in the mid-2000s. Between 2014 and 2017, those numbers peaked at over 1,000 certifications each year before declining again in the ensuing years (**Figure 19**). (According to industry leaders, the spike was driven by a concerted effort to engage and certify large numbers of workers for the Northwestern Mutual tower, Fiserv Forum, and Milwaukee streetcar development projects.) Still, over 400 new workers have been certified each year for the last 15 years, and a total of 8,705 individuals have been certified in the most recent 10-year period extending from 2012 to 2021.

⁸ City of Milwaukee. Chapter 355: Community Participation in Development Agreements. <https://city.milwaukee.gov/ImageLibrary/Groups/ccClerk/Ordinances/Volume-3/CH355.pdf>



Figure 19: Number of new workers certified for the RPP each year since program creation



Source: WPF analysis of data from the city of Milwaukee's Department of Public Works

In 2016, [several notable changes](#) were made to the RPP, including removal of a rule that previously limited participants' eligibility for the program to five years. Thus, once a person becomes RPP-certified, they now remain certified indefinitely. The intention behind this policy change was to help workers continue to benefit from RPP certification over the long term by giving them a permanent leg up in the job market. Even before this policy change, however, the RPP's five-year eligibility rule was never enforced and nobody was ever removed from the city's list of certified workers.

On the one hand, there are strengths to this approach as it gives workers an extended benefit while also offering area contractors an ever-growing list of workers who can help them meet city requirements on applicable projects. Individuals never need to recertify for the RPP, however, and those on the list are not tracked to know whether they are still pursuing work in the construction industry or even living in the Milwaukee area. Consequently, it is not possible to determine the actual number of RPP-certified individuals who are ready and able to work on local construction projects at any given time.

Summary

Metro Milwaukee's current construction workforce and pipeline of new workers into the trades appear to be relatively strong overall. However, data from multiple sources also suggest a tightening of the labor market in recent years, some softening of the workforce training pipeline during the pandemic, and greater workforce challenges for some trades than others.

Pension fund data show the number of active union trade workers has risen slightly over the last 10 years in the area, but those workers are being stretched thinner, with the number of hours worked per employee rising by almost 20% since 2012. The total number of hours worked was higher in most trades in 2021 than in 2012, indicating increased overall demand.

The apprenticeship pipeline appears solid overall, though greater challenges exist for some trades and there has been limited success in diversifying the apprenticeship pool. The total number of



active construction apprentices in metro Milwaukee plateaued during the pandemic at a level that is as high as it has been since at least 2000. Progress has been made in attracting Hispanic workers to apprenticeships, but Black representation among apprentices has declined and virtually no progress has been made in attracting women to the trades. The number of new workers in the pre-apprenticeship pipeline declined considerably during the pandemic, according to data from WRTP|BIG STEP, but encouragingly, those numbers appear to be rebounding in 2022.

Regarding the city of Milwaukee's Residents Preference Program, our analysis finds that the number of RPP-certified workers available at any given time is unknown. Over 8,700 workers have become RPP-certified since 2012 alone, and while individuals remain certified indefinitely, they are not tracked to know if they are still in the Milwaukee area and actively pursuing work in the trades.



SURVEY OF AREA UNIONS

A data-driven look at construction worker supply and demand is helpful, but we deemed it important to supplement that analysis with on-the-ground perspectives from construction labor leaders in the region. To do so, we first developed and distributed a survey to all of the unions affiliated with the Milwaukee Building-Construction Trades Council⁹ in September 2022.

The survey collected data on the demographics of union members and the effects of the pandemic on the availability of workers. It also captured the views of area union leaders on current and future labor-related challenges, including the strength of the pipeline of new workers to replace those expected to retire in the near future. We received 16 survey responses covering 17 unions¹⁰ - essentially a response from all the council's member unions - that together represent nearly 28,000 members. A complete list of the unions that responded to the survey is included in the **Appendix** of this report.

It is important to note that not all construction workers in the Milwaukee metro area belong to a union. This data offers valuable insight into a large segment of the region's construction workforce - and particularly those engaged in commercial construction - but does not provide a complete picture of the entire sector.

All of the information presented below was reported by the unions. While we have no reason to doubt the information provided, we also cannot independently confirm its accuracy.

Worker Demographics

Our survey asked several questions designed to collect data on the age, race and ethnicity, and gender of union construction workers in metro Milwaukee. One key objective of this part of the survey was to understand whether a sufficient number of younger workers is entering the trades to replace those who are nearing retirement age. We also wanted to understand the extent to which the demographics of the workforce reflect the diversity of the metro area's population.

Age

Overall, there appears to be a relatively well-balanced curve of union construction workers throughout the age spectrum, with the largest share of workers in their 40s, similar percentages in their 30s and 50s, and more workers in their 20s than in their 60s.

As shown in **Table 3**, however, some unions appear to face greater pipeline challenges in the near future than others. For example, one (the roofers) said less than 5% of their members are under the age of 30, and two more (the painters and sheet metal workers) said less than 10% of their workers

⁹ Milwaukee Building-Construction Trades Council. <https://www.milwbuildingtrades.org/>

¹⁰ The Bricklayers and Allied Craft Workers Union (Local 8) is linked with the Tile Layers Union (Local 5) and responded for both.



are under 30. The roofers also reported that less than 10% of their members are in their 30s, meaning the vast majority of union roofers in the area are ages 40 and over.

On the other side of the age spectrum, four unions (the roofers, bricklayers, sheet metal workers, and Teamsters) said more than 10% of their members are ages 60 and over. Thus, the roofers and sheet metal workers have both a large number of workers who will likely retire in the near future and not many young workers entering the field. Also, given many construction workers retire by the age of 60, it is notable that four unions (the carpenters, plasterers and cement masons, tile setters, and Teamsters) said at least 25% of their active members are in their 50s.

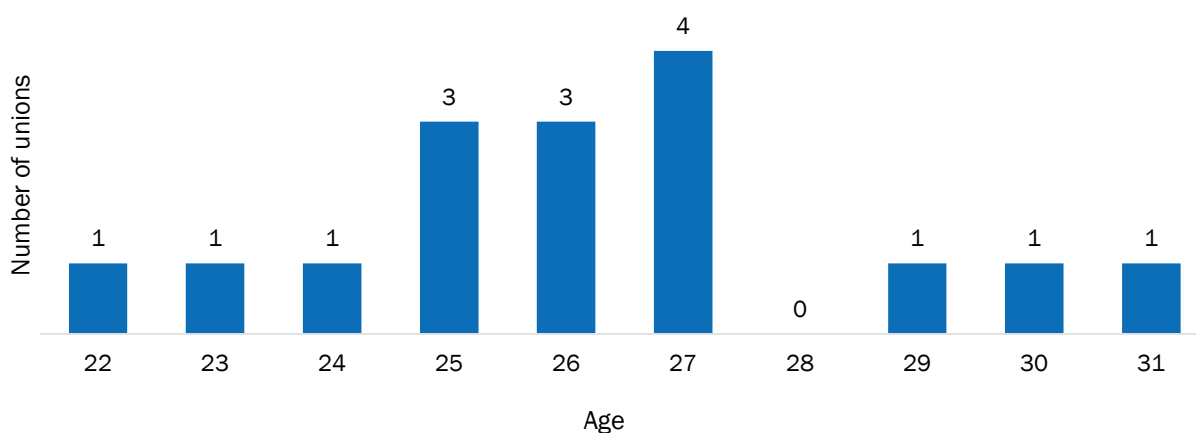
Table 3: Share of active union members by age range (figures represent number of unions)

	Less than 5%	5-9%	10-24%	25-49%	50-74%	75% or more
Under age 30	1	2	12	2	0	0
Ages 30-39	0	1	11	5	0	0
Ages 40-49	0	0	4	12	1	0
Ages 50-59	0	0	13	4	0	0
Ages 60 and over	9	4	4	0	0	0

Note: The bricklayers and tile setters provided separate figures for this question, yielding 17 total responses.

Most respondents said the average age of new apprentices entering their trade is between 25 and 27, as shown in **Figure 20**. A few unions (steamfitters, boilermakers, and heat and frost insulators) have younger average ages of entry (22-24), while new workers in a few other trades (roofers, bricklayers, and tile layers) are older on average (29-31).

Figure 20: What is the average age of entry for new apprentices into your trade?



Race and ethnicity

While a majority of the members of all but one area union identify as white, Hispanic union members are better represented in the construction industry than Black workers (**Table 4**). Nearly half of the unions (seven) said that at least 10% of their members are Hispanic, while only two (the Teamsters and electrical workers) said at least 10% of their members are Black. Most unions indicated that less



than 5% of their members fit into the other racial and ethnic categories besides white, Black, and Hispanic.

Table 4: Share of union members by race and ethnicity (figures represent number of unions)

	Less than 5%	5-9%	10-24%	25-49%	50-74%	75% or more
White	0	0	0	1	7	8
Black/African American	9	5	1	1	0	0
Hispanic/Latino	4	5	7	0	0	0
Asian	10	0	1	0	0	0
American Indian	12	1	0	0	0	0
Two or More Races	9	1	1	0	0	0
Other	6	0	0	0	0	0

Gender

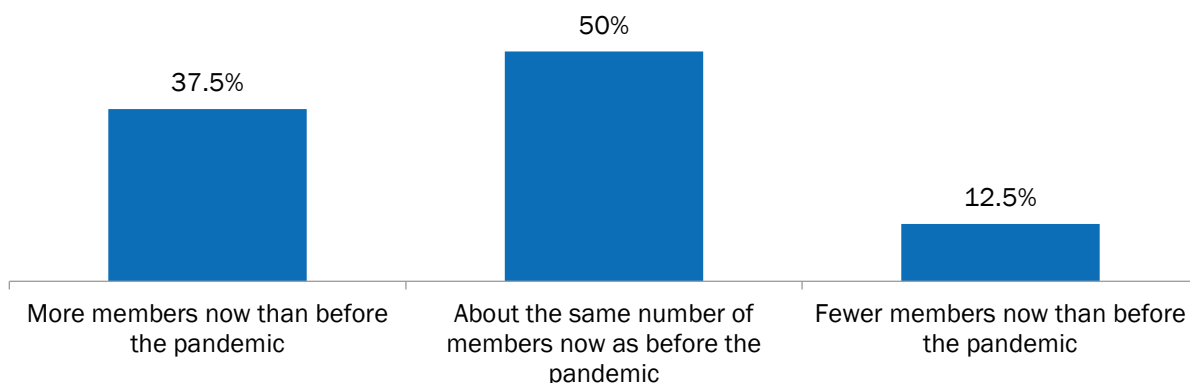
Three-quarters of survey respondents said females account for less than 5% of their members. The Teamsters, electrical workers, painters, and heat and frost insulators were the only unions to report that at least 5% of their members are female, and no union said females account for 10% of their membership or more.

Current Workforce & Changes Since Pandemic

Union membership

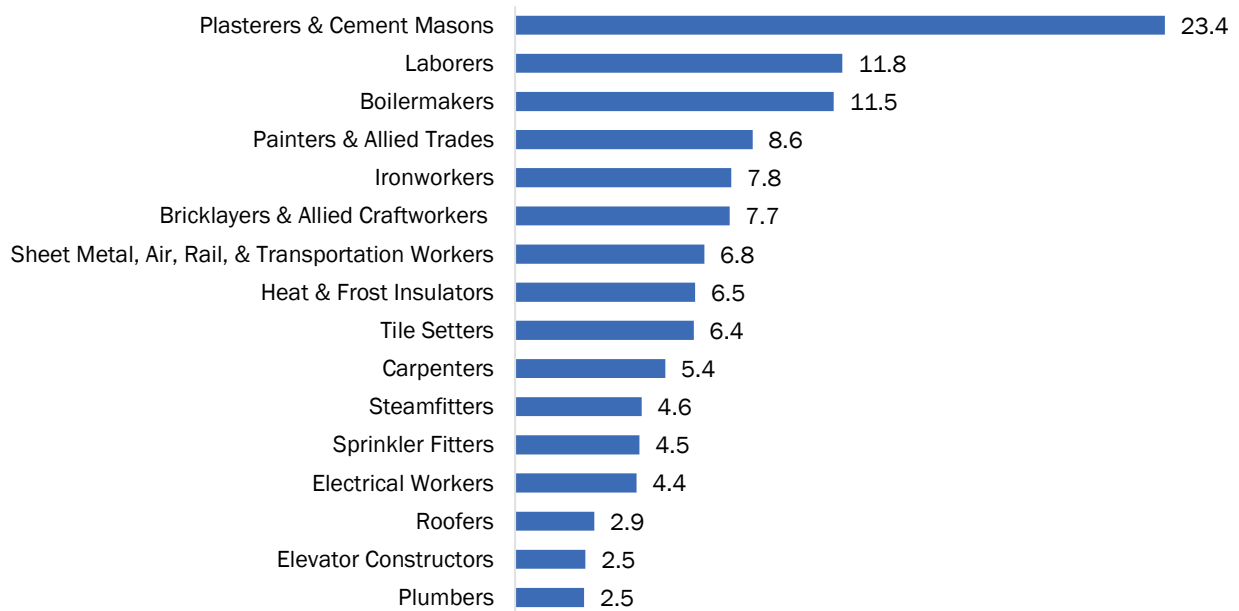
Several questions gauged how union membership and the availability of workers has changed since before the start of the COVID-19 pandemic. As shown in **Figure 21**, most unions said their membership numbers have remained steady or even increased since before the pandemic. The carpenters (one of the largest area unions) and boilermakers (one of the smallest) were the two exceptions to this trend, indicating their numbers have decreased.

Figure 21: How does the size of your union membership compare with pre-pandemic levels?



Within union memberships, the ratio of journey worker to apprentices varies widely by trade. This is important as a high ratio can indicate not enough new workers are entering a given trade. As shown in **Figure 22** several unions (plumbers, elevator constructors, and roofers) reported having one apprentice for every two or three journey workers. On the opposite end of the spectrum, the plasterers and cement masons have more than 23 journey workers for every apprentice, and the laborers and boilermakers each have more than 11 journey workers per apprentice.

Figure 22: Journey workers per apprentice by trade



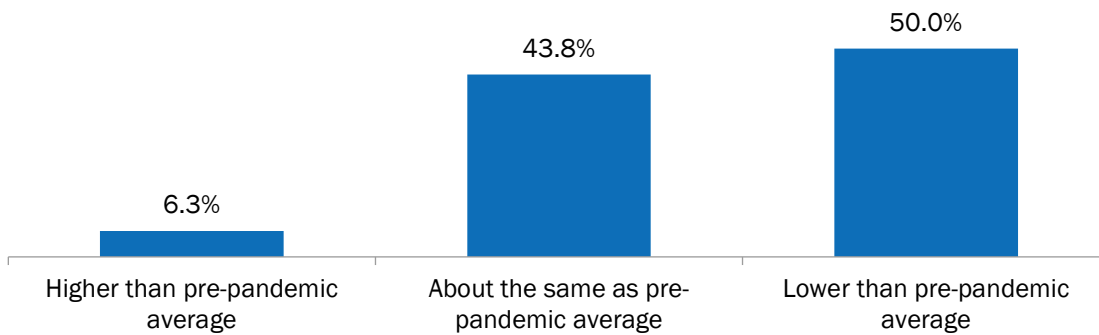
The high ratios for the plasterers and cement masons, laborers, and boilermakers may raise concerns among some industry leaders. In an interview, the president of the Milwaukee Building-Construction Trades Council expressed less concern, however, noting that multiple factors contribute to these ratios. For example, the ratio for the plasterers/cement masons may be influenced by an overlap in duties between that union and the laborers union. Many workers start as laborers where they can earn a particularly good salary as new workers and are often able to advance to journey status quickly, even without completing apprenticeships. From there, some switch to become plasterers/cement masons, where they do similar work and can enter at the journey level. Thus, while the plasters and cement masons likely could benefit from increasing their apprenticeship numbers, there are other paths that bring them new workers.

Available workers

Despite their relatively strong membership numbers overall, half of the union respondents reported having fewer workers on average in their halls in summer 2022 than they did pre-pandemic (**Figure 23**). These workers are those not already employed and thus available for work when new opportunities become available. Only the steamfitters bucked this trend in saying they had more workers available than prior to the pandemic. Overall, these responses reinforce the notion that area construction workers have been in especially high demand.



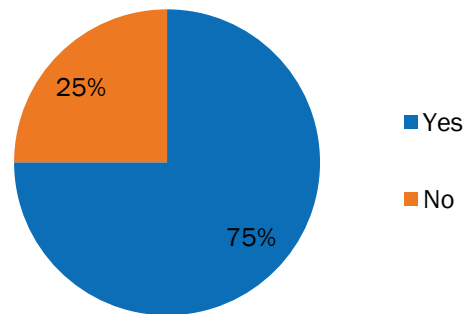
Figure 23: During summer 2022, how has the average daily number of available members in your hall compared with pre-pandemic averages?



Apprenticeship classes

Three-quarters of union leaders said their apprenticeship classes have grown over the last three to five years (Figure 24), which roughly aligns with the state’s apprenticeship data. Those indicating their classes have not grown include the Teamsters, roofers, boilermakers, and elevator constructors. Among them, the Teamsters also reported having no apprentices, while elevator constructors reported having just one apprentice for every 70 journey workers.

Figure 24: Have your apprenticeship classes grown in the last 3 to 5 years?

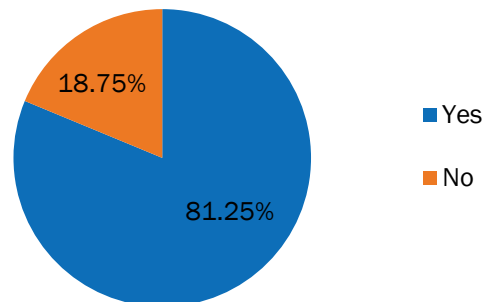


Anticipated Future Workforce

Apprenticeship classes

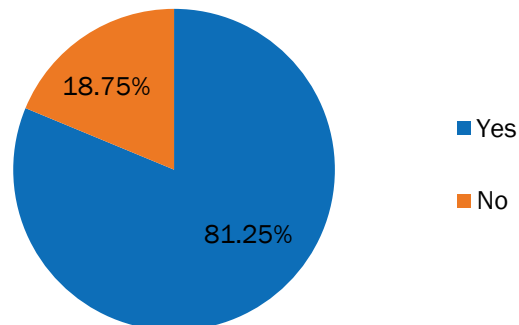
Looking forward, most unions indicated they expect their apprenticeship classes to grow in the next three to five years (Figure 25). The only unions to say they do not expect their apprenticeship classes to grow were the Teamsters, roofers, and elevator constructors, who were all also among those that have not seen recent growth in their apprenticeship classes.

Figure 25: Do you expect your apprenticeship classes to grow in the next 3 to 5 years?



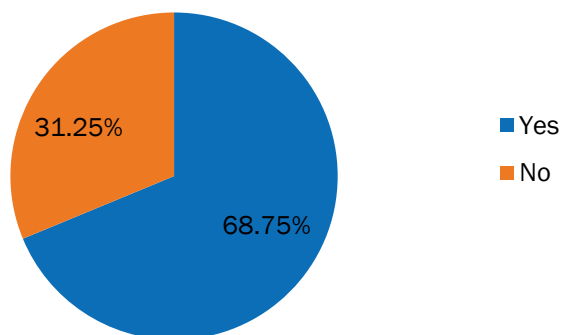
Most unions said that for every worker they expect to retire in the next three to five years, they have at least one new worker in their pipeline ready to begin an apprenticeship (Figure 26). The roofers again stood out as one of only three unions to respond “no” on this question, joined by the painters and steamfitters.

Figure 26: For each worker expected to retire in the next 3 to 5 years, do you have at least one new worker in your pipeline waiting to begin an apprenticeship?



A somewhat higher share of unions reported pipeline challenges at higher levels – namely, a shortage of workers ready to move into leadership roles. As shown in Figure 27, five unions (31.25%) said they do not have enough younger journey workers ready to replace those in leadership positions who they expect to retire in the next three to five years.

Figure 27: For every experienced journey worker you expect to retire in the next 3 to 5 years, do you have at least one younger journey worker ready to move into a leadership role?

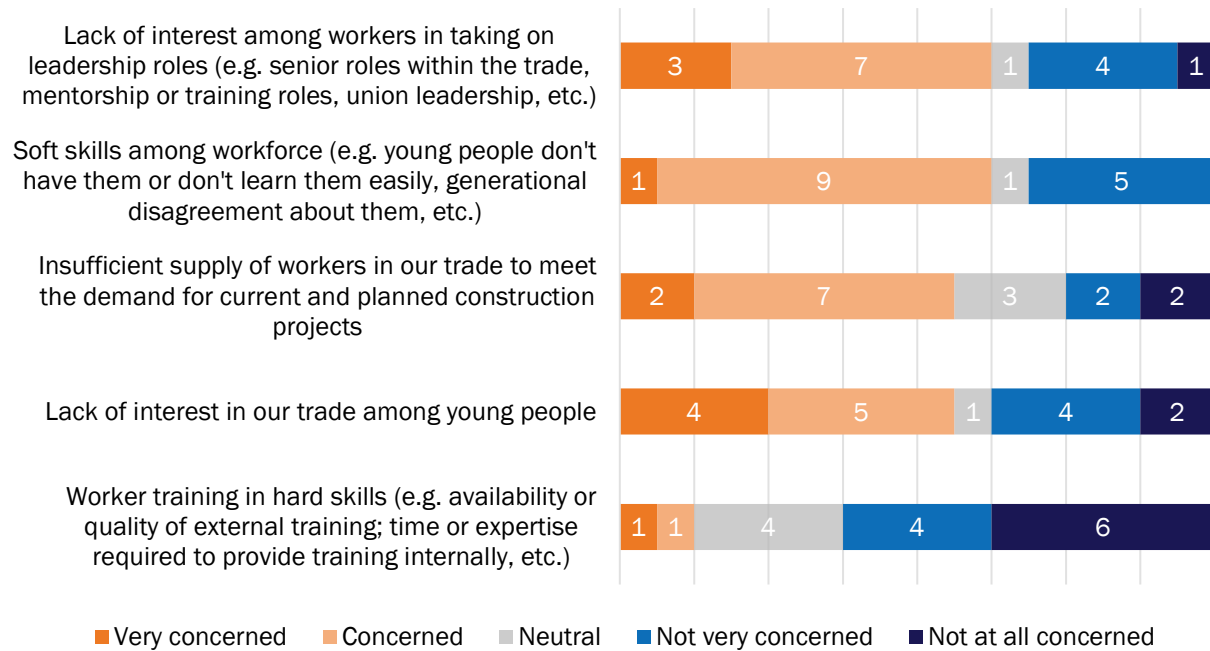


Labor-Related Challenges

Another set of questions asked respondents to express their level of concern about current and future labor-related challenges. We first asked about several specific challenges that are often discussed among workforce development and business leaders. Overall, respondents expressed moderate and relatively similar levels of concern about four of those five specific challenges, though the responses varied considerably by union, as shown in Figure 28.



Figure 28: How concerned are you about each of the following labor challenges over the next 3 to 5 years as they relate to your trade? (figures represent number of unions)



Aligning with the responses to the previous question, many union leaders reported being concerned about a lack of interest among workers in taking on leadership roles. Three of the 16 unions (roofers, boilermakers, and painters and allied trades) said they are “very concerned” about this challenge, while seven others said they are “concerned.” Soft skills among workers and an insufficient number of workers to meet demand also are posing challenges for more than half of the unions.

Likewise, more than half of the unions reported being concerned about a lack of interest among youth in their trade, though the responses were especially varied on this question. Four unions (roofers, boilermakers, carpenters, and Teamsters) said they are “very concerned” about this issue, and five more said they are “concerned.” On the other end of the spectrum, two unions (electrical workers and elevator constructors) said they are “not at all concerned” and four more said they are “not very concerned” about this challenge.

On an open-ended question asking union leaders to identify their biggest labor-related challenges, responses given by multiple unions were: finding and recruiting enough available workers; contractors not hiring enough apprentices; and child care access and affordability. Many other issues were raised by one respondent each.

Recruitment Strategies

Area labor unions engage in a number of marketing, outreach, and educational activities to recruit new workers. On an open-ended question asking what recruitment methods traditionally have been most effective in attracting new members to their trades, the most common response was “word of



mouth,” which was cited by nine of the 16 unions. Other responses cited by multiple unions were career fairs, partnerships with WRTP|BIG STEP, and radio ads.

We also asked survey respondents what *new* recruitment methods they believe could help attract additional members to their trades. Common responses to this question included online advertising and social media, school outreach, and general marketing and advertising. Several creative ideas were raised by individual respondents, including using virtual reality machines at schools and career fairs; creating an online career portal that connects to union websites; developing short marketing videos; and building stronger relationships with correctional institutions.

Summary

Though limited to *union* construction workers, the results of our survey paint a relatively optimistic portrait of the current and future construction workforce overall, with stable or increasing membership and apprenticeship numbers. They also further highlight a number of labor-related challenges, including a tight labor market, limited success in recruiting new and diverse workers and preparing workers for leadership roles, limited apprenticeship opportunities with area contractors, and notable differences that make some of these issues more challenging for certain trades.

Further evidence of a tight labor market is reflected in half of survey respondents reporting fewer workers available in their halls in summer 2022 than before the pandemic. Only one union reported having more available workers than their pre-pandemic average.

Tempering anecdotal evidence that the construction workforce is aging, the survey responses suggest a fairly well-balanced curve when it comes to the age of active union construction workers, with more workers under the age of 30 than over the age of 60. Several trades appear to have greater pipeline challenges, however, including the roofers and sheet metal workers, who both said less than 10% of their workers are in their 20s while more than 10% are in their 60s. Four other unions (including the carpenters and plasterers and cement masons) said at least 25% of their workers are in their 50s, which could be concerning given many construction workers do not remain active in the field past the age of 60.

Looking to the future, most unions said that for every worker they expect to retire in the next several years, they have at least one new worker in their pipeline waiting to begin an apprenticeship, though there were a few exceptions. Pipeline challenges are not limited to new workers, however. While a majority of respondents said they have enough journey workers ready to step into leadership roles in the next several years as older workers retire, five unions said they do not.



INSIGHTS FROM INDUSTRY LEADERS

To round out our analysis, we interviewed leaders from local contracting companies and workforce development, labor, and construction industry organizations to capture their views on metro Milwaukee's construction workforce. Our conversations focused on many of the same questions highlighted in our union survey, including the current and future supply of workers, the strength of the workforce pipeline, recruitment and retention efforts, and key labor challenges facing the sector. In this section, we summarize the input received from those interviews.

Local Employers

The employers we interviewed – briefly introduced below – include three general contractors and two companies whose work is focused on a specific trade.

Findorff is a general contractor with offices in Milwaukee, Madison, and Wausau. High-profile projects it has built or is currently building in Milwaukee include the downtown Moderne and Couture apartment towers, the redevelopment of 1433 N. Water St. (formerly Laacke & Joys), and Marquette University's new College of Business Administration building.

JP Cullen is a general contractor particularly active in the healthcare and K12 educational facility markets and also engaged in commercial and industrial development. JP Cullen did the structural steel work for Fiserv Forum and developed UWM's School of Freshwater Sciences and the downtown McKinley Health Center, among other major local projects.

Klein-Dickert (KD) Glass sources, fabricates, and installs glass and glazing products. Major Milwaukee projects have included the 7Seventy7 apartment tower, the Marquette University Law School and College of Business Administration buildings, and the Potawatomi hotel tower.

Staff Electric is an electrical contractor that provides commercial lighting, power supply, and network security to commercial properties. Projects in Milwaukee have included the Bradley Symphony Center, Northwestern Mutual Tower and Commons, and Fiserv Forum.

VJS Construction Services is a general contractor based in Pewaukee that engages in a range of development activities, including corporate offices, healthcare and educational facilities, multi-family housing, and more. Examples of their work include the Avenir apartment building in downtown Milwaukee and UWM's new chemistry building.

Below, we summarize important themes that emanated from our interviews with these construction industry employers.

- 1) General contractors are experiencing greater challenges than usual in finding the craft workers they need in some trades and at desired skill levels.***

Workforce challenges have intensified this year for the three general contractors we interviewed, though their most pressing challenges vary somewhat. Two said the workforce is aging and noted



that the pandemic accelerated the pace of retirements among long-tenured field leaders while the third said locating *skilled* labor – specifically those with five to 15 years of experience – is their biggest challenge.

Employers also said these difficulties vary by trade. Two of the three general contractors said finding carpenters is among their greatest challenges, while laborers, iron workers, and cement masons were among the other trades cited as posing significant workforce challenges.

The contractors we spoke with whose work is focused on individual trades – specifically electrical work and glazing – expressed fewer concerns in finding the workers they need, which could be because challenges are greater in other trades. In fact, they said they have seen a slight increase in the availability of workers during the pandemic. One said, however, that he has lost more experienced workers during the pandemic than usual and that it is more difficult to fill higher-skilled, more specialized positions. He also noted reduced interest among workers in leadership roles since the onset of the pandemic.

Some contractors expect these workforce challenges to linger for the next several years. As one put it, work in the construction industry tends to be cyclical. Demand is currently very high but will eventually moderate – currently rising interest rates could play a role in that. Contractors generally know what their labor needs will be for the next several years and are currently stretched thin. Beyond that it is difficult to predict, but the cyclical nature of the industry makes it likely that demand for projects and workers will continue to ebb and flow.

2) A number of pandemic-related factors may be reducing the supply of craft workers currently.

In addition to a pandemic-induced acceleration in retirements, contractors we spoke with said the pandemic caused many workers to reconsider their options, prompting some to leave the construction industry for other fields. They noted that other sectors provided workers the opportunity to work from home and/or greater flexibility in work schedules. The physicality of the work also may have pushed some away from the industry.

Inconsistent work schedules may be another factor. Construction workers sometimes experience breaks between projects when they are not employed. Also, the workforce has been impacted by supply chain challenges; when contractors cannot get the supplies they need, project delays can occur, which can lead to unpredictable work schedules.

3) Contractors are not overly concerned about securing the RPP-certified workers they need, but say it requires being proactive.

Most of the contractors we spoke with regularly take on projects with RPP requirements. They said while the pool of RPP-certified workers is not as steady as the broader workforce and requires some extra effort, securing those workers is manageable. They noted a need to focus both on those who are already RPP-certified and those who may be interested in becoming certified.

A number of strategies for securing RPP-certified workers were cited. Some said they try to keep RPP-certified workers employed steadily, bringing them from project to project. Others highlighted



partnerships with WRTP|BIG STEP and unions as being particularly helpful. Attending job fairs, town halls, and other educational events are another way that contractors recruit RPP-certified workers.

Those we spoke with noted that some subcontractors do not understand the RPP and struggle to comply with it. One interviewee asked, “How can we get more subcontractors to understand the program?”

Others suggested that some contractors are resistant to hiring RPP-certified workers or not proactive enough in seeking them out. As one company leader stated, “People need to have open minds and be willing to give people chances. I think once that is in place the rest will take care of itself.”

4) Many general contractors are concerned about the level of interest in the trades among youth.

Our interviewees had varied levels of concern about the strength of the pipeline of young workers into the trades. General contractors again seemed more concerned than employers whose work is focused on specific crafts, which likely reflects greater challenges in some trades than others. As a leader of one firm stated, “All of the general contractors in the area have the same fear: Can we build the pipeline of apprentices and trades people?”

There was general consensus among interviewees that young people have been pushed to go to college (and not into the trades) for many years, and that high schools need to rebuild their technical education departments. However, some also said a “cultural shift” is taking place as more people see that college is not the only path and that the trades can offer solid career paths to young people.

One general contractor said he sees plenty of younger workers entering the trades but said his firm’s biggest labor-related challenge is that young workers are not as motivated as past generations were. As he put it, “It’s just a job to them. They don’t have the pride in the work that past generations did and don’t do more than what is asked.” Another said absenteeism – particularly among younger workers – has become one of his firm’s biggest labor-related challenges since the pandemic.

5) Employers are engaged in a range of recruitment, training, and retention efforts, but some believe more is needed.

The employers we spoke with said that in addition to partnering with unions, they attend job fairs and trade shows, visit high schools, and use social media to promote job openings. Some offer youth apprenticeships, while others have done targeted campaigns to recruit workers in specific trades when they have struggled to fill open positions. Employers also stressed that word of mouth is often their most effective recruitment strategy.

Some also said the industry and educational system could do a better job of sharing their story. For example, one employer said more education and awareness is needed that construction is a solid career path, adding that unions often are portrayed in a negative light, which is detrimental to recruitment efforts and should change.

Others suggested that employers should “think outside the box” when it comes to recruitment and training. On the recruitment side, for example, one employer said they realized their location in



Pewaukee was difficult for Milwaukee residents to access, so they set up a second facility on the city's north side where they now do fabrication work, which has been successful. Regarding training, one employer said rather than expecting workers to come in fully trained (as many employers do), they train new workers "from the ground up."

To better retain workers, one employer said encouraging more experienced craft workers to mentor younger workers is needed, which may require training them in how to mentor. Another noted that construction has not historically been a diverse industry and that a major emphasis on cultivating a diverse workforce is needed; to retain apprentices of color, that employer is pairing them with more experienced workers of the same background who can provide guidance and support.

Other Industry Leaders

We also spoke with leaders from several organizations involved in other aspects of the region's construction industry, from organizing and supporting general contractors and union workers to providing workforce development and diversity and inclusion services. Below, we introduce those organizations and then summarize the key takeaways from our conversations.

WRTP|BIG STEP is a nonprofit workforce intermediary with locations in Milwaukee, Madison, and Racine. As previously noted, the organization provides tutoring, training, and job placement services and is primarily focused on the construction and manufacturing sectors.¹¹

Associated General Contractors (AGC) – AGC of America is a national organization of construction contractors and related companies that provides advocacy, education, professional development, research, and training services. AGC Greater Milwaukee provides similar services for southeast Wisconsin's construction industry.

Milwaukee Area Labor Council (AFL-CIO) represents unionized workers in Milwaukee, Ozaukee, and Washington counties. Its mission is to organize for economic and social justice in the workplace and community.

Prism Technical is a consulting firm that assists businesses and governments with supplier and workforce diversity services and strategy to increase the inclusion and success of underrepresented firms and residents. Prism works with many developers and contractors to ensure compliance with Milwaukee's Residents Preference Program.

1) Metro Milwaukee's construction labor market is tight – at least in the short term.

There was general agreement among those we interviewed that many employers are finding it more difficult to secure workers than prior to the pandemic, though opinions varied as to whether this poses a longer-term problem.

¹¹ WRTP|BIG STEP. <https://wrtp.org/paving-the-way/>



AGC regularly surveys general contractors, and its [most recent survey](#) showed a majority of contractors in the Midwest and nationally reporting difficulties in filling open positions in many trades. According to AGC, this is not a new challenge but it has intensified during the pandemic, with reduced labor force participation and firms trying to get by with fewer and less experienced workers. In some cases, employers are filling gaps with overtime (which raises project costs), tapping workers from outside of the region, and bringing back retirees.

Echoing what we heard from local employers, industry leaders said competition with other sectors is adding to this challenge. Unemployment is low, and wages have increased faster in some other industries (e.g. food and beverage; warehousing) than in construction, resulting in a reduced wage premium for work that often involves difficult conditions. Construction also offers less flexibility than other industries in location and scheduling, which has become a competitive disadvantage in a period when hybrid work environments have become much more common.

WRTP|BIG STEP reported a recent increase in requests for workers from employers that previously would not have contacted them. The organization's leaders have interpreted this to mean those employers are tapping out of workers in suburban areas and at least starting to seek workers who have not been given as many opportunities in the past, including city residents and workers of color.

While there was agreement that employers have struggled in 2022 to fill available jobs, some noted that apprenticeships are up and that the demand for workers has been manageable overall. Some noted that the unions have the capacity to scramble to fill growing jobs when needed by exhausting their own lists and partnering with WRTP|BIG STEP and other workforce development organizations.

2) Demand for labor may continue to rise, but uncertainty is high.

A common concern is that the recently-adopted federal infrastructure law and other federal legislation could cause demand for construction work to increase substantially in the near future, exacerbating current workforce challenges. The infrastructure law will require an increase in laborers for heavy highway, sewer, and water infrastructure projects, for example, which will increase competition for general laborers on commercial building projects. It will also expand construction of broadband infrastructure, and both the infrastructure bill and Inflation Reduction Act will support expanded construction of electrical vehicle charging stations and solar energy installations, which will require skilled workers.

At the same time, the timeframe for implementing these federal laws remains unclear and it is impossible to predict what the base level demand for construction workers will be when projects supported by the new legislation materialize. There are growing concerns that the U.S. may be entering a recession, for example, which could dampen baseline demand considerably. Also, infrastructure projects can be delayed for many reasons, so it is possible the new laws could produce a modest and manageable increase in demand that stretches out over many years.

In the short term, AGC said national indices like the [Dodge Momentum Index](#) suggest that construction activity is expected to be high despite recession fears. This means labor will likely be a top concern for the near future.



3) Workforce diversification must be a priority.

Another common sentiment is that more workers of color and women are needed in the construction workforce. Diversifying the workforce is critical to filling the jobs that are opening as baby boomers continue to retire. As one interviewee noted, the area's population is growing more diverse and the construction workforce must diversify to remain viable. Women and African Americans are particularly underrepresented among the construction workforce and could be better utilized.

More than one interviewee noted that race continues to be a factor in southeast Wisconsin's construction sector, with one noting that some Black workers quit because they do not have good experiences doing the work. Another said advocacy efforts to improve Black representation among apprentices have not been successful, noting that in addition to addressing issues of workplace culture and racism, industry leaders should consider other factors that may need to be addressed, such as transportation and financial issues.

Looking to the future, another interviewee noted that the federal government has made it clear it wants new entrants into the field, career-building opportunities, and workforce diversification in projects it supports.

4) Improvements to the city of Milwaukee's Residents Preference Program are needed.

Industry leaders we interviewed pointed out several areas where the RPP could be strengthened, including the following:

- ***More information about the pool of RPP-certified workers is needed.*** There was general agreement that demand for RPP workers seems to have increased somewhat over time and concern that not enough information is available. Even organizations like WRTP|BIG STEP, which is a major partner in the program as the primary certifying agency, do not have access to data that would allow it to understand the program's supply and demand dynamics. Those we interviewed agreed that the city should share information about the RPP worker pool and how it is utilized so the broader industry can understand how many workers are truly available over time. Requiring workers to recertify for the program periodically may also be necessary.
- ***Greater understanding of the RPP is needed among some contractors.*** Industry leaders agreed with the employers we interviewed that certain contractors – particularly those not based in the Milwaukee area – have very little understanding of the RPP and struggle to comply with it. Some said if those contractors are going to take on projects with RPP requirements, then they need to take the time to learn about the program and do the outreach necessary to secure the workers they are required to utilize.
- ***Bringing workforce development agencies into the conversation earlier in the project planning process could be beneficial.*** Another concern is that workforce development agencies are often not engaged early enough in the project planning process. Having them at the table sooner could strengthen their ability to generate the RPP-certified workers employers need.
- ***Including workforce development and inclusion needs and costs in project development plans could help to strengthen the workforce system.*** Industry leaders said regularly including



workforce development and inclusion requirements and their costs in project development plans could strengthen the workforce system by signaling to workforce agencies the expected number of workers needed, race and gender requirements, etc.

5) *Expanded efforts are needed to attract and retain construction workers.*

Although those we interviewed said extensive recruitment efforts are already taking place, they agreed that more is needed and that filling current and future job openings will require targeting both youth and young adults in their mid-to-late 20s.

Lower birth rates and a spike in the death rate are exacerbating construction workforce challenges in the region and nationally. As one interviewee noted, the lower birth rate means that even if there was a high degree of interest in the construction field among youth, it would be very difficult to fill in gaps with youth alone as older workers retire. At the same time, the death rate is up, largely due to COVID and increases in suicide and substance abuse, which are issues that disproportionately have affected men and thus the male-dominated construction sector.

On the youth recruitment side, industry leaders lamented the drop in vocational education that has occurred over many years. Though some pointed to recent growth in technical education in the area, they said more is needed. Some said over the long-term, parents and guidance counselors have pushed students to pursue college and “indoor jobs,” which has reduced the worker pool, but noted that this may have started to change during the pandemic.

One suggestion for bringing more workers into the field was for companies to continue to increase their apprenticeship numbers modestly. There are numerous contractors in the area, and if each took on even one more apprentice, it could have an enormous collective impact.

One interviewee suggested that WRTP | BIG STEP and the Social Development Commission (SDC) could strengthen their partnership on worker training. The SDC, which primarily serves central city residents of color, provides training that is not as extensive as that provided by WRTP | BIG STEP while also providing case management and other supportive services. It may be possible to develop a stronger connection between the two organizations such that the SDC serves as a feeder to WRTP | BIG STEP.

On the worker retention side, those we interviewed suggested that not enough mentoring is available for apprentices of color and female apprentices. They supported the strategy of pairing apprentices with journey workers of similar backgrounds as a way of strengthening both retention and workforce diversification efforts.



OBSERVATIONS & CONCLUSION

Our analysis of metro Milwaukee's construction workforce reveals a mixed picture. Some of the data we collected and input we received from industry leaders suggest the workforce is stable and is supported by a relatively robust pipeline of new workers, while others highlight current worker shortages that may be reflective of longer-term challenges for at least some trades and types of workers. We summarize our key findings below.

Metro Milwaukee's construction labor market is as tight as it has been in at least 20 years.

Construction employment in the Milwaukee area remained stable and even ticked upward during the pandemic, while unemployment in the sector is near a historic low, and job openings are at a more than 20-year high. Pension fund data show that active union construction workers are being stretched to work considerably more hours on average than they were a decade ago. Meanwhile, half of the unions that responded to our survey reported having fewer available workers (i.e. those not already employed) than before the pandemic. Taken together, these data show that the regional construction sector is experiencing a particularly challenging labor market.

The region's construction apprenticeship pipeline is strong overall, but more apprentices may be needed in at least some trades. The total number of active apprentices in the construction trades in metro Milwaukee plateaued during the pandemic after climbing for many years. The current pool of apprentices is as large as it has been since at least 2000, and most unions expect their apprenticeship classes to grow in the coming years. More apprentices may be needed in some trades, however, as five area unions (the glazers, tile setters, roofers, bricklayers, and iron workers) have seen their apprenticeship numbers decline by at least 17% over the last five years and three (the roofers, painters, and heat and frost insulators) said they do not have enough workers ready to begin apprenticeships to make up for those they expect to retire in the next several years.

Meanwhile, the pandemic caused the number of new workers entering the pre-apprenticeship pipeline via WRTP|BIG STEP to decline considerably in 2021, but those numbers appear to be rebounding in 2022 and may even reach pre-pandemic levels.

Certain trades have limited supplies of young workers and/or insufficient interest in leadership roles among experienced workers. Our union survey data suggest there is a relatively strong pipeline of young workers in construction overall, but three unions (the roofers, painters, and sheet metal workers) said less than 10% of their active members are under the age of 30. The roofers and sheet metal workers also were among four unions that said more than 10% of their workers are over the age of 60, while carpenters and three other unions said at least 25% of their active members are in their 50s.

A majority of area unions said they have enough journey workers ready to step into leadership roles that will open up in the next several years due to retirements, but five (the roofers, painters, boilermakers, bricklayers, and Teamsters) said they do not. The contractors we spoke with also cited a lack of interest in leadership roles as a significant workforce challenge they are experiencing.



Additional improvements to the city of Milwaukee’s Residents Preference Program (RPP) may be needed. City leaders have expanded and refined the RPP several times since it was created over 30 years ago to boost workforce opportunities in the construction industry for qualifying city residents. Our analysis suggests that more changes may be needed, however, both to better understand the supply and demand for RPP-certified workers and to strengthen connections between area contractors and the workforce development system.

Over 8,700 workers have become RPP-certified since 2012 alone. Once certified, workers are eligible indefinitely with no need to recertify, which makes it impossible to estimate how many may still be pursuing work in the local construction industry at any given time. City leaders may wish to require workers to recertify periodically to give employers and industry leaders a clearer understanding of the size of the available workforce and how it aligns with demand. If they do so, however, they should consider how to ensure that the recertification process does not lead to the loss of available workers. Given a key goal of the RPP is to provide long-term employment opportunities for city residents, recertification would not need to include income limits.

Input from our interviews also suggests that workforce development agencies who train workers and prepare them for the RPP could be more effective in helping contractors meet workforce inclusion requirements if they are brought to the table earlier in the project development process.

Efforts to strengthen gender and racial diversity in the construction workforce may need to be modified or expanded. Despite the growing diversity of metro Milwaukee’s population, limited progress has been made in diversifying the construction workforce. Among apprentices, Hispanic representation has increased considerably, but Black and female workers remain highly underrepresented and more than half of Black workers cancel their apprenticeships before completion. These issues have long been acknowledged, and efforts have been made to address them, but industry and local leaders may want to undertake additional steps.

One potential strategy for strengthening retention that emerged from our interviews was to expand mentorship programs that pair apprentices of color and female apprentices with experienced workers of the same identities.

The longer-term level of demand for construction workers is difficult to predict, but demographic trends suggest the need for expanded recruitment efforts. From a labor perspective, metro Milwaukee’s construction sector is currently experiencing a challenging period that likely will remain so for the next few years as projects already in the pipeline proceed. The longer-term picture is less clear, however, due to economic uncertainty, the tendency for development demand to ebb and flow, and other factors.

Nevertheless, demographic trends – including the ongoing retirement of baby boomers and declining birth rates – point to a need for expanded recruitment efforts. Industry leaders we interviewed said those should include increased technical education opportunities in schools that expose youth to the trades and new approaches to recruiting and retaining both youth and young adults.

We hope this analysis is helpful to industry and economic development leaders and policymakers working to bolster metro Milwaukee’s construction workforce.



APPENDIX

Union Respondents to Our Survey

Boilermakers Union, Local 107
Bricklayers & Allied Craftworkers Union, Local 8
Carpenters Union, Wisconsin Regional Council – Pewaukee
Electrical Workers Union, Local 494
Elevator Constructors Union, Local 15
Heat & Frost Insulators Union, Local 19
Iron Workers Union, Local 8
Laborers Union (Liuna), Local 113
Painters & Allied Trades, District Council 7
Plasterers & Cement Masons Union, Local 599
Plumbers Union, Local 75
Roofers Union, Local 65
Sheet Metal Workers Union, Local 18
Sprinkler Fitters Union, Local 183
Steamfitters Union, Local 601
Teamsters Union, Local 200
Tile Layers Union, Local 5

