

THE VALUE OF HIGHER EDUCATION

Amid intensifying debate on the benefits of higher education, we sought to provide context by examining the educational requirements of projected job openings in Wisconsin. Although a strong majority of the state's expected job openings through 2030 do not require a college degree or credential, nearly two-thirds do in occupations with median wages of \$50,000 or more. That is likely to increase in the future, as occupations that require higher education are expected to account for a disproportionate share of new higher-paying jobs.

In recent months, national journalists and academic leaders have discussed a waning confidence among some Americans in the value of a college education (see examples in [The New York Times Magazine](#), [The Wall Street Journal](#), and [The Atlantic](#)). Rising sticker prices at both public and private institutions and [expanding student loan debt](#) increasingly are raising questions about whether the benefits of a college degree outweigh the costs.

Labor market projections may add value to these discussions, as they provide insight on which occupations may offer the most opportunity in the future and the credentials they require. We examined data from the state Department of Workforce Development's long-term [occupational employment projections](#) for 2020 to 2030 and reviewed the educational requirements of higher-paying jobs expected to open in Wisconsin in the coming years. For each occupation, the projections estimate annual job openings and provide information about the typical education needed for entry, wage data, and more (see text box on the following page for additional information about the projections). It is important to note that estimates for wages and educational requirements are from 2020 and were produced by the U.S. Bureau of Labor Statistics, which does not make projections for how wages or educational requirements may change in the future.

In our analysis below, we focus primarily on “annual openings” in Wisconsin, which reflect the total number of jobs

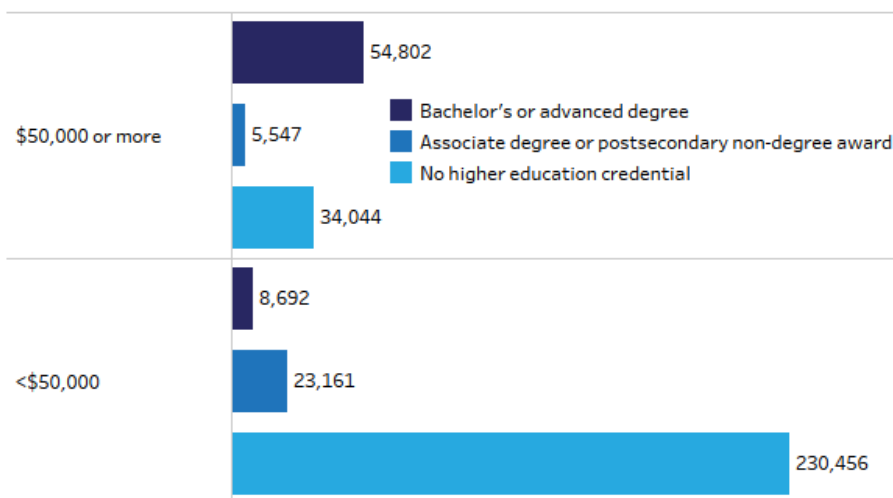
expected to become available each year for any reason, including exits (workers who leave the labor force entirely, such as through retirement), transfers (workers who leave one occupation for a different one), and growth (job creation). We also consider growth independently as an indicator of the likely future trajectory of the state's job market.

While higher education has other, non-financial costs and benefits for individuals and society, they are beyond the scope of this analysis.

DEGREES REQUIRED FOR MAJORITY OF HIGHER-PAYING JOBS

Nearly three-quarters (74%) of the roughly 357,000 jobs projected to open each year in Wisconsin between

Fig 1: Nearly Two-Thirds of Higher-Paying Job Openings Require Higher Ed
Projected annual openings in Wisconsin (2020-2030) by median wages and typical education needed for entry



Source: WPF analysis of Wisconsin DWD Long Term Occupational Employment Projections, 2020-2030. Notes: 1) A small number of jobs are in occupations for which median wage data were not available and are thus excluded from this chart. 2) Although it is still possible to become a registered nurse with an associate degree, we include registered nurses under “Bachelor's or advanced degree” to reflect the increasing expectation for credentialing.

2020 and 2030 are in occupations that typically did not require a college degree or credential as of 2020. A majority of those jobs require a high school diploma or equivalent, while many others have no formal educational requirements.

For individuals seeking higher-paying jobs, however, these numbers tell only part of the story. Fewer than 95,000 (26%) of the state’s projected annual openings are in occupations that paid median wages of \$50,000 or higher in 2020, which we use as a minimum threshold for “higher-paying jobs” in our analysis. That is somewhat above the state’s 2020 median wage of \$41,150 across all jobs.

Among higher-paying jobs expected to open each year in Wisconsin through 2030, more than half (54,802, or 58.1%) will be in occupations that typically require a bachelor’s or advanced degree for entry (see Figure 1 on the previous page). Another 5.9% require an associate degree or postsecondary non-degree award, such as a certificate or technical diploma from a community college.

Meanwhile, roughly 25,000 (7%) of Wisconsin’s projected annual openings will be in occupations that pay a median wage of \$75,000 or more annually. Raising the bar further, 91% of those jobs will require a bachelor’s or advanced degree.

A Note on the Data Used in this Report

The Wisconsin Department of Workforce Development (DWD) produces long-term (10-year) projections every other year for the state and 11 regions known as “workforce development areas.” To do so, the agency primarily utilizes a national methodology developed by the U.S. Bureau of Labor Statistics using data from the bureau’s Occupational Employment and Wage Statistics survey and national projections along with Wisconsin industry employment data. The projections are also reviewed by economists in DWD’s Office of Economic Advisors.

Projections are by nature imperfect, but these are the best estimates available for what is likely to occur in Wisconsin through 2030. DWD does not produce confidence intervals to show how large the margins of error may be.

The projections analyzed for this report were made in 2022 using baseline data from 2020. Thus, the baseline data reflect the initial impact of the pandemic, and projections were made amid ongoing economic uncertainty. As such, they may be subject to more volatility than usual. We plan to review DWD’s updated projections when they are published in fall 2024 to examine how post-pandemic estimates compare with those we analyzed here.

Just over 34,000 (36.1%) of the state’s higher-paying projected annual openings do not require a higher education degree or credential. Notably, that includes

Figure 2: A Look at the Occupations with the Most Projected Job Openings in Wisconsin, 2020-2030
Top 10 occupations with median annual wages of \$50,000 or higher

Occupation	Typical Education Needed for Entry	Annual Total Openings	Annual Median Wages
Registered Nurses	Associate’s or Bachelor’s degree	3,666	\$73,540
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	High school diploma or equivalent	3,643	\$61,360
Software Developers and Software Quality Assurance Analysts and Testers	Bachelor’s degree	2,961	\$91,810
Farmers, Ranchers, and Other Agricultural Managers	High school diploma or equivalent	2,684	\$61,380
First-Line Supervisors of Production and Operating Workers	High school diploma or equivalent	2,651	\$63,390
General and Operations Managers	Bachelor’s degree	2,608	\$117,070
Accountants and Auditors	Bachelor’s degree	2,389	\$67,840
First-Line Supervisors of Office and Administrative Support Workers	High school diploma or equivalent	2,244	\$60,200
Elementary School Teachers, Except Special Education	Bachelor’s degree	2,243	\$56,970
Carpenters	High school diploma or equivalent	2,160	\$50,890

Source: WPF analysis of Wisconsin DWD Long Term Occupational Employment Projections, 2020-2030



five of the 10 occupations with annual median wages over \$50,000 expected to produce the most openings in Wisconsin each year: sales representatives, agricultural managers, carpenters, and supervisors of workers in both production and operating and office and administrative support occupations (see Figure 2 on the previous page). Most of these occupations do require related work experience in addition to a high school diploma or equivalent. For example, an apprenticeship is required to become a carpenter.

HIGHER-PAYING JOB GROWTH HEAVILY FAVORS DEGREE HOLDERS

Of the roughly 357,000 jobs projected to open each year in Wisconsin, fewer than 19,000 (5.3%) would be from new growth. The vast majority instead would come from retirements, other exits from the workforce, and transfers between occupations.

Nevertheless, examining the wages and educational requirements of new jobs expected to be created in Wisconsin can provide insight for individuals and institutions about the state's future job market. The projections show that among the roughly 6,700 jobs projected to be added each year in higher-paying occupations, nearly 70% (4,669) would require a bachelor's or advanced degree, and another 7% would require an associate degree or postsecondary non-degree award (see Figure 3). Thus, new higher-paying jobs are even more likely to require a degree than those that already exist.

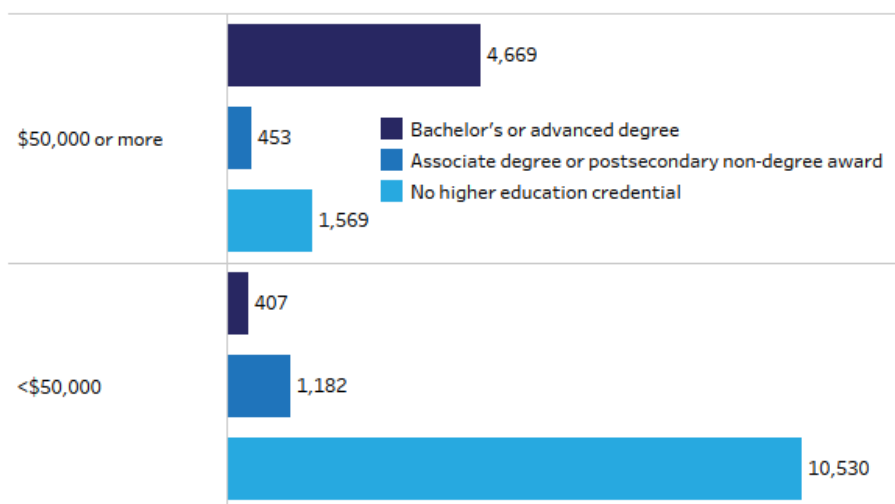
To some extent, these latest state projections show a continued shift in Wisconsin toward higher-paying occupations that tend to require more education. Our August 2023 [research brief](#) showed that during the height of the pandemic, higher-paying jobs were largely retained in Wisconsin, while losses were overwhelmingly concentrated in lower-wage occupations. Prior to that, roughly three-quarters of the jobs added in Wisconsin in the years between 2012 and 2019 were in occupations that paid more than the state's median annual wages.

INSIGHTS FOR STUDENTS, FAMILIES, AND INSTITUTIONS

Overall, our analysis shows that though some higher-paying job openings in Wisconsin in the coming years will not require a college degree, a growing majority likely will. These findings, and the detailed information about specific occupations found within the state's long-term [projections](#), can be helpful for students and families as well as businesses considering future plans, and for educational leaders and elected officials considering how to prepare students for college and careers.

Concerns about the cost and value of college may not be wholly mitigated by these data, however. As a panel of national experts at a recent Brookings Institution [event](#) articulated, median annual wages rarely equate to entry-level wages, meaning that it may take years for a college graduate to see their earnings outpace those in another field. Also, the institution one attends and field of study can make big differences in assessing costs and benefits, and completing one's studies is critical. Indeed, accumulating debt without completing a degree or certificate can put an individual in a worse long-term financial situation than if they had not gone to college at all.

Figure 3: New Higher-Paying Jobs More Likely to Require Higher Education
Annual projected job growth (2020-2030) in Wisconsin by median wages and typical education required



1) A small number of jobs are in occupations for which median wage data were not available and are thus excluded from this chart. 2) Although it is still possible to become a registered nurse with an associate degree, we include registered nurses under "Bachelor's or advanced degree" to reflect the increasing expectation for credentialing.



At the same time, in addition to our findings on openings and wages, recent research may at least temper concerns about rising tuition prices. According to an [analysis](#) by the national nonprofit College Board, the average net tuition and fees paid by full-time students at Wisconsin's public four-year institutions was roughly 12% lower in 2023 than in 2018 after adjusting for inflation. The same was true for the state's public two-year institutions. Data for Wisconsin's private institutions were not provided, but nationally, the inflation-adjusted average net price for those at private, nonprofit four-year institutions was 15% lower in 2023 than its 2006 peak. The net price is what the student or family must pay after grant aid is figured in.

To be sure, projections can only tell us what appears most likely to occur, and as the COVID-19 pandemic has shown, unexpected events can have profound effects on Wisconsin's economy. Technological advancements, such as the rise of artificial intelligence, also could impact the state's job market in ways that are difficult to forecast, particularly for young people taking initial steps toward careers that could last decades.

Despite these uncertainties, the actual changes in Wisconsin's job market over the last 10 years and the projected changes through 2030 show a college degree will be an imperative for those seeking to fill many of the state's higher-paying job openings. Consequently, while the cost-benefit calculus for each potential job seeker will differ, it does appear that higher education will hold value for many young Wisconsinites in the years to come.

