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# Promising Pathways

College and industry routes to good jobs for Illinois youth from low-income families

**Illinois High School  
to Career Series**

**Part Two**

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## External Review

To ensure that this report's contents are rigorous, accurate, and useful to educators and policymakers, we solicited feedback from experts at the state agencies that produce the High School to Career (HS2C) dataset. These experts included (in alphabetical order):

- **Maureen Font**, Illinois State Board of Education
- **Ewa Gallagher, Ph.D.**, Illinois Department of Employment Security
- **Shana Rogers**, Illinois Student Assistance Commission
- **Jackie Matthews**, Illinois State Board of Education
- **Logan Woods, Ph.D.**, Illinois State Board of Education

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# Promising Pathways

## College and industry routes to good jobs for Illinois youth from low-income families

*“To find out what one is fitted to do and to secure an opportunity to do it is the key to happiness.”*

*-John Dewey, Democracy and Education*

The great philosopher John Dewey spent ten years in Illinois, where he developed and refined theories on education, vocation, and society. From this experience, he argued that opportunity to engage in meaningful work is central to a healthy democratic society and the personal fulfillment of those in its citizenry (Dewey, 1916). Unfortunately, over a century later, national data shows that many people are not employed in purposeful, economically secure work.

Fewer than half of U.S. workers report having a job that provides livable wages with benefits, a predictable schedule, safe working conditions, a sense of enjoyment and meaning, and other characteristics of high-quality employment. Those who do work in jobs with high-quality characteristics—or what many term “good jobs”—are disproportionately White, male, and highly educated (Bellisle et al., 2025; Rothwell & Crabtree, 2019). However, there is some evidence that opportunities for good jobs are improving (Clark & Kozák, 2024), and good jobs are expected to grow in the U.S. through 2031 (Strohl et al., 2024). Expanding access to good jobs is vital for ensuring that all members of society can benefit from this growth.

As such, we focus this report on identifying promising pathways to good jobs, especially for those who started life with less economic advantage. In Report 1 of this series, we used a unique state data set, the [Illinois High School 2 Career](#) project, to describe education and earning outcomes for Illinois high school seniors from the classes of 2008 to 2012 with diverse family income backgrounds.<sup>1</sup> We found that earning a higher level of education led to higher income for students from all backgrounds; however, students from lower-income backgrounds were less likely to attain higher education and, even when they did, were less remunerated, on average—even when working in similar industries or with similar education. While this first report identified the outcomes of various post-high school pathways for different student groups, it did not specifically address the pathways that promote the economic success of low-income students.

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<sup>1</sup>To be included in the study, high school seniors had to meet criteria as described in the “Data, Population, and Sample” section. The main criteria were that they had to complete the Free Application for Federal Student Aid (FAFSA) and find employment in Illinois as adults.

This report, the second and final report in the series, returns to the High School 2 Career data and seeks to identify “promising pathways” that support students from low-income backgrounds in accessing good jobs, despite the powerful headwinds against economic mobility found in Report 1. This study defines a good job as one in which the person’s earnings are in the top three quintiles (i.e., top 60%) relative to their peers in the same high school cohort. For the students who met our study criteria, we ask:

- 1. Which education and industry pathways led a high proportion of students from low-earning families to work in a good job?**
- 2. How did these promising pathways vary by race/ethnicity and gender?**

In other words, we ask what the promising pathways are in Illinois that can move students from the bottom economic rungs to the top. In doing so, we hope to inform Illinois educators and policymakers so that they can provide students with more information about and access to such promising pathways. However, we caution that identifying and encouraging access to such pathways is only one piece of a complex puzzle of economic, social, labor, and education policies likely needed to promote economic prosperity for all (Carnevale et al., 2023; NASEM, 2024). Breaking cycles of income inequality requires interventions beyond individual choice of education and career pathway, such as investing in education and career training, supporting personal and environmental health, and reducing exposure to crime and violence (see NASEM, 2004, p. 85 for a summary of evidence-based interventions for reducing intergenerational poverty). In the remainder of this paper, we first share our key takeaways, then describe in detail the background, methods, and findings supporting these takeaways.

# Key Takeaways

- 01 Higher education is the most promising pathway to a good job:** Averaged across all industries and programs of study, earning a bachelor's degree or above was a promising pathway for students of all racial/ethnic and gender groups.
- 02 Pathways without a bachelor's degree can lead to good jobs, but mostly for men:** Some industries and majors provided students from low-income families with good jobs at high average rates without a bachelor's degree, including:
  - a. Programs of study: construction (certificate), agriculture, engineering, health, or mechanic & repair technologies (associate degrees)
  - b. Industries: construction, manufacturing, or wholesale trade

However, our evidence suggests that many of these pathways were promising only for men and/or specific racial/ethnic groups, and there were no promising pathways identified for students with only a high school degree.

- 03 Disparities remain in access to good jobs, even with similar degree, program of study, or industry, but higher education shrinks these gaps:** Among students from low-income families, women and Black students accessed good jobs at lower rates than men and other racial/ethnic groups within the same industries and majors. In contrast, Latino men and women worked in good jobs at higher rates than other racial/ethnic groups of the same gender. However, disparities in access to good jobs shrank as education level rose, suggesting that education helps to equalize outcomes.

This study suggests that the most promising pathways to good jobs for students from low-income families across most demographic groups involve attaining a college degree (specifically, a bachelor's degree or higher). However, there were select pathways at the sub-baccalaureate level that were promising for all the groups with sufficient observations to observe. Extending these pathways to more students could also be a fruitful endeavor. This study confirms national research that suggests the importance of a college degree for accessing good jobs, as well as the existence of—but inequitable access to—sub-baccalaureate pathways to good jobs.

## Background

### What is a good job?

There are numerous definitions for a good job across labor market literature, but on one point almost all scholars agree: pay is central to a good job, but not the whole of what makes a job “good.” Various definitions (Aspen Institute, 2022; Bellisle et al., 2025; Carnevale et al., 2024; Rothwell & Crabtree, 2019; Strohl et al., 2024; Woods et al., 2024) include such aspects as:

1. **Pay**
2. **Benefits, including health insurance, retirement, vacation leave, and sick leave**
3. **Job security**
4. **Stability in work hours and scheduling**
5. **Job growth and future prospects**
6. **Working conditions, including interpersonal/social conditions and health/safety conditions**
7. **Sense of enjoyment, meaning, autonomy, and purpose in the job**
8. **Voice about the workplace, including access to collective bargaining mechanisms**

In 2022, the Aspen Institute attempted to synthesize this vast literature into a common national definition with three components: (1) economic stability, (2) economic mobility, and (3) equity, respect, and voice. In parallel, the Project for Middle Class Renewal at University of Illinois developed an “Employment Quality of Illinois” measure with ten components, which can be found at Bellisle et al. (2025).

While these definitions rightfully acknowledge the multi-faceted nature of a good job, research on good jobs also finds that pay is predictive of the other aspects of a good job. In other words, highly paid jobs tend to have higher levels of other desirable traits (Bellisle et al., 2025; Rothwell & Crabtree, 2019). As Bellisle et al. (2022) summarized, “Poorer quality working conditions tend to be bundled with relatively poorer compensation, while more desirable working conditions are coupled with superior compensation and other positive work and job features” (p. 2). Furthermore, a worker’s pay earlier in their career is strongly predictive of lifetime earnings (Kim et al., 2018).

Perhaps because of the clear link between pay and other aspects of a good job, many quantitative studies of good jobs have primarily used a minimum benchmark of wage/salary as the core indicator (Carnevale et al., 2023; Carnevale et al., 2024; Strohl et al., 2024; Woods et al., 2024). We follow suit in this report, basing our measure of good jobs on worker earnings. As we will discuss further below, we define a good job as one in which the worker’s earnings are in the top three quintiles of income relative to their peers in the same cohort of former Illinois high school students.

### **Who has access to good jobs?**

Along with providing definitions of a good job, labor market research has also described the characteristics of workers who do and do not have access to good jobs. Unfortunately, access to good jobs, like many other disparities in our society, is stratified along gender and racial/ethnic lines. Both nationally and in Illinois, male and White workers are more likely to be in good jobs, while female, Black, and Latino workers are less likely to be in such jobs (Bellisle et al., 2025; Carnevale et al., 2023; Rothwell & Crabtree, 2019). As we found in Report 1, this is true even for workers with similar education levels (Bellisle et al., 2025; Cashdollar et al., 2025). Workers from high-income backgrounds are also more likely to access good jobs than those from lower-income backgrounds (Carnevale et al., 2023).

When examining demographic differences in access to good jobs exclusively among workers from low-income backgrounds, a more nuanced picture emerges. The National Academy of Sciences, Engineering, and Medicine (NASEM, 2024) summarized research by Raj Chetty and colleagues (2020) on racial/ethnic and gender differences in individual adult earnings among workers from low-income households. They showed that among men from low-income families, Asian workers had the highest rates of upward mobility, with 64% of Asian workers from low-income households earning in the top three quintiles of adult earnings. They were followed by Latino (56%) and White (53%) men, with Black men having the lowest rates (37%) of these groups. Asian and Latina workers also had the highest rates of upward mobility among women from low-income households, with 62% and 45%, respectively, earning in the top three quintiles. White and Black women from low-income households had the same rate of upward mobility (39%). While men had higher rates of upward mobility than women, on average, this pattern was reversed among Black workers.

Interestingly, there is little regional disparity in workers holding a good job. Carnevale et al. (2024) found that rural and urban workers are about as likely to hold good jobs, and that rural workers may in fact have an advantage in the likelihood of having a “blue collar” good job. Rothwell & Crabtree (2019) similarly found no real difference in job quality by urbanicity, also seeing a slight advantage for rural areas in many aspects of job quality, except income (as rural areas tend to have lower pay due to lower cost of living).

## What education pathways provide access to good jobs?

Increasing access to good jobs—as well as eliminating demographic disparities in such access—is a policy goal in Illinois. But what pathways are known to increase access to good jobs? In this section, we summarize the research literature in several areas as we look to investigate the highest leverage pathways to good jobs for Illinois students from low-income backgrounds.

### Postsecondary Education

Higher education increases access to good jobs. Examining Illinois data, Bellisle et al. (2025) noted a “...steady increase in the percentage of workers employed in high-quality occupations as education increases” (p. 12). Similarly, Strohl et al. (2024) predicted that the biggest increase in good jobs over the next few years will be for workers with a bachelor’s degree. Put simply, there is a high earnings premium for workers with bachelor’s degrees compared to workers without these credentials. This earnings premium has persisted through various economic shifts (National Center for Education Statistics, 2020). As degree requirements rise for various jobs, workers without college degrees increasingly face wage penalties and employment instability (Abel & Deitz, 2014). Further, the value of a college education increases over a worker’s lifetime, with higher degrees netting greater lifetime returns (Carnevale, Cheah, et al., 2019).

### Credential Pathways

Recognizing that not all students have the means or desire to complete college degrees, many policymakers have called for alternative pathways for workers to increase their earnings through short-term, low-cost training programs for industry-relevant skillsets. These platforms—also sometimes called “credential pathways”—involve postsecondary training instead of or in addition to two- and four-year college programs. They include certificate programs, apprenticeships, and short-term trainings such as “bootcamps.” Offered by formal educational institutions as well as by labor and industry groups, these training programs are often touted as opportunities for workers to gain marketable credentials while avoiding the large financial and time investments of traditional degree programs. While research on the economic returns of non-degree certificates and credentials to workers is limited, existing studies have found evidence that these forms of postsecondary training can improve employment outcomes.

For example, researchers at the Georgetown Center for Education and the Workforce have found positive returns to non-degree educational certificates, or certificates earned through short-term coursework sequences at colleges and universities. However, earnings vary significantly between certificate holders, depending heavily on the occupational field in which certificates are earned. Some of the highest earning fields for workers with certificates are engineering, information technology, legal studies, and blue-collar trades, where workers earn as much or more than workers with bachelor’s degrees in education, liberal arts, and humanities (Carnevale, Cheah, et al., 2019; Carnevale et al., 2020).

While students who earn job-specific vocational credentials have a boost in immediate employment and earnings, they may experience lower rates of employment after middle age relative to their more highly educated peers. This phenomenon is theorized to reflect lower adaptability among specialized workers as technologies and labor market needs change (Hanushek, 2012; Hanushek et al., 2017).

### Disparities in Outcomes from Education Pathways

Given non-degree credentials’ positive returns for workers and society alike, interest has grown in how they might improve access to well-paying careers among groups historically marginalized in higher education and the workforce. However, research comparing returns to credentials across demographic groups finds that their positive returns are not distributed evenly across gender, ethnic, and racial groups. Women with educational certificates earn less than men, in part because the fields in which



they concentrate (including healthcare, business and office management, and cosmetology) are lower earning than those in which men concentrate. Yet certificate-holding women also earn less than men within the same occupational fields (Carnevale, Smith, et al., 2018). In fact, Baird and colleagues (2021) find that occupational credentials decrease women's earnings, on average, relative to women with high school degrees (despite increasing their rates of employment). Additionally, Black and Latino workers with educational certificates earn less than White workers, with Black certificate-holders earning the least (Carnevale et al., 2012; Carnevale, Strohl, et al., 2019). Earnings gaps between non-degree credential holders from minoritized groups and their male and White counterparts are even larger than the gaps among workers from these groups with bachelor's degrees (Brand & Xie, 2010; DiPrete & Buchmann, 2006).

Black and Latino students, along with students from low-SES backgrounds, are over-represented in non-degree certificate programs. For example, in Illinois in 2020, 14% of the population was Black, but Black workers made up 20% of certificate-holders (Carnevale et al., 2020). Given the non-degree credentials' demographic earnings disparities, their overrepresentation among members of racially and socioeconomically marginalized populations, and their potential for becoming obsolete as workers reach later life, some educators and researchers have expressed concern over short-term training programs' increasing popularity. They caution that promoting these programs could divert minoritized students from pursuing higher degrees, reproducing the tracking along axes of race and class that the "college for all" movement of the late 20th century attempted to eliminate (Gandal, 2021; Jacobs, 2020).

As an answer to concerns about tracking, educators and policymakers working to expand non-degree credential attainment have developed programs that make it easier for students to transition from short-term training programs to degree programs. The idea is that students can "stack" credentials, pursuing job-relevant skills incrementally by earning additional credentials when they want to upskill over the course of their careers. Advocates of stackable credentials argue that balancing "off-ramps" from school into the workforce with more "on-ramps" back into postsecondary learning can offer students the best of both worlds. That is, students can enter the labor market with non-degree credentials, earning higher wages in exchange for relatively low investments of time and money, and they can also return to school at any time, earning additional credentials that could culminate in a degree.

To date, little research has examined the outcomes of students who earn stackable credentials, and studies that do exist have found mixed results, with higher returns for White students than students from other ethnic/racial groups (Daugherty et al., 2021; Giani & Fox, 2017; Meyer et al., 2022). Given the current sparse body of literature on stackable credentials, Daugherty and colleagues (2021) called for more research on implementation of credential programs, variation in student outcomes across program fields and demographic groups, and prospects for improving students' navigation of on-ramps and off-ramps between education and work.

## **What Labor Market Forces Influence Access to Good Jobs?**

Education is only one part of access to a good job; industry and occupation matter as well. Carnevale et al. (2023) identified high-paying occupations as those in STEM, business, finance, management, law, social science, and skilled healthcare. In contrast, they found that the arts, community services, education, food and personal services, and healthcare support are lower-paying jobs. Similarly, Strohl et al. (2024) predicted that STEM fields will provide the most growth of good jobs in the coming years. Looking at Illinois, Report 1 in this series (Cashdollar et al., 2025) identified higher and lower-paying industries for students in their early careers. High-paying industries included utilities; mining, quarrying, and oil and gas extraction; professional, scientific, and technical services; and management of

companies and enterprises. Lower-paying industries were in accommodation and food services; arts, entertainment, and recreation; and retail trade. Students from low-income backgrounds were overrepresented in two of the lower-paying industries, but none of the higher-paying ones.

Beyond industry choice, broader labor market factors also influence access to good jobs. For instance, Woods et al. (2024) examined the likelihood of service industry workers transitioning from low-wage to high-wage jobs in the context of different labor markets. While it was uncommon for workers to make this leap, it was more likely during tight labor markets (i.e., periods with low unemployment when there is high demand for workers). Furthermore, structural inequities in the labor market and employment may reproduce disparities in economic outcomes by gender and race/ethnicity, even for people with similar education and occupation. These factors include racial bias in hiring, lack of women and people of color in leadership positions in companies, location of companies within communities, and lack of support for childcare and flexible schedules for parents (Carnevale et al., 2023).

This influence of labor market demand—and compensation for that demand—is an important reminder that education is only a small part of the picture when it comes to good jobs. While this report is focused on identifying promising pathways that policymakers can support and individuals can access, the onus for creating more good jobs and reducing intergenerational poverty is not just on the individual to make “good” choices about education and work. Economic factors, as well as economic, social, and other policies, play an equally—if not more important—role (see NASEM, 2024).

## **Methods**

### **Data, Population, and Sample**

The data, population, and sample used for this study are the same as those used in Report 1 (Cashdollar et al., 2025). As such, an interested reader can refer to that report. Here, we simply note that this study uses data from the Illinois High School 2 Career project, a collaboration between the Illinois State Board of Education (ISBE), the Illinois Student Assistance Commission (ISAC), the Illinois Department of Employment Security (IDES), and Illinois State University (ISU). The project provided student-level data for five cohorts of high school students who were seniors from the spring of 2008 to the spring of 2012, and the current study draws on a subset of these students. Inclusion in the study sample required that students had completed the Free Application for Federal Student Aid (FAFSA), an application for federal financial aid for college, and that their FAFSA forms had complete data on parent adjusted gross income. Students also had to be employed in a stable job in Illinois three years (12 quarters) after their latest educational enrollment, whether that was in high school or college. Out of all high school seniors from 2008-2012 (N=706,453), 171,357 students (24%) met these requirements. The study sample differs from the full Illinois high school student population in several important ways, detailed in the previous report. One notable difference is that the sample includes a larger proportion of students who attended college in Illinois rather than leaving the state for higher education. Neither students working outside of Illinois nor students who were unemployed are in the sample, and we cannot distinguish between them.

### **Measures**

We use many of the same measures as in Report 1 (Cashdollar et al., 2025), including student demographics and education degree. We refer the reader to that report and the accompanying Supplemental Materials for more on those measures. Here, we detail the measures that are central to this report.

## Defining Students from Low-Income Households

For each cohort of high school seniors, we developed quintiles of parent adjusted gross income (AGI) based on FAFSA records. Each cohort received its own quintile boundaries based on that year's data, and we categorized households in the lowest two quintiles as "low-income." The upper earnings threshold for this category varied by student cohort, from \$39,358 for the 2008 cohort to \$43,531 for the 2012 cohort. More on this measure can be found in the Supplemental Materials.

In Report 1 (Cashdollar et al., 2025), we found that students from low-income households were disproportionately Black and Latino. Students from low-income households most commonly grew up in the largest metropolitan areas in Illinois (Chicago-Naperville-Elgin and St. Louis), but they were most overrepresented among those who grew up in rural areas downstate.

## Defining Students in Good Jobs

We estimated a student's earnings by examining their employment data three years (12 quarters) after the student's latest postsecondary enrollment/completion or after their senior year among those with no postsecondary enrollments. We limited the sample to students who were working in a "full-quarter" job in Illinois, meaning the same employer reported wages for them in the quarters before and after quarter 12 (quarters 11 and 13, respectively). The full-quarter requirement helps limit our analysis of outcomes to those with stronger, more stable labor market attachment. Half of students for whom we had parent AGI data worked in a full-quarter job during quarter 12. Of those, approximately 6% worked in two or more full-quarter jobs, in which case we report on their highest-paying full-quarter job.

We then estimated annual earnings by multiplying the student's quarterly earnings from their highest-paying full-quarter job in quarter 12 by four. To make earnings comparable across students, we transformed all wages to 2017 dollars. We then developed quintiles of earnings. Students whose earnings were in the top three quintiles relative to all other students were classified as in good jobs, while students in the bottom two quintiles were not. The income threshold for a good job was \$25,879 annually in 2017 dollars, worth approximately \$34,375 in 2025. Meeting this income threshold would require a full-time worker to earn at least \$12.44 per hour, well above the Illinois minimum wage in 2017 of \$8.25. However, this earnings threshold was still below the national living wage in 2017 of \$37,367<sup>2</sup> for a single adult with no children in Illinois, according to the MIT living wage calculator (Glasmeier, 2024). We recognize that this threshold is low; however, using the top three quintiles of earnings allows us to mirror our threshold for being from a middle- or high-income family (i.e., the top three quintiles of parental earnings; see previous section). The students in our sample are also all early in their careers, so very few pathways would be likely to meet a higher threshold; however, the students in the top

This study defines a **good job** as one in which the person's earnings are in the top three quintiles (i.e., top 60%) relative to their peers in the same high school cohort.

Students from higher-income families (as measured by parental income) are much more likely to be in good jobs than students from lower-income families. As such, this study defines a **promising pathway** as a degree, program of study, or industry that places students from low-income families into good jobs at a 69% rate, the same overall rate that students from high-income families can be found in such jobs.

<sup>2</sup> This estimate was calculated using the Living Wage Calculator's estimate of a living wage in Illinois for a single adult with no children in 2025 (\$49,005). The authors converted this to 2017 dollars using a cumulative inflation rate from 2017 to 2025 of 31.1%.

three quintiles are more likely to be on the pathway to a good job, if not already in one, than other students (as early career earnings predicts later earnings; see Kim et al., 2018). Our use of income as the core indicator of a good job follows many quantitative studies of job quality (e.g., Carnevale et al., 2023; Carnevale et al., 2024; Strohl et al., 2024; Woods et al., 2024).

Using this kind of relative measure for a good job has many strengths. First, it allows us to clearly examine economic mobility. Report 1 showed that students who started life in higher family income quintiles were likely to remain in higher income quintiles as adult wage-earners, with the reverse being true for students from lower family income quintiles. Looking at how students from lower family income quintiles can access higher earning quintiles at the same rate as their more economically advantaged peers provides a direct look at levers of economic mobility. Second, it inherently places students' wages on a similar playing field in terms of the value of the wages in a specific timespan/era, the general place students are in their career/age trajectory, and the range of possible wages available within those parameters. In other words, it allows us to compare apples to apples, and to essentially create a wage benchmark for a good job that is sensible and attainable for the students in our study based on where they are in their careers at a particular moment in time.

Of course, this relative measure also has weaknesses, the most obvious one being that it treats access to a good job as a zero-sum game, where only the top quintiles can have access and the bottom quintiles cannot. The rough correspondence between our wage threshold for a good job and the MIT estimate of a living wage suggests that the relative measure, for the time studied, reflects absolute differences in access to jobs that provide a livable wage. But jobs that provide stable and livable wages, along with other desirable traits, can increase, as they are projected to do by Strohl et al. (2024). In turn, a relative measure of good jobs may not make sense in a future in which, ideally, a higher proportion of jobs are good jobs. Our measure also does not include other desirable traits of a good job, such as benefits and good working conditions. That said, we believe our measure is a robust one for our purposes of finding promising pathways to good jobs in the early careers of Illinois students, and that it signifies something important about access to good jobs given the strong relationship between wages and other desirable job characteristics (Bellisle et al., 2025; Rothwell & Crabtree, 2019).

## **Industry**

We report industry of employment three years (12 quarters) after students' latest postsecondary enrollment/completion or after their senior year among those with no postsecondary enrollments. Note that industry is not synonymous with occupation, which we do not have data on. Industry is categorized using 2-digit North American Industry Classification System (NAICS) codes.

## **Degree Program**

For students who had a college completion, we identified program of study using the 2020 2-digit Classification of Instructional Programs (CIP) code title associated with their highest degree.



## Analysis

We provide descriptive statistics of the measures outlined above, examining the proportion of students from different income backgrounds who are in good jobs, as well as how education degree attainment, program of study, and industry of work relate to the likelihood that students from low-income backgrounds will end up in good jobs. We also examine how student demographic factors interact with these findings. These descriptive statistics are presented in figures and tables. When disaggregating by degrees, programs of study, industries, and demographic groups, we show only results of groups with a minimum of 40 observations to ensure that findings are reasonably representative of the sample. To protect student privacy, the state agencies with which we partnered suppressed data cells with student counts lower than 10, in which case we treated student counts as 0. Due to small numbers of observations for some groups, disaggregated results are presented only for four racial/ethnic groups: Asian, Black, Latino, and White. However, students who identify as American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and Two or More Races are included in aggregate findings.

## Findings

### 01 Research Question 1:

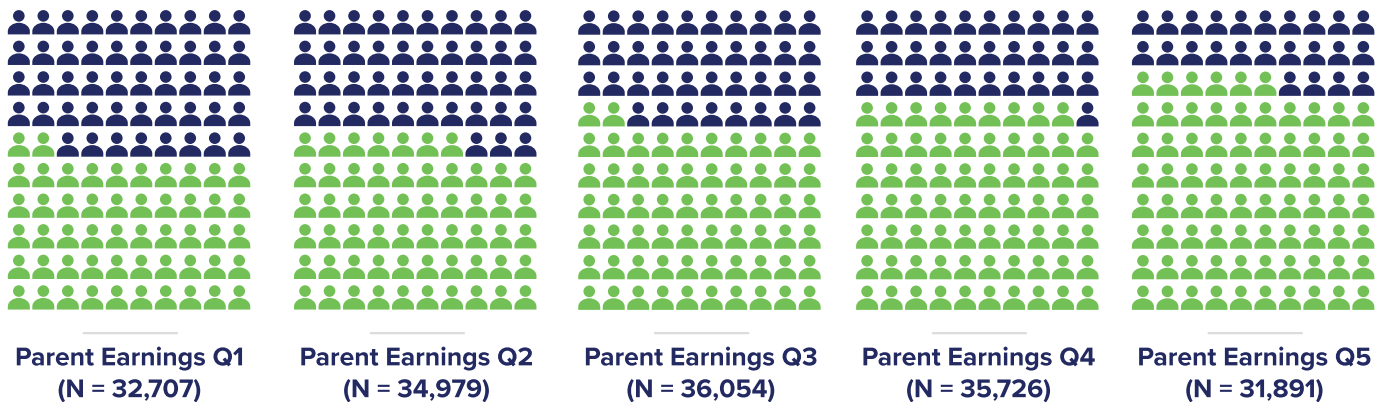
**Which education and industry pathways led a high proportion of students from low-earning families to work in a good job?**

#### **Student Earnings by Family Income Background**

To begin answering this research question, we first examined the distribution of Illinois students who were in good jobs by their family's economic background. This information is important to the remainder of our findings, as our goal is to find pathways that move students from low-income families into good jobs at the same rate that students from higher-income families attain good jobs. Identifying such pathways is one step toward a labor market in which individuals' prospects for attaining occupational rewards are unrelated to their economic origins. Knowing the rate at which students from different economic backgrounds, on average, attain good jobs is thus a fundamental piece of information.

Figure 1 provides five pictograms, each for a different set of students. The quintile 1 (Q1) pictogram focuses on students whose parents were in the bottom quintile of earnings, the Q2 pictogram the next lowest quintile, and so forth. Q1 and Q2 represent "students from low-income families" for the purposes of this study, while Q3-Q5 are students from middle- and high-income families. These charts each show the proportion of students from that economic background who were found to be in a good job as adults. Students in a good job are in green—a good job is one in the top three quintiles of earnings for the students' cohort. The blue figures represent students who are in the bottom two quintiles of earnings, or not in a good job.

**FIGURE 1.** Proportion of former Illinois high school seniors in a good job (green) by their parents' adjusted gross income quintile.



#### KEY

**Green** = Students found as adults to be in a “good job”, defined as the top three quintiles of earnings relative to their peers

**Blue** = Students found as adults in the bottom two quintiles of earnings, or **not** a good job

**Parent Earnings Q1-Q5** = The students’ parental earning level, separated into the lowest quintile of parent earning (Q1) through the highest (Q5). Students in Q1 or Q2 are considered students from “low-income families.”

What does this figure tell us? Simply put, students from low-income families were less likely than students from middle- and high-income families to be in good jobs. Indeed, as Figure 1 shows, the likelihood of being in a good job increased steadily by parental earnings quintile. Only 52% of students who grew up in the lowest economic quintile ended up in a good job, while 76% of those from the highest economic quintile ended up in a good job. Uncovering pathways that move students from the bottom quintiles to the top quintiles is, thus, an urgent area of concern.

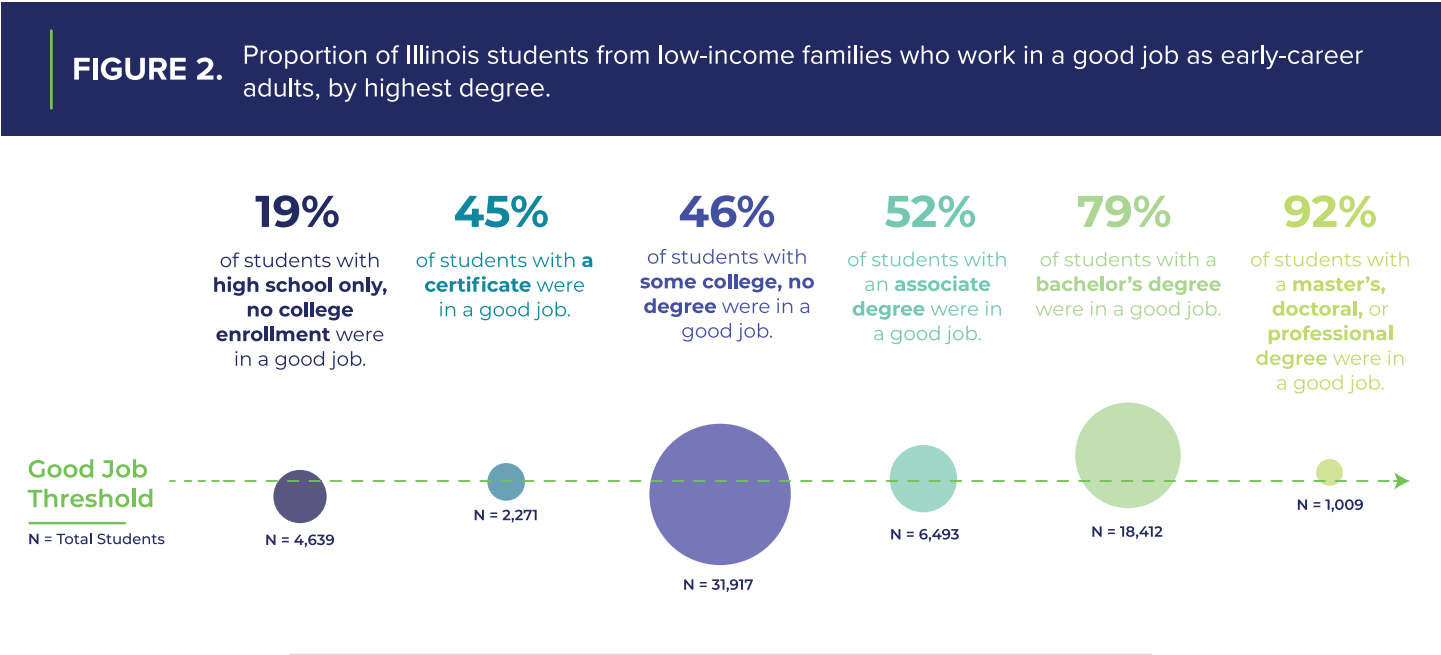
**For the remainder of this report, we use the benchmark of 69% of students from low-income backgrounds being placed in a good job as representative of a “promising pathway.”** This is derived from the data underlying Figure 1, wherein 69% of students from the higher-income quintiles (Q3-Q5) were in a good job, while only 54% of students from lower-income quintiles (Q1-Q2) were in such jobs. If the playing field were level for students of all economic backgrounds, then students from low-income families would access good jobs at the same rate as their peers from higher-income families. Promising pathways are those that move low-income students into good jobs at that rate.

### Promising Degree Pathways

Here, we examine which education degrees are promising pathways—or those that resulted in at least 69% of students from low-income families accessing good jobs as early-career adults. Figure 2 shows the proportion of students from low-income families who worked in good jobs by their highest level of educational attainment. The size of each bubble is scaled to the number of students who achieved each education level, showing that “some college, no degree” was the most common degree level for economically disadvantaged students, followed by “bachelor’s degree.” The proportion of each bubble above the “good job threshold” represents the proportion of students in that degree category who worked in a good job. Students with different degrees had vastly different likelihoods of working in a good job, with bachelor’s degree holders being 1.7 times as likely as students with “some college,

no degree.” At the ends of the educational spectrum, we see that almost all students from low-income families with master’s, doctoral, or professional degrees were in good jobs, but very few held such degrees. Similarly, a mere 19% of students with a high school education only were in good jobs, though very few were in this category.

The figure shows that a bachelor’s degree was the lowest education level that met our benchmark of at least 69% of students from low-income families working in a good job. In other words, a bachelor’s degree or higher was the most promising degree pathway. As noted in Report 1 (Cashdollar et al., 2025), students from lower-income families had less access to and completion of this pathway compared to their higher-income peers. This difference in attainment rates largely drove the disparities we saw in Figure 1 in access to good jobs by students from different income backgrounds.



**Note:** “Good job” refers to a job in which the student’s earnings are in the top three quintiles relative to their cohort peers. The size of each circle represents the number of students from the sample in each degree category. The proportion of each circle above the good job threshold represents the percentage of students from low-income families in that degree category who went on to work in a good job. Figure design inspired by infographic from Georgetown Center on Education and the Workforce (2011).

That said, attaining a bachelor’s degree or higher was not the only way that students from low-income families attained good jobs, and it was also not a guarantee that they would work in good jobs. Figure 2 shows that every degree level had variation between students in whether they worked in a good job or not. For instance, around half of low-income students with a certificate, associate degree, or “some college, no degree” worked in a good job. Meanwhile, more than one in five low-income students with a bachelor’s degree did not work in a good job. These findings suggest that (1) there are promising pathways that involve less risk, debt, and time than a bachelor’s degree, and (2) additional factors, such as program of study, industry, and student demographics, contribute to variation in work outcomes by degree level. In the next few sections, we unpack how these factors relate to promising pathways.

**Promising Programs of Study**

While only about half of low-income students with associate degrees or certificates worked in a good job, some programs of study within those degree levels led to good jobs at high rates. Table 1 shows the promising programs of study at the associate and certificate level—i.e., those that had at least 69%

of students from low-income families in good jobs. (Only programs with at least 40 observations are shown. Appendix A, Table A1 shows results for all programs of study with at least 40 observations.)

**TABLE 1.** Promising programs of study at the associate degree and certificate level.

Program of study	Proportion of recipients from low-income families in a good job
<b>Certificates:</b>	
Construction trades	80%
<b>Associate degrees:</b>	
Engineering/ engineering-related technologies/technicians	84%
Health professionals and related programs	78%
Agricultural/animal/plant/veterinary science and related fields	76%
Mechanic and repair technologies/technicians	75%

**Note:** Promising programs of study are those wherein at least 69% of students from low-income families who took the pathway were in good jobs as adults. Programs shown had a minimum of 40 observations.

In showing these programs that “beat the odds” of earnings outcomes from less than a bachelor’s degree, it is also important to show the inverse: programs of study at a bachelor’s degree level or above that did not result in a good job. While the majority of students with a bachelor’s degree held a good job, not all did. The programs in Table 2 resulted in fewer than 69% of students from low-income families accessing good jobs. These pathways might be thought of as “less promising” for students from low-income families.

**TABLE 2.** Programs of study at the bachelor’s degree level or higher wherein fewer than 69% of students from low-income families were in good jobs.

Program of study	Proportion of recipients from low-income families in a good job
<b>Bachelor’s degrees:</b>	
History	67%
Natural resources and conservation	67%
Psychology	66%
Parks, recreation, leisure, fitness, and kinesiology	64%
Biological and biomedical sciences	61%
Visual and performing arts	61%



Master's/doctoral/professional degrees:	
None	

**Note:** Programs shown had a minimum of 40 observations. There were no programs of study at the master's/doctoral/professional degree level wherein fewer than 69% of students from low-income families were in good jobs.

However, it's worth noting that—despite these programs of study not leading to good jobs at the 69% rate—they led to good jobs more than the average for sub-bachelor's degree programs. Indeed, all bachelor's programs led to good jobs for at least 61% of students (see Appendix Table A1), which was not true for all sub-baccalaureate programs. In other words, the least promising bachelor's degree programs were still more promising than the average sub-bachelor's degree programs, in terms of proportion of students acquiring a good job.

### Promising Industry Pathways

As discussed in the Background section, the industry in which one works also influences earnings. In this section, we examine industries that provided good jobs for students from lower-income families even without the bachelor's degree. Table 3 lists these promising industry pathways—i.e., those in which at least 69% of students from low-income families obtained a good job without the benefit of a bachelor's degree. (Appendix A, Table A2 shows results for all industries for which we have data.)

**TABLE 3.** Promising industry pathways at various sub-baccalaureate degree levels.

Industry	Proportion of recipients from low-income families in a good job
<b>High school degree only:</b>	
None	
<b>Some college, no degree:</b>	
Utilities (e.g., electric, water, sewage, natural gas)	97%
Agriculture, forestry, fishing, and hunting	83%
Manufacturing	78%
Construction	77%
Wholesale trade (merchants of various goods like groceries, furniture, cars, lumber, paper, apparel, machinery, etc.)	75%
Finance and insurance	70%
Public administration (e.g., administrative roles in government)	70%
<b>Certificate:</b>	
Construction	86%
Manufacturing	85%

Wholesale trade	74%
<b>Associate degree:</b>	
Wholesale trade	81%
Construction	80%
Manufacturing	79%
Management of companies and enterprises	77%
Public administration	77%
Professional, scientific, and technical services	70%

**Note:** Promising industry pathways are those wherein at least 69% of students from low-income families who took the pathway were in good jobs as adults. Industries shown had a minimum of 40 observations. There were no industry pathways at the high school degree level wherein at least 69% of students from low-income families were in good jobs.

This table provides promising pathways to a good job for students from low-income families who do not attain a bachelor's degree. Yet again, however, this table reinforces the value of postsecondary education and training to student prospects, as there are no promising industry pathways for those who have just a high school diploma.

While almost all industry pathways were promising for students with a bachelor's degree or higher, there were **no** promising industry pathways for those who had just a high school diploma.

Reinforcing that point, we found only three industries that did not provide access to a good job for bachelor's degree recipients. The three industries were accommodation and food services (46% of students from low-income families in a good job), arts, entertainment, and recreation (51%), and retail trade (47%); all these industries are ones in which a bachelor's degree is not commonly required and thus likely provided no earnings premium to students for holding it. For low-income students with a bachelor's degree, all other industries provided at least 69% of them access to a good job.

## Summary

On average, 54% of Illinois students from low-income families ended up in a good job, compared to 69% of students from higher-earning families. From this fundamental piece of information, we can identify "promising pathways" that move students from lower-income families to good jobs at the same rate that students from higher-income families attain good jobs. Promising pathways include:

- **The bachelor's degree.** At the bachelor's degree level and above, more than 4 in 5 students from low- income backgrounds had a good job, on average.
- **Five programs of study at the certificate and associate level.** Programs that led to good jobs included (1) certificate programs in construction trades and associate degree programs in (2) agricultural/animal/plant/veterinary science and related fields, (3) engineering/engineering-related technologies/technicians, (4) health professions and related programs, and (5) mechanic and repair technologies/technicians.

• **Three industries for students with more than a high school degree, but less than the bachelor's degree.** Construction, manufacturing, and wholesale trade could all lead to good jobs for students with a certificate, associate degree, or “some college, no degree.” There were six other industries (agriculture, forestry, fishing, and hunting; finance and insurance; management of companies and enterprises; professional scientific, and technical services; public administration; utilities) that could lead to a good job, depending on the specific sub-baccalaureate education level. However, no pathways to a good job were available with just the high school degree.

These findings indicate that good jobs are attainable—even early in one's career—for Illinois students of all income backgrounds who obtain a bachelor's degree, or for those without a bachelor's degree in specific programs of study and industries.

“ These findings indicate that good jobs are attainable—even early in one's career—for Illinois students of all income backgrounds who obtain a bachelor's degree, or for those without a bachelor's degree in specific programs of study and industries. ”

## **02 Research Question 2:**

### **How did these promising pathways vary by race/ethnicity and gender?**

The findings for Research Question 1 clearly showed that the bachelor's degree is a promising pathway to a good job for students from low-income families, but also that there are a few promising educational and industry pathways for students who do not attain such a degree. That said, the next question is whether these pathways were equally successful for students of all demographic backgrounds, or whether there were pathways that were particularly promising for some. In other words, we explore how gender<sup>3</sup> and race intersected with being from a low-income family for students in these pathways.

#### **Gender and Racial/Ethnic Differences within Degree Pathways**

Above, Figure 2 showed that the higher the educational attainment, the higher the proportion of students from low-income families in good jobs, on average. But was that true for students of all demographic backgrounds? In Table 4, we examine the percentage of students of each gender and race/ethnicity who were in a good job across each degree level (for students from low-income backgrounds only). These numbers can also be found in Appendix A, Tables A1 and A2, as the bottom “total” row.

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<sup>3</sup> We note that this data set only allows us to examine outcomes by binary gender (men and women).

**TABLE 4.** Proportion of students from low-income families in a good job by degree pathway, disaggregated by race and gender.

	Overall	Men					Women				
		Black	Latino	White	Asian	All Men	Black	Latina	White	Asian	All Women
High School Only, No College Degree	19%	16%	33%	30%	12%	26%	5%	17%	13%	9%	12%
Some College, No Degree	46%	41%	59%	59%	62%	54%	34%	50%	39%	55%	40%
Certificate	45%	52%	62%	66%	*	61%	36%	43%	34%	*	36%
Associate Degree	52%	52%	63%	60%	56%	60%	43%	49%	50%	44%	48%
Bachelor's Degree	79%	77%	84%	86%	83%	84%	72%	80%	78%	74%	77%
Master's, Doctoral, or Professional Degree	92%	*	93%	94%	96%	93%	92%	97%	90%	97%	92%

\*There were not enough students in this degree level to report. Per the Method section, findings for only some racial/ethnic groups can be reported separately given small sample sizes; however, all racial/ethnic groups are included in aggregate findings (i.e., Overall, All Men, All Women).

First and most importantly, we see that **attaining the bachelor's degree (or higher) is a promising pathway for all racial/ethnic groups of each gender**. All groups are at least 72% likely (above our threshold of 69%) to be in a good job with a bachelor's degree or higher. Conversely, there are no promising degree pathways below the bachelor's degree for any racial/ethnic group of any gender. These data tell a remarkably consistent story: a 4-year college degree is the surest path to a good job, for all student groups from low-income backgrounds.

Second, **for all degree levels, men were more likely than women to be in a good job**. In other words, even with the same educational attainment, women from low-income backgrounds were less likely to access good jobs than men from low-income backgrounds. However, this disparity shrinks as attainment grows. For example, men with just a high school degree are twice as likely as women with just a high school degree to be in a good job (26% vs. 12%, respectively). In contrast, men and women with master's degrees or higher are almost even in their access to good jobs (93% vs. 92%). For some racial/ethnic groups, women with graduate degrees actually access good jobs at higher rates than men from the same group. The higher the education, the closer we get to gender parity in access to good jobs, for these students from low-income backgrounds. This is yet another signal that the most promising pathway for all is higher education, and that education does indeed, to some extent, "level the playing field."

For all degree levels, men were more likely than women to be in a good job. However, these gender gaps shrank as education level rose.

A similar, if more nuanced, story emerges for race/ethnicity. Within this sample of students from low-income families, Black men are less likely to be in a good job than White and Latino men at all degree



levels. However, this gap shrinks (but does not entirely close) as education level rises. Black women are less likely than Latinas and Asian women to be in a good job at all degree levels, but they have a slight advantage over White women at the certificate and master's degree (or greater) levels. The gap between Black women and Latinas and Asian women is also less stark at higher education levels. In short, for Black men and women from low-income families, more equity in access to good jobs comes with more education.

There are some nuanced findings for students of other racial/ethnic groups. Latinos and Latinas from low-income families are relatively advantaged in access to good jobs at each degree level. Latinos have the highest proportion of students in good jobs at the high school only and associate degree levels, and they are essentially on par with White and Asian men from low-income backgrounds at all other degree levels. Likewise, Latinas from low-income backgrounds led the way in access to good jobs at the high school only, certificate, and bachelor's degree levels. They were on par with Asian women at the "some college, no degree" and master's (or greater) degree levels (while exceeding White women at those levels).

Asian men and women from low-income backgrounds were less likely than White and Latino students to be in good jobs at the high school only, associate, and bachelor's degree levels (although the gap at the bachelor's degree level was slight). They had the most access to good jobs of any groups at the "some college, no degree" and master's (or greater) levels.

Finally, White women and men seemed to be on different trajectories. As noted previously, White (and Latino) men were more likely to be in good jobs than Black men at every education level. In other words, White men from low-income families were advantaged in access to good jobs across degree levels. The same was not true for White women. White women were well behind Latinas at all the sub-associate degree levels. They were also slightly behind Black women at the certificate and master's degree (or greater) level and well behind Asian women at the "some college, no degree" and master's degree (or greater) levels. In short, White women did not have the consistent advantage that White men did in their relative position.

While this nuance is worth discussing, it's important not to miss the forest for the trees. The clear takeaway here is that **higher education is a promising pathway for all racial/ethnic and gender groups, and higher education also appears to close gaps between racial/ethnic and gender groups in access to promising pathways.**

Indeed, lack of access to and persistence through higher education explains much of the continued overall disparity in economic outcomes by gender and race/ethnicity. As shown in Report 1 of this series (Cashdollar et al., 2025), students from low-income families do not complete a bachelor's degree as much as their higher-income peers. As such, students from low-income families are concentrated in the lower-degree pathways where disparities in economic outcomes are much wider.

Higher education is a promising pathway for all racial/ethnic and gender groups, and higher education also appears to close gaps between racial/ethnic and gender groups in access to promising pathways.

### **Gender and Racial/Ethnic Differences within Programs of Study**

Having established differences in promising pathways by degree level for different racial/ethnic groups, the next question is how these pathways differ by program of study. Appendix A, Table A1

shows outcomes for all low-income students, disaggregated by gender and race, for all programs of study for which we have enough data to report (at least 40 observations). We use data from that large table throughout this section to explore equity in outcomes for low-income students by program of study.

To begin, recall that Table 1 identified five sub-baccalaureate programs of study that were promising pathways overall for students from low-income families. But were these programs promising for all those students? Here, we list those five programs and disparities we see in outcomes by race/ethnicity and gender, as shown in Appendix Table A1. We point out groups for which we have evidence that a program is promising or not promising. When fewer than 40 students of a specific race and/or gender are present in the data, we do not draw conclusions about whether the pathway is promising.

- **Construction trades (certificate)**

There is only evidence that this pathway is promising for men (80% in good job).

- **Agricultural/animal/plant/veterinary science and related fields (associate)**

This pathway appears promising for men (92% in good job), but not women (60%).

There is only evidence that this pathway is promising for White men (92% in good job).

- **Engineering/engineering-related technologies/technicians (associate)**

There is only evidence that this pathway is promising for White men (88% in good job). While 85% of men overall were in good jobs, men of other racial/ethnic groups were not present in sufficient numbers to disaggregate by race.

- **Health professions and related programs (associate)**

This pathway appears promising for both men (92% in good job) and women (77%). There is evidence that this pathway is promising for White men (90% in good job) and women (79%), as well as Latina women (76%). However, it does not appear promising for Black women (a mere 59% in good job).

- **Mechanic and repair technologies/technicians (associate)**

There is only evidence that this pathway is promising for White men (81% in good job). While 76% of men overall were in good jobs, men of other racial/ethnic groups were not present in sufficient numbers to disaggregate by race.

In short, while we did observe promising sub-baccalaureate pathways to good jobs for students from low-income backgrounds, those pathways were largely only observed among men, particularly White men. The field of health professions is an exception in that it appears to have more gender parity in access to good jobs, though not racial/ethnic parity.

Next, we examine the number of promising programs of study for students from low-income backgrounds by gender and race/ethnicity. Table 5 summarizes the proportion of programs of study that are “promising” for each gender and racial/ethnic group. In each cell, the denominator represents the number of programs that had at least 40 observations of low-income students from the demographic group. The numerator shows the number of programs in which at least 69% of low-income students had access to good jobs (i.e. promising programs). For example, the first column shows that there were six bachelor’s degree programs that had sufficient observations of Asian men from low-income backgrounds. Of those, four of the programs were promising pathways, meaning that at least 69% of the Asian men in those programs ended up working in good jobs.

The table shows that White men accessed a greater variety of promising degree programs at all degree levels, totaling 25 promising pathways, than any other group. Similarly, White women accessed more promising pathways (18) than other women at the bachelor’s and master’s degree level. One reason White men and women are shown to have accessed more promising pathways, and more pathways overall, is that there were simply more people in these demographic groups statewide. It is also the case that White students had higher rates of degree attainment than Black and Latino students, resulting in higher participation in promising degree programs. It is possible that these pathways could be promising for other populations if they were able to engage in them more frequently.

When looking at proportion of degree programs that were promising, rather than counts alone, White men continue to come out ahead of other groups. Of the 32 programs of study with sufficient observations of White men, 25 of them (or 78%) were promising. For White women, on the other hand, just 51% of degree programs were promising—a much lower percentage than for Latina (76%) or Asian (63%) women, but slightly higher than Black (45%) women.

**TABLE 5.** The proportion of programs of study that were “promising” [i.e. led to good jobs for at least 69% of students] for each gender and racial/ethnic group, by degree level.

	Men				Women			
	Asian	Black	Latino	White	Asian	Black	Latina	White
Certificate	0/0	0/0	1/2	1/3	0/0	0/2	0/1	0/2
Associate Degree	0/1	0/1	1/3	5/9	0/1	0/3	1/3	1/8
Bachelor’s Degree	4/6	4/7	9/10	18/19	5/7	8/14	12/13	14/22
Master’s, Doctoral, or Professional Degree	0/0	0/0	0/0	1/1	0/0	1/1	0/0	3/3
Total proportion of degree programs that are promising	4/7	4/8	11/15	25/32	5/8	9/20	13/17	18/35
Told percent of degree programs that are promising	57%	50%	73%	78%	63%	45%	76%	51%

**Note:** In each cell, the denominator represents the number of programs that had at least 40 observations of low-income students from the demographic group. The numerator shows the number of programs in which at least 69% of low-income students had access to good jobs (i.e. promising programs). The “total” rows show the proportion and percent of all degree programs with sufficient observations that are promising. Per the Method section, findings for only some racial/ethnic groups can be reported separately due to small sample sizes.

To examine specific pathways in a directly comparative way, we look at promising degree programs for which there is the possibility of comparison—i.e., we look at programs in which we had sizable numbers of students across different subgroups. We compare these pathways first by gender for students within the same racial/ethnic group, then by racial/ethnic group for students of the same gender. We do so because, as discussed in the Background section, previous research indicates that there are gender and racial/ethnic differences in employment outcomes (Bellisle et al., 2025; Carnevale et al., 2023; Rothwell & Crabtree, 2019).

When we compare men and women within the same racial/ethnic group, we find that there were several promising pathways for men, but not for women. These programs, which we deem promising pathways for men, are summarized in Table 6. (As a reminder, data for all programs can be found in Appendix Table A1.) There were no programs of study that were promising for women, but not for men, of the same racial/ethnic group.

**TABLE 6.** Programs of study that provide promising pathways to good jobs for men, but not women (within the same racial/ethnic group).

Program of study	Degree Level	Groups for which it is a promising pathway (percentage in good job)	Comparison across gender
Agricultural/animal/plant/veterinary science and related fields	Associate	White men (92%)	White women (61%)
Biological and biomedical sciences	Bachelor's	White men (69%)	White women (58%)
History	Bachelor's	White men (69%)	White women (58%)
Parks, recreation, leisure, fitness, and kinesiology	Bachelor's	White men (70%)	White women (66%)
Psychology	Bachelor's	Black men (75%) White men (71%)	Black women (68%) White women (63%)

**Note:** “Promising” programs are those for which 69% of the students in that group had access to a good job (for students from low-income families). Programs shown had a minimum of 40 observations.

Before moving on, three issues are worth noting. First, as stated previously, Table 6 only lists the programs of study where there were comparable data for men and women in the same racial/ethnic group. As Table 5 illustrated, there were many instances where one group (White men, predominantly) had access to a promising pathway for which no other group had comparable data. For instance, Table A1 shows that 79% of White men with a certificate in precision production had a good job. There were not enough students in any other group with that certificate to show comparison data. This could indicate that this is promising pathway only available to White men, but it could also be a promising pathway for others if they could access it. (See the Background section for more on historical reasons for lack of access to good jobs for women and people of color.)

Second, Table 6 only includes programs of study in which men were in good jobs over 69% of the time, and women were not. This is because 69% is our “promising pathway” benchmark for students from low-income backgrounds. But there were many more programs of study—beyond those listed in the table—for which there were gaps in the percentage of men and women accessing a good job. Within most pathways, men were more likely than women of the same racial/ethnic group to have access to a good job. The few programs of study in which women had higher proportions in good jobs were found at the bachelor’s degree level.

Finally, while several bachelor’s degree programs of study are listed in Table 6, the disparities between men and women were much slighter for these programs than at other degree levels. Indeed, the greatest gender disparities were found at the certificate and associate degree level, suggesting that sub-baccalaureate pathways to good jobs were more available to men than women.

Sub-baccalaureate pathways to good jobs were more available to men than women.

Next, we compare data for racial/ethnic groups of the same gender. Table 7 highlights differences by race/ethnicity. Appendix Table A1 contains the full data set.

**TABLE 7.** Programs of study that provide promising pathways for some racial/ethnic groups and not others (within the same gender group).

Program of study	Degree Level	Groups for which it is a promising pathway (percentage in good job)	Comparison across race
Mechanic and repair technologies/ technicians	Certificate	Latino men (72%)	White men (63%)
Health professions and related programs	Associate	Latina (76%) and White (79%) women	Black women (59%)
Homeland security, law enforcement, firefighting and related protective services	Associate	Latino men (88%)	White men (68%)
Biological and biomedical sciences	Bachelor's	Latino (80%) and White (69%) men Latina women (73%)	Asian men (49%) Asian (43%), Black (68%), and White (58%) women
Family and consumer sciences	Bachelor's	Latina women (87%)	Black (68%) and White (68%) women
Homeland security, law enforcement, firefighting and related protective services	Bachelor's	Latino (88%) and White (89%) men Latina (84%) and White (73%) women	Black men (68%) Black women (66%)
Liberal arts and sciences, general studies and humanities	Bachelor's	Black women (76%)	White women (58%)
Parks, recreation, leisure, fitness, and kinesiology	Bachelor's	White men (70%)	Black men (65%)
Psychology	Bachelor's	Black (75%), Latino (75%), and White (71%) men Latina women (69%)	Asian (61%) men Asian (64%), Black (68%), and White (63%) women

**Note:** “Promising” programs are those for which 69% of the students in that group had access to a good job (for students from low-income families). Programs shown had a minimum of 40 observations.

As opposed to differences by gender, differences by race/ethnicity were more nuanced. All racial/ethnic groups had promising programs of study relative to peers, except Asian men and women (which may potentially have been due to low sample size). Conversely, all racial/ethnic groups had programs of study in which they were relatively disadvantaged compared to other groups, except Latino men and women. Black women were disadvantaged relative to their peers in the most programs of study (5), followed by White women (4). Interestingly, the magnitude of these racial/ethnic disparities is relatively similar across degree levels, while the magnitude was much wider at lower degree levels for the gender disparities in Table 6.



Gender and Racial/Ethnic Differences within Industries

Moving from program of study (i.e., major or field of study in postsecondary education) to industry (i.e., field of employment), we examine how equitable promising industry pathways were for all students from low-income families. Appendix A, Table A2 shows outcomes for all low-income students, disaggregated by gender and race, for all industries for which we had enough data to report (at least 40 observations). We use data from that large table throughout this section to explore equity in outcomes for low-income students by industry.

To begin, recall that Table 3 identified industries that were promising pathways overall for students from low-income families who had less than a bachelor’s degree. But were these industry pathways promising for all those students? Of the 16 unique pathways identified in Table 3, 12 were only promising pathways for specific groups (e.g., just men, or just particular racial/ethnic and gender groups). Eleven of the pathways had evidence that they were promising for men, but not for women. Three pathways only had evidence of promise for White men, as they were the only group who appeared with sufficient counts (at least 40 observations): certificates in construction and manufacturing, as well as an associate degree in construction.

Of the four remaining pathways, two did not have sufficient observations to disaggregate by subgroups. The other two pathways, manufacturing (associate degree), and wholesale trade (associate degree) were promising for both men and women, on average, though we did not have sufficient data to break down these aggregates by race/ethnicity. These might be seen as the most promising sub-baccalaureate pathways for all students from low-income backgrounds, although we did not have direct evidence they are indeed promising for all (just no evidence they are inequitable).

Next, we examine the number of promising industry pathways for students from low-income backgrounds by gender and race/ethnicity. Like Table 5 showed for promising programs of study, Table 8 summarizes the proportion of industry pathways that are promising for each gender and racial/ethnic group out of all pathways with at least 40 observations from that group. In other words, it shows the proportion of industry pathways, by degree level, for which 69% of the students from low-income families in that group had access to a good job.

**TABLE 8.** The proportion of industry pathways that were “promising” [i.e. led to good jobs for at least 69% of students] for each gender and racial/ethnic group, by degree level.

	Men				Women			
	Asian	Black	Latino	White	Asian	Black	Latina	White
High School	0/0	0/5	1/4	2/5	0/0	0/4	0/5	0/5
Some college, No Degree	1/4	4/16	8/16	7/16	0/3	1/15	4/16	3/17
Certificate	0/0	0/0	0/1	2/4	0/0	0/2	0/2	0/4
Associate Degree	0/0	0/1	1/6	5/11	0/0	0/3	2/7	2/10
Bachelor’s Degree	6/8	6/9	10/12	14/17	5/6	8/13	10/12	13/16
Master’s, Doctoral, or Professional Degree	0/0	0/0	0/0	1/1	0/0	0/0	0/0	3/3

	Asian	Black	Latino	White	Asian	Black	Latina	White
Total proportion of industry pathways that are promising	7/12	10/31	20/39	31/54	5/9	9/37	16/42	21/55
<b>Total percent</b> of industry pathways that are promising	58%	32%	51%	57%	56%	24%	38%	38%

**Note:** In each cell, the denominator represents the number of industry pathways that had at least 40 observations of low-income students from the demographic group. The numerator shows the number of industry pathways in which at least 69% of low-income students had access to good jobs (i.e., promising industry pathways). The “total” rows show the proportion and percent of all industry pathways with sufficient observations that are promising. Per the Method section, findings for only some racial/ethnic groups can be reported separately given small sample sizes.

This table shows that women had no promising industry pathways at the high school only and certificate level, nor did Asian and Black men. Put differently, White and Latino men were the only students with promising industry pathways at the high school and certificate levels. These were found through the industries of manufacturing, and wholesale trade (high school) and construction and manufacturing (certificate). Looking further at the sub-baccalaureate pathways, we see that, at the associate degree level, only White and Latino men and women had promising industry pathways. At the “some college, no degree” level, promising industry pathways were available for all groups but Asian women.

White and Latino men were the only students with promising industry pathways at the high school and certificate levels. At the associate degree level, only White and Latino men and women had promising industry pathways.

This table, with the inclusion of non-degree workers, tells a different story than Table 5—one that is more promising for men and less promising for women—for students who have less than a bachelor’s degree. Industry pathways were promising at a higher rate for men than women, on average. And they were promising for Black women at the lowest rate; just 24% of industry pathways provided at least 69% of Black women from low-income families with good jobs.

As in the previous section, this first table (Table 8) includes pathways in which there is no comparison group—i.e., pathways in which, for instance, White men had enough numbers in the data set to report, but other groups did not. As such, in Table 9 we also examine the data where direct comparisons across gender and racial/ethnic groups are possible. This table mirrors Table 6, but for industry, rather than program of study.

**TABLE 9.** Industries that provide promising pathways for one gender group but not another (promising pathways for men are in white, while promising pathways for women are in green).

Industry	Degree Level	Groups for which it is a promising pathway (percentage in good job)	Comparison across gender
Finance and insurance	Some college, no degree	Black (72%) and White (81%) men	Black (67%) and White (58%) women
Information	Some college, no degree	Black (73%), Latino (75%), and White (69%) men	Black (64%), Latina (62%), and White (55%) women
Manufacturing	Some college, no degree	Latino (83%) men	Latina (64%) women
Professional, Scientific, and Technical Services	Some college, no degree	Latino (74%) and White (82%) men	Latina (66%) and White (53%) women
Public Administration	Some college, no degree	White (84%) men	White (59%) women
Wholesale Trade	Some college, no degree	Black (74%) and White (85%) men	Black (56%) and White (59%) women
Professional, scientific, and technical services	Associate	White men (86%)	White women (61%)
Administrative and support and waste management and remediation services	Associate	Latina women (71%)	Latino men (59%)
Transportation and warehousing	Bachelor's	Black men (83%)	Black women (65%)
Educational services	Bachelor's	Black women (75%)	Black men (67%)
Health care and social assistance	Bachelor's	Asian women (69%)	Asian men (60%)

**Note:** “Promising” pathways are those for which 69% of the students in that group have access to a good job (for students from low-income families).

In all, there are eight industry pathways in which men had a promising pathway, but not women, even with the same degree level. In six of those pathways, White men had the advantage over White women. In contrast, there were only three industries in which women had a promising pathway but not men, and each time the disparity was specific to one racial/ethnic group.

In addition to the pathways displayed in Table 9, there were many more that showed gaps in the percentage of men and women accessing good jobs. The majority of these pathways showed higher percentages for men in good jobs than women, but several pathways resulted in good jobs for women at higher rates. These pathways were mostly at the bachelor’s degree level. As with degree programs, the gender gaps were smaller on average for pathways at the bachelor’s degree level and higher compared to pathways involving lower levels of education.

In Table 10, we examine the same data, comparing access to promising industry pathways for racial/ethnic groups within the same gender group and degree level.

**TABLE 10.** Industries that provide promising pathways to good jobs for some racial/ethnic groups and not others (for students from low-income families within the same gender group and degree level).

Industry	Degree Level	Groups for which it is a promising pathway (percentage in good job)	Comparison across race
Construction	Some college, no degree	Latino (79%) and White (81%) men	Black men (62%)
Finance and Insurance	Some college, no degree	Latina (73%) women	Black (67%) and White (58%) women
Management of Companies & Enterprises	Some college, no degree	White (71%) women	Latina (62%) women
Manufacturing	Some college, no degree	Black (70%) and White (70%) women	Latina (64%) women
Professional, Scientific, and Technical Services	Some college, no degree	Asian (84%), Latino (74%), and White (82%) men	Black men (61%)
Public Administration	Some college, no degree	Latino (82%) and White (84%) men Latina (71%) women	Black men (65%) Black (59%) and White (59%) women
Real Estate and Rental and Leasing	Some college, no degree	Latino (70%) men Latina (74%) women	Black (54%) and White (65%) men Black (65%) and White (54%) women
Wholesale Trade	Some college, no degree	Latina (70%) women	Black (56%) and White (59%) women
Administrative and Support and Waste Management and Remediation Services	Associate	Latina (71%) women	White (56%) women
Professional, Scientific, and Technical Services	Associate	Latina (73%) women	White (61%) women
Administrative and Support and Waste Management and Remediation Services	Bachelor's	Asian (87%), Latino (81%), and White (84%) men Latina (84%) and White (80%) women	Black (68%) men Black (68%) women
Educational services	Bachelor's	Asian (74%), Latino (82%), and White (76%) men	Black men (67%)
Health care and social assistance	Bachelor's	Black (77%), Latino (77%), and White (70%) men	Asian (60%) men
Other Services (except Public Administration)	Bachelor's	Latina (77%) and White (70%) women	Black women (67%)
Transportation and warehousing	Bachelor's	White women (86%)	Black women (65%)

**Note:** “Promising” pathways are those for which 69% of the students in that group have access to a good job (for students from low-income families).

Again, as opposed to differences by gender, differences by race/ethnicity were more nuanced. All groups had industry pathways in which they were relatively advantaged in accessing good jobs relative to their peers (except for Asian women, who were neither advantaged nor disadvantaged in any pathway). Latino men (7) and Latina women (8) had the most pathways in which they were relatively advantaged in access to good jobs, followed closely by White men (6) and White women (5). In contrast, the groups that were disadvantaged in the most pathways were Black men (6) and Black women (7). They were only advantaged in 1 pathway each.

## Summary

The major takeaway from this analysis is that not all “promising pathways” to good jobs are promising for all students from low-income backgrounds.

- **Earning a bachelor’s degree or above** is a promising pathway for all gender and racial/ethnic groups. In contrast, earning less than a bachelor’s degree is not a promising pathway for any gender or racial/ethnic group (averaging across all degree programs and industries). Disparities in access to good jobs by race/ethnicity and gender shrink as education level rises, indicating that higher education indeed helps to equalize outcomes.
- Of the promising programs of sub-baccalaureate study identified in the previous section, only the **associate degree in health was promising for both men and women**, while the other programs with sufficient data only showed promise for men. No programs of study were promising for all racial/ethnic groups of both genders.
- Of the promising industry pathways identified in the previous section, **the sub-baccalaureate industry pathways of manufacturing and wholesale trade were promising for both men and women**. No industry pathways were promising for all racial/ethnic groups of both genders.

There were numerous more sub-baccalaureate fields that were promising just for some groups from low-income families.

In general, men were more likely than women to be in good jobs across all degree levels, although these gaps shrank with higher education. Additionally, White men had more access to promising programs of study and industry pathways than other groups (i.e., all women and men of other racial/ethnic groups). White women had access to more promising program and industry pathways than other women, but Latina women had an equal or higher proportion of promising pathways out of the pathways to which they had access. When comparing outcomes for racial/ethnic groups across different pathways into work, Black men and women were often disadvantaged in accessing good jobs compared to their peers, even with the same degree level, industry, or program of study.



## Discussion

In this report, we found that only 54% of Illinois students from low-income families ended up working in a good job three years after their last education degree. In contrast, 69% of students from higher-income families ended up in good jobs. To help redress this disparity, we examined education and industry pathways that moved at least 69% of students from low-income families to good jobs. We called these “promising pathways.”

After identifying promising pathways, we had three key takeaways. First, **higher education was the most promising pathway to a good job**. On average, students from low-income families who attained a good job at rates on par with students from higher-earning families earned a bachelor’s degree or higher. Earning a bachelor’s degree or above was a promising pathway for students of all racial/ethnic and gender groups, while earning less than a bachelor’s degree was not a promising pathway for any group (i.e., averaging across all programs of study and industries, no group worked in good jobs at a rate of 69% or higher with less than a bachelor’s degree).

Second, **pathways without a college degree could lead to good jobs, but mostly for men**. Some industries and majors provided some students from low-income families with good jobs at high rates without a bachelor’s degree, but women were underrepresented in these pathways and were less likely to work in a good job when they took them. One sub-baccalaureate program of study (health) and two sub-baccalaureate industry pathways (manufacturing and wholesale trade) provided men and women with associate degrees with good jobs. We did not have a sufficient number of observations to break down these pathways by race/ethnicity. While it is possible that they were promising for all groups, we do not have evidence that any sub-baccalaureate pathways provided men and women of all racial/ethnic groups with good jobs.

Third, **disparities remain in access to good jobs, even with similar degree, program of study, or industry**. We found that women had good jobs at lower rates than men, and this was not (solely) because they were concentrated in lower-earning degree programs or industries. Instead, even when they took the same pathways, women usually worked in good jobs at lower rates, as others have found (Bellisle et al., 2025). Within gender groups, Latino men and women commonly worked in good jobs at higher rates than other racial/ethnic groups of the same gender. This finding comports with national studies that have found high rates of upward mobility among Latino workers from low-income backgrounds (Chetty et al., 2020; NASEM, 2024). Our findings are also consistent with the same research showing especially low rates of upward mobility for Black workers. When examining intersections of race and gender, we see that Black men and women were particularly disadvantaged. Of all the degree program and industry pathways they took, they experienced the fewest promising pathways of any other groups. Black men accessed fewer promising pathways than women of other races/ethnicities, while the pathways Black women took led to good jobs at the lowest rates. Gender and racial/ethnic disparities narrowed as education level rose, suggesting that education helps to equalize outcomes.

Findings from this study have implications for students, parents, and those who provide guidance to them on postsecondary pathways. While attaining a bachelor’s degree or higher is the surest bet for students from low-income households to access a good job, what students study in college and what industry they work in also matter a great deal. Not all degree programs lead to good jobs for all groups, even at the bachelor’s level, and several industries generally do not provide good jobs even for highly educated workers. On the other hand, some pathways that involve more than a high school education but less than a bachelor’s degree can pay off. However, these high-paying sub-baccalaureate pathways were rare—so rare that we had limited data on outcomes across racial/ethnic and gender

groups. Where we did have outcomes data, it suggested that the racial and gender disparities in outcomes at the sub-baccalaureate level were greater than those at higher levels of education. In other words, these sub-baccalaureate pathways are a riskier gamble, especially for women.

Findings also have implications for policymakers. Policies to improve upward mobility and reduce racial disparities in access to good jobs may involve continuing and increasing supports for students from low-income backgrounds to enroll in and complete postsecondary degrees, especially four-year degrees. Increasing support for sub-baccalaureate pathways that lead to good jobs could also improve upward mobility for specific groups (primarily White men). Extending the payoffs of these sub-baccalaureate pathways to more students may require increased data collection to better understand which groups are more likely to benefit, if given access, as well as research into why some groups appear to benefit more than others.

When considering these implications, readers should keep in mind that students graduating high school today face different educational options and economic conditions than the students in this study, all of whom graduated more than a decade ago. The cohorts we analyzed were the latest we possibly could use for examining employment outcomes a reasonable distance from post-high school education choices. However, transformations wrought by the COVID-19 pandemic include increases in virtual postsecondary options (Barshay, 2024) and remote work (U.S. Bureau of Labor Statistics, 2025a), along with geographic shifts in job opportunities (Audoly et al., 2024). The advancement of generative artificial intelligence (AI) promises to further disrupt labor markets (Jiang et al., 2025). In turn, pathways to good jobs today may differ from the promising pathways identified in this study. We will not know the outcomes of students facing this shifting landscape for many years.

## Limitations

This study has several limitations that may influence interpretation of the findings. First, our sample population is limited to high school seniors in Illinois who met our study parameters. These seniors differed from the full population of Illinois students in several ways, as described in Report 1 and the Supplemental Materials. One primary difference between our sample and the population was that, because we had data only on students who completed the FAFSA, students who did not enroll in college were underrepresented.<sup>4</sup> As such, these findings should not be interpreted as representative of the Illinois student population as whole. The promising pathways identified were, however, promising for the large group of students in this sample and can provide important information to policymakers and educators who wish to extend those pathways to others.

One of our parameters was that students found stable work in Illinois three years (12 quarters) after entering the job market (i.e., after their last educational experience) and within nine years of finishing high school. This meant that students' last educational experience had to be completed within six years of finishing high school. In turn, there were a number of pathways we are not able to observe.

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<sup>4</sup> Interestingly, students from very wealthy families who did attend college may also be excluded; this study took place prior to the Illinois FAFSA mandate for graduation, so parents with the means to fully pay for their student's college tuition would be less likely to fill out the FAFSA. However, this portion of Illinois students was small and did not lead to a representative discrepancy between our study sample and the full student population.

For example, there may have been students who earned some college or a sub-baccalaureate degree, started working full-time, and then went back to college to earn additional degrees that they were still pursuing when our 6-year window closed. Because we are unable to observe these pathways, we cannot comment on the outcomes of students whose “off-ramps” from school into work were followed by taking “on-ramps” back into higher education. We also lack earnings data on students who left the state for work, and we lack postsecondary data on students who completed sub-baccalaureate programs not administered by institutions of higher education, including many apprenticeship programs and short-term training programs offered by corporations, such as “bootcamps” and massive open online courses.

Because we are examining a student’s wage on early entrance into the job market, or early career wage data, the number and percentage of students in good jobs is likely lower than it will be at later points in the career, especially for those who earned higher levels of education (Andrews et al., 2024). Conversely, because we limit to students with more stable labor market attachment, we are inherently reporting a higher percentage of students with good jobs than there were, in truth. This is because those without stable jobs are left out of the analysis entirely. These two factors likely intersect, amplify, and/or counteract each other in various ways. Despite these limitations, the data are still appropriate and valid for our purpose of identifying pathways that moved students from low-income families to good jobs at the same rate as those higher-income families, precisely because we compare both groups of students at the early career timepoint and with the same exclusion criteria.

As discussed in the Methods section, our measure of good jobs is based on earnings, and it is relative based on an entire cohort’s economic outcomes rather than absolute dollar amounts. While this measure has numerous strengths, it is possible that students are relatively well-positioned within their cohort but still not making a wage commensurate with a good job or benefiting from good working conditions, opportunity to advance, or other traits of good jobs.

Moreover, the identification of degree levels, programs of study, and industry pathways that are “promising” for low-income students was reliant on setting a benchmark. As such, changing the benchmark might result in more or fewer pathways. Indeed, as we conducted this study, we tested different potential earnings and percentage benchmarks, and some programs would enter or exit “promising pathway” status based on the benchmark. Regardless of these modest and specific shifts, the broader takeaways—the earnings premium of the bachelor’s degree and the inequities in sub-baccalaureate pathways—remained consistent.

We also note that these data were limited to students from low-income families, as the purpose of this study was to identify promising pathways for upward economic mobility. If all students were included, more pathways would have met the salary benchmark for a good job. For an examination of outcomes for different pathways for all students, please see Report 1 of this series (Cashdollar et al., 2025).

Finally, we have low counts for many of the programs of study and industries explored here, especially for certain demographic groups. To protect privacy and ensure findings were representative of trends in the sample, we did not report on outcomes for groups smaller than 40 students. Ensuring that we included as many students as possible therefore required reporting on degree programs (according to CIP code titles) and industries (according to NAICS code categories) at their highest, 2-digit levels. This decision resulted in sacrificing more granular data on the degree programs and industries that shaped earnings outcomes. The low counts for particular demographic groups can represent disparities, in that some groups are found in promising pathways where other groups are not. However, it also could obscure us from identifying pathways that would be promising if only more students—particularly students from marginalized backgrounds—were in them.

## Is College Still Worth It?

A key finding of both reports in this series is the enduring power of a college degree for earnings. Of course, when unpacking the earnings payoffs of varying educational degree levels, it is vital to keep in mind that students often take on debt to pay for degree programs. While students who earn higher degrees (e.g. bachelor's or master's) usually also have higher earnings, they also tend to have higher debt loads. For most low-income students, these debt loads create significant financial burdens even when heavily subsidized by scholarships and grants (Huelsman, 2018). For the cohorts in this study (those from the senior classes of 2008-2012), Illinois' national ranking in proportion of four-year college graduates with debt ranged from 15th- to 4th-highest, while its ranking for debt load among four-year college graduates ranged from 23rd- to 15th-highest (Cheng et al., 2017; Cochrane & Cheng, 2016; Cochrane & Reed, 2015; Reed & Cochrane, 2013, 2014).<sup>5</sup> In recent years, concerns about these debt loads have fueled a national discourse around the question: "Is college still worth it?"

To address this question, we synthesize findings from both reports in this series to conclude that the answer is yes, but with caveats. The first caveat is that students who graduate with a four-year degree or higher may have a longer time horizon for seeing the full return on their educational investments than students who graduate with lower degrees (see also Carnevale et al., 2019). For a student in our study with the typical debt load of an Illinois four-year college graduate in 2015 (\$29,305) (Cochrane & Cheng, 2016), the estimated monthly payment on a standard repayment plan would be \$333, according to the Federal Student Aid Loan Simulator (n.d.). Given our study's bachelor's degree holders' average annual earnings of \$45,986, this represents a substantial proportion of a student's estimated monthly take-home pay of \$2,681.<sup>6</sup> Yet compared to students in our study who earned associate degrees and took on no debt, who were estimated to bring home \$2,074 monthly,<sup>7</sup> bachelor's degree holders with typical debt payments could still expect to earn a higher net monthly income after paying their student loan payments. Over time, as their loans are paid off, their expected return on investment is even greater. In other words, more education was worth it, on average. Additionally, students from low-income families are more likely to qualify for need-based aid and graduated repayment plans, which could diminish their debt load more than average and allow them to take more advantage of the promising pathway of the bachelor's degree.

Bachelor's degree holders with typical debt payments could still expect to earn a higher net monthly income than students with less postsecondary training after paying their student loan payments.

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<sup>5</sup> We use debt-load data for the same years as our sample to make a fair calculation. However, more recent data on debt load can be found via The Institute for College Access & Success (<https://ticas.org/>). For a full examination of the college payoff accounting for debt, see the Georgetown Center on Education and the Workforce's return-on-investment calculations for 4,500 colleges (<https://cew.georgetown.edu/cew-reports/collegeroi/>).

<sup>6</sup> Monthly take-home pay was calculated using the ADP Salary Paycheck Calculator with the following specifications: Year of earnings was 2020, state was Illinois, filing status was "Single or Married filing separately," no dependents, no other income, \$2,500 student loan deduction, \$125 pre-tax medical benefits, 8% retirement savings.

<sup>7</sup> Monthly take-home pay was calculated using the same method as for bachelor's degree holders, except with no student loan deduction and \$75 in pre-tax medical benefits.

The second caveat is that average earnings mask wide earnings variation within degree levels and programs of study. For example, we found that students who earned a certificate or associate degree in construction trades, a degree program in which students from low-income families were overrepresented, earned more at \$54,101 annually than the average student who earned a bachelor's degree or higher. Meanwhile, students who earned a bachelor's or higher in psychology earned an average of \$33,378 annually, less than the average student with an associate degree (\$34,737 annually), while those who earned a bachelor's or higher in visual and performing arts (\$31,932 annually) or theology and religious vocations (\$31,070 annually) earned less than the average student with a certificate (\$32,326 annually). By and large, however, high earners with lower levels of education and lower earners with higher levels of education were exceptions to the rule.

The third, and most concerning, caveat is that many students who enroll in college and take on debt do not finish a degree. **In our study, “some college, no degree” was the most common educational achievement category for students from low-income families. These students who have college debt without the income premium to pay it off are at the greatest disadvantage.** Our study's findings on how commonly students from low-income households started but did not complete college degrees reflect persistent national trends (National Center for Education Statistics, 2022, 2023) and speak to the urgent need for support for degree completion.

## **A Final Note: The Future of Good Jobs**

This report has focused on one lever that could expand access to good jobs: identifying education and industry pathways that provide upward mobility for students from economically disadvantaged backgrounds. The other side of the coin is expanding the pool of jobs that are “good”—jobs that offer a living wage with benefits, good working conditions, opportunities for growth, and other traits associated with high employment quality (Aspen Institute, 2022; Bellisle et al., 2025; Carnevale et al., 2024; Rothwell & Crabtree, 2019; Strohl et al., 2024; Woods et al., 2024).

While providing information on how to increase good jobs is outside the scope of this study, acknowledging this lever is important for contextualizing our findings and their implications. Expanding access to promising pathways for upward mobility can help democratize opportunity, creating a more equal playing field for students of all backgrounds. However, these efforts will not change the fact that, as long as there exist jobs that are not good, there will be workers needed to fill them. Historically, though access to rewarding and economically secure jobs can be more egalitarian or less, those employed in low-wage, low-quality jobs have always been disproportionately from society's most disadvantaged groups (Bellisle et al., 2025; Carnevale et al., 2023; Rothwell & Crabtree, 2019).

While the proportion of jobs that are good is expected to grow in the coming years (Strohl et al, 2024), a sizable proportion of jobs will remain not good. Considering the 20 occupations that the U.S. Bureau of Labor Statistics (2025b) projects will have the most new jobs in the coming years, 52% pay below a living wage<sup>8</sup> (Glasmeier, 2025). Strohl and colleagues (2024) estimate that jobs that are not good will make up 38% of all jobs in 2031. The prevalence of good jobs could be further disrupted by the rapid evolution of generative AI (Cazzaniga et al., 2024). And, of course, social policies and labor movements will also contribute to the growth or decline of good jobs (see NASEM, 2024).

In light of these considerations, a future characterized by widespread engagement in meaningful and rewarding work will likely require both (1) expansion of access to the good jobs that already exist via the promising pathways identified in this study, and (2) a broader commitment to policies and practices that improve job quality and create the conditions for good jobs to grow.

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<sup>8</sup> Living wage estimate is based on MIT Living Wage calculation for one earner with no children in Illinois in 2025.



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# Appendix A

**TABLE A1.** Percentage of students from low-income families in a “good job,” by program of study at each degree level and by gender and racial/ethnic group.

**Note:** Gray cells indicate there are too few students (<40) in a category to report. Programs of study with no values in any cell are not shown. Due to low N size, specific outcomes for students of other races/ethnicities are not shown in a separate column, but these students do contribute to the overall totals. Cells in green represent promising pathways (i.e., 69% or more of the group in a good job); cells in yellow represent “almost” promising pathways (i.e., 50%-68% in a good job); cells in red represent non-promising pathways (i.e., less than 50% in a good job).

## Certificate Level

		Men				All Men	Women				All Women
	Overall	Asian	Black	Latino	White		Asian	Black	Latina	White	
Business, management, marketing and related support services.	0.51										0.52
Computer and information sciences and support services.	0.51					0.52					
Construction trades.	0.80					0.80					
Culinary, entertainment, and personal services	0.34					0.61		0.25		0.22	0.26
Family and consumer sciences/ human sciences.	0.42										0.38
Health professions and related programs.	0.39			0.49	0.57	0.50		0.36	0.46	0.35	0.37
Homeland security, law enforcement, firefighting and related protective services.	0.65					0.73					
Mechanic and repair technologies/ technicians.	0.64			0.72	0.63	0.65					
Precision production.	0.67				0.79	0.71					
Unknown	0.53					0.65					0.41
<b>Grand Total</b>	<b>0.45</b>		<b>0.52</b>	<b>0.62</b>	<b>0.66</b>	<b>0.61</b>		<b>0.36</b>	<b>0.43</b>	<b>0.34</b>	<b>0.36</b>

## Associate Degree Level

		Men				All Men	Women				All Women
	Overall	Asian	Black	Latino	White		Asian	Black	Latina	White	
Agricultural/animal/plant/ veterinary science and related fields.	0.76				0.92	0.92				0.61	0.60
Business, management, marketing, and related support services.	0.57					0.57				0.56	0.56
Computer and information sciences and support services.	0.60				0.68	0.67					



Culinary, entertainment, and personal services.	0.56					0.66				0.54	0.52
Engineering/ engineering-related technologies/technicians.	0.84				0.88	0.85					
Family and consumer sciences/ human sciences.	0.27									0.19	0.27
Health professions and related programs.	0.78				0.90	0.92		0.59	0.76	0.79	0.77
Homeland security, law enforcement, firefighting and related protective services	0.68			0.88	0.68	0.77				0.52	0.53
Liberal arts and sciences, general studies and humanities.	0.45	0.50	0.47	0.57	0.47	0.50	0.34	0.41	0.47	0.40	0.42
Mechanic and repair technologies/technicians	0.75				0.81	0.76					
Multi/ <i>interdisciplinary</i> studies.	0.41			0.50	0.49	0.48		0.37	0.35	0.38	0.37
Unknown	0.57				0.73	0.64					0.51
Visual and performing arts.	0.46										0.29
<b>Grand Total</b>	<b>0.52</b>	<b>0.56</b>	<b>0.52</b>	<b>0.63</b>	<b>0.60</b>	<b>0.60</b>	<b>0.44</b>	<b>0.43</b>	<b>0.49</b>	<b>0.50</b>	<b>0.48</b>

### Bachelor's Degree Level

		Men				All Men	Women				All Women
	Overall	Asian	Black	Latino	White		Asian	Black	Latina	White	
Agricultural/animal/plant/ veterinary science and related fields.	0.81				0.89	0.88				0.76	0.74
Architecture and related services.	0.93					0.97					
Area, ethnic, cultural, gender, and group studies	0.78										0.78
Biological and biomedical sciences.	0.61	0.49		0.80	0.69	0.65	0.43	0.68	0.73	0.58	0.59
Business, management, marketing, and related support services.	0.89	0.95	0.85	0.86	0.92	0.91	0.92	0.78	0.89	0.90	0.88
Communication, journalism, and related programs.	0.80		0.73	0.80	0.83	0.79	0.84	0.71	0.85	0.83	0.81
Communications technologies/ technicians and support services.	0.76										
Computer and information sciences and support services.	0.92	0.94		0.93	0.93	0.92					0.89
Education.	0.86			0.91	0.88	0.89	0.77	0.80	0.91	0.86	0.86
Engineering.	0.96	0.95		0.96	0.98	0.97				0.93	0.93
Engineering/engineering related technologies/technicians.	0.94				0.94	0.94					
English language and literature/ letters	0.74				0.77	0.74		0.70	0.77	0.75	0.74

Family and consumer sciences/ human sciences.	0.71							0.68	0.87	0.68	<b>0.71</b>
Foreign languages, literatures, and linguistics.	0.71								0.70	0.71	<b>0.68</b>
Health professions and related programs.	0.85				0.86	<b>0.84</b>	0.78	0.78	0.87	0.89	<b>0.85</b>
History.	0.67				0.69	<b>0.70</b>				0.58	<b>0.63</b>
Homeland security, law enforcement, firefighting and related protective services.	0.80		0.68	0.88	0.89	<b>0.85</b>		0.66	0.84	0.73	<b>0.74</b>
Liberal arts and sciences, general studies and humanites.	0.72					<b>0.80</b>		0.76		0.58	<b>0.68</b>
Mathmatics and statistics.	0.87				0.90	<b>0.85</b>				0.90	<b>0.89</b>
Multi/interdisciplinary studies.	0.73					<b>0.85</b>				0.74	<b>0.64</b>
Natural resources and conservation.	0.67										
Parks, recreation, leisure, fitness, and kinesiology.	0.64		0.65		0.70	<b>0.67</b>		0.56		0.66	<b>0.61</b>
Philosophy and religious studies.	0.76										
Physical sciences.	0.74				0.83	<b>0.77</b>				0.69	<b>0.69</b>
Psychology.	0.66	0.61	0.75	0.75	0.71	<b>0.71</b>	0.64	0.68	0.69	0.63	<b>0.65</b>
Public administraion and social service professions.	0.77							0.77	0.80	0.75	<b>0.77</b>
Social sciences.	0.80	0.88	0.79	0.84	0.87	<b>0.85</b>	0.81	0.75	0.81	0.75	<b>0.77</b>
Transportation and materials moving.	0.98					<b>0.98</b>					
Unknown	0.75				0.83	<b>0.78</b>				0.68	<b>0.74</b>
Visual and performing arts.	0.61		0.64	0.57	0.58	<b>0.60</b>		0.51	0.63	0.66	<b>0.62</b>
<b>Grand Total</b>	<b>0.79</b>	<b>0.83</b>	<b>0.77</b>	<b>0.84</b>	<b>0.86</b>	<b>0.84</b>	<b>0.74</b>	<b>0.72</b>	<b>0.80</b>	<b>0.78</b>	<b>0.77</b>

### Master's or Doctoral/Professional Degree Level

		Men				All Men	Women				All Women
	Overall	Asian	Black	Latino	White		Asian	Black	Latina	White	
Business, management, marketing, and related support services.	0.96				0.98	<b>0.96</b>				0.94	<b>0.95</b>
Education.	0.94										<b>0.96</b>
Engineering	1.00										
Health professions and related programs	0.94									0.93	<b>0.94</b>
Public administration and social service professions.	0.92							0.90		0.90	<b>0.91</b>
<b>Grand Total</b>	<b>0.92</b>	<b>0.96</b>		<b>0.93</b>	<b>0.94</b>	<b>0.93</b>	<b>0.97</b>	<b>0.92</b>	<b>0.97</b>	<b>0.90</b>	<b>0.92</b>

**TABLE A2.** Percentage of students from low-income families in a “good job,” by industry at each degree level and by gender and racial/ethnic group.

**Note:** Gray cells indicate there are too few students (<40) in a category to report. Industries with no values in any cell are not shown. Due to low N size, specific outcomes for students of other races/ethnicities are not shown in a separate column, but these students do contribute to the overall totals. Cells in green represent promising pathways (i.e., 69% or more of the group in a good job); cells in yellow represent “almost” promising pathways (i.e., 50%-68% in a good job); cells in red represent non-promising pathways (i.e., less than 50% in a good job).

### High School Diploma Only

		Men				All Men	Women				All Women
	Overall	Asian	Black	Latino	White		Asian	Black	Latina	White	
Accommodation and Food Services	0.09		0.08	0.17	0.05	0.10		0.04	0.11	0.09	0.08
Administrative and Support and Waste Management and Remediation Services	0.21		0.14	0.32	0.34	0.27		0.08	0.18	0.13	0.13
Arts, Entertainment, and Recreation	0.12					0.16					0.07
Construction	0.51					0.54					
Educational Services	0.13										0.08
Finance and Insurance	0.26								0.22		0.19
Health Care and Social Assistance	0.18		0.16			0.19		0.06	0.32	0.15	0.18
Information	0.28										
Manufacturing	0.62			0.71	0.74	0.74					0.33
Other Services (except Public Administration)	0.17					0.29				0.10	0.07
Professional, Scientific, and Technical Services	0.32										0.28
Public Administration	0.23										0.15
Real Estate and Rental and Leasing	0.29										
Retail Trade	0.11		0.06	0.22	0.16	0.15		0.02	0.09	0.09	0.07
Transportation and Warehousing	0.25		0.20			0.30					
Wholesale Trade	0.49				0.73	0.57					
<b>Grand Total</b>	<b>0.19</b>	<b>0.12</b>	<b>0.16</b>	<b>0.33</b>	<b>0.30</b>	<b>0.26</b>	<b>0.09</b>	<b>0.05</b>	<b>0.17</b>	<b>0.13</b>	<b>0.12</b>

### Some College, No Degree Level

		Men				All Men	Women				All Women
	Overall	Asian	Black	Latino	White		Asian	Black	Latina	White	
Accommodation and Food Services	0.24	0.23	0.17	0.37	0.24	<b>0.25</b>	0.34	0.19	0.32	0.21	<b>0.23</b>
Administrative and Support and Waste Management and Remediation Services	0.44		0.32	0.57	0.58	<b>0.47</b>		0.34	0.57	0.42	<b>0.41</b>
Agriculture, Forestry, Fishing, and Hunting	0.83										
Arts, Entertainment, and Recreation	0.30		0.29	0.36	0.44	<b>0.36</b>		0.20	0.25	0.27	<b>0.23</b>
Construction	0.77		0.62	0.79	0.81	<b>0.78</b>				0.79	<b>0.66</b>
Educational Services	0.49		0.54	0.58	0.55	<b>0.55</b>		0.39	0.56	0.41	<b>0.46</b>
Finance and Insurance	0.70		0.72	0.82	0.81	<b>0.80</b>		0.67	0.73	0.58	<b>0.66</b>
Health Care and Social Assistance	0.42	0.49	0.39	0.57	0.49	<b>0.46</b>	0.57	0.34	0.54	0.40	<b>0.42</b>
Information	0.68		0.73	0.75	0.69	<b>0.73</b>		0.64	0.62	0.55	<b>0.61</b>
Management of Companies and Enterprises	0.67					<b>0.72</b>			0.62	0.71	<b>0.64</b>
Manufacturing	0.78		0.75	0.83	0.85	<b>0.82</b>		0.70	0.64	0.70	<b>0.69</b>
Other Services (except Public Administration)	0.39		0.34	0.49	0.53	<b>0.48</b>		0.24	0.36	0.32	<b>0.32</b>
Professional, Scientific, and Technical Services	0.65	0.84	0.61	0.74	0.82	<b>0.75</b>		0.51	0.66	0.53	<b>0.58</b>
Public Administration	0.70		0.65	0.82	0.84	<b>0.79</b>		0.59	0.71	0.59	<b>0.62</b>
Real Estate and Rental and Leasing	0.63		0.54	0.70	0.65	<b>0.63</b>		0.65	0.74	0.54	<b>0.64</b>
Retail Trade	0.31	0.51	0.26	0.44	0.41	<b>0.38</b>	0.32	0.19	0.31	0.27	<b>0.26</b>
Transportation and Warehousing	0.56		0.52	0.65	0.68	<b>0.59</b>		0.41	0.63	0.60	<b>0.49</b>
Unknown	0.16					<b>0.26</b>					<b>0.11</b>
Utilities	0.97					<b>1.00</b>					
Wholesale Trade	0.75		0.74	0.82	0.85	<b>0.81</b>		0.56	0.70	0.59	<b>0.63</b>
<b>Grand Total</b>	<b>0.46</b>	<b>0.62</b>	<b>0.41</b>	<b>0.59</b>	<b>0.59</b>	<b>0.54</b>	<b>0.55</b>	<b>0.34</b>	<b>0.50</b>	<b>0.39</b>	<b>0.40</b>

### Certificate Level

		Men				All Men	Women				All Women
	Overall	Asian	Black	Latino	White		Asian	Black	Latina	White	
Accommodation and Food Services	0.26					0.43				0.12	0.17
Administrative and Support and Waste Management and Remediation Services	0.52										0.47
Construction	0.86				0.93	0.90					
Education Services	0.36										
Finance and Insurance	0.63										0.63
Health Care and Social Assistance	0.41				0.55	0.55		0.38	0.48	0.37	0.39
Manufacturing	0.85				0.90	0.88					
Other Services (except Public Administration)	0.33									0.16	0.21
Professional, Scientific, and Technical Services	0.60										
Public Administration	0.59					0.70					0.45
Retail Trade	0.27			0.35	0.38	0.33		0.17	0.22	0.26	0.22
Transportation and Warehousing	0.64					0.65					
Wholesale Trade	0.74					0.84					
<b>Grand Total</b>	<b>0.45</b>		<b>0.52</b>	<b>0.62</b>	<b>0.66</b>	<b>0.61</b>		<b>0.36</b>	<b>0.43</b>	<b>0.34</b>	<b>0.36</b>

### Associate Degree Level

		Men				All Men	Women				All Women
	Overall	Asian	Black	Latino	White		Asian	Black	Latina	White	
Accommodation and Food Services	0.26			0.51	0.29	0.31		0.33	0.25	0.21	0.23
Administration and Support and Waste Management and Remediation Services	0.58			0.59	0.59	0.58			0.71	0.56	0.57
Arts, Entertainment, and Recreation	0.23					0.25					0.21
Construction	0.80				0.83	0.85					
Educational Services	0.39					0.43			0.41	0.34	0.38
Finance and Insurance	0.63					0.75			0.63	0.55	0.60
Health Care and Social Assistance	0.58			0.55	0.58	0.56		0.49	0.54	0.62	0.58
Information	0.61					0.70					0.52

Management of Companies and Enterprises	0.77										
Manufacturing	0.79			0.87	0.82	<b>0.84</b>				0.69	<b>0.71</b>
Other Services (except Public Administration)	0.44				0.62	<b>0.61</b>				0.32	<b>0.30</b>
Professional, Scientific, and Technical Services	0.70				0.86	<b>0.79</b>			0.73	0.61	<b>0.66</b>
Public Administration	0.77				0.85	<b>0.83</b>				0.73	<b>0.68</b>
Real Estate and Rental and Leasing	0.63										
Retail Trade	0.34		0.38	0.46	0.43	<b>0.43</b>		0.24	0.29	0.30	<b>0.28</b>
Transportation and Warehousing	0.58			0.68	0.63	<b>0.64</b>					<b>0.48</b>
Wholesale Trade	0.81				0.87	<b>0.84</b>					<b>0.73</b>
<b>Grand Total</b>	<b>0.52</b>	<b>0.56</b>	<b>0.52</b>	<b>0.63</b>	<b>0.60</b>	<b>0.60</b>	<b>0.44</b>	<b>0.43</b>	<b>0.49</b>	<b>0.50</b>	<b>0.48</b>

### Bachelor's Degree Level

		Men				All Men	Women				All Women
	Overall	Asian	Black	Latino	White		Asian	Black	Latina	White	
Accommodation and Food Services	0.46			0.58	0.43	<b>0.47</b>		0.40	0.55	0.45	<b>0.45</b>
Administrative and Support and Waste Management and Remediation Services	0.79	0.87	0.68	0.81	0.84	<b>0.81</b>		0.68	0.84	0.80	<b>0.77</b>
Arts, Entertainment, and Recreation	0.51				0.63	<b>0.63</b>				0.47	<b>0.41</b>
Construction	0.89				0.91	<b>0.90</b>					<b>0.88</b>
Educational Services	0.80	0.74	0.67	0.82	0.76	<b>0.76</b>	0.74	0.75	0.84	0.82	<b>0.81</b>
Finance and Insurance	0.92	0.99	0.96	0.90	0.96	<b>0.96</b>	0.94	0.89	0.90	0.87	<b>0.89</b>
Health Care and Social Assistance	0.75	0.60	0.77	0.77	0.70	<b>0.71</b>	0.69	0.73	0.77	0.78	<b>0.76</b>
Information	0.83			0.84	0.88	<b>0.87</b>		0.79	0.82	0.77	<b>0.80</b>
Management of Companies and Enterprises	0.94				0.95	<b>0.95</b>				0.92	<b>0.93</b>
Manufacturing	0.96	0.99	0.95	0.97	0.97	<b>0.97</b>		0.94	0.94	0.95	<b>0.95</b>
Other Services (except Public Administration)	0.73				0.72	<b>0.74</b>		0.67	0.77	0.70	<b>0.72</b>
Professional, Scientific, and Technical Services	0.91	0.96	0.84	0.91	0.95	<b>0.94</b>	0.93	0.84	0.88	0.88	<b>0.88</b>
Public Administration	0.89		0.92	0.92	0.92	<b>0.92</b>		0.85	0.84	0.86	<b>0.85</b>
Real Estate and Rental and Leasing	0.92				0.97	<b>0.96</b>		0.95		0.87	<b>0.88</b>
Retail Trade	0.47	0.28	0.47	0.54	0.65	<b>0.55</b>	0.23	0.35	0.53	0.46	<b>0.42</b>



Transportation and Warehousing	0.85		0.83	0.90	0.90	<b>0.89</b>		0.65		0.86	<b>0.80</b>
Utilities	0.98					<b>1.00</b>					
Wholesale Trade	0.93	0.94		0.94	0.94	<b>0.93</b>	0.91		0.93	0.94	<b>0.93</b>
<b>Grand Total</b>	<b>0.79</b>	<b>0.83</b>	<b>0.77</b>	<b>0.84</b>	<b>0.86</b>	<b>0.84</b>	<b>0.74</b>	<b>0.72</b>	<b>0.80</b>	<b>0.78</b>	<b>0.77</b>

### Master's or Doctoral/Professional Degree Level

		Men				All Men	Women				All Women
	Overall	Asian	Black	Latino	White		Asian	Black	Latina	White	
Educational Services	0.89					<b>0.85</b>				0.87	<b>0.91</b>
Finance and Insurance	0.98										
Health Care and Social Assistance	0.91									0.91	<b>0.91</b>
Manufacturing	1.00										
Professional, Scientific, and Technical Services	0.98				1.00	<b>1.00</b>				0.95	<b>0.96</b>
Public Administration	0.92										
<b>Grand Total</b>	<b>0.92</b>	<b>0.96</b>		<b>0.93</b>	<b>0.94</b>	<b>0.93</b>	<b>0.97</b>	<b>0.92</b>	<b>0.97</b>	<b>0.90</b>	<b>0.92</b>

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## **Illinois Workforce & Education Research Collaborative**

IWERC, a research unit at Discovery Partners Institute, part of the University of Illinois System, conducts rigorous, relevant, and timely cradle-to-career research. IWERC collaborates with community partners to co-construct solutions to pressing issues and ensure informed decision-making leads to statewide equity advancement. Learn more about IWERC at <https://dpi.uillinois.edu/applied-research/iwerc/>

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With the goal of supporting stronger and more equitable educational outcomes for students, the UChicago Consortium conducts research of high technical quality that informs and assesses policy and practice in the Chicago Public Schools (CPS). We seek to expand communication among researchers, policymakers, practitioners, families, and communities as we support the search for solutions to the challenges of school improvement. The UChicago Consortium encourages the use of research in policy action and practice but does not advocate for particular policies or programs. Rather, we help to build capacity for school improvement by identifying what matters most for student success, creating critical indicators to chart progress, and conducting theory-driven evaluation to identify how programs and policies are working. **The University of Chicago Consortium on School Research is part of the Kersten Institute for Urban Education, within the University of Chicago Crown Family School of Social Work, Policy, and Practice.** <https://consortium.uchicago.edu/>