



•••••
Women's Work

•••••
**Growth in Women's College Attainment
Will Drive Blue-Collar Labor Shortages**

By Gad Levanon & Frank Steemers

AUGUST 2023



The strong growth in college attainment among women is good news. It will also exacerbate labor shortages for blue-collar and manual services work – particularly in jobs traditionally held by women.

Main insights

- It's well known that the US working-age population is currently barely growing and that this trend will likely continue at least over the next decade. There are barely enough young people to replace the large baby-boomer cohort that is now retiring.
- However, less well reported is how trends in educational attainment will cause labor shortages to be more severe in blue-collar and manual services jobs. While the number of working-age people with a bachelor's degree is solidly and uninterruptedly growing at about 2% annually, the working-age population without a college degree has been shrinking at about -0.5% annually for a decade.
- On top of that, and perhaps more significantly, is showing that this decline is much more dramatic for women than for men, because the increase in college attainment has been much greater for women. These trends are expected to continue over the next decade.
- Those aged 65+ comprise a growing share of the workforce yet their low labor force participation rates, especially for women without a college degree, will exacerbate the large decline in the noncollege working population.
- Due to the trends discussed above, labor shortage can be expected to be more severe in jobs employing a large share of women without a bachelor's degree, such as healthcare support, childcare, and personal services.

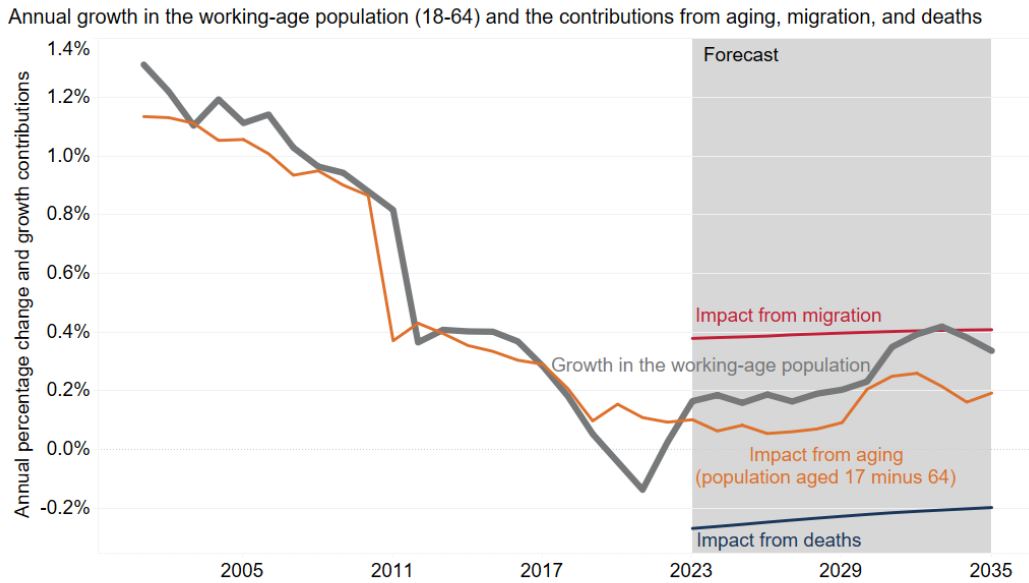
THE US WORKING-AGE POPULATION WILL BARELY GROW OVER THE NEXT DECADE, RESULTING IN CONTINUED SEVERE LABOR SHORTAGES.

The working-age population has been growing by less than 0.5% annually since 2012, slowing to less than 0.2% since 2017. This trend is likely to continue through 2030. This projection stands in stark contrast to other periods in U.S. history. For instance, even in the early 2000s, the working-age population grew by more than 1% annually, and prior to that, it had grown around 2% per year during many periods. Why is the working-age population expected to grow so sluggishly?

To develop an accurate projection of net growth in the working-age population, three variables must be considered: new entrants versus leavers, death, and immigration. First and most significantly, there is a gap between the number of 17-year-olds and the number of 64-year-olds. The former group is set to join the working-age population next year, while the latter has historically been considered a point at which exits accelerate. Simply put, the larger the number of 17-year-olds entering the workforce in comparison to the number of 64-year-olds leaving, the greater the net increase in the working population (Chart 1).

With baby boomers retiring in almost equal numbers to the numbers of young individuals entering the workforce, the natural result is stalled growth in the working age population.

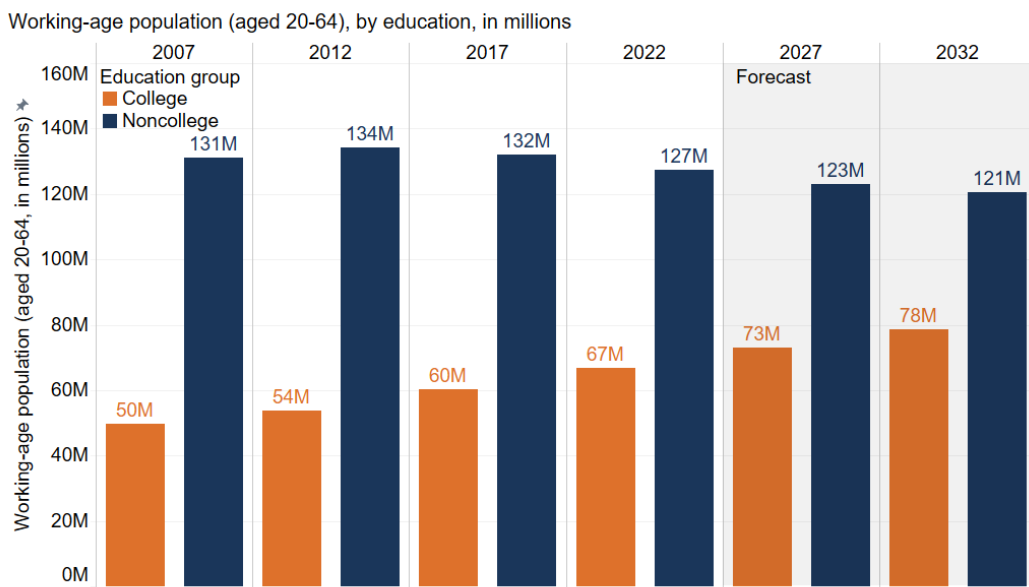
Chart 1: Slower projected growth in the working-age population is driven by growing retirements, fewer net entrants, and insufficient net migration.



TWO OPPOSITE TRENDS: MORE PEOPLE WITH A COLLEGE DEGREE, FEWER WITHOUT ONE, CAUSING SEVERE LABOR SHORTAGES ESPECIALLY IN BLUE-COLLAR AND MANUAL SERVICES JOBS.

An even more interesting trend can be found when looking closer. It turns out that the decline in the working-age population does not apply to people with a bachelor’s degree. The number of working age people with a bachelor’s degree is solidly and uninterruptedly growing at about 2% annually. The reason is that the new entrants to the working age population are much more likely to have a bachelor’s degree than the those who are retiring (Chart 2).

Chart 2: More people are getting a college degree, while the population of those without one is shrinking.

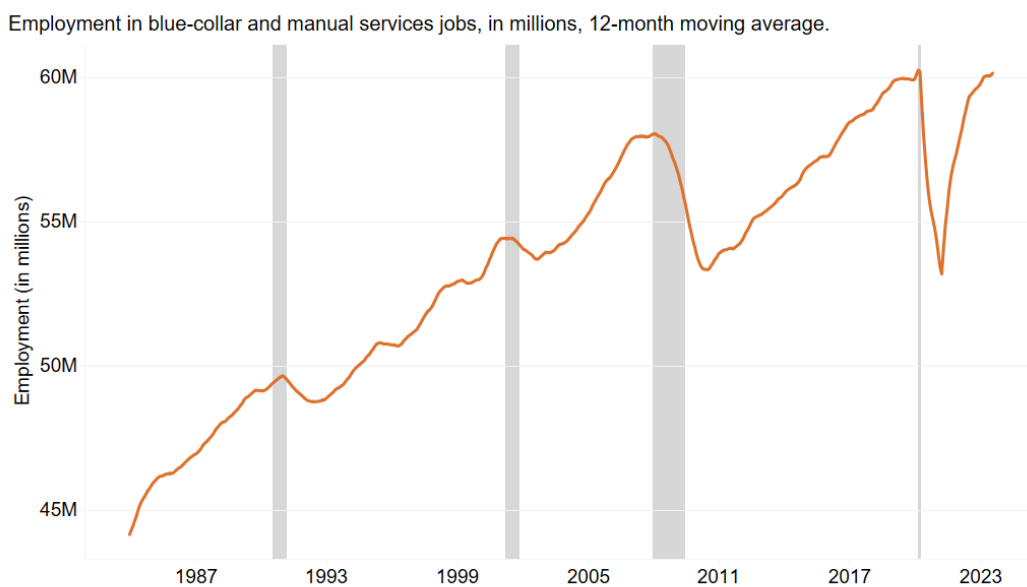


People with a bachelor’s degree typically try to avoid working in manual labor occupations (e.g., transportation, production, construction, farming, maintenance and repair, personal care, food services, cleaning, security, and health help support). As a result, the supply of available workers in manual occupations is dwindling and it's likely to continue to shrink in the next decade.

That’s a particular problem given the strong continued demand for blue-collar and manual services workers. Our economy continues its long march toward remaking itself around the knowledge economy, with white collar-work growing accordingly. But perhaps surprisingly, demand for blue-collar and manual service workers continues to grow, despite the decline in the supply of workers for these jobs (Chart 3). That growth has been driven by an unprecedented slowdown both in automation in recent decades and in offshoring in the past decade, as well as by the shift to online shopping and home deliveries that have generated millions of jobs in transportation and warehousing.

The trend may accelerate further as reshoring generates greater momentum and as funds designated to industrial policy initiatives like semiconductor and EV manufacturing are disbursed.

Chart 3: Employment for blue-collar and manual services jobs continues to grow.



Sources: Bureau of Labor Statistics; Burning Glass Institute

Therefore, blue-collar and manual services occupations are experiencing more severe labor shortages than those that require higher levels of education, also referred to as white-collar occupations. This is the exact opposite of what has been the prevailing experience of recent decades, where employers faced the greatest shortages filling roles that typically require a college degree.

One of the implications of the growing prevalence of college educated workers is that in recent decades, it has become more common for college educated workers to have to reluctantly take jobs that don’t require their degree. This trend may become yet more common due to generative AI impacts, which are projected to play out more heavily on office and professional jobs than in manual work.

WOMEN ARE MORE LIKELY TO GET A DEGREE, WORSENING LABOR SHORTAGES IN BLUE-COLLAR AND MANUAL SERVICES JOBS THAT EMPLOY MANY WOMEN SUCH AS HEALTHCARE SUPPORT.

Looking yet further under the hood yields important additional insights. It turns out that the drop in the number of workers without a bachelor’s degree is much stronger for women than for men, as women have become increasingly likely to enroll in and complete college degree programs. Between 2012 and 2022 the number of working-age women without a college degree declined by 5.6 million (or 8.5 percent) versus 1.3 million (or 1.9 percent) for men. This decline is likely to continue through the next decade as well (Chart 4 and 5).

Chart 4: More women get a college degree compared to men.

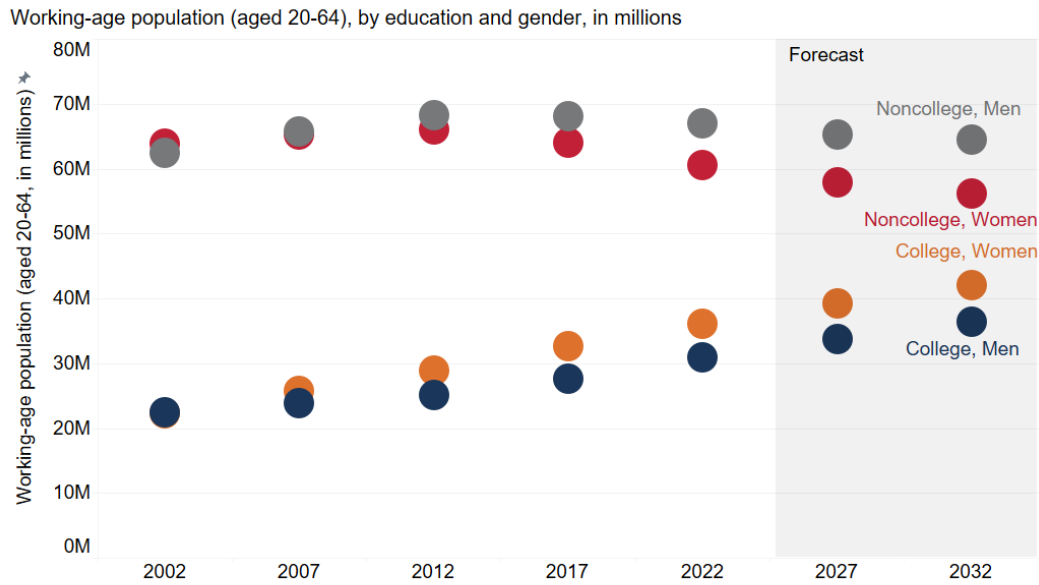
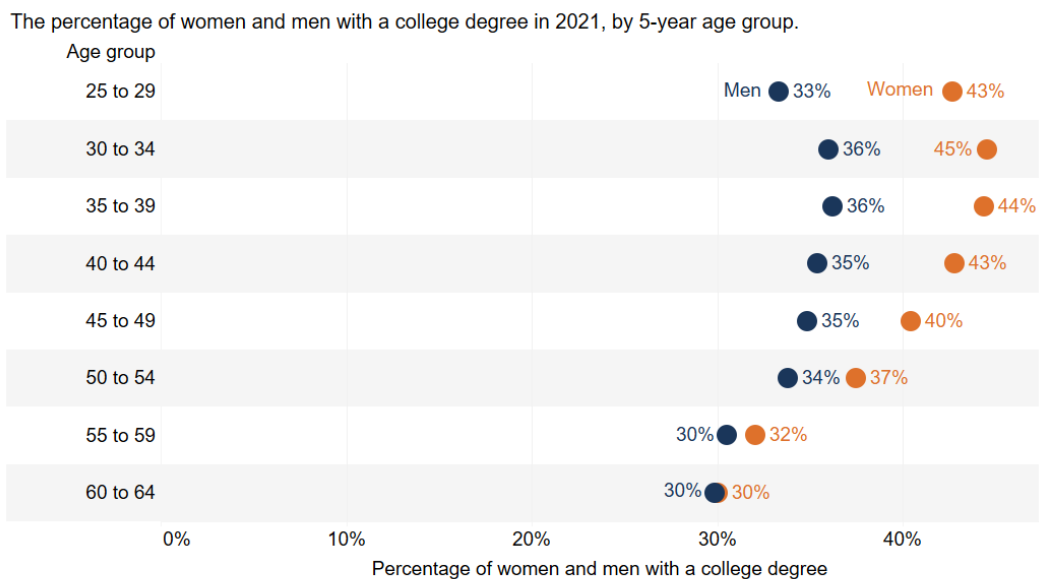
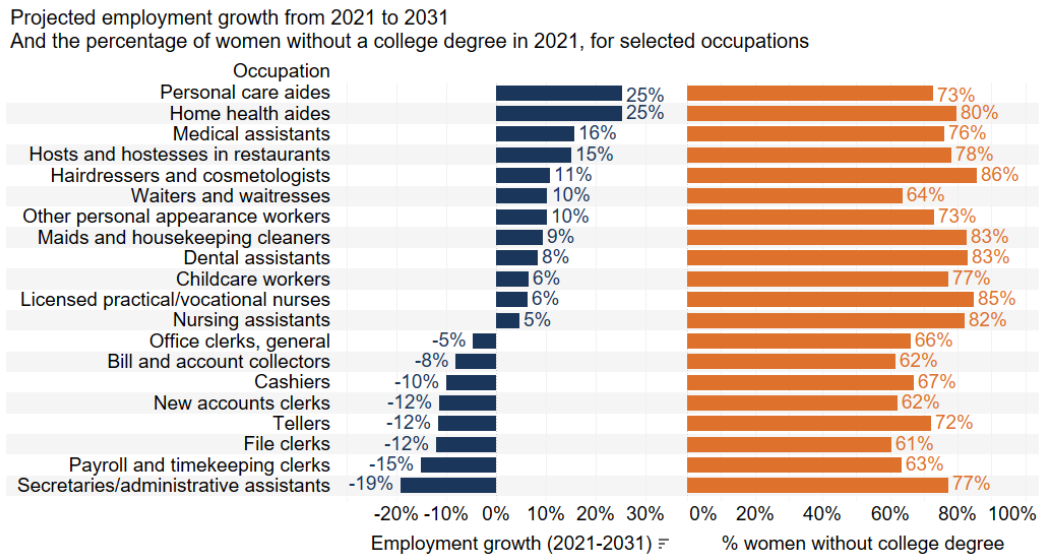


Chart 5: The gap between women and men in degree attainment is especially high – and growing – in recent generations.



The implication of this trend: occupations with a high share of women without a bachelor’s degree are likely to experience growing strains in labor supply. In some of these occupations, especially those involved in administrative office functions, automation has been lowering demand for workers over the past 1-2 decades. As such, these occupations are less likely to suffer from shortages. However, employment in many other occupations with heavy concentration of female employment is growing – such as health support occupations, childcare, personal care, and food service – making them more susceptible to labor shortages (Chart 6).

Chart 6: Jobs that employ a large share of women without a college degree may experience greater labor shortages, especially in healthcare support.



Sources: IPUMS-ACS, University of Minnesota; Bureau of Labor Statistics Occupational Employment Projections; Burning Glass Institute

Recruiters trying to fill roles in healthcare support jobs will struggle. Recruiting workers from other roles may be a solution. But which roles?

Knowing the occupations from which workers historically transitioned to healthcare support occupations may provide some guidance. However, many of these are themselves occupations with a disproportionate share of women. Table 1 shows the top 15 jobs people worked in before moving into a healthcare support related job, along with a measure of each occupation’s relative concentration of women (Chart 7).

Chart 7: Before starting in a healthcare support job, most workers were employed in an occupation with a disproportionate large share of women, such as childcare.

Top 15 jobs people work in before transitioning into a healthcare support job (excluding workers already employed in any healthcare related occupation).

Occupation prior to healthcare support job	Share of women	Share of women relative to healthcare support (87%)
Laborers and Material Movers	22%	-65%
Chefs and Cooks	37%	-50%
Janitors and Building Cleaners	39%	-48%
Retail Salespersons	49%	-38%
Customer Service Representatives	66%	-21%
Waiters and Waitresses	68%	-19%
Cashiers	72%	-15%
Social Workers	79%	-8%
Personal Care Aides	80%	-7%
Teacher Assistants	80%	-7%
Office Clerks, General	83%	-4%
Maids and Housekeeping Cleaners	88%	1%
Receptionists and Information Clerks	90%	3%
Secretaries and Administrative Assistants	93%	6%
Childcare Workers	94%	7%

Note: Job transitions in this analysis are based on the month-to-month changes in detailed occupation by respondents of the Current Population Survey.

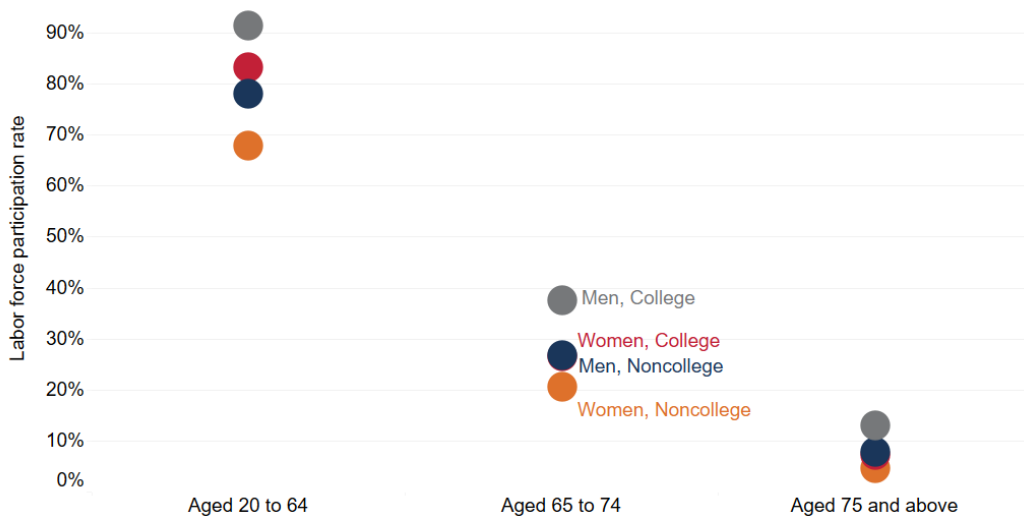
Sources: IPUMS-CPS, University of Minnesota; Burning Glass Institute

CAN AN INCREASE IN THE NUMBER OF OLDER WORKERS OFFSET THE DECLINE IN WORKING-AGE WORKERS?

People aged 65 and older tend to have much lower labor force participation, especially those without a bachelor’s degree – and women in particular (Chart 8). At the same time, the 65+ age group is the fastest growing age group in the workforce. It is therefore reasonable to ask whether the increase in representation within the workforce of those 65 and over can offset the decline in the prime working age population.

Chart 8: Labor force participation rates are lower for people aged 65+ and especially for women without a college degree.

Labor force participation rates in 2021, by gender, education, and age.

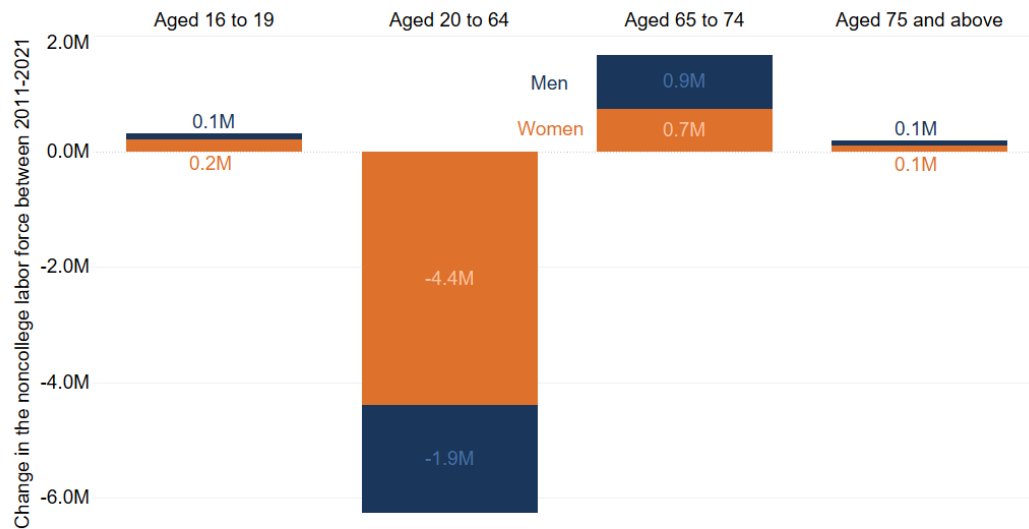


Sources: IPUMS-ACS, University of Minnesota; Burning Glass Institute

In Chart 9 we show that, for women without a bachelor’s degree, the increase in the labor force of the 65+ group offsets less than 20% of the drop in the 20-64 age group between 2011 and 2021. For men however, the offset is a bigger share of the decline in the 20-64 age group. In sum, the increase in the labor force of women 65 and over is way too small to offset the decline in the number of prime working age women.

Chart 9: The labor force for noncollege workers aged 65+ grew modestly between 2011 and 2021, but not enough to offset the large decline in the working-age labor force, especially for women.

Change in the labor force without a college degree between 2011 and 2021, by age and gender.



Sources: IPUMS-ACS, University of Minnesota; Burning Glass Institute

As service sector employment reaches pre-pandemic levels and consumers become increasingly maxed out, some of the growth in demand for those without degrees may cool off. Yet, reshoring and growing demand for healthcare and childcare – the very occupations with the greatest gender imbalance – are likely to keep demand high. Stay tuned for more labor shortages ahead.