

America's Skilled Trades Dilemma: Shortages Loom As Most-In-Demand Group Of Workers Ages

Joshua Wright, Contributor (covers jobs, the economy, industry and education trends)

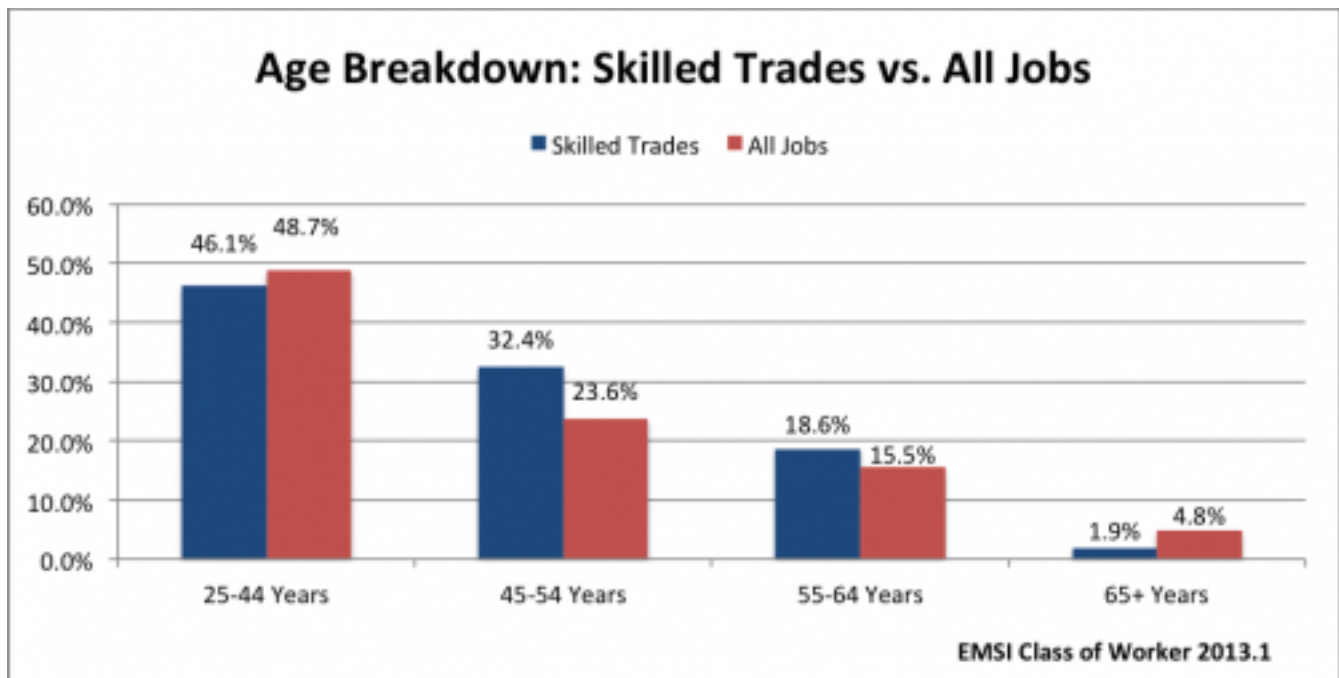
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For the last three years, according to ManpowerGroup, the hardest segment of the workforce for employers to staff with skilled talent hasn't been registered nurses or engineers or even web developers. It's been the skilled trades – the welders, electricians, machinists, etc. that are so prevalent in manufacturing and construction.

But if these skilled-trades workers are difficult to find now, as Manpower's survey indicates, just wait a few years. The skills gap is likely to become more acute.

In 2012, 53 percent of skilled-trade workers in the U.S. were 45 years and older, according to EMSI, and 18.6 percent were between the ages of 55 and 64. (We are using the Virginia Manufacturers Association's definition of skilled trades, which encompasses 21 particular occupations.)

Contrast those numbers with the overall labor force, where 44 percent of workers were at least 45 years old, and 15.5 percent of jobs were held by the 55-to-64 demographic.



Those are just the national figures; in Connecticut, Rhode Island, New Jersey and New Hampshire, more than 60 percent of the skilled-trades labor force is 45 or older. Other Northeastern states such as Delaware, Maine and New York also have aging skilled-trades workforces, as do Illinois, Ohio and Pennsylvania. (See all states in this spreadsheet.)

What makes this issue more striking is that the skilled trades have far fewer 65-and-older workers than the total labor force (1.9 percent to 4.8 percent) – a clear sign that these jobs are more physically demanding than the typical job. So unlike other occupations, many skilled trades workers can't hold off on retirement because they need the money or simply enjoy working.

“If the skills shortage is debatable today,” economic development consultant Brian Kelsey wrote last year, “it likely won't be at some point in the future.”

States With The Biggest Looming Skilled Labor Shortages

The heavy proportion of older skilled-trade workers puts into focus more than just the pending retirement for baby boomers and oft-cited but rarely quantified gap between the skills that employers need and available workers possess. It also touches on the fact that American high schools have largely shifted their focus to preparing students for four-year colleges rather than vocational school.

But just as training to become a welder or computer controlled machine operator isn't for everyone, pursuing a college degree doesn't fit every student's skill set.

“For two or three generations, the focus has been to go to college, get a degree and in doing so you will ensure a brighter future with more access to employment,” Genevieve Stevens, interim dean for instruction at Houston Community College's central campus, told the *Houston Chronicle*. “We started focusing on academic instruction, but left behind the notion of work-force education. However, in a two-year institution that costs less, the average work-force student can come out of that program with skills to gain immediate employment.”

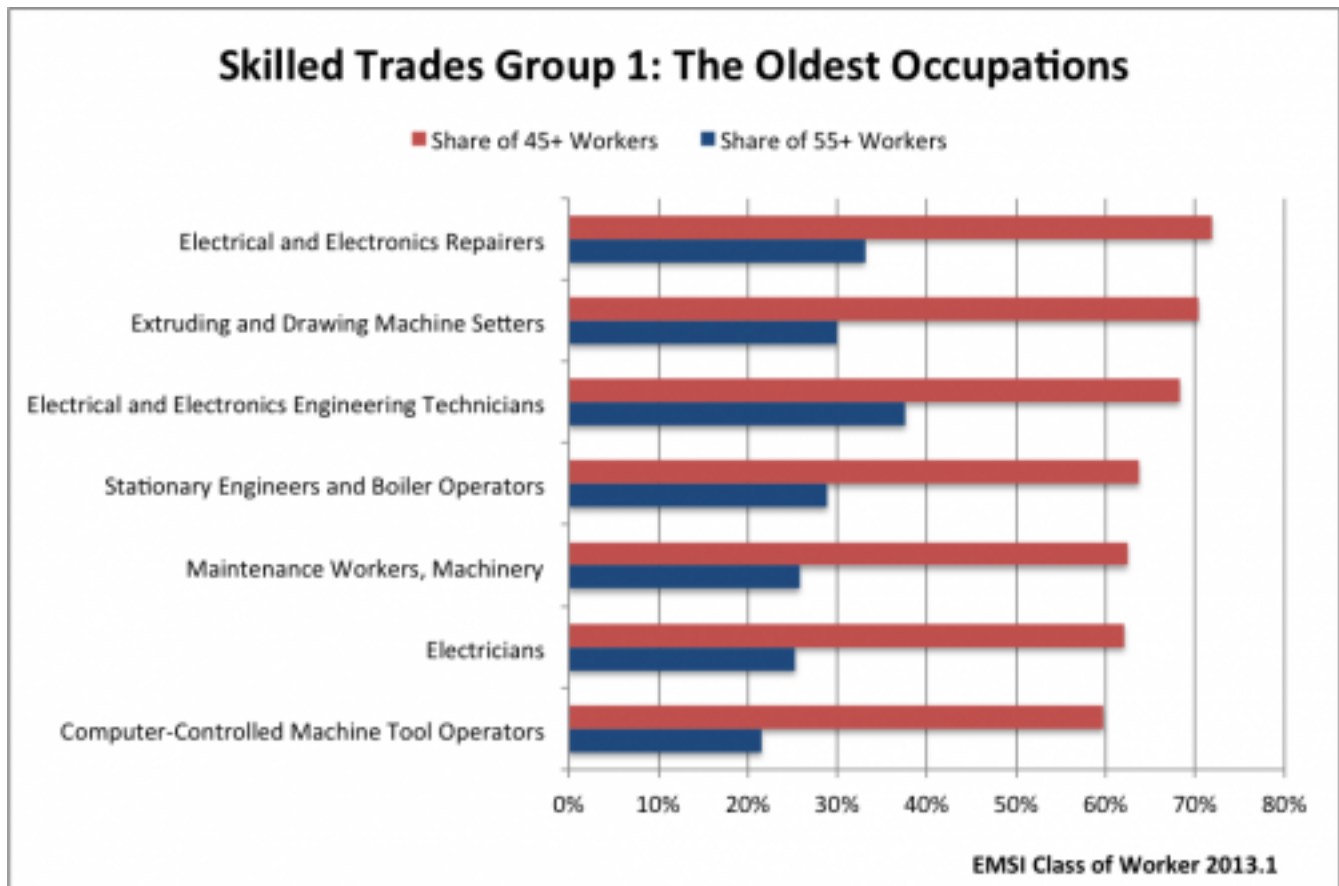
Three Groups of Skilled-Trade Workers

Skilled trades can provide a promising career path depending on a job seeker's skills and location. However, some of these middle-skill occupations will need an influx of new talent sooner than others.

Of the 21 skilled trades professions identified by the Virginia Manufacturers

Association, the oldest in the U.S. is electrical and electronics engineering technicians, with 38 percent of jobs held by workers 55 years and older. Meanwhile, a third of electrical and electronics repairers are at least 55, while 72 percent are 45 years and older.

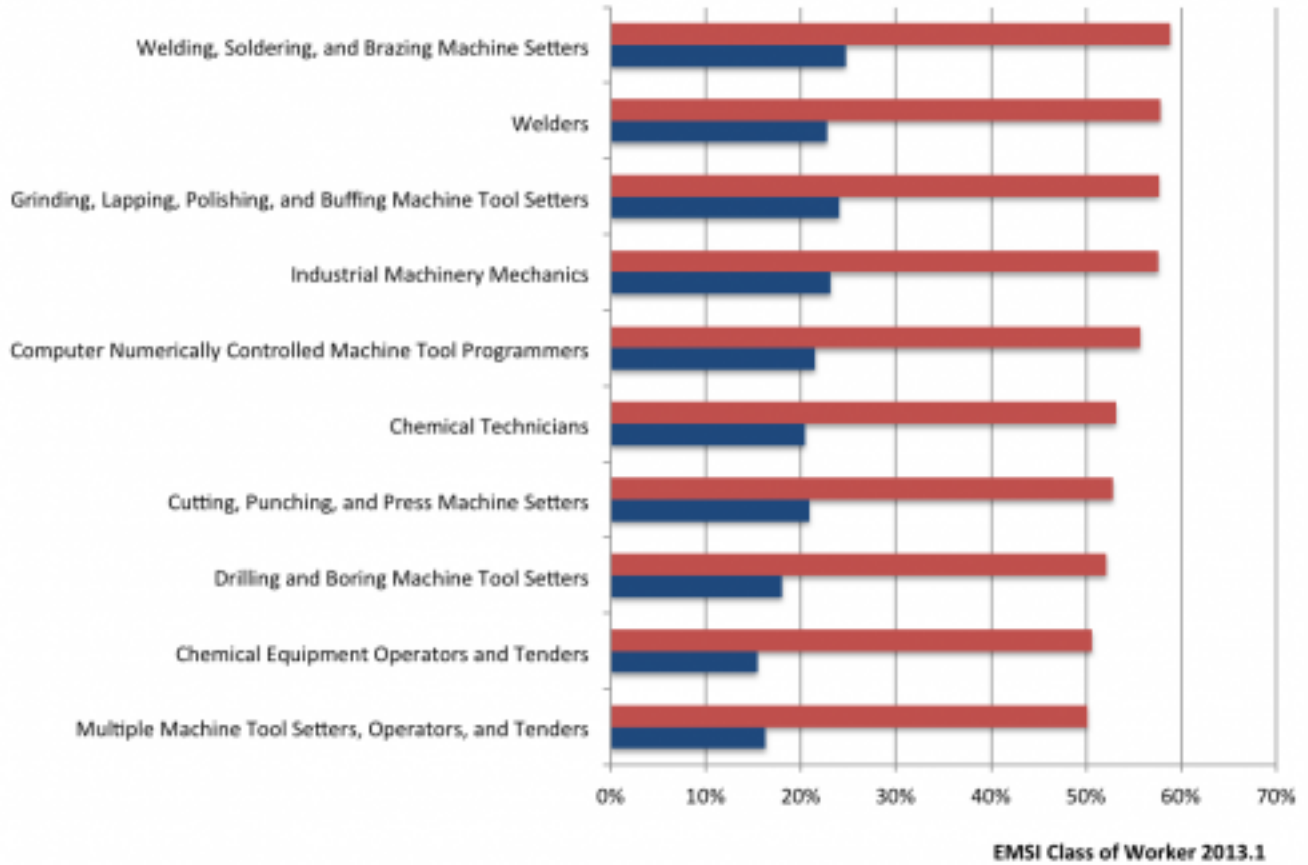
We've broken the 21 occupations into three groups – the oldest, the not-so-old, and the youngest. Group 1 encompasses occupations where at least 60 percent of the workforce is 45-plus years old. Included in the list are electricians, by far the largest of all the skilled trades with more than 600,000 jobs in the U.S.



Group 2, the not-so-old skilled trades, includes a host of production occupations such as welders and industrial machinery mechanics. These are occupations with workforces slightly younger than those in Group 1, but impending retirements could still be a concern – particularly for welding, soldering, and brazing machine setters (59 percent of workers at least 45) and welders (58 percent).

Skilled Trades Group 2: Not-So-Old Occupations

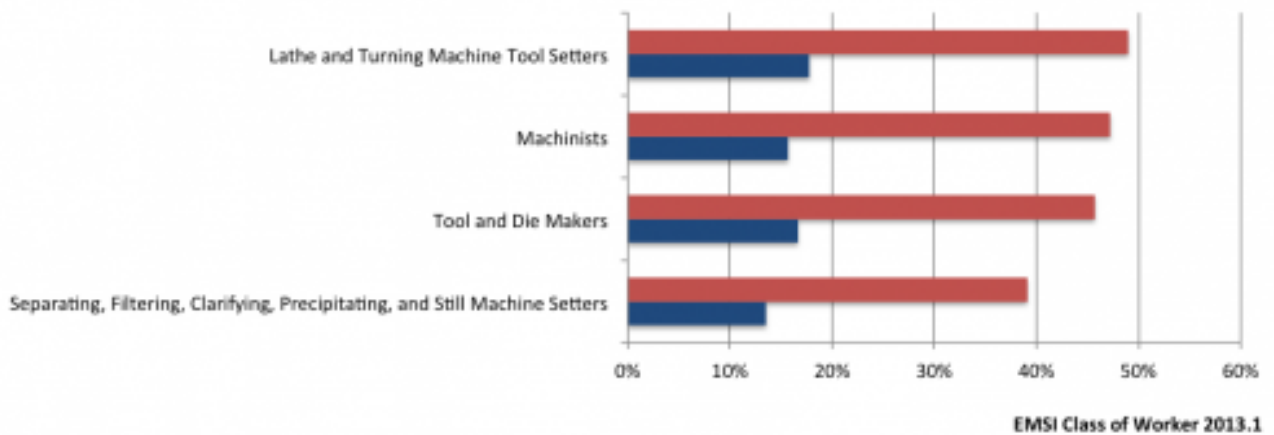
■ Share of 45+ Workers ■ Share of 55+ Workers



Lastly, we've grouped the youngest of all the skilled trades. Group 3 includes machinists, the second-largest of all skilled trades (394,523 estimated jobs in 2012).

Skilled Trades Group 3: Youngest Occupations

■ Share of 45+ Workers ■ Share of 55+ Workers



Jobs Increasing, Wages Not So Much

Nearly 60 percent of all skilled-trade workers are employed in manufacturing, and another 17 percent work in construction – the two sectors that lost the most jobs during the recession. And as you might expect, the skilled trades suffered during the downturn, declining 13% in employment from 2007-2009.

Yet skilled-trade professions have rebounded since the recession, with employment expanding 6.2 percent from 2010-2012, according to EMSI's [first data release of 2013](#).

In North Dakota, Oklahoma, Michigan, and other states, employment in the skilled trades is growing – in some cases by more than 10 percent since 2010 – and demand is relatively high. But what about replacing the many older workers in these fields who could soon retire?

A big part of the equation is what manufacturers and other employers are willing, or can afford, to pay. As Adam Davidson [wrote](#) in *The New York Times*, a telltale sign of a true skills gap is an increase in wages to make up for a shortage of labor. But in a [well-publicized report](#), the Boston Consulting Group showed manufacturing wages have only gone up in a few pockets of the country. “Many skilled workers have simply chosen to apply their skills elsewhere rather than work for less,” Davidson wrote, summing up the BCG report, “and few young people choose to invest in training for jobs that pay fast-food wages.”

Earnings for many skilled trades are actually more competitive than Davidson indicates. The median wage for the skilled trades we've focused on is \$20.25 an hour, and even the bottom 10 percent earn \$13.14 an hour, according to EMSI. Also, it should be noted: As older workers move out of these positions, companies will often replace them with younger (and cheaper) workers – if they can find them. So the aging workforce is not all bad news for businesses that rely on skilled labor, particularly advanced manufacturers who need tech-savvy workers.

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