

TEN EDUCATION, TRAINING, AND WORK-BASED PATHWAY CHANGES THAT LEAD TO GOOD JOBS

Findings by Race, Gender, and Class from the Georgetown University Pathways-to-Career Policy Simulation Model



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A ll along the journey from youth to young adulthood, there are critical junctures at which a change in pathway can have a tremendous impact on a young person's future. For example, for a high school graduate, entering an educational program with economic value or getting a first job in a high-demand sector can substantially improve the likelihood of having a good job 10 years in the future.

Too often, these critical junctures become missed opportunities. Young adults may lack access to specific interventions that would set them up for economic success because of our siloed education, training, and workforce development systems, or they may be tracked down certain pathways based on their race, gender, and socioeconomic or class status.¹ As a result, their outcomes are determined too much by chance and by systemic disparities in opportunity, and not enough by their individual potential and aspirations.

Imagine that instead of the current disjointed system, we had a system of smooth and clearly marked pathways extending from youth to young adulthood that supported all young adults instead of tracking them based on their identities. The system would involve a series of on- and off-ramps to various education and work experiences, none of which would lead to dead ends. A young person who stepped off of an educational pathway would have ample opportunity to reengage with education at a later time. And for those who don't wish to pursue postsecondary education, work-based pathways would provide strong opportunities to acquire skills and knowledge on the job that lead to upward mobility and career success.

In this report, we use "class" and "socioeconomic status (SES)" interchangeably.

What is a good job?

Job quality has multiple dimensions, including wages. At the national level, we define a good job as one that pays a minimum of approximately \$38,000 in 2020 dollars for workers younger than age 45 and a minimum of approximately \$49,000 for workers ages 45 and older. For the young adults who are the focus of this report — 30-year-old workers nationwide — these good jobs pay a median of approximately \$57,000 annually. Among 30-year-old workers who have a good job, one-quarter earn less than \$46,000 annually, while one-quarter earn more than \$76,000. Workers with good jobs are more likely than those with low-paying jobs to have access to healthcare and retirement benefits at work.

Building a system with clear signposts and pathways to opportunity starts with identifying which pathway changes have the greatest potential to improve outcomes for young adults. Thus, to identify the pathway changes with the greatest potential, the Georgetown University Center on Education and the Workforce (CEW) developed the Pathways-to-Career policy simulation model. The model uses longitudinal data to identify promising junctures at which a strategic intervention could increase the likelihood of working in a good job — one we define as providing minimum annual earnings of about \$38,000 per year, with a median of \$57,000, at age 30.

The Pathways-to-Career model establishes an actionable, solution-oriented framework for improving the economic lives of young adults by simulating the potential impacts of different pathway changes at critical junctures along the route from adolescence to early adulthood. Using the model, we identified **10 pathway changes** involving education, training, and work experience that could most improve the likelihood of having a good job at age 30.²

We find that these 10 pathway changes could substantially increase the number of young adults working in good jobs at age 30 (**Figure 1**).

² These 10 pathway changes are associated with the greatest increases in the likelihood of having a good job relative to baseline circumstances, rather than the greatest overall likelihood of having a good job. We focus on the change in likelihood of having a good job instead of the overall likelihood because identifying opportunities for intervention at malleable junctures is most relevant from a policy perspective.

For youth in high school:

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Specializing in career and technical education (CTE) in high school: There are 6.6 million youth in the current high school cohort who are not expected to enter a bachelor's degree program by age 22 and who do not currently specialize in CTE in high school. If these youth received more high school CTE instruction, 186,000 more young adults in this cohort³ could have good jobs at age 30. As detailed below, most of these good jobs would go to young men.⁴

For young adults starting on the high school pathway:

- **Entering a certificate or associate's degree program by age 22:** There are 4.7 million high school graduates in the current college-age cohort who are not expected to pursue a certificate, associate's degree, or bachelor's degree by age 22. If these individuals pursued a certificate or associate's degree by age 22, 261,000 more young adults in this cohort could have a good job at age 30.
- **Entering a bachelor's degree program by age 22:** There are 4.8 million high school graduates in the current college-age cohort who are academically prepared to enter a bachelor's degree program but are not expected to pursue this goal by age 22.^{5,6} Moving these individuals onto the bachelor's degree pathway by age 22 could result in 765,000 more young adults in this cohort with good jobs at age 30.
 - **Working in a blue-collar occupation at age 22:** In the current college-age cohort, there are 2.7 million young adults with no more than a high school diploma who are expected to work in low-paying occupations at age 22.⁷ If these individuals instead had jobs in blue-collar occupations, 45,000 additional young adults in this cohort, all of whom are men,⁸ could have a good job at age 30.
- **Experiencing continuous employment from ages 20 to 22:** In the current cohort of young workers ages 20 to 22, there are 4.3 million young adults with no more than a high school
- 3 We define the cohort for this pathway change as the high school-age population (ages 14 to 18). We define the cohort for the continuous employment pathway change as the population of young adults ages 20 to 22. For all other pathway changes, we define the cohort as the population of young adults ages 18 to 22.
- 4 Among the 186,000 young adults who would gain a good job through this pathway change, 157,000 are young men.
- 5 We define academic preparedness as having test scores or a high school GPA above the 25th percentile of students who pursue a bachelor's degree by age 22. This means having a high school GPA or test score in the upper half of the high school class. While there are multiple definitions of academic preparedness for bachelor's degree programs, we chose this definition because it aligns with the admission criteria of broad-access four-year institutions, which typically accept at least three-quarters of students who apply.
- 6 We consider academically prepared individuals on the high school pathway and individuals who enter the middle-skills pathway by age 22 as eligible for this pathway change. However, most young adults who are academically prepared to enter the bachelor's degree pathway by age 22 but do not enter it are on the high school pathway (58 percent versus 42 percent on the middle-skills pathway).
- 7 Low-paying occupations at age 22 include jobs in the arts, community services, education, food and personal services, and healthcare support.
- 8 This pathway change would be expected to reduce the number of young women working in a good job at age 30, as discussed later in this report.

diploma who are expected to experience employment gaps in early adulthood that can stymie their career advancement. Without these gaps, 148,000 more young adults in this cohort could have good jobs at age 30.

Working in a STEM or other high-paying occupation at age 22: If the 2.7 million young adults in the current college-age cohort who are expected to start out in low-paying jobs after high school instead worked in science, technology, engineering, or mathematics (STEM) or other high-paying occupations⁹ at age 22, 310,000 more young adults in this cohort could have good jobs at age 30.

For young adults starting on the middle-skills pathway:

- **7 Earning an associate's degree by age 26 after enrolling in a certificate or associate's degree program:** There are 2.6 million young adults in the current college-age cohort who enroll in a certificate or associate's degree program by age 22, but who are not expected to earn a college degree by age 26. Ensuring that these individuals complete an associate's degree could result in 201,000 more young adults in this cohort with good jobs at age 30.
- **Earning a bachelor's degree by age 26 after enrolling in a certificate or associate's degree program:** There are 3.4 million young adults in the current college-age cohort who enroll in a certificate or associate's degree program by age 22, but who are not expected to subsequently transfer to a four-year institution and complete a bachelor's degree by age 26. If these individuals did complete a bachelor's degree, 479,000 more individuals in this cohort could have a good job at age 30.

For young adults starting on the bachelor's degree pathway:

- **Farning an associate's degree by age 26 after enrolling in a bachelor's degree program:** There are 3 million young adults in the current college-age cohort who enroll in a bachelor's degree program by age 22, but who are not expected to earn a college degree by age 26. If these individuals were to transfer their credits to a two-year institution and complete an associate's degree, 242,000 more young adults in this cohort could have good jobs at age 30.
- Earning a bachelor's degree by age 26 after enrolling in a bachelor's degree program: There are 3.6 million young adults in the current college-age cohort who start down the bachelor's degree pathway, but who aren't expected to earn a bachelor's degree by age 26. Ensuring that these individuals complete a bachelor's degree could put 573,000 more young adults in this cohort in a good job at age 30.

⁹ Other high-paying occupations include jobs in business, finance, management, law, social science, and skilled healthcare.

FIGURE 1. The ten most promising education, training, and on-the-job-learning pathway changes could substantially increase the number of young adults in a good job at age 30.



Source: Georgetown University Center on Education and the Workforce analysis of data from the US Bureau of Labor Statistics, National Longitudinal Survey of Youth 1997 (NLSY97), 1997–2015.

Note: Good jobs are those paying approximately \$38,000 or more in 2020 dollars, adjusted for geographic differences in cost of living. "M" indicates millions; "k" indicates thousands. For details about who is eligible for each scenario, see Appendix A in the full report. Blue-collar occupations include jobs in farming, fishing, and forestry; construction, extraction, maintenance, and repair; and production, transportation, and material moving. Other high-paying occupations include jobs in business, finance, management, law, social science, and skilled healthcare. Low-paying occupations include jobs in the arts, community services, education, food and personal services, and healthcare support. Numbers may not sum due to rounding.

Pathway change

Some of these pathway changes involve increasing educational attainment, especially progressing toward attainment of a bachelor's degree. Others replace or combine classroom learning with on-the-job learning, capitalizing on the growth that occurs when workers gain access to jobs in high-demand fields that equip them with both general and sector-specific skills, competencies, and domain knowledge.

A reader might reasonably ask if the numbers summarized above can be added up to calculate a grand total. The answer is no: the potential gains from these 10 pathway changes cannot simply be summed to arrive at the total possible increase in good jobs. This is for several reasons, including the fact that some groups are eligible for several pathway changes, but the pathway changes are mutually exclusive. For example, the same young adults are eligible to move to a STEM occupation

at age 22 as are eligible to move to a blue-collar occupation at age 22, but a young person can hold primary employment in only one of these occupational groups at a time.

Nonetheless, our model shows that layering certain pathway changes can further boost the number of workers in good jobs at age 30. For An all-one-system approach that layers pathway changes and offers holistic supports on all pathways could result in even greater gains in the number of good jobs.

example, ensuring college completion after putting the 4.8 million eligible academically prepared young adults on the pathway to a bachelor's degree could result in 1.2 million more young adults in the current cohort in good jobs at age 30 than are expected at present. That's 435,000 more than increasing enrollment in bachelor's degree programs alone, which could put 765,000 more young adults in good jobs. Similarly, ensuring completion of either a bachelor's degree or an associate's degree after putting the 4.7 million eligible young adults on the pathway to an associate's degree could result in 516,000 more young adults in good jobs than are expected at present, almost twice what would be possible from increasing enrollment in certificate and associate's degree programs alone (which would result in 261,000 more young adults in good jobs). Ensuring the 2.7 million young adults with no more than a high school diploma who are working in a low-paying, entry-level occupation are continuously employed from ages 20 to 22 and placed in a STEM or other high-paying occupations without addressing their previous gaps in employment (which would result in 310,000 more young adults in good jobs) (Figure 2).

Crucially, the effectiveness of the 10 pathway changes varies by race, gender, and class. A change that is especially effective for one group may not be as effective – or may even have negative effects – for another group.

FIGURE 2. Layered pathway changes can be much more effective than any single pathway change on its own.



Source: Georgetown University Center on Education and the Workforce analysis of data from the US Bureau of Labor Statistics, National Longitudinal Survey of Youth 1997 (NLSY97), 1997–2015.

Note: Good jobs are those paying approximately \$38,000 or more in 2020 dollars, adjusted for geographic differences in cost of living. "M" indicates millions; "k" indicates thousands. Other high-paying occupations include jobs in business, finance, management, law, social science, and skilled healthcare. Numbers may not sum due to rounding.

Consider the different impacts of pathway changes among different **racial/ethnic groups**, for example. Specializing in CTE in high school increases the likelihood of having a good job at age 30 for white and Black/African American young adults, but reduces the likelihood of having a good job at age 30 for Hispanic/Latino young adults. This may reflect limited access to high-quality CTE programs among Hispanic/Latino high schoolers, and it may also indicate that Hispanic/Latino students have more difficulty overcoming the stigma associated with CTE than students from other racial/ethnic groups.

In addition, some pathway changes have the potential for much larger numerical gains among white young adults than among Black/African American or Hispanic/Latino young adults simply because white young adults are the largest of the three groups. Because the white young adult population is larger than either the Black/African American or Hispanic/Latino population, more white young adults than young adults from any other group are eligible for each pathway change. Therefore, even in cases in which a particular change in pathway might be more effective for Black/African American or Hispanic/Latino young adults, putting all eligible young adults on that pathway would result in larger numerical gains in good jobs for white young adults.

One of the most effective individual pathway changes – earning a bachelor's degree by age 26 after enrolling in a bachelor's degree The effectiveness of the 10 pathway changes varies by race, gender, and class.

program by age 22 – illustrates how differences among racial/ethnic groups in eligibility for any single intervention position white young adults to benefit the most. Earning a bachelor's degree is especially consequential to the economic prospects of Black/African American young adults because it protects against some forms of discrimination and systemic racism that limit access to good jobs for Black/African American young adults with some college but no degree.¹⁰ But moving all eligible young adults on the bachelor's degree pathway to degree completion by age 26 is expected to put more than twice as many additional white 30-year-olds in good jobs as Black/African American 30-year-olds (Figure 3). This is because more than three times as many white young adults as Black/African American young adults are eligible for this pathway change.

The 10 pathway changes would also produce different effects by **gender**, with generally more positive effects for men than for women. Perhaps most notably, moving from a low-paying occupation to a blue-collar occupation at age 22 improves the prospects of being in a good job at age 30 for young men with no more than a high school diploma – but the same pathway change harms those prospects

¹⁰ Among individuals who enrolled in a bachelor's degree program by age 22 but did not complete a bachelor's degree by age 26, 30 percent of Black/African American individuals work in a good job at age 30, compared to 43 percent and 42 percent of Hispanic/Latino and white individuals, respectively. In contrast, racial/ethnic differences in the likelihood of having a good job are much smaller among bachelor's degree completers: 66 percent of Black/African American individuals who earned a bachelor's degree by age 26 have a good job at age 30, compared to 63 percent and 68 percent of Hispanic/Latino and white individuals, respectively.

FIGURE 3. White young adults would see the biggest gains in good jobs from nine of the 10 pathway changes, effective for them than for Black/African American or Hispanic/Latino young adults.

		Black/African American	
	In high school	Number of 30-year-olds in a good job	Change in number of 30-year-olds in a good job
Young adults Youth	Original Pathway: Not specializing in career and technical education (CTE) in high school	177k	nom pathway change
	Pathway Change: Specializing in CTE in high school	196k	+19k
	Starting on the high school pathway		
	Educational Strategies		
	Original Pathway: No postsecondary enrollment by age 22	103k	+8k
	Pathway Change: Entering a certificate or associate's degree program by age 22	111k	
	Original Pathway: Not pursuing a bachelor's degree by age 22	87k	. 401
	Pathway Change: Entering a bachelor's degree program by age 22	136k	+49K
	Workforce-Oriented Strategies		
	Original Pathway: Working in a low-paying occupation at age 22	51k	+2k
	Pathway Change: Working in a blue-collar occupation at age 22	53k	· LR
	Original Pathway: Experiencing at least one break in employment between ages 20 and 22	98k	+28k
	Pathway Change: Experiencing continuous employment from ages 20 to 22	126k	2011
	Original Pathway: Working in a low-paying occupation at age 22	51k	
	Pathway Change: Working in a STEM or other high-paying occupation at age 22	111k	TOOK
	Starting on the middle-skills pathway		
	Original Pathway: No associate's or bachelor's degree by age 26	107k	1076
	Pathway Change: Earning an associate's degree by age 26	134k	+27K
	Original Pathway: No bachelor's degree by age 26	136k	
	Pathway Change: Earning a bachelor's degree by age 26	221k	+85K
	Starting on the bachelor's degree pathway		
	Original Pathway: No associate's or bachelor's degree by age 26	188k	+381
	Pathway Change: Earning an associate's degree by age 26	226k	TOK
	Original Pathway: No bachelor's degree by age 26	219k	11001/
	Pathway Change: Earning a bachelor's degree by age 26	342k	TIZSK

Source: Georgetown University Center on Education and the Workforce analysis of data from the US Bureau of Labor Statistics, National Longitudinal Sur Note: Good jobs are those paying approximately \$38,000 or more in 2020 dollars, adjusted for geographic differences in cost of living. "k" indicates thous forestry; construction, extraction, maintenance, and repair; and production, transportation, and material moving. Other high-paying occupations include job education, food and personal services, and healthcare support. Numbers may not sum due to rounding.

in part because they are the largest racial/ethnic group and in part because some pathway changes are more





vey of Youth 1997 (NLSY97), 1997–2015.

ands. For details about who is eligible for each scenario, see Appendix A in the full report. Blue-collar occupations include jobs in farming, fishing, and os in business, finance, management, law, social science, and skilled healthcare. Low-paying occupations include jobs in the arts, community services, for young women. Unlike men, women who work in blue-collar occupations at age 22 have relatively poor future earnings prospects, even if they subsequently leave those occupations. In comparison, women with no more than a high school diploma experience higher upward mobility if they work in low-paying occupations at age 22 than if they work in blue-collar occupations at that age.

Due to differences by gender in effectiveness and eligibility, nearly every pathway change has the potential to put more men than women into good jobs at age 30. The one exception is working in a STEM or high-paying occupation at age 22, a pathway change for which more women are eligible because more women than men enter low-paying occupations like community services and healthcare support immediately after high school. On the whole, because women already have higher average levels of education than men, there is less potential to improve women's economic outcomes by increasing their education without also addressing the gender wage gap among workers with the same levels of educational attainment. Even when they have the same levels of educational attainment or work in the same occupations, women tend to earn less than men – further dampening the effect of the 10 pathway changes on the number of women in good jobs at age 30 (Figure 4).¹¹

FIGURE 4. Almost all of the 10 pathway changes stand

In high school

Youth

Young adults

Original Pathway: Not specializing in career and technical education (CTE) in high school

Pathway Change: Specializing in CTE in high school

Starting on the high school pathway

Educational Strategies Original Pathway: No postsecondary enrollment by age 22

Pathway Change: Entering a certificate or associate's degree program by age 22

Original Pathway: Not pursuing a bachelor's degree by age 22

Pathway Change: Entering a bachelor's degree program by age 22

Workforce-Oriented Strategies

Original Pathway: Working in a low-paying occupation at age 22

Pathway Change: Working in a blue-collar occupation at age 22

Original Pathway: Experiencing at least one break in employment between ages 20 and 22

Pathway Change: Experiencing continuous employment from ages 20 to 22

Original Pathway: Working in a low-paying occupation at age 22

Pathway Change: Working in a STEM or other high-paying occupation at age 22

Starting on the middle-skills pathway

Original Pathway: No associate's or bachelor's degree by age 26

Pathway Change: Earning an associate's degree by age 26

Original Pathway: No bachelor's degree by age 26

Pathway Change: Earning a bachelor's degree by age 26

Starting on the bachelor's degree pathway

Original Pathway: No associate's or bachelor's degree by age 26

Pathway Change: Earning an associate's degree by age 26

Original Pathway: No bachelor's degree by age 26

Pathway Change: Earning a bachelor's degree by age 26

¹¹ Men are more than 14 percentage points more likely than women to work in a good job at age 30, despite the facts that women outnumber men in college and the collegefocused pathway changes are among the most effective of all the pathway changes we examined. Equalizing access to good jobs between men and women would therefore require interventions that go far beyond removing barriers to knowledge and skill acquisition.

Source: Georgetown University Center on Education and the Workforce anal Note: Good jobs are those paying approximately \$38,000 or more in 2020 do the full report. Blue-collar occupations include jobs in farming, fishing, and f jobs in business, finance, management, law, social science, and skilled health may not sum due to rounding.

to put more young men than young women on track to a good job at age 30.



ysis of data from the US Bureau of Labor Statistics, National Longitudinal Survey of Youth 1997 (NLSY97), 1997–2015.

Illars, adjusted for geographic differences in cost of living. "k" indicates thousands. For details about who is eligible for each scenario, see Appendix A in orestry; construction, extraction, maintenance, and repair; and production, transportation, and material moving. Other high-paying occupations include ncare. Low-paying occupations include jobs in the arts, community services, education, food and personal services, and healthcare support. Numbers

Finally, considered by **class**, all 10 pathway changes would result in larger boosts in good jobs for young adults from low socioeconomic status (low-SES) backgrounds than those from high socioeconomic status (high-SES) backgrounds.¹² This is because most of the pathway changes are expected to be more effective for low-SES than high-SES young adults, and more low-SES young adults also tend to be eligible for each pathway change.

For example, increasing college degree attainment is much more effective in improving the likelihood of having a good job for low-SES young adults than for their high-SES peers. This reflects the fact that young adults from low-SES families need college degrees to compensate for barriers to opportunity related to their family background, while young adults from high-SES families have greater access to good jobs through social capital such as family and community connections, regardless of their college degree attainment status. In addition, because fewer low-SES young adults hold bachelor's degrees, more are eligible to benefit from this change in pathway. As a result, young adults from low-SES backgrounds stand to gain more good jobs by earning bachelor's degrees than their high-SES peers (Figure 5).

FIGURE 5. More young adults from low-SES backgrou

In high school

Youth

Young adults

Original Pathway: Not specializing in career and technical education (CTE) in high school

Pathway Change: Specializing in CTE in high school

Starting on the high school pathway

Educational Strategies Original Pathway: No postsecondary enrollment by age 22

Pathway Change: Entering a certificate or associate's degree program by age 22

Original Pathway: Not pursuing a bachelor's degree by age 22

Pathway Change: Entering a bachelor's degree program by age 22

Workforce-Oriented Strategies

Original Pathway: Working in a low-paying occupation at age 22

Pathway Change: Working in a blue-collar occupation at age 22

Original Pathway: Experiencing at least one break in employment between ages 20 and 22

Pathway Change: Experiencing continuous employment from ages 20 to 22

Original Pathway: Working in a low-paying occupation at age 22

Pathway Change: Working in a STEM or other high-paying occupation at age 22

Starting on the middle-skills pathway

Original Pathway: No associate's or bachelor's degree by age 26

Pathway Change: Earning an associate's degree by age 26

Original Pathway: No bachelor's degree by age 26

Pathway Change: Earning a bachelor's degree by age 26

Starting on the bachelor's degree pathway

Original Pathway: No associate's or bachelor's degree by age 26

Pathway Change: Earning an associate's degree by age 26

Original Pathway: No bachelor's degree by age 26

Pathway Change: Earning a bachelor's degree by age 26

Source: Georgetown University Center on Education and the Workforce ana Note: Good jobs are those paying approximately \$38,000 or more in 2020 do the full report. Blue-collar occupations include jobs in farming, fishing, and jobs in business, finance, management, law, social science, and skilled healt may not sum due to rounding.

¹² To examine how the 10 pathway changes are expected to influence low-SES versus high-SES individuals, we constructed a continuous composite index of socioeconomic status for each person using mother's level of educational attainment, father's level of educational attainment, household income per capita, and household net worth per capita in 1997. High-SES individuals are defined as having a composite index value above the median of the distribution across individuals in the analytic sample, and low-SES individuals are defined as have a composite index value below the median.

nds than from high-SES backgrounds stand to gain good jobs from each of the 10 pathway changes.



ysis of data from the US Bureau of Labor Statistics, National Longitudinal Survey of Youth 1997 (NLSY97), 1997–2015.

ollars, adjusted for geographic differences in cost of living. "k" indicates thousands. For details about who is eligible for each scenario, see Appendix A in forestry; construction, extraction, maintenance, and repair; and production, transportation, and material moving. Other high-paying occupations include hcare. Low-paying occupations include jobs in the arts, community services, education, food and personal services, and healthcare support. Numbers In fact, earning a bachelor's degree puts low-SES and high-SES individuals on nearly equal footing in terms of their likelihood of having a good job at age 30.¹³ Among young adults with a bachelor's degree at age 26, those from low-SES backgrounds are only 2 percentage points less likely to have a good job at age 30 than those from high-SES backgrounds, compared to a 12-percentage-point gap among individuals without bachelor's degrees.¹⁴

Because the effectiveness of each pathway varies by group, applying the pathway changes uniformly does not always result in uniformly positive outcomes. In addition, the number of young adults eligible for each pathway change varies depending on the overall size of the group and on each group's likelihood of pursuing different pathways along the journey from youth to young adulthood. As a result, extending the 10 pathway changes to every eligible young adult would have uneven effects,

Extending the 10 pathway changes to every eligible young adult would have uneven effects on good jobs gaps.

sometimes increasing instead of decreasing race-, gender-, and class-based gaps in the likelihood of having a good job at age 30.

To illustrate this point, we need only consider one of the most effective individual pathway changes – for

those who have the academic qualifications to do so, **entering a bachelor's degree program by age 22** instead of entering the workforce or an associate's degree program. This pathway change shows how the results of one intervention would differ across different groups if all eligible young adults received the same level of priority during recruitment instead of targeting support toward those who face the biggest barriers to good jobs.

Differences by race/ethnicity:

- For Black/African American young adults, entering a bachelor's degree program by age 22 is associated with a 10-percentage-point increase in the likelihood of having a good job. Five hundred thousand Black/African American individuals in the current cohort are eligible for this pathway change. Moving these individuals onto the bachelor's degree pathway by age 22 could result in 49,000 more Black/African American young adults in this cohort with good jobs at age 30.
- For Hispanic/Latino young adults, this pathway change is associated with a 20-percentagepoint increase in the likelihood of having a good job, twice the magnitude of the effectiveness for Black/African American individuals. Furthermore, 1.1 million Hispanic/Latino individuals in the

¹³ Nevertheless, among young adults working in a good job at age 30, high-SES individuals earn more than low-SES individuals on average (\$72,810 versus \$64,193, respectively).

¹⁴ Sixty-six percent of low-SES young adults with a bachelor's degree by age 26 and 68 percent of high-SES young adults with a bachelor's degree by age 26 have a good job at age 30. In contrast, 25 percent of low-SES young adults without a bachelor's degree by age 26 have a good job at age 30 versus 37 percent of high-SES young adults without a bachelor's degree by age 26.

current cohort are eligible for this pathway change. Moving these individuals onto the bachelor's degree pathway by age 22 could result in 212,000 more Hispanic/Latino young adults in this cohort with good jobs at age 30.

- For white young adults, this pathway change is associated with a 16-percentage-point increase in the likelihood of having a good job, and 2.9 million white individuals in the current cohort are eligible to enter a bachelor's degree program by age 22. This pathway change could result in 455,000 more white young adults in this cohort with good jobs at age 30.
- If all eligible young adults experienced this pathway change, these differences in effectiveness and eligibility could lead to the white–Black/African American gap in the likelihood of having a good job at age 30 increasing from 20.8 percentage points to 23.3 percentage points and the white–Hispanic/Latino gap decreasing slightly from 7.4 to 7.0 percentage points.

Differences by gender:

- For women, entering a bachelor's degree program by age 22 is associated with a 14-percentagepoint increase in the likelihood of having a good job, and 2.4 million young women in the current cohort are eligible to enroll in a bachelor's degree program by age 22. This pathway change could result in 330,000 more women in this cohort with good jobs at age 30.
- For men, this pathway change is associated with an 18-percentage-point increase in the likelihood of having a good job, and 2.5 million young men in the current cohort are eligible to enroll in a bachelor's degree program by age 22. This pathway change could result in 435,000 more men in this cohort with good jobs at age 30.
- If all eligible young adults experienced this pathway change, these differences in effectiveness and eligibility could lead to the male-female gap in the likelihood of attaining a good job by age 30 increasing from 14.4 percentage points to 15.2 percentage points.

Differences by class:

- For low-SES young adults, entering a bachelor's degree program by age 22 is associated with a 14-percentage-point increase in the likelihood of having a good job, and 2.7 million low-SES individuals in the current cohort are eligible for this pathway change. Moving these young adults onto the bachelor's degree pathway by age 22 could result in 392,000 more low-SES individuals in this cohort with good jobs at age 30.
- For high-SES young adults, this pathway change is associated with a 17-percentage-point increase in the likelihood of having a good job, but fewer high-SES individuals (2.1 million in

the current cohort) than low-SES individuals are eligible for this pathway change because more academically qualified high-SES individuals than low-SES individuals already enroll in bachelor's degree programs by age 22. Moving these young adults onto the bachelor's degree pathway by age 22 could result in 373,000 more high-SES individuals in this cohort with good jobs at age 30.

 If all eligible young adults experienced this pathway change, the gap in the likelihood of having a good job at age 30 between young adults from high-SES and low-SES backgrounds would remain virtually unchanged, at around 21 percentage points.

Differences in effectiveness and eligibility have implications for the prospect of using the 10 pathway changes to achieve racial/ethnic, class, and gender justice on a societal level. Narrowing gaps in good

Without affirmative action in the form of targeted interventions, gaps in good jobs by race and gender are likely to grow, and the gap by class won't budge much at all. jobs is not as simple as making all 10 interventions equally available to youth and young adults regardless of race, class, and gender. With that approach, the gaps by race and gender are likely to grow rather than shrink, and the good jobs gap by class wouldn't budge much at all.

If equal economic opportunity is the goal, we need

affirmative action by race, gender, and class to target the most effective interventions toward the people who stand to benefit the most from various changes in pathway. We also need to look beyond these pathway changes and address persistent inequalities in society, such as earnings differences among equally qualified workers of different racial/ethnic, gender, and class backgrounds. Much can be done to build stronger pathways to good jobs in young adulthood through education, sectoral training, and workforce development. But expanding access to good jobs also requires interventions to combat bias and discrimination in the labor market, direct investments toward individuals from historically disadvantaged groups, and raise wages in undervalued occupations that are crucial to the functioning of our society.

Ultimately, expanding access to economic opportunity more broadly and more fairly will require replacing the patchwork approach that currently exists across government, educational institutions, and businesses with a coordinated and comprehensive all-one-system approach. The 10 effective pathway changes we identify in this report suggest a place to start.

What Works: Ten Education, Training, and Work-Based Pathway Changes That Lead to Good Jobs can be accessed online at cew.georgetown.edu/pathway-changes.

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