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# Policy Brief Series

4

## Understanding College Credentials: **Expanding the Higher Education Pathways That Can Increase Attainment in Arizona**



## **About This Brief**

This is the fourth brief in College Success Arizona's Policy Brief Series, which focuses on important issues that affect higher education access and attainment in our state. It provides policymakers and the public with information about three key higher education pathways—certificate, associate, and bachelor's degree programs—and offers recommendations for ways Arizona can build a stronger college-going culture and future-ready workforce.

Throughout our history, College Success Arizona has championed the importance of higher education in its many forms. We believe that formal education beyond high school has tremendous value for individuals and families, as well as for Arizona's economy. For us, "college" is a broadly defined set of higher education pathways—inclusive of certificate, associate degree, and bachelor's degree programs—that lead to a credential with real value in the labor market.

## **About College Success Arizona**

College Success Arizona is working to significantly increase the postsecondary attainment rate of students in Arizona, particularly for those who otherwise would not be able to attend or graduate. By doing so, we believe that we will improve the quality of life not just for those individuals and their families but also for the state as a whole.

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## PREFACE

Higher education is vital to Arizona's future. The business and education communities here recognize this and have formed a coalition, Achieve60AZ, to bolster partnerships and catalyze initiatives to increase the attainment rate to 60 percent by 2030 and align education with Arizona's economic opportunities. This work is fundamental to building a college-going culture that benefits individual Arizonans and to securing the prosperity of our state. It could not be more timely or important.

There is a real urgency to the challenge ahead of us. Workforce projections indicate that, within the next 10 years, 70 percent of jobs in Arizona will require at least some education beyond high school; just 44 percent of Arizonans ages 25-64 hold a college certificate or degree.

To increase educational attainment, we must look beyond the traditional conception of what it means to go to college. Often, the public conversation focuses on programs that lead to a bachelor's degree and either excludes or glosses over the other valuable higher education pathways, like certificate and associate degree programs. These non-baccalaureate pathways are important options for students who seek credentials that will enable them to get a good job.

By increasing the number of Arizona residents who hold a certificate or degree, we can ensure that workers have the skills and credentials they need to compete in the labor market while also ensuring that our state economy grows as a result. It is this combination of individual benefits and public good that makes higher education, in all its forms, such a powerful force for change in Arizona.

**Nearly 70 percent of adults believe it is very important for adults to have a degree or professional certificate beyond high school.**

**Vince Roig**  
Chairman, Board of Directors  
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**Rich Nickel**  
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# Introduction

It is clear that a large majority of Americans recognize the value of higher education. Since 2012, nearly 70 percent of adults surveyed in the annual Gallup study of public opinion on higher education consistently have said they believe it is “very important for adults to have a degree or professional certificate beyond high school.”<sup>1</sup> And, according to a recent study conducted by Helios Education Foundation, more than 60 percent of Arizonans surveyed believe a postsecondary credential is either important or very important for the average Arizonan to be successful in today’s workforce. More than 70 percent believe such a credential will be either important or very important in the future labor market.<sup>2</sup>

The reason it is so important to have a certificate or a degree? For most Americans, these credentials matter because they represent the key to getting a good job and enjoying a better quality of life.<sup>3</sup> National labor market data reflects this. Workers with at least some college education, especially those who hold a degree, have gained 11.5 of the 11.6 million jobs created in the years since the Great Recession.<sup>4</sup> Holding a certificate, associate, bachelor’s, or graduate degree provides a clear and substantial advantage.

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## Key Higher Education Credentials Defined

### Certificate

A formal award certifying the satisfactory completion of a postsecondary education program (a formal instructional program whose curriculum is designed primarily for students who are beyond the compulsory age for high school. This includes programs whose purpose is academic, vocational, and continuing professional education, and excludes vocational and adult basic education programs.)

### Associate Degree

An award that normally requires at least two but less than four years of full-time equivalent college-level work.

### Bachelor's Degree

An award (baccalaureate or equivalent degree) that normally requires at least four but not more than five years of full-time equivalent college-level work.

Definitions from National Center for Education Statistics (IPEDS)



The value of education beyond high school extends beyond individual economic opportunity and upward mobility. As College Success Arizona has previously shown, increased attainment rates—inclusive of certificates, associate degrees, and bachelor's degrees—have the potential to drive significant economic growth. By increasing attainment to meet projected workforce needs, a goal that is essential to the economic future of Arizona, the state would benefit from estimated gains of more than \$7 billion every year.<sup>5</sup> In view of the powerful economic impact that increased attainment can have, states across the country have prioritized support for public higher education, which “has long been a centerpiece of state efforts to modernize and grow their economies.”<sup>6</sup>

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### Perceptions of What it Means to Go to College

**69%**

**Of Americans think going to college means living on campus and working toward a bachelor's degree**

**50+%**

**Of Americans think going to college can mean working toward a certificate**

**40%**

**Of Americans think going to college can mean working toward an associate degree**

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### Understanding Education Beyond High School

Although 69 percent of Americans think of college education primarily in terms of “a campus where students live and attend classes with the goal of getting a four-year degree,” a majority also believe that college education can be described most of the time as “students working to earn a professional certificate to use in their workplace.”<sup>7</sup> Nearly 40 percent believe that students working toward an associate degree describes college most of the time.

In view of this expanding understanding of what it means to go to college, it is vital to illuminate—and support—all forms of higher education to increase college-going rates and attainment.

Arizona, though, has severely reduced its investments in higher education. This is especially true when it comes to providing financial support that can help young people afford higher education. Between 2008 and 2017, Arizona reduced per-student higher education spending by more than 50 percent<sup>8</sup> and the two largest community college systems, Maricopa and Pima, no longer receive any state funding.<sup>9</sup> Moreover, there are no substantial state grant aid programs that support students with financial need, and even less state support is available for students who are working towards a credential that is not a baccalaureate degree.

**1,000,000**

**The number of additional credentials needed in Arizona by 2030 to reach statewide goal of 60 percent attainment.**

The lack of state investment, particularly with respect to non-baccalaureate institutions and pathways, represents a missed opportunity to incentivize broader participation in higher education and to increase our state's attainment rate. Programs that award associate degrees or certificates—like those offered by community colleges and technical institutions—provide hundreds of thousands of Arizonans with the education and training that can be a springboard to better employment prospects and a higher quality of life.

A bachelor's degree program is not the best option for all high school graduates. Many students in Arizona take advantage of alternative pathways. As shown in the table below, higher education institutions in the state awarded a combined 73,789 certificates and associate degrees in 2016, exceeding the 55,676 bachelor's degrees awarded by nearly 33 percent. Young people who seek other opportunities to benefit from higher education should not be excluded from the conversation about how our state can better support student enrollment and persistence in higher education programs, increase attainment, and develop a skilled and competitive workforce.

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### Higher Education Credentials Awarded in Arizona, 2012-2016

Credential Type	2012	2013	2014	2015	2016
Certificates (Less than 4 years)	38,894	36,814	38,211	40,053	42,025
Associate Degree	20,842	20,357	40,008	35,925	31,764
Bachelor's Degree	29,832	32,502	60,283	57,731	55,676

Source: IPEDS

If Arizona is to reach its goal of increasing postsecondary attainment, we must ensure that our education system and culture recognize and value each of the different pathways and credentials that represent a potential next step for residents who have earned a traditional high school diploma or an equivalent, like a GED. Each of these pathways leads to greater economic opportunities, long-term prosperity, and higher quality of life for individuals and families. Increasing statewide completion of certificate, associate degree, and bachelor's degree programs—the three types of credentials that contribute to the higher education attainment rate—will make for a stronger, more competitive workforce that is resilient and prepared for the demands of Arizona's future economy.



## Postsecondary Certificate

Certificates are postsecondary awards—below the baccalaureate level—that recognize the completion of a program or course of study in a specific field. Typically, certificates are awarded by community colleges and other public two-year schools, or by non-degree-granting vocational, technical, and trade schools.

Importantly, postsecondary certificates are distinct from professional or industry certifications (e.g., Microsoft competency) in that certificates are more similar to postsecondary degrees—fundamentally, they are earned through time spent in the classroom—whereas certification awards are contingent on test performance to demonstrate a specific competency.<sup>11</sup> Certificate programs are classified according to the amount time they require to complete; the National Center for Education Statistics (NCES) distinguishes between certificate programs that require less than one year of instructional time, programs that require at least one but less than two years, and those that require at least one year but less than four.<sup>12</sup>

On average, individuals who hold a certificate as their highest educational credential benefit from a 20 percent wage premium compared to those whose highest credential is a high school diploma.<sup>13</sup> In certain industries, certificate holders can earn more than the average bachelor's degree holder. For example, IT certificate holders who work in the field earn an average of \$70,000 per year compared with \$61,000 average annual pay for individuals with a bachelor's degree.<sup>14</sup>

**In 2016, Arizona higher education institutions awarded nearly 33 percent more certificates and associate degrees than bachelor's degrees.**

**99 percent of the 11.6 million jobs created since the Great Recession have gone to workers with at least some college education.**



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## Arizona Needs 1,000,000 More Credentials to Reach Its 60% Attainment Goal by 2030

	2016 (Actual)	2020 (Projected)	2025 (Projected)	2030 (Projected)
Adult Population (25-64)	<b>3,456,583</b>	<b>3,641,878</b>	<b>3,880,786</b>	<b>4,134,275</b>
Number of Certificate, Associate, and Bachelor's Degree Awards	<b>1,477,434</b>	<b>1,754,930</b>	<b>2,099,263</b>	<b>2,480,565</b>
Attainment Rate	<b>42.7%</b>	<b>48.2%</b>	<b>54.1%</b>	<b>60.0%</b>

Source: Achieve60AZ

Between 2005 and 2015, the number of certificates awarded by postsecondary institutions in the U.S. increased by 35 percent. The overall number of certificates public institutions awarded increased by nearly 40 percent, from 370,683 in 2005 to 602,895 in 2015. Similarly, the proportion of certificates awarded by public institutions, compared to private institutions, increased from 52 percent to 63 percent, during this period.<sup>15</sup> This growth highlights the ongoing and increasing importance of public postsecondary institutions in preparing a skilled, credentialed workforce. Notably, one-third of certificate holders also have a college degree (typically an associate degree).<sup>16</sup>

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## Associate Degree

An associate degree is an award that normally requires at least two but fewer than four years of full-time equivalent college-level work.<sup>17</sup> The value of these credentials, both in terms of their benefits to individuals and the broader workforce, is often overlooked despite the fact that “30 percent of associate degree holders make more than the average bachelor’s degree holder.”<sup>18</sup>

As is true in other states, workers in Arizona who hold an associate degree are more likely than their counterparts whose highest credential is a high school diploma to have what the Georgetown University Center on Education and the Workforce calls “good jobs”—jobs that pay at least \$35,000 a year for workers under 45, and at least \$45,000 a year for workers 45 and over.

Between 2005 and 2015, the number of associate degrees awarded by postsecondary institutions in the U.S. grew by nearly 46 percent; in 2015, more than 1,000,000 associate degrees were awarded nationally. Public institutions awarded 50 percent more associate degrees in 2015 than they did in 2005.<sup>19</sup> In 2016, associate degrees accounted for nearly 25 percent of all postsecondary credentials awarded in Arizona at the baccalaureate level and below. Approximately 150,000 associate degrees were awarded in Arizona from 2012 to 2016.

**30 percent of associate degree holders make more than the average bachelor's degree holder.**



## Bachelor's Degree

Bachelor's degrees continue to be highly relevant credentials in the Arizona and national labor markets. An individual who holds a bachelor's degree remains more likely to earn more over their lifetime than someone whose highest credential is a postsecondary certificate or associate degree. For example, among workers in Arizona who have good jobs, the median annual earnings for those who hold at least a bachelor's degree are \$15,000 higher than associate degree holders and \$17,000 higher than workers who have some higher education but not a degree.<sup>20</sup> Nationally, individuals with a bachelor's degree now collectively earn 57 percent of all wages earned in the U.S.<sup>21</sup>

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**If Arizona is to reach its goal of increasing postsecondary attainment, we must ensure that our education system and culture recognize and value each of the different higher education pathways.**

A bachelor's degree typically requires at least four, but no more than five, years of full-time equivalent college-level work to complete. In 2015, more than 1,800,000 bachelor's degrees were awarded nationally, up 32 percent from 2005.<sup>22</sup> Higher education institutions in Arizona awarded more than 235,000 bachelor's degrees from 2012 to 2016.

## Higher Education and the Future of Arizona

The simple fact is that Arizona needs a skilled workforce to meet the needs of employers currently in the state and to attract new jobs and business investment to the state. Already, more and more occupations in Arizona require a postsecondary credential, whether it is a certificate or a degree. For example, of the 34 Management Occupations—an occupational category that is projected to add 28,341 jobs to the Arizona economy in the next 10 years—27 typically require at least an associate degree and most require a bachelor's degree.<sup>23</sup> Similarly, 10 of the 16 Healthcare Support occupations, which are expected to grow by nearly 20,000 jobs in the next 10 years, require a certificate or associate degree.<sup>24</sup>



## 2014-2024 Arizona Statewide Occupational Projections

Occupation Title	Employment		10 Year Change	
	2014 Estimated	2024 Projected	Numeric	Percent
Total, All Occupations	2,728,012	3,305,314	577,302	21.16%
Construction and Extraction	109,940	158,269	48,329	44.0%
Computer and Mathematical	88,928	114,937	26,009	29.3%
Business and Financial Operations	137,570	172,343	34,773	25.3%
Building and Grounds Cleaning and Maintenance	84,964	104,997	20,033	23.6%
Personal Care and Service	101,667	125,613	23,946	23.6%
Healthcare Support	86,047	105,602	19,555	22.7%
Installation, Maintenance, and Repair	106,705	130,171	23,466	22.0%
Healthcare Practitioners and Technical	191,603	233,645	42,042	21.9%
Education, Training, and Library	135,033	164,490	29,457	21.8%
Legal	17,808	21,621	3,813	21.4%
Community and Social Service	44,581	54,118	9,537	21.4%
Food Preparation and Serving Related	251,124	302,423	51,299	20.4%
Management	139,633	167,974	28,341	20.30%
Transportation and Material Moving	156,850	186,777	29,927	19.1%
Life, Physical, and Social Science	17,441	20,722	3,281	18.8%
Office and Administrative Support	473,981	562,962	88,981	18.8%
Arts, Design, Entertainment, Sports, and Media	33,166	39,220	6,054	18.3%
Sales and Related	296,873	350,391	53,518	18.0%
Protective Service	71,401	83,428	12,027	16.8%
Production	109,577	124,188	14,611	13.3%
Architecture and Engineering	51,932	58,717	6,785	13.1%
Farming, Fishing, and Forestry	21,188	22,706	1,518	7.2%

Source: Arizona Bureau of Labor Statistics



While individuals who hold a bachelor's degree continue to have an advantage over those who do not—both in terms of the kinds of jobs they are qualified for and earnings—there is strong demand for workers who have certificates and associate degrees. According to analysis by the Georgetown University Center on Education and the Workforce, workers in Arizona who hold these credentials are more likely to have good jobs and higher earnings than workers whose education stopped after high school.

The surest way to secure the future of our state is to increase attainment in Arizona. To do so, it is imperative that statewide efforts prioritize all three higher education pathways that lead to a formal credential. By increasing the number of Arizona residents who hold a certificate or degree, we can ensure that workers have the skills and credentials they need to compete in the labor market while also ensuring that our state economy grows as a result. It is this combination of individual benefits and public good that makes higher education, in all its forms, such a powerful force for change in Arizona.

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### Educational Attainment and Good Jobs in Arizona

Educational Attainment	Number of Workers	Workers with Good Jobs	Median Earnings	Median Earnings of Workers with Good Jobs
Less than high school	<b>232,000</b>	<b>39,000</b>	<b>\$20,000</b>	<b>\$50,000</b>
High school graduate	<b>512,000</b>	<b>160,000</b>	<b>\$28,000</b>	<b>\$53,000</b>
Some college	<b>609,000</b>	<b>257,000</b>	<b>\$34,000</b>	<b>\$56,000</b>
Associate degree	<b>232,000</b>	<b>115,000</b>	<b>\$37,000</b>	<b>\$59,000</b>
All non-BA workers	<b>1,586,000</b>	<b>571,000</b>	<b>\$31,000</b>	<b>\$55,000</b>
BA+ Workers	<b>751,000</b>	<b>517,000</b>	<b>\$53,000</b>	<b>\$72,000</b>
All Workers	<b>2,337,000</b>	<b>1,088,000</b>	<b>\$36,000</b>	<b>\$61,000</b>

Source: Georgetown University Center on Education and the Workforce

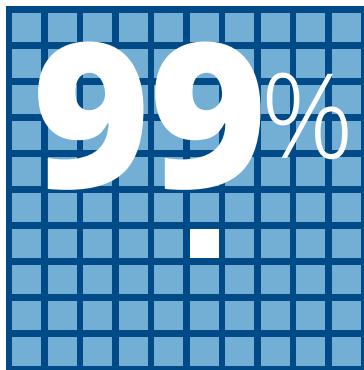
\* A good job is defined as one with earnings of at least \$35,000 annually for those under age 45 and, earnings of at least \$45,000 annually for workers age 45 and older.



# Recommendations for Policymakers

Supporting and investing in strategies that foster a comprehensive college-going culture that values the different pathways to earning a postsecondary credential is fundamental to building strong communities and a vibrant, sustainable economy in Arizona. Policymakers have an important role to play in creating programs and securing funding for higher education in Arizona.

- 1. The state should restore support for Arizona's two largest community college systems, Maricopa and Pima, which provide important opportunities for students to earn certificates as well as associate degrees.** Community colleges are among the largest workforce training providers in Arizona and will be vital to statewide efforts aimed at increasing the number of skilled workers with the formal credentials required to thrive in the Arizona labor market.
- 2. The state should create a program that provides flexible, portable, and visible—to students in middle and high school—funding to encourage young people to pursue formal education credentials beyond high school.** Such a program should go beyond support for students seeking a four-year degree to include students for whom a certificate or associate degree program is the best option for furthering their education.
- 3. The state should develop and promote programs and policies designed to help students and families better understand their higher education options and make informed decisions about their future.** This could ensure that every high school in Arizona has the capacity to provide advising and counseling services that help students and families navigate the higher education landscape accordingly. Such efforts could also include developing and promoting tools to help students understand what skills and credentials they will need to enter a given profession.
- 4. The state should adopt a statewide college readiness assessment that includes the ability for all public high school juniors and seniors to have access to take the ACT or SAT at no cost to them during the school day.** This initiative could create a profound opportunity for a more substantial learning and curricular alignment for both students and teachers. In addition, it would minimize the number of testing days allocated and eliminate the potential for duplicate testing.



**The percentage of the 11.6 million jobs created since the Great Recession that have gone to workers with at least some college education.**

**More than 70 percent of Arizonans believe a higher education credential will be either important or very important in the future labor market.**

**Nationally, the overall number of certificates public institutions award increased by nearly 40 percent from 2005 to 2015.**



**Arizona Needs 1,000,000 More Credentials to Reach Its 60% Attainment Goal by 2030.**



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## Endnotes

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