

# Examining the Value of Education Beyond High School in Ohio: Northwest Region Profile

December 13, 2023



## Introduction

Pursuit of education beyond high school is an investment of time, money, and resources. The effort to examine the value of education and training beyond high school aims for students and communities to see a return on investment for graduates that expands workforce and economic opportunities for all.

As community leaders review the data in this report, the following questions may help determine what meaning and desired next steps of inquiry or action may be helpful for the region and for Ohio:

### **Enrollment:**

- What are education and training enrollment patterns in our region?
- How are students from low-income backgrounds and students of color participating in education beyond high school?

### **Access Pipeline:**

- What are college going rates for high school students?
- Are they getting a head start on college while in high school?
- Are some communities and groups of students having greater challenges in accessing education and training after high school?
- What districts, organizations, and strategies are advancing access?

### **Completion:**

- Are students in our region completing their education so that they may reap the value in the workforce?
- What communities and groups of students are far below the average in completion rates?
- Which institutions are showing excellence in completion rates for a diversity of student groups?

### **Post-school outcomes:**

- Are graduates in our region earning an economic return on their investment in education at our public adult technical centers, colleges, and universities? In which institutions are students seeing an economic return?

### **Alignment to industry:**

- What are the growing jobs and industry sectors in our region?
- Are the growing jobs paying median wages above the state median?
- Is our region producing graduates in those growing jobs and the priority industry sectors?
- Are some populations underrepresented within our region among those completing education in the industry sectors?

## Northwest Ohio Demographics

Northwest Ohio encompasses seventeen counties - Allen, Crawford, Defiance, Fulton, Hancock, Hardin, Henry, Lucas, Ottawa, Paulding, Putnam, Sandusky, Seneca, Van Wert, Williams, Wood, Wyandot – as defined by Jobs Ohio.<sup>1</sup> Northwest Ohio is home to 10% of Ohioans. As of 2020, 81% of residents identified as White, 9% as African American/ Black, 6% as Hispanic Latino/a/x., 3% two or more races,

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<sup>1</sup> [MapJobsOhioNetwork.pdf \(ohiolmi.com\)](https://www.ohiolmi.com/MapJobsOhioNetwork.pdf)

1% Asian, and less than one percent Indigenous/American Indian.<sup>2</sup> The Northwest is home to the highest proportion of Latino/a/x residents compared to other Ohio regions. As of 2020, the Northwest region's population age 25 and up had one of the lowest levels of education attainment compared with other Ohio regions, with 11% having an associate degree, 15% a bachelors, and 9% a graduate or professional degree.

## Enrollment and Access Beyond High School

Matching data from the National Center for Education Statistics College Navigator<sup>3</sup> and the Postsecondary Value Equitable Value Explorer<sup>4</sup>, this summary defines the Northwest Region as home to 34 public and private institutions offering degrees and post-high school certificates. These include eleven proprietary (for-profit) institutions, 10 private institutions, and 13 public institutions.

### UNDERGRADUATE ENROLLMENT

In the Northwest region, there were 4,287 students (sub-baccalaureate certificates, associate, and baccalaureate programs) enrolled in proprietary institutions, 18,467 students enrolled in private institutions, and 67,735 students enrolled in public institutions in 2018-2019.<sup>5</sup> The largest proprietary institutions in the region were Ross College-Sylvania (1,010 students) and Stautzenberger College-Maumee (1,007 students), and the largest private institution was University of Northwestern Ohio (4,271 students). The largest institutions overall were all public, including University of Toledo (17,581 students), Bowling Green State University-Main Campus (16,861 students), and Owens Community College (16,212 students). Public institution enrollments are shown in Table 1.

### DISAGGREGATED DEMOGRAPHIC ENROLLMENT

In the Northwest, the percentage of Pell recipients in 2017-2018 ranged from 37% - 82% at proprietary institutions, 19% - 88% at private institutions, and 2% - 95% at public institutions. Ten of the 12 proprietary institutions had over 50% of their enrollment receiving Pell grants, and six of the 10 private institutions had over 40% of their enrollment receiving Pell grants.

Four of the 12 proprietary institutions had more than 50% of their enrollments as students of color, and between 0% - 23% of the private institution enrollments were students of color. Public institutions with the largest populations of students of color included Toledo Public Schools Adult and Continuing Education (77%) and Penta County Joint Vocational School (34%). While some proprietary schools have a higher proportional enrollment of students of color and students receiving Pell, they enroll a smaller percentage of students in the region. See Table 1.

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<sup>2</sup> US Census Bureau, American Community Survey 2020

<sup>3</sup> [College Navigator - National Center for Education Statistics](#)

<sup>4</sup> [Equitable Value Explorer - Postsecondary Value Commission](#)

<sup>5</sup> Enrollment data sourced from [Equitable Value Explorer - Postsecondary Value Commission](#) which used 2018-2019 cohort data from IPEDS.

**Table 1. Northwest Ohio Public Postsecondary Institutions by Enrollment, Estimated Annual Net Price, % Pell, and % Students of Color**

	Public Institutions	Undergraduate Enrollment	Estimated Annual Net Price	% Pell	% Students of Color <sup>6</sup>	Overall Post-School Median Earnings <sup>7</sup>
<b>Predominantly Certificates</b>	Apollo Career Center	1,036	--	11%	15%	\$40,192
	Four County Career Center	292	--	2%	10%	--
	Ohio Technical Center at Vantage Career Center	169	--	15%	1%	\$30,632
	Penta County Joint Vocational School	38	--	33%	34%	\$41,821
	Toledo Public Schools Adult and Continuing Education	92	--	95%	77%	\$52,376
	Vanguard-Sentinel Adult Career and Technology Center	48	--	50%	21%	\$38,096
<b>Predominantly Associates</b>	James A Rhodes State College	5,155	\$13,735	23%	7%	\$41,993
	Northwest State Community College	6,047	\$13,648	21%	9%	\$40,058
	Owens Community College	16,212	\$11,830	30%	18%	\$39,809
	Terra State Community College	3,051	\$16,009	28%	12%	\$40,341
<b>Predominantly Bachelors</b>	Bowling Green State University-Main Campus	16,861	\$19,402	29%	14%	\$50,673
	Ohio State University-Lima Campus	1,153	\$20,083	37%	11%	\$63,285
	University of Toledo	17,581	\$20,591	31%	19%	\$53,960

Data Source: Equitable Value Explorer

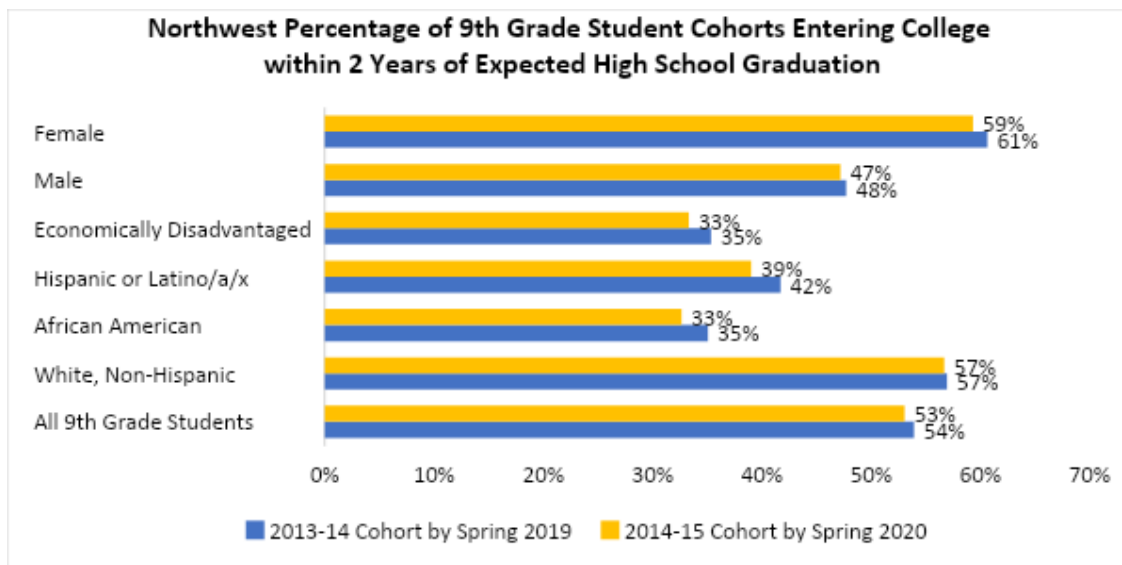
### **NINTH GRADE COHORT COLLEGE GOING RATE BY ECONOMIC STATUS, RACE, & GENDER**

Data from 2013-2014 and 2014-2015 cohorts show that overall, 53% and 54%, respectively, of the region's students are estimated to have entered postsecondary education within two years of high school graduation. Students identified as economically disadvantaged or African American are going to college at a rate of roughly 20 percentage points lower than the average college going rate for their class cohorts. Students identified as Hispanic/Latinx are going to college at a rate of that is 12 or more percentage points lower than the average college going rate for their class cohorts. Males are also going to college at a rate at least 12 percentage points lower than females in the same cohort.

<sup>6</sup> This variable is a summation of the counts for students identifying as Asian, Black, or Hispanic race. The variable "additional races" was not included because it seemed to include missing data.

<sup>7</sup> The earnings data was obtained from the [Equitable Value Explorer - Postsecondary Value Commission](#). A data limitation is that regional and main campuses are aggregated in earnings reports.





**Figure 1. Northwest Percentage of 9th Grade Student Cohorts Entering College within 2 Years of High School Graduation**

Data Source: Ohio Department of Education, Special Tabulation, presented by Education First to Ohio Excels - *Ohio Excels Regional Convening*, October 12, 2022. [PowerPoint slides]. Note: Sub-group results based only on counties in which student counts exceed 10.

### **COLLEGE CREDIT PLUS/DUAL ENROLLMENT & AP CREDIT**

The Northwest Region is home to 103 public K-12 school districts. The district Advanced Placement (AP) participation rates, AP exam scoring levels, and dual credit participation rates are summarized in Table 2. Districts in the region utilize College Credit Plus and other dual credit programs at a greater rate than Advanced Placement programming. The percentage of students who scored 3 or above on the AP exam is less than 25% in 95 districts with no AP participation in 51 districts.

There were dozens of K-12 school districts in the Northwest Region that had 50% or more of their graduating cohorts scoring a 3 or higher on an AP exam or receive at least 3 dual enrollment credits during the 2020-2021 or 2021-2022 academic years. Several of the schools with high participation and credit earning rates included:

- Rural districts with average poverty rates: Gibsonburg Exempted Village, Holgate Local, Jennings Local, Miller City-New Cleveland Local, Mohawk Local, New Riegel Local, Old Fort Local, Ottoville Local, Seneca East Local, Spencerville Local and Vanlue Local.
- Small town districts with low poverty rates: Benton Carroll Salem Local, Danbury Local, Eastwood Local, Hopewell-Loudon Local, Kalida Local, Liberty-Benton Local, Ottawa-Glandorf Local and Van Buren Local.
- A small-town district with a high poverty rate: Bath Local
- A suburban district with low student poverty: Sylvania City
- A suburban district with very low student poverty: Ottawa Hills Local
- An unclassified district with very small population: Put-in-Bay Local

**Table 2. Summary of Northwest Ohio K-12 School District AP Participation, AP Scoring Rates, and Dual Credit Earning Rates**

Number of K-12 districts in Northwest Region with...	Taking an AP course (21-22)	Scoring a 3 or higher on an AP exam (21-22)	Earning 3 or more dual credits (20-21)	Earning 12 or more dual credits (21-22)
<b>75% or more of students...</b>	1	0	3	1
<b>50-74% of students...</b>	1	2	18	2
<b>25-49% of students...</b>	15	5	48	21
<b>Less than 25% of students...</b>	85	95	34	78

Data Source: District Prepared for Success and College, Career, and Work Readiness Data from State Report Cards; Some data was not available for Put-In Bay Local.

## Regional Access and Success Strategies

Toledo Tomorrow is a coalition of education, business, and community partners promoting access for high school students and adult learners into education beyond high school. Toledo Tomorrow and Partners in Education, a business, education, and community partnership organization, were involved in the Ohio Department of Higher Education's Three to Get Ready and Four to Go Campaign.

## Completion

Graduation rates range between 62-95 % for Ohio Technical Centers and the four-year main campuses in the region, Bowling Green State University of Toledo have 62% and 55% graduation rates, respectively, as shown in Table 3.

Pell recipients at Toledo Public Schools Adult Continuing Education and Penta County Joint Vocational System are graduating at a rate above the overall graduation rate. In all other institutions, graduation rates among Pell recipients are lower than the overall graduation rate.

Among the Ohio Technical Centers, disaggregated data by race was only available for Toledo Public Schools Adult and Continuing Education, where African and Black students graduated at rates twenty-five percentage points or higher than white and Hispanic students. However, graduation rates among Black/African American students were far below the average in other institutions. Graduation rates among Black or African American students were lower than the overall graduation rate for all public institutions of higher education. Hispanic or Latinx graduation rates were higher than the overall graduation rate at Terra State Community College and Ohio State University-Lima but below the overall rate at other institutions.

**Table 3. Northwest Ohio Graduation Rates within 150 Percent of Normal Time for Public Institutions, 2021**

	Public Institutions	Overall Graduation Rate	Graduation Rate, Pell Only	Graduation Rate, Black or African American	Graduation Rate, Hispanic	Graduation Rate, White
<b>Predominantly Certificates</b>	Apollo Career Center	67%	12%	--	--	--
	Four County Career Center	--	--	--	--	--
	Ohio Technical Center at Vantage Career Center	95%	71%	--	--	--

	Public Institutions	Overall Graduation Rate	Graduation Rate, Pell Only	Graduation Rate, Black or African American	Graduation Rate, Hispanic	Graduation Rate, White
	Penta County Joint Vocational School	78%	85%	--	--	--
	Toledo Public Schools Adult and Continuing Education	66%	68%	75%	50%	56%
	Vanguard-Sentinel Adult Career and Technology Center	62%	50%	--	--	--
<b>Predominantly Associates</b>	James A Rhodes State College	47%	41%	13%	25%	52%
	Northwest State Community College	39%	36%	0%	25%	43%
	Owens Community College	24%	20%	4%	17%	30%
	Terra State Community College	32%	28%	14%	35%	33%
<b>Predominantly Bachelors</b>	Bowling Green State University-Main Campus	62%	51%	47%	46%	66%
	Ohio State University-Lima Campus	24%	21%	12%	29%	26%
	University of Toledo	55%	42%	32%	46%	62%

Data Source: National Center for Education Statistics Integrated Postsecondary Education Data System

The graduation rates at regional two-year campuses and community colleges can be reviewed in the context of a three-year success rate which considers transfer and persistence rates in addition to completion rates. Institutional review of the disaggregated data by Pell eligibility and race/ethnicity will complement this analysis. See Table 4.

**Table 4. Three Year Success Measure Components for Northwest Ohio Public Two-Year Institutions, Fall 2018 Entering Cohort, 2021**

Sector   Institution	% Earned degree by end of third year	% Persisting at same institution in FY 2021	% Persisting at a different institution in FY 2021
<b>James A Rhodes State College</b>	38%	21%	7%
<b>Northwest State Community College</b>	26%	34%	6%
<b>Owens Community College</b>	21%	18%	7%
<b>Terra State Community College</b>	26%	15%	8%
<b>Ohio State University-Lima Campus</b>	22%	35%	14%

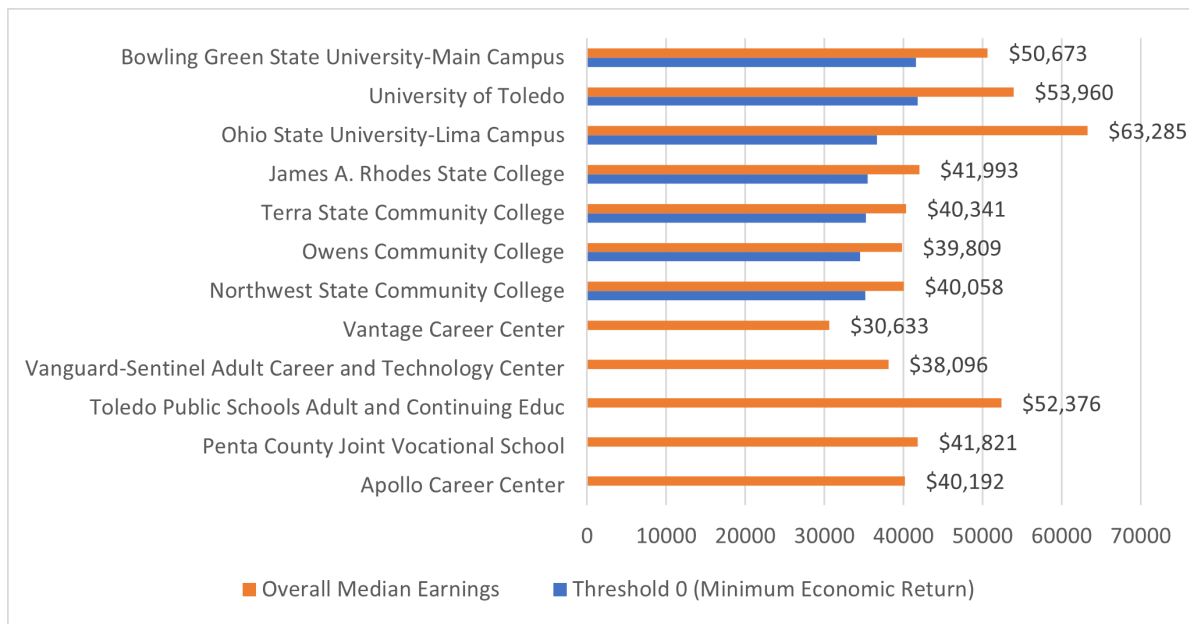
Data Source: Ohio Department of Higher Education

## Post-School Outcomes

Northwest Ohio institutions reporting the highest overall median earnings include Ohio Northern University (\$81,847) and Mercy College of Ohio (\$64,666), both of which are private institutions. Overall earnings for proprietary institutions ranged from \$24,042 (Tiffin Academy of Hair Design) to \$44,403 (Professional Skills Institute) and from \$48,141 (Lourdes University) to \$81,847 (Ohio Northern University) for regional private institutions. Overall median earnings for public institutions ranged from \$30,633 (Ohio Technical Center at Vantage Career Center) to \$63,285 (Ohio State University - Lima) as shown in Table 1 on page 2. A limitation to the earnings for public institutions is that regional and main campuses are reported aggregately and that Four County Career Center did not have median earnings available in the dataset.

All public institutions in the Northwest region reported overall median earnings over \$30,000. This was also true for five of the proprietary institutions and all of the private institutions. All the public two-year and four-year institutions have positive earnings compared to Threshold 0, which was defined by the Equitable Value Explorer Tool as the minimum economic return to see earnings over time that would be above what an individual who only completed high school received. Threshold 0 was not available for the Ohio Technical Centers.





**Figure 2. Overall Median Earnings and Earnings Relative to Threshold 0 for Northwest Ohio Public Institutions**

Source: Equitable Value Explorer. Note that regional and main campuses earnings are reported aggregately. Note: Earnings are not available for Four County Career Center and Vanguard-Sentinel Adult Career and Technology Center.

## Industry

The State of Ohio Governor’s Office of Workforce Transformation in partnership with the InnovateOhio Platform’s Data Analytics team has created a Top Jobs list of occupations paying sustainable wages and with a promising future based on the projected number of openings and growth.<sup>8</sup> The “Top Jobs” for the Northwest region and their median salaries are shown in Table 4 by expected growth rate. They are displayed by typical education required. At the top of each column, the median earnings in Ohio for the education credential level (known as threshold 1 in the Equitable Value Explorer Tool) is listed. The top jobs for which wage data are available, except for psychiatric technicians; veterinary technologists and technicians; pre-school teacher; and substance abuse, behavioral disorder, and mental health counselor jobs meet or exceed the median earnings threshold for the credential level. Please note that wage data were not reported for medical records & health information technicians, web developers, and software developers.

Jobs Ohio identifies several core industries for growth with four areas noted as consistent across regions: Advanced Manufacturing, Technology, Business and Professional Services, and BioHealth. The Top Jobs are color coded if they match one of the four core industries. All jobs in the core industries meet or exceed the threshold for median earnings for the credential level. In addition, Northwest Ohio Regional Growth Partnership has identified Energy and Agriculture and Food Processing as core industries. While these industries are not included in this analysis, there is some inclusion of occupations and educational programs in Advance Manufacturing that also serve the Energy and Food Processing sectors.

<sup>8</sup> [Ohio’s Top Jobs List](#) | [Ohio's Top Jobs](#)

Overall, the Ohio Department of Job and Family Services' Bureau of Labor Market Information projects jobs to slightly decline in Northwest Ohio from 2018 – 2028.<sup>9</sup>

Table 5. Top Jobs in Northwest Ohio and Median Salary by Typical Education Required ranked by Projected Annual Growth within the Region

Northwest Region Top Jobs					
Postsecondary Non-Degree Award Threshold 1 = \$31,070	Salary	Associate Degree Threshold 1 = \$34,911	Salary	Bachelor's Degree Threshold 1 = \$46,380	Salary
Medical Assistants (Direct Support Professional)	\$31K	Physical Therapist Assistants	\$57K	Registered Nurses	\$65K
Heavy and Tractor-Trailer Truck Drivers	\$47K	Occupational Therapist Assistants	\$59K	Market Research Analysts and Marketing Specialists	\$54K
Licensed Practical and Licensed Vocational Nurses	\$45K	Respiratory Therapists	\$58K	Software Developers, Applications	(Not Availa ble)
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	\$47K	Veterinary Technologists and Technicians	\$33K	Industrial Engineers	\$83K
Health Technologists and Technicians, All Other	\$41K	Diagnostic Medical Sonographers	\$61K	Financial Managers	\$109K
Massage Therapists	\$35K	Web Developers	(Not Availab le)	General and Operations Manager	\$92K
Phlebotomists	\$34K	Preschool Teachers, Except Special Education	\$27K	Medical and Health Services Managers	\$88K
Computer Numerically Controlled Machine Tool Programmers, Metal	\$54K	Mechanical Engineering Technicians	\$53K	Substance abuse, behavioral disorder, and mental health counselors	\$42K
Medical Records and Health Information Technicians	(Not Availa ble)	Paralegals and Legal Assistants	\$40K	Mechanical Engineers	\$76K
Psychiatric Technicians	\$30K	Medical Equipment Repairers	\$55K	Human Resources Specialists	\$53K
Skincare Specialists	\$33K	Environmental Science and Protection Technicians, Including Health	\$44K	Managers, All other	\$91K
Dental Assistants	\$38K	Dental Hygienists	\$63K	Business Operations Specialists, All other	\$67K
Aircraft Mechanics and Service Technicians	\$70K	Chemical Technicians	\$54K	Cost Estimators	\$63K

<sup>9</sup> [Employment Projections \(ohiolmi.com\)](https://www.ohiolmi.com/)

Northwest Region Top Jobs					
Postsecondary Non-Degree Award Threshold 1 = \$31,070	Salary	Associate Degree Threshold 1 = \$34,911	Salary	Bachelor's Degree Threshold 1 = \$46,380	Salary
Surgical Technologists	\$47K	Radiologic Technologists and Technicians	\$59K	Operations Research Analyst	\$90K
Electrical and Electronics Repairers, Commercial and Industrial Equipment	\$72K	Electrical and Electronics Engineering Technicians	\$63K	Training and Development Specialists	\$56K

■ BioHealth ■ Advanced Manufacturing ■ Technology ■ Business & Professional Services ■ Multiple Core Industries ■ Not in a core industry

Table 6 shows the number of completers by institution for the four statewide core industries. The field of study was correlated to industry by CIP code as shown in the Appendix. This gives a general sense of the production of education awards in these fields. Baccalaureate level completions far surpass awards at associate and certificate levels.

Table 6. Number of Completions by Industry Category, 2021

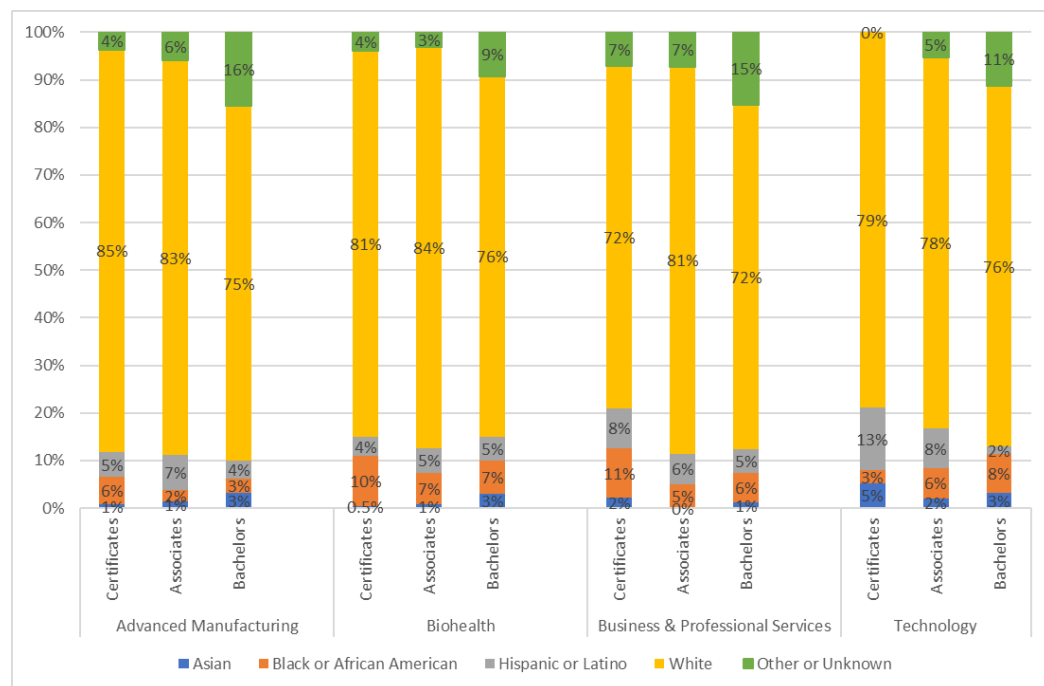
Public Institutions	BioHealth			Advanced Manufacturing			Technology			Business and Professional Services		
	Cert	Assoc	Bac	Cert	Assoc	Bac	Cert	Assoc	Bac	Cert	Assoc	Bac
Apollo Career Center	318	0	0	46	0	0	0	0	0	0	0	0
Four County Career Center	104	0	0	0	0	0	0	0	0	0	0	0
Ohio Technical Center at Vantage Career Center	68	0	0	28	0	0	0	0	0	0	0	0
Penta County Joint Vocational School	0	0	0	23	0	0	0	0	0	0	0	0
Toledo Public Schools Adult and Continuing Education	33	0	0	0	0	0	0	0	0	0	0	0
Vanguard-Sentinel Adult Career and Technology Center	13	0	0	0	0	0	0	0	0	7	0	0

Public Institutions	BioHealth			Advanced Manufacturing			Technology			Business and Professional Services		
	Cert	Assoc	Bac	Cert	Assoc	Bac	Cert	Assoc	Bac	Cert	Assoc	Bac
James A Rhodes State College	72	189	0	50	49	0	0	25	0	68	63	0
Northwest State Community College	36	69	0	49	58	0	2	13	0	5	46	0
Owens Community College	134	385	0	117	120	0	3	9	0	120	106	0
Terra State Community College	27	56	0	101	48	0	33	33	0	38	29	0
Bowling Green State University-Main Campus	0	0	521	0	0	252	0	0	34	0	0	388
Ohio State University-Lima Campus	0	0	17	0	0	0	0	0	0	0	0	8
University of Toledo	1	0	792	0	13	675	0	16	28	0	18	644
<b>TOTAL</b>	<b>806</b>	<b>699</b>	<b>1330</b>	<b>414</b>	<b>288</b>	<b>927</b>	<b>38</b>	<b>96</b>	<b>62</b>	<b>238</b>	<b>262</b>	<b>1040</b>

Data Source: National Center for Education Statistics Integrated Postsecondary Education Data System

Figure 3 shows the proportion of degrees conferred by race for the core industries in 2021, which were defined by matching CIP codes (See Appendix). Black or African American students are equal or greater proportion of the representation in their region for certificate awards in BioHealth and Business and a lesser proportion of awards in other categories. Hispanic or Latinx students were consistently underrepresented in the baccalaureate awards in the four core industries but had representation above their proportion of the general population in Advanced Manufacturing associate degrees, and Business and Professional Services certificates and associate awards; and Technology certificates and associate awards.

**Figure 3. Proportion of Degrees Conferred by Race for Priority Core Industries and Award Levels, Northwest Ohio Public Institutions 2021**



Data Source: National Center for Education Statistics Integrated Postsecondary Education Data System; Note: Certificates only includes certificates below the baccalaureate level

## Appendix

Scale Strategic Solutions connected industry priorities and designations from JobsOhio with fields of study based on CIP code families that best fit the industry. Please note that some occupations may have a variety of fields of study from which they may hire.

Table 7: Crosswalk of regional core industries, job categories, and CIP codes of field of study

Core Industries	Job Categories from Ohio's Top Jobs	<a href="#">CIP Codes</a>
BioHealth	Healthcare Practitioners and Technical; Healthcare Support; select Life and Physical Science, and Social Sciences; select Management	26- Biological and Biomedical Sciences 42- Psychology 51- Health Professions
Advanced Manufacturing	Installation, Maintenance, and Repair; Production; select Management	14- Engineering 15- Engineering Tech 47- Mechanic, Repair, and installations 48- Precision Production
Technology	Computer and Mathematical; select Management	11- Computer and Information Sciences
Business and Professional Services	Business and Financial Operations; select Management	52- Business, Management, and Marketing