### **OPPAGA Report**

### Florida College System Industry Certifications

Report No. 19-10



**OCTOBER 31, 2019** 

### **Legislative Charge**



2019 General Appropriations Act (Specific Appropriation Line 128)

The Office of Program Policy Analysis and Government Accountability (OPPAGA) shall conduct a review of the industry certifications funded by this appropriation to determine if they are aligned with statewide and/or regional labor market demands and to determine if the initial annual earnings of students receiving these certifications are comparable to high-skill/high wage entry level wages established for the Workforce Development Areas across the state. OPPAGA shall provide its findings to the President of the Senate and the Speaker of the House of Representatives by October 31, 2019.

### Scope

OPPAGA's research on college industry certifications focused on two research questions



Are the industry certifications on the Florida College System funding list aligned with labor market demand?



Do students earning the industry certifications on the college postsecondary funding list have wages comparable to high-skill/high-wage (HSHW) earnings?

### **Summary**

#### **Background**

#### Labor Market Alignment

### Employment and Earnings

#### Certifications Earned Through the Incentive Policy

- Colleges receive \$1,000 for each student-earned industry certification on a list developed and maintained by the Florida Department of Education.
- The funding list includes over 200 types of industry certifications, and students earned over 15,000 fundable certifications in 2017-18. Most (87%) of the funded certifications earned between 2013-14 and 2017-18 were in the Health Sciences and Public Safety occupational funding areas.

#### Certification Alignment With Statewide High-Skill/High-Wage (HSHW) Occupations

Many of the certifications earned do not link directly to one specific occupation, and often a single certification type links to multiple potential occupations. Most (90%) earned industry certification types eligible for state funding were linked to at least one statewide HSHW occupation. However, only 24% of the potential 268 occupations linked to the earned certifications were on the statewide list of HSHW occupations.

#### Certification Alignment With Regional HSHW Occupations

Demand for occupations associated with fundable industry certifications varied across the state. In 11 of the 14 occupational funding areas, industry certifications were linked to HSHW occupations in 10 or more of the 24 workforce regions.

#### Occupational Gaps

 Four HSHW occupations requiring associate-level or certificate-level training on the statewide demand occupation list had no reported fundable certifications associated with them.

#### Employment Rates and Earnings Among Early-Career and Mid-Career Individuals

Among early career certification earners, 98% were found employed the year after certification and 63% of those employed were earning HSHW entry-level wages. Among mid-career certification earners, 99% were found employed the year after certification, and 77% showed earnings increases.

#### Employment Rates and Earnings of Academic Program Completers and Non-Completers

Among students who earned a fundable certification and completed their academic program, 94% were found employed the following year and 69% earned at least the entry-level HSHW threshold. Among certification earners who did not complete their academic program, 90% were found employed and 59% earned wages at or above the entry level HSHW threshold.

#### **Overview**

- 1 Background
- Alignment with Labor Market Demand
- **Employment and Earnings of Certification Earners**

4 Appendix

### Background

## Overview of the Industry Certification Incentive Funding Program

**Summary** 

The Florida Legislature rewards colleges for certain industry certifications earned by students



The Legislature establishes target occupational funding areas in the General Appropriations Act for fundable industry certifications



Staff in the Florida Department of Education develop annual lists of fundable certification types in each occupational funding area for the Florida College System



The department solicits from colleges recommended additions to the list and reviews each recommendation



The fundable certification lists are approved by the State Board of Education and adopted into Florida Administrative Code<sup>1</sup>



Each fundable certification earned by a college student results in incentive funding of \$1,000 for the college



Certifications earned in continuing workforce education are not eligible for funding

<sup>&</sup>lt;sup>1</sup> If a recommendation is denied, colleges may re-submit proposed certifications with additional supporting evidence.

### Occupational Funding Areas Over Time

**Summary** 

The Florida Legislature added several occupational funding areas in 2014; no further changes have been made since then

#### **Original 2013 List**

- Advanced Manufacturing
- Automotive Service Technology
- Cloud Virtualization
- Cyber Security
- FAA Airframe Mechanics
- FAA Power Plant Mechanics
- HVAC Technician
- Pharmacy Technician
- Welding

#### Added in 2014 - -

- Auto Collision Repair and Refinishing
- Computer Programming
- Electrician
- Health Sciences
- Network Support Services
- Public Safety

### **Current Occupational Funding Areas**

**Summary** 

Currently, specific types of industry certifications in 15 broad occupational areas are eligible for funding

Advanced Manufacturing	Auto Collision Repair and Refinishing	Automotive Service Technology	Cloud Virtualization	Computer Programming
Cybersecurity	Electrician	FAA Airframe Mechanic	FAA Power Plant Mechanics	Health Sciences
Pharmacy Technician	HVAC Technician	Network Support Services	Public Safety	Welding

9

### Rubric for Adding Certifications to the Funding List

#### **Summary**

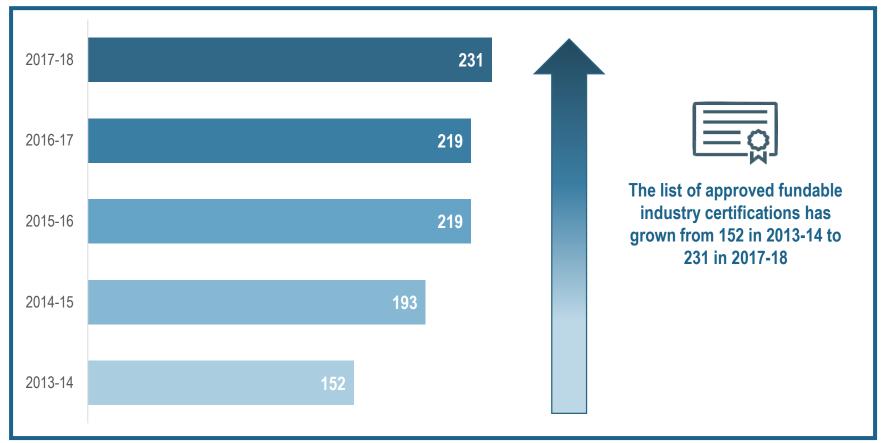
The Department of Education has criteria for reviewing proposed additions to the list of fundable certifications

- The Florida Department of Education developed a rubric that includes criteria for evaluating proposed additions to the funding list. The department determines whether a proposed addition
  - ✓ Is an industry certification;
  - Supports a target occupational funding area established in the General Appropriations Act;
  - ✓ Is the highest available level of certification; and
  - ✓ Has an appropriately proctored written exam that is scored by the certifying agency.

### **Approved Fundable Industry Certifications**

Summary

Over 200 types of specific industry certifications within the 15 occupational areas are approved for funding<sup>1</sup>



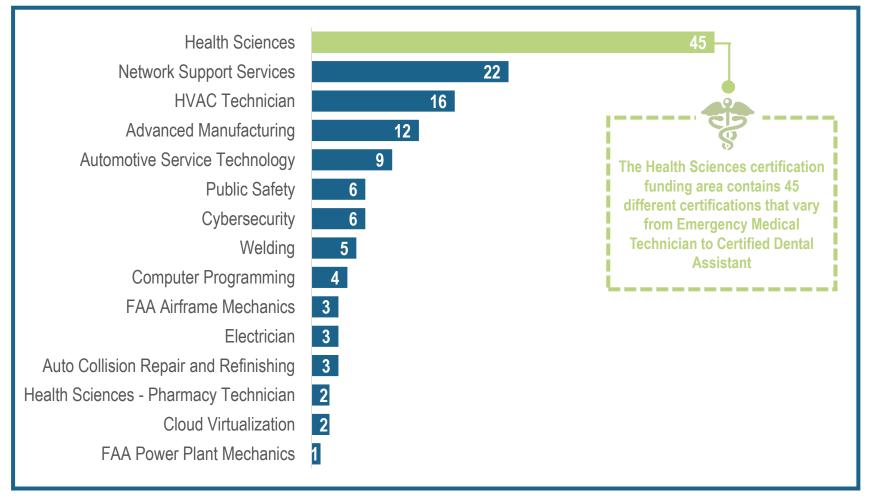
<sup>&</sup>lt;sup>1</sup> Over time, industry certifications have been added and removed. Overall, 259 different certifications have been eligible for Florida College System funding even though, at most, only 231 certifications were approved in any given year.

Source: OPPAGA analysis of data provided by the Florida Department of Education.

## Individual Certification Types Within Each Occupational Funding Area

**Summary** 

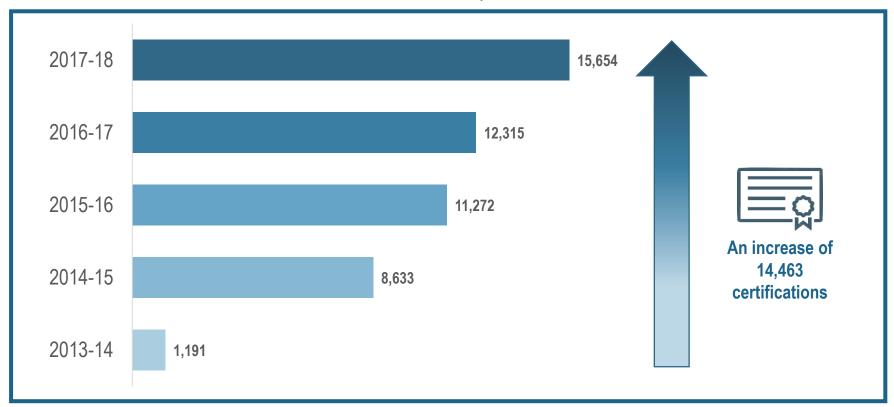
Among certifications earned between 2013-14 and 2016-17, the number of individual industry certification types varied by occupational funding area



## Funded Industry Certifications Earned by College Students

Summary

The number of funded postsecondary industry certifications earned by college students has increased substantially since 2013-14<sup>1</sup>

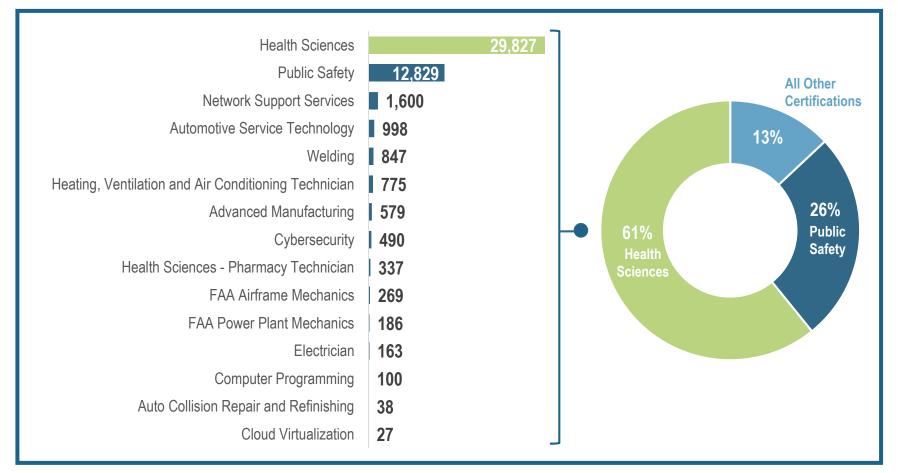


<sup>&</sup>lt;sup>1</sup> The figures above reflect the number of certifications earned in each year. These figures will differ from Florida Department of Education college funding reports, which include the number of certifications funded each year, and funding may be lagged.

## Industry Certifications Earned by Occupational Funding Area

**Summary** 

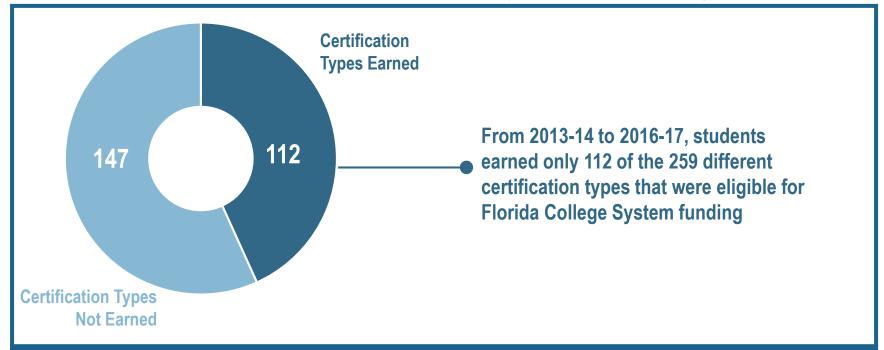
From 2013-14 to 2016-17, 87% of the funded certifications earned by college students were in the Health Sciences and Public Safety occupational funding areas



### **Industry Certifications Earned by College Students**

**Summary** 

From 2013-14 to 2016-17, college students earned certifications representing fewer than half of the 259 certification types approved for funding<sup>1</sup>



Note: The fundable certification lists vary slightly from year to year. Unless otherwise noted, here and in the remainder of this report we define "earned fundable certification" as a certification earned from 2013-14 to 2016-17 that was or would have been eligible for incentive funding based on the most current (2018-19) incentive funding list. However, in 2018-19, one general welding certification (Certified Welder) was replaced with 10 comparable specialty welding certifications. General welding certifications earned between 2013-14 and 2016-17 are included in the results.

<sup>&</sup>lt;sup>1</sup>Over time, fundable industry certifications have been added and removed. Overall, 259 different certifications have been eligible for Florida College System funding even though, at most, only 219 certifications were approved in any given year between 2013-14 and 2016-17.

# Alignment With Labor Market Demand

### Statewide and Regional Demand Occupations Lists



### Criteria for 2019-20 Statewide Demand Occupations List

- Occupation requires training at the postsecondary certificate or associate's degree level
- √ 500 annual openings and average growth rate of 1.26% or 1,200 annual openings with any positive growth
- ✓ Mean wage of \$15.13/hour and entry wage of \$12.31/hour
- ✓ HSHW occupations have a mean wage of at least \$23.72/hour and entry wage of \$15.13/hour
- √ 83 occupations are on this statewide list, 38 of which are classified as HSHW





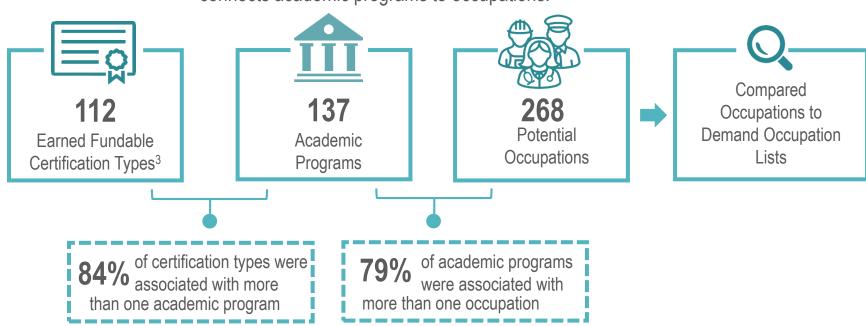
#### Criteria for 24 Regional Lists

- Occupation requires training at the postsecondary certificate, associate's degree, or bachelor's degree level
- √ 30-80 annual openings and positive growth
- ✓ Minimum mean wage varies by region
- √ HSHW threshold varies by region
- Highest regional threshold: Region 21 (Palm Beach County)
  - Mean wage of \$24.92/hour, entry wage of \$15.89/hour
- Lowest regional threshold: Region 6 (Hamilton, Jefferson, Lafayette, Madison, Suwannee, and Taylor Counties)
  - Mean wage of \$21.89/hour, entry wage of \$13.96/hour

### Method for the Labor Market Alignment Analysis

Methodology

The Florida Department of Education does not directly link types of industry certifications to occupations. Therefore, to associate certification types with occupations, we analyzed student data from 2013-14 to 2016-17 to identify program enrollments of certification earners, and then used a crosswalk that connects academic programs to occupations.<sup>1, 2</sup>



<sup>&</sup>lt;sup>1</sup> We identified student programs as those a student completed, unless students had not completed any programs. In cases with no program completion, programs were based on student enrollment in any valid Florida College System program.

<sup>&</sup>lt;sup>2</sup> To match programs to occupations, we used a crosswalk managed by the Florida Department of Education and referred to as the "CIPxSOC Table."

<sup>&</sup>lt;sup>3</sup> As noted on slide 15, we defined "earned fundable certification" as a certification earned from 2013-14 to 2016-17 that was or would have been eligible for incentive funding based on the most current (2018-19) incentive funding list. Programs associated with Certified Welder between 2013-14 and 2016-17 are included in the figures above.

## Example of Certification-to-Program-to-Occupation Linkage

Law Enforcement Officer certification is associated with 11 different programs that **Summary** are, in turn, associated with 4 possible occupations<sup>1</sup> Certification Programs Occupations Training for Special Operations Criminal Justice/Security Technician Correctional Officers and Jailers **Dual Certification Law Enforcement** and Correctional Officer Law Enforcement Criminal Justice Technology Officer Specialist Crossover Law Enforcement to Police and Sheriff's Patrol Officers Correctional Officer Law Enforcement Training for **Special Operations Public Safety Telecommunications** Police, Fire, and Ambulance Public Safety Dispatcher Dispatchers Criminal Justice Technician Private Detectives and Law Enforcement Investigators Private Investigation Intern

Note: This is an example and not a complete list of all programs and occupations associated with this certification.

<sup>&</sup>lt;sup>1</sup>To match programs to occupations, we used a crosswalk managed by the Florida Department of Education and referred to as the "CIPxSOC Table."

## Certification Linkages to HSHW Occupations on the Statewide Demand Occupations List

**Summary** 

Most (90%) earned fundable industry certification types are linked to at least one statewide HSHW occupation; Auto Collision Repair and Refinishing certifications are linked to none

**90%** of the 112 earned fundable certification types are linked to at least one HSHW occupation on the Statewide Demand Occupations List



24% of all 268 occupations linked to certifications were HSHW occupations on the Statewide Demand Occupations List



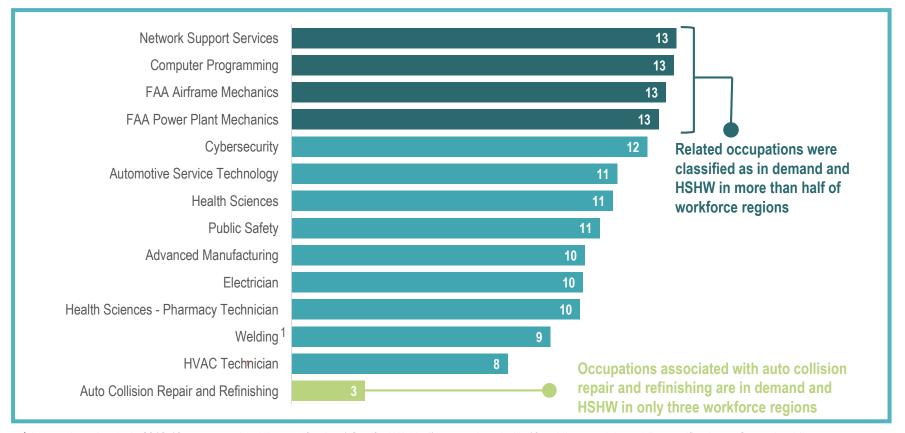
**None** of the 34 certifications in the Auto Collision Repair and Refinishing Occupation Area are linked to a statewide HSHW occupation



## Certification Linkages to HSHW Occupations on the Regional Demand Occupations Lists

**Workforce Regions** 

The demand and classification as HSHW for occupations associated with certifications varied across the state; in 11 of the 14 occupational funding areas, industry certifications were linked to HSHW occupations in 10 or more of the 24 workforce regions



<sup>&</sup>lt;sup>1</sup> As noted previously, in 2018-19 one general welding certification ("Certified Welder") was replaced with 10 welding specialty welding certifications. General welding certifications earned between 2013-14 and 2016-17 are included in the figures.

Source: OPPAGA analysis of data provided by the Florida Department of Education.

#### HSHW Occupations on the Statewide Demand Occupations List That Are Not Associated With Any Earned Fundable Certifications

Four HSHW occupations on the Statewide Demand Occupation List had no reported **Summary** fundable certifications associated with them<sup>1</sup> **Purchasing Agent Cost Estimator** Construction and Loan Officer **Building Inspector** 

<sup>&</sup>lt;sup>1</sup> To match programs to occupations, we used a crosswalk managed by the Florida Department of Education and referred to as the "CIPxSOC Table."

# **Employment and Earnings of Certification Earners**

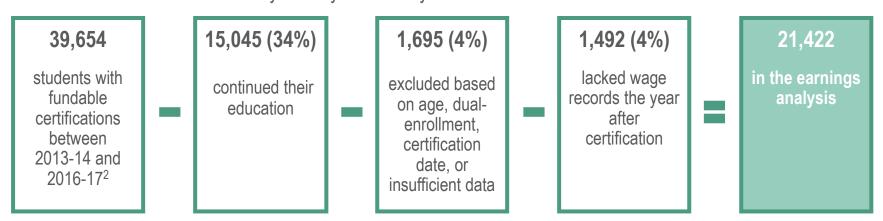
### **Earnings Analysis Sample and Method**

#### Methodology

We examined post-certification earnings for 21,422 students who completed programs or exited the college system with certifications between 2013-14 and 2016-17 and who

- ✓ Did not continue their education the following year;
- ✓ Did not earn a certification while under 18 or dual-enrolled:
- ✓ Had a record for at least one program or completion; and
- ✓ We could observe at least four earnings quarters post-certification.

When students earned more than one certification, we classified and examined student outcomes based on their highest-level funded certification in the most recent year they earned any certification.<sup>1</sup>



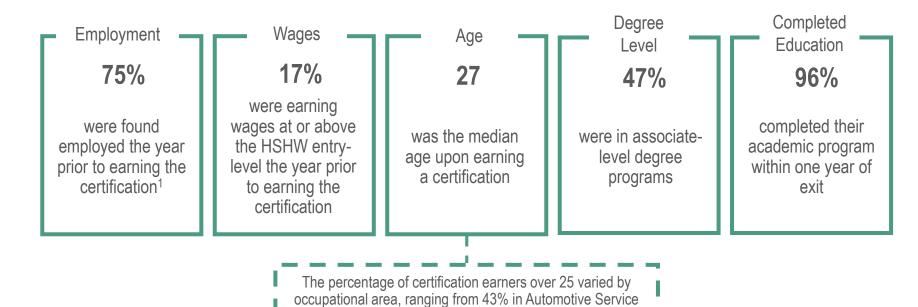
<sup>&</sup>lt;sup>1</sup> We counted earnings of the first four quarters after the student exited the Florida College System based on whichever was the last date: certification date; graduation date; or, in the case of students who did not complete a program, their last course end date.

<sup>&</sup>lt;sup>2</sup> As noted previously, we defined "earned fundable certification" as a certification earned from 2013-14 to 2016-17 that was or would have been eligible for incentive funding based on the most current (2018-19) incentive funding list. Programs associated with Certified Welder between 2013-14 and 2016-17 are included in the figures above.

### **Characteristics of Certification Recipients**

**Summary** 

75% of certification recipients were employed prior to receiving the certification; 17% were already earning at least entry-level HSHW earnings



Note: Our analysis was unable to identify the occupations of certification earners as this information is not available through the Florida Education and Training Placement Information Program (FETPIP). Therefore, while inferences can be made, earnings in the analysis may not be directly related to the actual certification that the recipient received.

Technology to 85% in Computer Programming

<sup>&</sup>lt;sup>1</sup> FETPIP includes wage data for individuals found employed in the Florida Unemployment Insurance System. In addition to those not in the labor force, individuals may be absent from FETPIP if they are employed outside of Florida or employed in jobs not covered by unemployment insurance.

### Certification Recipients' Earnings One Year After Certification

#### **Summary**

Among individuals employed before certification, one year after certification 63% of entry-level recipients earned HSHW wages, and 77% of mid-career recipients increased their earnings



**Entry-Level Earnings** 

Among certification earners who were not earning HSHW entry-level earnings before certification

- 98% were found employed the year after certification
- 63% of those employed were earning HSHW entry-level earnings<sup>1</sup>





Mid-Career Earnings

Among certification earners who were earning HSHW entry-level earnings before certification

- 99% were found employed the year after certification
- Average annual earnings increased from \$42,000 to \$49,000<sup>2</sup>
- 77% experienced earnings increases

n = 3,781

<sup>&</sup>lt;sup>1</sup> The entry-level HSHW earnings threshold was between \$13.07 (2012-13) and \$14.72 (2018-19) for the years we reviewed.

<sup>&</sup>lt;sup>2</sup> Post-wages are not adjusted for inflation.

### Earnings of Certification Recipients Who Completed Their Academic Programs Compared to Non-Completers

**Summary** 

Among all industry certification recipients, those who completed their academic program had higher average earnings than non-completers



Earnings of Academic Program Completers

Among students who earned a fundable certification and completed their academic program

- 94% were found employed the following year
- **69%** earned wages at or above the entry-level HSHW threshold
- \$17.56 was their median initial hourly earnings

n = 20,492



Earnings of Non-Completers

Among students who earned a fundable certification but did not complete their academic program

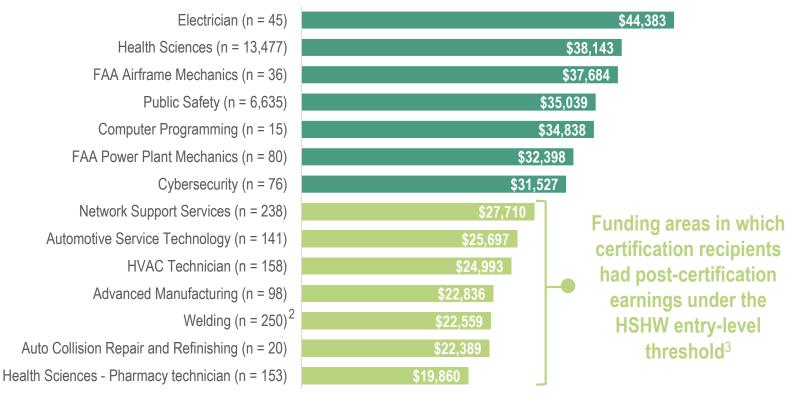
- 90% were found employed
- 59% earned wages at or above the entry-level HSHW threshold
- \$15.89 was their median initial hourly earnings

n = 930

## Median Earnings of Recipients One Year After Certification by Occupational Funding Area

**Summary** 

Median earnings of recipients one year after certification varied by occupational funding area; seven areas had median earnings under the HSHW entry-level threshold<sup>1</sup>



<sup>&</sup>lt;sup>1</sup> Average earnings are based on FETPIP data. We defined the entry-level HSHW threshold as the average threshold for all certification recipients in the funding area in the final sample during the four earnings quarters after exiting their programs. Wages are not adjusted for inflation.

<sup>&</sup>lt;sup>2</sup> As noted previously, in 2018-19 one general welding certification ("Certified Welder") was replaced with 10 welding specialty welding certifications. General welding certifications earned between 2013-14 and 2016-17 are included in the figures above.

<sup>&</sup>lt;sup>3</sup> The HSHW threshold ranged by funding area from \$28,288 to \$29,224.

### **Appendix**

Funding Area	Certification Title	Certifications Earned <sup>1</sup>
	Manufacturing Skill Standards Council Certified Production Technician	450
	National Institute for Metalworking Skills Machining Level I Computer Numerical	
	Control Milling: Programming Set Up & Operations	64
	Computer Numerical Control Production Specialist	18
	Quality Improvement Associate	15
	National Institute for Metalworking Skills Machining Level I Computer Numerical	
	Control Turning: Programming Set Up & Operations	11
Advance d Manufacturina	Certified Solidworks Professional - Academic	9
Advanced Manufacturing	National Institute for Metalworking Skills Machining Level II - Computer Numerical	
	Control Milling Skills II	4
	National Institute for Metalworking Skills Machining Level II - Computer Numerical	
	Control Turning Skills II	3
	National Institute for Metalworking Skills Machining Level II - Manual Milling Skills II	2
	Mastercam Associate Certification - Mill Design and Toolpaths	1
	Certified Control Systems Technician - Level 1	1
	National Institute for Metalworking Skills Manual Turning - Between Centers	1
	Total	579
	Automotive Service Excellence - Painting and Refinishing	20
Auto Callinian Dannin and Deficiality	Automotive Service Excellence - Non-structural Analysis and Damage Repair	15
Auto Collision Repair and Refinishing	Automotive Service Excellence - Structural Analysis and Damage Repair	3
	Total	38

Funding Area	Certification Title	Certifications Earned <sup>1</sup>
	Automotive Service Excellence - Brakes	236
	Automotive Service Excellence - Electrical/Electronic Systems	211
	Automotive Service Excellence - Suspension and Steering	142
	Automotive Service Excellence - Engine Repair	111
Automotive Service Technology	Automotive Service Excellence - Heating and Air Conditioning	110
	Automotive Service Excellence - Manual Drive Train and Axles	81
	Automotive Service Excellence - Engine Performance	57
	Automotive Service Excellence - Automatic Transmission/Transaxle	40
	Automotive Service Excellence - Advanced Engine Performance Specialist	10
	Total	998
	CompTIA Cloud+	14
Cloud Virtualization	VMware Certified Professional - vSphere	13
	Total	27
	Certified Internet Web JavaScript Specialist	79
Computer Programming	Oracle Certified Associate: Java Programmer	8
	Certified Internet Web Advanced HTML5 & CSS3 Specialist	7
	Certified Internet Web Design Specialist	6
	Total	100

Funding Area	Certification Title	Certifications Earned <sup>1</sup>
	CompTIA Security+	462
	Certified Ethical Hacker	11
	Cisco Certified Network Associate Security	9
Cybersecurity	CompTIA CSA+	4
	Systems Security Certified Practitioner	3
	Certified Information Systems Security Management Professional	1
	Total	490
	Journeyman Electrician	75
Cleatrician	Marine Electrical Certification	44
Electrician	National Center for Construction Education and Research Electrical - Level 4	
	(Postsecondary)	44
	Total	163
	Federal Aviation Administration Aviation Mechanic Technician - Airframe	165
Federal Aviation Administration Airframe	Federal Aviation Administration Aviation Maintenance Technician - General	101
Mechanics	Aircraft Electronics Technician	3
	Total	269
Federal Aviation Administration Power Plan	t Federal Aviation Administration Aviation Maintenance Technician - Powerplant	186
Mechanics		
	Total	186

Funding Area	Certification Title	Certifications Earned <sup>1</sup>
	National Licensed Registered Nurse	13,940
	Emergency Medical Technician	4,790
	Paramedic	2,755
	National Licensed Practical Nurse	1,440
	Registered Technologist	1,034
	Licensed Physical Therapist Assistant	773
	Licensed Dental Hygienist	712
	Certified Nursing Assistant	692
	Registered Respiratory Therapist	576
	Certified Respiratory Therapist	515
Health Sciences	Certified Dental Assistant	423
	Certified Surgical Technologist	378
	Registered Diagnostic Medical Sonographer	230
	Certified Medical Assistant	185
	Licensed Optician	157
	Registered Health Information Technician	153
	Registered Cardiovascular Invasive Specialist	138
	Registered Technologist (Nuclear Medicine)	121
	Certified Nuclear Medicine Technologist	102
	Registered Technologist (Radiation Therapy)	101
	Radiologic Technologist (Sonography)	93
	Registered Medical Assistant	91
	Certified Occupational Therapy Assistant	82

Funding Area	Certification Title	Certifications Earned <sup>1</sup>
	Certified Patient Care Technician	50
	Certified EKG Technician	40
	Certified Coding Associate	37
	Registered Cardiac Sonographer	30
	Certified Coding Specialist	29
	Computed Tomography	28
	Medical Laboratory Technician	24
	Certified Professional Coder	19
	Registered Technologist - Quality Management	18
	Medical Laboratory Technician	17
Llockh Coionaga (Continued)	Registered Vascular Specialist	13
Health Sciences (Continued)	Registered Diagnostic Cardiac Sonographer	11
	Medical Laboratory Technician	9
	Dietetic Technician, Registered	6
	Certified Clinical Medical Assistant	4
	Certified Prosthetic-Orthotic Technician	3
	Certified Biomedical Equipment Technician	2
	Registered Vascular Technologist	2
	Certified Healthcare Documentation Specialist	1
	Certified Coding Specialist - Physician-based	1
	Certified Healthcare Technology Specialist - Implementation Manager	1
	Certified Healthcare Technology Specialist - Practice Workflow & Information	
	Management Redesign Specialist	11
	Total	29,827

Funding Area	Certification Title	Certifications Earned <sup>1</sup>
Haalib Caianaaa Dharmaay Taabaisian	Pharmacy Technician	330
Health Sciences - Pharmacy Technician	Certified Pharmacy Technician	7
	Total	337
	Heating, Ventilation, and Air Conditioning Excellence Employment Ready - Air Conditioning	198
	National Center for Construction Education and Research Electrical Heating, Ventilation,	190
	and Air Conditioning - Level 4 (Postsecondary)	122
	Heating, Ventilation, and Air Conditioning Excellence Employment Ready - Heat Pump	112
	Heating, Ventilation, and Air Conditioning Excellence Employment Ready - Electrical	64
	Heating, Ventilation, and Air Conditioning Excellence Employment Ready - Light	<u> </u>
	Commercial Refrigeration	48
	Heating, Ventilation, and Air Conditioning Excellence Employment Ready - Gas Heat	38
	Heating, Ventilation, and Air Conditioning Excellence Employment Ready - Light	
	Commercial Air Conditioning	30
HVAC Technician	National Center for Construction Education and Research Electrical Heating, Ventilation, and Air Conditioning Excellence - Level 4	27
	Heating, Ventilation, and Air Conditioning Excellence Employment Ready - Electric Heat	22
	National Center for Construction Education and Research Electrical Heating, Ventilation,	
	and Air Conditioning - Level 3	21
	Air Conditioning Refrigeration Certification	18
	National Center for Construction Education and Research Electrical Heating, Ventilation,	
	and Air Conditioning - Level 2	18
	Air Conditioning Installation Specialization	17
	Air to Air Heat Pump Installation Technician	15
	Air to Air Heat Pump Service Technician	13
	Air Conditioning Service Technician	12
	Total	775

Funding Area	Certification Title	Certifications Earned <sup>1</sup>
	CompTIA A+	832
	CompTIA Network+	392
	Cisco Certified Network Associate	132
	CompTIA Project+	90
	Certified Internet Web Database Design Specialist	42
	Associate Certified Electronics Technician	21
	Cisco Certified Network Associate Routing and Switching	19
	CompTIA Linux+	18
	Microsoft Certified Solutions Associate - SQL Server 2012	11
	Microsoft Certified Solutions Associate - Windows Server 2012	10
Nativalis Compant Camilana	CompTIA CDIA+	7
Network Support Services	Cisco Certified Network Professional	4
	Microsoft Certified Solutions Expert - Server Infrastructure	4
	Cisco Certified Internetwork Expert Routing and Switching	3
	Cisco Certified Design Associate	2
	CompTIA Server+	2
	Information Storage and Management Associate	2
	Microsoft Certified Solutions Associate - Windows 7	2
	Microsoft Certified Solutions Associate - Windows Server 2008	2
	Microsoft Certified Solutions Expert - Desktop Infrastructure	2
	Certified Internet Web E-Commerce Specialist	2
	Microsoft Certified Solutions Associate - Windows 8	1
	Total	1,600

Funding Area	Certification Title	Certifications Earned <sup>1</sup>
	Law Enforcement Officer	6,926
	Fire Fighter II	2,841
Dublic cofety	Correctional Officer	2,604
Public safety	Correctional Probation Officer	452
	911 Public Safety Telecommunicator	5
	Fire Safety Inspector I	1
	Total	12,829
	Certified Welder	518
	National Center for Construction Education and Research Welding - Level 3	
	(Postsecondary)	193
Welding	National Center for Construction Education and Research Welder - Level 1	80
	National Center for Construction Education and Research Welding - Level 2 (Secondary)	47
	National Center for Construction Education and Research Welder - Level 3	9
	Total	847

<sup>&</sup>lt;sup>1</sup>Certification counts are based on the certification funding list applicable during the year the certification was initially reported to the Florida Department of Education (2013-14 to 2016-17).

### **Additional Information**

OPPAGA provides performance and accountability information about Florida government in several ways.

- Reports deliver program evaluation and policy analysis to assist the Legislature in overseeing government operations, developing policy choices, and making Florida government more efficient and effective.
- Government Program Summaries (GPS), an online encyclopedia, <a href="www.oppaga.state.fl.us/government">www.oppaga.state.fl.us/government</a>, provides descriptive, evaluative, and performance information on more than 200 Florida state government programs.
- <u>PolicyNotes</u>, an electronic newsletter, delivers brief announcements of research reports, conferences, and other resources of interest for Florida's policy research and program evaluation community.

Visit OPPAGA's website at <a href="https://www.oppaga.state.fl.us">www.oppaga.state.fl.us</a>.

Project supervised by Mark Baird (850/717-0527)
Project conducted by Anastasia Prokos, Robert Cox, and Stuart LaRosa.
David D. Summers (850/717-0555), Staff Director, Education Policy Area
R. Philip Twogood, Coordinator

Copies of this report in print or alternate accessible format may be obtained by telephone (850/488-0021), by FAX (850/487-3804), in person, or by mail (OPPAGA Report Production, Claude Pepper Building, Room 312, 111 W. Madison St., Tallahassee, FL 32399-1475).

#### FLORIDA LEGISLATURE OFFICE OF PROGRAM POLICY ANALYSIS AND GOVERNMENT ACCOUNTABILITY