

INTRODUCTION

A key part of PVCC's mission is the promotion of student success, including employment that a student obtains upon completion of a Workforce Service (WFS) course. This report provides details on the impact that PVCC had on students obtaining employment. This report has three guiding questions:

1. Are PVCC WFS students employed after completing WFS coursework?
2. What is the average salary of completers?
3. Are those eligible for licensure and/or certification receiving licensure and/or certification?

METHODOLOGY

This report focuses on the employability of WFS students at PVCC for the 2015-16 academic year. To provide adequate time for completers to obtain employment, PVCC uses the Bureau of Labor and Statistics standard of six months to obtain employment. A **professional credential** is defined as registered apprenticeship certificates, occupational licenses (typically awarded by state government agencies), and certifications from industry or professional associations. A **credential** is defined as an educational diploma, certificate, and degree; or a registered apprenticeship certification; occupational licenses; personnel certifications from industry or professional associations; and other skill certificates for specific skills sets or competencies within one or more industries or occupations. These definitions are supported by the U.S. Department of Labor Employment and Training Administration.

A **completer** is defined as a student who has successfully passed a WFS course. A **credentialed completer** is defined as a student who has successfully passed a WFS course with a grade of "S" or "P" and earned the related professional credential.

HIGHLIGHTS

- 92% of PVCC credentialed WFS completers have a job in six months
- Average full-time salary of a WFS student who earned a credential was \$54,000 per year
- 67% of licensure and/or eligible certification students have successfully become licensed or obtained certification in their field of study.

COURSE COMPLETION RESULTS

For a student to become eligible to obtain an industry credential examination, the student must successfully pass their WFS coursework. The table below details students who were enrolled in a credentialing area's coursework and those who passed. Pass rates are not shown for credential areas with fewer than three students. The total number of WFS students was 643. Of those who enrolled in a WFS credentialing course, 621 (97%) successfully completed the course.

Credential Area	2015-2016 Headcount		Course Success	
	n	n	n	%
Automotive Service Excellence (ASE) - T8 Preventive Inspection Maintenance	5	5	5	100%
Basic Life Support for Healthcare Provider	9	8	8	89%
Certified Administrative Professional (CAP)	4	*	2	50%
Certified Custodial Technician	6	6	6	100%
Certified Nurse Aide (CNA)	17	16	16	94%
Certified Professional Coder (CPC)	*	*	*	100%
Certified Professional Food Manager (CPFM)	15	14	14	93%
Cisco Certified Network Associate (CCNA)	*	*	0	0%
Clinical Medical Assistant	10	7	7	70%
Commercial Driver's License (CDL)	42	41	41	98%
CompTIA	*	*	2	50%
Contractor's License	41	38	38	93%
Core - Introductory Craft Skills	16	16	16	100%
Customer Service and Sales Certification	9	9	9	100%
Dealer-Operator License	26	26	26	100%
Electrical	139	138	138	99%
Gas Fitter Tradesman License Renewal	17	17	17	100%
General Certificate in Brewing	15	15	15	100%
HeartSaver First Aid	86	85	85	99%
HVAC Tradesman License Renewal	70	69	69	99%
Personal Trainer Certification	*	*	*	100%
Pharmacy Technician	*	*	1	33%
Phlebotomy Technician	33	33	33	100%
Plumbing Tradesman License Renewal	58	57	57	98%
Project Management Professional (PMP)	*	*	0	0%
Scrum Master Certified	*	*	*	100%
ServSafe Food Handler	11	10	10	91%
Six Sigma	*	*	*	100%
Two-Stroke Engine Certification	40	39	39	98%
Welding	7	7	7	100%
Total Unduplicated Across Credential Areas	643	621	621	97%

*Areas with 3 or less students are not shown

CREDENTIALS

As stated in the PVCC mission “workforce programs prepare students for employment or promotion in a career and promote a skilled regional workforce by meeting the training and educational needs of employers”. PVCC explored those students who enrolled in WFS programs that led to licensure in the state of **Virginia** or a credential from the field of study’s national registry. Students who successfully passed the WFS course (n=621) were eligible to earn a credential. Students were excluded if they did not earn a credential and were over 65 years old, under 18 years old, deceased, or enrolled in higher education (n=32), the remaining 589 were eligible for a credential. Of the 589 course completers, 395 (67%) completed their licensing examinations or certifications. Many of these graduates received multiple credentials, the average number of credentials per credentialed student was 1.42.

Credential Area	Credentialed		Number Credentials Earned	
	n	%		
Basic Life Support for Healthcare Provider	8	100%	17	2.13
Certified Custodial Technician	6	100%	6	1.00
Certified Nurse Aide (CNA)	12	80%	12	1.00
Clinical Medical Assistant	5	83%	12	2.40
Commercial Driver's License (CDL)	28	68%	29	1.04
Contractor's License	4	12%	5	1.25
Dealer-Operator License	21	81%	21	1.00
Electrical	90	67%	157	1.74
Gas Fitter Tradesman License Renewal	17	100%	56	3.29
HeartSaver First Aid	83	99%	96	1.16
HVAC Tradesman License Renewal	69	100%	119	1.72
Pharmacy Technician	*	100%	*	*
Phlebotomy Technician	24	86%	37	1.54
Plumbing Tradesman License Renewal	54	98%	120	2.22
Scrum Master Certified	*	100%	*	*
ServSafe Food Handler	6	60%	6	1.00
Two-Stroke Engine Certification	4	13%	7	1.75
Welding	4	57%	5	1.25
Total Unduplicated Across Credential Areas	395	67%	560	1.42

*Areas with 3 or less students are not shown

Note: Includes 25 students over age 65 who earned a credential and 34 students who earned a credential and are enrolled in higher education.

EMPLOYMENT RESULTS

The results presented provide the employment data from the three employment databases currently available to PVCC, these include the state, national, and federal level databases. If a WFS course completer is listed in the state database, as well as the national database, that individual is only counted once. Of the students who earned a credential (n=395), 225 (57%) had data available in the employment database. Availability of data in the employment database is dependent on several variables, details for the information requirements to obtain employment data can be found in Appendix A. Of those WFS credentialed completers with available employment data, 207 (92%) were employed within six months of completing coursework. Students were excluded from this study if they were unemployed and under 18, over 65 years old, deceased or enrolled in higher education.

For institutional effectiveness, PVCC has a target of having 90% of students employed six months after completing the WFS credentialing course. Credentialing areas that fall below this goal are highlighted in red. Data is not displayed for credentialing areas with 3 or fewer credentialed completers.

Credentialing Area	Credentialed and in Employment Database		Employed in Field
	n	n	%
Basic Life Support for Healthcare Provider	8	8	100%
Certified Custodial Technician	*	*	100%
Certified Nurse Aide (CNA)	8	7	88%
Clinical Medical Assistant	4	*	25%
Commercial Driver's License (CDL)	12	11	92%
Contractor's License	4	*	50%
Dealer-Operator License	12	5	42%
Electrical	53	52	98%
Gas Fitter Tradesman License Renewal	15	12	80%
HeartSaver First Aid	25	24	96%
HVAC Tradesman License Renewal	53	49	92%
Phlebotomy Technician	20	19	95%
Plumbing Tradesman License Renewal	36	33	92%
ServSafe Food Handler	*	*	100%
Two-Stroke Engine Certification	*	*	100%
Welding	*	*	100%
Total Unduplicated Across Credential Areas	225	207	92%

*Areas with 3 or less students are not shown

Note: Includes 9 students over 65 years old who were credentialed and employed and 25 students who were credentialed, employed, and enrolled in higher education.

AVERAGE SALARY

Annual salary data is also obtained from the three employment databases currently available to PVCC, these include the state, national, and federal level databases. The average salary study assists program coordinators to determine if the program is a cost benefit to the student. Table 3 depicts average full-time salary and low to high range for credential completers who are employed full-time. The average full-time salary of a WFS student who earned a credential was \$54,000 per year with a low to high range of \$22-110,000 per year. Credential areas with three or fewer reported full-time salaries were not reported.

Table 3: Average full-time salaries and full-time salary range by the credential area of credential completers who were employed within 6 months

Credentialing Area	Number of Students Employed in Field	Average of Full-Time Salary	Low to High Salary
Basic Life Support for Healthcare Provider	4	\$36,000	\$26-45,000
Certified Custodial Technician	*	*	*
Certified Nurse Aide (CNA)	*	*	*
Commercial Driver's License (CDL)	7	\$35,000	\$29-50,000
Contractor's License**	*	*	*
Dealer-Operator License**	4	\$50,000	\$31-74,000
Electrical	51	\$60,000	\$24-110,000
Gas Fitter Tradesman License Renewal	11	\$67,000	\$52-92,000
HeartSaver First Aid	22	\$47,000	\$23-77,000
HVAC Tradesman License Renewal	46	\$62,000	\$42-89,000
Phlebotomy Technician	11	\$33,000	\$22-62,000
Plumbing Tradesman License Renewal	33	\$64,000	\$37-93,000
ServSafe Food Handler	*	*	*
Two-Stroke Engine Certification	*	*	*
Welding	*	*	*
Total Unduplicated Across Credential Areas	175	\$54,000	\$22-110,000

*Areas with 3 or less students are not shown

** Farm workers and self-employed are excluded from the employment database

Note: Full time salary is classified as anything above \$20,000 per the national standard (BLS, 2016).

FINDINGS

This study sought to answer three questions. The first question asked are PVCC WFS course completers obtaining jobs? The results of this study show that 92% PVCC WFS credential completers are obtaining jobs within six months. Additionally, WFS course completers who earned a credential and were employed full-time made an average of \$54,000 per year.

The second question posed was, are those eligible for licensure and/or certification receiving licensure and/or certification? In the areas of licensure and credentials, 67% (n=395) of the course completers eligible for credentialing have completed their licensing examinations or certifications. Many of these graduates received multiple credentials with an average of 1.41 credentials per credentialed student.

APPENDIX A: EMPLOYMENT DATABASES

This study used three databases federal, state, and a multi-state database.

Federal Database

The federal database is collected and maintained by the University of Maryland and is provided four times a year on six-month stagger in reporting. The federal department, agency names, military branches, and addresses are not provided. Employee salaries are provided, and the NAICS code for employment is used. Employment data on federal and military employees is provided at the unit level.

Multi-state Database

The multi-state database is collected and maintained by the Bureau of Labor and Statistics and provides data to PVCC four times a year on a six-month stagger in reporting. Federal employees, farmers, incarcerated, and self-employed are excluded. Hawaii and Alaska do not report to the multi-state database.

Virginia Database

All states are required to collect and maintain data on employees from every non-federal wage-paying employer, within their boundaries, covered by that state's unemployment compensation laws. In Virginia, this requirement is satisfied by the Virginia Employment Commission (VEC) collecting and maintaining wage records used to determine employment and earnings of individuals covered by the Virginia unemployment compensation laws. These records populate the VEC Unemployment Insurance (UI) database. Employers submit UI quarterly reports of employee earnings to the VEC. For each employee, an employer reports social security number (SSN) and total earnings received during the quarter. Additionally, employer information is also provided, such as the unique employer federal identification number, business name, mailing address, and industry affiliation code.

Since each state maintains its own UI database, based on reports from employers within its state boundaries, the VEC UI database consists primarily of data on individuals employed in the state of Virginia. Data on individuals employed in neighboring states (MD, NJ, OH, PA, WV, and DC) are also available from the VEC as part of a cooperative agreement with these states. These data, however, are limited to the extent that they include no information about the employers. In addition, the employer mailing addresses for individuals employed in Virginia may or may not be in Virginia, if the employer also operates in other states or countries (e.g., Canada).

Currently, the VCCS provides the VEC with a file containing the SSN for every student who has enrolled in one of the 23 Virginia Community Colleges within the previous five years. The VEC then cross-references this file of SSNs with the VEC UI database and the databases from the neighboring states. All records with matching SSNs from the previous 20 quarters are selected and provided to the VCCS, where the data are mapped to SAS datasets. (Data record format Information is provided below.) This process repeats four times per year resulting in quarterly updates to the VEC UI data.

Advantages of Databases

The databases offers several advantages over other sources of employment and wage information. For example, the data is collected and maintained on most individuals employed throughout the United States (HI and AK excluded, federal and military included)). Since the data is linked to SSN, an individual's employment can be tracked despite changes in name, address, and employment anywhere as indicated above. The databases potentially make available longitudinal data on most students once they leave school, regardless of whether or not they graduated. The availability of the data requires no school staff or resources to collect or maintain.

Limitations of Data

Although the database has its advantages, it also has its limitations which must be considered when using the data.

- Farm workers, incarcerated, and self-employed are excluded
- Only employee quarterly wages and industry of employment are reported, not other employee data that might be of interest such as date of hire, occupation, hourly wages, or time worked.
- The Industry Codes categorize the business of the employer, but does not provide any indication of the role of the employee in the business.
- The employer addresses do not necessarily provide the Virginia location of an individual's employment, but rather a mailing address for the employer which could be in another state or even another country.
- The data are often not available for at least six months after initial collection.
- Students who do not provide their SSN cannot be linked to the data.