State Council of Higher Education for Virginia



New Economy Workforce Credential Grant Annual Report 2020



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PURPOSE OF THIS REPORT

During the 2016 session, the General Assembly passed HB 66 and SB 576, which established the New Economy Workforce Grant Program. This grant program, the first of its kind in the nation, provides a pay-for-performance model for funding noncredit workforce training that leads to a credential in a high-demand field. The program also includes requirements for students to complete the program in order to avoid paying additional costs. A summary of the major components of the program is included below. Additional information is available through the Code of Virginia.

The purpose of this report is to provide an annual review of FY 2020 activities of the New Economy Workforce Credential Grant to the General Assembly and the Virginia Board for Workforce Development as outlined in § 23.1-627.7 of the Code of Virginia. This year's report was delayed due to data reporting issues related to the COVID-19 pandemic.

Summary of Findings for FY 2020

In FY 2020, the Virginia Community College System and the Southern Virginia Higher Education Center offered training aligned to high-demand occupations and fields as identified by the Virginia Board for Workforce Development. Observations from FY 2020 show that:

- Institutions offered training in nine high-demand occupational fields.
- Collectively, these institutions reported 7,484 enrollments, the most since the inception of the program and an 8% increase from 2019. Some students enrolled in multiple programs.
 - An additional 1,903 students started their program but were unable to complete their training or credential due to the COVID-19 pandemic. These students were removed from the analysis.
- Of the 7,484 enrollments included in this report, 6,879 (92%) completed training. Among program completers, 4,906 (71%) went on to earn the credential. Some students will go on to earn a credential beyond the FY 2020 period and thus result in a higher credential rate.
 - Black or African American students are eight points less likely to earn their program's credential compared to white students. Hispanic students are seven points less likely.
- The average student cost of the program was \$677. The average state cost per credential attained was \$1,627.

- More than one-in-five enrollments were in Highway Construction Programs.
 Commercial Drivers' license had the second highest enrollments accounting for nearly 16% of the program.
- Most students who earned their credential saw an increase in earnings. Median annual wages increased approximately \$7,000 or 31%.
 - o Students in the bottom quartile (with wages less than \$8,200 before completing their credential) saw the highest median wage increase.

Program Purpose

The Governor and the General Assembly outlined three primary purposes of the program based on the requirements outlined in § 23.1-627.2. of the Code of Virginia:

The New Economy Workforce Credential Grant is established for the purpose of (i) creating and sustaining a demand-driven supply of credentialed workers for high-demand occupations in the Commonwealth by addressing and closing the gap between the skills needed by workers in the Commonwealth and the skills of the available workforce in the Commonwealth; (ii) expanding the affordability of workforce training and credentialing; and (iii) increasing the interest of current and future Virginia workers in technician, technologist, and trade-level positions to fill the available and emerging jobs in the Commonwealth that require less than a bachelor's degree but more than a high school diploma.

The program also defines two key elements:

- <u>High-demand field:</u> a "discipline or field in which there is a shortage of skilled workers to fill current job vacancies or anticipated additional job openings."
- <u>Noncredit workforce credential:</u> a "competency-based, industry-recognized, portable, and third-party-validated certification or occupational license in a high-demand field."

Program Requirements and Pay-for-Performance Model

The program focuses on a pay-for-performance model that provides payments for costs to institutions only when an individual completes training and when an individual attains a credential.

The following is a brief overview of the program requirements.

 Eligible institutions and type of training: Eligible institutions are community colleges, higher education centers and Richard Bland College. The type of training these institutions are required to offer is noncredit training.



State Funding:

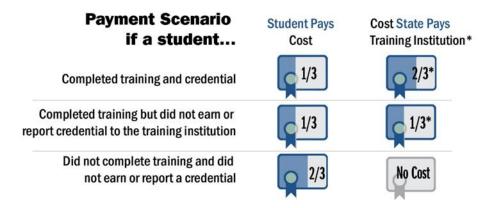
| Fiscal Year | Amount |
|--------------------|----------------|
| 2017 | \$5 million |
| 2018 | \$7.5 million |
| 2019 | \$9.5 million |
| 2020 | \$13.5 million |
| 2021 | \$13.5 million |

- Alignment to high-demand fields: Training programs should align with the highdemand fields set by the Virginia Board for Workforce Development. Boards of eligible institutions are required to approve the aligned training programs.
- Payments and cost of the program: The student, the institution and the state, as described below, share the program's cost. In addition, the table below illustrates the pay-forperformance model.
 - Student responsibility: Students are required to pay one-third of the total cost of the program upon enrollment. Students may use third-party funds, such as noncredit financial aid, training vouchers or employer payment to cover this cost. If the student does not complete the program, then the student is required to pay an additional one-third of the cost of the program.
 - State: If the student completes the training, then the state provides one-third of the cost of the program, up to \$1,500, to the institution. If the student earns and reports a credential, then the state pays an additional one-third of the cost of the program, up to an additional \$1,500.
 - <u>Institution</u>: If a student does not report a credential earned, then the institution does not receive state funding for one-third of the cost of the program.
- Reporting and payments: Eligible institutions must provide student-level data to SCHEV to receive funding.
- Administration: SCHEV is responsible for administering the program, conducting periodic assessments of the program, collecting student data and making final decisions on disputes between eligible institutions and grant recipients.



Figure 1: Program Pay-for-Performance Model

The student, institution and the state share the Workforce Credential Grant costs based on student credential attainment.



• *Maximum contribution is \$3,000 from the state.



HIGH-DEMAND FIELD AND TRAINING ALIGNMENT PROCESS

Identification of High-Demand Fields

The Code requires that the Virginia Board for Workforce Development identify high-demand occupational fields. In 2017, the Virginia Board for Workforce Development developed a methodology to identify high-demand programs, using the following criteria:

- The relevance of the occupational group to the state's economic development strategy as outlined in Governor McAuliffe's *New Virginia Economy* strategy document.
- Annual statewide job openings based on Virginia Employment Commission/Bureau of Labor Statistics' 10-year employment projections. Jobs were considered if they had more than 50 annual openings.
- The degree to which the occupations require advanced skills as measured by entry-level education.

The board also allows a petition process for regions to request adding an occupational field to the list if the region can demonstrate sufficient demand. A complete list of training programs offered is available on the *Virginia Career Works website*.

Based on a review of the occupations meeting the criteria above, the Virginia Board for Workforce Development identified high-demand occupations in 11 fields.

Training Programs Offered by Eligible Institutions

Once the Virginia Board for Workforce Development identifies the high-demand fields, the eligible institutions develop or align existing noncredit training programs to meet the new credential criteria, and their boards approve the programs. To date, the Virginia Community College System and the Southern Virginia Higher Education Center are the only eligible training institutions offering programs in the high-demand fields.

The boards of the institutions submit their approved lists to the Virginia Board for Workforce Development. A full list of high-demand occupations and aligned training programs offered by eligible training institutions is maintained and updated on the Career Works website.

The following table is a sample list by occupational field of the types of training and credentials students could attain upon completion. A full list of credentials by type is in the Appendix.





Table 1: Sample Workforce Training and Certifications Offered by Occupational Field

| Occupational Field (Occupation Number) | Sample Workforce Training/Certification Offered |
|--|--|
| Computer and Mathematical (15) | CompTIA A+, Network+ and Server+ Computer Entry Level (CISCO Networking Technician and Associate, CompTIA IT Fundamentals); Information Systems Security Project Management Professional |
| Construction and Extraction (47) | Construction (Project Management, Carpentry, Contractor's License), Plumbing and Electrical, Highway Construction, Welding |
| Education, Training and Library (25) | Career Switcher/Teaching License |
| Healthcare Practitioners and Technical (29) | Emergency Medical, Pharmacy, EKG Technician |
| Healthcare Support (31) | Certified Nurse Aide, Medical Assistant, Medication Aide, Phlebotomy Technician |
| Installation, Maintenance and Repair (49) | Electrical and Electrical Systems, Engine Repair, HVAC, Power Line Worker |
| Office and Administrative Support (43) | Billing and Coding Specialist, Customer Services and Sales, Medical Administrative Assistant, Professional Coder, Society for Human Resource Management Certified Professional |
| Production (51) | Backflow Prevention, Electronics Assembly (JSTD-001 Certification), Machine Tool Operations, Manufacturing Technician 1 (MT1), Manufacturing Entry Level (specialist and production technician), Mechatronics, Six Sigma, Millwright (industrial machine installation, maintenance, troubleshooting and repair), Welding (flux, gas and general) |
| Transportation and Material Moving (53) | Commercial Driver's License, Logistics Associate, Logistics Technician, Remote Pilot Airman Certification |



ENROLLMENT, TRAINING AND CREDENTIAL COMPLETIONS AND COSTS

The following section provides data for FY 2020 by occupational field, credential type and institution. FY 2020 data are based on all students completing a training course between July 1, 2019, and June 30, 2020. Eligible institutions are allowed up to 180 days after the completion of training to obtain verification that a student earned a credential. Training institutions may verify this information either through receiving information from a student or through a record match with the entity issuing the credential.

Training Offered in Nine High-Demand Occupational Fields

Construction, production, healthcare support and transportation had the highest number of enrollments, accounting for three-quarters of the program enrollments. In FY 2020, 7,484 individuals were enrolled in training and 4,906 attained a credential. The following table summarizes enrollments, completions, reported credentials, average costs to students, total payments by the state and average costs to the state per credential attained, by occupational field.

Table 2: FY 2020 Data on Enrollment, Training Completion and Reported Credentials by Occupational Field

| • | • | • | , | • | | |
|---|----------|-----------------------|--------------------------------------|-----------------------------|--|---------|
| Occupational Field | Enrolled | Completed Training | Reported a Credential Attained | Average Cost to Student* | Total State Payments for Training and Credential Completion* | _ |
| Computer and Mathematical | 542 | 498 | 243 | \$723 | \$564,940 | \$2,325 |
| Construction and Extraction | 2,206 | 2,101 | 1,582 | \$211 | \$813,851 | \$514 |
| Education, Training and Library | 30 | 21 | 23 | \$1,330 | \$58,520 | \$2,544 |
| Healthcare Practitioners and Technical | 256 | 216 | 85 | \$467 | \$132,416 | \$1,558 |
| Healthcare Support | 1,061 | 947 | 701 | \$830 | \$1,403,863 | \$2,003 |
| Installation, Maintenance and Repair | 714 | 666 | 556 | \$825 | \$1,037,644 | \$1,866 |
| Office and Administrative Support | 261 | 217 | 102 | \$784 | \$256,986 | \$2,519 |
| Production | 973 | 913 | 656 | \$583 | \$907,078 | \$1,383 |
| Transportation and Material Moving | 1,441 | 1,300 | 958 | \$1,256 | \$2,804,980 | \$2,928 |
| All | 7,484 | 6,879 | 4,906 | \$677 | \$7,980,278 | \$1,627 |

^{*}Average costs per student are based on the charges of 1/3 of the cost of the program if the student completes training.

Total state payments do not equal the allocation for FY 2020 of \$13.5 million due to how funds are obligated when a student enrolls. Payments are made at the time the training or credential completion and submitted to SCHEV.





The Average Student Cost of the Program was \$677. The Average State Cost per Credential Attained was \$1,627.

As shown in the table above, the average cost of the program to a student (reflecting 1/3 of the cost) was \$677. SCHEV provided reimbursements to institutions through state general fund in the amount of \$7.98 million for training completions and credentials. This figure is lower than the general fund appropriation for FY 2020 due to the pay-for-performance model where funds are obligated when a student enrolls, but are paid when an institution submits reimbursement upon completion of training and earning of a credential.

Based on the attainment data and the total payments through state general fund, the average state payment per credential attained in FY 2020 was \$1,627 (total payments/credentials attained).

Top Training Programs and Alignment to Annual Job Openings

While many certifications are offered, nearly three-quarters of students enrolled in the top 10 programs. Of the more than 50 programs offered, four programs accounted for nearly half of enrollments: Highway Construction, Commercial Drivers' License, Medical Assistant and Certified Nurse Aid.

In comparing enrollments in these programs to the annual job openings provided by the Virginia Employment Commission (VEC), the certifications appear to address but not exceed an annual need. For example, VEC projects annual openings for truck drivers to be about 5,819. In FY 2020, about 1,051 individuals enrolled in the credential program to attain a commercial driver's license. The difference between the annual openings and enrollments does not necessarily indicate a shortage, as training programs offered by private providers are not included in this analysis. At the same time, not all students go on to earn their credential and may not pursue the exact occupation aligned with their program.

This analysis also de-duplicates individual records, so that one student pursuing multiple road construction certifications, for example, is not counted twice, as that individual would theoretically take up a single job opening.





Table 3: Top 10 Credentials and Annual Openings by Related Occupational Field FY 2020

| | Annual Job | | Individuals** Enrolled |
|--|--------------------|----------------------------------|---------------------------|
| Occupation | Openings by Field* | Program | FY 2020 |
| Heavy and Tractor-Trailer Truck Drivers | 5,819 | Commercial Driver's License A | 1,051 |
| Highway Maintenance Workers + Paving, Surfacing, and Tamping Equipment Operators | 751 | Highway Construction | 621 |
| Medical Assistants | 2,122 | Medical Assistant | 431 |
| Nursing Assistants | 5,484 | Certified Nurse Aide (CNA) | 307 |
| Welders, Cutters, Solderers, and Brazers | 1,080 | Welding | 306 |
| Carpenters | 2,941 | Core - Introductory Craft Skills | 250 |
| Phlebotomists | 566 | Phlebotomy Technician | 193 |
| Pharmacy Technicians | 907 | Pharmacy Technician | 159 |
| Information Security Analysts | 1,931 | CompTIA A+ | 141 |
| Logisticians | 871 | Logistics Associate | 113 |

^{*}Review based on Virginia Employment Commission's long-term 2018-2028 projections.

https://virginiaworks.com/occupational-projections?page80257=1&size80257=12&page79862=1&size79862=12&page81630=1&size81630=12

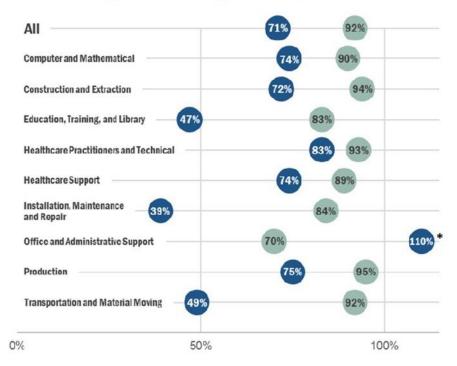
Differences may not represent a shortage as other individuals may complete certification through non-WCG programs.

Training Completion Rates Averaged 92% and Credential Completion Rates Averaged 71%

While completion rates for training vary by field and credential type, the average completion rate for the last four years remains relatively stable. About 92% of enrolled individuals complete their training. Of those who complete their training, about 71% earn a credential. Some credential rates, such as IT certification, are much lower. A full list of completion rates by credential type is in the Appendix.



Figure 2
In FY2020, on average 92% of enrolled individuals complete their training.
Of those who complete their training, about 71% earn a credential.



^{*30} students have enrolled in the teaching license programs. 21 completed the coursework, but 23 successfully earned a teaching license, thus producing a credential completion rate over 100%.

Participation and Completion Rates by Institution

The number of students enrolling across training institutions varies. The table below provides enrollments and completions by institution. More than half (53%) of enrollments in FY 2020 were at institutions in rural areas of the state. The remaining enrollments occurred at urban institutions, including Germanna, Northern Virginia, Tidewater and Reynolds/Tyler community colleges.

Table 4: FY 2020 Enrollment, Training Completion and Reported Credentials by Eligible Training Institution

| Training Institution | Enrolled | Completed Training | Reported a Credential Attained |
|----------------------|----------|--------------------|-----------------------------------|
| Blue Ridge | 339 | 310 | 236 |
| Central Virginia CC | 156 | 131 | 90 |
| Dabney Lancaster CC | 113 | 91 | 72 |
| Danville CC | 49 | 46 | 30 |



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| Total | 7,484 | 6,879 | 4,906 |
|------------------------------------|-------|-------|-------|
| Wytheville CC | 222 | 216 | 161 |
| Virginia Western CC | 221 | 200 | 166 |
| Virginia Highlands CC | 151 | 123 | 80 |
| Tidewater CC | 326 | 304 | 262 |
| Thomas Nelson CC | 450 | 411 | 229 |
| Southwest Virginia CC | 133 | 125 | 96 |
| Southside Virginia CC | 336 | 321 | 236 |
| Southern Virginia Higher Ed Center | 92 | 75 | 54 |
| Rappahannock CC | 203 | 198 | 102 |
| Piedmont CC | 339 | 308 | 174 |
| Paul D. Camp CC | 206 | 174 | 132 |
| Patrick Henry CC | 79 | 71 | 56 |
| Northern Virginia CC | 461 | 442 | 329 |
| New River CC | 91 | 87 | 68 |
| Mountain Empire CC | 121 | 111 | 98 |
| Lord Fairfax CC | 599 | 546 | 474 |
| John Tyler/Reynolds CC (CCWA) | 987 | 888 | 602 |
| Germanna CC | 1,739 | 1,641 | 1,133 |
| Eastern Shore CC | 71 | 60 | 26 |

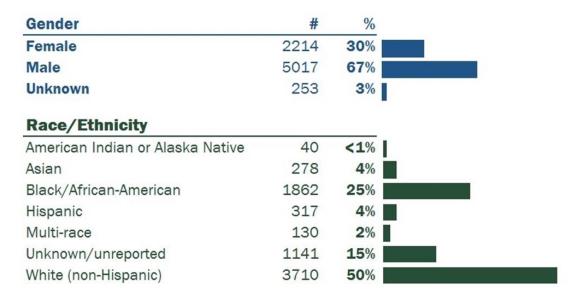


STUDENT DEMOGRAPHICS

Enrollment

The Workforce Credential Grant program tends to serve a nontraditional, older adult student whose average age is 35. Only 25% of students are 24 years old or younger. Roughly two-thirds of students are male, most likely because some of the largest enrollments occur in fields that are frequently majority male. For example, some of the largest enrollments are in commercial truck driving, welding, highway construction and machining.

Figure 3: Student Demographics by Sex and Race/Ethnicity, FY 2020



Success

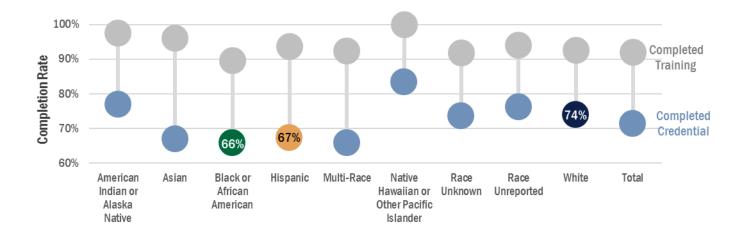
More than 1,000 enrollments, or 15% of enrollments overall, were designated as either race unknown or unreported. Other groups, such as American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander have relatively small cell sizes. This complicates efforts to effectively compare success rates by race and ethnicity. But using the data as reported, credential completion varies by race and ethnicity. (Training completion rates do not vary significantly.) Black or African American students are eight points less likely to earn their program's credential compared to white students. Hispanic students are seven points less likely.





Figure 4

In FY 2020, Black or African American students are eight points less likely and Hispanic students are seven points less likely to earn their program's credential compared to white students.





EARNINGS OUTCOMES

Methodology

When the General Assembly established the program in 2016, an important component was to align training to high-demand fields where there was an unmet need for workers. Code also requires SCHEV to report "information on the wages, including average wage and other relevant information, of students who have completed noncredit workforce training programs by credential name and relevant industry sectors." To better evaluate the impact of the program on an individual's job prospects, it is also important to measure wages before completing the program, as well as after.

Wages were matched through the <u>Virginia Longitudinal Data System</u> with Virginia Employment Commission (VEC) wage records. While a valuable and unique source of post-program wages, these records still suffer from a few flaws. Some people are exempt from reporting, such as individuals who are self-employed, work for the federal government or those who meet other exemption qualifications. Wages also are collected at a quarterly basis, without any indication of the hours worked. This makes it difficult to know whether an individuals' quarterly wage was based on full-time or part-time work. VEC data also does not collect information on a worker's specific occupation, so we do not know if these individuals are working in the jobs for which they are trained. Matching individual records from their training to their incomes also takes time, resulting in wage outcomes that are not as up to date as information about the program itself.

To accurately assess programs' impact on wages, SCHEV staff only compared students who had at least four quarters of wages before and four quarters of wage records after completing the program. SCHEV staff summed those four quarters to serve as a proxy for annual income, despite the fact that those individuals might be earning additional income not counted in that quarterly wage, or that they could be choosing to work part-time.

To expand the number of students in the analysis, SCHEV staff included students who completed their programs in 2017 and 2018. The most recent wage data currently available is FY 2019. SCHEV staff then analyzed earnings of the remaining 7,273 students with wage records before and after enrolling in the program.

Earnings Analysis

Students who completed a WCG program experienced a median wage increase of \$6,000. This represents a 31% increase compared to the median pre-wage. However, just over half of these students, 55% had their individual wages increase. Of the 7,273 students successfully

matched to a year of pre- and post-program wages, 4,981 earned a credential. These students saw a greater increase to their wages, over \$7,000, with 57% earning higher wages after earning their credential. Notably, students who would go on to earn their credential started at similar starting wages as students who did not go on to earn a credential, suggesting that post-wages have more to do with credential attainment than the students' socio-economic background.

Credential earners earned a median wage of \$31,607. Using the federal poverty level for a household of one, that wage represents just slightly above the 250% of the poverty line, but barely over 100% for a family of four. Wage data does not measure the size of a household. For reporting purposes, SCHEV designates families falling between 0% and 200% of the federal poverty level as low-income and 200% and 400% as middle-income. Therefore, on the median, single-household Virginians with a credential earn middle-income wages. Furthermore, the median wage of Virginians who earned a for-credit certificate of less than one year in 2017 earned \$27,190, suggesting a slight edge in the immediate value of WCG programs over for-credit certificates.¹

Table 5: Wages Pre- and Post-Program by Credential Status FY 2017-18

| | # of Students w/ pre- and post- wages successfully matched | Median Pre- wage | Median Post- wage | Median Wage Change | Students receiving positive wage premium |
|----------------------------|---|---------------------|----------------------|-----------------------|--|
| Did Not Earn Credential | 2,292 | \$19,767 | \$24,183 | \$3,870 | 52% |
| Earned Credential | 4,981 | \$22,895 | \$31,607 | \$7,050 | 57% |
| Total | 7,273 | \$21,832 | \$29,341 | \$6,001 | 55% |

Median Wages Increased in all Occupational Fields

To more effectively measure specific credentials' impact on wages, the chart below only examines the 4,981 students who earned their credential and successfully had their pre- and post-program wages matched. In all occupational fields, median wages increased after attaining the credential. However, despite earning the highest post-median wages of any

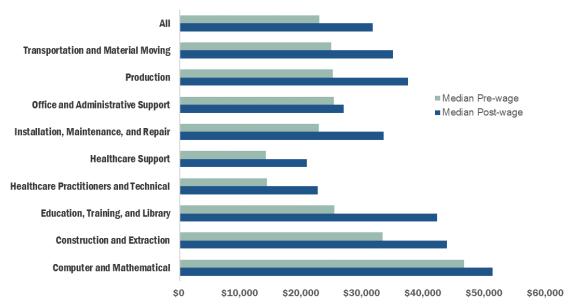


¹ SCHEV Research EOM18: Exploration of Wages over time by Degree. https://research.schev.edu//EOM/EOM18_Report.asp

other industry, a minority of Computer & Mathematical students, 45%, earned a higher wage then before entering the program.

Chart 1

WCG Training Median Wages Before & After Earning Credential



Measures wages for credential earners who completed their programs in FY 2017-18.

Construction and Extraction programs produced the most credentialed individuals that saw a wage increase (70%). Students who earned credentials in Installation, Maintenance saw the highest dollar increase in median wages (\$11,601). Students with Healthcare Practitioner and technical credentials saw the highest percentage increase in wages (57%). Notably these students started with the lowest median wage of just over \$14,000.

Table 6: Wages Pre- and Post-Program for Credentialed Students by Industry FY 2017-18

| | # of Students w/ pre- and post- wages successfully matched | Median Pre- wage | Median Post- wage | Median Wage Change | Students receiving positive wage premium |
|--|---|---------------------|----------------------|-----------------------|--|
| Computer and Mathematical (15) | 185 | \$46,564 | \$51,201 | \$7,313 | 45% |
| Construction and Extraction (47) | 475 | \$33,261 | \$43,725 | \$9,101 | 70% |
| Education, Training, and Library (25) | 156 | \$25,306 | \$42,124 | \$8,692 | 52% |
| Healthcare Practitioners and Technical (29) | 103 | \$14,294 | \$22,627 | \$8,148 | 61% |
| Healthcare Support (31) | 850 | \$14,136 | \$20,824 | \$4,664 | 57% |
| Installation, Maintenance, and Repair (49) | 187 | \$22,737 | \$33,372 | \$11,601 | 61% |



| Grand Total | 4.981 | \$22.895 | \$31.607 | \$7.050 | 57% |
|---|-------|----------|----------|---------|-----|
| Transportation and Material Moving (53) | 1,967 | \$24,841 | \$34,928 | \$7,190 | 53% |
| Production (51) | 776 | \$25,066 | \$37,411 | \$9,362 | 61% |
| Office and Administrative Support (43) | 282 | \$25,205 | \$26,886 | \$3,508 | 54% |

Wages by Race & Ethnicity

All credentialed racial and ethnic groups saw increases in their median wages. The wage analysis by race and ethnicity is complicated by the high numbers of unknown and unreported and with some groups having relatively small cell sizes. (See the enrollments and success rates by race and ethnicity above.) A higher percentage of Black and African American students saw wage gains compared to white students and compared to the average. However, Hispanic students saw below average median wage gains, and only 48% of credential earners actually earned more after the program than before.

Table 7: Wages Pre- and Post-Program for Credentialed Students by Race & Ethnicity FY 2017-18

| | # of Students w/ pre- and post- wages successfully matched | Median Pre-wage | Median Post-wage | Median Wage Change | Students receiving positive wage premium |
|--|---|-----------------|------------------|--------------------|--|
| American Indian or Alaska Native | 15 | \$19,972 | \$30,560 | \$8,754 | 47% |
| Asian | 96 | \$25,649 | \$28,630 | \$7,533 | 45% |
| Black or African American | 1,232 | \$20,331 | \$27,944 | \$6,760 | 59% |
| Hispanic | 212 | \$20,175 | \$27,113 | \$4,358 | 48% |
| Multi-Race | 85 | \$17,965 | \$26,583 | \$6,668 | 61% |
| Native Hawaiian or Other Pacific Islander | 10 | \$18,872 | \$38,451 | \$23,254 | 60% |
| Unknown | 361 | \$24,876 | \$39,784 | \$8,382 | 52% |
| Unreported | 480 | \$29,896 | \$36,909 | \$5,998 | 50% |
| White | 2,490 | \$23,449 | \$32,974 | \$7,372 | 58% |
| Grand Total | 4,981 | \$22,895 | \$31,607 | \$7,050 | 57% |

Wage Increase by Income Range

To better understand WCG's impact on social mobility, the table below measures students' wages by pre-wage quartile. Usually in this type of analysis an equal number of records exist in each group. However, students still needed to have their post-program wages matched, so the number of students in each quartile varies.

All income groups' median wages increased after completing their credential. Students in the bottom quartile (with wages less than \$8,200 before completing their credential) saw the highest median wage increase. These lowest income students saw median wage increases of over \$15,000, or over 400%. As a group however, only 39% actually saw an increase in their wages.

Students in the 2nd quartile (with wages between \$8,200 and \$21,000) were most likely to see an increase in wages (70%). Their change in median wage was roughly \$9,200.

Table 8: Wages Pre- and Post-Program for Credentialed Students by Income Quartile FY 2017-18

| Pre-Wage Quartile | # of Students w/ pre- and post- wages successfully matched | Median Pre-wage | Median Post-wage | Median Wage Change | Students receiving positive wage premium |
|---------------------------------------|--|-----------------|------------------|-----------------------|--|
| 1st (\$0 - \$8,216) | 1,550 | \$3,765 | \$20,025 | \$15,157 | 39% |
| 2 nd (\$8,217 - \$21,490) | 1,202 | \$15,003 | \$24,464 | \$9,231 | 70% |
| 3 rd (\$21,481 - \$37,891) | 1,220 | \$29,154 | \$35,460 | \$5,363 | 65% |
| 4 th (\$37,892 and Up) | 1,009 | \$51,975 | \$55,815 | \$2,960 | 57% |
| Total | 4,981 | \$22,895 | \$31,607 | \$7,050 | 57% |



ADDITIONAL OBSERVATIONS AND NEXT STEPS

Since the inception of the Workforce Credential Grant in 2016, the program has continued to grow based on student demand. The largest areas of enrollment occur in occupational fields with annual job openings that exceed training completions. In addition, students' median earnings consistently increase post-training completion and even more so if the student earns the credential.

As noted in the summary, this report does not include the enrollment or success of 1,903 students who enrolled in a WCG program but were unable to complete their training or credential due to the COVID-19 pandemic. In alignment with Governor Northam's Executive Order Number 51, Secretary of Education Atif Qarni and SCHEV Director Peter Blake <u>issued guidance</u> to WCG institutions in April 2020. The guidance laid out three scenarios for how to adjust the pay-for-performance model, including when to refund student charges and to request pro-rated performance payments based on the training and credential completion rates of the specific workforce program for the prior year.

The Virginia Board for Workforce Development is expected to update the list of high-demand occupations this year. The Virginia Community College System and other WCG providers will then match program offerings to this updated list of high-demand occupations. SCHEV staff are participating in a data-focused workgroup to assist the Board in those efforts. SCHEV is also working toward incorporating WCG's data into the data collection and publication system that SCHEV operates for students pursuing for-credit programs. This should add transparency and accountability for the program.





APPENDIX: FY 2020 TRAINING CREDENTIAL ENROLLMENT, COMPLETIONS AND COSTS

| | Enrollments | Training Completions | Credential Completions | % Complete Training | % Complete Credential | Average Tuition | Sum of total reimbursed | Avg Reimbursed Per Credential Earned |
|---|-------------|-------------------------|---------------------------|------------------------|--------------------------|--------------------|-------------------------|--|
| Computer and Mathematical (15) | 542 | 498 | 243 | 92% | 49% | \$723 | \$564,940 | \$2,325 |
| AWS Certified Cloud Practitioner | 22 | 22 | 16 | 100% | 73% | \$322 | \$12,236 | \$765 |
| AWS Certified Solutions Architect | 34 | 34 | 29 | 100% | 85% | \$943 | \$59,461 | \$2,050 |
| CompTIA A+ | 175 | 155 | 51 | 89% | 33% | \$816 | \$175,620 | \$3,444 |
| CompTIA Linux+ Certification | 45 | 44 | 43 | 98% | 98% | \$1,158 | \$100,740 | \$2,343 |
| CompTIA Network+ | 95 | 87 | 35 | 92% | 40% | \$643 | \$88,770 | \$2,536 |
| CompTIA Server+ | 22 | 17 | 7 | 77% | 41% | \$233 | \$5,600 | \$800 |
| Computer Entry Level (CISCO Networking Technician and Associate, CompTIA IT Fundamentals) Information Systems Security (CompTIA Security, | 68 77 | 65 70 | 30 31 | 96% 91% | 46% 44% | \$350 \$841 | \$32,535 \$85,977 | \$1,085 \$2,773 |
| Certified professional and ethical hacker) | | | | | | | | |
| Project Management Professional (PMP) | 4 | 4 | 1 | 100% | 25% | \$800 | \$4,000 | \$4,000 |
| Construction and Extraction (47) | 2,206 | 2,101 | 1,582 | 95% | 75% | \$211 | \$813,851 | \$514 |
| Construction (Project Management, Carpentry, Contractor's License) | 18 | 12 | - | 67% | 0% | \$134 | \$960 | N/A |
| Core - Introductory Craft Skills | 286 | 266 | 217 | 93% | 82% | \$300 | \$144,961 | \$668 |
| Heavy Equipment Operations | 73 | 71 | 65 | 97% | 92% | \$883 | \$119,586 | \$1,840 |
| Highway Construction | 1,563 | 1,490 | 1,068 | 95% | 72% | \$127 | \$330,448 | \$309 |
| HVAC (includes license renewal) | 18 | 18 | 17 | 100% | 94% | \$425 | \$14,875 | \$875 |
| Marine Trade Training | 114 | 112 | 106 | 98% | 95% | \$524 | \$115,400 | \$1,089 |
| Plumbing &Electrical (including license renewal) | 134 | 132 | 109 | 99% | 83% | \$366 | \$87,621 | \$804 |
| Education, Training, and Library (25) | 30 | 21 | 23 | 70% | 110% | \$1,330 | \$58,520 | \$2,544 |
| Teaching License | 30 | 21 | 23 | 70% | 110% | \$1,330 | \$58,520 | \$2,544 |
| Healthcare Practitioners and Technical (29) | 256 | 216 | 85 | 84% | 39% | \$467 | \$132,416 | \$1,558 |
| Advanced Cardiovascular Life Support | 12 | 12 | 12 | 100% | 100% | \$50 | \$1,200 | \$100 |
| EKG Technician | 15 | 12 | 9 | 80% | 75% | \$509 | \$10,586 | \$1,176 |
| Emergency Medical Technician | 54 | 42 | 18 | 78% | 43% | \$396 | \$23,625 | \$1,313 |
| Pharmacy Technician | 175 | 150 | 46 | 86% | 31% | \$513 | \$97,005 | \$2,109 |

| Healthcare Support (31) | 1,061 | 947 | 701 | 89% | 74% | \$830 | \$1,403,863 | \$2,003 |
|---|-------|-----|-----|------|------|---------|-------------|---------|
| Certified Nurse Aide (CNA) | 321 | 272 | 146 | 85% | 54% | \$651 | \$267,581 | \$1,833 |
| Medical Assistant | 466 | 424 | 388 | 91% | 92% | \$1,063 | \$863,331 | \$2,225 |
| Medication Aide | 45 | 41 | 14 | 91% | 34% | \$325 | \$18,713 | \$1,337 |
| Phlebotomy Technician | 229 | 210 | 153 | 92% | 73% | \$704 | \$254,238 | \$1,662 |
| Installation, Maintenance, and Repair (49) | 714 | 666 | 556 | 93% | 83% | \$825 | \$1,037,644 | \$1,866 |
| Apartment Maintenance Technician | 1 | - | - | 0% | N/A | \$486 | \$0 | N/A |
| Driveline/Hydraulics Certification | 13 | 13 | 3 | 100% | 23% | \$490 | \$9,170 | \$3,057 |
| Electrical and electrical systems | 230 | 212 | 185 | 92% | 87% | \$529 | \$210,170 | \$1,136 |
| Engine Repair | 30 | 29 | 8 | 97% | 28% | \$165 | \$6,075 | \$759 |
| Facilities Maintenance | | - | - | N/A | N/A | \$1,115 | \$0 | N/A |
| HVAC (includes license renewal) | 191 | 170 | 146 | 89% | 86% | \$622 | \$197,860 | \$1,355 |
| Industrial Maintenance Mechanic - Level 1 | 2 | 2 | 2 | 100% | 100% | \$932 | \$3,728 | \$1,864 |
| Other (Driveline/Hydraulics, Diesel Engine, Workready Foundations CORE) | 5 | 3 | 2 | 60% | 67% | \$275 | \$1,375 | \$688 |
| Power Industry Fundamentals | 92 | 91 | 67 | 99% | 74% | \$1,200 | \$189,600 | \$2,830 |
| Power Line Worker | 150 | 146 | 143 | 97% | 98% | \$1,453 | \$419,666 | \$2,935 |
| Office and Administrative Support (43) | 261 | 217 | 102 | 83% | 47% | \$784 | \$256,986 | \$2,519 |
| Billing and Coding Specialist | 120 | 96 | 59 | 80% | 61% | \$958 | \$157,006 | \$2,661 |
| Customer Services and Sales | 31 | 26 | 10 | 84% | 38% | \$277 | \$10,080 | \$1,008 |
| Medical Administrative Assistant | 41 | 39 | 9 | 95% | 23% | \$659 | \$30,576 | \$3,397 |
| Professional Coder | 47 | 40 | 20 | 85% | 50% | \$778 | \$45,524 | \$2,276 |
| SHRM Certified Professional | 22 | 16 | 4 | 73% | 25% | \$690 | \$13,800 | \$3,450 |
| Production (51) | 973 | 913 | 656 | 94% | 72% | \$583 | \$907,078 | \$1,383 |
| Backflow Prevention | 27 | 25 | 18 | 93% | 72% | \$173 | \$6,550 | \$364 |
| Machining | 181 | 177 | 144 | 98% | 81% | \$548 | \$168,908 | \$1,173 |
| Manufacturing entry level (specialist and production technician) | 61 | 53 | 28 | 87% | 53% | \$575 | \$45,065 | \$1,609 |
| Manufacturing Technician 1 (MT1) | 79 | 72 | 36 | 91% | 50% | \$445 | \$47,320 | \$1,314 |
| Mechatronics (Siemens Certifications) | 3 | 1 | - | 33% | 0% | \$1,015 | \$1,015 | N/A |
| Photovoltaic | 56 | 56 | 43 | 100% | 77% | \$413 | \$39,743 | \$924 |
| Six Sigma | 34 | 34 | 20 | 100% | 59% | \$647 | \$34,000 | \$1,700 |
| Welding | 532 | 495 | 367 | 93% | 74% | \$648 | \$564,477 | \$1,538 |
| | | | | | | | | |

New Economy Workforce Credential Grant Annual Report FY 2019

| Transportation and Material Moving (53) | 1,441 | 1,300 | 958 | 90% | 74% | \$1,256 | \$2,804,980 | \$2,928 |
|---|-------|-------|-------|------|-----|---------|-------------|---------|
| Commercial Driver's License A | 1,178 | 1,045 | 756 | 89% | 72% | \$1,436 | \$2,602,793 | \$3,443 |
| Logistics Associate | 117 | 111 | 103 | 95% | 93% | \$404 | \$87,300 | \$848 |
| Logistics Technician | 106 | 104 | 78 | 98% | 75% | \$557 | \$104,000 | \$1,333 |
| Remote Pilot Airman Certification | 40 | 40 | 21 | 100% | 53% | \$177 | \$10,887 | \$518 |
| Grand Total | 7,484 | 6,879 | 4,906 | 92% | 71% | \$677 | \$7,980,278 | \$1,627 |