

THE ECONOMIC VALUE OF CATAWBA VALLEY COMMUNITY COLLEGE'S Electrical Systems and HVAC Program



The Electrical Systems and HVAC program¹ was established in 2013. In FY 2019-20, CVCC enrolled 78 students in the program. Of these students, eight graduated with a certificate and two graduated with an associate degree in FY 2019-20.



THE CVCC SERVICE AREA, NC

CAREER OUTLOOK

The Electrical Systems and HVAC program can lead students into a number of occupations, which may include heating, air conditioning, & refrigeration mechanics & installers; first-line supervisors of construction trades & extraction workers; and electricians. Many of the Electrical Systems and HVAC program students will enter the CVCC Service Area² workforce.

Using the regional number of annual openings for these occupations (141) and subtracting the FY 2019-20 CVCC completers that may fill these openings (10), we arrive at a gap of 131 job openings.³ There are 114 unique job postings at the associate degree or below for these occupations in the CVCC Service Area. The top posting companies include City of Hickory; CommScope Solutions International, Inc.; and Johnson Controls, Inc.

ALUMNI IMPACT

Former students of CVCC's Electrical Systems and HVAC program added \$129.9 thousand in income to the CVCC Service Area economy in FY 2019-20. This figure represents the increased wages collected by former students active today in the regional workforce as a direct result of their education, the increased output of businesses that employ these students, and the multiplier effects that occur.

PROGRAM TO OCCUPATION MAPPING MEASURES IN THE CVCC SERVICE AREA

Number of occupations	17
Jobs (2020)	3,622
Projected avg. job growth (2020-2029)	+0.8%
Annual openings (2020)	141
Median annual wage (2020)*	\$46,587

* The median annual wage reflects all award levels.

ALUMNI LIFETIME EARNINGS INCREASE AND IMPACT

Lifetime earnings
increase per completer

\$337.8 thousand

Total alumni impact
in FY 2019-20

\$129.9 thousand

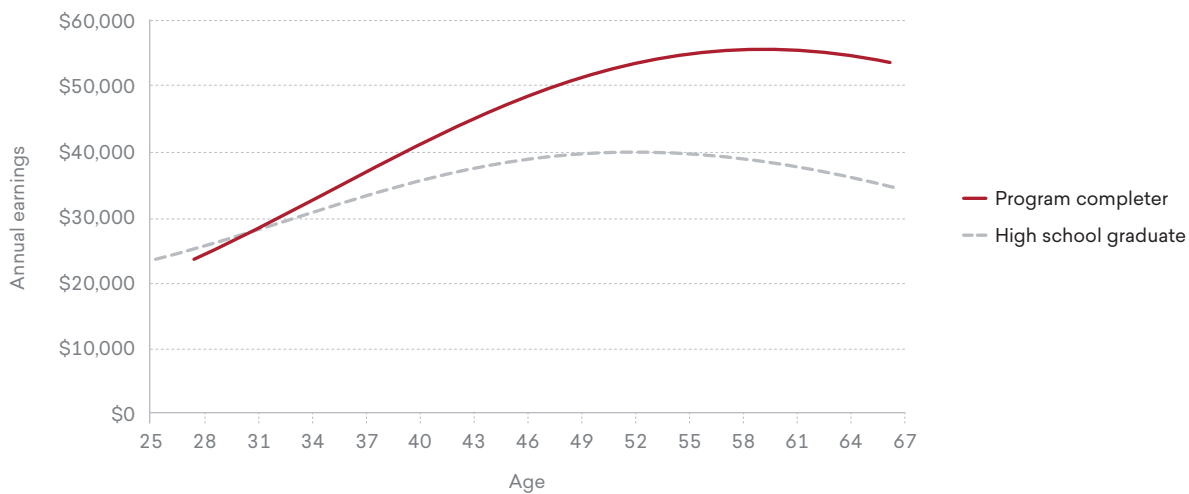


1 The Electrical Systems and HVAC program is defined by the following Classification of Instructional Programs (CIP) codes: Electrician (46.0302) and Heating, Air Conditioning, Ventilation & Refrigeration Maintenance Technology/Technician (47.0201).
2 For the purposes of this analysis, the CVCC Service Area is defined as Catawba and Alexander Counties.
3 For the purposes of this analysis, only CVCC completers are considered when comparing to annual openings.

STUDENT RETURN ON INVESTMENT

To earn a degree or certificate in the program, students experience costs in the form of tuition and fees, books and supplies, and the opportunity cost of attending school instead of working. In return for this investment, students can earn higher wages. For every dollar students invest in their education in the program, they will receive \$5.80 back over the course of their working lives. This investment can also be seen in terms of a rate of return of 19.1%. This is an impressive return, especially when compared to the U.S. stock market 30-year average return of 10.6%.

LIFETIME EARNINGS OF A PROGRAM COMPLETER
COMPARED TO A HIGH SCHOOL GRADUATE



Source: Emsi Burning Glass impact model.

TAXPAYER BENEFITS

Taxpayers will receive an estimated present value of \$1.3 million in added tax revenue stemming from the students' higher lifetime earnings and the increased output of businesses. Savings to the public sector add another estimated \$91.3 thousand in benefits due to a reduced demand for government-funded social services in North Carolina. Throughout the students' working lives, North Carolina taxpayers will receive a total of \$1.4 million in benefits.

Throughout the students' working lives, **North Carolina taxpayers** gain in added tax revenue and public sector savings



\$1.4 million