THE ECONOMIC VALUE OF WESTERN PIEDMONT COMMUNITY COLLEGE'S **Engineering Technology Program**

The Engineering Technology program¹ was established in 1970. In FY 2019-20, WPCC enrolled 117 students in the program. Of these students, 22 graduated with an associate degree in FY 2019-20.

CAREER OUTLOOK

The Engineering Technology program can lead students into a number of occupations, which may include industrial machinery mechanics; electrical & electronic engineering technologists & technicians; and mechanical drafters. Many of the Engineering Technology program students will enter the Burke County workforce.

Using the county number of annual job openings for these occupations (28) and subtracting the FY 2019-20 WPCC completers who may fill these openings (22), we arrive at a gap of six job openings.² There are 53 unique job postings at the associate degree or below for these occupations in Burke County. A few of the top posting companies are Continental AG; Leviton Manufacturing Co. Inc.; and Meritor. Inc.

ALUMNI IMPACT

Former students of WPCC's Engineering Technology program added \$1.7 million in income to the Burke County economy in FY 2019-20. This figure represents the increased wages collected by former students active today in the county workforce as a direct result of their education, the increased output of businesses that employ these students, and the multiplier effects that occur.

1 The Engineering Technology program is defined by the following CIP codes: Mechanical Engineering/Mechanical Technology/Technician (15.0805), Electromechanical Technology/Electromechanical Engineering Technology (15.0403), Electrical, Electronic & Communications Engineering Technology/Technician (15.0303), and Computer Engineering Technology/Technician (15.1201).

2 For the purposes of this analysis, only WPCC completers were considered when comparing to annual openings.

PROGRAM TO OCCUPATION MAPPING METRICS IN BURKE COUNTY

Number of occupations	15
Jobs (2020)	746
Projected avg. job growth (2020-2029)	+0.3%
Annual openings (2020)	28
Median annual wage (2020)*	\$40,611

* The median annual wage reflects all award levels.

ALUMNI LIFETIME EARNINGS INCREASE AND IMPACT

Lifetime earnings increase per completer

S458.4 thousand

Total alumni impact in FY 2019-20 \$1.7 million





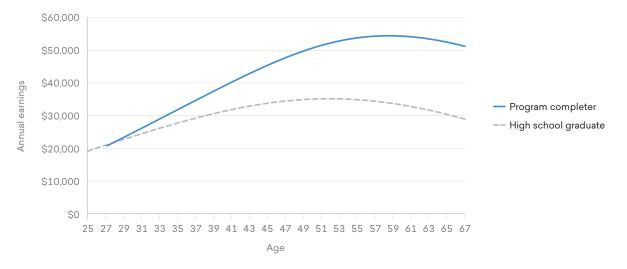




STUDENT RETURN ON INVESTMENT

To earn a degree 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 18.8%. 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



TAXPAYER BENEFITS

Taxpayers will receive an estimated present value of \$1.1 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 \$83.5 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 \$1.2 million in benefits.

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



\$1.2 million