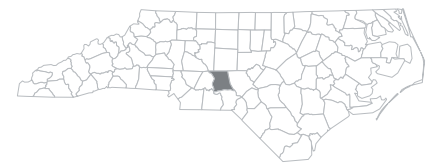


# THE ECONOMIC VALUE OF MONTGOMERY COMMUNITY COLLEGE'S Air Conditioning, Heating, and Refrigeration Technology Program



The Air Conditioning, Heating, and Refrigeration Technology program<sup>1</sup> was recently established in 2013. In FY 2019-20, MCC enrolled 28 students in the program. Of these students, 27 graduated with a certificate and one graduated with an associate degree in FY 2019-20.



MONTGOMERY COUNTY, NC

## CAREER OUTLOOK

The Air Conditioning, Heating, and Refrigeration Technology program can lead students into a number of occupations, which may include heating, air conditioning, & refrigeration mechanics & installers; environmental engineering technologists & technicians; and electrical & electronics repairers, commercial & industrial equipment. Many of the program students will enter the Montgomery County workforce.

Using the county number of annual job openings for these occupations (11) and subtracting the FY 2019-20 MCC completers that may fill these openings (28), we arrive at a surplus of 17 student completers.<sup>2</sup> There are 35 unique job postings at the associate degree or below for these occupations in Montgomery County. The top three posting companies are Grede LLC; Mountaire Farms Inc.; and Republic Services, Inc.

## ALUMNI IMPACT

Former students of MCC's Air Conditioning, Heating, and Refrigeration Technology program added \$119.3 thousand in income to the Montgomery 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.

### PROGRAM TO OCCUPATION MAPPING METRICS IN MONTGOMERY COUNTY

Number of occupations	15
Jobs (2020)	289
Projected avg. job growth (2020-2029)	+0.7%
Annual openings (2020)	11
Median annual wage (2020)*	\$41,692

\* The median annual wage reflects all award levels.

### ALUMNI LIFETIME EARNINGS INCREASE AND IMPACT

Lifetime earnings  
increase per completer  
**\$315.6 thousand**

Total alumni impact  
in FY 2019-20  
**\$119.3 thousand**

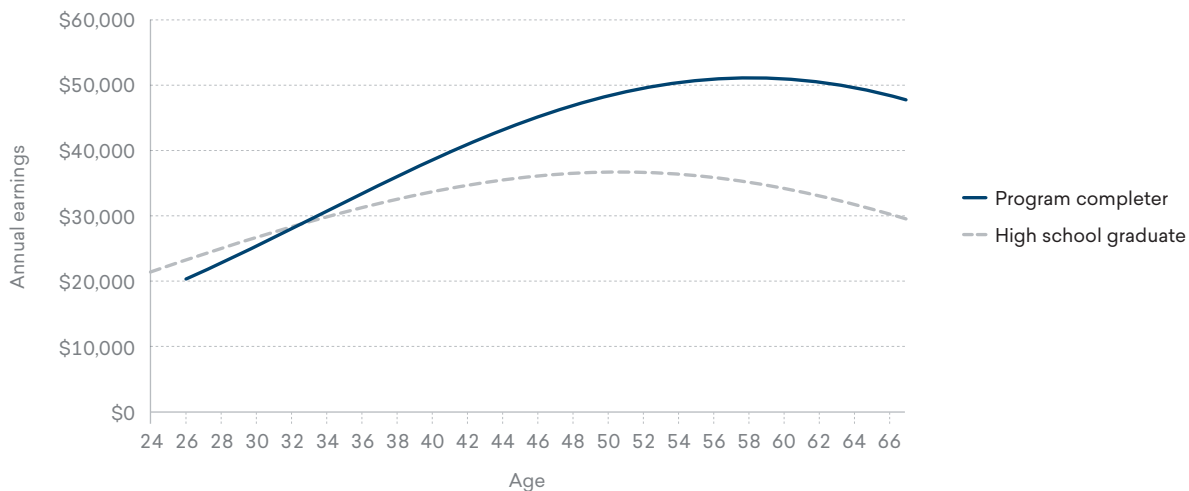


1 The Air Conditioning, Heating, and Refrigeration Technology program is defined by the following Classification of Instructional Programs (CIP) codes: Heating, Ventilation, Air Conditioning & Refrigeration Engineering Technology/Technician (15.0501) and Heating, Air Conditioning, Ventilation & Refrigeration Maintenance Technology/Technician (47.0201).  
2 For the purposes of this analysis, only MCC completers were 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 \$9.70 back over the course of their working lives. This investment can also be seen in terms of a rate of return of 36.7%. 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 \$1.3 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 \$41.7 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**

