



The Economic Value of Central Virginia Community College



CENTRAL VIRGINIA COMMUNITY COLLEGE (CVCC) creates value in many ways. The college plays a key role in helping students increase their employability and achieve their individual potential. The college retains students in the region, generating new dollars and opportunities for the CVCC Service Region.* CVCC provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, CVCC is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

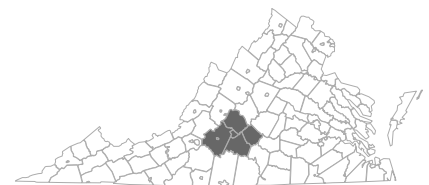
CVCC influences both the lives of its students and the regional economy. The college supports a variety of industries in the CVCC Service Region, serves regional businesses, and benefits society as a whole in Virginia from an expanded economy and improved quality of life. Additionally, the benefits created by CVCC extend to the state and local government through increased tax revenues and public sector savings.

This study measures the economic impacts created by CVCC on the business community and the benefits the college generates in return for the investments made by its key stakeholder groups—students, taxpayers, and society. The following two analyses are presented:

 **Economic impact analysis**

 **Investment analysis**

All results reflect employee, student, and financial data, provided by CVCC and the Virginia Community College System (VCCS), for fiscal year (FY) 2021-22. Impacts on the CVCC Service Region economy are reported under the economic impact analysis and are measured in terms of added income. The returns on investment to students, taxpayers, and society in Virginia are reported under the investment analysis.



The CVCC Service Region, Virginia

CVCC influences both the **lives of its students** and the **regional economy**.

* For the purposes of this analysis, the CVCC Service Region is comprised of Amherst, Appomattox, Bedford, Campbell, and Lynchburg City Counties.

Economic impact analysis



CVCC promotes economic growth in the CVCC Service Region through its direct expenditures and the resulting expenditures of students and regional businesses. The college serves as an employer and buyer of goods and services for its day-to-day and construction operations. The college's activities retain students in the CVCC Service Region, whose expenditures benefit regional vendors. In addition, CVCC is one of the primary sources of higher education to the CVCC Service Region residents and a supplier of trained workers to regional industries, enhancing overall productivity in the regional workforce.

Operations spending impact



CVCC adds economic value to the CVCC Service Region as an employer of regional residents and a large-scale buyer of goods and services. In FY 2021-22, the college employed 398 full-time and part-time faculty and staff, 82% of whom lived in the CVCC Service Region. Total payroll at CVCC was \$15.5 million, much of which was spent in the region for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the college spent \$16.6 million on day-to-day and construction expenses related to facilities, supplies, and professional services.

CVCC's operations spending added \$20.9 million in income to the region during the analysis year. This figure represents the college's payroll, the multiplier effects generated by the in-region spending of the college and its employees, and a downward

Impacts created by CVCC in FY 2021-22



Operations spending impact

\$20.9 million

+



Student spending impact

\$2.2 million

+



Alumni impact

\$201.4 million



Total economic impact

\$224.6 million

OR

Jobs supported

3,506



adjustment to account for funding that the college received from regional sources. The \$20.9 million in added income is equivalent to supporting 459 jobs in the region.

Student spending impact



Some in-region students, referred to as retained students, would have left the CVCC Service Region if not for the existence of CVCC. While attending the college, these retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$2.2 million in added income for the regional economy in FY 2021-22, which supported 46 jobs in the CVCC Service Region.

CVCC alumni and programs help change lives

CVCC embraces the essence and purpose of a community college; it's a catalyst for change that goes beyond graduation day. It's about transforming lives and opening doors for those seeking a better path. Mike Rhodes, CVCC Class of 2021, can attest to that. "Having no experience or specific skillset, I was without direction and in search of a stable career," he recalls. Following this, he found the Mechatronics Program at CVCC and was intrigued by the program length and real-world subject matter.

"After joining the Mechatronic Program, I was provided with job opportunities and access to a community of professors who are passionate about student success," Mike explains. "The best part about the program is the classes directly correlate with what I see at my job!" Mike is now employed as a full-time Automation Technician by Altavista Instruments & Controls (AIC).

CVCC isn't just about diplomas; it's a place that shapes futures and connects students with industry-ready skills. Through success stories like Mike's, CVCC stands as a driving force, empowering its alumni to make a tangible impact in the workforce and contribute meaningfully to the economy's growth.



Alumni impact



The education and training CVCC provides for regional residents has the greatest impact. Since the establishment of the college, students have studied at CVCC and entered the regional workforce with greater knowledge and new skills. Today, thousands of former CVCC students are employed in the CVCC Service Region. As a result of their education from CVCC, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2021-22, CVCC alumni generated \$201.4 million in added income for the regional economy, which is equivalent to supporting 3,002 jobs.



Total impact

CVCC added \$224.6 million in income to the CVCC Service Region economy during the analysis year, equal to the sum of the operations spending impact, the student spending impact, and the alumni impact. For context, the \$224.6 million impact was equal to approximately 1.7% of the total gross regional product (GRP) of the CVCC Service Region. This contribution

that the college provided on its own is nearly as large as the entire Transportation & Warehousing industry in the region.

CVCC's total impact can also be expressed in terms of jobs supported.

The \$224.6 million impact supported 3,506 regional jobs, using the jobs-to-sales ratios specific to each industry in the region. This means that one out of every 42 jobs in the CVCC Service Region is supported by the activities of CVCC and its students. In addition, the \$224.6 million, or 3,506 supported jobs, stemmed from different industry sectors. For instance, among non-education industry sectors, the spending of CVCC and its students and the activities of its alumni in the Health Care & Social Assistance industry sector supported 351 jobs in FY 2021-22. If the college did not exist, these impacts would not have been generated in the CVCC Service Region.

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CVCC impacts by industry (jobs supported)



Community partnerships flourish at CVCC

CVCC operates in close collaboration with the community, to inform, engage, and provide vital wrap-around resources to empower students in their academic pursuits. Branson Fowler, CVCC Class of 2023 and UVA transfer student, confronted educational barriers that impeded his learning journey. "With CVCC's assistance, I started receiving benefits that have facilitated an environment in my life where I am able to move past questions like, 'Where will I get my next meal?' or 'What happens if I get sick?' or 'How will I afford gas for my car?'" Brandon expressed. "These benefits have allowed me to be much more available to focus on my schoolwork."

In addition to removing barriers to education, the college consistently works to expand initiatives on and off campus through events like the Workforce Conversations series to connect students to business and community leaders and experts. CVCC alumni, business, foundation, and individual donors work collaboratively to increase access to education. CVCC's Educational Foundation supports scholarships and emergency relief funds to help address financial challenges such as book fees, food and housing insecurities, transportation, and other hurdles to student success. These wraparound services aid in increasing student retention and graduation rates. The community's generosity plays a significant role in supporting the purchasing of state-of-the-art instructional equipment to ensure that students are job-ready when they complete their program.



An investment analysis evaluates the costs associated with a proposed venture against its expected benefits. If the benefits outweigh the costs, then the investment is financially worthwhile. The analysis presented here evaluates CVCC as an investment from the perspectives of students, taxpayers, and society in Virginia.

Student perspective



In FY 2021-22, CVCC served 4,707 credit and 805 non-credit students. In order to attend the college, the students paid for tuition, fees, books, and supplies. They also took out loans and will incur interest on those loans. Additionally, students gave up money they would have otherwise earned had they been working instead of attending college. The total investment made by CVCC's students in FY 2021-22 amounted to a present value of \$17.8 million, equal to \$9.7 million in out-of-pocket expenses (including future principal and interest on student loans) and \$8.1 million in forgone time and money.

In return for their investment, CVCC's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average CVCC associate degree graduate from FY 2021-22 will see annual earnings that are \$10,100 higher than a person with a high school diploma or equivalent working in Virginia. Over a working lifetime, the benefits of the associate degree over a high school diploma will amount to an undiscounted value of \$414.1 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings that CVCC's FY 2021-22 students will receive over their working careers is \$122.2 million.

Students see a high rate of return for their investment in CVCC



Average annual return for CVCC students
23.5%



Stock market 30-year average annual return
9.6%

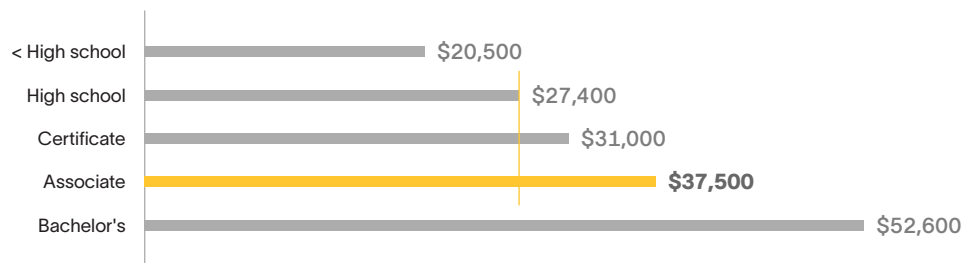


Interest earned on savings account (national deposit rate)
0.4%

Source: Forbes' S&P 500, 1992-2021. FDIC.gov, 2-2022.



The average associate degree graduate from CVCC will see an increase in earnings of **\$10,100** each year compared to a person with a high school diploma or equivalent working in Virginia.



Source: Lightcast employment data.

The students' benefit-cost ratio is 6.9. In other words, for every dollar students invest in CVCC in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$6.90 in higher future earnings. Annually, the students' investment in CVCC has an average annual internal rate of return of 23.5%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 9.6%.

Taxpayer perspective



CVCC generates more in tax revenue than it receives. These benefits to taxpayers consist primarily of taxes that the state and local government will collect from the added revenue created in Virginia. As CVCC students will earn more, they will make higher tax payments throughout their working lives. Students' employers will also make higher tax payments as they increase their output and purchases of goods and services. By the end of the FY 2021-22 students' working lives, the state and local government will have collected a present value of \$30.6 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of CVCC students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The education that CVCC students receive will generate savings in three main categories: 1) healthcare, 2) justice system, and 3) income assistance. Improved health will lower students' demand for national health care services. In addition, costs related to the justice system will decrease. CVCC students will be more employable, so their reduced demand for income assistance such as welfare and unemployment benefits will benefit taxpayers. For a list of study references, contact the college for a copy of the main report. Altogether, the present value of the benefits associated with an education from CVCC will generate \$2.7 million in savings to state and local taxpayers.

For every dollar of public money invested in CVCC, taxpayers will receive a cumulative value of **\$2.60** over the course of the students' working lives.

Total taxpayer benefits amount to \$33.3 million, the present value sum of the added tax revenue and public sector savings. Taxpayer costs are \$12.8 million, equal to the amount of state and local government funding CVCC received in FY 2021-22. These benefits and costs yield a benefit-cost ratio of 2.6. This means that for every dollar of public money invested in CVCC in FY 2021-22, taxpayers will receive a cumulative



present value of \$2.60 over the course of the students’ working lives. The average annual internal rate of return for taxpayers is 6.6%, which compares favorably to other long-term investments in the public sector.

Workforce solutions are at the forefront of educational innovation

CVCC offers continuing education and professional development training for a 21st-century workforce with financial options designed to change lives. CVCC does this by strategizing business solutions and community partnerships. Using leading-edge technology, curriculum, philosophies, and methodology to help local businesses thrive, CVCC offers training programs and cohorts, apprenticeship and certification programs, and consulting and assessment services. CVCC’s economic vitality depends on its accessible and affordable education to train, reskill, and upskill the region’s workforce. Students of all ages have been able to find new directions, start new careers, and advance in new fields.

Social perspective



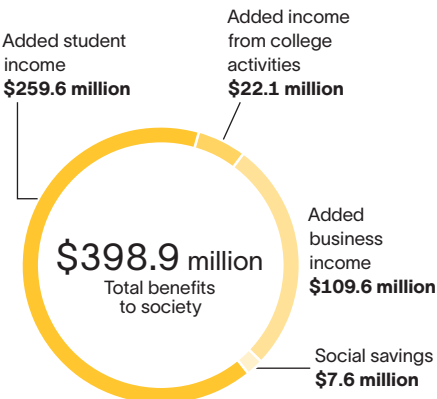
Society as a whole in Virginia benefits from the presence of CVCC in two major ways. Primarily, society benefits from an increased economic base in Virginia. This is attributed to the added income from students’ increased lifetime earnings (added student income) and increased business output (added business income), which raise economic prosperity in Virginia.

Benefits to society also consist of the savings generated by the improved lifestyles of CVCC students. As discussed in the previous section, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers but are distinct from the costs avoided by the taxpayers outlined above. Healthcare savings include avoided medical costs associated with smoking, alcohol dependence, obesity, drug abuse, and depression. Justice system savings include avoided costs to the government and society due to less judicial activity. Income assistance savings include reduced welfare and unemployment claims. For a list of study references, contact the college for a copy of the main report.

Altogether, the social benefits of CVCC equal a present value of \$398.9 million. These benefits include \$259.6 million in added student income, \$109.6 million in added business income, \$22.1 million in added income from college activities, as well as \$7.6 million in social savings related to health, the justice system, and income assistance in Virginia. People in Virginia invested a present value total of \$43.5 million in CVCC in FY 2021-22. The cost includes all the college and student costs.

The benefit-cost ratio for society is 9.2, equal to the \$398.9 million in benefits divided by the \$43.5 million in costs. In other words, for every dollar invested in CVCC, people in Virginia will receive a cumulative value of \$9.20 in benefits. The benefits of this investment will occur for as long as CVCC’s FY 2021-22 students remain employed in the Virginia workforce.

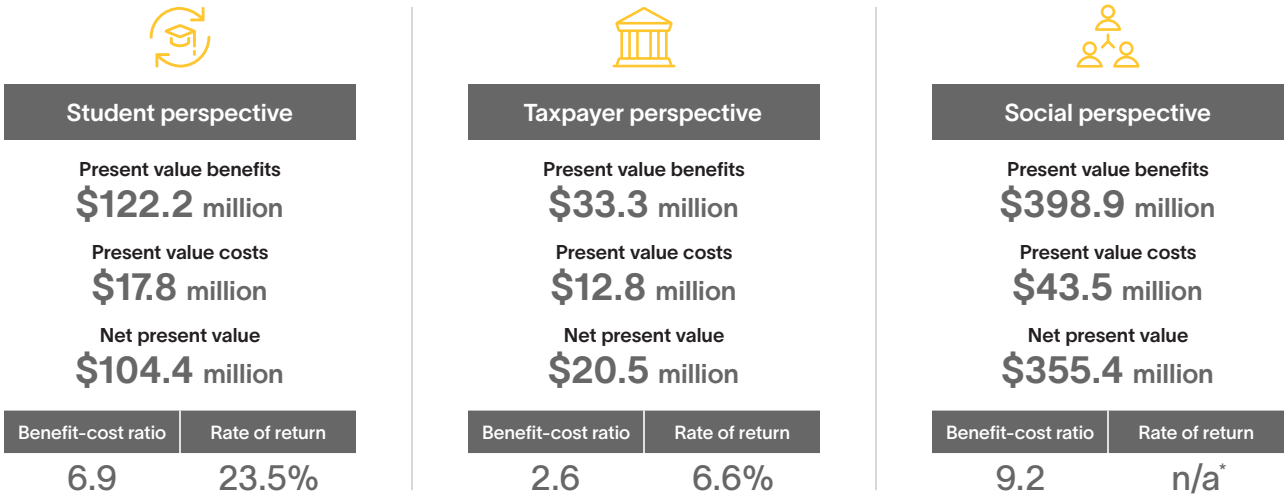
Social benefits in Virginia from CVCC



Source: Lightcast impact model.

Summary of investment analysis results

The results of the analysis demonstrate that CVCC is a strong investment for all three major stakeholder groups—students, taxpayers, and society. As shown, students receive a great return for their investments in an education from CVCC. At the same time, taxpayers’ investment in CVCC returns more to government budgets than it costs and creates a wide range of social benefits throughout Virginia.



* The rate of return is not reported for the social perspective because the beneficiaries are not necessarily the same as the original investors.

Conclusion

The results of this study demonstrate that CVCC creates value from multiple perspectives. The college benefits regional businesses by increasing consumer spending in the region and supplying a steady flow of qualified, trained workers to the workforce. CVCC enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The college benefits state and local taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, CVCC benefits society as a whole in Virginia by creating a more prosperous economy and generating a variety of savings through the improved lifestyles of students.



About the study

Data and assumptions used in the study are based on several sources, including the FY 2021-22 academic and financial reports from CVCC, VCCS, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of Lightcast's Multi-Regional Social Accounting Matrix model, and a variety of studies and surveys relating education to social behavior. The study applies a conservative methodology and follows standard practice using only the most recognized indicators of economic impact and investment effectiveness. For a full description of the data and approach used in the study, please contact the college for a copy of the main report.

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Lightcast provides colleges and universities with labor market data that help create better outcomes for students, businesses, and communities. Our data, which cover more than 99% of the U.S. workforce, are compiled from a wide variety of government sources, job postings, and online profiles and résumés. Hundreds of institutions use Lightcast to align programs with regional needs, drive enrollment, connect students with in-demand careers, track their alumni's employment outcomes, and demonstrate their institution's economic impact on their region. Visit lightcast.io/solutions/education to learn more or connect with us.