

The Economic Value of America's Community Colleges

A **AMERICA'S COMMUNITY COLLEGES**¹ create value in many ways. The colleges play a key role in helping students increase their employability and achieve their individual potential. They provide students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, the colleges are places for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

America's community colleges influence both the lives of students and the national economy. The colleges support a variety of industries in the U.S., serve businesses across the country, and benefit society as a whole in the U.S. from an expanded economy and improved quality of life. Additionally, the benefits created by America's community colleges extend to the government through increased tax revenues and public sector savings.

This study measures the economic impact created by alumni of America's community colleges on the business community and the benefits the colleges generate in return for the investments made by their key stakeholder groups—students, taxpayers, and society. The following two analyses are presented:



THE UNITED STATES OF AMERICA

America's community colleges influence both the **lives of students** and the **national economy**.



Economic impact analysis



Investment analysis

All results reflect student and financial data reported by America's community colleges to the Integrated Postsecondary Education System (IPEDS) for fiscal year (FY) 2019-20. The alumni impact on the U.S. economy is reported under the economic impact analysis and is measured in terms of added income. The returns on investment to students, taxpayers, and society in the U.S. are reported under the investment analysis.

¹ The institutions reflected in this analysis are those designated in IPEDS as public two-year institutions and public four-year institutions primarily providing associate degrees. Lightcast's definition of community colleges differs slightly from the number of institutions that are members of the American Association of Community Colleges, who defines community colleges as predominately associate degree regionally accredited institutions.



Economic impact analysis



America's community colleges' greatest impact comes from the education and training they provide to U.S. residents. Since the colleges were established, students have graduated from the colleges and entered or re-entered the workforce with new skills that they have been able to directly apply to their jobs, enhancing overall productivity in the national workforce.

Alumni impact



The education and training the colleges provide for U.S. residents generate substantial value to the national economy. Since the colleges were first established, students have studied at America's community colleges and entered the national workforce with greater knowledge and new skills. Today, millions of former students of America's community colleges are employed in the U.S. As a result of their education from America's community colleges, the students receive higher earnings and increase the productivity of the businesses that employ them.

In FY 2019-20, alumni of America's community colleges generated \$898.5 billion in added income for the national economy. For context, the impact of \$898.5 billion is equal to approximately 4.1% of the total gross domestic product (GDP) of the U.S. This contribution that the colleges provided on their own was nearly as large as the entire Construction industry in the nation.

America's community colleges' economic impact can also be expressed in terms of jobs supported. The \$898.5 billion impact supported 10.7 million national jobs, using the jobs-to-sales ratios specific to each industry in the nation. This means that one out of every 18 jobs in the U.S. is supported by the activities of the colleges' former students.

In addition, the \$898.5 billion, or 10.7 million supported jobs, stemmed from different industry sectors. For instance, among non-education industry sectors, alumni of America's community colleges in the Health Care & Social Assistance industry sector supported 1.9 million jobs in FY 2019-20. If the colleges did not exist, these impacts would not have been generated in the U.S.

Impacts created by America's community colleges in FY 2019-20



Alumni impact

\$898.5 billion

OR

Jobs supported

10,694,944

America's community colleges' alumni impact by industry (jobs supported)



1,949,617

Health Care & Social Assistance



1,232,154

Retail Trade



1,053,725

Other Services (except
Public Administration)



806,536

Government, Non-Education



752,524

Professional & Technical Services


One out of every 18 jobs in the U.S. is supported by the activities of America's community colleges' alumni.





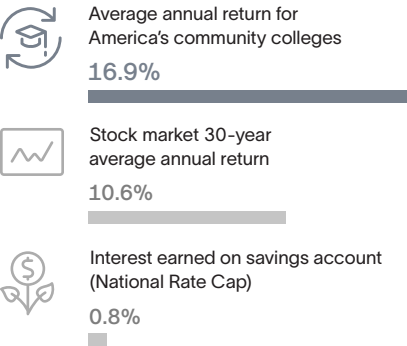
An investment analysis evaluates the costs associated with a proposed venture against its expected benefits. If the benefits outweigh the costs, then the investment is financially worthwhile. The analysis presented here considers America’s community colleges as an investment from the perspectives of students, taxpayers, and society in the U.S.

Student perspective

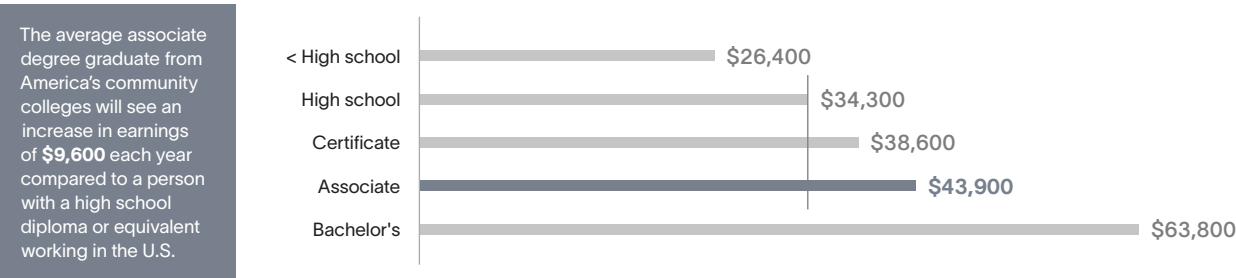
 In FY 2019–20, America’s community colleges served 9.8 million credit students.² In order to attend college, students paid for tuition and fees. Some also took out loans and will incur interest on those loans. Additionally, students give up money they would have otherwise earned had they not attended college; non-working students forego the entire amount of potential earnings, whereas working students sacrifice a part of their earnings while holding jobs that pay less than a full-time job could have provided. The total investment made by students of America’s community colleges in FY 2019–20 amounted to a present value of \$58 billion, equal to \$10.4 billion in out-of-pocket expenses (including future principal and interest on student loans) and \$47.6 billion in forgone time and money.

In return for their investment, America’s community colleges’ students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average America’s community colleges associate degree graduate from FY 2019–20 will see annual earnings \$9,600 higher than a person with a high school diploma or equivalent working in the U.S. Over a working lifetime, the benefits of the associate degree over a high school diploma will amount to an undiscounted value of \$403.2 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings that America’s community colleges’ students will receive over their working careers is \$265.2 billion.

Students see a high rate of return for their investment in America’s community colleges



Source: Forbes’ S&P 500, 1991–2020. FDIC.gov, 6–2021.



Source: Lightcast employment data.

2 Due to the limitations of the IPEDS data that only reflect credit students, and the absence of alternative reliable sources to collect accurate data on non-credit students, the results of this analysis are based on data for degree-seeking students.

The students' benefit-cost ratio is 4.6. In other words, for every dollar students invest in an education at America's community colleges in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$4.60 in higher future earnings. Annually, the students' investment in America's community colleges has an average annual internal rate of return of 16.9%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 10.6%.

Taxpayer perspective



America's community colleges generate more in tax revenue than they take.

These benefits to taxpayers consist primarily of taxes that the government will collect from the added revenue created in the nation. As America's community colleges' 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 2019-20 students' working lives, the government will have collected a present value of \$331.7 billion in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of America's community colleges' students and the corresponding reduced government services.

Education is statistically correlated with a variety of lifestyle changes. The educations that the 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. Students of America's community colleges will be more employable, so their reduced demand for income assistance such as welfare and unemployment benefits will benefit taxpayers. Altogether, the present value of the benefits associated with an education through America's community colleges will generate \$17.8 billion in savings to taxpayers.

Total taxpayer benefits amount to \$349.5 billion, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$51.3 billion, equal to the amount of federal, state, and local government funding America's community colleges received in FY 2019-20. These benefits and costs yield a benefit-cost ratio of 6.8. This means that for every dollar of public money invested in America's community colleges in FY 2019-20, taxpayers will receive a cumulative present value of \$6.80 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 12.2%, which compares favorably to other long-term investments in the public and private sectors.

For every dollar of public money invested in America's community colleges, taxpayers will receive a cumulative value of **\$6.80** over the course of the students' working lives.

Social perspective



Society as a whole in the U.S. benefits from the presence of America's community colleges in two major ways. Primarily, society benefits from an increased economic base in the nation. 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 the U.S.



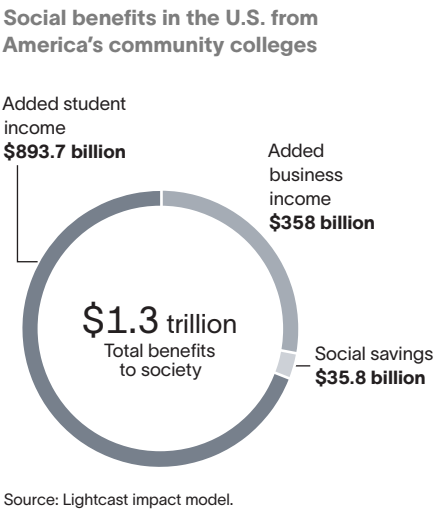
Benefits to society also consist of the savings generated by the improved lifestyles of America’s community colleges’ students. As discussed in the previous section, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided 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.

Altogether, the social benefits of America’s community colleges equal a present value of \$1.3 trillion. These benefits include \$893.7 billion in added student income, \$358.0 billion in added business income, and \$35.8 billion in social savings related to health, crime, and income assistance in the U.S. People in the U.S. invested a present value total of \$110.7 billion in America’s community colleges in FY 2019-20. The investment includes all federal, state, and local government funding to the colleges and student costs.

The benefit-cost ratio for society is 11.6, equal to the \$1.3 trillion in benefits divided by the \$110.7 billion in costs. In other words, for every dollar invested in America’s community colleges, people in the U.S. will receive a cumulative value of \$11.60 in benefits. The benefits of this investment will occur for as long as America’s community colleges’ students remain employed in the national workforce.

Summary of investment analysis results

The results of the analysis demonstrate that America’s community colleges are 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 through America’s community colleges. At the same time, taxpayers’ investment in America’s community colleges returns more to government budgets than it costs and creates a wide range of social benefits throughout the U.S.



Student perspective

Present value benefits
\$265.2 billion

Present value costs
\$58.0 billion

Net present value
\$207.2 billion

Benefit-cost ratio	Rate of return
4.6	16.9%

Taxpayer perspective

Present value benefits
\$349.5 billion

Present value costs
\$51.3 billion

Net present value
\$298.3 billion

Benefit-cost ratio	Rate of return
6.8	12.2%

Social perspective

Present value benefits
\$1.3 trillion

Present value costs
\$110.7 billion

Net present value
\$1.2 trillion

Benefit-cost ratio	Rate of return
11.6	n/a*

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

Conclusion

The results of this study demonstrate that America's community colleges create value from multiple perspectives. The colleges benefit businesses across the nation by supplying a steady flow of qualified, trained workers to the workforce. America's community colleges enrich the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The colleges benefit taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, America's community colleges benefit society as a whole in the U.S. by creating a more prosperous economy and generating a variety of savings through the improved lifestyles of students.

The results of this study demonstrate that America's community colleges create value from **multiple perspectives**.

About the study

Data and assumptions used in the study are based on several sources, including the FY 2019-20 academic and financial data from America's community colleges reported to IPEDS, 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, estimates from Lightcast's client database, 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 American Association of Community Colleges (AACC) for a copy of the main report.



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 economicmodeling.com/higher-education to learn more or connect with us.