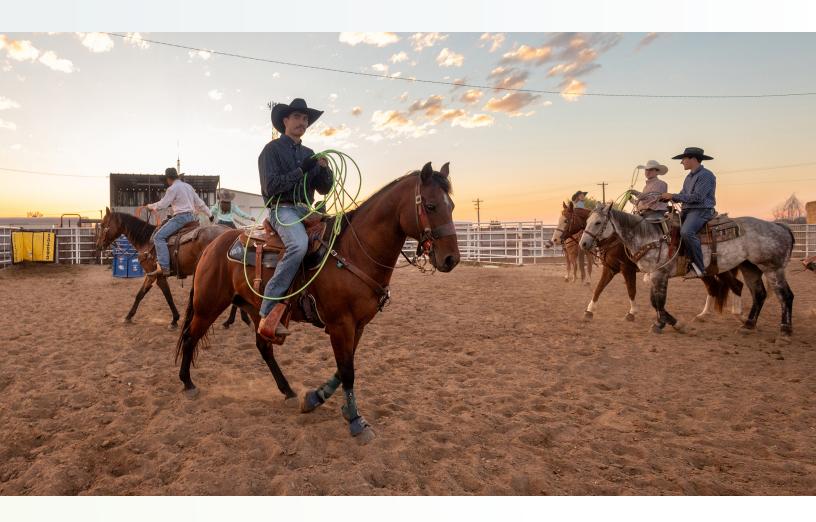
# The Economic Value of Wyoming Community Colleges







YOMING COMMUNITY COLLEGES create value in many ways. The colleges play a key role in helping students increase their employability and achieve their individual potential. The colleges draw students to the state, generating new dollars and opportunities for Wyoming. The colleges 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.

Wyoming Community Colleges influence both the lives of students and the state economy. The colleges support a variety of industries in Wyoming, serve state businesses, and benefit society as a whole in Wyoming from an expanded economy and improved quality of life. Additionally, the benefits created by Wyoming Community Colleges extend to the state and local government through increased tax revenues and public sector savings.

This study measures the economic impacts created by Wyoming Community Colleges on the business community and the benefits the colleges generate in return for the investments made by their key stakeholder groups—students and society. The following two analyses are presented:

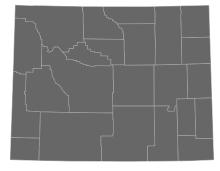


# **Economic impact analysis**



# **Investment analysis**

All results reflect employee, student, and financial data, provided by the colleges, for fiscal year (FY) 2022-23. Impacts on the Wyoming economy are reported under the economic impact analysis and are measured in terms of added income. The returns on investment to students and society in Wyoming are reported under the investment analysis.



Wyoming

Wyoming Community
Colleges influence both
the **lives of students** and
the **state economy**.

The following colleges are included in this analysis: Casper College, Central Wyoming College, Eastern Wyoming College, Gillette College, Laramie County Community College, Northwest College, Sheridan College, and Western Wyoming Community College.

# **Economic impact analysis**



Wyoming Community Colleges promote economic growth in Wyoming through their direct expenditures and the resulting expenditures of students and state businesses. The colleges serve as employers and buyers of goods and services for their day-to-day and construction operations. The colleges' activities attract students from outside Wyoming, whose expenditures benefit state vendors. In addition, the colleges are primary sources of higher education to Wyoming residents and suppliers of trained workers to state industries, enhancing overall productivity in the state workforce.

# **Operations spending impact**

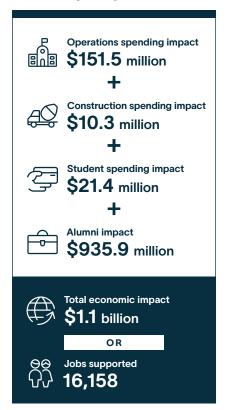
Wyoming Community Colleges add economic value to Wyoming as employers of state residents and large-scale buyers of goods and services. In FY 2022-23, the colleges employed 2,633 full-time and part-time faculty and staff, 93% of whom lived in Wyoming. Total payroll at Wyoming Community Colleges was \$165.0 million, much of which was spent in the state for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the colleges spent \$99.6 million on expenses related to facilities, supplies, and professional services (excluding construction).

Wyoming Community Colleges' operations spending added \$151.5 million in income to the state during the analysis year. This figure represents the colleges' payroll, the multiplier effects generated by the in-state spending of the colleges and their employees, and a downward adjustment to account for funding that the colleges received from state sources. The \$151.5 million in added income is equivalent to supporting 2,435 jobs in the state.

# **Construction spending impact**

Wyoming Community Colleges invest in capital projects each year to maintain facilities, create additional capacities, and meet growing educational demands. While the amount varies from year to year, these quick infusions of income and jobs have a substantial impact on the state economy. In FY 2022-23, Wyoming Community Colleges' construction spending generated \$10.3 million in added income, which is equivalent to supporting 158 jobs.

Impacts created by Wyoming Community Colleges in FY 2022-23



## Student spending impact

Around 7% of students attending Wyoming Community Colleges originated from outside the state in FY 2022-23, and the majority of these students relocated to Wyoming to attend the colleges. These students may not have come to the state if the colleges did not exist. In addition, some in-state students, referred to as retained students, would have left Wyoming if not for the existence of Wyoming Community Colleges. While attending the colleges, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$21.4 million in added income for the state economy in FY 2022-23, which supported 427 jobs in Wyoming.

## **Alumni impact**

The education and training the colleges provide for state residents has the greatest impact. Since the colleges were established, students have studied at the colleges and entered the state workforce with greater knowledge and new skills. Today, hundreds of thousands of former students of Wyoming Community Colleges are employed in Wyoming. As a result of their education from Wyoming Community Colleges, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2022-23, alumni of Wyoming Community Colleges generated \$935.9 million in added income for the state economy, which is equivalent to supporting 13,138 jobs.

# **Total impact**

Wyoming Community Colleges added \$1.1 billion in income to the Wyoming economy during the analysis year, equal to the sum of the operations and construction spending impacts; the student spending impact; and the alumni impact. For context, the \$1.1 billion impact was equal to approximately 2.4% of the total gross state product (GSP) of Wyoming. This contribution that the colleges provided on their own was larger than the entire Agriculture, Forestry, Fishing & Hunting industry in the state.

Wyoming Community Colleges' total impact can also be expressed in terms of jobs supported. The \$1.1 billion impact supported 16,158 state jobs, using the jobs-to-sales ratios specific to each industry in the state. This means that one out of every 28 jobs in Wyoming is supported by the activities of the colleges and their students. In addition, the \$1.1 billion, or 16,158 supported jobs, stemmed from different industry sec-

tors. For instance, among non-education industry sectors, the spending of Wyoming Community Colleges and their students and the activities of their alumni in the Health Care & Social Assistance industry sector supported 1,791 jobs in FY 2022-23. If the colleges did not exist, these impacts would not have been generated in Wyoming.

Wyoming Community Colleges' impact by industry (jobs supported)



#### 1,791

Health Care & Social Assistance



#### 1,586

Government, Non-Education



#### 1,289

Other Services (except Public Administration)



#### 1,262

Agriculture, Forestry, Fishing, & Hunting



#### 992

Construction

One out of every 28 jobs in Wyoming is supported by the activities of the colleges and their students.



# **Investment analysis**



An investment analysis evaluates the costs associated with a proposed venture against its expected benefits. The analysis presented here evaluates Wyoming Community Colleges as an investment from the perspectives of students and society in Wyoming. As with the economic impact analysis, this analysis considers only FY 2022-23 activities.

## Student perspective

In FY 2022-23, Wyoming Community Colleges served 23,918 credit and 17,123 non-credit students. In order to attend the colleges, 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 Wyoming Community College students in FY 2022-23 amounted to a present value of \$105.9 million, equal to \$54.7 million in out-of-pocket expenses (including future principal and interest on student loans) and \$51.2 million in forgone time and money.

In return for their investment, Wyoming Community College students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average associate degree graduate from Wyoming Community Colleges in FY 2022-23 will see annual earnings \$10,100 higher than a person with a high school diploma or equivalent working in Wyoming. Over a working lifetime, the benefits of the associate degree over a high school diploma will amount to an undiscounted value of \$404,000 in higher earnings per graduate. The present value of the cumulative higher future earnings that Wyoming Community College FY 2022-23 students will receive over their working careers is \$609.5 million.

The students' benefit-cost ratio is 5.8. In other words, for every dollar students invest in an education at Wyoming Community Colleges in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$5.80 in higher future earnings. Annually, the students' investment in Wyoming Community Colleges Students see a high rate of return for their investment in Wyoming **Community Colleges** 



Average annual return for Wyoming Community Colleges students

21.6%



Stock market 30-year average annual return

10.1%



Interest earned on savings account (national deposit rate)

0.5% 

Source: Forbes' S&P 500, 1994-2023;

FDIC.gov, March 2023

#### Average earnings by education level at career midpoint

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



Source: Lightcast employment data



has an average annual internal rate of return of 21.6%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 10.1%.

## Social perspective

Society as a whole in Wyoming benefits from the presence of Wyoming Community Colleges in two major ways. Primarily, society benefits from an increased economic base in the state. 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 Wyoming.

Benefits to society also consist of the savings generated by the improved lifestyles of Wyoming Community College 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. Health care savings include avoided medical costs associated with smoking, obesity, substance 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 Wyoming Association of Community College Trustees for a copy of the main report.

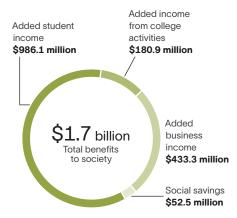
Altogether, the social benefits of Wyoming Community Colleges equal a present value of \$1.6 billion. These benefits include \$982.8 million in added student income, \$431.4 million in added business income, \$183.1 million in added income from college activities, as well as \$52.4 million in social savings related to health, the justice system, and income assistance in Wyoming. Furthermore, direct benefits to Wyoming's tax base represent a present value of \$152.1 million of tax revenue growth, stemming from increased business output, and government savings, from a reduced demand for government-funded services in the state. People in Wyoming invested a present value total of \$367.8 million in Wyoming Community Colleges in FY 2022-23. The cost includes all the colleges' expenditures and student costs.

The benefit-cost ratio for society is 4.5, equal to the \$1.6 billion in benefits divided by the \$367.8 million in costs. In other words, for every dollar invested in Wyoming Community Colleges, people in Wyoming will receive a cumulative value of \$4.50 in benefits. The benefits of this investment will occur for as long as the Wyoming Community College FY 2022-23 students remain employed in the state workforce.

# Summary of investment analysis results

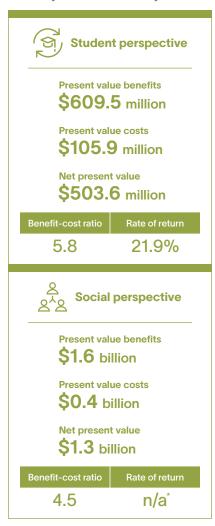
The results of the analysis demonstrate that Wyoming Community Colleges are a strong investment for students and society. As shown, students receive a great return for their investments in an education through Wyoming Community Colleges. The benefits generated by the colleges and their students also directly benefit Wyoming's tax base and create a wide range of social benefits throughout the state.

#### Social benefits in Wyoming from **Wyoming Community Colleges**



Source: Lightcast impact model

#### Summary of investment analysis results



<sup>\*</sup> 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 Wyoming Community Colleges create value from multiple perspectives.

The colleges benefit state businesses by increasing consumer spending in the state and supplying a steady flow of qualified, trained workers to the workforce. Wyoming Community Colleges enrich the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The colleges benefit state and local taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, Wyoming Community Colleges benefit society as a whole in Wyoming 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 2022-23 academic and financial reports from Wyoming Community Colleges, 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 Wyoming Association of Community College Trustees for a copy of the main report.



# Lightcast

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.