

FACT SHEET

The Economic Value of Kirkwood Community College to the State of Iowa

Kirkwood Community College (KCC) creates a significant positive impact on the business community and generates a return on investment to its major stakeholder groups—students, taxpayers, and society. Using a two-pronged approach that involves an economic impact analysis and an investment analysis, this study calculates the benefits to each of these groups. Results of the analysis reflect Fiscal Year (FY) 2013-14.

IMPACTS CREATED BY KCC IN FY 2013-14

ADDED INCOME	JOBS
\$92.2 MILLION	1,966
Operations spending impact	
\$1.6 MILLION	27
Construction Spending Impact	
\$60.1 MILLION	2,205
Student spending impact	
\$819.4 MILLION	13,801
Alumni impact	
\$973.3 MILLION	18,000
Total impact	

IMPACT ON IOWA'S BUSINESS COMMUNITY

During the analysis year, KCC and its students added **\$973.3 MILLION** in added income to Iowa's economy, approximately equal to **0.6%** of the state's total GSP. The economic impacts of KCC break down as follows:

Operations spending impact

- KCC employed 1,779 full-time and part-time employees in FY 2013-14. Payroll amounted to **\$83.5 MILLION**, much of which was spent in Iowa to purchase groceries, clothing, and other household goods and services. The college spent another **\$56 MILLION** to support its day-to-day operations.
- The net impact of college payroll and expenses in Iowa during the analysis year was approximately **\$92.2 MILLION** in added income.

Construction spending impact

- KCC commissioned contractors to build or renovate its facilities during the analysis year, generating a short-term infusion of spending and jobs in the state economy.
- The net impact of KCC's construction spending in FY 2013-14 was **\$1.6 MILLION** in added income for Iowa, equivalent to **27** new jobs.

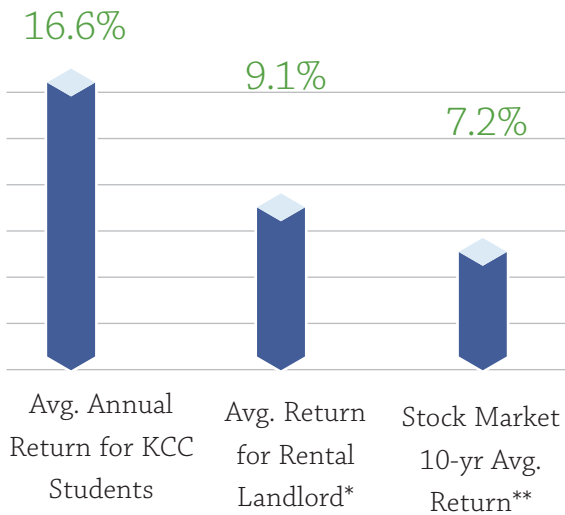
Impact of student spending

- Around 8% of students attending KCC originated from outside the state. Some of these students relocated to Iowa. In addition, a number of students would have left the state if not for KCC. These relocator and retained students spent money on groceries, transportation, rent, and so on at state businesses.
- The expenditures of relocator and retained students during the analysis year added approximately **\$60.1 MILLION** in added income to Iowa's economy.

Alumni impact

- Over the years, students have studied at KCC and entered or re-entered the workforce with newly-acquired skills. Today, thousands of these former students are employed in Iowa.
- The accumulated contribution of former students currently employed in the state workforce amounted to **\$819.4 MILLION** in added income during the analysis year. Of this non-credit students contributed \$220.1 million and credit students added \$599.3 million in added income during the analysis year.

STUDENT RATE OF RETURN



*RealtyTrac's Q3, 2014
 **Forbes's S&P 500, 1994-2014.

RETURN ON INVESTMENT TO STUDENTS, TAXPAYERS, AND SOCIETY

Student perspective

- KCC's FY 2013-14 students paid a total of **\$45.9 MILLION** to cover the cost of tuition, fees, and supplies. They also forwent **\$180.9 MILLION** in money that they would have earned had they been working instead of learning.
- In return for the monies invested in the college, students will receive a present value of **\$833.5 MILLION** in increased earnings over their working lives. This translates to a return of **\$3.70** in higher future earnings for every \$1 that students invest in their education. The average annual return for students is **16.6%**.

Taxpayer perspective

- In FY 2013-14, state and local taxpayers in Iowa paid **\$61.6 MILLION** to support the operations of KCC. The net present value of the added tax revenue stemming from the students' higher lifetime earnings and the increased output of businesses amounts to **\$207 MILLION** in benefits to taxpayers. Savings to the public sector add another **\$18.1 MILLION** in benefits due to a reduced demand for government-funded services in Iowa.
- Dividing benefits to taxpayers by the associated costs yields a **3.7** benefit-cost ratio, i.e., every \$1 in costs returns \$3.70 in benefits. The average annual return on investment for taxpayers is **12.2%**.

Social perspective

- The economic base in Iowa will grow by **\$2.3 BILLION** over the course of the students' working lives. Society will also benefit from **\$63.2 MILLION** in present value social savings related to reduced crime, lower unemployment, and increased health and well-being across the state.
- For every dollar that society spent on KCC educations during the analysis year, society will receive a cumulative value of **\$7.00** in benefits, for as long as the FY 2013-14 student population at KCC remains active in the state workforce.

FOR EVERY \$1 SPENT BY...

STUDENTS	<p>\$3.70</p> <p>Gained in lifetime earnings for STUDENTS</p>
TAXPAYERS	<p>\$3.70</p> <p>Gained in added state revenue and social savings for TAXPAYERS</p>
SOCIETY	<p>\$7.00</p> <p>Gained in added taxes and public sector savings for SOCIETY</p>

FACT SHEET

The Economic Value of Kirkwood Community College

Kirkwood Community College (KCC) creates a significant positive impact on the business community and generates a return on investment to its major stakeholder groups—students, taxpayers, and society. Using a two-pronged approach that involves an economic impact analysis and an investment analysis, this study calculates the benefits to each of these groups. Results of the analysis reflect Fiscal Year (FY) 2013-14.

IMPACTS CREATED BY KCC IN FY 2013-14

ADDED INCOME	JOBS
\$101.3 MILLION	2,066
Operations spending impact	
\$1.6 MILLION	24
Construction Spending Impact	
\$40.4 MILLION	1,498
Student spending impact	
\$689.5 MILLION	9,812
Alumni impact	
\$832.8 MILLION	13,400
Total impact	

IMPACT ON BUSINESS COMMUNITY

During the analysis year, KCC and its students added **\$832.8 MILLION** in added income to the KCC Service Area economy, approximately equal to **3.2%** of the region's total GRP. By comparison, this impact is nearly as large as the entire Transportation and Warehousing industry.

Operations spending impact

- KCC employed 1,779 full-time and part-time employees in FY 2013-14. Payroll amounted to **\$83.5 MILLION**, much of which was spent in the KCC Service Area to purchase groceries, clothing, and other household goods and services. The college spent another **\$56 MILLION** to support its day-to-day operations.
- The net impact of college payroll and expenses in the KCC Service Area during the analysis year was approximately **\$101.3 MILLION**.

Construction spending impact

- KCC commissioned contractors to build or renovate its facilities during the analysis year, generating a short-term infusion of spending and jobs in the regional economy.
- The net impact of KCC's construction spending in FY 2013-14 was **\$1.6 MILLION** in added income for the region, equivalent to **24** new jobs.

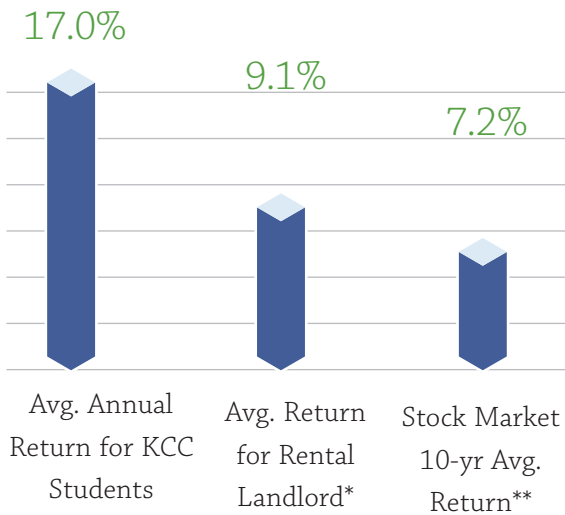
Impact of student spending

- Around 23% of students attending KCC originated from outside the region. Some of these students relocated to the KCC Service Area. In addition, a number of students would have left the region if not for KCC. These relocators and retained students spent money on groceries, transportation, rent, and so on at region businesses.
- The expenditures of relocators and retained students during the analysis year added approximately **\$40.4 MILLION** in added income to the KCC Service Area economy.

Alumni impact

- Over the years, students have studied at KCC and entered or re-entered the workforce with newly-acquired skills. Today, thousands of these former students are employed in the KCC Service Area.
- The accumulated contribution of former students currently employed in the regional workforce amounted to **\$689.5 MILLION** in added income during the analysis year. Of this non-credit students contributed \$180.7 million and credit students contributed \$508.7 million.

STUDENT RATE OF RETURN



*RealtyTrac's Q3, 2014
 **Forbes's S&P 500, 1994-2014.

RETURN ON INVESTMENT TO STUDENTS, TAXPAYERS, AND SOCIETY

Student perspective

- KCC's FY 2013-14 students paid a total of **\$45.9 MILLION** to cover the cost of tuition, fees, and supplies. They also forwent **\$196.1 MILLION** in money that they would have earned had they been working instead of learning.
- In return for the monies invested in the college, students will receive a present value of **\$913.1 MILLION** in increased earnings over their working lives. This translates to a return of **\$3.80** in higher future earnings for every \$1 that students invest in their education. The average annual return for students is **17.0%**.

Taxpayer perspective

- In FY 2013-14, state and local taxpayers in Iowa paid **\$61.6 MILLION** to support the operations of KCC. The net present value of the added tax revenue stemming from the students' higher lifetime earnings and the increased output of businesses amounts to **\$304.3 MILLION** in benefits to taxpayers. Savings to the public sector add another **\$18.1 MILLION** in benefits due to a reduced demand for government-funded services in Iowa.
- Dividing benefits to taxpayers by the associated costs yields a **5.2** benefit-cost ratio, i.e., every \$1 in costs returns \$5.20 in benefits. The average annual return on investment for taxpayers is **18.6%**.

Social perspective

- The economic base in Iowa will grow by **\$3.4 BILLION** over the course of the students' working lives. Society will also benefit from **\$63.3 MILLION** in present value social savings related to reduced crime, lower unemployment, and increased health and well-being across the state.
- For every dollar that society spent on KCC educations during the analysis year, society will receive a cumulative value of **\$9.70** in benefits, for as long as the FY 2013-14 student population at KCC remains active in the state workforce.

FOR EVERY \$1 SPENT BY...

STUDENTS	<p>\$3.80</p> <p>Gained in lifetime earnings for STUDENTS</p>
TAXPAYERS	<p>\$5.20</p> <p>Gained in added state revenue and social savings for TAXPAYERS</p>
SOCIETY	<p>\$9.70</p> <p>Gained in added taxes and public sector savings for SOCIETY</p>

THE ECONOMIC VALUE

Of Kirkwood Community College



ANALYSIS OF THE ECONOMIC IMPACT & RETURN ON INVESTMENT OF EDUCATION

Kirkwood Community College (KCC) creates value in many ways. The college plays a key role in helping students increase their employability and achieve their individual potential. It provides students with the skills they need to have a fulfilling and prosperous career. Further, it supplies an environment for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

The value of KCC influences both the lives of students and also the regional economy. The college serves a range of industries in the KCC Service Area, supports local businesses, and benefits society as a whole in Iowa from an expanded economy and improved quality of life. The benefits created by KCC even extend to the state and local government through increased tax revenues and public sector savings.

The purpose of this study is to investigate the economic impacts created by KCC on the business community and the benefits that the college generates in return for the investments made by its key stakeholder groups—students, taxpayers, and society. The region the college serves is defined as Benton, Cedar, Iowa, Johnson, Jones, Linn, and Washington counties. The following two analyses are presented:

- **ECONOMIC IMPACT ANALYSIS**
- **INVESTMENT ANALYSIS**

All results reflect student and financial data for Fiscal Year (FY) 2013-14. Impacts on the regional business community are reported under the economic impact analysis. Results are measured in terms of added income. The return on investment to students, taxpayers, and society are reported under the investment analysis. Both analyses are described more fully in the following sections.

ECONOMIC IMPACT ANALYSIS

KCC promotes economic growth in the KCC Service Area in a variety of ways. The college is an employer and buyer of goods and services, and the living expenses of students benefit local businesses. In addition, KCC is a primary source of education to the KCC Service Area residents and a supplier of trained workers to the KCC Service Area industries.

OPERATIONS SPENDING IMPACT

KCC is an important employer in the KCC Service Area. In FY 2013-14, the college employed 1,779 full-time and part-time faculty and staff. Of these, 89% lived in the KCC Service Area. Total payroll at KCC was \$83.5 million, much of which was spent in the region for groceries, rent, dining out, clothing, and other household expenses.

KCC is itself a large-scale buyer of goods and services. In FY 2013-14 the college spent \$56 million to cover its expenses for facilities, professional services, and supplies.

KCC added \$101.3 million in added income to the region during the analysis year as a result of its day-to-day operations. This figure represents the college's payroll, the multiplier effects generated by the spending of the college and its employees, and a downward adjustment to account for funding that the college received from state and local sources.

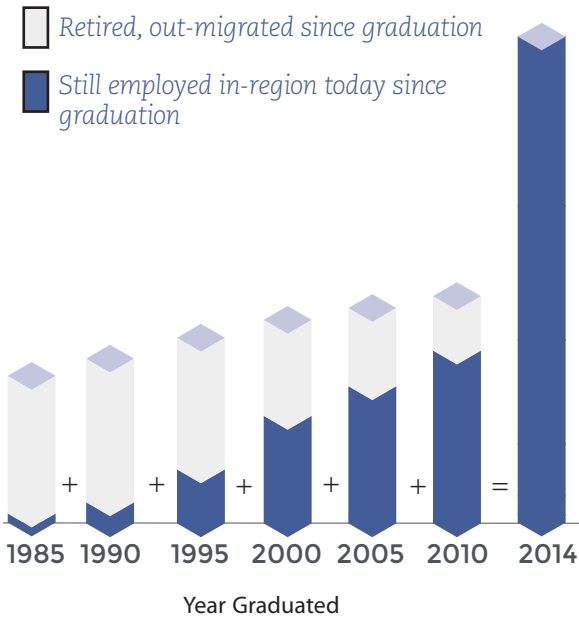
IMPACT OF CONSTRUCTION SPENDING

KCC commissioned contractors to build or renovate a number of facilities during the analysis year. The quick infusion of earnings and jobs that occurred in the region economy as a result of this construction spending is only considered short-term due to the one-time nature of construction projects. Nonetheless, the construction spending had a substantial impact on the region economy in FY 2013-14, equal to \$1.6 million in added income for the KCC Service Area and the creation of 24 new jobs.

TABLE 1. IMPACTS CREATED BY KCC IN FY 2013-14

ADDED INCOME	JOBS
\$101.3 MILLION	2,066
Operations spending impact	
\$1.6 MILLION	24
Construction Spending Impact	
\$40.4 MILLION	1,498
Student spending impact	
\$689.5 MILLION	9,812
Alumni impact	
\$832.8 MILLION	13,400
Total impact	

FIGURE 1. KCC ALUMNI WORKING IN-REGION TODAY



IMPACT OF STUDENT SPENDING

Around 23% of students attending KCC originated from outside the region in FY 2013-14. Some of these students relocated to the KCC Service Area. These students would not have come to the region if the college did not exist. In addition, a number of in-region students would have left the area for other education opportunities if not for the existence of KCC. While attending the college, these relocator and retained students spent \$92.9 million to purchase groceries, rent accommodation, pay for transportation, and so on. A significant portion of these expenditures occurred in the region, generating \$40.4 million in added income in the region economy during the analysis year.

ALUMNI IMPACT

The education and training KCC provides for region residents results in the greatest impact. As shown in Figure 1, since the college was established, students have studied at KCC and entered the regional workforce with new skills. Today, thousands of former students are employed in the KCC Service Area.

During the analysis year, past and present students of KCC generated \$689.5 million in added income for the region. Of that non-credit students at KCC contributed \$180.7 million and credit students contributed \$508.7 million. This figure represents the higher earnings that students earned during the year, the increased output of the businesses that employed the students, and the multiplier effects that occurred as students and their employers spent money at other businesses.

TABLE 2. KCC IMPACT BY INDUSTRY

INDUSTRY	ADDED INCOME (THOUSANDS)	JOBS
Manufacturing	\$68,300	534
Health Care and Social Assistance	\$57,189	1,130
Accommodation and Food Services	\$49,584	2,006
Government, Non-Education	\$41,615	522
Agriculture, Forestry, Fishing and Hunting	\$26,450	334

TOTAL IMPACT

The overall impact of KCC on the local business community during the analysis year amounted to \$832.8 million in added income, equal to the sum of the operations spending impact, the construction spending impact, the student spending impact, and the alumni impact. The \$832.8 million in added income was equal to approximately 3.2% of the GRP of the KCC Service Area. By comparison, this contribution that the college provides on its own is nearly as large as the entire Transportation and Warehousing industry.

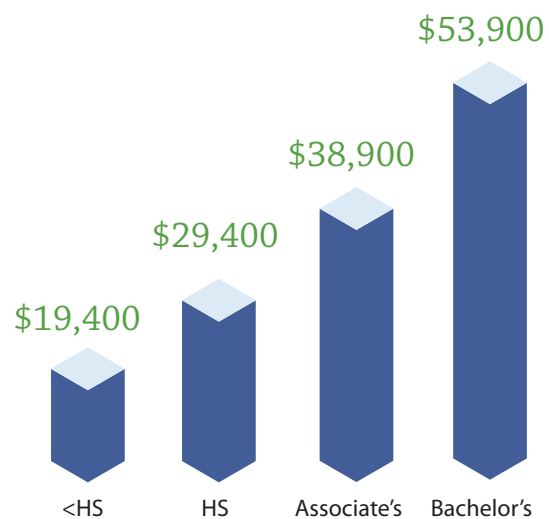
Investment analysis is the process of evaluating total costs and measuring these against total benefits to determine whether or not a proposed venture will be profitable. If benefits outweigh costs, then the investment is worthwhile. If costs outweigh benefits, then the investment will lose money and is considered unprofitable. This study considers KCC as an investment from the perspectives of students, taxpayers, and society. The backdrop for the analysis is the entire Iowa economy.

STUDENT PERSPECTIVE

In FY 2013-14, KCC served 21,916 credit students and 41,881 non-credit students. In order to attend college, students paid for tuition, fees, books, and supplies. They also gave up money that they would have otherwise earned had they been working instead of attending college. The total investment made by KCC's students in FY 2013-14 amounted to \$241.9 million, equal to \$45.9 million in out-of-pocket expenses plus \$196.1 million in forgone time and money.

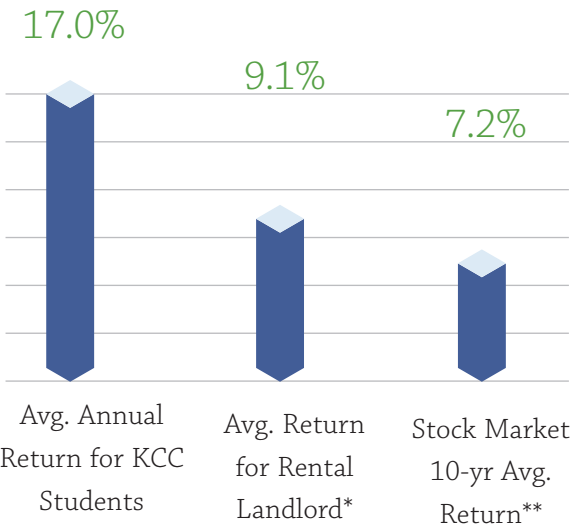
In return for their investment, KCC's students will receive a stream of higher future earnings that will continue to grow through their working lives. As shown in Figure 2, mean earnings levels at the midpoint of the average-aged worker's career increase as people achieve higher levels of education. For example, the average associate's degree completer from KCC will see an increase in earnings of \$9,500 each year compared to someone with a high school diploma or equivalent. Over a working lifetime, this increase in earnings amounts to an undiscounted value of approximately \$361,000 in higher earnings.

FIGURE 2. HIGHER EARNINGS BY EDUCATION LEVEL AT CAREER MIDPOINT IN THE KCC SERVICE AREA



Source: EMSI complete employment data.

FIGURE 3. STUDENT RATE OF RETURN



*RealtyTrac's Q3 2014
 **Forbes' S&P 500, 1994-2014.

The present value of the higher future earnings that KCC's students will receive over their working careers is \$913.1 million. Dividing this value by the \$241.9 million in student costs yields a benefit-cost ratio of 3.8. In other words, for every \$1 students invest in KCC in the form of out-of-pocket expenses and forgone time and money, they receive a cumulative of \$3.80 in higher future earnings. The average annual rate of return for students is 17.0%. This is an impressive return, especially when compared to the 10-year average 7.2% return to the US stock market (Figure 3).

TAXPAYER PERSPECTIVE

KCC generates more in tax revenue than it takes. These benefits to taxpayers consist primarily of taxes that the state and local government will collect from the added revenue created in the state. As KCC students earn more, they will make higher tax payments. Employers will also make higher tax payments as they increase their output and purchase more supplies and services. By the end of the FY 2013-14 students' working careers, the state and local government will have collected a present value of \$304.3 million in added taxes.

Benefits to taxpayers consist of the savings generated by the improved lifestyles of students and the proportionally reduced government expenditures. Education is statistically correlated with a variety of lifestyle changes that generate taxpayer savings across three main categories: 1) health, 2) crime, and 3) unemployment. Improved health habits lower the students' demand for national health care services. Students are also less likely to commit crimes, so the demand for law enforcement and criminal justice services is reduced (study references are available in the main report). Students are also more employable, so the demand for welfare and unemployment benefits, such as earnings assistance and welfare benefits, is reduced. For a list of study references to these statistical benefits, please contact the college for a copy of the main report. All of these benefits will generate a present value of \$18.1 million in savings to state and local taxpayers.





Total benefits to taxpayers equal \$322.4 million, equal to the sum of the added taxes and public sector savings. Comparing this to the taxpayer costs of \$61.6 million—equal to the funding that KCC received from the state and local government during the analysis year—yields a benefit-cost ratio of 5.2. This means that for every \$1 of public money invested in KCC, taxpayers receive a cumulative value of \$5.20 over the course of the students’ working lives. The average annual rate of return is 18.6%, a solid investment that compares favorably with other long-term investments in both the private and public sectors (Figure 3).

SOCIAL PERSPECTIVE

Society as a whole within Iowa benefits from the presence of KCC in two major ways. The first and largest benefit that society receives is an increased state economic base. As discussed in the previous section, the higher student earnings and increased business output occurs across the state. This raises prosperity in Iowa and expands the economic base for society as a whole.

Benefits to society also consist of the savings generated by the improved lifestyles of students. Similar to the taxpayer section above, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers, and are distinct from the costs avoided by taxpayers outlined above. Health savings include avoided medical costs associated with smoking, alcoholism, obesity, drug abuse, and mental disorders. Crime savings include reduced security expenditures and insurance administration, lower victim costs, and reduced criminal justice system expenditures. Unemployment savings include the reduced employer contributions towards unemployment claims. For a list of study references to these statistical benefits, please contact the college for a copy of the main report.

Figure 4 shows the present value of the higher earnings and social savings that will occur in Iowa over the working lifetime of the FY 2013-14 student population at KCC. Higher earnings amounts to a present value of \$3.4 billion due to the increased lifetime earnings of students and associated increases in business output. Social savings amount to \$63.3 million, the sum of health, crime, and unemployment savings in Iowa. Altogether, total benefits to society equal \$3.4 billion (in present value terms).

FIGURE 4. PRESENT VALUE OF HIGHER EARNINGS AND SOCIAL SAVINGS IN IOWA

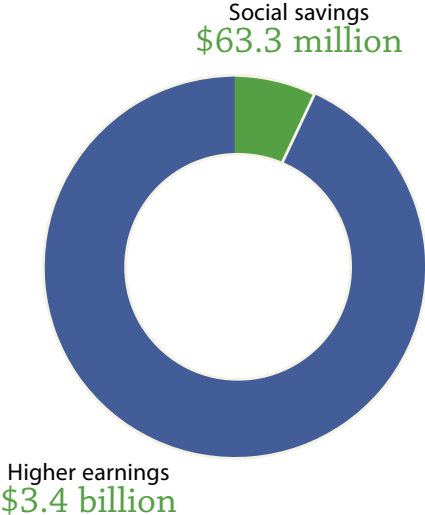


TABLE 3. SUMMARY OF INVESTMENT ANALYSIS RESULTS

STUDENT PERSPECTIVE	
\$913,145	Present value benefits (thousands)
\$241,915	Costs (thousands)
\$671,231	Net present value (thousands)
3.8	Benefit-cost ratio
17.0%	Rate of return

TAXPAYER PERSPECTIVE	
\$322,337	Present value benefits (thousands)
\$61,566	Costs (thousands)
\$260,771	Net present value (thousands)
5.2	Benefit-cost ratio
18.6%	Rate of return

SOCIAL PERSPECTIVE	
\$3,445,296	Present value benefits (thousands)
\$357,003	Costs (thousands)
\$3,088,293	Net present value (thousands)
9.7	Benefit-cost ratio
N/A	Rate of return*

* 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.

Society invested \$357 million in KCC educations during the analysis year. This includes all expenditures by KCC, all student expenditures, and all student opportunity costs. For every dollar of this investment, society as a whole in Iowa will receive a cumulative value of \$9.70 in benefits, equal to the \$3.4 billion in benefits divided by the \$357 million in costs. These benefits will occur for as long as KCC’s FY 2013-14 students remain employed in the state workforce.

SUMMARY OF INVESTMENT ANALYSIS RESULTS

Table 3 presents the results of the investment analysis for all three of KCC’s major stakeholder groups—students, taxpayers, and society. As shown, students receive great value for their educational investment. At the same time, the investment made by state and local taxpayers to the college creates a wide range of benefits to society and returns more to government budgets than it costs.

The results of this study demonstrate that KCC creates value from multiple perspectives. The college benefits local businesses by increasing consumer spending in the region and supplying a steady flow of qualified, trained workers into the workforce. It enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. It benefits state and local taxpayers through increased tax receipts across





the state and a reduced demand for government-supported social services. Finally, it benefits society as a whole in Iowa 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 2013-14 academic and financial reports from the college, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of EMSI's Social Accounting Matrix (SAM) 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 investment effectiveness and economic impact. For a full description of the data and approach used in the study, please contact the college for a copy of the technical report.

ABOUT EMSI

Economic Modeling Specialists International, a CareerBuilder company, is a leading provider of economic impact studies and labor market data to educational institutions, workforce planners, and regional developers in the U.S. and internationally. Since 2000, EMSI has completed over 1,200 economic impact studies for educational institutions in four countries. Visit www.economicmodeling.com for more information about EMSI's products and services.