



# A Return **on** Investment

The Economic Impact of Warren County Community College on the Local Economy

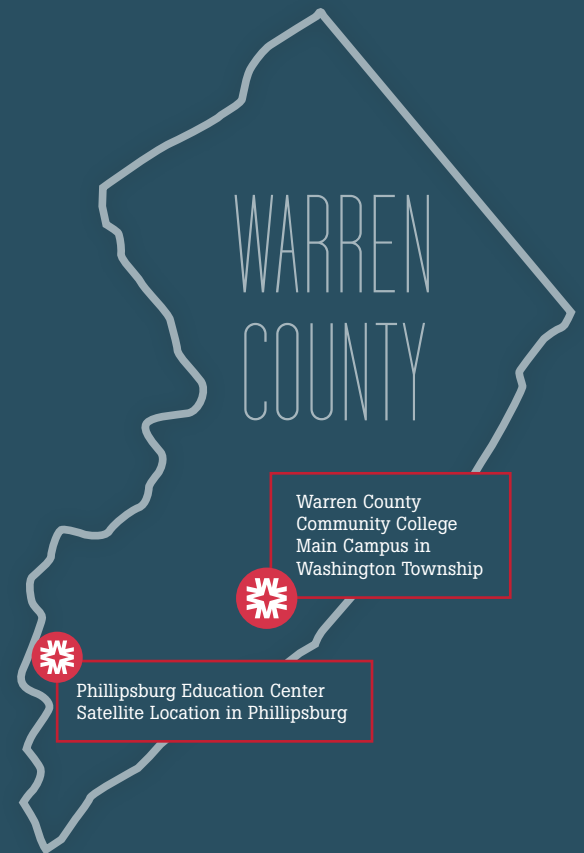
FISCAL YEAR 2011–2012 • PREPARED BY LDPLATT STRATEGIES

# About the College

As the only public institution offering a post-secondary education in Warren County, WCCC has provided educational opportunities to thousands of residents seeking to continue their education, develop their workforce skills, and increase their earning potential. During Fiscal Year 2011–2012, the College served more than 3,000 full-time and part-time credit students in a range of academic programs.

Although WCCC is one of the smallest community colleges in the state, it remains one of the strongest and most innovative. The College boasts one of the highest graduation rates in the state's community college sector.<sup>1</sup> In recent years, WCCC has introduced new partnerships with several four-year colleges, making it easier for county residents—and its impressive number of graduates—to continue on to earn bachelor's and master's degrees without ever having to leave the state and with the choice to remain in Warren County. WCCC also offers county high school students the opportunity to earn college credits, as well as valuable knowledge applicable to the workforce and to four-year degree programs, through dual enrollment courses. In Fiscal Year 2011–2012, 57 of the college's courses were approved for dual enrollment, helping hundreds of the county's high schoolers to save significantly on the cost of four-year degrees and encouraging them to continue their education after earning high school diplomas.

In addition to its fundamental support of Warren County's educational development, WCCC also contributes to and drives economic development by providing relevant instruction that addresses the needs of the local workforce. In Fiscal Year 2011–2012, WCCC provided career, vocational, and customized training programs to 1,443 students. These include health care and business programs, five of which lead to state and/or national certification and licensing. Most importantly, however, all of these training programs are centered around employment and career advancement and attract individuals who plan to stay in Warren County.



<sup>1</sup>In 2011, WCCC boasted the highest two-year graduation rate among New Jersey's 19 community colleges.

# Executive Summary

The economic return on investment that Warren County Community College makes cannot be underestimated. As the only public higher education institution in the county, WCCC has provided economic mobility to thousands of county residents, most of whom stay in the county after they graduate. This economic mobility can be measured by the increased earning potential that a degree or certificate affords. But this is only one way of measuring the true value or impact of the college. This report, for the first time, tracks three different measures that place a dollar value on the economic impact that WCCC has on the local economy.<sup>2</sup>



The results  
speak for  
themselves.

## FOR FISCAL YEAR 2011–2012:

WCCC had an estimated **DIRECT ECONOMIC IMPACT OF MORE THAN \$10.7 MILLION** on the county's economy. This direct economic impact resulted from dollars that were spent by the college, its employees, and its students and then re-spent in the local economy.

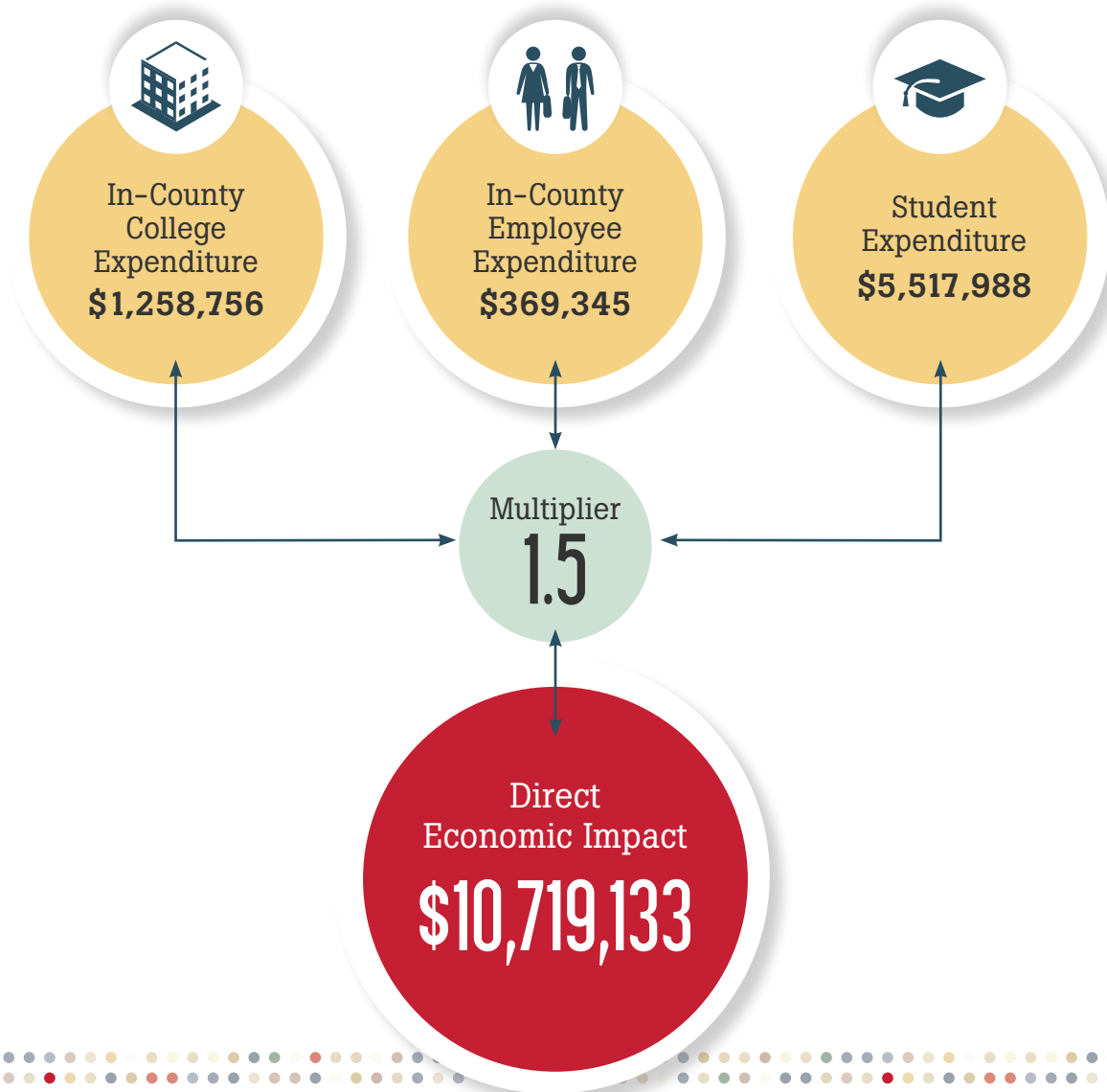
WCCC contributed to the economy by bringing **MORE THAN \$9.1 MILLION INTO THE COUNTY FROM OUT-OF-COUNTY SOURCES**. These are dollars that would not otherwise flow into the community if WCCC were not a part of it.

In keeping with its educational mission, WCCC helped the 2012 graduating class **INCREASE THEIR ANNUAL EARNING POTENTIAL BY MORE THAN \$3 MILLION** a year.

<sup>2</sup> Note that each method measures very different pieces of the economy and must be looked at independently. They cannot be added together.

# The Expenditure Impact

In Fiscal Year 2011–2012, we estimate that WCCC, its employees, and its students spent more than \$7 million in the local economy. This spending stimulated additional economic activity resulting in a direct economic impact of more than \$10.5 million.





# Warren County Community College Contributed Over \$10.5 Million to the County's Economy.

In this very conservative calculation we estimate the tangible economic impact of the college by determining the total impact from three types of expenditures generated by the College:

**IN-COUNTY INSTITUTIONAL EXPENDITURE.** This is determined by the actual in-county purchases made by the College for Fiscal Year 2011–2012 as obtained from college business records. It includes both operational and capital expenditures.

**IN-COUNTY EMPLOYEE EXPENDITURE.** This figure is determined from the disposable income (less mortgage principle and interest, taxes and retirement contribution) that employees earn and then spend in the county.

**IN-COUNTY STUDENT EXPENDITURES.** Student expenditure is calculated based on the FAFSA "Cost of Attendance" formula for full and part time students. We used the FAFSA calculation to estimate activities related to attendance at WCCC and excluded tuition and fees as well as all living and personal allowances. Note that living and personal expenses were excluded because most of WCCC's students would continue to live in the county even if they were not attending school.

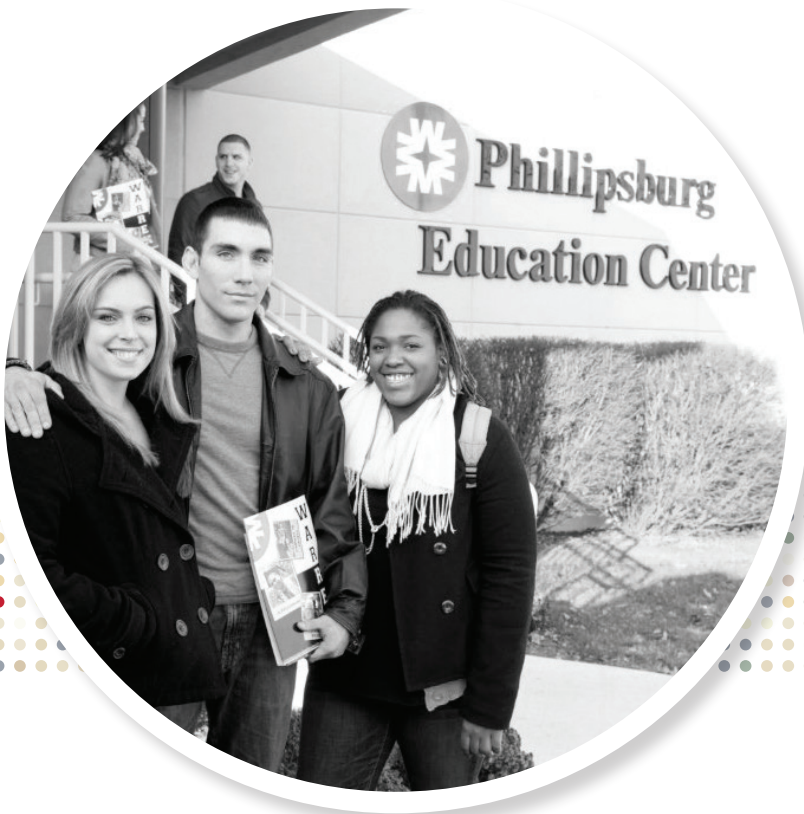
The next step in this calculation is to apply a mathematical multiplier to account for the additional economic business generated by the re-spending of these dollars within the county's economy. The multiplier is central to any economic impact study and is used to measure how much of the original spending—in this case, \$7 million—stays in the county and is then re-circulated to cover the costs of local payroll and services. This cycle of spending and re-spending continues until all of the spending leaks out of the region. The multiplier selected for this study is based on a conservative 1.5 percent.



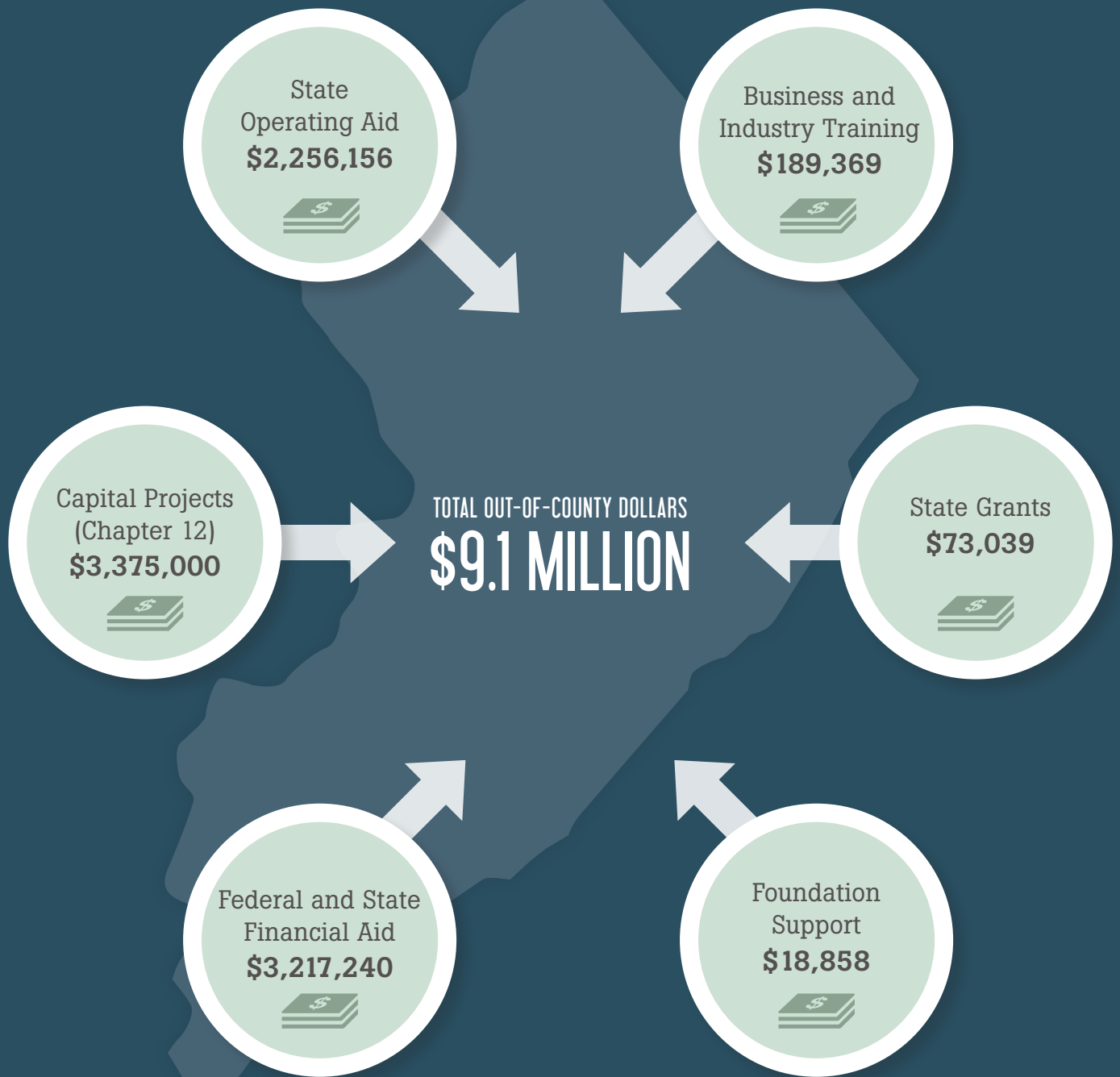
# Revenue Impact

## Bringing State and Federal Dollars to Warren County

In Fiscal Year 2011–2012, WCCC was responsible for bringing more than \$9.1 million into to the county from out-of- county sources. This figure includes state aid, Foundation support, the state’s match for capital construction funding, dollars generated from business and industry training originating outside the county and federal and state financial aid to students who live and work in Warren County. These are dollars that would not flow into the community if WCCC were not part of it. Instead, these dollars would be redistributed among the other 18 community colleges in the state and students would ultimately leave the county to obtain a degree or workforce training.

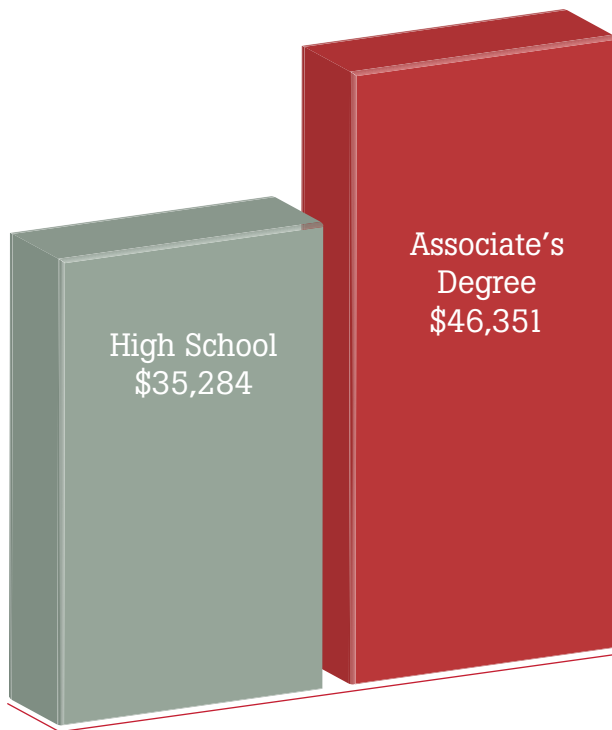


# Dollars from out of County Sources Fiscal Year 2011-2012



# Educational Impact


Increasing Earning Potential  
and Making a Difference  
in the Lives of Residents



**AVERAGE ANNUAL EARNINGS  
BY LEVEL OF EDUCATION**

<sup>3</sup> Using census and educational statistics the State Higher Education Executive Officers in "The Economic Benefits of Post Secondary Degrees: a State and National Level Analysis conclude that "despite substantial variations across states and disciplines "post secondary degree attainment clearly results in higher earnings for the vast majority of individuals in all 50 states".





In 2012, the 289 students who graduated from Warren County Community College increased their annual earning potential by



**\$3,198,363**



In almost all cases, each successive level of higher-educational attainment yields additional economic benefits.<sup>3</sup> Data from the U.S. Census Bureau calculates that the median average income for people with an associate's degree in New Jersey is \$46,351 compared with the median income of \$35,284 for people with only a high school diploma.<sup>4</sup>

And the difference is even greater for those working in health care. In New Jersey, those with an associate's degree in a health-related field have a \$24,000 advantage over those with just a high school diploma (\$54,530 compared to \$30,939).

WCCC also offers a number of occupationally focused certificates that train students for specific careers. While certificates are not always counted as measures of success, the economic value of a certificate cannot be underestimated. Every level of education is an important driver of economic mobility and is vital to the economic growth and competitiveness of the region. By preparing individuals for jobs in fields like computerized accounting or phlebotomy or medical assisting, the College is helping to ensure a skilled and employable workforce for years to come. Whether a student earns a degree or non-degree credentials, the additional skills translate into higher earnings and a more stable county economy.

<sup>4</sup> Median Wage Salary Income by State and Education Level is based on the U.S. Census Bureau, 2006-2010 American Community Survey Five-Year Public Use Microdata Sample. Note: Median Wages calculated for persons age 18-64 with positive wage /salary income working 35+ hours per week. Replicate weights Methodology used to calculate 90% Margins of Error (MOE). Design Factor Method used where Replicate Weights Methodology Fails.

# Methodology Notes

## THE EXPENDITURE IMPACT

The calculation for the direct economic impact of the College is based on two design parameters: the selection of an established model that could be easily understood and a conservative multiplier.

### The Model

We selected the Ryan Model, A Shortcut to Estimating Economic Impact Studies at Community Colleges, because it relies on existing data that could be readily collected from audited College records and business documents without the use of time-consuming surveys of the faculty, staff, or students. Data could also be collected through the financial aid office and through the Integrated Post-Secondary Education Data System (IPEDS), a federal reporting system common to all community colleges in the United States. The Ryan model is relatively simple to use and the outcomes from its application can be easily understood. We also wanted a model that was accepted and used by numerous colleges nationwide.

The Expenditure Impact calculates in-county spending by the College, its staff, and students. Spending by the college was determined by reviewing and accounting for all purchases spent within the county during Fiscal Year 2011–2012. We included Foundation spending but did not account for scholarships since that money comes back to the college in the form of tuition.

We derived student spending by using the average annual “Cost of Attendance” less tuition, fees, room and board and personal items established by the US Department of Education. The calculation was based on unduplicated headcount for the full academic year 2011–2012 for both full-time enrollment (total of 843 students) and part-time enrollment (total of 2195 students.) We also took into account spending by career and vocational programs and excluded all personal development, active adult, customized training, summer youth, English as a Second Language and Emergency Medical Technician training programs. In this case we used the average HPOG allowance for non-tuition expenses for a total of 133 full-time equivalents enrolled in a true career and/or vocational program.

To determine employee expenditure we calculated the total disposable income paid directly to college employees and excluded taxes, retirement contributions and the cost of employee benefits. We then excluded money spent on home mortgage principal and interest by calculating home ownership with and without a mortgage from the US Department of Commerce Census Quick Facts and applying the housing costs for the Allentown-Bethlehem-Easton PA/NJ Metro Area using the ACCRA Cost of Living Index. To determine the amount spent on commodities other than mortgage principal and interest we used the Bureau of Labor Statistics Consumer Expenditure survey for the Northeast and selected a conservative estimate.

### The Multiplier

The second design parameter was the selection of a conservative income multiplier. The concept of a multiplier has been a generally accepted part of macroeconomic impact modeling for more than fifty years. It is based on the fact that a dollar spent by an individual or a business firm for goods or services becomes a dollar of income to some other individual or business firm who sold the goods or services. This second individual or business firm will then spend at least a portion of the dollar received, which in turn will provide income to a third individual or business firm. This “chain of expenditures” will continue through several cycles until all of the income leaks from the region. The spending and re-spending of dollars is then translated into a multiplier.

To determine an appropriate multiplier we had to take into consideration the geographic size of the county and its level of self-sufficiency. We also needed to estimate the percentage of the county that has labor-intensive services (fast food, auto repair, etc.) where salaries are being paid as opposed to large external purchases (automobiles, stereos, television, etc.) where money leaks from the community at a higher rate. The smaller the size of an area and the more dependent its population is on goods and services from an outside area, the smaller the multiplier. Based on our knowledge of the county and in comparison to other economic impact studies, we chose a conservative multiplier of 1.5. (Note that multipliers associated with regional impacts generally range from 1.1 to 3.0).

## REVENUE IMPACT

The revenue calculation is based on the dollars coming into the county from out-of-county sources during the fiscal year. The calculation includes grants, financial aid dollars and capital acquisitions, which would not otherwise occur if the College was not part of the equation. Data was taken from the Fiscal Year 2012 Annual College Audit. Note that revenue is based on a single year and unlike the other two calculations can vary more significantly year-to-year depending on capital, Foundation and grant acquisition.

## EDUCATIONAL IMPACT

The calculation for educational impact was based on the difference between high school and associate’s degree average annual income for New Jersey for the 289 students who graduated in 2012. New Jersey’s annual income for both high school and associate degree graduates is higher than the national average. Income data came from “The Economic Benefit of Postsecondary Degrees: A State and National Level Analysis”, published in December 2012.

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