Higher Education:

Oklahoma's Best Return on Its Investment

rom the very beginning, educators and other supporters of higher learning in Oklahoma have vigorously proclaimed the economic value of the state's universities and colleges. The refrain became so common as

almost to be taken for granted, assumed to be true. But in days of tight budgets and tough decisions, assumptions are not enough.

Earlier this year, the Oklahoma State Regents for Higher Education, with cosponsorship from the Presidents Council, the University of Oklahoma and Oklahoma State University, directed OU and OSU economists to put dollar figures to the impact of higher education on the state's economy. Reports were issued for each of Oklahoma's 26 institutions and the system as a whole.

If these figures had been projections for new industry locating in the state, the story would have been front page news. While such attention was not forthcoming, the significance of this research cannot be overstated. The following is the State Regents' impact statement for the University of Oklahoma.

> —The Editor continued

Stimulating Economic Growth

The University of Oklahoma, a comprehensive university, offers bachelor's, master's and first professional degrees. The University and its constituent agencies serve approximately 30,300 credit-seeking students annually. OU provides its graduates, as well as all Oklahomans, long-term dividends on their investment in higher education. OU graduates also benefit the state's economy because they have higher earnings and greater employability than Oklahomans without college experience.

OU produces thousands of jobs on- and off-campus, and

the spending of the wages and salaries associated with these jobs creates millions of dollars in additional income for families throughout Oklahoma. The University also generates knowledge and technology to keep area business and industry competitive.

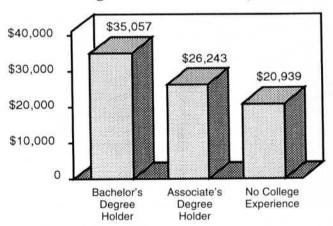
This brief report reviews the benefits of OU and its constituent agencies—the Geological Survey, Law Center and Health Sciences Center—to all Oklahomans. A similar report focuses on the impact of the Oklahoma State System of Higher Education.

Providing Long-Term Dividends

OU graduates have higher earnings and experience greater employability than Oklahomans without college experience. OU also provides the state with quality employees for the Oklahoma work force.

Higher Quality of Living

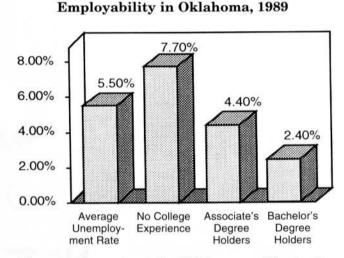
In 1989, Oklahoma college graduates with bachelor's degrees earned an average of \$35,057 a year, and Oklahomans with associate's degrees earned \$26,243 a year, compared to \$20,939 for Oklahomans with no college experience. (U.S. Census Bureau)



Earning Power in Oklahoma, 1989

In 1989, an Oklahoman with a bachelor's degree earned an average of \$35,057 and an associate's degree holder earned \$26,243, while an Oklahoman with no college experience earned \$20,939.

OU graduates also enjoy higher employability than Oklahomans without college experience. For instance, in 1989 the average unemployment rate for working age Oklahomans was 5.5 percent. For Oklahomans with associate's degrees, the unemployment rate was 4.4 percent, while those with bachelor's degrees experienced a 2.4 percent unemployment rate. In comparison, Oklahomans



The unemployment rate for Oklahomans without college experience is 7.7 percent, 4.4 percent for associate's degree holders and 2.4 percent for bachelor's degree holders.

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All working Oklahomans realize economic gains from having college graduates in the state's work force. According to a report issued by Oklahoma Futures, the state's economic development policy board, a one percentage point increase in the number of Oklahomans holding bachelor's degrees increases average earnings for the working age population by \$598 per year.

Work Force Preparation

OU makes its most important contribution to the state's economic development by providing Oklahoma with a welleducated work force. OU and its constituent agencies produce more than 3,680 market-ready college graduates annually.

Helping Business and Industry

OU plays a vital role in the state's business development. With funding from Weyerhaeuser Company, Dr. Samuel C. Lee developed a method for cutting logs that produces the finest quality boards. Working closely with Weyerhaeuser engineers, Lee developed an optical scanner that determines the locations, sizes and orientations of knots on a log. A computer then simulates the log's optimum-yield cutting pattern. The process earned a U.S. patent in 1993.

Since 1992, OU professors have worked with Seagate Technologies Inc. to enhance disk drive quality. Through the Oklahoma Center for Integrated Design and Manufacturing, professors John Y. Cheung and Adedeji Badiru have applied artificial intelligence techniques to Seagate's quality control system. The results are expected to increase efficiency and reduce test time.

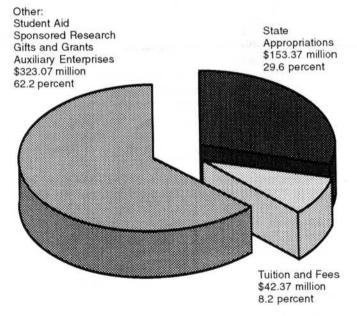
With initial funding from the Oklahoma Center for the Advancement of Science and Technology, Dr. Warren Jackman, professor of cardiology at the OU Health Sciences Center, developed a radio frequency catheter procedure that reduces treatment time and allows patients with irregular heartbeats to leave the hospital two days after heart surgery and to return immediately to normal activities.

Producing Jobs for Oklahoma

Revenue Sources

OU finances its day-to-day operations with revenues derived from a variety of sources. In FY93, OU and its constituent agencies had \$518.81 million in total resources, including \$153.37 million in state appropriations, \$42.37 million in tuition and fees and \$323.07 million from student aid, sponsored research, gifts and grants and self-supporting campus activities. State appropriations to OU and its constituent agencies accounted for only 29.6 percent of its total revenues.

Sources of Current Operating Revenue 1992-93

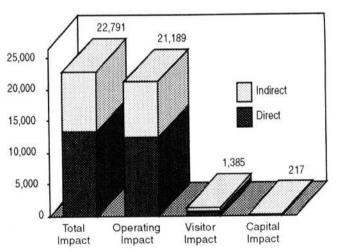


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OU spurs economic growth in local economies and in the state economy through its operating and capital budgets. OU's most immediate and identifiable economic impacts can be seen in current jobs, income, tax revenues and out-of-state revenues.

Oklahoma Jobs

In FY93, the University of Oklahoma and its constituent agencies generated 22,791 jobs. While OU employed 8,166 full-time equivalent employees, it generated an additional 5,128 jobs directly by institutional, student, visitor and capital spending and another 9,497 jobs indirectly.



Jobs Generated by OU, 1992-93

OU and its associated employee, student, visitor and capital spending directly and indirectly accounted for 22,791 Oklahoma jobs in FY93.

Generating Income for Oklahoma

Income for Oklahomans

In FY93, the University of Oklahoma and its constituent agencies generated \$617.96 million in income. This income was the result of institutional operating outlays, student off-campus expenditures, capital projects and visitor expenditures.

Income Generated by OU, 1992-93 \$617.96 \$593.04 million million \$700.0 \$600.0 \$500.0 Indirect In Millions) \$400.0 Direct \$300.0 \$21.12 \$200.0 \$3.80 million million \$100.0 0 Total Operating Visitor Capital Impact Impact Impact Impact

OU operations and capital outlays and student and visitor expenditures had a \$617.96 million impact on state income in FY93.

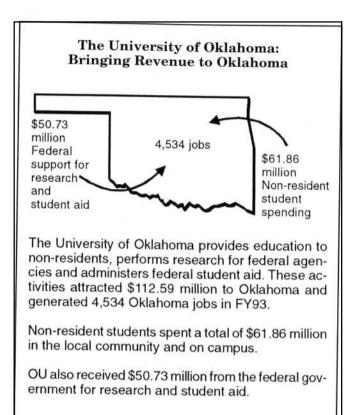
Operating Impact. In FY93, \$277.52 million of OU's spending for current operations was for salaries, wages and benefits.

Student off-campus expenditures for housing, food, transportation, books, clothing, laundry, insurance, miscellaneous supplies and telephone services provided an estimated \$63.31 million in wage and salary income.

Wage and salary income from current operations and student off-campus expenditures generated \$252.21 million in indirect income, for a total of \$593.04 million in direct and indirect income.

Visitor Impact. Visitors to OU were responsible for creating \$21.12 million in wage and salary income, \$12.14 million directly and \$8.98 million indirectly.

Capital Impact. Expenditures by OU for capital investment provided a total of \$3.8 million in wages and salaries, \$1.57 million directly and \$2.23 million indirectly. The capital impact is estimated to increase as additional capital spending financed by the 1992 voter-approved bond issue comes online.



Oklahoma Taxes

In FY93, OU and its associated employees, students and visitors generated an estimated \$34.67 million in state tax revenues, including \$19.16 million in personal income taxes, \$11.12 million in sales taxes and \$4.39 million in excise taxes, which include motor vehicle collections, gasoline excises and alcoholic beverages and tobacco taxes.

OU is part of the Oklahoma State System of Higher Education. The estimated economic impacts in this report are based on financial and visitor data reported by the University and its constituent agencies. Data cover expenditures and income for all purposes, including educational and general programs (E&GI), special account programs (auxiliary enterprises), student aid, sponsored research and sponsored programs (E&GI) and capital spending.

Some numbers have been rounded.