



Impact

on Alabama

*Auburn University's
economic contribution
to the state and citizens*



AUBURN

UNIVERSITY

Economic Impact Study - 2007

Office of the Vice President for University Outreach
September 2007

Auburn University Economic Impact Study – 2007

Executive Summary

Introduction

This summary report provides an overview of the economic contribution to the State of Alabama by Auburn University including its four divisions and alumni base across the state. The report reflects both direct and indirect impact through spending, creation of jobs, and enhancement of human capital. This report is based upon an economic impact study performed in spring and summer 2007 by a committee appointed by the Office of the Vice President for University Outreach for the purpose of updating previous studies of Auburn's economic impact.

Findings

The Auburn University system and its alumni contributed **\$4.85 billion** to the economy of the State of Alabama in 2006. This was realized through **\$1.7 billion** in economic impact directly and indirectly attributable to the Auburn system. This represents a **7 to 1 return** relative to the university's annual state appropriation. Auburn's impact is estimated to be responsible for creating some **21,500 jobs** in addition to its own direct employment. Additionally, the university's high quality educational programs increase human capital in Alabama representing a value of more than **\$3.15 billion** in earning power.

Auburn's economic impact delivers a dramatic return on investment for Alabama taxpayers and other AU stakeholders. Auburn's leadership in development and application of innovative technologies promotes the economy of the state as well as the economic and security interests of the nation as a whole. Auburn provides the primary academic support for a number of major state industries. Additionally, the Auburn and Montgomery campuses, Extension offices, research installations, outreach programs, and faculty engagement represent the university's significant presence across the state. This presence contributes greatly to community quality of life through support for civic infrastructure and business, and direct assistance to individuals.



Methodology

The committee drew upon 2006 statistical and financial data compiled by a number of university offices including Business and Finance, Institutional Research, Student Financial Aid, Campus Planning, Alumni, Athletics, University Outreach, Research, Communications & Marketing, and Extension, and the Auburn-Montgomery offices of the Chancellor and University Outreach. Financial and employment data quoted for Auburn University collectively reflect four institutional divisions: Auburn University Main Campus, Auburn University at Montgomery, the Alabama Agricultural Experiment Station, and the Alabama Cooperative Extension System. Student spending information was drawn from surveys of expenditures compiled by both the Auburn and Auburn Montgomery Student Financial Services offices. Visitor spending was estimated utilizing research provided by the Alabama Bureau of Tourism and Travel and the Auburn-Opelika Tourism Bureau. Estimates of alumni earning per discipline were based upon regional information reported by the Bureau of Labor Statistics. Data on support for key

industries were drawn from information presented in the Alabama Commission on Higher Education inventory of instructional programs at public institutions. Economic multipliers used were generated by the U.S. Bureau of Economic Analysis Regional Input-Output Modeling System (RIMS II). The multiplier is state and county specific. Anecdotes reflecting Auburn’s support for Alabama’s economy and quality of life were drawn from various university publications to illustrate the scope of programming offered across the state.

In compiling the report, care has been taken to compensate for overstatement of the Auburn’s impact in the three key areas of study. This study does not include an estimate of the economic value of outreach programs and services delivered across the state. Nor does it estimate Auburn’s substantive impact beyond the state. Thus, this presentation reflects a conservative estimate of the Auburn University system’s economic contribution to Alabama with anecdotes provided to demonstrate that Auburn’s influence extends nationally and even internationally.

Comparison to Previous Studies

The 2007 study was preceded by studies performed by University Outreach in 1996 and 2001. These studies were not replications, but similar methodologies and sources of data were utilized in each. The results of the three studies are presented in the chart below as a historical reference comparing the outcome of the current study to previously published statements of Auburn’s economic contributions.

AU Economic Contributions 1996 - 2007

	1996	2001	2007
Economic Impact	\$1 billion	\$1.5 billion	\$1.7 billion
Human Capital	\$1.3 billion	\$2.4 billion	\$3.15 billion
Overall Contribution	\$2.3 billion	\$3.9 billion	\$4.85 billion
Job Creation*	18,859	20,000	21,500

* Consistent with the presentation in previous years’ reports, these job creation figures do not include full time positions directly employed by the Auburn University system.



- Auburn is the leading research institution in the state and is recognized for its development of advanced technologies and academic programs in the fields of alternative fuels, water resources, software and wireless engineering, and others. The National Security Agency has designated Auburn as a Center of Academic Excellence. Six astronauts and three past directors of the Kennedy Space Center are Auburn alumni.
- Auburn's Rural Studio, world renowned for its outreach to impoverished west Alabama, has been recognized by influential organizations such as the New York Times and the MacArthur Foundation.

Auburn's Economic Engine

Money spent in Alabama circulates through the economy stimulating demand and creating jobs. Auburn University takes its state appropriation and magnifies its effect many times through spending power, ability to generate revenue, and attraction for related spending.

- In addition to the \$246 million appropriation Auburn received in 2006 from the State of Alabama for the operation of the university, AU generated some \$488 million in additional revenue from tuition, contracts and grants, research and trademark licensing, and various services. In other words, for every \$1 Auburn receives, it produces almost \$2 more.

The university is a major state attraction for visitors who stimulate the local and state economy through their purchases of food, lodging, services and retail items. Both Auburn and Auburn-Montgomery campuses attract hundreds of thousands of visitors each year to a variety of meetings, continuing education activities, family orientations, summer camps and alumni programs. By far, the largest and best documented source of visitors is Auburn Tiger football.

- Excluding faculty, staff and student attendance, an estimated 452,389 visitors attended seven home football games in 2006.
- A 2003 Alabama Bureau of Tourism and Travel survey of Auburn football visitors concluded that the average visitor on game day was likely to spend as much as \$133 on food, fuel, and other purchases; more than half of football visitors also spent \$110 on lodging.
- Adjusting for inflation, a conservative estimate of Auburn football's direct visitor expenditures is more than \$79.6 million during seven home events. That spending generates some \$173 million in economic impact.



In all, Auburn pours into the economy some \$774 million in annual expenditures such as the institution's payroll and purchases, student spending on local housing and food, construction, and spending by visitors to university events. This money flow stimulates the state economy producing **\$1.7 billion in economic activity**.

Return on Investment

Auburn's \$1.7 billion in direct economic activity represents significant productivity beyond the institution's 2006 state appropriation of \$246 million. This **7 to 1 return** on the appropriation dollar demonstrates Auburn University is a great investment for Alabama taxpayers and other AU stakeholders.

A Boost for Employment

As Auburn University's economic productivity flows beyond its campuses, it stimulates employment across the state.

- The institution directly employs 5,648 full time equivalent faculty and staff positions at its Auburn and Auburn-Montgomery campuses, the Alabama Agricultural Experiment Station and Alabama Cooperative Extension System.
- Auburn's collective economic activity creates demand for an **estimated 21,500 more jobs** across the state. The combined direct and indirect employment impact is more than 27,000 full time jobs.



Contribution to Alabama's Human Capital

Human capital is the productive capacity of people. Auburn enhances the productive capacity of Alabama by providing a quality education to students. Auburn and Auburn-Montgomery alumni living in Alabama produce goods and services, pay taxes, and spend money, thereby helping to create jobs for other workers in the state. The value of their skills to Alabama's economy can be estimated from the average regional salaries for the fields in which they graduated.

- **\$3.15 billion in human capital** is generated by the annual earning capacity of **97,119 alumni** of both the Auburn and Auburn-Montgomery campuses living and working in the state.

Sum It Up...

\$1.7 billion in economic impact directly and indirectly attributable to the Auburn system, plus **\$3.15 billion** in human capital in Alabama from the earning power of Auburn alumni, equals **\$4.85 billion** in economic contributions to the State of Alabama attributable to the Auburn University system.



Auburn's Extended Impact on Alabama's Economy

Added Value

Auburn has an extended impact on Alabama's economy well beyond its direct economic impact. The university and its divisions provide a wealth of academic support, research development, technical expertise and consultation that contributes to the continued viability of industries that employ hundreds of thousands of Alabamians. Auburn is the principal or in some cases the sole source of academic support for key industries in the state. Additionally, the university promotes innovation and development of new industry which promises to employ many thousands more of our fellow citizens. These resources enhance greatly Alabama's competitiveness in the global economy.



Support for Key Alabama Industries and Professions

Auburn provides the **principal academic support for Alabama's key industries and professions** which Labor Market Information data estimates **employ more than 337,166 people**.

- According to the Alabama Commission on Higher Education data, Auburn produces the majority of public university graduates for Alabama agriculture, construction, and the largest manufacturing industries, including the forest products industry.
- Auburn has the state's largest engineering program, producing half of Alabama's engineering graduates.
- Auburn offers unique degree programs in several fields within agriculture, horticulture, poultry, biosciences, forestry, natural resources, wireless technology, architecture and industrial design, vocational education, textiles, nutrition and food science, graphic design, technical writing and logistics.
- Many of the state's architects, pharmacists, veterinarians, educators, and other professionals are Auburn graduates.
- Auburn and Auburn-Montgomery offer business and engineering technical assistance services to Alabama industrial clients, helping increase productivity and create opportunity. For example, the Auburn Technical Assistance Center documented 2006 project impacts of \$14,525,000 in increased or retained sales, and \$5,020,000 in increased investment for clients.



Stimulus for Innovation

Auburn University is **leading the nation in development and application of new technologies** which promise to boost the economy and create jobs for the state and contribute to the security of the nation as well.

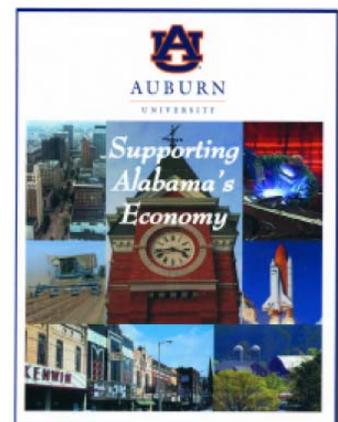
- Auburn's 156 acre research park under construction will stimulate business development which is projected to create more than 12,000 new jobs within the park and through related business expansion in the area.
- AU holds some 53 licensing agreements with outside firms for commercialization of research technologies, and contracts with 11 start-up companies formed exclusively to commercialize AU research developments. Of these, Auburn's microscope technology was ranked by *R&D* magazine among the top 100 technological products of 2005.
- Auburn's Natural Resources Management & Development Institute alternative energy initiatives address environmental, economic and national security issues associated with America's dependence on foreign oil. There is a great potential for biofuel refining and distribution to generate significant economic impact and creation of jobs.
- Water is key to both urban growth and rural sustainability throughout the United States, especially in the South where demographic shifts in population are headed. Auburn and Auburn-Montgomery water resource initiatives address conservation and utilization of this limited natural resource upon which continued economic prosperity is so dependent.
- Auburn-Montgomery's Center for Advanced Technologies provides computer consultation to private and public sector clients.
- Auburn's nationally recognized canine and detection program provides research and training for defense, transportation security, and detection of explosives and weapons of mass destruction.
- Auburn is the primary source of instruction and research for Alabama's growing aerospace, automotive, transportation, microelectronics, biotech, and wireless/software technology industries.



Focus on Economic Development

There are **more than 60 outreach, research, and college-based disciplinary units at Auburn and Auburn-Montgomery with a focus on economic development in the state.** Collectively, these provide a variety of services, consultation and training for economic development agencies, governments, and civic groups.

- The Economic and Community Development Institute is a partnership of Auburn's Outreach division and the Extension System. This comprehensive economic development program specializes in community planning and sustainable



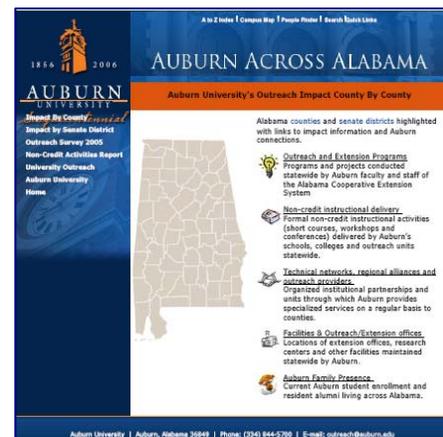
development, leadership development, training, research, and publication. Among ECDI's successful programs is the Intensive Economic Development Training Course, which boasts more than 700 alumni, including most of the state's top economic development professionals.

- The Center for Business and Economic Development at Auburn-Montgomery provides human resource and economic impact research for organizations and state agencies. For example, the Center conducted an extensive study for the Governor's office to identify more efficient means of transportation for users of state services. Econometric models developed at Auburn-Montgomery provide economic analysis and forecasting for the state.
- Auburn offers a graduate minor in Economic Development which provides a specialization in economic development for students pursuing graduate degrees in business, government, or planning.
- Auburn is creating new programs promoting workforce development. The College of Business, along with Southern Union State Community College, is establishing a Technical Systems Management Minor for non-engineering majors to provide students with technical skills for manufacturing sector jobs. The colleges of Engineering and Sciences & Mathematics host the BEST Robotics program which focuses on developing high school student interest in engineering and science careers.
- Auburn's Outreach division led the organization of two regional economic development alliances, the Black Belt Community Foundation in west Alabama and the I-85 Corridor Alliance in east Alabama.
- The College of Architecture, Design and Construction's Urban Studio program in Birmingham has conducted planning studies for more than 40 small town and communities. The college's acclaimed Rural Studio program in west Alabama is in its second decade of building inspired, innovative, but practical homes and civic structures for poor citizens in the impoverished region.

Accessibility to Educational Opportunity

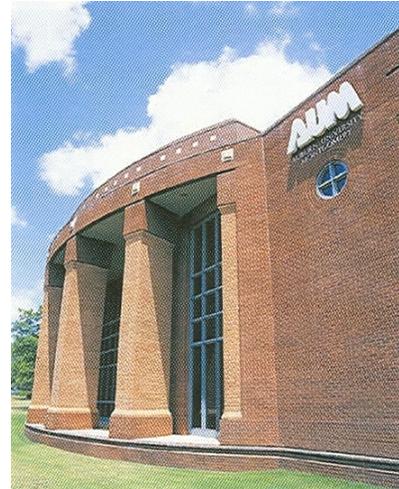
Auburn University **promotes accessibility to its educational resources for all citizens.** Auburn maintains facilities across the state and delivers programs and services in every county to businesses, communities and citizens. Auburn further expands its reach throughout Alabama by working with external partners. Additionally, the university is continually expanding the number of academic programs offered via distance education.

- Besides its two major campuses, Auburn University maintains some 100 service facilities and research sites across the state - more than any other educational institution in Alabama.
- The 2005 "Auburn Across Alabama" survey identified 401 ongoing programs and services which



AU conducts across the state concentrating on K-12 education, professional development training, family programming, technical assistance for agriculture, government and business, environmental education, cultural and historical education, economic development, public safety and emergency preparedness, and healthcare. Details are at www.auburnacrossalabama.org.

- In 2006, Extension offices in each of the 67 counties documented 1,787,892 face-to-face client service contacts focusing on agriculture, community and economic development, family and consumer sciences, youth development, urban affairs, forestry and natural resources, and nutrition.
- Annually, Auburn and Auburn-Montgomery outreach units deliver some 1,893 continuing education courses statewide, with registrations of 56,056, providing more than 26,234 hours of non-credit instruction. Programs are offered by Auburn's Outreach Program Office, Auburn-Montgomery's School of Continuing Education, and academic units in the colleges.
- Auburn and Auburn-Montgomery outreach units provide services throughout the state in conjunction with agencies such as the Alabama Technology Network, the Alabama Department of Education, Small Business Development Administration, the Alabama Department of Economic & Community Affairs, Alabama Development Office, Southern Policies Growth Board, Appalachian Regional Commission and many other state/federal agencies, partnerships and delivery networks.
- In 2006, Auburn offered 250 courses via distance education, a 33 percent increase over the previous year. These courses generated 8,000 credit hours. Enrollments have increased by more than 23 percent. Auburn now provides 22 program choices to distance students.



Adding Value to the Community

The Auburn system serves communities statewide through programming, faculty engagement and student service projects. In a very real way, these efforts support and build quality of life in Alabama communities, invariably boosting the economic vitality of the state.

- On the Auburn and Auburn-Montgomery campuses, there are more than 70 outreach programs and units. These provide a variety of disciplinary based programs and services in the community.
- A 2005 survey of Auburn faculty reported that 93 percent of those responding engage in outreach activities in the community.
- Auburn's Center for Governmental Services and Montgomery's Center for Government both provide



research, training and technical assistance to local and state agencies aimed at improving civic infrastructure for Alabama communities.

- Student led community projects, such as Auburn’s “Impact” initiative, provide hundreds of volunteer service hours to local agencies.
- Clinical services on both campuses offer a variety of health and wellness services, counseling and testing to the public, some at low or no cost to the recipient.
- Auburn’s ECDI oversees the Alabama Communities of Excellence program which promotes leadership and citizen engagement, effective planning, economic development and quality of life in the state.
- Both campuses offer their communities stellar library facilities and the Auburn campus hosts a world-class museum of fine arts. Theatre, music, and cultural programs on each campus and across the state enrich life in Alabama and helps preserve our cultural heritage.

And Much More...

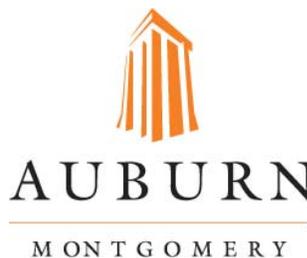
Each of the academic schools and colleges in the Auburn University System provide leadership and support for the programs listed throughout this report, plus many more. Each makes a distinct contribution to the economy of the state by offering high quality, nationally ranked academic programs. These produce highly qualified graduates, promote the professional capacity of alumni, and serve the industries they represent with innovative research and outreach assistance.

On the Auburn campus:

- College of Agriculture
- College of Architecture, Design and Construction
- College of Business
- College of Education
- Samuel Ginn College of Engineering
- School of Forestry and Wildlife Sciences
- College of Human Sciences
- College of Liberal Arts
- School of Nursing
- James Harrison School of Pharmacy
- College of Sciences and Mathematics
- College of Veterinary Medicine

On the Auburn-Montgomery campus:

- School of Business
- School of Education
- School of Liberal Arts
- School of Nursing
- School of Sciences



Extensive information on these academic programs and their impact on Alabama's economy can be found on the university's websites:

www.auburn.edu (Auburn campus) or www.aum.edu (Auburn-Montgomery).

Conclusions

Combined, the university's economic activity, contribution to human capital, and other indicators of Auburn's productivity yield a conservative estimate of **AU's overall economic contribution at \$4.85 billion - or more**. This extraordinary measure of economic impact, **a 7 to 1 return on investment**, and added value indicate why the Auburn University system is a major contributor to growth and prosperity in the State of Alabama and well beyond.

Auburn's commitment to the economic well-being of the state is perhaps best summed up in the first line of the Auburn Creed –

“I believe that this is a practical world and that I can count only on what I earn. Therefore, I believe in work, hard work.”

Indeed, the Auburn University system is working hard for Alabama and all its citizens to promote quality of life in our state.

Note

Financial and employment data quoted for the Auburn University system collectively reflect four institutional divisions: Auburn University Main Campus, Auburn-Montgomery, the Alabama Agricultural Experiment Station, and the Alabama Cooperative Extension System.

Economic multipliers used were generated by the U.S. Bureau of Economic Analysis Regional Input-Output Modeling System (RIMS II). Information regarding the economic analysis presented in this document is available upon request.

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