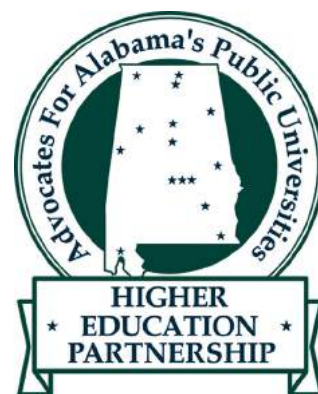


THE ECONOMIC & SOCIAL IMPACTS OF ALABAMA PUBLIC HIGHER EDUCATION

Full Report

AUGUST 2015

PREPARED BY THE UNIVERSITY OF ALABAMA EDUCATION POLICY CENTER
FOR THE HIGHER EDUCATION PARTNERSHIP OF ALABAMA



ABOUT THE HIGHER EDUCATION PARTNERSHIP

The Higher Education Partnership is Alabama's advocacy group for the state's public universities. Its goal is to identify, recruit, organize and unite advocates of higher education; to advocate the needs and effectively communicate the importance of higher education to the people of Alabama and its leaders; and to promote new education partnerships to improve the quality of life for citizens of Alabama. The Partnership seeks to encourage, inform, train and involve university leaders in statewide initiatives designed to make Alabama a better state by delivering a message that makes them aware of the economic, cultural, and social contributions of Alabama's 14 public, four-year universities. The Education Policy Center at The University of Alabama conducted this study at the request of the Higher Education Partnership of Alabama.

In support of the mission of The University of Alabama and its College of Education, the Education Policy Center works to improve the quality of life for all Alabamians through a research agenda that seeks to expand access, strengthen equity, and advance economic and community development, with special focus on issues to benefit education practitioners and policy-makers in the State of Alabama and the Deep South.

ABOUT THE AUTHORS

This study was led by Stephen G. Katsinas, Ph.D., Director, Education Policy Center, and Professor of Higher Education Administration, the University of Alabama; and Jonathan P. Koh, MPA, Doctoral Candidate, and Research Coordinator, Education Policy Center.

The Research Team drew upon the contributions of the following colleagues:

David S. Murphy, Ph.D., CPA, CFP, CFS, Senior Fellow, Education Policy Center, The University of Alabama and Professor of Accounting and Economic Crime, Lynchburg University

Vincent A. Lacey, Ph.D., Senior Fellow, Education Policy Center, The University of Alabama. Director Emeritus, Computer Assisted Instructional Research Laboratory, Southern Illinois University at Carbondale.

Mark E. Fincher, Ph.D., Assistant Professor, Mississippi State University, Education Policy Center Fellow

R. Matthew DeMonBrun, Fellow, Education Policy Center, The University of Alabama. Doctoral Student in Higher Education, University of Michigan.

Nathaniel J. Bray, Ph.D., Associate Professor, Higher Education Administration, The University of Alabama.

Arleene P. Breaux, Ed.D., Fellow, Education Policy Center, Clinical Professor, The University of Alabama.

Michael S. Malley, Jr., Technology Coordinator and Research Associate, Education Policy Center, Master's student, Public Administration, The University of Alabama.

J. Lucas Adair, Research Associate, Education Policy Center, The University of Alabama. Master's student, Public Administration, The University of Alabama.

Louis E. Shedd, Research Associate, Education Policy Center, The University of Alabama, and Doctoral Candidate, The University of Alabama.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	2
FORWARD	5
EXECUTIVE SUMMARY	6
INTRODUCTION	8
THE PREDOMINANCE OF PUBLIC HIGHER EDUCATION IN ALABAMA	
A. CHARACTERISTICS OF ALABAMA’S STATE SYSTEM	16
B. BEGINNING OF PUBLIC HIGHER EDUCATION	20
C. BEGINNING OF REGIONAL UNIVERSITIES..	22
D. IMPACT OF HIGHER EDUCATION INVESTMENTS	29
METHODOLOGY & THE STATE OF ALABAMA’S PUBLIC UNIVERSITIES	
INTRODUCTION	36
RESULTS	40
REGIONAL RESULTS	53
REFERENCES	79
INSTITUTION SUMMARIES	83
APPENDIX A	98

THE ECONOMIC & SOCIAL IMPACTS OF ALABAMA PUBLIC HIGHER EDUCATION

*An Analysis of Alabama's Four-Year
Colleges & Universities*

AUGUST 2015

PREPARED BY THE UNIVERSITY OF ALABAMA EDUCATION POLICY CENTER
FOR THE HIGHER EDUCATION PARTNERSHIP OF ALABAMA

FORWARD



Dr. Stephen Katsinas
Director, Education Policy Center

This study of the economic and social benefits of state investment in Alabama's 14 public universities was commissioned by the Higher Education Partnership of Alabama, and conducted between December 2014 and April 2015. Our research team included EPC Senior Fellows David S. Murphy (Lynchburg College, VA), Vincent A. Lacey (Southern Illinois University), Mark E. Fincher (Mississippi State University), R. Matt DeMonBrun (University of Michigan), Mark M. D'Amico (University of North Carolina Charlotte); our colleagues here at Alabama, EPC Fellows Nathaniel J. Bray (Associate Professor) and Arleene P. Breaux (Executive Ed.D. Director); and EPC Research Associates J. Lucas Adair, Michael S. Malley, Louis E. Shedd, and EPC Research Coordinator Jonathan P. Koh. It is my high privilege to work with such talented people. We thank the Council of University Government Affairs Representatives, and the Higher Education Partnership headed by Gordon Stone, for their input and encouragement. Any errors are our responsibility alone.

Four principles guide the study: use of national data sets; a transparent, replicable methodology; localized data to measure regional as well statewide impacts; and consistency. Alabama's 67 counties were assigned to eight regions, and 140 tables and charts were generated. Key findings include:

- Per-capita income is positively correlated and highly significant as it relates to unrestricted expenditures. This means that increases in state funding, which will increase unrestricted expenditures, will also increase per-capita income in the state. Funding higher education benefits the entire state.
- The foundation of investing in Alabama's public universities produces higher per capita income for Alabamians, more income tax receipts, and more money for ALL of education in Alabama.
- There are significant non-monetary benefits to state investment in public higher education. The "value-add" of the leadership of Alabama's public universities in bringing the automotive industry to the state, and partnerships between engineering programs at the University of South Alabama, Auburn University, etc. with Airbus are incalculable.

In his conclusion to *Investment in Learning, the Individual and Social Value of American Higher Education*, Howard R. Bowen states: "First, the monetary returns from higher education alone are probably sufficient to offset all the costs. Second, the nonmonetary returns are several times as valuable as the monetary returns. And third, the total returns from higher education in all its aspects exceed the cost by several times...the cumulative evidence leaves no doubt that American higher education is well worth what it costs (1977, p. 448)." This is true for Alabama in 2015 as well.

EXECUTIVE SUMMARY

FUNDING ALABAMA'S UNIVERSITIES INCREASES PER CAPITA INCOME

OVERVIEW

The Education Policy Center at the University of Alabama has completed an objective analysis to determine whether there is a quantifiable relationship between the funding of Alabama's universities and the per capita income of Alabama's citizens. The study revealed a statistically significant relationship. Alabama's state-wide per capita income rises in direct proportion to Alabama's funding of its public higher education institutions. Alabama gains a quantifiable return on its investment in higher education. Simply put, the more Alabama spends on universities, the better off Alabamians will be.

METHODOLOGY

The study's results are reliable. Well-established multiple regression methods were applied to nationally recognized and publically available databases, including information from the American Institutes for Research's Delta Cost Project, the United States Department of Education's National Center for Education Statistics, the Carnegie Foundation for the Advancement of Teaching's 2010 Basic Classification System, and the Return on Investment ("ROI") model initially developed by Jacob Mincer, historically known as the father of modern labor economics. By using respected data sets and accepted methodology, the study is statistically transparent and replicable.

KEY POINTS

- **In Alabama, higher education means public higher education.** Alabama has fourteen public universities and so few private colleges that Alabama's public higher education system accounts for four out of every five baccalaureate degrees, seven out of every eight graduate degrees, and nearly all of the professional degrees (e.g., medicine, law, and engineering). Between 2000 and 2013, enrollment in Alabama's public universities increased by fifty-three percent. The number of degrees awarded at those institutions increased by eighty percent; Alabama's universities with doctoral programs accounted for much of this increase. During this period of time, academic quality also improved, as measured by the ACT scores of the freshmen

entering Alabama's public higher education system. Improving the quality of public academic programs attracts stronger students, and stronger students are more likely to complete their academic degrees.

- **Higher education means increased per capita income throughout Alabama.** The upward statewide per capita income curve that results from higher education reflects not only a lower unemployment rate, but also a robust long-term business climate throughout Alabama. Students graduating from Alabama's public universities constitute Alabama's present and future workforce capital base. In today's global economy, businesses tend to locate where their personnel needs will be met and qualified employees can be found. For example, the burgeoning aerospace and automotive sectors will require employees who are qualified for high-wage, high-demand jobs. If such industries can find a workforce in Alabama as a result of Alabama's investment in its fourteen public universities, these high-wage, high-demand jobs will be located in Alabama. Each paycheck will generate more paychecks. Thus, Alabama's investment in higher education has a positive impact not only on the graduates of its public universities, but also on the income levels of the entire state.
- **Alabama public universities took deep cuts in state appropriations from FY2008 to FY2012,** behind only Louisiana among the fifty states, according to the State Higher Education Executive Officers. The severity of these deep cuts has given institutions no choice but to find alternative sources of funding to limit negative impacts on accessibility.
- **Alabama's investment in public universities is especially important to its rural citizens.** Rural citizens face higher out-of-pocket costs, such as transportation and child care, which negatively correlate with fewer degrees regardless of increased enrollment.
- **State disinvestment, coming at a time when enrollments are growing, means public universities have less money for scholarships.** Although enrollments grew by fifty-three percent from 2000 to 2013, Stable Operating Revenue ("SOR") effectively decreased by fourteen percent. Due to the lack of

major state-supported student aid funding, Alabama public universities have become highly dependent on federal financial aid. As the Alabama Student Assistance Program funds fell to \$2.9 million, federal Pell Grants directed to Alabama's public universities grew from \$111.5 million to \$249.4 million, and Pell Grant recipients at Alabama's public universities grew from 30,000 to 48,000 between 2008 and 2012. However, the greater reliance on federal student aid has made Alabama's public universities more sensitive to federal cuts in Pell Grants and federal student loans.

- **Investing in Alabama public higher education produces higher per capita income for Alabamians, more income tax receipts, and more money for ALL of education in Alabama** (PK-12 education, postsecondary, and public universities). In FY2013, about 60% of all tax receipts for the Education Trust Fund come from income taxes. Investing in public higher education is key to growing the ETF, which benefits all education sectors.
- **Aside from the positive economic returns, there are significant non-economic benefits as well.** Mercedes-Benz employs a total of 3,700 employees at its Alabama plant and estimates 28,000 people are employed by MBUSI and its many sub-contractors. About \$2 billion in taxes have been generated since 1993. Mercedes, Alabama's top exporter, has invested nearly \$4 billion in its Alabama plant-- five models are now built on-site. Putting a dollar value on the leadership contribution of Alabama's fourteen public universities to help the State of Alabama's efforts to land this plant, and others as well, is not easily calculated, but likely exceeds the economic benefits measured in this report.
- **The historic one-third/two-thirds ratio of the Education Trust Fund investments should be restored.** In all respects, from every angle, Alabama will see a return on its investment in public higher education. Alabama's public universities receive only twenty-eight percent of the historic one-third/two-thirds ratio of the Education Trust Fund Investments. This has resulted in an annual underfunding of Alabama's public universities by

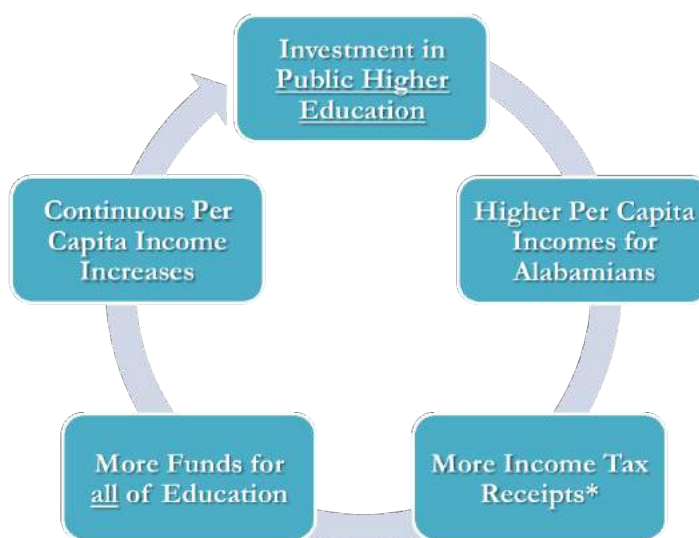
more than \$570 million. Restoring the Education Trust Fund investments to the thirty-three percent share for Alabama's public universities would serve to regain Alabama's interest in, and reap the foreseeable additional benefits of, promoting higher education for the citizens of Alabama.

- Per-capita income is positively correlated and highly significant as it relates to unrestricted expenditures. This means that increases in state funding, which will increase unrestricted expenditures, will also increase per-capita income in the state. Funding higher education benefits the entire state.

SUMMARY

The study was designed to determine the impact of Alabama's two flagship universities (with statewide missions) and twelve regional universities on Alabama's economy. Our study captures the economic impact of Alabama's fourteen public universities at the state and regional level, in a consistent, statistically reliable manner. It is apparent from the study that the per capita income of Alabama's citizens is directly related to the funding of Alabama's public higher education institutions. The study statistically proved that by increasing the allocations for public higher education, Alabama's legislature will also increase the per capita income of Alabama's citizens.

How PUBLIC HIGHER EDUCATION IMPACTS ALABAMA'S FUTURE



**60 percent of the Education Trust Fund (ETF) is Income Taxes.*

THE ECONOMIC & SOCIAL IMPACTS OF ALABAMA PUBLIC HIGHER EDUCATION

INTRODUCTION

Public higher education is a public good, especially in a Deep South state like Alabama. With private higher education contributing such a small percentage of total four-year enrollments, higher education in Alabama functionally means *public* higher education. **There are no large private research universities or master's universities to provide the vast majority of Alabama businesses and industries its homegrown engineers, medical doctors, teachers, pharmacists, architects, and social workers.** Alabama's fourteen public universities enroll four of every five undergraduate students, seven of every eight graduate students, and one hundred percent of professional students in key areas of economic importance such as medicine and engineering. The starting point of any study of the economic and social impact of Alabama's fourteen public universities begins with acknowledgement of Alabama's dominant public sector. Alabama needs strong public institutions, which in turn requires consistent state investment to fulfill a long-standing commitment to public excellence. The public sector must be positioned to lead.

As the Alabama economy continues to improve, with unemployment falling back to levels not seen since before the 2008 economic downturn, a longer term examination of the economic and social impact of state investment in public higher education is needed. The limited resources Deep South states like Alabama possess requires working smarter than competitors, and this takes investment in higher education. In order to be competitive, Alabama needs a highly educated workforce not only within the southern region, but globally.

In his successful 2006 bid to become Alabama's first consecutive two-term governor since George C. Wallace won in 1974, former Governor Bob Riley said "Alabama stands at the cusp of excellence." He was correct. For the first time in a generation, on many measures Alabama stood in the middle rankings of the states. As Governor Robert Bentley acknowledged in his 2015 State of the State Address, the positive benefits that came with the arrival of Mercedes in 1993 brought "a new day in Alabama." For a time, the common mantra of "Thank God" for other Deep South states, so that Alabama no longer ranked at the bottom, was not applicable.

During the recession of 2007-2012, Alabama's fourteen public universities took the second deepest cuts of any state nationally in the six

fiscal years between FY2008 and FY2012.¹ The recession magnified inequities in how Alabama funds public universities, which today receive just twenty-eight percent of annual allocation from the Education Trust Fund, not the thirty-three percent they are supposed to receive. As Table 1.1 shows, the underfunding difference in FY2013 alone was \$570,427,757. Public universities' lost revenue must be made up with other revenue streams, most notably tuition paid by Alabama students and families, as university administrators and trustees cannot print money.

Since Alabama is not wealthy, efforts to make Alabama more competitive have, to date, not yet brought parity with its global competitors, or with other states that are not standing still. Alabama simply cannot afford to allow its public universities to slide back toward mediocrity, after the progress that has been made. We begin by acknowledging that Alabama does not stand at the front, we therefore cannot coast or fall back. A good place for policymakers to start is to renew the commitment to the two-thirds/one-third traditional split of the Education Trust Fund. As Table 1.1 shows, restoring the thirty-three percent funding level would make a major difference in the funding of Alabama's fourteen universities.

Table 1.1 What If Alabama's Public Universities Received the State Funding They *Should* Get: Current Funding (28%) vs. One-Third (33%) of the Education Trust Fund

Public University	FY2013 State Appropriations ACTUAL (@ 28%)		FY2013 State Appropriations IF FUNDED PROPERLY (@ 33%)		
	in dollars	in percentages	<i>(What they should get)</i> in dollars	DIFFERENCE <i>(from other revenue streams, likely tuition)</i>	
				in dollars	in percentages
A&M	39,335,736	4%	46,563,085	7,227,349	18%
ASU	42,658,142	4%	50,144,861	7,486,719	18%
Athens	11,178,201	1%	13,133,178	1,954,977	17%
AU	216,653,516	21%	255,500,005	38,846,489	18%
AUM	21,947,664	2%	26,266,356	4,318,692	20%
JSU	35,315,802	3%	41,787,384	6,471,582	18%
Troy	44,923,086	4%	52,532,711	7,609,625	17%
UA	140,699,910	14%	165,955,611	25,255,701	18%
UAB	258,429,840	26%	304,450,941	46,021,101	18%
UAH	42,710,964	4%	50,144,861	7,433,897	17%
UM	17,551,449	2%	20,296,729	2,745,280	16%
UNA	25,934,629	3%	31,042,057	5,107,428	20%
USA	102,585,000	10%	120,586,451	18,001,451	18%
UWA	13,103,552	1%	15,521,028	2,417,476	18%
TOTAL (4-yr)	1,013,027,491	100%	1,583,455,248	570,427,757	56%

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

PRINCIPLES OF THIS STUDY

This study was commissioned by the Higher Education Partnership of Alabama in the Fall of 2014, and was guided by four principles. The first principle was that the study would be based upon respected national data sources, including (a) the Delta Cost Project data, a project of the American Institutes for Research; (b) the U.S. Department of Education/National Center for Education Statistics' Integrated Post-secondary Education Data System (IPEDS); and (c) the Carnegie Foundation for the Advancement of Teaching's 2010 Basic Classification. The second principle was that the data presented and methodology used would be transparent and replicable. This is why the research team chose to use the methodology initially pioneered by Jacob Mincer², who many consider to be the father of modern labor economics, outlined in Chapter 3 below (Mincer's analysis was a theoretical basis for the 1994 World Bank study, *The East Asian Miracle: Economic Growth and Public Policy*, which quantitatively assessed why the four so-called "Asian tigers" nations of Hong Kong, Singapore, South Korea, and Taiwan achieved their economic success.³ Given how devastated South Korea was after the Korean War, and the relative lack of natural resources possessed by Hong Kong and Singapore, the research team believed such analysis about "how to do it smarter" might be particularly relevant to Alabama). The third principle was that data presented be localized, so that data for the return on investment from Alabama's twelve public universities with regional missions were compared in apples-to-apples regional comparisons, and not statewide as is appropriate for Auburn University and The University of Alabama, which have statewide missions. Officials from Alabama's fourteen public universities worked with the study team to determine which of Alabama's sixty-seven counties were assigned to one of eight regions (East, Northwest, Southeast, Southwest, and West Alabama, as well as Birmingham, Huntsville, and Montgomery). The fourth principle was that data be consistent across regions and state, to provide an accurate picture of the economic and social returns of state investment in Alabama's fourteen public universities.

RETURN ON INVESTMENT

Return on Investment (ROI) is one of the most commonly used metrics to measure the profitability of an investment. It is usually computed *Net Income divided by Investment*.

Where net income is revenue minus expenses. Mincer defines net income as often being replaced with some measure of net earnings. The computation of individual ROI from investing in education is fairly straight-forward, as individual costs incurred and individual net earnings are easily estimated. But this is not the case when calculating for societal returns from investing in higher education, as most of direct and indirect societal benefits associated with societal ROI from investing in higher education are difficult to measure. We believe that as Alabama, the nation, and indeed the world move further into the global economy, the impact of Alabama's public universities on their graduates' per capita income curve will be of increasing importance.

High rates of employment are still important—it has long been a goal of Alabama policymakers to foster the most positive environment possible for business and industry economic development. But as Alabama enters the third decade of the information

age, it is the per capita income curve and not just the employment rate and/or the unemployment rate, that matters most. The “learning how to learn” skills—the value added to future employees by Alabama’s fourteen public universities—directly impacts the high-demand, high-wage jobs Alabama’s globally competitive employers need.

The American Institutes for Research’s Delta Cost Project found a steep decline across the fifty states in state appropriations from 2000 to 2013, even as enrollments and degrees awarded grew, with tuition increases commonly used to supplant cuts in state appropriations for operating budgets. Tables 1.2, 1.3, and 1.4 on the following pages, presents the summary of key data, the first being enrollment and degrees awarded data. As Table 1.2 shows, public university enrollments in seven of the eight regions grew, as did the statewide average (fifty-three percent). We note that the decision by Troy University to pursue single accreditation of Troy’s three physical campuses in Alabama and its Global Campuses meant that the national data sets no longer present disaggregation of the enrollment at Troy University-Montgomery. Had that campus been included in the Montgomery total, the Southeast enrollment and degree average totals would have been slightly lower and the Montgomery totals would have increased between 2000 and 2013—but the statewide averages would have remained unchanged.

The per-capita income data on Table 1.3 show increases in each of Alabama’s eight regions from 2000 to 2013, with a high of \$3,584 in East Alabama and \$3,533 in Southeast Alabama (eleven percent increases in each), to a low of \$46 for Huntsville (although Huntsville had the highest base per-capita income average in 2000, the first year of the Delta Cost Project’s available data). The larger increases in these

Table 1.2. Summary of Enrollment and Degree Change by Region, 2000 to 2013									
Region #	Geographic Location	Enrollment				Degrees Awarded			
		2000	2013	Change, 2000-13		2000	2013	Change, 2000-13	
				#	(%)			\$	(%)
1	Southwest	11,673	17,114	5,441	47%	1,882	2,527	645	34%
2	West Alabama	21,201	43,525	22,324	105%	4,224	7,795	3,571	85%
3	Southeast	12,541	29,109	16,568	132%	4,099	4,328	229	6%
4	Montgomery	10,169	9,955	(214)	-2%	1,757	1,545	(212)	-12%
5	East Alabama	29,704	37,601	7,897	27%	6,641	7,306	665	10%
6	Birmingham	17,965	24,651	6,686	37%	3,348	4,373	1,025	31%
7	Northwest	5,601	8,450	2,849	51%	987	1,286	299	30%
8	Huntsville	14,748	18,941	4,193	28%	2,872	3,303	431	15%
Statewide Total		123,602	189,346	65,744	53%	25,810	32,463	6,653	26%

two regions may in part be explained by the well-known phenomenon that regional university graduates typically stay in the region from which they graduate; no one would question the commitment of Jacksonville State University to its East Alabama region, for example.

Table 1.4 presents apples-to-apples comparisons of net revenue changes from 2000 to 2013. This is the combined total of state appropriations, tuition and fees, endowment

Table 1.3. Statewide Change in Per Capita Income

REGION		2000	2013	Change, 2000-13	
				(dollars)	(%)
1	Southwest	\$37,400	\$38,901	\$1,501	4%
2	West AL	\$34,126	\$35,341	\$1,215	4%
3	Southeast	\$31,514	\$35,074	\$3,533	11%
4	Montgomery	\$36,305	\$37,980	\$1,675	5%
5	East AL	\$32,471	\$36,055	\$3,584	11%
6	Birmingham	\$34,654	\$37,467	\$2,813	8%
7	Northwest	\$34,264	\$34,452	\$188	1%
8	Huntsville	\$38,179	\$38,225	\$46	0%
Statewide		\$34,353	\$36,055	\$1,702	5%

income, and other key revenue streams that the Delta Cost Project developed, coining the term “*Stable Operating Revenue*.” In the real world, budget planners and boards must consider **all** revenue streams however inconsistent that they might be from year-to-year.

The Stable Operating Revenue (SOR) across Alabama’s fourteen public universities increased from \$3,901,101,128 in 2000 to \$5,211,627,361 in 2013, an

increase of \$1,310,526,233 or thirty-three percent. But the Stable Operating Revenue (SOR) on a per capita basis decreased statewide from \$31,562 in 2000 to \$27,524 in

Table 1.4 Statewide Summary of Stable Operating Revenue Change by Region, in 2013 Constant Dollars

Region		Stable Operating Revenue				Per Capita Stable Operating Revenue			
		2000	2013	Change, 2000-13		2000	2013	Change, 2000-13	
				(dollars)	(%)			(dollars)	(%)
1	Southwest	\$573,058,354	\$525,204,000	(\$47,854,354)	(8%)	\$49,093	\$30,689	(\$18,404)	(37%)
2	West Alabama	\$455,884,973	\$774,829,397	\$318,944,424	70%	\$21,503	\$17,802	(\$3,701)	(17%)
3	Southeast	\$135,068,539	\$251,106,595	\$116,038,056	86%	\$10,770	\$8,626	(\$2,144)	(20%)
4	Montgomery	\$151,658,366	\$196,552,029	\$44,893,663	30%	\$14,914	\$19,744	\$4,830	32%
5	East Alabama	\$662,309,876	\$786,008,271	\$123,698,395	19%	\$22,297	\$20,904	(\$1,393)	(6%)
6	Birmingham	\$1,612,132,614	\$2,230,754,193	\$618,621,579	38%	\$89,737	\$90,493	\$756	1%
7	Northwest	\$57,100,623	\$82,686,239	\$25,585,616	45%	\$10,195	\$9,785	(\$409)	(4%)
8	Huntsville	\$253,887,783	\$364,486,637	\$110,598,854	44%	\$17,215	\$19,243	\$2,028	12%
Statewide		\$3,901,101,128	\$5,211,627,361	\$1,310,526,233	34%	\$31,562	\$27,524	(\$4,037)	(13%)

2013. Statewide, this was a steep decline of \$4,037 (thirteen percent) in just fourteen years. SOR per capita declined in six of the eight regions. The regions in which it fell most steeply were those that saw the largest enrollment growth, East Alabama, Southwest Alabama, and West Alabama, and the regions that had the lowest enrollment growth, Montgomery and Huntsville, saw the only increases in per capita SOR (though the same concern noted above for Montgomery applies here).

WHAT THESE DATA MEAN

In analyzing these data, we begin with the caveat that the fourteen-year period from 2000 to 2013 saw two recessions—the brief so-called “dot.com” bubble burst in 2001-02 that coincided with the terrorist bombings on September 11, 2001 and the much steeper Great Recession from 2008 to 2011. That said, the side-by-side comparisons of flat or declining SOR, and SOR per capita compared to per capita income are revealing. Statewide, average per capita income grew from \$34,353 in 2000 to \$35,579 in 2008, to \$36,055 in 2013. Seven of Alabama’s eight regions saw average per capita income increases between 2000 and 2008, and all eight regions saw increases between 2008 and 2013. The 2013 per capita income averages were above the 2000 averages in all eight regions. But as enrollments and degrees

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

awarded grew, state investments fell sharply with the deep cuts Alabama's fourteen public universities took in the six Great Recession years and its immediate aftermath (FY2008 to FY2012) surpassed only by Louisiana (forty-two percent decline). The substantial tuition increases, which challenge Alabama students and families, have not made up for the cuts in state appropriations, as Table 1.2 makes clear.

Falling state investments have forced Alabama's fourteen public universities to pursue alternative strategies to augment/enhance other income revenue streams.

Auburn University and The University of Alabama pursued recruiting out-of-state students, a strategy not as readily available to many of Alabama's regional universities. It is important to note that in-state enrollments have held constant at Auburn and Alabama even as out-of-state enrollments have increased, evidence of their commitment to serving Alabamians.

The federal Pell Grant increases helped bolster in-state student enrollments.

Beginning with the last two years of President George W. Bush's second term, Pell Grant funding increased dramatically. At a time of historically high state disinvestment, federal Pell Grants at Alabama's public universities grew from \$111,417,846 to \$249,423,450, an increase of \$138 million or 124 percent. This compares with the \$2.9 million in Alabama Student Assistance Grants, the state's sole need-based student aid program. Since student aid is a joint federal-state responsibility, and since federal Pell dollars typically are disbursed by institutions and applied first to tuition and fees, then to book and supplies costs, it is highly relevant to our discussion to examine the relationship between Pell Grant changes, state appropriations cuts, and tuition increases.

Pell Grant awardees at Alabama's fourteen public universities grew from just over 30,000 in 2008-9 to 48,000 in 2011-12, an increase of about 18,000, or sixty percent. Pell recipients grew at Alabama's flagship institutions: At Auburn University, Pell recipients grew from about 2,500 students in 2008-09 to nearly 4,000 in 2011-12, and at The University of Alabama from just under 4,000 students in 2008-9 to nearly 6,000 in 2011-12. At both flagship universities, the percentage of total students on Pell grew from about twelve percent to seventeen percent at Auburn, and from about sixteen to twenty percent at Alabama.

The numbers of Pell recipients grew at Alabama's regional universities grew even more, albeit from a higher base: From 2008-9 to 2011-12 at Troy University, the percentage of students on Pell Grants grew from twenty-six percent to forty-one percent; at the University of North Alabama, from twenty-five percent to thirty-one percent; at the University of West Alabama from just under thirty percent to fifty-five percent; at Jacksonville State University from thirty-two percent to forty percent; at Auburn University at Montgomery from about twenty-four percent to about thirty-four percent; at Alabama State University from sixty percent to sixty-four percent; at Alabama A&M University from forty-seven percent to sixty-five percent; at the University of Montevallo from twenty-six percent to thirty-seven percent; at Athens State University from twenty-four percent to twenty-nine percent; at the University of South Alabama, from twenty-one percent to thirty-one percent; at the University of Alabama at Birmingham from twenty-one percent to thirty-four percent; and, at

the University of Alabama in Huntsville from about twenty percent to twenty-eight percent.

Since the vast majority of the Pell recipients—likely in the range of ninety-five percent—are from Alabama, the inescapable conclusions are that (1) Pell Grant increases helped in-state student enrollments to grow; (2) when federal dollars invested in Pell Grants at Alabama’s fourteen public universities grow, so too do enrollments and degrees awarded; and, (3) when federal dollars invested in Pell Grants fall, so too do enrollments initially -- followed several years later by degrees awarded particularly at Alabama’s non-urban regional universities (whose students cannot rely upon publicly-subsidized mass transit). This is precisely what happened in Alabama as 11,300 regional university students lost their Pell Grants in 2012-13. We now see flatter rates of enrollment increases, which surely will translate into flat if not declining graduation rates in the next several years. From 2009 moving forward, all fourteen of Alabama’s public universities became more reliant upon federal student aid, both Pell Grants and federal student loan programs. Continued and stable federal Pell Grant funding is critical for Alabama’s future success.

The per capita income curve is what matters in the information age. While the employment curve is important, the high-wage, high-demand jobs of the future result from the human capital developed by Alabama’s fourteen public universities. This means that influencing the long-term per capita income curve of Alabama citizens is what counts most. This study found that from 2000 to 2013 at Alabama’s fourteen public universities enrollment increased in seven of Alabama’s eight regions, and only a change in the way that Troy-Montgomery reports their data is why all eight regions did not increase.

Statewide, enrollment increased from 150,983 in 2001 to 189,346 in 2013, an increase of 38,363 students or twenty percent. Statewide, degrees awarded increased from 25,810 to 32,463, an increase of 6,653 or twenty percent. By region, enrollment increased in seven of the eight regions as well as statewide, and per capita income increased (Birmingham, East Alabama, Huntsville, Montgomery, and Northwest, Southeast, Southwest and West Alabama). Alabama’s two flagship universities with their statewide missions positively influenced their regions’ per capita income curve (\$34,353 in 2000, \$36,055 in 2013).

Since 2000, amazing progress to improve academic quality has been made. In *Alabama in Twentieth Century* (2004) Auburn University historian Wayne Flynt cited a study that found Auburn ranked twelfth and The University of Alabama last among sixteen southern peer universities on the average ACT scores for their entering freshman classes. In Fall 2014, the average ACT score for Auburn University’s entering class of 4,592 freshmen was twenty-seven, and a third of The University of Alabama’s freshman class of 6,856 students entered with an ACT average score of thirty or higher. We find improving ACT scores at Alabama’s regional universities, as well. **The improving quality of their academic programs helps Auburn and Alabama attract strong students; attracting strong students likely means more will complete their degrees. This is remarkable improvement in a little over a decade.**

But there is an upper limit on how much individual citizens can be expected to contribute, as opposed to the State of Alabama. Given the deep cuts experienced in recent years, Alabama is well past this limit, as the 11,300 students who lost Pell eligibility in 2011-12 show.

Not surprisingly, state investments to increase institution's Stable Operating Revenue (SOR) were highly significant in the model, indicating that increases in revenue directly result in increases in degrees granted. In addition, the percentage of the population living in rural areas of Alabama was significantly and negatively correlated with total degrees granted. This indicates that the number of degrees awarded decreases as the rural population percent increases, and likely reflects the higher out-of-pocket costs associated with transportation and child care. Numerous studies, including one by Georgetown University and the Lumina Foundation, consistently cite that Alabama does a good job of enrolling students but not completing them. Alabama public universities are very dependent upon federal student financial aid, a dependence that is higher because of the near total lack of presence of state student aid.

This analysis found that in reaction to the severe cut in state appropriations -- Alabama saw the second largest decline of any state in America in state investments from FY2008 to FY2012 as a portion of Stable Operating Revenues -- Alabama's flagship universities have been incited to recruit more students from out-of-state who can pay higher tuition to compensate the institutions for what the state has disinvested. The number of students attending The University of Alabama has increased significantly, by ninety-three percent from 2000 to 2013, while Stable Operating Revenue per student from 2000 to 2013 has actually decreased by fourteen percent in constant inflation-adjusted 2013 dollars. As will be discussed in greater detail in Chapter 3, this implies that public universities have been forced to serve more students with significantly declining resources.

Stable Operating Revenues have a significant and positive effect on the dependent variable, per capita income. **Thus, it is obvious that the investment in higher education affects not only the students, but the income level of the state as a whole. Per-capita income is positively correlated and highly significant as it relates to unrestricted expenditures. This means that increases in state funding, which will increase unrestricted expenditures, will also increase per-capita income in the state. Funding higher education is good for the entire state.**

THE PREDOMINANCE OF PUBLIC HIGHER EDUCATION IN ALABAMA

A. CHARACTERISTICS OF ALABAMA’S STATE SYSTEM⁴

By Stephen G. Katsinas, Director, Education Policy Center, Nathaniel J. Bray, The University of Alabama, and Mark E. Fincher, Mississippi State University

INTRODUCTION: THE PREDOMINANT PUBLIC SECTOR

A striking feature of higher education institutions within the State of Alabama is that they are overwhelmingly controlled by the public sector. This is documented by an analysis of Alabama’s universities and colleges using the Carnegie Foundation for the Advancement of Teaching’s Basic Classification of Institutions of Higher Education, “the gold standard” for peer comparisons in U.S. higher education since its introduction in 1973.⁵ The 2010 Carnegie Basic Classification is included in virtually every federal database.

Within Alabama, unlike other states, there are no privately-controlled Doctoral-granting universities. Two public universities--the University of Alabama at Birmingham and the University of Alabama in Huntsville--are classified as “Research University/Very High Research Activity,” and three are classified as “Research Universities/High Research Activity”-Auburn University (main campus), The University of Alabama, and the University of South Alabama. There are no universities classified as “Doctoral/Research Universities in Alabama. That no private institution in Alabama offers a large enough array of graduate and professional degrees to gain research university classification means the preponderance of doctoral and advanced professional degree programs that business and industry need to remain economically competitive in the global economy—especially advanced degrees in science, technology, engineering, and mathematics (STEM) fields—are offered by Alabama’s fourteen public universities.

The Carnegie Basic Classification’s next level is Master’s Colleges and Universities (MCUs), which is comprised of institutions that confer at least fifty master’s degrees per year. Carnegie divides these into three groupings: larger-sized programs, medium-sized programs, and smaller programs. Seven of Alabama’s fourteen public universities are classified as larger-sized MCUs: Alabama A&M University, Alabama State University, Auburn University at Montgomery, Jacksonville State University, Troy University, the University of North Alabama, and the University of West Alabama. The University of Montevallo is classified as a public MCU-Medium-sized program institution. Only one senior institution, Athens State University, is classified in the next classification grouping, as a Baccalaureate College-Diverse Fields. In summary, five of Alabama’s public universities offer enough doctoral and professional degrees to be Carnegie Doctoral-granting universities, eight are public MCUs, and one is at the bachelor’s level. Again, this indicates a level of order and planning to serve all regions of the state with an array of programs.

Just as there are no private, non-profit doctoral granting universities or master’s large-sized universities within the state’s boundaries, there are no highly selective private

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

liberal arts baccalaureate colleges either. Unlike Georgia, which has Emory University, or Texas with Rice University, or Tennessee with the University of the South at Sewanee and Rhodes College, no highly selective elite private liberal arts colleges or universities exist in Alabama. This does not mean Alabama's independent colleges are unimportant, rather it means that the institutions most likely to offer graduate and professional degrees are almost totally publicly controlled.

STUDENT CHARACTERISTICS

The public tilt of Alabama's higher education system is even more pronounced the higher the degree level. Table 2.1 shows by sector, among 240,802 total unduplicated headcount students enrolled at Alabama's four-year universities and colleges in 2012-13, 192,373 or eighty percent, were enrolled at one of Alabama's fourteen public universities; 29,309 or twelve percent were enrolled at private, non-profit colleges and universities (Alabama has seven private, non-profit federally-designated Historically Black Colleges and Universities, the most of any state); and 19,120 or eight percent were enrolled at private, for-profit institutions. Of the total 40,124 total degrees awarded by all four-year universities and colleges in Alabama in 2012-2013, 33,360 or eighty-three percent were awarded by one of Alabama's fourteen public universities. Of this 40,124 total, 26,480 were bachelor's degrees and 12,324 were graduate degrees (including master's, first-professional, and doctoral). Among the 26,483 bachelor's degrees, eighty-five percent were earned at one of Alabama's fourteen public universities, and among the 12,324 graduate degrees awarded, 10,800, or eighty-eight percent, were awarded by Alabama's public universities. At each level of degree awarded (bachelor's, master's, first professional, doctoral), the percentage awarded by Alabama's fourteen public universities increases.

Table 2.1 Enrollment and Degrees Awarded at Alabama's Four-Year Universities by Sector and Control, 2012-2013
(Public, Private Non-Profit, and Private For-Profit Universities and Colleges)

Sector/Control	in numbers			
	Unduplicated Headcount Enrollment	Total Degrees	Bachelor's Degrees	Graduate Degrees
Public	192,373	33,360	22,560	10,800
Private (Non-Profit)	29,309	6,193	3,559	1,317
Private (For-Profit)	19,120	571	364	207
TOTAL	240,802	40,124	26,483	12,324
Sector/Control	in percentages			
Public	80%	83%	85%	88%
Private (Non-Profit)	12%	15%	13%	11%
Private (For-Profit)	8%	1%	1%	2%
TOTAL	100%	100%	100%	100%

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

In the Fall 2013 term, according to the Alabama Commission on Higher Education (ACHE), Alabama's fourteen public universities enrolled fifty-seven percent female students and forty-three percent male students. Also by this same measure, in the Fall term of 2013, Alabama's fourteen public universities enrolled seventy-nine percent undergraduate and twenty-one percent graduate students. By type of tuition rate paid to the fourteen public universities, ACHE cites that seventy-four percent were in-state; twenty percent were out-of-state; four percent were non-resident exempt, paying in-state tuition; less than one percent were participating in a state-approved learning consortium; and two percent were distance education students. Among the graduate students enrolled by type of tuition paid, fifty-six percent were *in-state*; nineteen percent were *out-of-state*; eight percent were non-resident exempt, paying in-state; one percent were consortium; and sixteen percent were distance learning students. Thus, by type of tuition paid, about four in five undergraduates were in-state, and about three in four graduate students were in-state. This speaks powerfully to the notion that Alabama's public universities generate human capital at the undergraduate and graduate levels.

Not surprisingly, the dominance of the public sector revealed in the enrollment data is also reflected in doctoral/professional degree productivity data. According to the ACHE Fall 2013 profile, among the 1,789 doctoral/professional degrees awarded by Alabama's fourteen public universities in 2012-13, the top five majors were Medicine (247), Law (168), Nursing Practice (165), Pharmacy (147), and Physical Therapy/Therapist (105). All 247 degrees in Medicine were awarded at one of Alabama's fourteen public universities. Similarly, most of the 168 Law, 165 Nursing Practice, and 147 Pharmacy degrees were awarded at one of Alabama's fourteen public universities.

By race and ethnicity, of the undergraduate student class of the Fall 2013 term, sixty-four percent were White, Non-Hispanic; twenty-three percent were African-American, Non-Hispanic; and, twelve percent were other races that include Non-Resident Aliens or international students (four percent), two percent Hispanics and two percent Asian students.

THE GRADUATION RATE DILEMMA: INCREASING SUCCESS WITH DECLINING STATE RESOURCES

An important determinant of success is graduation rates. Table 2.2 shows unduplicated headcount enrollment and degrees awarded at Alabama's fourteen public universities in 2012-2013. Alabama's two public universities with statewide missions—Auburn University (main campus) and The University of Alabama, together awarded thirty-eight percent of four-year degrees, while Alabama's twelve regional universities awarded just over six in every ten. Troy University and the University of Alabama at Birmingham each awarded thirteen percent of all undergraduate degrees in 2012-2013.

It is important to note that according to the Alabama Commission on Higher Education, bachelor's degree graduation rates at Alabama's fourteen public universities are increasing. From 2009-10 to 2013-14, six-year baccalaureate degree graduation rates increased from forty-seven percent to forty-nine percent.⁶ This is a solid achievement given the convergence of four interrelated key trends. First is the severe decline

Table 2.2 Enrollment and Degrees Awarded at Alabama's 14 Public Universities, 2012-13

University	Unduplicated Headcount Enrollment		Graduate and Undergraduate Degrees	
	Number	%	Number	%
Alabama A & M University	5,513	2%	825	2%
Alabama State University	6,782	3%	794	2%
Athens State University	4,700	2%	907	3%
Auburn University	26,706	11%	5743	17%
Auburn University at Montgomery	6,173	3%	790	2%
Jacksonville State University	10,895	5%	1704	5%
Troy University	29,109	12%	4337	13%
The University of Alabama	37,220	15%	7105	21%
University of Alabama at Birmingham	21,196	9%	4234	13%
University of Alabama in Huntsville	8,728	4%	1573	5%
University of Montevallo	3,482	1%	490	1%
University of North Alabama	8,450	4%	1286	4%
University of South Alabama	17,114	7%	2670	8%
University of West Alabama	6,305	3%	902	3%
TOTAL	192,373	80%	33,360	100%

in state appropriations from FY2008 to FY2012 (well over thirty percent, second only to the cuts experienced in Louisiana, according to the State Higher Education Finance 2014 report⁷). Second is the much higher tuition paid by the current generation of Alabama students and their families, resulting from tuition increases forced by institutions as a result of state disinvestment. According to the Delta Cost

"Knowledge, being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged."

Northwest Ordinances, 1787

Project, due to need for public access institutions to augment declining state appropriations, 2011 is the first time tuition paid for at least one-half of Education & Research costs at public four-year universities across the United States.⁸ Declining state appropriations has forced tuition up by sixty-five percent from 2008 forward in Alabama, according to the State Higher Education Executive Officers.⁹ Third, the nearly non-existent state-student aid funding—less than \$3 million—comes in the form of state need-based aid under the Alabama Student Assistance Program, compared to the \$249 million in Pell Grant aid in 2011-2012. Fourth, the decline of federal student aid

following the end of the one-time year-round summer Pell Grant, combined with the \$2 billion in congressionally-mandated federal budget cuts in June of 2012, resulted in an estimated 11,300 fewer students at Alabama's fourteen public universities in 2012-13. The lack of a substantial state student aid program means that the Pell Grant program is, for students attending Alabama's fourteen public universities, the *de facto* need-based state student aid program opening gateways to college.¹⁰ That graduation rates continue to rise despite such negative financial trends speaks to the efforts of Alabama faculty, staff, and administrators to focus their efforts on student success.

B. THE BEGINNING OF PUBLIC HIGHER EDUCATION IN ALABAMA

The strong interest among Alabamians in the use of their public universities as vehicles for economic and social betterment dates to the state's beginnings. State action began four decades before the first shots were fired at Fort Sumter to start the Civil War. While it took more than a decade between statehood and the initial enrollment of students at Alabama's first public university, from the beginning there was recognition that strong public universities would make the new state attractive for new settlers and new businesses.¹¹

The roots of public higher education precede implementation of the American Constitution. In 1787, the Northwest Ordinances passed by the last Continental Congress set aside land for the establishment of education.¹² While applicable only to territories west of Pennsylvania and north of the Ohio River, the setting aside of the sixteenth section of available public lands in each township for sale earmarked to public schools and an additional section for public universities was modeled by southern states, including Alabama. By the time President Abraham Lincoln signed the Land-Grant Colleges Act of 1862, seventeen states had congressional land grants to establish public universities.

One of those states was Alabama. The Alabama Territory Act was passed by Congress on March 3, 1817.¹³ On April 18, 1818, when the Fifteenth Congress set aside proceeds from sale of land to establish the new Alabama Territorial capital, it also set aside land for "a seminary of learning within said territory."^{14,15} Thus, the people's interest in public higher education predates Alabama's admission as a state.

Alabama was admitted to the Union on March 2, 1819, and at its very first session, the Alabama General Assembly moved promptly to appoint commissioners to choose a site for a new public university.¹⁶ "The University of the State of Alabama" was chartered on December 18, 1820, but did not enroll students until 1831.¹⁷ This is consistent with the history of other southern states.¹⁸ The Third General Assembly in 1827 approved locating the University in Tuscaloosa, then the state's capital.¹⁹ Four years later, in 1831, **The University of Alabama** would enroll its first students.

.....
The interest in strong public universities for Alabamians, dating to the very beginnings of the State, is testimony that Alabama's business and civic leaders know that public universities are engines to help Alabama attract new businesses.
.....

An Act... "for the endowment, support, and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts...to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life."

Land-Grant Colleges Act of 1862

Federal action would influence state action, a recurrent theme in the history of Alabama higher education. The Land-Grant Colleges Act of 1862 created a process by which western lands were divided and proceeds from sale earmarked for the establishment of public colleges and universities related to agriculture and engineering.²⁰ The Agricultural and Mechanical College of Alabama, today's **Auburn University**, was designated to receive federal

PARTNERSHIP SPOTLIGHT:

UA AND AUBURN

For the 20th year in a row, students at Auburn and Alabama had a food fight to address food insecurity. Auburn students collected 169,702 pounds of food for the East Alabama Food Bank, while Alabama students collected 299,398 pounds for the West Alabama Food Bank.

funds under the Land-Grant Colleges Act, opening in 1872. Auburn University was the South's first land-grant university established separately from the state university.²¹ Its 2014 fall semester enrollment was 25,912; students were enrolled in more than one hundred and forty degree options in thirteen colleges at the undergraduate, master's, first-professional, and doctoral levels.²²

In the last decade, both Alabama and Auburn have made great strides to dramatically improve the quality of their academic programs. In his 2004 book, *Alabama in Twentieth Century*, Auburn University historian Wayne Flynt found Auburn twelfth and Alabama last among sixteen peer universities on ACT scores of their entering college freshmen.²³ In sharp contrast a little over a decade later in the Fall of 2014, about a third of The University of Alabama's freshman class of 6,856 students entered with a thirty or higher ACT, and the average ACT score for Auburn University's 4,592 entering freshman class was twenty-seven. Today, The University of Alabama is a leader among public universities nationwide in National Merit Scholars, with more than six hundred currently enrolled.²⁴ Both universities are highly committed to public service; both have achieved the Carnegie Foundation for the Advancement of Teaching's prestigious Community Engagement designation. In 2013-2014 alone, some 26,000 UA students completed more than 1.1 million hours of community service. In Fall 2014, Auburn University and The University of Alabama enrolled 25,912 and 36,155 students, respectively (the Alabama total includes students at its Gadsden Center). The growth of both universities, and indeed all public universities, has been fueled by federal investments, primarily in the form of earmarks for construction and equipment in science, technology, engineering, and mathematics (STEM) areas, and federal student aid via Pell Grants. The strong bipartisan support of Alabama's congressional delegation for federal investments today, led by Senator Richard Shelby, builds upon a long tradition of strong support by Senators Lister Hill and John Sparkman and Congressmen Carl A. Elliott. Hill and Elliott coauthored the National Defense Education Act of 1958, one of the most important pieces of federal legislation for higher education in American history--many of the graduate programs at Alabama public universities date to NDEA funding in the late 1950s and 1960s. Federal support has significantly advanced the academic profile of both of Alabama's flagship institutions, and indeed all fourteen public universities.

"Auburn
uses the knowledge
and skills it creates to benefit
the people of Alabama and beyond.

"The distinguished Carnegie Foundation selected Auburn for the 2010 "Community Engagement Classification," recognizing Auburn's commitment to community partnership and public service through its mission of outreach.

"There's perhaps no better honor for our campus than to be recognized for helping others."

--Dr. Jay Gogue, President,
Auburn University

PARTNERSHIP SPOTLIGHT:

ALABAMA A&M AND UAH

More than 12,000 students are served by the academic programs at Alabama A&M University and the University of Alabama in Huntsville.

“Perhaps UAH’s greatest contribution to the local economy is its high quality, technologically focused graduates, many of whom go on to join the local workforce.

--Dr. Robert A. Altenkirch, President,
University of Alabama in Huntsville

“Together, the two campuses add momentum to a progressively vibrant cycle that sustains economic development, cultural activity, and social well-being, that gives the Tennessee Valley an enviable edge over other communities its size.”

--Dr. Andrew Hugine, Jr., President,
Alabama A&M University

In 1890, Congress passed the Second Land Grant Colleges Act that resulted in southern states with all white land-grant colleges to create separate land grant colleges for blacks, as a condition to continue to receive continued federal land-grant funding.²⁵ A former Normal School in 1875, which had as its purpose as the training of teachers for Negro schools, with emphasis on industrial education.²⁶ It was renamed “State Normal and Industrial School at Huntsville.”

In 1891, responding to the Second Land Grant Colleges Act passed in 1890, the federal government accepted the Alabama Legislature’s recommendation and designated the “State Normal and Industrial School for Negroes” to be Alabama’s black land-grant college. This institution is now known as **Alabama Agricultural and Mechanical University (hereafter, Alabama A&M University)**.²⁷ Today, Alabama A&M University is among the top fifteen universities

in America in producing minority graduates in the STEM disciplines, and is in the top ten among universities awarding undergraduate engineering degrees to minorities. It has deep ties to businesses and industries in the Tennessee Valley, and there is a longstanding record of partnerships between Alabama A&M University and the University of Alabama in Huntsville to bolster regional economic and community development, building upon their institution’s complementary strengths.

C. THE BEGINNING OF REGIONAL UNIVERSITIES IN ALABAMA

The University of Montevallo traces its history to meeting vocational education needs, and the effective advocacy of Julia S. Tutwiler, one of the most substantial women in Alabama history.²⁹ To “escape from the drudgery of field work, mill work, or the ignominy of depending on a father or brother for lifelong support if there was no husband,³⁰ the Alabama Girls’ Industrial School prepared self-supporting women for careers in teaching, bookkeeping, dressmaking, telegraphers, and other careers.³¹ Following its opening in 1896, Alabama College for Women established the state’s first home economics and social work programs, training faculty for Alabama and Auburn. The college became coeducational in 1956, and admitted its first African Americans in 1968. The University of Montevallo’s commitment to improve Alabama’s economic, civic, and cultural life that began a century ago with Julia Tutwiler continues in the 21st century. Today, the institution is widely viewed as one of the leading public liberal arts colleges and universities in the South.

“That schools ad the means
of education should be provided
and encouraged to
the extent of your powers.”

--Governor William W. Bibb, Address to the
First Territorial Legislature, January 19, 1818²⁸

Athens State University has perhaps the most unusual history of Alabama’s fourteen public universities. Its roots trace to a church-related (Methodist) academy for

The International Society of Logistics predicts the global marketplace has created a strong demand for logisticians and supply chain managers. To aid long-term workforce needs at Redstone Arsenal and the Tennessee Valley, Athens State in 2014 created a new Master of Science in Global Logistics & Supply Chain Management.

women that opened in 1822, supporting its claim as Alabama's oldest institution of higher education. Athens College soon embraced a teacher education mission, and in 1930 during the Great Depression became co-educational.³² In 1975, ownership of Athens State College was transferred to the State of Alabama, joining the state's community, junior, and technical college system, with the Alabama State Board of Education (ASBE) as its governing board. From 1975 to 2012, it was restricted to offering only upper division classes leading to the baccalaureate.³³ Today, following creation by the Alabama Legislature of an independent board of trustees for the first time in four decades, Athens State University is charting a new future, building upon its strong tradition of offering transfer student opportunities and online learning to reach underserved older adults. With its new logistics programs³⁴ and the 2014 opening of the new Alabama Center for the Arts in Decatur, it is expanding its commitment to the fine arts, as it develops a new Comprehensive Facility Master Plan to better serve the people of the Tennessee Valley.

Alabama State University's roots date to the interracial American Missionary Association (AMA) that was founded in 1839 as a legal defense fund for the African slaves who mutinied against their Spanish slavers on the Amistad. The AMA helped to found more than five hundred schools for freed slaves in the south following the Civil War,³⁵ including the Normal School, founded by nine freed slaves in Marion, Alabama. Coretta Scott King, the wife of Martin Luther King, Jr., was a Lincoln School graduate.³⁶ In 1872, the Alabama Legislature created the "State Normal School and University for the Education of Colored Teachers and Students," which incorporated Lincoln's assets. Both institutions operated in Marion until 1889, when "Alabama Colored People's University" was relocated to Montgomery.³⁷ For nearly a hundred years, the institution was under the control of the Alabama State Board of Education, until 1975, when the Alabama Legislature created an independent board of trustees. Like other normal colleges, ASU began offering two-year degrees for teachers early in its history (1915). Its first bachelor's degree was awarded in 1931, its first master's degree in 1943, and it achieved Southern Association of Colleges and Schools (SACS) accreditation in 1935.³⁸ Today, Alabama State University offers fifty different academic

programs in nine separate academic units.³⁹ In 2014, ASU announced its new Nuclear Protection Academy to train and educate nuclear and energy facility security professionals across the United States and in other energy-producing countries.⁴⁰ The University is much involved in strengthening STEM efforts in Alabama's Black Belt under new President Gwendolyn E. Boyd, a Montgomery, Alabama native who earned her undergraduate degree from ASU, and is pursuing new avenues of service, teaching and research.

ALABAMA STATE UNIVERSITY IS...

"...a vital resource to continue the education of nuclear security professionals."

--Stephen Kuczynski, Chairman
Southern Nuclear Operating Company

"...is creating a preeminent training center for security practitioners nationally."

--Henry B. Barron, President and CEO
Constellation Energy Nuclear Group

"I am very happy to be back in Florence again. After much persistent hard work by UNA senior administrators and Florence city government officials, we are now ready to begin the implementation stage of creating a world-renowned program for integrative health."

--Zhang Shiting, Chairman, Shenqi Ethnic Medicine College on signing agreement to create UNA's new U.S.-China International Institute

"The vision for the City of Florence is to partner with both public and private parties to enrich the quality of life for all our citizens."

--Mickey Haddock, Mayor of Florence

The University of North Alabama calls itself the oldest state-chartered institution in Alabama, tracing its roots to the Methodist Church's desire to prepare teachers. Founded as LaGrange College in Leighton in 1830, it was relocated to Florence in 1855, and became a state normal teacher's college in 1870. From 1870 to 1967, its governing board was the Alabama State Board of Education. It has been coeducational since the 1870s, offering the two-year teacher training degree until 1931, when the first bachelor's degree was awarded. Full SACS accreditation came in 1934, and the first master's degree in 1956. As the curriculum broadened beyond education, the name changed from Florence State Normal College (1929), to Florence State College (1957), to Florence State University (1967), and to its present University of North Alabama (1974).⁴¹ The first African American student, Wendell Wilkie Gunn, was admitted on September 10, 1963; he later earned an advanced degree at the University of Chicago and worked as a Special Assistant to President Ronald Reagan.⁴² The University is partnering with China's Shenqi Ethnic Medical College on a new integrative holistic health master's degree. "Chairman Zhang Shiting's vision...extends...to create a botanical museum and garden, a visitors center and dining options as well as other academic programs and continuing-education offerings," UNA President Bill Cale said.⁴³ The close ties with its region are demonstrated by the recent \$3 million gift by the City of Florence to build a new science and technology building.⁴⁴ In Fall 2014, UNA enrolled nearly 7,000 students in ninety majors, minors, and concentrations.⁴⁵

Jacksonville State University began as a privately controlled Calhoun College in 1871. In 1883, the Alabama Legislature acquired Calhoun's facilities and created the State Normal School at Jacksonville, and remained under control of the Alabama State Board of Education until 1968. Two-year teaching certificates were offered until 1929, when bachelor's degrees were offered.⁴⁶ Again, name changes reflected the broadening of the institutional mission, from State Normal School at Jacksonville (1883), to State Teachers College at Jacksonville (1929), to Jacksonville State College (1957), to Jacksonville State University (1966).⁴⁷ The university's teacher training roots continue

today, as demonstrated by its Collaborative Regional Education program, which received a highly competitive \$11.7 million grant from the U.S. Department of Education's Investing in Innovation (i3) program. The grant funds are integrating technology into classrooms, teacher professional development, and five hundred dual enrollment scholars to earn college credit while in

"...we will be recruiting students who might not otherwise be able to pay for dual enrollment courses... first-time freshman who took at least one dual enrollment course at JSU have an 85 percent first-year retention rate, 17 points higher than all JSU first-time freshmen, so we know that dual enrollment has a very positive impact on student success."

--Dr. Alicia Simmons, Executive Director of JSU's Collaborative Regional Education program, on news of an \$11.7 million USED grant

PARTNERSHIP SPOTLIGHT:

ALABAMA POWER AND JSU

The Alabama Power Foundation funded \$300,000 for a new robotics/applied engineering laboratory at JSU. "This is very symbiotic for us...it helps us develop the workforce for some of our biggest customers, like Honda."

--Julia Segars, Vice President, Eastern Division, Alabama Power

.....
"For six decades
Troy University has
distinguished itself as
the largest provider
of higher education
opportunities of any
Alabama university
to the United States
Military."
.....

high school.⁴⁸ Today, JSU serves 8,693 students, of whom eighty-seven percent are undergraduates, in forty-five degree programs at the bachelors, masters, post-baccalaureate, doctoral and advanced certificate levels. Its 204 international students represent sixty-one countries around the world.⁴⁹

Troy University began in 1887 when the Alabama Legislature established Troy State Normal School to train teachers for Alabama's schools. It became State Normal College at Troy in 1893, and in 1929 it moved to its present location and began offering four-year degrees. The enlarged mission was reflected in name changes, first to State Teachers College at Troy (1929), Troy State College (1957), Troy State University (1967), and Troy University (2005). For six decades, Troy University has distinguished itself as the largest provider of higher education of any Alabama university to the United States Military. These efforts began with extension courses at Fort Rucker (Troy University-Dothan started in 1961) and later at Maxwell Air Force Base (Troy University-Montgomery, 1965). A third campus was added in Phenix City in 1975. SACS independently accredited the campuses until 2005, when "state" was dropped from the name and a single unified accreditation began. Today, Troy consists of its three Alabama campuses and Troy Global Campus, which operates sixty sites in seventeen U.S. States and eleven countries.⁵⁰ The University's partnerships include extensive work with community colleges to promote transfer, the hosting of the STARS statewide program to guide community college students to transfer without loss of credit at senior universities,⁵¹ developing reverse transfer agreements with Alabama's community colleges,⁵² and partnering with Faulkner and Samford Universities on an accelerated two-year law degree (one of only twenty in the country).⁵³

Known as Alabama's "international university," almost thirteen percent of the Troy campus enrollment--900 students--come from seventy nations and speak eighty languages. Troy University seeks to graduate "globally prepared students" with study abroad programs in each of its five colleges, and has added international engagement to its faculty tenure and promotion process.⁵⁴ In 2014, Troy University Chancellor Jack Hawkins received the World Confucius Institute's Individual Performance Excellence Award from Liu Yandong, Vice Premier of the State Council of the People's Republic of China in Beijing.⁵⁵ The University remains committed to its education roots, demonstrated by its partnership with the Alabama Institute for the Deaf and Blind. Another point of distinction is the remarkable stability of its senior leadership: just two individuals, Ralph Adams (1964-1989), and Dr. Hawkins (1989-present), have served as its chief executive officer over the past fifty years.⁵⁶

"Many people would make fun of me because I was deaf. I was never part of any organizations or activities at school, and went to the sixth grade unable to read or write.

"What an exciting time in my life [to enroll at age 12 at the Alabama School for the Deaf and Blind]. I served as president of many organizations and became Patrick, my given name, and not Pat the deaf boy...I became a person with no limits, no handicaps. Patrick, a big mass of possibilities."

--Patrick Robertson, Director, Talladega Regional Center, Alabama Institute for the Deaf and Blind, at the 18th Annual Helen Keller Lecture, Troy University, 2013

The University of West Alabama was chartered as a Presbyterian all-female academy in 1835, and began enrolling students in 1839. Closed during the Civil War, it reopened in the 1870s. From 1881 to 1910, the school was directed by Julia Tutwiler, who obtained a small amount of state appropriations to establish a normal school for girls to be operated by Livingston Female Academy (from 1876 to 1907; male students were excluded). From 1907, when state assumed full control, to 1911, UWA had its own board of trustees. In 1911, the Alabama Legislature created a single board of trustees for all of its normal schools, and in 1919 normal colleges were placed under the control of the Alabama State Board of Education. The name changes of the institution reflect the broadening mission: State Teacher's College at Livingston (1929), Livingston State College (1957), Livingston University (1967), and the University of West Alabama (1995).⁵⁷ To reduce barriers to higher education for the very rural, sparsely populated region it serves, UWA has become a leader in online education, and today a substantial portion of the total student body is enrolled in one hybrid online form or another. The institution actively partners with other public

"We know that if we're going to continue to advance our products and processes, we must advance our workforce.

"We sat down with UWA two years ago and said, 'Are you brave enough to embark on an experiment with us?' and that's what we've done."

--Phil Johnston, Vice President of Engineering, Mercedes-Benz U.S. International

universities to meet business and industry needs, such as working with The University of Alabama to provide advanced nursing degrees. In February 2015, University of West Alabama President Ken Tucker announced an innovative new program to prepare automotive technicians in cooperation with Mercedes-Benz U.S. International, Alabama Power, and Shelton State Community College.⁵⁸ The seven colleges and divisions of UWA served nearly 4,000 students in Fall 2014.

The mission statement of **the University of South Alabama** states it was founded in 1963, dedicated to "offering high-quality programs of teaching, research, public service, and health care."⁵⁹ USA serves the state's second largest metropolitan area; both the southwest Alabama region and the University have seen great growth since Governor George C. Wallace dedicated the new campus in 1964. It has enjoyed a long tradition of stable leadership with its own board of trustees since its inception and just three presidents: Frederick Widdon, 1963-1998; V. Gordon Moulton, 1998-2013; and Tony G. Waldrop, 2013-present. The first doctorate of medicine degree was awarded in 1969, and the first Doctorate in Philosophy was awarded in 1978. There is a long history of strong academic partnerships between USA and other Alabama public universities to provide and extend services to the people of southwest Alabama,

"For Airbus, any partnership with education in Mobile is an investment in our future and that of the aerospace industry...With this donation, we hope to help give students at USA hands-on experience with the new materials used in aerospace, and put them one step closer to realizing their future."

--Barry Eccleston, President, Airbus Americas

half of all USA employees contributed to the 2014 Employee Annual Fund for scholarships for needy students. In November 2014, Airbus Americas donated an A330 elevator to USA's College of Engineering, as USA responds positively to the region's burgeoning aerospace industry.⁶⁰ At its Spring 2014 commencement, USA awarded 1,040 bachelor's, 242 master's, 63 doctor of medicine, 37 doctor of physical therapy, 8 doctor of audiology degrees, 1 doctorate of nursing practice, and 8 doctor of philosophy degrees.⁶¹ USA's Fall 2014 enrollment reached an all-time record of 16,055.⁶²

PARTNERSHIP SPOTLIGHT:

Five Universities to Serve the Black Belt. The University of Alabama at Birmingham received a \$49 million U.S. Department of Education GEAR-UP grant to serve 10,000 students from 18 school districts in Alabama's Black Belt. UAB is partnering with Alabama State University, Auburn University, the University of Alabama, and the University of Montevallo, as well as the Black Belt Community Foundation and Regions Bank.

Funding for UAB from the National Institutes of Health rose by more than 20% percent in FY2014 compared to FY2013:

"This vital funding helps us grow our footprint in the fields of genomics, personalized medicine and other key areas and, in turn, provides unparalleled care to patients throughout our state and region."

--Selwyn Vickers, MD, Senior Vice President

as evidenced by the presence since 2007 of Auburn University's Harrison School of Pharmacy at the University of South Alabama to provide critically important pharmacy education opportunities. The commitment of service to the region is demonstrated by the fact that more than

The roots of the **University of Alabama at Birmingham (UAB)** can be traced to the founding of the Medical College of Alabama in 1859⁶³ and the opening of the Birmingham Extension Center in 1936. The Ulman School, the oldest building on UAB's campus, opened in 1902 when privately controlled nursing, dentistry, and pharmacy education programs were begun. By 1939, 365 students were enrolled at the Extension Center. Jefferson County Hospital opened nine months before America entered WWII; with federal support, year-round institutes to accelerate the training of medical doctors began. In 1945, Jackson and Hillman hospitals merged, and a new School of Dentistry was established. Again, the federal

Hill-Burton Act of 1945 and federal grants through the newly established National Institutes of Health would provide added support. The School of Nursing founded in Tuscaloosa in 1950 was moved to Birmingham in 1967. A new Extension Building for the nearly 2,000 students was built next to the Medical Center in 1956, and Amendment 4, a statewide bond issue, passed in 1957 to purchase ten blocks of land for an

expanded campus (today UAB occupies eighty-six city blocks). An Engineering Building opened in 1962, and in 1966 the Extension and Medical Centers were merged to form UAB, which became one of the autonomous universities within the new University of Alabama System in 1969.⁶⁴

Today, UAB has created new research institutes in genomic medicine, personalized medicine and informatics, and new treatments and therapies for diabetes and viral

“Where UAH truly excels is working with existing businesses ..to ensure that students are well prepared for their chosen career paths.

“Our prospects are impressed by the university’s capabilities and the attitude of the UAH leadership...such as ‘What do we need to do to get ready to meet your needs?’”

--Chip Cherry, CEO, Huntsville-Madison County Chamber of Commerce

infections are under development.⁶⁵ With 23,000 employees, UAB is Alabama’s largest single-site employer and a major force for research and economic development.⁶⁶ Its twelve schools and colleges now serve about 18,000 students, as UAB fulfills its urban mission as a research university

and first choice for education and health care.

The University of Alabama in Huntsville (UAH) began as an extension center of The University of Alabama in 1950, evolving into its own campus in 1969. A major employer in the Tennessee Valley, with more than 1,500 faculty and staff, UAH offers seventy-one degree programs in its eight colleges to 7,376 students, of whom 1,805 are majoring in engineering and 1,012 in science as of 2013. The Carnegie Foundation classifies UAH as “very high” research activity, an elite group of seventy-three U.S. public universities. The average ACT score of UAH’s entering 2014 freshmen

class was 26.7. Students hail from seventy-five countries.⁶⁷ The University is an incubator for more than a dozen high-tech start-ups in the Tennessee Valley, including biotech ventures iXpressGenes, Inc, GeneCapture, and Vastly, as well as NextStorm, which develops weather prediction apps. UAH assists in economic development activities, playing a vital role in bringing a 400-job Boeing research center to Huntsville. Aerojet Rocketdyne executives cited a reason for locating a rocket propulsion development office in Huntsville was close proximity to the city’s academic resources. UAH technology transfer has resulted in fifteen patents generating \$5.2 million in patent license income in the past five years, as UAH actively partners with area businesses and industries, as well as with other

postsecondary institutions, especially Alabama A&M University.⁶⁸

“We are very interested in having a world-class education system, from pre-kindergarten to the Ph.D. level.”

--Col. Bill Marks, Garrison-Commander, Redstone Arsenal

The newest separately accredited public university in Alabama is **Auburn University at Montgomery (AUM)**. In his history of AUM for the *Encyclopedia of Alabama*, G. Travis Adams documents a true “bottom-up” grass-roots effort to expand higher education opportunities in Alabama’s capital city. Montgomery Area Chamber of Commerce President Charles Brightwell approached Auburn University President Harry M. Philpott about developing a new campus with three educational objectives: a competitive undergraduate program, opportunities for adult education, and graduate programs in business, government, public administration, and education. The Montgomery College Bill, Act No. 403, was introduced in 1967 by Alabama State Senator Otis J. “Joe” Goodwyn, Chair of the Senate Finance and Taxation Committee, and was passed in five days. The bill was signed into law by then-Governor Lurleen B. Wallace, and \$5 million in bonds to acquire land and buildings was appropriated. It would take nearly two years and a legal case decided by the U.S. Supreme Court before the project would move forward. Nearly six hundred students enrolled at AUM as it opened in 1969. The Southern Association of Colleges and Schools approved accreditation of AUM as a separate institution in 1973. AUM’s academic profile flows from its commitment to the Montgomery region and includes the Speech and Hearing Clinic, the Center for Business and Economic Development, the Early Childhood

Center, Project Read, the Center for Psychological Services, the Center for Government and Public Affairs, and the Montgomery Area Community Health Services Institute.⁶⁹ AUM offers more than ninety areas of study⁷⁰ at both the undergraduate and graduate levels, and 5,057 students were enrolled in Fall 2014.⁷¹

D. IMPACT OF HIGHER EDUCATION INVESTMENTS IN ALABAMA

Economic impact is no longer merely a local affair. The days of economic development being driven by local or state money have past. Even national borders are no longer a barrier to the flow of investment. Consequently, states and regions must be prepared to compete with other places around the world for the vital lifeblood of financial investment. This is something well known in Alabama, given the rise of the automotive industry in Alabama following the arrival of Mercedes in 1993, and the recent arrival of Airbus in Mobile.

THE CHANGING WORLD OF INVESTMENT CAPITAL

In generations past, the flow of investment across regions was largely restricted by legal and structural barriers. In the not-so-distant past, it was not even possible to directly exchange currencies between a substantial number of countries, due to legal constraints. An additional challenge to the movement of investment capital was the costly and limited mobility of the goods and services that were produced through the investment. It was illegal to ship many products across borders, and many other products were subject to high tariffs and other financial penalties. The rise of free trade agreements in the 1980s and 1990s, reflecting a broad political consensus across both political parties, has changed this dynamic. Still other products were completely impractical to export due to limitations of transportation. Businesses operating across national borders were challenged due to the limitations of communications and travel. The movement of services across borders was a virtual impossibility due to legal and communication barriers.

Today, in sharp contrast, Mercedes employs a total of thirty-seven hundred employees at its Tuscaloosa plant as of March 2015. Mercedes estimates that a total of twenty-eight thousand people are employed by MBUSI and its many secondary and tertiary sub-contractors. They estimate that a total of two billion dollars in taxes have been generated since arriving in 1993. Mercedes has invested nearly four billion in its Alabama plant--five models are now built on-site in Tuscaloosa County. Mercedes is Alabama's top exporter, as discussed below. Thanks to close work with its suppliers and the application of modern, state-of-the-art technologies by a highly trained, computer-literate workforce, Mercedes' manufacturing processes have brought "just-in-time" delivery of sub-contracted parts for its vehicles to a whole new level. This is the new globally competitive world in which Alabama businesses must compete in, and thus is the world that Alabama's fourteen public universities must be preparing their students for success in.

Investors and their representatives today seek to produce the maximum return on their investment with the minimum level of risk. To produce such results, investors seek out the best resources that will give them a competitive advantage over potential rivals. The barriers of the past to the movement of capital and physical barriers in the

conducting of international commerce were frustrating to investors, as they limited consideration of all possible investment opportunities. Practically, the choice was between investment options that were politically and geographically related.

Consequently, communities and states only had to be concerned with how competitive they were with other communities and states within their own country. In Alabama, this meant focusing on comparing recruitment strategies comparable to other southern and mid-south states. This was a relatively simple competitive position to maintain, given the relatively few competing opportunities for investment. The spending by states and local governments on the components that would better attract investment were often not considered to be of major consequence, since investment could be expected with little effort due to the relatively small pool of investment opportunities. With few options, investment opportunities with very few positive characteristics could expect to receive substantial funding by merely offering a viable business opportunity rather than an exemplary opportunity. The South's historic offer of a hardworking, low-wage workforce was attractive. During the early Wallace years, Alabama was among the leading southern states in attracting industries to relocate; often these were from northern states.

DIMINISHING BARRIERS TO TRADE AND THE FLOW OF INVESTMENT

Those days are long past. The situation changed markedly from the 1960s to the 2000s, due to shifts in trade regulations, tariffs, travel, communications, and currency exchange. Beginning with the 1940s General Agreement on Tariffs and Trade (GATT), a wide range of agreements and efforts have been carried out to promote international trade and reduce trade barriers.

The reduction of trade barriers has included, but has not been limited to, tariffs and trade regulations, arbitrary regulations and restrictions on distribution and ownership, licensing barriers, and import tariffs. The most dominant single force in the movement toward reducing trade barriers has been the World Trade Organization (WTO). The WTO, and its predecessor organization GATT, exist to reduce international trade barriers. A series of comprehensive negotiations since the 1940's have produced the long-term trend toward the liberalization of trade rules and the lowering of tariffs. This effort has been furthered by a variety of regional trade organizations that promote drastically reduced trade barriers among neighboring countries. Some of these agreements, such as the union of Belgium, Netherlands, and Luxembourg (Benelux), the Mercosur cooperation program between Argentina, Brazil, Paraguay, Uruguay, and Venezuela, the North American Free Trade Agreement (NAFTA) of the early 1990s, and the expanding European Union have resulted in reduced trade barriers so low that it is practical to consider these areas to be single economies for purposes of economic analysis and market segmentation. The result is a situation where sovereign borders are often of very little consequence to business and investment decisions. This increases the value of the availability for attractive local resources in decisions to invest in an area.

Transportation and communications have also changed markedly since the 1980s. While it was once a major undertaking to make a phone call across national boundaries, it is now simple to create simultaneous real-time video conferencing in multiple countries between multiple suppliers and a single corporation, as Mercedes and Airbus do each and every day with their suppliers. Mail that once took weeks to go around the world has been replaced by electronic messages that move almost instantaneously from one country to another. Perhaps most significantly, modern container ship technology has greatly increased the functional speed of shipping products from one continent to another. A ship that would have previously taken two weeks to unload and reload can now be emptied and reloaded in forty-eight hours. *This explains the advancement of Mercedes' manufacturing processes, to the point where "just-in-time" means delivering what is needed for today's manufacturing today, not yesterday or last week. It is in this context that a well-trained college-level workforce that can assimilate information and processes quickly is vital to Alabama's future economic development.*

Currency exchange has also long been a significant barrier to international trade and investment. Historically, the movement of wealth from one country to another was highly regulated and limited. As recently as the 1990's, currencies as prominent as the U.S. dollar and the Russian/Soviet ruble could not be exchanged due to legal and systemic barriers. A U.S. firm wishing to do business in Russia would have to resort to bartering for goods in order to be able to repatriate its earnings. At this time it was common for U.S. firms doing business in Russia to be required to purchase vodka or caviar to export and sell those items on a market with a convertible currency, and then take the money back to the U.S. simply to operate. From the 1940's until the 1970's the exchange rate for the currencies that could be exchanged was set at a constant rate by the 1944 GATT Bretton Woods Agreement that established a consistent price for one currency compared to another. This led to a situation where a currency may have actually been worth more or less than its price, due to various factors of money supply and inflation. This served as an additional deterrent to international trade, as the relative price of any good or activity could be substantially inflated due to this imbalance.

In recent years, however, the barriers related to moving money from one country to another have nearly disappeared. Most countries have little or no barrier to moving money to other countries. Exchange rates largely float freely so that the value that is placed on a currency generally reflects what the market will justify from one country to another. Investment, for all practical purposes, no longer has a nationality. Investment dollars, rather than being attached to an individual country, now frequently flow directly to the location where they can provide the greatest likelihood of substantial financial gain. At this writing, the Alabama Legislature and its executive leadership have carefully considered and are proposing a new package of incentives to help the state recruit new and expanding businesses to Alabama. Those state-level incentives will be positioned in a tough, globally-competitive environment, requiring Alabama to think smarter as it moves forward.

With the flow of investment capital set free from national boundaries, investors can make decisions based entirely on the attractiveness of available options anywhere in the world. These decisions are driven by the quality, price, and availability of

the resources, and characteristics of a place or region that cannot be easily moved. Primary immobile resources include business-friendly governmental systems, a strong transportation infrastructure, ready market access, and perhaps most important as we move farther into the information age, workforce quality. An established governmental system provides a predictable rule of law that facilitates the accumulation of profit. An advanced transportation infrastructure allows for the movement of the components of a business operation to, and the output from, a region or state. Each location has, due to geography, laws, and culture, access to markets for the sale of goods and services. Some places have greater market advantages than others. The presence of a high-quality workforce that possesses the “learning-how-to-learn” skills will assure companies they can find the creative 21st century workers they need to produce better products at lower costs, to make the most profitable use of investment capital. Here is the business-public university connection.

THE COMPETITIVE POSITION OF ALABAMA

The State of Alabama has a variety of advantages in the competition for investment. The state possesses several key characteristics that can make it an attractive destination for a major corporate investment from anywhere around the globe. Many of these substantial advantages are likely to persist.

The State of Alabama has a well-earned reputation as a business-friendly state within a nation that is consistently considered one of the most business-friendly in the world. Laws impacting business are stable. The state has a confluence of three major Interstate Highways, including a critical north/south/east/west intersection in Birmingham. A prominent deep-water port in Mobile, and one of the eastern United States’ largest system of navigable rivers makes Alabama highly accessible to the shipping of products and components to and from emerging markets in South America, southern Europe, and Africa. Alabama also has a substantial number of rail lines that connect with major distribution hubs in neighboring states and beyond. Those conducting business in Alabama are generally well-equipped and well-situated to bring raw materials and components from anywhere in the world, and by using an internationally recognized quality transportation infrastructure can ship goods anywhere.

Alabama is particularly well positioned to ship products throughout the growing southern United States, the fastest growing region of our nation since World War II. The state has a large untapped capacity for inter-modal shipping that could be optimized to serve industrial growth. Consequently, as a location that has a great transportation infrastructure, a stable pro-business government, and outstanding market access, Alabama presents a reasonable option for direct investment activities. And much is already happening: Alabama auto exports climbed by two point eight percent in 2014, as six point six billion dollars worth of Alabama-made vehicles were shipped to ninety-nine countries around the globe.⁷² Canada, which purchased nearly two billion dollars in Alabama-made vehicles alone, was the top destination country, followed closely by China with one point eight billion dollars, and Germany, Mexico, and the United Kingdom rounding out the top five. According to Alabama Department of Commerce data, the Mercedes-Benz Tuscaloosa County factory accounts for the vast majority of the state’s auto exports. The good news is that in January 2015, Alabama’s auto

exports are seeing a fifteen percent increase, according to the International Trade Division at the Alabama Department of Commerce.

The question then begs: what is the one area where Alabama has limits on attracting businesses? The answer is workforce quality. Here is where higher education and the jobs of the future intersect.

THE SOCIAL OR NON-MONETARY BENEFITS GENERATED BY ALABAMA’S PUBLIC UNIVERSITIES

Chapter 1 described aspects of Alabama’s higher education system that should give it great pride. A distinctive feature of its system are its community colleges located throughout the state, its seven privately controlled Historically Black Colleges and Universities, and two public HBCUs (Alabama State University and Alabama A&M University), the most of any state in the union. But as Alabama and the world moves forward into the fourth decade of the information age, the most distinctive feature of Alabama’s system is the predominance of the public sector. For example, all five of its doctoral granting institutions are public universities. And as the Economic Development Partnership of Alabama notes on its website, six of Alabama’s seven colleges of engineering are located at public universities.⁷³

Perhaps the single most distinguishing feature of Alabama’s system is its public tilt: at each successive degree level, the predominance of public universities is readily apparent. There are aspects of this quality higher education network that should Alabamians proud. That said, Alabama’s competitors in other states and nations are not standing still. Just how does Alabama stack up?

In comparisons of higher education outcomes to many of the competitor U.S. states and countries, the State of Alabama is often in the bottom ten among U.S. states in terms of degree productivity. This image is supported by a variety of measures, most prominently the percentage of state citizens who have achieved a college degree of some kind.

The State of Alabama has a relatively low portion of adults, and particularly young adults ages twenty-five to thirty-four, who possess a college degree. This becomes

Table 2.3 Percentage Success Rates of Young Adults (25-34 years old) in Selected States		
State	Overall Degree Holding Rate	25-34 Degree Holding Rate
Maryland	45.5	46.6
Washington	42.8	41.9
United States	39.4	40.9
Delaware	38.4	41
North Carolina	38.4	39
Alabama	31.6	34.4

apparent when degree attainment is examined. Alabama ranked forty-second among fifty states in degree attainment in 2012.⁷⁴ This measure is actually even more problematic than it sounds, in that the forty-first ranked state has a rate almost two full percentage points above Alabama. Alabama is at the top of a substantially under-performing cluster of six states that have between twenty-nine and thirty-one percent of their residents holding college degrees. This is obvi-

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

ously not enhanced by state disinvestment, a matter discussed in great detail in the chapter following.

The competitive position of Alabama in terms of residents with college degrees becomes even more disconcerting when compared with direct competitor states with similar advantages in terms of governmental systems, market access, and transportation infrastructure. Other states with similar port access and rail/interstate systems have substantially higher rates of degree holders, as Chart 2.3 shows. This competitive weakness is visible in both the overall rate of adults with degrees and the critical rate of degree holding in the twenty-five to thirty-four year-old demographic.

THE INTERNATIONAL COMPETITIVENESS POSITION OF ALABAMA

Given the relatively borderless world that we live in today, and will be living in well into the future from an investment perspective, the international competitiveness position of Alabama may be of even greater importance than its domestic position within the fifty states and especially the southern region. Regional and domestic industry recruitment was the hallmark of the Wallace governorships (George C. Wallace's four terms in office were the longest tenure in office of any governor of any state in the twentieth century, and this does not include the nearly two years his late wife Lurleen served). Recruiting low-wage jobs as a strategy is not geared to the future, as Alabama began to recognize when it turned to its public universities to help bring the automotive industry, starting with Mercedes to the state in the early 1990s.

Unfortunately the current situation shows an even greater deficit when compared to countries with similar advantages in the other determining factors of investment decisions. Alabama lags far behind these examples of direct competitors in the critical twenty-five to thirty-four year old Degree Holding Rate measure.

LONG-TERM IMPLICATIONS AND OPPORTUNITIES

The State of Alabama has the opportunity to become a prime global destination for economic investment. The advantages that the state has in governmental systems, market access, and transportation infrastructure, already make it a viable option for consideration by investors. It is, however, far from an optimal investment opportunity due to its limited number of degree-holding residents. Alabama does periodically attract major investors. Prime examples of this can be seen

in the presence of such major productions facilities as the ones for Mercedes, Honda, Toyota, Hyundai, and Airbus. These investments, while valuable, are limited in number and have often come after the granting of substantial financial incentives. Alabama's potential for attracting major investment has barely been tapped. Fortunately for the state, Alabama has a nearly unique opportunity to move from being a quality destination for investment to a prime location through its own actions without depending on any outside assistance.

Table 2.4 Percentage Success Rates of Young Adults (25-34 years old) in Selected Nations

County/State	Degree Holding Rate
Ireland	48
New zealand	48
Australia	47
Chile	45
Alabama	34.4

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

The one major weakness of low degree attainment in Alabama's portfolio is the only one that state-level policy has the total discretion to work toward improving. State laws and public universities related to trade are superseded and can only complement what exists under the umbrella of the U.S. federal law and regulation, and completely changed unilaterally. The proximity and availability of markets is fairly constant and determined by neighboring states/countries and therefore cannot be determined by a state. Similarly, transportation infrastructure is largely influenced by national interests rather than by state activities. The attainment of college degrees, however, can be almost unilaterally influenced by state legislative action. Unlike these other investment drawing factors where Alabama has been primarily blessed with by providence or the actions of outsiders, the provision of higher education opportunity and the encouragement of state residents to pursue a college degree is entirely the prerogative of the State of Alabama. Alabama has the clear opportunity to go from good to great in the fierce global competition for investment capital. This is the 21st century choice facing policymakers today.

This section closes with the note that when one reviews the literature on the economic and social benefits of higher education, the great body of literature indicates that the economic returns to individuals and society are great...but that those benefits are consistently exceeded—indeed significantly exceeded—by the non-monetary or social benefits. Recent history in Alabama provides an excellent example of this: it was Alabama's public universities, under the leadership of its flagship universities, which brought the auto industry to Alabama. In Governor Wallace's last term, he assigned leadership responsibility in putting together the State of Alabama's proposal to land General Motors' new Saturn plant to The University of Alabama. That plant was eventually located in Franklin, Tennessee.

Today's site for Mercedes is located on that very same piece of property, which was leveraged by the new Tuscaloosa Industrial Development Authority, created by the Alabama Legislature in part to land Saturn. When Mercedes officials visited Tuscaloosa, they stopped by the JVC plant, and learned how the University had developed a Saturday school for the children of the Japanese transplant employees, so that their children would not have "reverse culture shock" upon returning home. They saw a Japanese language television station on Tuscaloosa's cable television network.

Governor Robert Bentley in his 2015 State of the State Address, said that "a new day came to Alabama" with the arrival of Mercedes in 1993. He was clearly right. The leadership that Alabama provides to ensure its public universities are strong may have as much to do with a positive future as any single factor.

RETURN ON INVESTMENT: METHODOLOGY & THE STATE OF ALABAMA'S PUBLIC UNIVERSITIES

A. INTRODUCTION

By David S. Murphy, and R. Matthew DeMonbrun

RETURN ON INVESTMENT (ROI) IS ONE OF THE MOST COMMONLY USED METRICS TO MEASURE THE PROFITABILITY OF AN INVESTMENT. IT IS USUALLY COMPUTED AS: NET INCOME / INVESTMENT. WHERE NET INCOME IS REVENUE MINUS EXPENSES.

$$\left\{ ROI = \frac{Net\ Income}{Investment} \right\}$$

ROI has been used for decades in labor economics, as well as in higher education to measure the private or individual return from investing in higher education. In particular, the work of Jacob Mincer (1922-2006), considered by many to be the father of modern labor economics, is of special note. In 1974, Mincer's chapter, "Schooling and Earnings," in a book he edited entitled *Schooling, Experience, and Earnings*, published by the National Bureau of Economic Research, was published.⁷⁵ Many major studies flow from this path-breaking work. Mincer defines net income as often being replaced with some measure of net earnings. The computation of individual ROI from investing in education is fairly straight-forward because both the individual cost incurred and individual net earnings are easily estimated.

That is not the case when calculating for societal returns from investing in higher education, however. Table 3.1, below, identifies just some of the costs and benefits that accrue to both individuals and society when an investment in higher education is made. Most of the individual direct costs and benefits summarized in Table 3.1 from investing higher education are easily measurable and quantifiable. On the other hand, most of the direct and indirect societal benefits are difficult to measure and quantify. This is the challenge associated with the measurement of societal ROI from investing in higher education; it is a challenge of special note in a state like Alabama, where public higher education constitutes over four of every five students enrolled. As Alabama, the nation, and indeed the world move further into the information age, the learning how to learn skills that higher education adds to participants' per capita income curve will be increasingly important. The rates of employment are still important—it is long been a goal of Alabama policymakers to foster the most positive environment possible for economic development for business and industry. That said, as we go deeper into the information age, it is the per capita income curve, and not just the employment rate and/or the unemployment rate that matters most. Here is

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

where the value added to future employees by Alabama's fourteen public universities directly impacts the high-demand, high-wage jobs that our state's globally competitive employers need. Measuring the value public higher education adds to the per capita income curve is what is most relevant to this discussion, and not just how much the spending invested at a particular institution circulates (which while vitally important to the communities and regions that host public universities, does not tell the whole story or perhaps even the most vital part of the story).

Table 3.1 Cost and Benefits from Investing in Higher Education

Individual Returns	Societal Returns
<i>Direct Costs</i>	<i>Direct Costs</i>
-Tuition and fees -Books and supplies -Room and board -Interest and principal payments on financial aid	-Public investment in higher education
<i>Indirect Costs</i>	
-Foregone wages	
<i>Direct Benefits</i>	<i>Direct Benefits</i>
-Increased life-time earnings -Increased productivity (GDP)	-Spillover productivity -Interest revenue from student loans -Expanded ability to employ advanced technology
<i>Indirect Benefits</i>	<i>Indirect Benefits</i>
-Expanded capacity to enjoy leisure time -Improved personal health -Increased participation in civil society -Increased work efficiency	-Greater social equity -Lower crime levels -More cohesive societies -Reduced risk from infectious diseases -Slower population growth

It is for this reason that the Mincer Equation derived from labor economics has become, in its various forms, one of the most useful and powerful tools for measuring individual returns from investing in higher education.⁷⁷ The Mincer equation often takes the form of:

$$\left\{ \ln(y)_i = \beta_0 + \beta_1 s_i + \beta_2 e_i + \beta_3 e_i^2 \right\}$$

Where: y_i is Earnings of individual i ; s_i is Years of education of individual i ; e_i is Years of work experience of individual i ; β_i is Regression coefficient; β_1 is Estimate of ROI based on years of school; B_0 is Regression constant that captures unmodeled variation in the data.

Taking the natural log of y_i transforms the assumed non-linear income function into one which is linear and which can be modeled by an Ordinary Least Squares (OLS) regression.

The Mincer equation, while not wholly suitable for estimating societal returns from investing in higher education, was of fundamental importance for this research study. Mincer's work served as a theoretical basis for the 1994 World Bank study, *The East Asian Miracle: Economic Growth and Public Policy*, which quantitatively assessed why the economies of the so-called "Asian Tigers" of Hong Kong, Singapore, South Korea, and Taiwan had achieved such economic success (particularly given the lack of any natural resource base in two of those four countries). The East Asian Miracle study was led by former World Bank Chief Economist and Director John Page; it estimated the societal returns from public investments in higher education.⁷⁸ To assess the economic and social returns from investment in Alabama's fourteen public universities, we have modified the World Bank model and modeled societal returns as:

PerCapita Income_j

$$\begin{aligned} &= \beta_0 + \beta_1 \text{Stable Operating Revenue}_j + \beta_2 \text{Population Growth Rate}_j \\ &+ \beta_3 \text{Unemployment Rate}_j + \beta_4 \text{Percent Young}_j \\ &+ \beta_5 \text{Percent Working Age}_j + \beta_6 \text{Percent Elderly}_j \\ &+ \beta_7 \text{Percent Rural Population}_j \end{aligned}$$

β_0 captures the effect of variables that we have not explicitly modeled on the dependent variable, per-capita income. β_1 through β_7 provide measures of the effects of the corresponding variables on the dependent variable with β_1 being an estimate of the ROI from Stable Operating Revenue in higher education in region j .

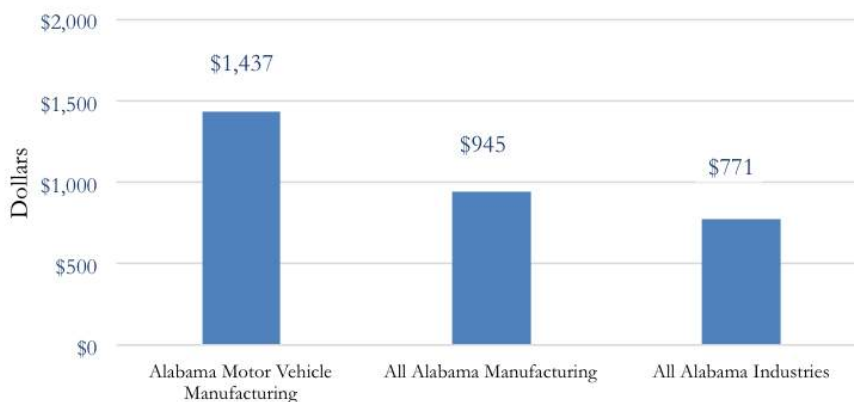
Two measures of societal returns to investments in higher education include Gross Domestic Product (GDP) and per-capita income. The logic behind the use of GDP is that investments in higher education directly result in increases in both individual productivity and income, and spillover productivity increases including those that flow from the adoption of advanced technologies. All of these, *in addition to* the indirect societal benefits identified in Table 3.0, above, lead to increases in GDP. **While per-capita increases in income may not capture the societal benefits from state funding of higher education as directly, those increases are easier to explain to citizens and legislative decision makers. Changes in income are directly felt by Alabama citizens, whereas changes in GDP are felt indirectly at best.**

The number of degrees awarded each year is therefore a measure of the effectiveness of institutions of higher education in their use of resources to accomplish their goal to produce educated and productive members of society. As the number of degrees awarded each year increases, so does the percentage of the population base that possess advanced skills. An increase (or decrease) in both GDP and per-capita income should necessarily follow and reflect this increase (or decrease). In addition, increased enrollment at higher education institutions is a necessary precondition for increased numbers of graduates. Thus we used three different measures of return on investment in our analysis:

- 1.) Constant dollar per-capita income,
- 2.) Number of degrees awarded (both undergraduate and graduate), &
- 3.) Number of students enrolled in higher education.

Changes in the population growth rate are a demographic measure of the fiscal well-being of a region. If the population is growing, it means that individuals are staying in a region and/or migrating toward it. On the other hand, a decrease in regional population is generally indicative of population attrition either through death or emigration, perhaps caused by stagnant or declining economic opportunities. This effect is also measured by the percentage of the population that is of traditional school-age (individuals who are not employed in the workplace), working age (individuals who could be currently employed), and the elderly (again, a population comprised of individuals who are not as likely to be currently employed). A large percentage of the population in a region who are working age is indicative of a region that has the capacity to generate new/more per-capita income and GDP. However, because not all working-aged individuals are actually in the work force, it is necessary to also include the unemployment rate in the model. If, for example, a higher percentage of the population falls into the working age category but the unemployment rate is also high then we would expect lower GDP and lower per-capita income growth as well.

Table 3.2 Alabama's Average Weekly Wage for Manufacturing Industries in 2011



Finally, the percent of a region's population that is rural typically measures the existence or lack of an industrial cluster in the region. The existence of an industrial cluster in a region will likely lead to higher regional GDP and per-capita income due to the fact manufacturing salaries are typically higher than agricultural, retail and service salaries, as Table 3.2, left, clearly shows.

The average weekly wage in 2011 for a worker employed at a motor vehicle manufacturing plant in Alabama was one thousand four hundred and thirty seven dollars, nearly five hundred dollars a week more than the average across all Alabama manufacturing industries, and nearly seven hundred dollars more a week or double the average weekly wage of all Alabama industries combined. A region where a preponderance of the population is rural should be indicative of a region with a high level of agricultural, retail and service sector employment.

B. RESULTS

Highly correlated independent variables result in problems associated with multicollinearity. These problems include unstable regression coefficients because the regression coefficient of a variable will depend on which other independent variables are included or excluded from the model. We considered correlations greater than 0.75 to be excessive, and consequently the base model was reduced to the following:

The elderly population, defined as 65 years of age and older, was highly and inversely correlated with the young population (Pearson correlation coefficient = -0.956) and was consequently excluded from the model. In addition, because the percentage of a region that was of traditional college-going ages of eighteen and twenty-four years old was not highly correlated (Pearson correlation coefficient = 0.267) with the percentage of the population that is working age between eighteen and sixty-five years old, even though the population groups may overlap by age, the college age population was added to the model.

Dependent Variable_j

$$\begin{aligned} &= \beta_0 + \beta_1 \ln(\text{Stable Operating Revenue})_j + \beta_2 \text{Population Growth Rate}_j \\ &+ \beta_3 \text{Unemployment Rate}_j + \beta_4 \text{Percent College Age Population}_j \\ &+ \beta_5 \text{Percent Working Age}_j + \beta_6 \text{Percent Elderly}_j \\ &+ \beta_7 \text{Percent Rural Population}_j \end{aligned}$$

Because a major purpose behind the methodology deployed in this study was to be transparent and replicable, we chose to use the nationally recognized definitions developed by the American Institutes for Research's Delta Cost Project, perhaps the nation's leading source of information on higher education finance and expenditure data. The Delta Cost definition of "Stable Operating Revenue" (SOR) is defined as follows:

"Total revenue including revenue from auxiliary, hospitals and other independent operations. Includes sum of tuition; federal, state, and local appropriations, grants, and contracts; auxiliaries; hospitals; and other independent operations; excludes rev-

venues from affiliated entities, private gifts, grants, and contracts; investment return, endowment earnings.”⁷⁹

Because the analysis of SOR was non-linear, a natural log transformation was used to then permit the use of Ordinary Least Squares (OLS) regression. The results of the state-wide regressions using the three identified dependent variables of number of students, number of degrees awarded, and per-capita income, are provided in the following sections.

Table 3.3 - State of Alabama - Key Variables							
<i>Year</i>	<i>Population</i>	<i>Stable Operating Revenue (SOR)</i>	<i>Year-to-Year % Change</i>	<i>ln(SOR)</i>	<i>Degrees Granted</i>	<i>Number of Students</i>	<i>Per-Capita Income</i>
2000	4,418,062	\$3,901,101,128	N/A	22.1	25,810	N/A	\$39,248
2001	4,433,622	\$3,957,919,938	1.44%	22.1	25,331	150,983	\$39,596
2002	4,440,640	\$4,158,183,946	4.82%	22.1	24,979	154,046	\$40,354
2003	4,457,157	\$4,272,888,508	2.68%	22.2	25,389	163,236	\$40,620
2004	4,477,172	\$4,413,416,611	3.18%	22.2	26,657	169,785	\$41,207
2005	4,507,927	\$4,397,683,354	-0.36%	22.2	27,702	185,249	\$41,269
2006	4,558,144	\$4,647,506,952	5.38%	22.3	28,594	185,398	\$41,835
2007	4,597,135	\$4,950,665,935	6.12%	22.3	28,279	188,571	\$42,124
2008	4,632,591	\$5,584,854,553	11.36%	22.4	28,949	193,934	\$41,910
2009	4,678,971	\$5,366,735,956	-4.06%	22.4	30,124	193,955	\$42,807
2010	4,758,229	\$5,722,633,398	6.22%	22.5	30,569	196,877	\$43,042
2011	4,774,326	\$5,414,886,594	-5.68%	22.4	31,876	199,731	\$42,654
2012	4,790,296	\$5,225,770,209	-3.62%	22.4	31,490	196,566	\$42,605
2013	4,806,646	\$5,210,627,361	-0.29%	22.4	32,463	189,346	\$42,276
2000 to 13	8.08%	25.13%	25.13	N/A	20.49%	N/A	7.70%

STATEWIDE RESULTS

Table 3.3, above summarizes the key variables for the statewide analysis.

The regression model with student enrollment (unduplicated head count from 2000-01 to 2012-13) as the dependent variable had an R square of 0.598, and adjusted r-square of 0.3573. Thus, forty-one point five percent of the variation in the dependent variable can be explained by this analysis of the independent variables. The regression results are presented in Table 3.4, below.

This model shows that student enrollments are positively and significantly associated with the natural log of Stable Operating Revenue. While some may argue that revenue is function of student enrollment, the opposite can also be said: That is, that increased revenue provides the infrastructure and capacity that in turn allows for increased student enrollment. In addition, the percent of the population living in rural areas was significantly and negatively correlated with total student enrollment. This is not surprising, given the growing body of research that indicates rural

Table 3.4 - Statewide Regression - Number of Students

<i>Coefficients^a</i>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-91293.683	373287.088		-0.245	0.807
StableRev	4.30E-06	0	0.319	3.78	0
GrowRate	200155.197	117995.188	0.168	1.696	0.093
UnempRate	-27399.731	45415.223	-0.071	-0.603	0.548
PcntCollege	-323920.93	834020.985	-0.035	-0.388	0.699
PcntWork	230376.883	599906.898	0.041	0.384	0.702
PcntElderly	144296.993	159001.42	0.088	0.908	0.366
Rural	-35875.112	9509.399	-0.343	-3.773	0

a. Dependent Variable: Students

Table 3.5 - Statewide Regression - Number of Degrees Granted

<i>Coefficients^a</i>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2363.612	54916.851		0.043	0.966
StableRev	8.25E-07	0	0.413	4.932	0
GrowRate	24178.329	17359.09	0.136	1.393	0.167
UnempRate	-3692.952	6681.348	-0.064	-0.553	0.582
PcntCollege	-1847.836	122698.608	-0.001	-0.015	0.988
PcntWork	-750.208	88256.462	-0.001	-0.009	0.993
PcntElderly	25596.657	23391.801	0.105	1.094	0.277
Rural	-4568.031	1398.994	-0.294	-3.265	0.002

a. Dependent Variable: Degrees

students face far higher out-of-pocket costs associated with public university attendance, most notably transportation and child-care. The Education Policy Center's November 2012 study for the Alabama Commission on Higher Education, "A Study of Pell Grants in Alabama" found that when Pell aid increased between 2008-2009 and 2011-2012, so too did enrollments at every one of Alabama regional universities, and that when Pell aid declined due to Congressionally-mandated cuts in June 2012 that were immediately implemented in August 2012 fall term, *enrollments fell at every rural-based Alabama public university that very term*.⁸⁰ It may be that students in urban areas who can access publicly subsidized mass transit are better able to deal with unexpected changes in federal law impacting their student aid financial packages. All of this taken together strongly suggests that individuals living in rural areas of Alabama are less likely to participate and persist in public universities, and certainly that rural students are more price sensitive to the net of tuition and available

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

state and federal student financial aid. The other independent variables, however, were not statistically significant.

The model was changed to analyze the effects of the independent variables on degrees awarded with resultant r-squared and adjusted r-squared of 0.608 and 0.370. The regression parameters for this model are shown in Table 3.5.

Again, Stable Operating Revenue was highly significant in the model, indicating that increases in revenue result in increases in degrees granted. In addition, the percentage of the population living in rural areas was again significantly and negatively correlated with total degrees granted. This indicates that the number of degrees awarded decreases as the rural population percent increases, and may well be another way of saying that rural students are more vulnerable to changes in federal student aid policy that impact access to transportation and childcare (since total Pell expenditures at Alabama's fourteen public universities are nearly a quarter of a billion dollars, compared to less than three million dollars for state need-based aid under the Alabama Student Assistance Program, Pell Grants are in fact Alabama's *de facto* state student aid program).

Finally, the statistical model was run to assess the effect of the independent variables on state-wide per-capita income. The resultant r-square and adjusted r-squares are 0.562 and 0.316, respectively. The lower r-squared values indicate that many other un-modeled variables may impact individuals' income levels, but is too low to be reflected in our models. The regression parameters for this model are shown in Table 3.6, below.

Table 3.6 again shows that Stable Operating Revenue had a significant and positive effect on the dependent variable, per capita income. **It is thus obvious that the investment in higher education affects not only the students, but the income level of the state as a whole. Per-capita income is positively correlated and highly**

Table 3.6 - Statewide Regression - Per-Capita Income

<i>Coefficients^a</i>						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1 (Constant)	31234.021	87996.421		0.355	0.723	
StableRev	7.92E-07	0	0.258	2.956	0.004	
GrowRate	76996.536	27815.466	0.282	2.768	0.007	
UnempRate	4145.19	10705.908	0.047	0.387	0.699	
PcntCollege	24932.09	196607.019	0.012	0.127	0.899	
PcntWork	-1565.088	141418.392	-0.001	-0.011	0.991	
PcntElderly	50314.667	37482.025	0.134	1.342	0.183	
Rural	-6715.529	2241.688	-0.281	-2.996	0.003	

a. Dependent Variable: PerCapIncome

Table 3.7 Statewide Total Stable Operating Revenue



Table 3.8 Statewide Stable Operating Revenue Per Student

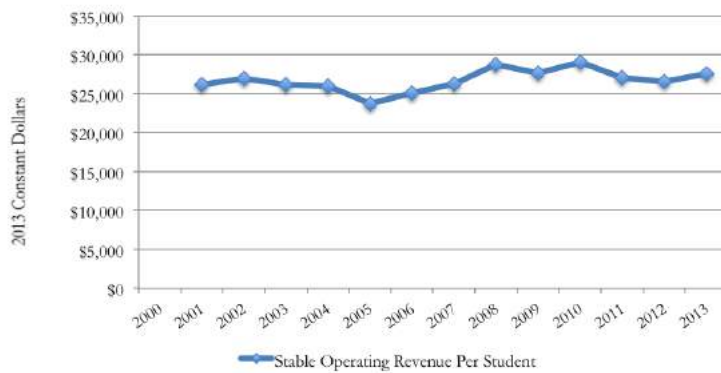
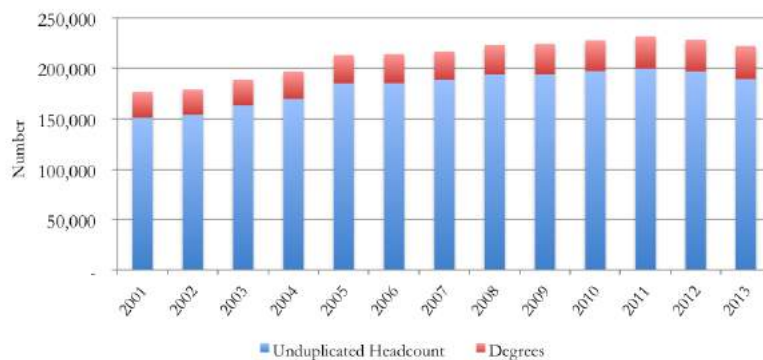


Table 3.9 Statewide Total Students and Degrees Awarded



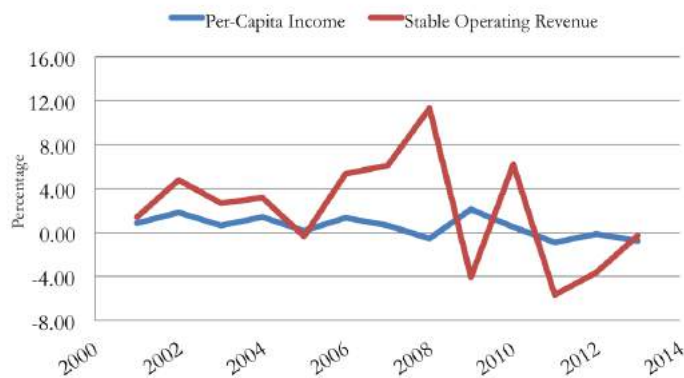
significant as it relates to unrestricted expenditures. This means that increases in state funding, which will increase unrestricted expenditures, will also increase per-capita income in the state. Funding higher education benefits the entire state.

In this model, the population growth rate had a positive and significant effect on per-capita income and the percent of the population living in rural areas had a significant and negative effect on per-capita income. This dynamic of population growth as it relates to per-capita income implies that growing the population of the state has positive economic effects.

Our analysis of Delta Cost Project data since 2001 shows that Statewide Stable Operating Revenue per student for Alabama's fourteen public universities (analyzed in 2013 constant dollars) has remained relatively flat since 2001 (see Tables 3.7 and 3.8, left). Total funding has slightly increased since the beginning of the Great Recession, yet an increase in statewide enrollment in higher education has kept the Statewide Stable Operating Revenue Per Student relatively unchanged. This can only mean that tuition and fee revenue is contributing a greater proportion of the total operating revenue for Alabama's fourteen public universities. As shall be seen, this is true statewide, as well as for each of the fourteen institutions.

Table 3.9 depicts the parallel relationship that degrees awarded and enrollments have across the entire State of Alabama from 2001 to 2013. Degrees awarded data include all degrees awarded—undergraduate, first-professional (law, medicine, architecture, and veterinary medi-

Table 3.10 Statewide Percent Change In...



cine), master's and doctoral degrees. Obviously, only students who are enrolled can graduate; therefore, should enrollment decrease due to consumer cost, a decrease in degrees awarded will necessarily follow suit. And declining numbers of Alabamians with four-year degrees certainly results in a less educated workforce and decreasing tax base for the state.

Conversely, as Table 3.10 illustrates, there is a consistent echo in the statewide per-capita income averages that follows significant fluctuations in state-

wide Stable Operating Revenue across all of Alabama's fourteen public universities. Typically, there is a lagging effect of Statewide Stable Operating Revenue increases and decreases that span roughly two years. This can be observed in the 2009-2010 period, when the decrease in statewide Stable Operating Revenue resulted in a decline in the statewide average per-capita income figure reported for 2010-2011. The opposite can also be observed--the per capita income increase in 2009-2010, while not solely due to changes in SOR, still echo the statewide Stable Operating Revenue gains in 2008, when the recession hit hardest. Thus, increases in statewide investments in Alabama's fourteen public universities results in increases in the state per capita income curve.

INSTITUTION RESULTS

Institutions of higher education in Alabama are currently allocated twenty-eight percent of total state expenditures from the Education Trust Fund. Of that amount, about seventy-six percent are then allocated to Alabama's fourteen public universities. In Fiscal Year 2013, total state funding for four-year universities totaled \$656 million. If higher education was to receive thirty-three percent it has traditionally received under the formula rather than the current twenty-eight percent it currently receives, state funds allocated to Alabama's fourteen public universities would increase by \$117 million to about \$773 million dollars. That spending increase is projected by the state-wide regression model to result in a \$4.97 increase in per-capita income [$\$4.97 = \ln(117 \text{ million})(0.258)$]. While that amount may not seem significant, when expanded to the state as a whole, it represents an increase of \$23.5 million increase in total per-capita income. The programmatic possibilities are relatively endless, when one considers an increase of this magnitude to the State's tax base.

FLAGSHIP INSTITUTIONS

Alabama's two flagship institutions, Auburn University and The University of Alabama, have statewide missions. Consequently these two institutions were analyzed from both regional and statewide perspectives.

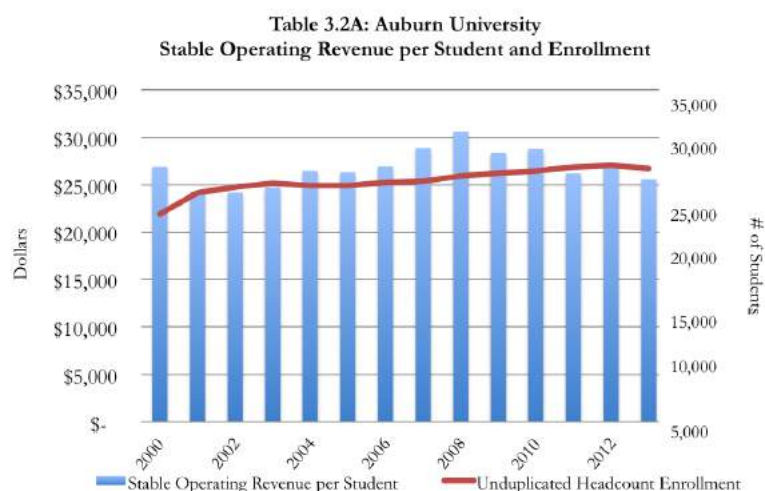
Table 3.1A - Auburn University - Key Variables								
Year	Population	Stable Operating Revenue (SOR)	Year-to-Year % Change	ln(SOR)	Degrees Granted	Number of Students	Per-Capita Income	Unemployment Rate
2000	4,418,062	\$587,307,204	N/A	20.17	5,091	N/A	\$39,248	4.50%
2001	4,433,622	\$585,209,146	-0.36%	20.1	4,731	24,125	\$39,596	4.90%
2002	4,440,640	\$599,036,763	2.31%	20.18	4,520	24,773	\$40,354	5.80%
2003	4,457,157	\$620,150,551	3.40%	20.2	4,532	25,101	\$40,620	5.90%
2004	4,477,172	\$658,674,537	5.85%	20.09	4,866	24,909	\$41,207	5.50%
2005	4,507,927	\$653,867,548	-0.74%	20.11	4,882	24,867	\$41,269	4.10%
2006	4,558,144	\$677,735,196	3.52%	20.15	5,063	25,203	\$41,835	4.10%
2007	4,597,135	\$730,768,089	7.26%	20.21	4,819	25,332	\$42,124	3.90%
2008	4,632,591	\$791,471,212	7.67%	20.16	4,817	25,872	\$41,910	5.40%
2009	4,678,971	\$743,974,841	-6.38%	20.15	5,029	26,221	\$42,807	10.60%
2010	4,758,229	\$761,403,610	2.29%	20.19	5,434	26,464	\$43,042	9.00%
2011	4,774,326	\$702,659,074	-8.36%	19.98	5,639	26,840	\$42,654	9.20%
2012	4,790,296	\$727,008,011	3.35%	20.04	5,860	27,046	\$42,605	8.10%
2013	4,806,646	\$682,282,964	-6.56%	20.08	5,847	26,706	\$42,276	6.90%
2000 to 13	8.08%	13.92%	13.92%	N/A	12.93%	N/A	7.70%	2.40%

AUBURN UNIVERSITY

Table 3.1A above summarizes key variables for Auburn University.

From 2000 to 2013, Auburn University's Stable Operating Revenue grew by sixteen percent, while its total unduplicated student headcount for all degree levels (undergraduate and graduate) grew by twenty-two percent. Stable Operating Revenue per student grew, however, because the percentage growth in the student population exceeded the growth in Stable Operating Revenue, **Auburn University's Stable Operating Revenue per student actually decreased five and a half percent from 2000 to 2013.** This trend is shown in Figure 3.2A below.

The next three charts show the regressions that were run for enrollment, degrees awarded, and per capita income. Table 3.3A on the following page presents the Model Summary for enrollment at Auburn University. It is clear that the log of Stable Operating Revenue, unemployment rate, percent of the population that is working age,



and the percent of the population that is elderly, **all** had statistically significant effects on the number of students attending Auburn University. The adjusted R-square for this model was 0.96, so about ninety-six percent of the variation in the dependent variable, student headcount, can be explained by the independent variables.

The standardized regression coefficient on ln(Stable Operating Revenue) was 0.309. This implies

that a \$1,000 increase in funding would result in an increase in about two additional students [$\ln(1000)(0.309) = 2.13$].

Table 3.3A Auburn University - Number of Students

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.990 ^a	0.98	0.96	185.169		
a. Predictors: (Constant), PcntElderly, GrowRate, PcntWork, PcntCollege, UnempRate, LnRev						
Coefficients ^a						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	-139184.693	30968.832		-4.494	0.004
	LnRev	3089.909	1206.593	0.309	2.561	0.043
	GrowRate	-24395.293	19077.037	-0.113	-1.279	0.248
	UnempRate	79.113	35.141	0.186	2.251	0.065
	PcntCollege	36973.717	91410.498	0.039	0.404	0.7
	PcntWork	136641.181	50669.592	0.237	2.697	0.036
	PcntElderly	94419.943	14759.769	0.568	6.397	0.001

a. Dependent Variable: Students

Table 3.4A - Auburn University - Number of Degrees Granted

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.951 ^a	0.905	0.81	158.8965442	
a. Predictors: (Constant), PcntElderly, GrowRate, PcntWork, PcntCollege, UnempRate, LnRev					
Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	-24707.141	26574.875	-0.93	0.388
	LnRev	-1293.624	1035.398	-0.33	0.258
	GrowRate	6013.053	16370.325	0.071	0.726
	UnempRate	-12.293	30.155	-0.074	0.698
	PcntCollege	-59017.506	78440.883	-0.158	0.48
	PcntWork	84455.597	43480.427	0.374	0.1
	PcntElderly	68890.473	12665.606	1.058	0.002

a. Dependent Variable: Degrees

Table 3.5A Auburn University - Per-Capita Income

Model Summary

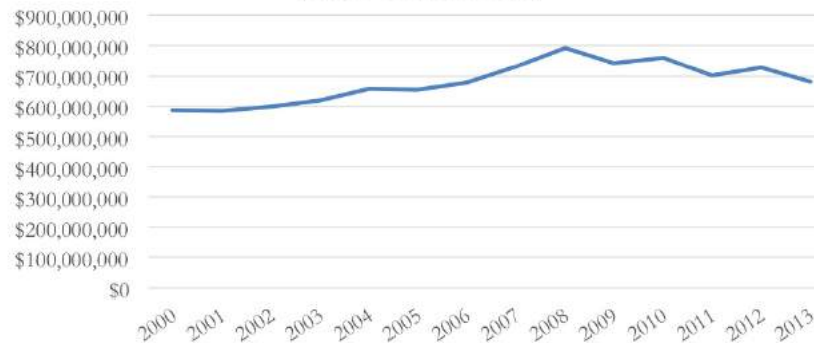
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.974 ^a	0.949	0.899	333.2059

a. Predictors: (Constant), PcntElderly, GrowRate, PcntWork, PcntCollege, UnempRate, LnRev

Coefficients^a

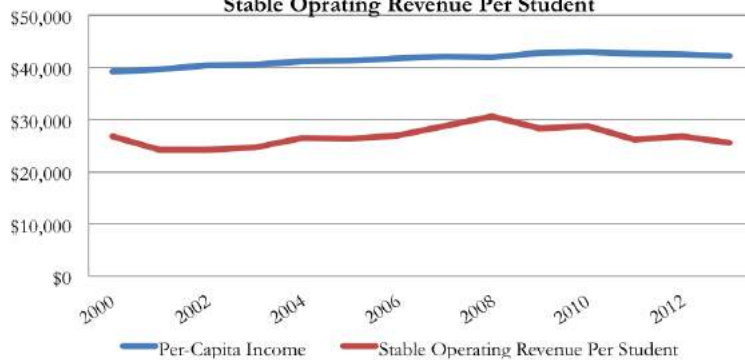
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-147529.904	55727.488		-2.647	0.038
LnRev	3365.056	2171.228	0.299	1.55	0.172
GrowRate	29173.683	34328.557	0.12	0.85	0.428
1 UnempRate	57.993	63.235	0.121	0.917	0.394
PcntCollege	-179375.232	164490.458	-0.167	-1.09	0.317
PcntWork	204069.166	91178.415	0.314	2.238	0.067
PcntElderly	81572.906	26559.763	0.436	3.071	0.022

a. Dependent Variable: PerCapIncome

**Table 3.6A: Auburn University
Total Stable Operating Revenue
(In 2013 Constant Dollars)**

As shown in Table 3.4A, Auburn University – Number of Degrees Granted Model Summary, below, the only independent variable that had a significant effect on number of degrees awarded was the percentage of the population that is elderly. While student headcount at Auburn University increased by about twenty-two percent from 2000 to 2013, the number of degrees awarded increased by only about ten percent (Table 3.1A). While it is beyond the purview of this study, additional research should be undertaken to address the question of why increases in student headcounts do not always translate into commensurate increases in degrees awarded. Possible reasons for this change include, but are not limited to, the dramatic increases in Pell Grant funding from 2009 to 2012, followed by the end of the one-time Summer Pell Grant funding and new Pell Grant Eligibility restrictions that coincided with the Congressionally mandated \$2 billion cuts in Pell Grants passed in June 2012 effective immediately with the Fall

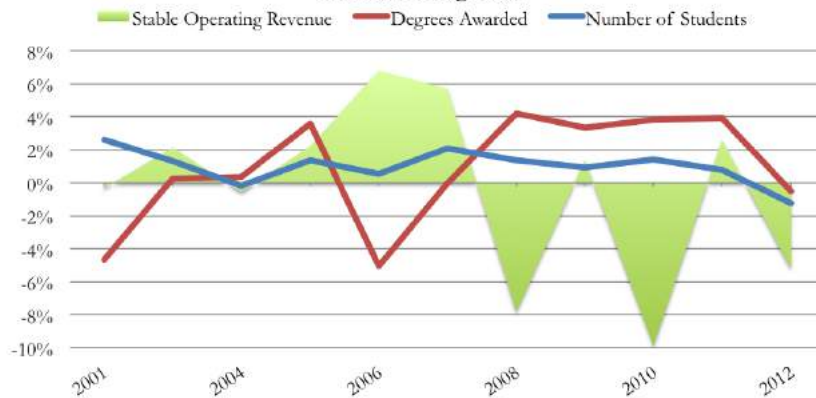
**Table 3.7A: Auburn University
Per-Capita Income and
Stable Operating Revenue Per Student**



2012 term—when enrollment fell at many Alabama public universities.

As Table 3.5A shows on the previous page, Stable Operating Revenue did not have a statistically significant effect on per-capita income. This is an issue that we see in the regional analyses presented below as well. Table 3.6A and 3.7A, left, illustrate this case.

**Table 3.8A: Auburn University
Percent Change in...**



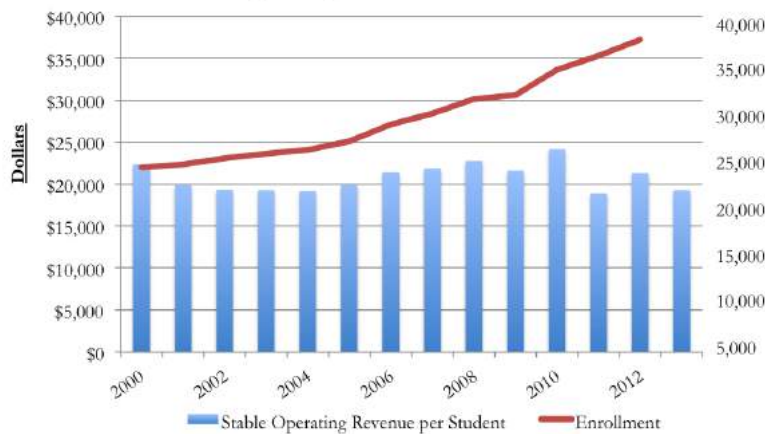
From the viewpoint of a statistical model, while Table 3.6A shows that Stable Operating Revenue fluctuates from year to year, Table 3.7A shows that Stable Operating Revenue per student is reasonably flat, and this makes it difficult to find a strong cause and effect relationship between flat revenue and growing student populations and number of degrees granted as depicted in Table 3.8A.

THE UNIVERSITY OF ALABAMA

Table 3.1B shows that Alabama’s statewide per-capita income curve has been relatively flat from 2000 to 2013, a period that saw two recessions including the deepest, longest-lasting economic downturn since the Great Depression of the 1930s, the so-called “Great Recession.” Stable Operating Revenue (SOR) increased significantly, especially from 2000 to 2011, from \$430,986,292 to \$752,877,394, but fell to \$715,939,698 in 2013. The flat trend in per-capita income makes it hard, from a statistical standpoint, to both explain and predict the lack of change in per-capita income.

Table 3.2B, on the following page, shows that the number of students attending The University of Alabama has increased significantly, ninety-three percent from 2000 to 2013, while Stable Operating Revenue per student has actually decreased by fourteen percent in constant 2013 dollars from 2000 to 2013. This documented decline comes as no surprise to experts familiar with state higher education finance; after all, Alabama ranks second among all states, after only Louisiana, in state tax appropriations cuts in the six-year period from FY2008 to FY2012. In reaction to the severe cut in state appropriations as a portion of Stable Operating Revenues, Alabama’s flagship universities have been incited—in fact, *dramatically incited*—to find alternative sources of revenue to replace the steep declines in state investments. Both of Ala-

**Table 3.2B - The University of Alabama
Stable Operating Revenue Per Student and Enrollment**



bama's flagship universities chose to pursue recruitment strategies to enroll more students from out of state who can pay higher tuition to compensate the institutions for what the state has disinvested in appropriations for operating budgets. It is important to note that this is not a strategy that is as readily available to some of Alabama's regional universities. In turn, as will be discussed in more detail below, this implies that the institutions have been forced to serve more students with significantly declining resources.

As shown in Table 3.2B above, the relationship between stable operative revenue per student and student headcount followed a similar path until 2009. In 2009, student headcount at The University of Alabama and Stable Operating Revenue per student started to diverge, as student headcount increased while Stable Operating Revenue per student began to decline. A regression of the number of students as a function of Stable Operating Revenue per student is not possible because of auto-correlation issues. However, a regression model with number of students as the dependent variable and total Stable Operating Revenue for the period 2000-2008 resulted in a model in an adjusted R-squared of 0.824 and a standardized regression coefficient of 0.920 for Stable Operating Revenue ($t=6.211$, sig. 0.000) indicates that increases in Stable Operating Revenue translate into increased enrollment in the institution. The increased Stable Operating Revenue thus acts as an enabling mechanism.

Full model regression results for The University of Alabama are shown on the following pages in Tables 3.3B, 3.4B and 3.5B respectively.

Table 3.4B shows the results of the regression of the independent variable set on number of degrees granted at The University of Alabama. Again revenue did not have a significant effect. The only independent variables that were significant were the percent of the population that is of working age ($t = 2.696$, sig. = 0.036) and the percent of the population classified as elderly ($t = 4.788$, sig. = 0.003).

Finally, as shown below in Table 3.5B, the only independent variable that had a statistically significant effect on per-capita income was the percent of the population that is of working age ($t = 2.303$, sig. = 0.061). Again, the relatively flat funding level for The University of Alabama makes it impossible to find a statistically significant effect of funding on the dependent variables.

The analysis of factors affecting student headcount indicates that the modeled demographic variables had a significant or highly significant effect. However, measures of Stable Operating Revenue did not have a significant effect on student headcount. The regression was repeated using dollars rather than $\ln(\text{Stable Operating Revenue})$

as an independent variable, and the resultant model had an adjusted r-square of 0.996 and again the demographic variables were significant or highly significant but Stable Operating Revenue had a standardized beta of 0.151 (t = 1.347, sig. = 0.227)

Table 3.3B - The University of Alabama - Number of Students

<i>Model Summary</i>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.998 ^a	0.996	0.992	466.023

a. Predictors: (Constant), PcntElderly, GrowRate, PcntWork, PcntCollege, UnempRate, LnRev

<i>Coefficients^a</i>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-447194.763	69002.166		-6.481	0.001
LnRev	4509.692	2851.462	0.186	1.582	0.165
GrowRate	-147137.348	55492.914	-0.123	-2.651	0.038
1 UnempRate	176.804	90.713	0.075	1.949	0.099
PcntCollege	-487146.735	220639.64	-0.093	-2.208	0.069
PcntWork	544558.351	134358.057	0.17	4.053	0.007
PcntElderly	686754.012	91036.181	0.745	7.544	0

a. Dependent Variable: Students

Table 3.4B - The University of Alabama - Degrees Granted

<i>Model Summary</i>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.992 ^a	0.984	0.969	178.2635312

a. Predictors: (Constant), PcntElderly, GrowRate, PcntWork, PcntCollege, UnempRate, LnRev

<i>Coefficients^a</i>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-102205.287	26394.775		-3.872	0.008
LnRev	-344.897	1090.744	-0.073	-0.316	0.763
GrowRate	1425.795	21227.202	0.006	0.067	0.949
1 UnempRate	33.227	34.7	0.072	0.958	0.375
PcntCollege	48677.985	84399.287	0.048	0.577	0.585
PcntWork	138571.538	51394.773	0.222	2.696	0.036
PcntElderly	166743.16	34823.247	0.927	4.788	0.003

a. Dependent Variable: Students

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

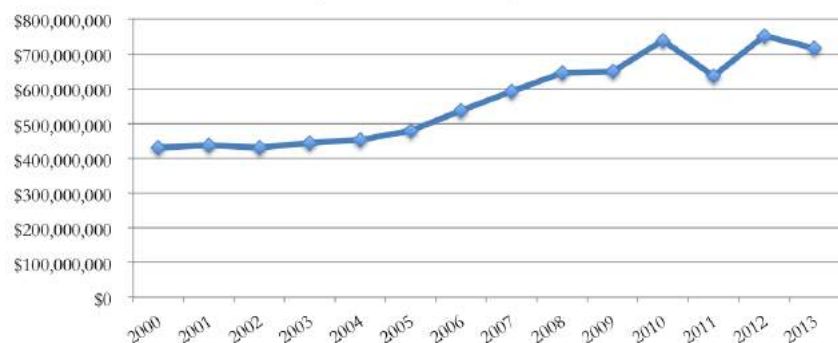
Table 3.5B - The University of Alabama - Per-Capita Income

<i>Model Summary</i>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.964 ^a	0.93	0.86	391.58903

a. Predictors: (Constant), PcntElderly, GrowRate, PcntWork, PcntCollege, UnempRate, LnRev

<i>Coefficients^a</i>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	-104397.534		-1.801	0.122
	LnRev	57.369	0.012	0.024	0.982
	GrowRate	46054.69	0.189	0.988	0.361
	UnempRate	71.325	0.149	0.936	0.386
	PcntCollege	-320172.619	-0.301	-1.727	0.135
	PcntWork	259962.989	0.4	2.303	0.061
	PcntElderly	105398.952	0.563	1.378	0.217

a. Dependent Variable: PerCapIncome

**Table 3.6B - The University of Alabama
Total Stable Operating Revenue
(in constant 2013 dollars)**

and was not significant. The relatively flat funding level provided to The University of Alabama affected this model, and the reported results below for degrees granted and per-capita income. Figure 3.6B below shows total Stable Operating Revenue in constant 2013 dollars for the period 2000 through 2013.

From the viewpoint of a statistical model, while Table 3.7B shows that Stable Operating Revenue fluctuates from year to year, Table 3.8B shows that Stable Operating Revenue per student is reasonably flat, and this makes it difficult to find a strong cause and effect relationship between flat revenue and growing student populations and number of degrees granted.

REGIONAL RESULTS

Table 3.7B- The University of Alabama
Stable Operating Revenue Per Student and
Statewide Per-Capita Income

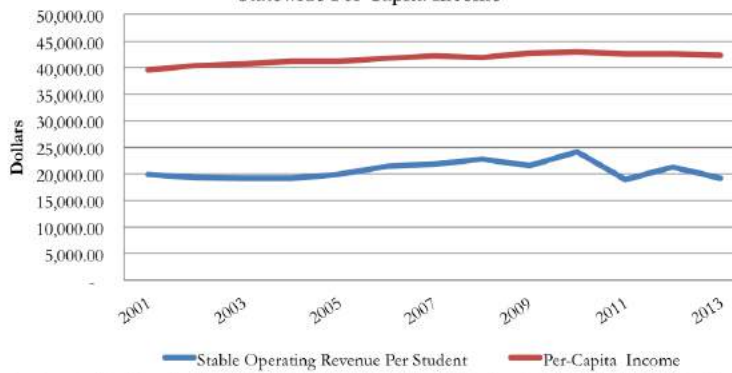
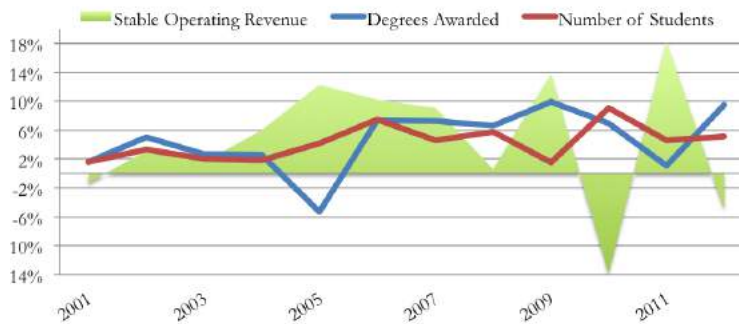


Table 3.8B - The University of Alabama
Percent Change in....



This study divided Alabama into eight regions: Region 1 (Southwest Alabama), Region 2 (West Alabama), Region 3 (Southeast Alabama), Region 4 (Montgomery), Region 5 (East Alabama), Region 6 (Birmingham), Region 7 (North Alabama), and Region 8 (Huntsville). Each of Alabama's 67 counties was assigned to one of these eight regions. This section summarizes the results of the regression models for each of the eight regions. The regression models are presented in a manner exactly alike the models presented above on the statewide analysis, with separate regression results for student enrollment, degrees granted and per-capita income. The independent variable that measured the rural percentage of each region's population, " β_7 ," was omitted from the following analysis because for each region the percentage is constant. The rural population variable is an effective *between-region* demo-

graphic measure, but is not relevant for *within-region* analyses. In addition, Stable Operating Revenue (SOR) within each region was essentially linear, so the natural log transformation of Stable Operating Revenue was not necessary to present in the regressions that follow. This is evident in Table 1 for each region where $\ln(\text{SOR})$ is essentially constant.

REGION 1 (SOUTHWEST ALABAMA)

Region 1, Southwest Alabama, consists of Baldwin, Clarke, Conecuh, Escambia, Mobile, Monroe, and Washington Counties. Since 2000, the region has experienced steady population growth from 663,075 to 724,809 in 2013. The unemployment rate for the area peaked in 2009 at 9.3 percent of the population, and as of 2013 had decreased to eight percent. The median wage received was \$38,901 in 2013, approximately \$3,000 higher than the statewide average of \$36,055.

Region 1 is serviced by one public university, the University of South Alabama (USA). USA has experienced steady growth in its student population, growing from 11,673 in 2000 to 17,114 in 2013. As the institution's enrollment has grown, so too has the annual number of degrees awarded increased from 1,882 to 2,527. Since total state appropriations have remained stagnant for USA from 2000 to 2013, the amount of state appropriations per student has decreased from \$8,659 in 2000 to \$5,994 in 2013.

Table 3.1C summarizes key data about the Southwest Alabama region. It is instructive to note in this table that while the overall growth rate in Stable Operating Revenue (SOR) has been negative a decline of 8.4 percent at the one institution in Region 1, the University of South Alabama, has continued to attempt to do more with less, serving and graduating more students in the face of declining state investments/financial

resources. The number of students served each year has increased and the number of degrees granted has increased thirty percent from 2000 to 2013. However, per-capita income in the Southwest Region has remained relatively flat, increasing only four percent from 2000 to 2013 and the unemployment rate has increased by three point four percent over the same period of time.

As Table 3.2C shows on the following page, the only independent variables that had statistically significant effects on the number of students enrolled in higher education in Region 1 (Southwest Alabama) were the percentage of the total population of working age (from eighteen to sixty-five years old) and the percentage of the population over age 65. An increase in both of these population segments has had a positive effect on the number of students enrolled in higher education. Table 3.2C also shows the number of students enrolled and Stable Operating Revenue per student per year.

The regression of the independent variables on number of degrees granted is shown in Table 3.2C above. Again, Stable Operating Revenue did not have a statistically significant effect on the number of degrees granted. However the percent of seniors in the region had a significant and positive effect on degrees granted while the percentage of college-aged individuals in the region had a significant and negative effect on degrees granted.

The regression of the independent variables on per-capita income is shown in Table 3.4C on the following page. Neither Stable Operating Revenue nor the other independent variables had a statistically significant effect on per-capita income.

REGION 2 (WEST ALABAMA)

Region 2, West Alabama, consists of the counties of Choctaw, Dallas, Fayette, Greene, Hale, Lamar, Marengo, Perry, Pickens, Sumter, Tuscaloosa, and Wilcox Counties,

Table 3.1C - Region 1 - Southwest Alabama - Key Variables

<i>Year</i>	<i>Population</i>	<i>Stable Operating Revenue (SOR)</i>	<i>Year-to-Year % Change</i>	<i>ln(SOR)</i>	<i>Degrees Granted</i>	<i>Number of Students</i>	<i>Per-Capita Income</i>	<i>Unemployment Rate</i>
2000	663,075	\$573,058,354	N/A	20.17	1,882	N/A	\$37,400	4.60%
2001	666,783	\$538,807,958	-6.00%	20.1	1,782	14,355	\$37,193	5.30%
2002	667,147	\$583,551,458	8.30%	20.18	1,922	14,669	\$37,181	6.30%
2003	668,757	\$593,467,007	1.70%	20.2	1,987	15,265	\$40,141	6.70%
2004	672,454	\$529,738,545	-10.70%	20.09	1,893	15,995	\$37,963	6.20%
2005	678,203	\$540,193,049	2.00%	20.11	2,079	15,839	\$38,169	4.20%
2006	687,703	\$561,462,183	3.90%	20.15	2,202	15,823	\$38,418	4.20%
2007	692,929	\$599,526,474	6.80%	20.21	2,231	15,870	\$38,547	3.90%
2008	697,365	\$568,832,384	-5.10%	20.16	2,350	16,558	\$38,790	5.60%
2009	707,464	\$566,158,360	-0.50%	20.15	2,573	16,985	\$39,076	11.00%
2010	714,434	\$588,392,273	3.90%	20.19	2,453	17,372	\$39,895	9.50%
2011	716,830	\$474,125,631	-19.40%	19.98	2,588	17,544	\$38,959	10.20%
2012	720,308	\$505,706,449	6.70%	20.04	2,545	17,302	\$38,902	9.10%
2013	724,809	\$525,204,000	3.90%	20.08	2,682	17,114	\$38,901	8.00%
2000 to 2013	9.30%	-9.11%	-9.11%	N/A	29.83%	N/A	4.00%	3.40%

Notes: (1) The following counties are included: Baldwin, Clarke, Conecuh, Escambia, Mobile, Monroe, and Washington. (2) Public universities include: University of South Alabama (USA)

Data Sources: (1) Population data is from the U.S. Census Bureau. (2) Stable Operating Revenue is defined by the Delta Cost Project as "Total revenue including revenue from auxiliary, hospitals and other independent operations. Includes sum of tuition; federal, state, and local appropriations, grants, and contracts; auxiliaries; hospitals; and other independent operations; excludes revenues from affiliated entities, private gifts, grants, and contracts; investment return, endowment earnings." (3) Year to Year Change is developed by EPC's analysis of Delta Cost Project and IPEDS data. (4) ln(SOR) is the natural log of the Stable Operating Revenue variable. (5) Degrees Awarded data are from IPEDS. (6) Number of Students represents full year Unduplicated Headcount figures from IPEDS. 2000-2001 Unduplicated Headcount data are not available through IPEDS. (7) Per Capita Income is from the Bureau of Labor Statistics. (8) Unemployment rate data is for the entire State of Alabama from the Bureau of Labor Statistics. (9) All data representing US Dollars are adjusted for the 2013 CPI Inflation rate found @ www.bls.gov/data/inflation_calculator.htm.

Table 3.2C - Region 1 Results - Southwest Alabama*Number of Students - Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.957 ^a	0.916	0.831	427.696

a. Predictors: (Constant), PcntElderly, GrowRate, PcntWork, StableRev, UnempRate, PcntCollege

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	-160776.706		-2.587	0.041
	StableRev	-1.37E-06	-0.049	-0.342	0.744
	GrowRate	36085.874	0.142	0.784	0.463
	UnempRate	6416.336	0.147	0.804	0.452
	PcntCollege	-109764.23	-0.104	-0.53	0.615
	PcntWork	277756.615	0.43	3.076	0.022
	PcntElderly	110907.991	0.595	3.783	0.009

a. Dependent Variable: Students

Notes: (1) The following counties are included: Baldwin, Clarke, Conecuh, Escambia, Mobile, Monroe, and Washington. (2) Public Universities include: University of South Alabama (USA).

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)**Table 3.3C - Region 1 Results - Southwest Alabama***Number of Degrees Granted - Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.973 ^a	0.947	0.894	80.8008124

a. Predictors: (Constant), PcntElderly, GrowRate, PcntWork, StableRev, UnempRate, PcntCollege

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	-7143.374		-0.608	0.565
	StableRev	6.33E-07	0.095	0.84	0.433
	GrowRate	-3335.214	-0.055	-0.384	0.714
	UnempRate	2834.515	0.273	1.88	0.109
	PcntCollege	-122206.107	-0.484	-3.121	0.021
	PcntWork	26344.191	0.171	1.544	0.173
	PcntElderly	33945.989	0.765	6.128	0.001

a. Dependent Variable: Degrees

Notes: (1) The following counties are included: Baldwin, Clarke, Conecuh, Escambia, Mobile, Monroe, and Washington. (2) Public Universities include: University of South Alabama (USA).

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

Table 3.4C - Region 1 Results - Southwest Alabama*Per-Capita Income -Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.724 ^a	0.524	0.047	856.42707

a. Predictors: (Constant), PcntElderly, GrowRate, PcntWork, StableRev, UnempRate, PcntCollege

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-98224.746	124456.127		-0.789	0.46
StableRev	1.25E-05	0	0.532	1.569	0.168
GrowRate	43110.075	92131.672	0.202	0.468	0.656
UnempRate	6448.801	15981.684	0.175	0.404	0.701
PcntCollege	225738.418	415047.074	0.253	0.544	0.606
PcntWork	156156.75	180807.463	0.287	0.864	0.421
PcntElderly	69209.574	58710.178	0.441	1.179	0.283

a. Dependent Variable: PerCapIncome

Notes: (1) The following counties are included: Baldwin, Clarke, Conecuh, Escambia, Mobile, Monroe, and Washington. (2) Public Universities include: University of South Alabama (USA).

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

many of which are commonly considered in Alabama's "Black Belt." From 2000, the region has experienced very slight regional population growth, from 372,050 to 385,782. The unemployment rate for the West Alabama region peaked in 2009 at just under thirteen percent, and as of 2013 had decreased to nine percent. It is important to note that the region-wide average masks county-by-county differences; for example, Tuscaloosa County unemployment is below five percent, while some Black Belt counties have unemployment rates double that. The median wages were \$35,341 in 2013, approximately \$700 lower than the state average of \$36,055.

Region 2 is serviced by two of Alabama's public universities, The University of West Alabama (UWA), and The University of Alabama, which has a statewide service mission. UWA has experienced dramatic growth in its student population from 2000 to 2013, growing from 1,924 to 6,305 students. The number of degrees UWA awards has nearly tripled, from 352 in 2000 to 902 in 2013. Inasmuch as state appropriations have only increased slightly while the student population has more than tripled, the dollar amount of state appropriations per student decreased by nearly two-thirds from \$6,305 in 2000 to \$2,078 in 2013. Similarly, UA has experienced dramatic growth in its student population from 19,277 in 2000 to 37,220 in 2013. Additionally, the number of degrees awarded has increased dramatically from 3,872 in 2000 to 6,893 in 2013. Again, since state appropriations for UA have declined by \$20,000,000 while enrollment nearly doubled, the dollar amount of state appropriations per student decreased by more than half from \$8,356 in 2000 to \$3,780 in 2013.

Table 3.1D summarizes key data about Region 2.

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

It is instructive to note in this table that while the overall growth rate in Stable Operating Revenue has been positive for the two public universities that serve West Alabama—increasing by 136.5 percent from 2000 to 2013, the number of students served and the number of degrees granted have increased even faster, at 227.7 percent and 156.3 percent, respectively. It is clear that funding has not kept pace with the growth in educational activities. This also means that Stable Operating Revenue per student has decreased from \$12,941 in 2000 to \$9,340 in 2013, a funding decrease of twenty-eight percent per student. At the same time, per-capita income in the region has decreased and the unemployment rate has increased.

Despite the decline in per-student spending in the West Alabama region, there is still a positive and statistically significant relationship between Stable Operating Revenue

Year	Population	Stable Operating Revenue (SOR)	Year-to-Year % Change	ln(SOR)	Degrees Granted	Number of Students	Per-Capita Income	Unemployment Rate
2000	372,050	\$24,898,681	N/A	17.03	352	N/A	\$37,126	5.70%
2001	371,556	\$25,115,559	0.90%	17.04	338	2,420	\$33,098	6.20%
2002	369,312	\$26,402,799	5.10%	17.09	339	2,496	\$34,229	7.30%
2003	367,588	\$28,297,969	7.20%	17.16	369	2,759	\$34,585	7.30%
2004	366,483	\$33,002,095	16.60%	17.31	361	3,218	\$34,729	6.80%
2005	366,984	\$33,393,099	1.20%	17.32	422	3,757	\$35,112	5.20%
2006	369,827	\$39,529,787	18.40%	17.49	567	4,432	\$35,419	5.10%
2007	371,410	\$45,742,795	15.70%	17.64	700	5,379	\$35,269	5.00%
2008	372,964	\$51,410,141	12.40%	17.76	831	6,373	\$35,676	6.70%
2009	374,346	\$55,342,093	7.60%	17.83	1,057	6,513	\$35,657	12.90%
2010	385,707	\$57,681,504	4.20%	17.87	1,143	6,390	\$35,986	11.00%
2011	384,721	\$63,375,932	9.90%	17.96	1,222	6,871	\$35,603	11.60%
2012	385,236	\$56,946,785	-10.10%	17.86	932	6,926	\$35,431	9.80%
2013	385,782	\$58,889,699	3.40%	17.89	902	6,305	\$35,341	9%
2000 to 2013	3.70%	57.72%	57.72%	N/A	60.98%	N/A	-4.80%	3.30%

Notes: (1) The following counties are included: Choctaw, Dallas, Fayette, Greene, Hale, Lamar, Marengo, Perry, Pickens, Sumter, Tuscaloosa, and Wilcox. (2) Public universities include: The University of Alabama (UA) and the University of West Alabama (UWA).

Data Sources: (1) Population data is from the U.S. Census Bureau. (2) Stable Operating Revenue is defined by the Delta Cost Project as "Total revenue including revenue from auxiliary, hospitals and other independent operations. Includes sum of tuition; federal, state, and local appropriations, grants, and contracts; auxiliaries; hospitals; and other independent operations; excludes revenues from affiliated entities, private gifts, grants, and contracts; investment return, endowment earnings." (3) Year to Year Change is developed by EPC's analysis of Delta Cost Project and IPEDS data. (4) ln(SOR) is the natural log of the Stable Operating Revenue variable. (5) Degrees Awarded data are from IPEDS. (6) Number of Students represents full year Unduplicated Headcount figures from IPEDS. 2000-2001 Unduplicated Headcount data are not available through IPEDS. (7) Per Capita Income is from the Bureau of Labor Statistics. (8) Unemployment rate data is for the entire State of Alabama from the Bureau of Labor Statistics. (9) All data representing US Dollars are adjusted for the 2013 CPI Inflation rate found @ www.bls.gov/data/inflation_calculator.htm.

and the number of students served, as shown in Table 3.2D, where the t-score for stable revenue was 2.907 (sig. = 0.027). Increases in funding still can make it possible for institutions to serve more students.

There is a positive and statistically significant relationship between Stable Operating Revenue and the number of degrees granted by UWA and UA in Region 2 (West Alabama). This is shown in Table 3.3D, where the t-score for stable revenue was 3.147 (sig. = 0.020). This relationship further corroborates earlier results that show increases in funding make it possible for these universities to serve more students. In addition, the unemployment rate had a positive and significant effect on degrees granted. Thus increases in funding and increases in the unemployment rate positively affect degrees granted.

Table 3.2D - Region 2 Results - West Alabama*Number of Students - Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.990 ^a	0.98	0.96	358.16

a. Predictors: (Constant), PcntElderly, PcntCollege, PcntWork, GrowRate, UnempRate, StableRev

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	39882.406	97482.054		0.409	0.697
StableRev	0	0	1.038	2.907	0.027
GrowRate	672.283	14651.693	0.003	0.046	0.965
1 UnempRate	-2318.478	7596.253	-0.034	-0.305	0.771
PcntCollege	-149729.6	247689.932	-0.083	-0.605	0.568
PcntWork	-39473.046	174431.598	-0.036	-0.226	0.828
PcntElderly	-8532.995	80601.208	-0.027	-0.106	0.919

a. Dependent Variable: Students

Notes: (1) The following counties are included: Choctaw, Dallas, Fayette, Greene, Hale, Lamar, Marengo, Perry Pickens, Sumter, Tuscaloosa, and Wilcox. (2) Public Universities include: The University of Alabama (UA) and the University of West Alabama (UWA).
Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

Table 3.3D - Region 2 Results - West Alabama*Number of Degrees Granted - Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.995 ^a	0.989	0.978	48.3649097

a. Predictors: (Constant), PcntElderly, PcntCollege, PcntWork, GrowRate, UnempRate, StableRev

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-5650.908	13163.705		-0.429	0.683
StableRev	1.95E-05	0	0.825	3.147	0.02
GrowRate	1926.373	1978.524	0.054	0.974	0.368
1 UnempRate	3111.66	1025.777	0.249	3.033	0.023
PcntCollege	-20987.136	33447.359	-0.063	-0.627	0.553
PcntWork	13305.957	23554.757	0.065	0.565	0.593
PcntElderly	-6916.045	10884.163	-0.118	-0.635	0.549

a. Dependent Variable: Degrees

Notes: (1) The following counties are included: Choctaw, Dallas, Fayette, Greene, Hale, Lamar, Marengo, Perry Pickens, Sumter, Tuscaloosa, and Wilcox. (2) Public Universities include: The University of Alabama (UA) and the University of West Alabama (UWA).
Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

Table 3.4D, below, indicates that none of the independent variables had a statistically significant effect on per-capita income in Region 2. This may be explained by the fact that while Stable Operating Revenue has increased from 2000 to 2013 at UWA and UA, per-capita income in the region has actually decreased over the same time.

REGION 3 (SOUTHEAST ALABAMA)

Table 3.4D - Region 2 Results - West Alabama

Per- Capita Income - Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.876 ^a	0.768	0.535	525.96801	
a. Predictors: (Constant), PcntElderly, PcntCollege, PcntWork, GrowRate, UnempRate, StableRev					
Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	-36265.981	143155.189	-0.253	0.808
	StableRev	4.02E-05	0	0.721	0.573
	GrowRate	7573.253	21516.431	0.09	0.737
	UnempRate	-5137.775	11155.315	-0.175	0.661
	PcntCollege	-111341.081	363739.758	-0.142	0.77
	PcntWork	130474.929	256157.798	0.273	0.629
	PcntElderly	-839.574	118365.183	-0.006	0.995

a. Dependent Variable: PerCapIncome

Notes: (1) The following counties are included: Choctaw, Dallas, Fayette, Greene, Hale, Lamar, Marengo, Perry Pickens, Sumter, Tuscaloosa, and Wilcox. (2) Public Universities include: The University of Alabama (UA) and the University of West Alabama (UWA).

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

Region 3, Southeast Alabama, consists of the counties of Barbour, Bullock, Butler, Coffee, Covington, Crenshaw, Dale, Geneva, Henry, Houston, Macon, Pike, and Russell. Since 2000, the Southeast Alabama region has experienced steady population growth, from 411,480 to 443,901 in 2013. The unemployment rate for the area peaked in 2009 at ten percent of the population, and fell back to seven percent in 2013. The median wages were \$35,074 in 2013, approximately \$1,000 lower than the statewide average of \$36,055.

Region 3 is serviced by one public university, Troy University. The main campus and two of its physical campuses in Phenix City and Dothan are in the Southeast Alabama region. Troy University campuses have experienced dramatic growth in student enrollments, increasing from 12,541 in 2000 to 29,109 in 2013. The number of degrees Troy University awards annually has increased from 4,099 to 4,328. Because state appropriations for Troy University have declined by approximately

\$1,000,000 for this college, however, the amount of state appropriations per student has decreased from \$3,660 in 2000 to \$1,543 in 2013.

Table 3.1E summarizes key data about Region 3. The overall growth rate in Southeast Alabama of its Stable Operating Revenue has been positive, growing by over eighty-five percent from 2000 to 2013. The number of students served and the number of degrees granted have increased, by over one hundred and thirty-two percent and over five percent, respectively. Nevertheless, funding has in no way kept pace with the growth in educational activities. Stable Operating Revenue per student has decreased from \$10,770 in 2000 to \$8,626 in 2013, a funding decrease in stable 2013 dollars of just under twenty percent per student, even as tuition as a component of SOR has grown significantly. At the same time, average per-capita income across the Southeast Alabama region has increased slightly, while the unemployment rate has increased one point seven percent.

Surprisingly the only independent variable in Table 3.2E that had a statistically significant effect on number of students was the percent of the regional population that was of college age. Even more surprising is the negative sign on the regression coefficient, indicating that an increase in the student-aged population has a negative effect on number of students enrolled. This is another way of saying that Troy University enrolls many students from outside the region, many of whom are enrolled through its Troy Global Campus, which brings additional revenue to make up for the state disinvestment over the same period.

In Table 3.2E, the only independent variable that had a statistically significant effect on number of degrees granted was the percent of the regional population that was of college age. Again, the sign of the regression coefficient is negative, indicating that an increase in the student-aged population has a negative effect on number of

Table 3.1E - Region 3 - Southeast Alabama - Key Variables

<i>Year</i>	<i>Population</i>	<i>Stable Operating Revenue (SOR)</i>	<i>Year-to-Year % Change</i>	<i>ln(SOR)</i>	<i>Degrees Granted</i>	<i>Number of Students</i>	<i>Per-Capita Income</i>	<i>Unemployment Rate</i>
2000	411,480	\$135,068,539	N/A	18.72	4,099	N/A	\$31,499	5.30%
2001	409,858	\$135,552,572	0.40%	18.72	4,082	17,619	\$31,548	5.30%
2002	408,581	\$154,818,695	14.20%	18.86	4,075	19,480	\$32,099	5.80%
2003	409,538	\$175,083,385	13.10%	18.98	4,259	22,558	\$32,247	5.80%
2004	410,636	\$182,768,396	4.40%	19.02	4,780	25,709	\$32,851	5.70%
2005	411,758	\$197,290,355	7.90%	19.1	5,073	39,228	\$32,806	4.30%
2006	414,571	\$208,097,498	5.50%	19.15	5,712	39,492	\$33,182	4.50%
2007	418,727	\$222,015,526	6.70%	19.22	5,121	38,901	\$33,640	4.10%
2008	421,677	\$238,727,487	7.50%	19.29	5,104	40,141	\$33,572	5.70%
2009	423,979	\$203,224,568	-14.90%	19.13	4,918	37,898	\$34,533	10.10%
2010	437,626	\$248,156,680	22.10%	19.33	4,950	38,040	\$35,138	8.40%
2011	439,582	\$275,167,166	10.90%	19.43	4,746	36,806	\$34,843	9.00%
2012	443,219	\$254,251,147	-7.60%	19.35	4,397	33,393	\$34,839	8.50%
2013	443,901	\$251,106,595	-1.20%	19.34	4,337	29,109	\$34,905	7%
2000 to 2013	7.90%	46.21%	46.21%	N/A	5.49%	N/A	10.80%	1.70%

Notes: (1) The following counties are included: Bullock, Butler, Coffee, Covington, Crenshaw, Dale, Geneva, Henry, Houston, Macon, Pike, Russell, and Barbour. (2) Public universities include: Troy University.

Data Sources: (1) Population data is from the U.S. Census Bureau. (2) Stable Operating Revenue is defined by the Delta Cost Project as "Total revenue including revenue from auxiliary, hospitals and other independent operations. Includes sum of tuition; federal, state, and local appropriations, grants, and contracts; auxiliaries; hospitals; and other independent operations; excludes revenues from affiliated entities, private gifts, grants, and contracts; investment return, endowment earnings." (3) Year to Year Change is developed by EPC's analysis of Delta Cost Project and IPEDS data. (4) ln(SOR) is the natural log of the Stable Operating Revenue variable. (5) Degrees Awarded data are from IPEDS. (6) Number of Students represents full year Unduplicated Headcount figures from IPEDS. 2000-2001 Unduplicated Headcount data are not available through IPEDS. (7) Per Capita Income is from the Bureau of Labor Statistics. (8) Unemployment rate data is for the entire State of Alabama from the Bureau of Labor Statistics. (9) All data representing US Dollars are adjusted for the 2013 CPI Inflation rate found @ www.bls.gov/data/inflation_calculator.htm.

Table 3.2E - Region 3 Results - Southeast Alabama*Number of Students - Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.938 ^a	0.881	0.761	4036.794

a. Predictors: (Constant), PcntElderly, PcntCollege, PcntWork, GrowRate, UnempRate, StableRev

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	194987.329	1276134.294		0.153	0.884
StableRev	0	0	0.713	1.328	0.233
GrowRate	92578.794	195240.398	0.1	0.474	0.652
UnempRate	116.098	105052.7	0	0.001	0.999
PcntCollege	-4571353.61	1559743.995	-0.544	-2.931	0.026
PcntWork	492758.328	2086603.893	0.096	0.236	0.821
PcntElderly	-315197.173	714744.153	-0.213	-0.441	0.675

a. Dependent Variable: Students

Notes: (1) The following counties are included: Bullock, Butler, Coffee, Covington, Crenshaw, Dale, Geneva, Henry, Houston, Macon, Pike, Russell, and Barbour. (2) Public Universities include: Troy University.

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>).

(2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

Table 3.3E - Region 3 Results - Southeast Alabama*Number of Degrees Granted - Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.882 ^a	0.778	0.557	322.1641561

a. Predictors: (Constant), PcntElderly, PcntCollege, PcntWork, GrowRate, UnempRate, StableRev

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	17091.125	101844.356		0.168	0.872
StableRev	6.16E-06	0	0.533	0.729	0.493
GrowRate	7834.487	15581.536	0.144	0.503	0.633
UnempRate	-4530.315	8383.933	-0.184	-0.54	0.608
PcntCollege	-288091.491	124478.375	-0.585	-2.314	0.06
PcntWork	31519.894	166525.444	0.105	0.189	0.856
PcntElderly	-31096.592	57041.534	-0.359	-0.545	0.605

a. Dependent Variable: Degrees

Notes: (1) The following counties are included: Bullock, Butler, Coffee, Covington, Crenshaw, Dale, Geneva, Henry, Houston, Macon, Pike, Russell, and Barbour. (2) Public Universities include: Troy University.

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>).

(2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

degrees granted. This is shown as well in degrees awarded regression presented in Table 3.3E on the previous page.

As shown in Table 3.4E below, the population growth rate, unemployment rate, and percent of college-aged students in the region all had statistically significant effects on per-capita income. Stable Operating Revenue did not have a significant effect. Increases in the population growth rate and unemployment rate both have regression coefficients with positive signs indicating that increases in both variables translate into increased per-capita income. Again, the sign of the regression coefficient for the college-aged population is negative indicating an inverse effect.

REGION 4 (MONTGOMERY REGION)

Table 3.4E - Region 3 Results - Southeast Alabama

<i>Per-Capita Income - Model Summary</i>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.992 ^a	0.984	0.967	219.59249

a. Predictors: (Constant), PcntElderly, PcntCollege, PcntWork, GrowRate, UnempRate, StableRev

<i>Coefficients^a</i>					
Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	-48181.713	69418.82		-0.694	0.514
StableRev	4.86E-06	0	0.168	0.844	0.431
GrowRate	25530.476	10620.636	0.187	2.404	0.053
1 UnempRate	14362.178	5714.629	0.232	2.513	0.046
PcntCollege	-211423.272	84846.547	-0.171	-2.492	0.047
PcntWork	137862.352	113506.534	0.183	1.215	0.27
PcntElderly	109438.822	38880.466	0.504	2.815	0.031

a. Dependent Variable: PerCapIncome

Notes: (1) The following counties are included: Bullock, Butler, Coffee, Covington, Crenshaw, Dale, Geneva, Henry, Houston, Macon, Pike, Russell, and Barbour. (2) Public Universities include: Troy University.

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

Region 4, the Montgomery Region, consists of Autauga, Elmore, Lowndes and Montgomery Counties. Since 2000, the region has experienced steady regional population growth, from 346,528 to 373,510 in 2013. The unemployment rate for the area peaked in 2009 at ten percent; by 2013 it had decreased to seven percent. The median wages were \$37,980 in 2013, nearly \$2,000 higher than the state average of \$36,055.

Region 4 is serviced by three of Alabama's public universities, Alabama State University (ASU), Auburn University at Montgomery (AUM), and Troy University-Montgomery (because Troy University's institutional accreditation is as a single institution, it was not possible to obtain data on Troy University-Montgomery from Delta Cost Project national data, and thus it is not included in the presentation that follows). ASU has experienced overall growth in its student population from 5,269

in 2000 to 6,782 in 2013. The number of degrees awarded has increased slightly from 715 to 750 over this same period. While state appropriations have moderately increased for ASU, its student population has grown at a faster rate; thus the amount of state appropriations per student has decreased from \$7,418 in 2000 to \$6,290 in 2013. AUM has experienced a decline in its student population from 4,900 in 2000 to 3,173 in 2013, and the number of degrees awarded has decreased from 1,042 to 795. Although state appropriations have decreased by approximately \$3,000,000, the decline in student population means a decline in tuition revenue as well.

Table 3.1F summarizes key data about Region 4. The Montgomery region appears to be significantly different in many respects from Regions 1, 2 and 3 (Southwest Alabama, West Alabama, and Southeast Alabama, respectively). The Montgomery region's overall growth rate in Stable Operating Revenue was positive, rising by over twenty-nine percent 2000 to 2013. While the Stable Operating Revenue growth rate was positive, the number of students served and the number of degrees granted both decreases, negative two percent and negative twelve percent, respectively, over the same period.

Public university enrollments were stable at 13,500 from 2005 to 2011, but the student headcount began to decline in 2012, when the one-time Summer Pell Grant funding was running out, and the Congressional-mandated new Pell Grant Eligibility Restrictions were implemented (over 11,300 students at Alabama's regional universities lost eligibility in 2012-13, producing declining enrollments at nearly all of the regional universities). It is instructive to note that the percentage decline in degrees granted is greater than the decline in student headcount. This inverse relationship between funding and students served means that Stable Operating Revenue per student actually increased from \$fourteen,9fourteen in 2000 to \$19,744 in 2013, a funding increase

Table 3.1F - Region 4 Key Variables

<i>Year</i>	<i>Population</i>	<i>Stable Operating Revenue (SOR)</i>	<i>Year-to-Year % Change</i>	<i>ln(SOR)</i>	<i>Degrees Granted</i>	<i>Number of Students</i>	<i>Per-Capita Income</i>	<i>Unemployment Rate</i>
2000	346,528	\$151,658,366	N/A	18.84	1,757	N/A	\$36,305	4.00%
2001	348,336	\$146,579,362	-3.30%	18.8	1,653	12,658	\$36,634	4.20%
2002	350,341	\$175,121,715	19.50%	18.98	1,552	13,639	\$36,503	5.10%
2003	351,657	\$160,969,705	-8.10%	18.9	1,721	14,792	\$36,604	5.50%
2004	353,250	\$161,572,648	0.40%	18.9	1,640	14,603	\$37,073	5.40%
2005	356,110	\$176,412,149	9.20%	18.99	1,642	13,944	\$36,503	3.90%
2006	362,447	\$188,589,205	6.90%	19.06	1,729	13,383	\$37,198	4.10%
2007	365,976	\$210,412,368	11.60%	19.16	1,507	13,199	\$37,260	3.70%
2008	365,924	\$251,934,624	19.70%	19.34	1,542	13,580	\$36,682	5.30%
2009	366,401	\$192,129,599	-23.70%	19.07	1,601	13,465	\$36,942	9.70%
2010	375,208	\$203,016,451	5.70%	19.13	1,627	13,853	\$37,645	8.50%
2011	377,939	\$203,823,903	0.40%	19.13	1,693	13,636	\$37,710	9.20%
2012	375,821	\$200,416,597	-1.70%	19.12	1,600	12,974	\$37,856	8.10%
2013	373,510	\$196,552,029	-1.90%	19.1	1,548	9,955	\$37,980	7.00%
2000 to 2013	7.80%	22.84%	22.84%	N/A	-13.50%	N/A	4.60%	3.00%

Notes: (1) The following counties are included: Autauga, Elmore, Lowndes, and Montgomery. (2) Public universities include: Alabama State University (ASU) and Auburn University at Montgomery (AUM).

Data Sources: (1) Population data is from the U.S. Census Bureau. (2) Stable Operating Revenue is defined by the Delta Cost Project as "Total revenue including revenue from auxiliary, hospitals and other independent operations. Includes sum of tuition; federal, state, and local appropriations, grants, and contracts; auxiliaries; hospitals; and other independent operations; excludes revenues from affiliated entities, private gifts, grants, and contracts; investment return, endowment earnings." (3) Year to Year Change is developed by EPC's analysis of Delta Cost Project and IPEDS data. (4) ln(SOR) is the natural log of the Stable Operating Revenue variable. (5) Degrees Awarded data are from IPEDS. (6) Number of Students represents full year Unduplicated Headcount figures from IPEDS. 2000-2001 Unduplicated Headcount data are not available through IPEDS. (6) Per Capita Income is from the Bureau of Labor Statistics. (7) Unemployment rate data is for the entire State of Alabama from the Bureau of Labor Statistics. (8) All data representing US Dollars are adjusted for the 2013 CPI Inflation rate found @ www.bls.gov/data/inflation_calculator.htm.

Table 3.2F - Region 4 Results - Montgomery Region

<i>Number of Students - Model Summary</i>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.904 ^a	0.817	0.635	712.059

a. Predictors: (Constant), PcntElderly, PcntCollege, PcntWork, UnempRate, StableRev, GrowRate

<i>Coefficients^a</i>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-207532.009	180411.503		-1.15	0.294
StableRev	6.14E-06	0	0.14	0.421	0.688
GrowRate	-48337.816	51609.433	-0.341	-0.937	0.385
1 UnempRate	12827.57	17370.528	0.23	0.738	0.488
PcntCollege	95895.263	340977.915	0.08	0.281	0.788
PcntWork	392521.294	321977.801	0.537	1.219	0.269
PcntElderly	-253755.932	59987.411	-1.204	-4.23	0.005

a. Dependent Variable: Students

Notes: (1) The following counties are included: Autauga, Elmore, Lowndes, and Montgomery. (2) Public universities include: Alabama State University (ASU) and Auburn University at Montgomery (AUM).

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System

(<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

in stable 2013 dollars of just over thirty-two percent per student. Some of this may be attributed to increased funding tied to the resolution of the *Knight* case, which is not easily tracked in the national Delta Cost Project/IPEDS data. As shown in Table 3.1F, per-capita income in the region has increased slightly and the unemployment rate has increased significantly from four percent in 2000 to seven percent in 2013.

None of the independent variables in Region 4 that had a significant effect on number of student enrolled, as shown in Tables 3.2F, 3.3F, and 3.4F. However, because of the substantial increase in student headcount of twenty-seven percent, even as Stable Operating Revenue grew by thirty percent, per student Stable Operating Revenue growth has been almost flat over the entire 2000 to 2013 period, just below two percent. The growth in SOR of twenty-three percent may well reflect the unique impact of the *Knight* case in the Montgomery region, as this is very different from the trend in other regions

As shown in Table 3.3F on the next page, none of the independent variables had a significant effect on the number of degrees granted. In addition, the model has an adjusted R squared that is negative, indicating that the independent variables do not explain movements in degrees granted.

The only independent variable that had a significant effect per-capita income in Region 4 was the percent of the population classified as elderly (see Table 3.4F, next page). It appears in the Montgomery Region per-capita income increases with increases in the elderly population. The percent of the population classified as young is so highly correlated with the percent elderly that when the regression summarized in Table 3.4F when run with “Percent Young” in place of “Percent Elderly” reveals this as the only

Table 3.3F - Region 4 Results - Montgomery Region*Number of Degrees Granted - Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.641 ^a	0.411	-0.178	76.3002936

a. Predictors: (Constant), PcntElderly, PcntCollege, PcntWork, UnempRate, StableRev, GrowRate

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-1774.431	19331.886		-0.092	0.93
StableRev	-1.40E-06	0	-0.536	-0.896	0.405
GrowRate	2143.515	5530.178	0.254	0.388	0.712
1 UnempRate	631.123	1861.328	0.19	0.339	0.746
PcntCollege	256.338	36537.282	0.004	0.007	0.995
PcntWork	5993.956	34501.337	0.137	0.174	0.868
PcntElderly	-1082.345	6427.915	-0.086	-0.168	0.872

a. Dependent Variable: Degrees

Notes: (1) The following counties are included: Autauga, Elmore, Lowndes, and Montgomery. (2) Public universities include: Alabama State University (ASU) and Auburn University at Montgomery (AUM).

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

Table 3.4F - Region 4 Results - Per-Capita Income - Montgomery Region*Per-Capita Income - Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.937 ^a	0.879	0.757	263.01046

a. Predictors: (Constant), PcntElderly, PcntCollege, PcntWork, UnempRate, StableRev, GrowRate

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-55893.497	66637.858		-0.839	0.434
StableRev	-6.43E-06	0	-0.324	-1.194	0.278
GrowRate	10269.545	19062.765	0.16	0.539	0.609
1 UnempRate	-5725.533	6416.081	-0.227	-0.892	0.407
PcntCollege	-52350.698	125945.616	-0.096	-0.416	0.692
PcntWork	136728.386	118927.622	0.413	1.15	0.294
PcntElderly	107369.588	22157.305	1.124	4.846	0.003

a. Dependent Variable: PerCapIncome

Notes: (1) The following counties are included: Autauga, Elmore, Lowndes, and Montgomery. (2) Public universities include: Alabama State University (ASU) and Auburn University at Montgomery (AUM).

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

change that takes place in the model signifies the standardized regression coefficient for percent elderly switches. Thus, as the percent of the population that is elderly increases in the Montgomery Region, or the percent classified as young decreases, per-capita income increases. This may imply that individuals in Region 4 may be putting off retirement and are continuing to work.

REGION 5 (EAST ALABAMA)

Region 5, East Alabama, consists of the counties of Calhoun, Chambers, Cherokee, Clay, Cleburne, Coosa, Etowah, Lee, Randolph, Talladega, and Tallapoosa. In recent years, the region has experienced steady regional population growth from 576,126 in 2010 to 616,369 in 2013, or seven percent. The unemployment rate for East Alabama peaked in 2009 at eleven percent; by 2013 it had decreased to seven percent. The median wages were \$33,989 in 2013, approximately \$2,000 lower than the state average of \$36,055.

Region 5 is serviced by two Alabama public universities, Jacksonville State University (JSU) and Auburn University (AU), which serves the entire state of Alabama. JSU has experienced significant growth in its student enrollments, from 7,844 in 2000 to 10,895 in 2013. The number of degrees JSU awards increased from 1,550 in 2000 to 1,705 in 2013. In light of this enrollment growth, occurring as it did at a time when JSU's state appropriations decreased by approximately \$2,000,000, state appropriations per student decreased from \$4,812 in 2000 to \$3,241 in 2013. Auburn University (AU) has experienced significant, steady growth in its student enrollments from 21,860 in 2000 to 26,706 in 2013. The number of degrees AU awards increased from 5,091 to 5,601 from 2000 to 2013. In light of the enrollment growth, with state appropriations decreases of more than \$25,000,000 for AU, the amount of state appropriations per student has decreased from \$11,051 in 2000 to \$8,113 in 2013.

Table 3.1G - Region 5 - East Alabama - Key Variables

<i>Year</i>	<i>Population</i>	<i>Stable Operating Revenue (SOR)</i>	<i>Year-to-Year % Change</i>	<i>ln(SOR)</i>	<i>Degrees Granted</i>	<i>Number of Students</i>	<i>Per-Capita Income</i>	<i>Unemployment Rate</i>
2000	576,126	\$75,002,672		18.13	1,550	N/A	\$32,471	4.60%
2001	575,281	\$78,125,474	4.20%	18.17	1,473	9,938	\$32,638	5.20%
2002	575,425	\$86,081,051	10.20%	18.27	1,457	9,939	\$33,237	5.90%
2003	575,719	\$88,642,151	3.00%	18.3	1,480	10,931	\$33,777	6.10%
2004	577,263	\$89,524,682	1.00%	18.31	1,565	10,916	\$33,812	5.70%
2005	580,734	\$94,679,071	5.80%	18.37	1,719	10,753	\$35,752	4.10%
2006	584,858	\$98,052,343	3.60%	18.4	1,668	10,869	\$34,156	4.30%
2007	588,337	\$107,057,954	9.20%	18.49	1,660	10,843	\$34,323	4.30%
2008	591,795	\$108,694,076	1.50%	18.5	1,486	11,114	\$34,329	6.20%
2009	595,159	\$110,890,594	2.00%	18.52	1,545	11,253	\$34,515	11.50%
2010	610,716	\$112,021,315	1.00%	18.53	1,491	11,379	\$34,993	9.60%
2011	611,862	\$113,668,303	1.50%	18.55	1,578	11,395	\$34,096	9.40%
2012	614,388	\$108,175,700	-4.80%	18.5	1,616	11,374	\$33,725	8.40%
2013	616,369	\$103,725,307	-4.10%	18.46	1,705	10,895	\$33,989	7.30%
2000 to 2013	7.00%	27.69%	27.69%	N/A	9.09%	N/A	4.70%	2.70%

Notes: (1) The following counties are included: Calhoun, Chambers, Cherokee, Clay, Cleburne, Coosa, Etowah, Lee, Randolph, Talladega, and Tallapoosa. (2) Public universities include: Auburn University (AU) and Jacksonville State University (JSU).

Data Sources: (1) Population data is from the U.S. Census Bureau. (2) Stable Operating Revenue is defined by the Delta Cost Project as "Total revenue including revenue from auxiliary, hospitals and other independent operations. Includes sum of tuition; federal, state, and local appropriations, grants, and contracts; auxiliaries; hospitals; and other independent operations; excludes revenues from affiliated entities, private gifts, grants, and contracts; investment return, endowment earnings." (3) Year to Year Change is developed by EPC's analysis of Delta Cost Project and IPEDS data. (4) ln(SOR) is the natural log of the Stable Operating Revenue variable. (5) Degrees Awarded data are from IPEDS. (6) Number of Students represents full year Unduplicated Headcount figures from IPEDS. 2000-2001 Unduplicated Headcount data are not available through IPEDS. (7) Per Capita Income is from the Bureau of Labor Statistics. (8) Unemployment rate data is for the entire State of Alabama from the Bureau of Labor Statistics. (9) All data representing US Dollars are adjusted for the 2013 CPI Inflation rate found @ www.bls.gov/data/inflation_calculator.htm.

Table 3.1G summarizes key data about Region 5. The East Alabama region that hosts JSU and AU has seen an overall positive growth rate of thirty eight percent in Stable Operating Revenue from 2000 to 2013. The number of students served and the number of degrees granted have also increased, by thirty-nine percent and ten percent, respectively, over the same period.

The growth rate in Stable Operating Revenue is about the same as the growth rate in student headcount. Again, increases in students served, from 7,844 in 2000 to 10,895 in 2013, have not resulted in a commensurate increases in degree granted. The student headcount in 2013 was less than that in 2012, again symptomatic of declining enrollments associated with Pell Grant Eligibility restrictions that so dramatically impacted regional university enrollments across the nation and in the Deep South in particular. Stable Operating Revenue and student headcount have grown at about the same rate, and consequently Stable Operating Revenue per student has been fairly constant at about \$9,200 per student. Per-capita income in the region has increased by about four and a half percent over the fourteen-year period from 2000 to 2013, while the unemployment rate has increased at aver two percent percent in the same period.

The regression results summarized in Table 3.2G indicate that Stable Operating Revenue has a significant and positive effect on number of students enrolled. Increases in Stable Operating Revenue and student headcount are highly correlated, and movement in one explains the movement in the other. As previously noted, as student headcount increases Stable Operating Revenue for tuition payments and state funding tied to enrollment also increases. On the other hand, increased funding levels make it possible for higher education institutions to admit and educate more

Table 3.2G - Region 5 Results - East Alabama

Number of Students - Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.901 ^a	0.811	0.622	294.067

a. Predictors: (Constant), PcntElderly, PcntCollege, GrowRate, UnempRate, PcntWork, StableRev

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	58524.887	67843.282		0.863	0.421
StableRev	6.62E-05	0	1.597	2.387	0.054
GrowRate	6490.154	16970.136	0.092	0.382	0.715
UnempRate	-1912.691	5570.904	-0.093	-0.343	0.743
PcntCollege	276550.589	180410.58	0.569	1.533	0.176
PcntWork	-123217.62	127125.694	-0.415	-0.969	0.37
PcntElderly	-37275.954	34375.205	-0.436	-1.084	0.32

a. Dependent Variable: Students

Notes: (1) The following counties are included: Calhoun, Chambers, Cherokee, Clay, Cleburne, Coosa, Etowah, Lee, Randolph, Talladega, and Tallapoosa. (2)Public universities include: Auburn University (AU) and Jacksonville State University.

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

Table 3.3G - Region 5 Results - East Alabama*Number of Degrees Granted - Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.791 ^a	0.626	0.252	80.7141831

a. Predictors: (Constant), PcntElderly, PcntCollege, GrowRate, UnempRate, PcntWork, StableRev

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-12802.031	18621.297		-0.687	0.517
StableRev	-3.00E-06	0	-0.371	-0.395	0.707
GrowRate	-1692.286	4657.881	-0.123	-0.363	0.729
1 UnempRate	-2716.343	1529.075	-0.675	-1.776	0.126
PcntCollege	-45717.054	49518.227	-0.482	-0.923	0.391
PcntWork	27550.293	34892.848	0.476	0.79	0.46
PcntElderly	16750.958	9435.141	1.004	1.775	0.126

a. Dependent Variable: Degrees

Notes: (1) The following counties are included: Calhoun, Chambers, Cherokee, Clay, Cleburne, Coosa, Etowah, Lee, Randolph, Talladega, and Tallapoosa. (2) Public universities include: Auburn University (AU) and Jacksonville State University.

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>).

(2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

Table 3.4G - Region 5 Results - East Alabama*Per Capita Income - Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.742 ^a	0.551	0.102	725.02282

a. Predictors: (Constant), PcntElderly, PcntCollege, GrowRate, UnempRate, PcntWork, StableRev

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	99345.691	167267.572		0.594	0.574
StableRev	7.28E-05	0	1.098	1.065	0.328
GrowRate	49440.073	41839.861	0.44	1.182	0.282
1 UnempRate	-13259.967	13735.06	-0.402	-0.965	0.372
PcntCollege	196250.944	444802.181	0.252	0.441	0.675
PcntWork	-134446.35	313428.325	-0.283	-0.429	0.683
PcntElderly	-57185.302	84752.049	-0.418	-0.675	0.525

a. Dependent Variable: PerCapIncome

Notes: (1) The following counties are included: Calhoun, Chambers, Cherokee, Clay, Cleburne, Coosa, Etowah, Lee, Randolph, Talladega, and Tallapoosa. (2) Public universities include: Auburn University (AU) and Jacksonville State University.

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>).

(2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

students. The relationship between student headcount and Stable Operating Revenue is most likely circular.

As shown in Table 3.3G on the previous page, none of the independent variables had a statistically significant effect on number of degrees granted. In addition, the regression of per-capita income on Stable Operating Revenue in the East Alabama Region did not yield significant results and the model only explained about half the variation in the dependent variable.

REGION 6 (BIRMINGHAM REGION)

Region 6, the Birmingham Region, consists of Bibb, Blount, Chilton, Jefferson, St. Clair, Shelby, and Walker Counties. The region has experienced steady regional population growth from 1,052,238 in 2000 to 1,140,300 in 2013. The unemployment rate for the area peaked in 2009 at ten percent; by 2013 it had decreased to six percent. The median wages were \$37,467 in 2013, over \$1,000 higher than the state average of \$36,056.

Region 6 is served by two of Alabama's fourteen public universities, the University of Alabama at Birmingham (UAB) and the University of Montevallo (UM). UAB has experienced dramatic growth in its student population from 14,951 in 2000 to 21,169 in 2013. Additionally, the number of degrees awarded has increased from 2,738 to 3,882. Although state appropriations have increased by approximately \$15,000,000, the sharp rise in student enrollments translates into a decrease in the amount of state appropriations per student from \$16,258 in 2000 to \$12,208 in 2013.

The University of Montevallo (UM) has experienced steady growth in its student enrollments from 3,0fourteen in 2000 to 3,482 in 2013. During this same period, unfortunately, the number of degrees awarded decreased from 610 to 491. As state appropriations have decreased for this college by approximately \$2,000,000, given the enrollment growth, the amount of state appropriations per student has decreased

Table 3.1H - Region 6 - Birmingham Region - Key Variables

<i>Year</i>	<i>Population</i>	<i>Stable Operating Revenue (SOR)</i>	<i>Year-to-Year % Change</i>	<i>ln(SOR)</i>	<i>Degrees Granted</i>	<i>Number of Students</i>	<i>Per-Capita Income</i>	<i>Unemployment Rate</i>
2000	1,052,238	\$1,612,132,614	N/A	21.2	3,348	N/A	\$34,654	3.70%
2001	1,060,076	\$1,700,479,065	5.50%	21.25	3,435	22,523	\$34,737	3.80%
2002	1,064,480	\$1,763,288,868	3.70%	21.29	3,449	20,882	\$35,641	4.80%
2003	1,072,415	\$1,813,429,399	2.80%	21.32	3,287	23,099	\$36,055	4.90%
2004	1,080,206	\$1,933,813,562	6.60%	21.38	3,410	23,984	\$36,677	4.70%
2005	1,088,303	\$1,842,512,233	-4.70%	21.33	3,604	23,994	\$36,524	3.70%
2006	1,100,286	\$1,917,954,297	4.10%	21.37	3,545	23,698	\$36,979	3.70%
2007	1,108,672	\$1,994,337,017	4.00%	21.41	3,573	23,454	\$37,477	3.30%
2008	1,117,608	\$2,467,534,932	23.70%	21.63	3,767	22,874	\$37,092	4.70%
2009	1,131,070	\$2,423,385,422	-1.80%	21.61	3,782	22,948	\$37,493	9.90%
2010	1,128,047	\$2,565,548,636	5.90%	21.67	4,294	23,888	\$37,595	8.50%
2011	1,131,325	\$2,538,706,201	-1.00%	21.65	4,514	24,121	\$37,307	8.30%
2012	1,134,915	\$2,211,434,733	-12.90%	21.52	4,607	24,356	\$37,328	7.00%
2013	1,140,300	\$2,230,754,193	0.90%	21.53	4,768	24,651	\$37,760	5.90%
2000 to 2013	8.40%	27.73%	27.73%	N/A	29.78%	N/A	9.00%	2.20%

Notes: (1) The following counties are included: Bibb, Blount, Chilton, Jefferson, St. Clair, Shelby, and Walker. (2) Public universities include: the University of Alabama at Birmingham (UAB) and the University of Montevallo (UM).

Data Sources: (1) Population data is from the U.S. Census Bureau. (2) Stable Operating Revenue is defined by the Delta Cost Project as "Total revenue including revenue from auxiliary, hospitals and other independent operations. Includes sum of tuition; federal, state, and local appropriations, grants, and contracts; auxiliaries; hospitals; and other independent operations; excludes revenues from affiliated entities, private gifts, grants, and contracts; investment return, endowment earnings." (3) Year to Year Change is developed by EPC's analysis of Delta Cost Project and IPEDS data. (4) ln(SOR) is the natural log of the Stable Operating Revenue variable. (5) Degrees Awarded data are from IPEDS. (6) Number of Students represents full year Unduplicated Headcount figures from IPEDS. 2000-2001 Unduplicated Headcount data are not available through IPEDS. (6) Per Capita Income is from the Bureau of Labor Statistics. (7) Unemployment rate data is for the entire State of Alabama from the Bureau of Labor Statistics. (8) All data representing US Dollars are adjusted for the 2013 CPI Inflation rate found @ www.bls.gov/data/inflation_calculator.htm.

from \$6,518 in 2000 to \$5,041 in 2013. Again, the ending of the Summer Pell Grant and new Pell Grant Eligibility Restrictions likely had a negative impact on UM.

Table 3.1H summarizes key data about Region 6. The Birmingham region's rate of Stable Operating Revenue grew by twenty-eight percent from 2000 to 2013. The number of students served and the number of degrees granted have increased as well, by over two thousand students and thirty percent, respectively, over the same period. The growth rate in the Stable Operating Revenue for Region 6 is about the same as the growth rate in student headcount. The significant increase in students served in the Birmingham Region--from 17,965 in 2000 to 24,651 in 2013--has resulted in a commensurate increase in degrees granted. Stable Operating Revenue, measured in constant 2013 dollars and student headcount have grown at about the same rate and consequently Stable Operating Revenue per student has been fairly constant, albeit at a much higher base due to the impact of the presence of UAB's Medical Center, one of the world's leading medical research hubs. Total Stable Operating Revenue (SOR) peaked in 2010 and per student SOR peaked in 2008. Per-capita income in the region has increased at about nine percent over the fourteen- year period from 2000 to 2013 while the unemployment rate has increased at two percent over the same period.

As in other regions of Alabama that have seen increases in the percentage of their elderly as a percentage of the total population, "Elderly Population" is the only independent variable that had a statistically significant effect on student headcount (see Table 3.2H, below). This may reflect that many of the students enrolled at UAB and UM are not from the Birmingham Region. Certainly, UM has positioned itself as Alabama's public liberal arts university. Similarly, a significant percentage of UAB's undergraduates are out-of-state or international students, and its graduate and profes-

Table 3.2H - Region 6 Results - Birmingham Region

Number of Students - Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.757 ^a	0.573	0.147	911.906

a. Predictors: (Constant), PcntElderly, PcntCollege, PcntWork, UnempRate, GrowRate, StableRev

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-324456.117	223714.883		-1.45	0.197
StableRev	1.40E-07	0	0.044	0.065	0.951
GrowRate	157253.613	142053.194	0.606	1.107	0.311
1 UnempRate	-27612.937	24516.96	-0.594	-1.126	0.303
PcntCollege	313645.067	473146.563	0.312	0.663	0.532
PcntWork	474912.698	327558.997	0.775	1.45	0.197
PcntElderly	155670.205	72103.747	0.881	2.159	0.074

a. Dependent Variable: Students

Notes: (1) The following counties are included: Bibb, Blount, Chilton, Jefferson, St. Clair, Shelby, and Walker. (2)Public universities include: the University of Alabama at Birmingham (UAB) and the University of Montevallo (UM).

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System

(<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

Table 3.3H - Region 6 Results - Birmingham Region***Number of Degrees Granted - Model Summary***

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.982 ^a	0.965	0.929	90.9814525

a. Predictors: (Constant), PcntElderly, PcntCollege, PcntWork, UnempRate, GrowRate, StableRev

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-21182.328	22320.169		-0.949	0.379
StableRev	2.65E-08	0	0.024	0.123	0.906
GrowRate	-8947.41	14172.733	-0.1	-0.631	0.551
1 UnempRate	-208.077	2446.072	-0.013	-0.085	0.935
PcntCollege	-22650.987	47206.118	-0.065	-0.48	0.648
PcntWork	31721.386	32680.758	0.15	0.971	0.369
PcntElderly	54531.597	7193.834	0.892	7.58	0

a. Dependent Variable: Degrees

Notes: (1) The following counties are included: Bibb, Blount, Chilton, Jefferson, St. Clair, Shelby, and Walker. (2) Public universities include: the University of Alabama at Birmingham (UAB) and the University of Montevallo (UM).

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

Table 3.4H - Region 6 Results - Birmingham Region***Per-Capita Income - Model Summary***

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.908 ^a	0.824	0.648	524.58996

a. Predictors: (Constant), PcntElderly, PcntCollege, PcntWork, UnempRate, GrowRate, StableRev

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-166245.605	128695.86		-1.292	0.244
StableRev	6.31E-07	0	0.223	0.507	0.63
GrowRate	83976.436	81718.559	0.361	1.028	0.344
1 UnempRate	-9035.922	14103.806	-0.217	-0.641	0.545
PcntCollege	-130577.177	272185.753	-0.145	-0.48	0.648
PcntWork	321150.39	188433.985	0.585	1.704	0.139
PcntElderly	109068.556	41478.929	0.689	2.629	0.039

a. Dependent Variable: PerCapIncome

Notes: (1) The following counties are included: Bibb, Blount, Chilton, Jefferson, St. Clair, Shelby, and Walker. (2) Public universities include: the University of Alabama at Birmingham (UAB) and the University of Montevallo (UM).

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

sional programs draw from around the world. The same result held for the regression of number of degrees awarded (Table 3.3H, following page) and per-capita income (Table 3.4H, following page).

REGION 7 (NORTHWEST ALABAMA)

Region 7 consists of the Northwest Alabama counties of Colbert, Franklin, Lauderdale, Marion, and Winston Counties. The region has experienced very slight regional population growth, from 265,033 in 2000 to 266,916 in 2013. The unemployment rate for the area peaked in 2009 at twelve percent; by 2013 it had decreased to seven percent. The median wages were \$34,452 in 2013, approximately \$1,600 lower than the statewide average of \$36,055.

Region 7 is serviced by one of Alabama's fourteen public universities, the University of North Alabama (UNA). UNA has experienced steady growth in its student population from 5,601 in 2000 to 8,450 in 2013. Additionally, the number of degrees awarded has increased from 987 to 1286. But as the enrollments have grown, state appropriations have decreased for this college and thus the amount of state appropriations per student has decreased from \$5,063 in 2000 to \$3,070 in 2013.

Table 3.1I summarizes key data about Region 7. The University of North Alabama's overall growth rate in Stable Operating Revenue has been positive, growing by over thirty percent from 2000 to 2013. The number of students served, and the number of degrees granted have increased as well, however, by fifty percent and thirty percent, respectively, over the same period. And again, we see that the growth rate in Stable Operating Revenue, as measured in 2013 constant dollars, is slower than the growth rate in student headcount from 5,601 in 2000 to 8,450 in 2013. The larger numbers means a slower increase in the number of degrees granted. Yet again, the Stable Operating Revenue and student headcount have not grown at the same rate, and con-

Table 3.1I - Region 7 - North Alabama - Key Variables

<i>Year</i>	<i>Population</i>	<i>Stable Operating Revenue (SOR)</i>	<i>Year-to-Year % Change</i>	<i>ln(SOR)</i>	<i>Degrees Granted</i>	<i>Number of Students</i>	<i>Per-Capita Income</i>	<i>Unemployment Rate</i>
2000	265,033	\$57,100,623		17.86	987	N/A	\$34,264	5.30%
2001	263,278	\$56,562,813	-0.90%	17.85	1,065	6,813	\$35,437	6.40%
2002	261,492	\$57,754,084	2.10%	17.87	1,048	6,835	\$34,082	8.50%
2003	260,528	\$60,021,119	3.90%	17.91	1,014	6,868	\$34,263	7.20%
2004	260,197	\$63,405,770	5.60%	17.97	1,072	7,162	\$35,157	6.30%
2005	260,256	\$66,455,606	4.80%	18.01	1,044	7,481	\$34,627	4.80%
2006	260,772	\$75,894,540	14.20%	18.14	1,081	8,062	\$34,846	4.40%
2007	261,373	\$84,562,787	11.40%	18.25	1,362	8,998	\$34,250	4.60%
2008	262,197	\$94,291,307	11.50%	18.36	1,310	9,501	\$34,284	6.50%
2009	262,548	\$81,784,144	-13.30%	18.22	1,483	8,870	\$35,020	12.20%
2010	268,440	\$82,849,722	1.30%	18.23	1,304	8,685	\$35,294	9.80%
2011	267,878	\$82,886,401	0.00%	18.23	1,275	8,691	\$34,758	9.60%
2012	267,259	\$81,793,216	-1.30%	18.22	1,299	8,631	\$34,701	8.50%
2013	266,916	\$82,686,239	1.10%	18.23	1,286	8,450	\$34,452	7.30%
2000 to 2013	0.70%	30.94%	30.94%	N/A	23.25%	N/A	0.50%	2.00%

Notes: (1) The following counties are included: Colbert, Franklin, Lauderdale, Marion, and Winston. (2) Public universities include: the University of North Alabama (UNA).

Data Sources: (1) Population data is from the U.S. Census Bureau. (2) Stable Operating Revenue is defined by the Delta Cost Project as "Total revenue including revenue from auxiliary, hospitals and other independent operations. Includes sum of tuition; federal, state, and local appropriations, grants, and contracts; auxiliaries; hospitals; and other independent operations; excludes revenues from affiliated entities, private gifts, grants, and contracts; investment return, endowment earnings." (3) Year to Year Change is developed by EPC's analysis of Delta Cost Project and IPEDS data. (4) ln(SOR) is the natural log of the Stable Operating Revenue variable. (5) Degrees Awarded data are from IPEDS. (6) Number of Students represents full year Unduplicated Headcount figures from IPEDS. 2000-2001 Unduplicated Headcount data are not available through IPEDS. (6) Per Capita Income is from the Bureau of Labor Statistics. (7) Unemployment rate data is for the entire State of Alabama from the Bureau of Labor Statistics. (8) All data representing US Dollars are adjusted for the 2013 CPI Inflation rate found @ www.bls.gov/data/inflation_calculator.htm.

sequently, Stable Operating Revenue per student has declined from \$10,195 in 2000 to \$9,785 in 2014. Per-capita income in the region has been stagnant, increasing by only half a percentage point in fourteen years while at the same time the unemployment rate increased by two percent. The stagnant growth in per-capita income made it difficult, if not impossible to find a statistically significant relationship between any of the independent variables and per-capita income.

Stable Operating Revenue, as shown in Table 3.2I above had a highly significant effect on the number of students enrolled. In addition, the college-aged population in the region as a total percentage of the region's population had a significant effect on number of students. From a statistical standpoint it appears that the University of North Alabama is likely attracting many students from within its primary service delivery region.

Table 3.2I - Region 7 Results - North Alabama

<i>Number of Students - Model Summary</i>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.997 ^a	0.994	0.988	104.525

a. Predictors: (Constant), PcntElderly, PcntCollege, PcntWork, UnempRate, GrowRate, StableRev

<i>Coefficients^a</i>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2569.676	16852.853		0.152	0.884
StableRev	7.00E-05	0	0.919	10.255	0
GrowRate	-3237.507	5844.064	-0.025	-0.554	0.6
1 UnempRate	3661.588	1573.861	0.089	2.326	0.059
PcntCollege	-120078.945	59406.719	-0.126	-2.021	0.09
PcntWork	19743.05	30166.775	0.034	0.654	0.537
PcntElderly	-2054.921	11361.916	-0.012	-0.181	0.862

a. Dependent Variable: Students

Notes: (1) The following counties are included: Colbert, Franklin, Lauderdale, Marion, and Winston. (2) Public universities include: the University of North Alabama (UNA).

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

The only independent variable that had a statistically significant effect on number of degrees granted was the unemployment rate within the region (see Table 3.3I, following page). It appears that unemployment provides an incentive for individuals within the region to complete their college degrees.

As noted in the introduction to this region, because there has not been any significant increase in per-capita income within Region 7, we did not expect to find a statistical relationship between the independent variables and per-capita income. This expectation was borne out as shown in Table 3.4I on the following page, where the R-squared was only 0.360 and none of the independent variables were significant.

Table 3.3I - Region 7 Results - North Alabama**Number of Degrees Granted - Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.956 ^a	0.913	0.826	63.9669682

a. Predictors: (Constant), PcntElderly, PcntCollege, PcntWork, UnempRate, GrowRate, StableRev

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	10829.797	10313.534		1.05	0.334
StableRev	5.58E-06	0	0.446	1.336	0.23
GrowRate	768.189	3576.424	0.036	0.215	0.837
1 UnempRate	3385.321	963.165	0.503	3.515	0.013
PcntCollege	-56920.696	36355.46	-0.365	-1.566	0.168
PcntWork	-8709.631	18461.329	-0.091	-0.472	0.654
PcntElderly	5955.676	6953.215	0.217	0.857	0.425

a. Dependent Variable: Degrees

Notes: (1) The following counties are included: Colbert, Franklin, Lauderdale, Marion, and Winston. (2) Public universities include: the University of North Alabama (UNA).

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

Table 3.4I - Region 7 Results - North Alabama**Per-Capita Income - Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.600 ^a	0.36	-0.279	489.44318

a. Predictors: (Constant), PcntElderly, PcntCollege, PcntWork, UnempRate, GrowRate, StableRev

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	29210.907	78913.994		0.37	0.724
StableRev	-4.20E-05	0	-1.19	-1.312	0.237
GrowRate	33245.076	27365.006	0.559	1.215	0.27
1 UnempRate	4659.011	7369.653	0.245	0.632	0.551
PcntCollege	-265313.376	278173.759	-0.603	-0.954	0.377
PcntWork	45959.745	141256.837	0.171	0.325	0.756
PcntElderly	45165.109	53202.517	0.584	0.849	0.428

a. Dependent Variable: PerCapIncome

Notes: (1) The following counties are included: Colbert, Franklin, Lauderdale, Marion, and Winston. (2) Public universities include: the University of North Alabama (UNA).

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

REGION 8 (HUNTSVILLE REGION)

Region 8, the Huntsville Region, consists of the counties of Cullman, DeKalb, Jackson, Limestone, Madison, Marshall, and Morgan. The region has experienced a large regional population growth, from 731,532 in 2000 to 855,059 in 2013, an increase of seventeen percent in fourteen years. The unemployment rate for the area peaked in 2009 at ten percent, and by 2013 had decreased to six percent. Median wages were \$38,225 in 2013, over \$2,000 higher than the state average of \$36,055.

Region 8 is serviced by three of Alabama's fourteen public universities, Alabama A&M (AAM), the University of Alabama in Huntsville (UAH), and Athens State University. AAM has remained stagnant in its student population from 5,523 in 2000 to 5,513 in 2013, while the number of degrees awarded has decreased from 967 to 825. As state appropriations have decreased for AAM by more than \$3,000,000, the amount of state appropriations per student has decreased from \$7,680 in 2000 to \$7,135 in 2013.

UAH has experienced steady growth in its student population from 6,563 in 2000 to 8,728 in 2013. Additionally, the number of degrees awarded has increased from 995 to 1,571. As state appropriations have decreased for UAH by approximately \$5,000,000, the amount of state appropriations per student has decreased too, from \$7,264 in 2000 to \$4,894 in 2013.

Athens State University has experienced steady growth in its student population from 2,662 in 2000 to 4,700 in 2013. However, the number of degrees awarded has remained stagnant from 910 to 907. As state appropriations have remained stagnant for Athens State while its student enrollments have increased, the amount of state appropriations per student has decreased from \$4,248 in 2000 to \$2,378 in 2013.

Table 3.1J - Region 8 - Huntsville Region - Key Variables

<i>Year</i>	<i>Population</i>	<i>Stable Operating Revenue (\$OR)</i>	<i>Year-to-Year % Change</i>	<i>ln(\$OR)</i>	<i>Degrees Granted</i>	<i>Number of Students</i>	<i>Per-Capita Income</i>	<i>Unemployment Rate</i>
2000	731,532	\$253,887,783	N/A	19.35	2,872	N/A	\$38,179	4.10%
2001	738,454	\$254,917,671	0.40%	19.36	2,903	18,559	\$37,918	4.60%
2002	743,862	\$281,060,893	10.30%	19.45	2,685	19,000	\$38,381	5.50%
2003	750,955	\$288,281,003	2.60%	19.48	2,600	18,757	\$38,828	5.30%
2004	756,683	\$309,094,975	7.20%	19.55	2,816	19,696	\$38,980	5.00%
2005	765,579	\$314,017,667	1.60%	19.56	2,869	21,341	\$38,624	3.80%
2006	777,680	\$342,464,914	9.10%	19.65	2,880	19,341	\$39,115	3.50%
2007	789,711	\$363,901,605	6.30%	19.71	2,832	19,478	\$38,709	3.20%
2008	803,061	\$365,613,828	0.50%	19.72	2,916	19,512	\$38,034	4.40%
2009	818,004	\$339,444,569	-7.20%	19.64	3,029	19,662	\$38,889	9.50%
2010	834,844	\$364,369,617	7.30%	19.71	2,891	20,193	\$39,327	8.00%
2011	844,189	\$323,604,777	-11.20%	19.6	3,235	20,146	\$38,586	8.30%
2012	849,150	\$327,160,177	1.10%	19.61	3,171	19,256	\$38,738	7.30%
2013	855,059	\$363,486,637	11.10%	19.71	3,313	18,941	\$38,225	6.00%
2000 to 2013	16.90%	30.15%	30.15%	N/A	13.31%	N/A	0.10%	1.90%

Notes: (1) The following counties are included: Cullman, DeKalb, Jackson, Limestone, Madison, Marshall, and Morgan. (2) Public universities include: Alabama A&M University (AAM), the University of Alabama in Huntsville (UAH), and Athens State University.

Data Sources: (1) Population data is from the U.S. Census Bureau. (2) Stable Operating Revenue is defined by the Delta Cost Project as "Total revenue including revenue from auxiliary, hospitals and other independent operations. Includes sum of tuition; federal, state, and local appropriations, grants, and contracts; auxiliaries; hospitals; and other independent operations; excludes revenues from affiliated entities, private gifts, grants, and contracts; investment return, endowment earnings." (3) Year to Year Change is developed by EPC's analysis of Delta Cost Project and IPEDS data. (4) ln(\$OR) is the natural log of the Stable Operating Revenue variable. (5) Degrees Awarded data are from IPEDS. (6) Number of Students represents full year Unduplicated Headcount figures from IPEDS. 2000-2001 Unduplicated Headcount data are not available through IPEDS. (7) Per Capita Income is from the Bureau of Labor Statistics. (8) Unemployment rate data is for the entire State of Alabama from the Bureau of Labor Statistics. (9) All data representing US Dollars are adjusted for the 2013 CPI Inflation rate found @ www.bls.gov/data/inflation_calculator.htm.

Table 3.1J summarizes key data about Region 8. The Huntsville Region's overall growth rate in Stable Operating Revenue has been positive, thirty percent from 2000 to 2013. This growth rate exceeded the grow rates for both student headcount and degrees granted. The number of students served and the number of degrees granted have increased at a healthy twenty-eight percent and fifteen percent, respectively, over the same period. Like the growth in student headcount in some of the other regions the increase in students served, the unduplicated headcount enrollment increase from fourteen,748 in 2000 to 18,941 in 2013 has resulted in a slower increase in the number of degree granted. The growth rate in Stable Operating Revenue, measured in constant dollars, was faster than the growth rate in student headcount and this resulted in an increase in Stable Operating Revenue per student. Stable Operating Revenue per student has grown from \$17,215 in 2000 to \$19,190 in 2014. Per-capita income in the region has been stagnant, however, increasing by only one tenth of one percent in fourteen years while at the same the unemployment rate has increased to just under two percent. Again, the stagnant growth in per-capita income made it difficult, if not impossible to find a statistically significant relationship between any of the independent variables and per-capita income.

None of the independent variables used in Region 8 were found to have a statistically significant effect on number of students enrolled or per-capita income (see Table 3.2J and Table 3.4J). The region experienced no significant growth in per-capita income, which means that increases in the independent variables had no effect on per-capita income. In addition, the increase in the unemployment rate does not appear to have provided a sufficient incentive that would have resulted in a statistically discoverable increase in the number of students enrolled.

Table 3.2J - Region 8 Results - Huntsville Region

Number of Students - Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.646 ^a	0.417	-0.165	789.983	

a. Predictors: (Constant), PcntElderly, GrowRate, PcntWork, UnempRate, PcntCollege, StableRev

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	-160941.309	124565		-1.292	0.244
StableRev	1.76E-06	0	0.086	0.094	0.928
GrowRate	-11849.727	128451.643	-0.079	-0.092	0.93
1 UnempRate	-5303.526	23928.589	-0.145	-0.222	0.832
PcntCollege	-140102.221	442124.986	-0.188	-0.317	0.762
PcntWork	316274.596	212609.454	0.697	1.488	0.187
PcntElderly	-18313.648	115055.479	-0.14	-0.159	0.879

a. Dependent Variable: Students

Notes: (1) The following counties are included: Cullman, DeKalb, Jackson, Limestone, Madison, Marshall, and Morgan. (2) Public universities include: Alabama A&M University, the University of Alabama in Huntsville (UAH), and Athens State University.

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System

(<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

Table 3.3J - Region 8 Results - Huntsville Region***Number of Degrees Granted - Model Summary***

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.953 ^a	0.909	0.818	86.2648791

a. Predictors: (Constant), PcntElderly, GrowRate, PcntWork, UnempRate, PcntCollege, StableRev

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-16288.405	13602.299		-1.197	0.276
StableRev	-3.75E-06	0	-0.661	-1.823	0.118
GrowRate	-4392.209	14026.714	-0.106	-0.313	0.765
1 UnempRate	-469.898	2612.964	-0.046	-0.18	0.863
PcntCollege	-120895.634	48279.343	-0.588	-2.504	0.046
PcntWork	42282.68	23216.613	0.337	1.821	0.118
PcntElderly	46011.567	12563.875	1.272	3.662	0.011

a. Dependent Variable: Degrees

Notes: (1) The following counties are included: Cullman, DeKalb, Jackson, Limestone, Madison, Marshall, and Morgan. (2)Public universities include: Alabama A&M University, the University of Alabama in Huntsville (UAH), and Athens State University.

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

Table 3.4J - Region 8 Results - Huntsville Region***Per-Capita Income - Model Summary***

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.684 ^a	0.468	-0.065	427.11709

a. Predictors: (Constant), PcntElderly, GrowRate, PcntWork, UnempRate, PcntCollege, StableRev

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	9.588	67348.085		0	1
StableRev	1.09E-05	0	0.941	1.073	0.325
GrowRate	-17533.453	69449.462	-0.206	-0.252	0.809
1 UnempRate	9131.339	12937.379	0.441	0.706	0.507
PcntCollege	121559.974	239042.036	0.289	0.509	0.629
PcntWork	51357.082	114950.746	0.2	0.447	0.671
PcntElderly	-68429.197	62206.609	-0.924	-1.1	0.313

a. Dependent Variable: PerCapIncome

Notes: (1) The following counties are included: Cullman, DeKalb, Jackson, Limestone, Madison, Marshall, and Morgan. (2)Public universities include: Alabama A&M University, the University of Alabama in Huntsville (UAH), and Athens State University.

Data Source: (1) National Center for Education Statistics/Integrated Postsecondary Education Data System (<http://nces.ed.gov/ipeds/>). (2) United States Department of Labor/Bureau of Labor Statistics (<http://www.bls.gov>) (3) United States Census Bureau (<http://www.census.gov/data.html>)

However, as shown in Table 3.3J on previous page, two variables did have a statistically significant effect on the number of degrees awarded. The model explained 90.9 percent of the variation in the dependent variable, number of degrees granted. The two significant independent variables were the percent of the region's population that was of college age and the percent elderly. The regression coefficient for the college-aged population was negative indicating the increases in the percentage of college-aged individuals in the region had a negative effect on degrees awarded; they may be attending college but not graduating. The elderly population percentage regression coefficient has a positive sign indicating. Recall that the elderly population and school aged population percentages were highly and negatively correlated. What the model may be uncovering is not that more elderly are attending college and graduating but that as the elderly population increases the school aged population decreases. School aged students have parents and as this population cohort decreases in size the parents may have the ability to finish degrees that they had to postpone. Thus the model may be uncovering the effect of returning students finishing degrees. While the model doesn't confirm this hypothesis, it may warrant further study within this region so that efforts can be undertaken to serve this potential market.study within this region so that efforts can be undertaken to serve this potential market.

End Notes

¹State Higher Education Executive Officers (2014, March 29). “State Higher Education Finance, FY2013.” Retrieved at <http://www.sheeo.org/resources/publications/shef-percentE2percent80percent94-state-higher-education-finance-fy13>

²Mincer, J. “Schooling and Earnings,” in Mincer (Ed.). *Schooling, Experience, and Earnings* (Cambridge, MA: National Bureau of Economic Research, 1974).

³Page, J. “The East Asian Miracle: Four Lessons for Development Policy,” in Fischer, S. and Rotenberg, J.J. (Eds.), *NBER Macroeconomics Annual 1994*, Volume 9. (Boston: MIT Press). Retrieved January 7, 2015 at www.nber.org/books/fisc94-1

⁴This section draws upon data from the U.S. Department of Education/National Center for Education Statistics’ Integrated Postsecondary Education Data System database, and data from the Alabama Commission on Higher Education.

⁵The Carnegie Classifications of Institutions of Higher Education (2010). Retrieved at <http://carnegieclassifications.iu.edu/> Columbia Southern University, a totally online private for-profit institution, is classified as Master’s Large Program; with the vast majority of its students from out-of-state, it is excluded from this analysis.

⁶Fitch, G.G. (2015, February 24). “The Role of Post-Secondary Education in Improving the Educational Attainment of All Our Children.” Alabama Commission on Higher Education. ACHE analysis based on IPEDS GRS Surveys from 2009-10 thru 2013-14, calculation of 150% GRS for Bachelor’s or equivalent Degree-Seeking Students. Retrieved at <http://www.ache.state.al.us/Content/Commission%20Meetings/2015EDSummit.pdf>

⁷State Higher Education Executive Officers (2014, March 29). “State Higher Education Finance, FY2013.” Retrieved at <http://www.sheeo.org/resources/publications/shef-%E2%80%94state-higher-education-finance-fy13>

⁸Desrochers, D.M., & Hurlburt, S. (2014, July). “Trends in College Spending: 2000-2011.” Delta Cost Project. Washington, D.C.: American Institutes for Research. Retrieved at http://www.deltacostproject.org/sites/default/files/products/Delta%20Cost_Trends%20College%20Spending%202001-2011_07fourteenfourteen_rev.pdf

⁹State Higher Education Executive Officers, 2014. Net Tuition as a Percent of Public Higher Education Total Education Revenue, Alabama, Fiscal 1988-2013. Retrieved at <http://www.sheeo.org/sites/default/files/publications/Net%20Tuition%20as%20a%20Percent%20of%20Total%20Educational%20Revenue%20by%20State%201988-2013.pdf>

¹⁰Katsinas, S.G.; Bray, N.J.; Koh, J.P., and Grant, P.D. (2012, November). A Study of Pell Grants in Alabama. Commissioned by the Alabama Commission on Higher Education. Tuscaloosa, AL: The University of Alabama, Education Policy Center. Retrieved at http://uaedpolicy.ua.edu/uploads/2/1/3/2/21326282/alabama_pell_funding_.pdf

¹¹Brubacher, J.S., & Rudy, W. *Higher Education in Transition*, Fourth Edition. New Brunswick, NJ: Transaction Publishers, 1997 (original edition published in 1958 by Harper & Row).

¹²Ordinance of 1787. Passed July 13, 1787. An ordinance for the government of the territory of the United States, North-west of the river Ohio. Cf. *Journals of the Continental Congress*, v. 32, p. 334-343. Retrieved February 8, 2015 from [http://memory.loc.gov/cgi-bin/query/r?ammem/bdsbib:@field\(NUMBER+@band\(bdsdcc+22501\)\)](http://memory.loc.gov/cgi-bin/query/r?ammem/bdsbib:@field(NUMBER+@band(bdsdcc+22501))):

¹³Alabama Territory Act of 1817. Passed March 3, 1817. “An act to establish a separate territorial government for the eastern part of the Mississippi Territory,” to be called Alabama. *Journals of the fourteenth Congress*, 2nd Session, Ch. fourteen, p. 371-373. <http://memory.loc.gov/cgi-bin/ampage?collId=llsl&fileName=003/llsl003.db&recNum=412>

¹⁴An Act Respecting the Surveying and Sale of the Public Lands in the Alabama Territory. U.S. Statutes, Fifteenth Congress, Session 1, Chapter 126, p 466-467. April 20, 1818.

¹⁵Pickett, A.J. (1851). *Pickett’s History of Alabama*. Montgomery, AL: River City Publishing (originally published in 1851, this was reissued with a new forward and introduction in 2003).

¹⁶Sellers, J.B. *History of the University of Alabama*, Volume 1, 1818-1902. Tuscaloosa, AL: University of Alabama Press. p 8.

¹⁷IBID, p. 8-9.

¹⁸Thelin, J.R. *A History of American Higher Education*. Baltimore: The Johns Hopkins University Press, 2004. The dispute about which was the first state university between the Universities of Georgia and North Carolina is found on p. 45.

¹⁹The University of Alabama. History of UA. Retrieved February 8, 2015 at <http://www.ua.edu/history.html>

²⁰Land-Grant Colleges Act of 1862. (July 2, 1862). Statutes at Large, 37th Congress, 2nd Session, Ch. 130, p. 503-5. Retrieved at <http://memory.loc.gov/cgi-bin/ampage?collId=llsl&fileName=012/llsl012.db&recNum=536>

²¹Auburn University. History. Updated July 27, 2012. Retrieved February 8, 2015 at <http://www.auburn.edu/main/welcome/aboutauburn.html> The website notes “The university began, though, as the small, more humble East Alabama Male College, which was chartered in 1856 and opened its doors in 1859 as a private liberal arts institution...From 1861 to 1866 the college was closed because of the Civil War. The college had begun an affiliation with the Methodist Church before the war. Due to dire financial straits, the church transferred legal control of the institution to the state in 1872, making it the first land-grant college in the South to be established separate from the state university. It thus became the Agricultural and Mechanical College of Alabama.

²²About Auburn University. (2015, February 24). Retrieved at <http://www.auburn.edu/main/welcome/>

²³Flynt, Wayne. Alabama in the Twentieth Century. Tuscaloosa, AL: The University of Alabama Press. 2004 (p. 239).

²⁴The University of Alabama. Quick Facts: Did You Know? Retrieved February 24, 2015 at <http://www.ua.edu/quickfacts/know.html>

²⁵Second Morrill Act of 1890. (August 30, 1890). Ch. 841, 26 Stat. 417, 7 U.S.C. 322 et. seq. Retrieved February 8, 2015 at <http://www.csrees.usda.gov/about/offices/legis/secondmorrill.html>

²⁶Vejnar, R.J. (2008, June 2; updated 2013, July 11). “Land Grant Colleges in Alabama.” Encyclopedia of Alabama. Retrieved at http://genealogytrails.com/ala/madison/school_huntsvillenormal.html

²⁷Alabama A&M University. AAMU-at-a-glance. Retrieved on February 8, 2015 at <http://www.aamu.edu/aboutaamu/pages/aamu-at-a-glance.aspx>. At about this same time, in 1892, Tuskegee College, which had received direct appropriations from the State of Alabama, was formally separated and made independent, which is why it refers to itself as “an independent and state-related institution of higher education.” See Tuskegee University, History of Tuskegee University. Retrieved February 8, 2015 at http://www.tuskegee.edu/about_us/history_and_mission.aspx

²⁸Bibb, William W. Address to the First Session of the First General Assembly. Journal of the Legislative Council of the Alabama Territory. pp. 7-8. January 18, 1818.

²⁹Synnott, M.G. (2007, March fourteen; updated 2011, June 6). “Julia S. Tutwiler.” Encyclopedia of Alabama. Retrieved February 9, 2015 at <http://www.encyclopediaofalabama.org/article/h-1112>

³⁰University of Montevallo. (2015). “History.” Retrieved on February 9, 2015 at <http://www.montevallo.edu/about-um/um-at-a-glance/history-mission/>

³¹Arneson, R.H. (2008, November 4; updated 2012, June fourteen). “University of Montevallo.” Encyclopedia of Alabama. Retrieved on February 9, 2015 at <http://www.encyclopediaofalabama.org/article/h-1827>

³²Fritze, R.H.; Buckhardt, R.; Busick, S., and Love, S. (2010, November 30; updated 2012, October 31). “Athens State University.” Encyclopedia of Alabama. Retrieved February 9, 2015 at <http://www.encyclopediaofalabama.org/article/h-2982>

³³Athens State University. “Board of Trustees.” Retrieved February 9, 2015 at <http://www.athens.edu/board/>

³⁴Athens State University. Athens State University Receives State Approval to Offer Graduate Coursework. Press Release, December 5, 2014. Retrieved at <http://www.athens.edu/information/news.php>

³⁵Encyclopedia Britannica (2015, February 9). “American Missionary Association.” Retrieved February 9, 2015 at <http://www.britannica.com/EBchecked/topic/19996/American-Missionary-Association-AMA> Three antislavery societies merged to form the AMA in 1846.

³⁶Kaetz, J.P. (2010, April 13; updated 2010, September 13). “Lincoln School.” Encyclopedia of Alabama. Retrieved February 9, 2015 at <http://www.encyclopediaofalabama.org/article/h-2570>

³⁷Alabama State University. (February 9, 2015). “The ASU Legacy: Perseverance, Progress, and Promise.” Retrieved February 9, 2015 at <http://www.alasu.edu/about-asu/history--tradition/the-asu-legacy/index.aspx>

³⁸Alabama State University. (February 9, 2015). “fourteen8 Years of Leadership.” Retrieved February 9, 2015 at <http://www.alasu.edu/about-asu/history--tradition/fourteen8-years-of-leadership/index.aspx>

- ³⁹Alabama State University. Academics. Retrieved February 24, 2015 at <http://www.alasu.edu/academics/index.aspx>
- ⁴⁰Mullins, K., and Scott, H. (2013, December). ASU Today Magazine. Retrieved at file:///C:/Users/Steve/Downloads/4fourteen38_ASUTDY-DEC-2013_2_3_fourteen.pdf
- ⁴¹Lindley, A. (2011, January 13; updated December 15, 2014). "University of North Alabama." Encyclopedia of Alabama. Retrieved February 9, 2015 at <http://www.encyclopediaofalabama.org/article/h-3009>
- ⁴²Pace, T. (2013, September 10). "Gunn Broke UNA's Color Barrier 50 Years Ago Today." Courier Journal (Florence, AL). Retrieved February 4, 2015 at http://www.courierjournal.net/news/article_52f52168-1a1b-11e3-b4fe-0019bb2963f4.html
- ⁴³University of North Alabama. UNA Signs Historic Integrative Health Agreement with China-Based Shenqi Ethnic Medical College. August 13, 2013. Retrieved at <http://www.una.edu/pressroom/detail.php?id=758&date=2013-08-15>
- ⁴⁴University of North Alabama. President's Campus Communications, Volume 21, Number 2, May 1, 2014. Retrieved at <https://www.una.edu/administration/docs/campus-communications/May%202014.pdf>
- ⁴⁵University of North Alabama. Apply. Retrieved February 24, 2015 at <http://www.una.edu/>
- ⁴⁶College History Garden. (2014, November 25). "Alabama Colleges that have Closed, Merged, or Changed Names." Retrieved February 9, 2015 at <http://collegehistorygarden.blogspot.com/2014/11/alabama-colleges-that-have-closed.html>
- ⁴⁷Ayers Finley, A. (2010, June; updated 2011, September 23). "Jacksonville State University." Encyclopedia of Alabama. Retrieved February 9, 2015 at <http://www.encyclopediaofalabama.org/article/h-2597>
- ⁴⁸Jacksonville State University. \$11.67 Million Federal Grant Could Enable JSU's CORE Program to Go National. Press Release. January 30, 2014. Retrieved February 24, 2015 at <http://www.jsu.edu/news/articles/2014/01/11.67-million-federal-grant-could-enable-jsus-core-program-to-go-national.html>
- ⁴⁹JSU at a Glance. Retrieved February 23, 2015 at <http://www.jsu.edu/discover/at-a-glance.html>
- ⁵⁰Troy University. The History of Troy University. Retrieved February 12, 2015 at <http://www.troy.edu/history.html>
- ⁵¹Troy University. Get the Guide. Retrieved February 25, 2015 at http://stars.troy.edu/get_the_guide.html
- ⁵²Troy University. Troy University, Southern Union State Community College agreement signing. Press Release, August 26, 2014. Retrieved January 28, 2014 at <http://www.troy.edu/news/articles/2014/08/troy-university-southern-union-state-community-college-agreement-signing.html>
- ⁵³Troy University. Troy to Offer Unique Accelerated Law Program. January 16, 2015. Retrieved February 10, 2015 at <http://www.alabamaneews.net/news/troy-news/Troy-to-Offer-Unique-Accelerated-Law-Program-288860841.html>
- ⁵⁴Troy University. University expanding study abroad efforts. Press Release. March 27, 2014. Retrieved February 25, 2015 at <http://www.troy.edu/news/articles/2014/03/university-expanding-study-abroad-efforts.html>
- ⁵⁵Troy University. Troy University Chancellor honored with Confucius Institute Award. Press Release. December 17, 2014. Retrieved January 30, 2015 at <http://www.troy.edu/news/articles/2014/12/troy-university-chancellor-honored-with-confucius-institute-award.html>
- ⁵⁶Kaylor, N.H. (2007, August 10; updated 2013, July 12). "Troy University." Encyclopedia of Alabama. Retrieved February 9, 2015 at <http://www.encyclopediaofalabama.org/article/h-1267>
- ⁵⁷University of West Alabama. History of UWA. Retrieved January 30, 2015 at http://www.uwa.edu/History_of_UWA.aspx
- ⁵⁸University of West Alabama. "UWA, Mercedes-Benz unveil auto tech training facility. Retrieved January 27, 2015 at http://www.uwa.edu/News_Events__amp_Media/News_Archive/2015_UWA_Training_Facility.aspx
- ⁵⁹University of South Alabama. History of USA. Retrieved January 21, 2015 at <http://www.southalabama.edu/aboutusa/historyofusa.html>
- ⁶⁰University of South Alabama. Airbus Donates Large Aircraft Part to USA. Retrieved February 24, 2015 at <http://www.southalabama.edu/departments/publicrelations/pressreleases/2014/1107fourteenAirbus.html>
- ⁶¹University of South Alabama. Airbus Exe Jean Botti to Speak at Spring 2014 Commencement. Retrieved February 23, 2015 at <http://www.southalabama.edu/departments/publicrelations/pressreleases/2014/botticomment.html>

⁶²University of South Alabama. About USA. Retrieved January 1, 2015 at <http://www.southalabama.edu/aboutusa/historyofusa.html#sthash.TuEeaL77.dpuf>

⁶³Alabama Legislature. Act Number 255, chartering the Medical College of Alabama. January 30, 1860.

⁶⁴University of Alabama at Birmingham. A Chronological History. Retrieved February 25, 2015 at <http://www.uab.edu/archives/chron>

⁶⁵University of Alabama at Birmingham. UAB's federal research funding up significantly. Press Release. December 17, 2014. Retrieved at <http://www.uab.edu/news/innovation/item/5609-uab-s-federal-research-funding-up-significantly>

⁶⁶The University of Alabama at Birmingham. UAB 2012 Financial Report for 2012, Introduction to UAB. Retrieved February 25, 2015 at <http://www.contentedits.com/img.asp?id=32233>

⁶⁷University of Alabama in Huntsville. About UAH. Retrieved February 25, 2015 at <http://www.uah.edu/about/>

⁶⁸University of Alabama in Huntsville. Brain Power, Research Universities Develop Intellectual Talent for Workforce. President's Annual Report 2014. Retrieved at http://www.uah.edu/images/administrative/president/annual-report/UAH_Annual_Report_2014.pdf

⁶⁹Adams, G. Travis. Auburn University at Montgomery (AUM). Encyclopedia of Alabama. Retrieved February fourteen, 2015 at <http://www.encyclopediaofalabama.org/article/h-3334>

⁷⁰Auburn University at Montgomery. About AUM. Retrieved February 26, 2015 at <http://www.aum.edu/about-aum>

⁷¹Auburn University at Montgomery. Fall Enrollment Semester System, Fall 2005 to Fall 2014. Retrieved February 26, 2015 at <http://www.aum.edu/docs/default-source/OIE/historical-enrollment-2014.pdf?sfvrsn=2>

⁷²Alabama Department of Commerce (2014), cited in The Birmingham News (March 31, 2015), D.K. Azok, at http://www.al.com/business/index.ssf/2015/03/alabama-made_vehicles_exported.html#incart_river

⁷³Economic Development Partnership of Alabama, "Regional Engineering Colleges." Retrieved March 30, 2015 at <http://www.edpa.org/wp-content/uploads/Regional-Engineering-Colleges.pdf>

⁷⁴Lumina Foundation for Education (2014). Strengthening the Nation through Higher Education. See also United States Census Bureau (2013). The 2012 Statistical Abstract

⁷⁵Mincer, J. "Schooling and Earnings," in Mincer (Ed.). Schooling, Experience, and Earnings (Cambridge, MA: National Bureau of Economic Research, 1974).

⁷⁶Spitzer, J. J. (1982). A primer on Box-Cox estimation. See also Review Of Economics & Statistics, 64(2), 307; AND Weerts, D. J., & Ronca, J. M. (2012). Understanding differences in state support for higher education across states, sectors, and institutions: A longitudinal study. Journal Of Higher Education, 83(2), 155-185; AND Pantuosco, L., Ullrich, L., & Pierce, B. (2013). Do states with levels of higher education spending graduate more students? Is the value of spending observable?. International Journal Of Business & Public Administration, 10(2), 152-165.

⁷⁷IBID, Page, 1994; p. 46. See also Mincer, J.A. "Schooling and Earnings," in Mincer (Ed.). Schooling, Experience, and Earnings (Cambridge, MA: National Bureau of Economic Research, 1974).

⁷⁸Page, J. "The East Asian Miracle: Four Lessons for Development Policy," in Fischer, S. and Rotenberg, J.J. (Eds.), NBER Macroeconomics Annual 1994, Volume 9. (Boston: MIT Press). Retrieved January 7, 2015 at www.nber.org/books/fisc94-1

⁷⁹Delta Cost Project. Delta Data Dictionary. (Washington, D.C.: American Institutes for Research, 2011). Retrieved on March 3, 2015 at nces.ed.gov/ipeds/deltacostproject/

⁸⁰Katsinas, S.G., and Bray, N.J., with Koh, J.P., & Grant, P.D. "A Study of Pell Grants in Alabama." A study commissioned by the Alabama Commission on Higher Education (Tuscaloosa, AL: Education Policy Center, The University of Alabama)

INSTITUTION SUMMARIES

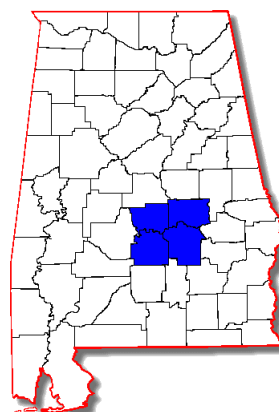
The following data is from the Bureau of Labor Statistics, Census Bureau and Integrated Postsecondary Education Data System, and analyzed by the Education Policy Center at The University of Alabama. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

PREPARED BY THE UNIVERSITY OF ALABAMA EDUCATION POLICY CENTER
FOR THE HIGHER EDUCATION PARTNERSHIP OF ALABAMA

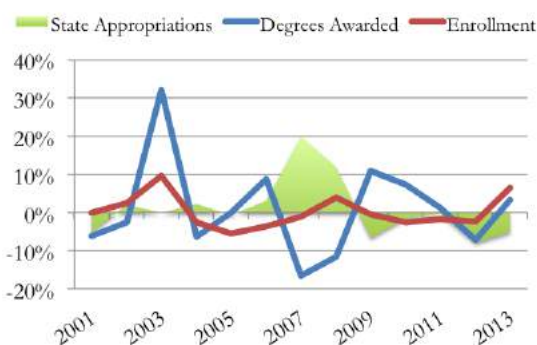
ASU ALABAMA STATE UNIVERSITY

“The impact of Alabama State University on the nation is profound. The generations of educators it has produced have inspired and uplifted knowledge to countless numbers of students across America. Its recently recognized cutting-edge scientific achievements are providing answers in the arenas of cancer and virus research around the world. ASU has made amazing contributions to the theatre arts in Hollywood and on Broadway. ASU has made myriad benefits and positive impact to Alabama and humankind.”

—Dr. Gwendolyn E. Boyd, President



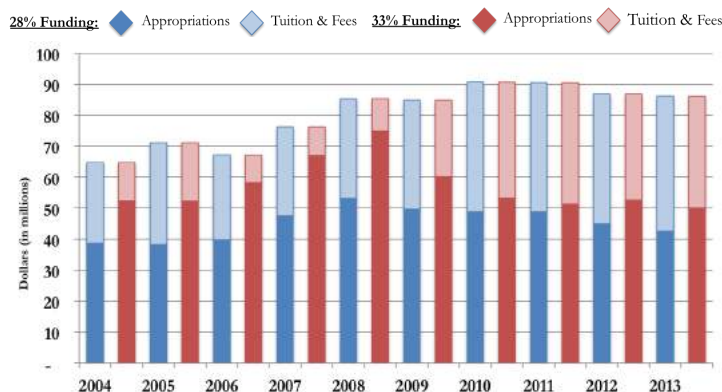
ANNUAL PERCENTAGE CHANGE IN...



Alabama State University is located in Region 4 (Montgomery). It is a Master’s University-Large Program in the 2010 Basic Classification of the Carnegie Foundation for the Advancement of Teaching, and is a federally-designated Historically Black College and University.

From 2001 to 2013, enrollments and degrees awarded have grown at ASU, from 6,664 to 6,782, and from 671 to 750, respectively. ASU’s academic profile is designed to serve the capitol region and Alabama’s underserved Black Belt.

MISSING STATE APPROPRIATIONS RESULT IN HIGHER TUITION & FEES



The enrollment growth at ASU was *not* accompanied by corresponding growth in state appropriations per student. While enrollments grew, state appropriations per student went from \$5,571 in 2001 to \$6,290 in 2013.

There has been a dramatic shift in key components comprising ASU’s Stable Operating Revenue, which includes state funding, tuition, and other revenue. SOR increased from \$85,259,118 in 2000 to \$121,409,165 in 2013, but state appropriations as a percentage of SOR *decreased* from 46% in 2008 to 35% in 2013. State appropriations fell by \$34 million since 08.

In FY2013, ASU received \$42,658,142 from the State of Alabama. If ASU and other public universities received what they used to get from Education Trust Fund--33%, and not 28%--it would mean a total of **\$50,144,861** or **\$7,486,719** in FY2013. The missing revenue must be generated from other sources, including tuition.

REGION 4 INSTITUTION - ALABAMA STATE UNIVERSITY

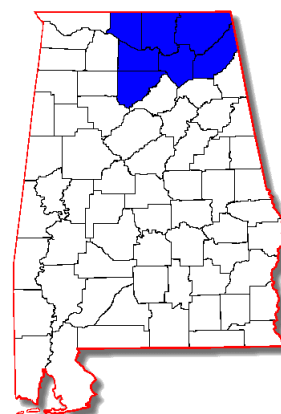
Year	State Appropriations	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	State Appropriations per Student
2001	\$37,128,297	\$84,568,838	44%	671	\$5,571
2004	\$38,687,661	\$97,961,451	39%	810	\$5,300
2008	\$53,198,024	\$165,968,861	32%	650	\$7,780
2013	\$42,658,142	\$121,409,165	35%	750	\$6,290

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

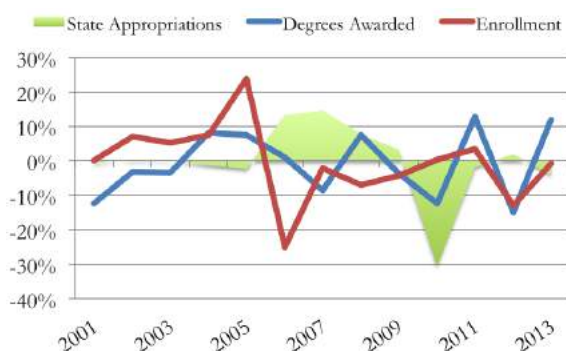


ALABAMA A&M UNIVERSITY

“Alabama A&M University has achieved an enviable record of success in degree completions for minorities in STEM fields and education. The university ranks 5th in bachelor’s, 3rd in master’s, and 2nd in doctoral degrees awarded to minorities in agriculture fields.” --Dr. Andrew Hugine, Jr., President



ANNUAL PERCENTAGE CHANGE IN...



Alabama A&M University is located in Region 8

(Huntsville). It is a Master’s

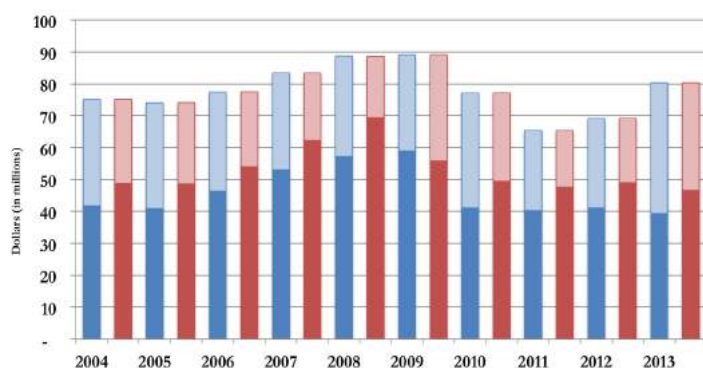
University, Large Program in the 2010 Basic Classification of the Carnegie Foundation for the Advancement of Teaching, and is a federally designated Historically Black College and University.

From 2001 to 2013, A&M has seen dramatic growth and decline in enrollments, from 6,310 (2001) to 9,451 (2005), then down to 5,513 (2013). Degrees awarded at A&M followed a very similar path. This reflects the one-time funding from the State of Alabama for the *Knight* desegregation case, and

federal Pell cuts since 2012. State appropriations per student at A&M went from \$6,681 in 2001 to \$7,135 in 2013.

MISSING STATE APPROPRIATIONS RESULT IN HIGHER TUITION & FEES

28% Funding: Appropriations (Blue), Tuition & Fees (Light Blue) 33% Funding: Appropriations (Red), Tuition & Fees (Pink)



There has been a dramatic shift in key components comprising A&M’s Stable Operating Revenue, which includes state funding, tuition, and other revenue. While SOR grew from \$104,682,294 in 2000 to \$129,396,550 in 2013, state appropriations as a percentage of SOR *decreased* from 40% to 30%. Most of the decline--\$17.7 million--has occurred since 2008.

In FY2013, A&M received \$39,335,736, from the State of Alabama. If A&M and other public universities received what they used to get from Education Trust Fund--33%, and not 28%--it would mean a total of **\$46,563,085**, or an additional **\$7,227,349** in FY2013. The missing revenue must be generated from other sources, including tuition.

REGION 8 INSTITUTION - ALABAMA A&M UNIVERSITY

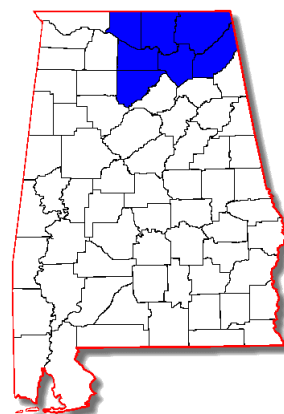
Year	State Appropriations	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	State Appropriations per Student
2001	\$42,154,746	\$106,822,171	39%	848	\$6,681
2004	\$41,838,811	\$128,561,946	33%	856	\$5,478
2008	\$57,115,257	\$137,662,868	41%	912	\$8,876
2013	\$39,335,736	\$129,396,550	30%	825	\$7,135

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

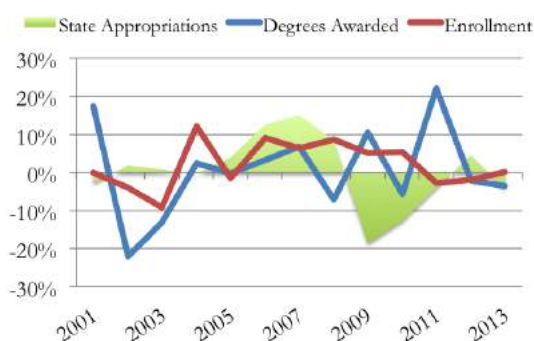


ATHENS STATE UNIVERSITY

“As Athens State University charts a new future with an independent board of trustees, the University will be especially sensitive to meeting the long-term work-force needs of private businesses in the Tennessee Valley and public sector employers as well, such as Redstone Arsenal. The International Society of Logistics predicts the global marketplace has created a strong demand for logisticians and supply chain managers. In response, in 2014, Athens State created a new Master of Science in Global Logistics and Supply Chain Management.” --Dr. Robert K. Glenn, President



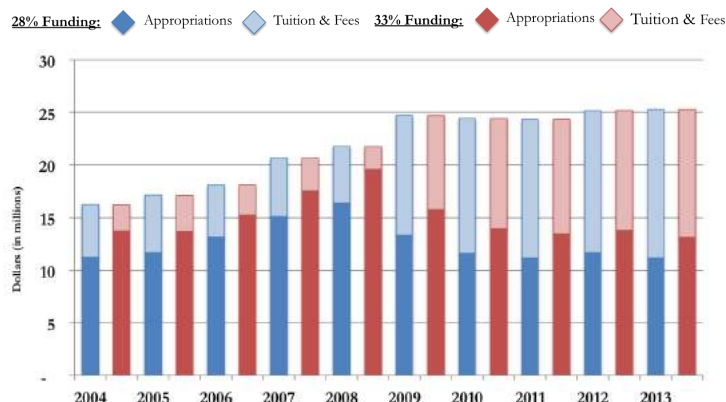
ANNUAL PERCENTAGE CHANGE IN...



Athens State University (Athens) is located in Region 8 (Huntsville), and is classified among Baccalaureate Colleges--Diverse Fields in the Carnegie Foundation for the Advancement of Teaching's 2010 Basic Classification. With creation of its own board of trustees in 2013, Athens is charting a new future, building upon its work with transfer students and online learning to reach older adults, to better serve Tennessee Valley businesses.

From 2001 to 2013, Athens has had growing enrollment, from 3,664 to 4,700 students. But this growth has *not* been accompanied by growing state appropriations. From 2001 to 2013, enrollments grew by 1000 students, while state appropriations *declined* from \$11.3 to \$11.2 million. State appropriations per student *fell* from \$3,002 in 2001 to \$2,378 in 2013.

MISSING STATE APPROPRIATIONS RESULT IN HIGHER TUITION & FEES



There has been a dramatic shift in key components comprising Athens' Stable Operating Revenue, which includes state funding, tuition, and other revenue. Athens' SOR increased from \$21,334,570 in 2000 to \$33,313,917 in 2013, but state appropriations as a percentage of SOR *decreased* from 53% in 2000 to 34% in 2013. State funds *fell* by about half (\$5 million) since 2008.

REGION 8 INSTITUTION - ATHENS STATE UNIVERSITY

Year	State Appropriations	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	State Appropriations per Student
2001	\$10,998,134	\$20,666,956	53%	1,068	\$3,002
2004	\$11,247,383	\$33,089,135	34%	740	\$3,143
2008	\$16,390,718	\$44,022,477	37%	756	\$3,688
2013	\$11,178,201	\$33,313,917	34%	907	\$2,378

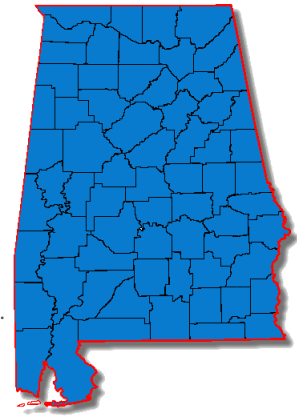
In FY2013, Athens received \$11,178,201 from the State of Alabama. If Athens and other public universities received what they used to get from Education Trust Fund--33%, and not 28%--it would mean a total of **\$13,133,178** or nearly **\$2 million** more in FY2013. The missing revenue must be generated from other sources, including tuition.

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.



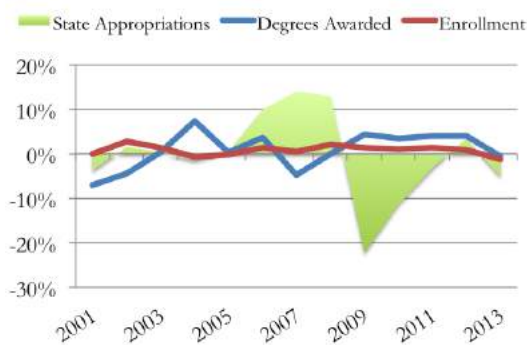
AUBURN UNIVERSITY

“Auburn uses the knowledge and skills it creates to benefit the people of Alabama and beyond... The distinguished Carnegie Foundation selected Auburn for the 2010 “Community Engagement Classification,” recognizing Auburn’s commitment to community partnership and public service through its mission of outreach.... There’s perhaps no better honor for our campus than to be recognized for helping others.” --Dr. Jay Gogue, President



Auburn University is designated “Research Universities/High Research Activity” in the 2010 Basic Classification of the Carnegie Foundation for the Advancement of Teaching, which has awarded AU its prestigious Elective Community Engagement Classification. Auburn

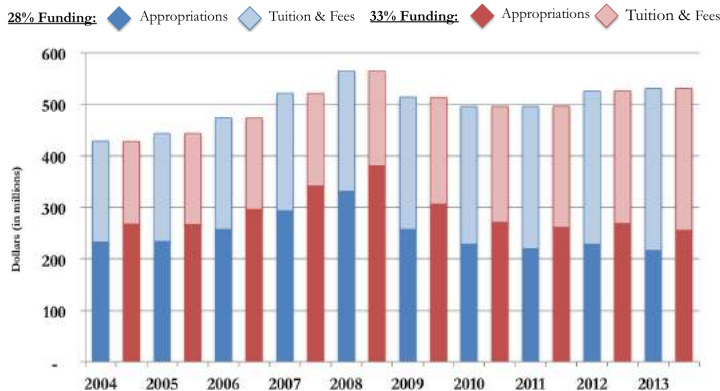
ANNUAL PERCENTAGE CHANGE IN...



University fulfills its state-wide land-grant mission by offering 140 undergraduate and graduate degree options, and through its extension service in every county of Alabama. Auburn enrolls 11% of all public and private 4-year students.

AU has seen dramatic growth from 2001 to 2013: Enrollments grew from 24,125 to 26,706, and degrees awarded from 4,731 to 5,601. Quality is on the rise—Auburn’s entering freshman class of 4,592 students had an average ACT score of 27.

MISSING STATE APPROPRIATIONS RESULT IN HIGHER TUITION & FEES



Since 2008, AU has seen a large shift in key components of its Stable Operating Revenue, which includes state funding, tuition, and other revenue. AU’s SOR was \$587,307,204 in 2001, \$791,471,212 in 2008, but fell to \$682,282,964 in 2013, a **decline** of \$109,188,248 or 13% in six years. SOR per capita grew as enrollments grew, from \$26,867 in 2000 to \$30,592 in 2008, then falling by \$5,000 to \$25,548 in FY2013.

In FY2013, Auburn received \$216,653,516 from the State of Alabama. If AU and other public universities received what they used to get from Education Trust Fund-33% and not 28% it would mean \$38.8 million **more** in 2013.

In FY2013, AU received \$24,913,712 from the State of Alabama. If AU and other public universities received what they used to get from Education Trust Fund--33%, and not 28%--it would mean a total of **\$26,266,356**, or **\$4,318,692** in FY2013. The missing revenue must be generated from other sources, including tuition.

REGION 5 INSTITUTION - AUBURN UNIVERSITY

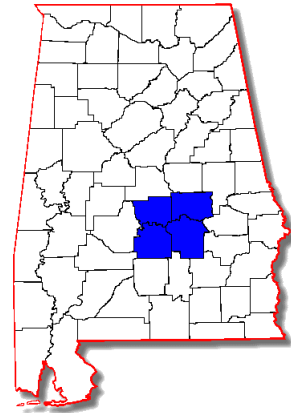
Year	State Appropriations	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	State Appropriations per Student
2001	\$232,446,247	\$585,209,146	40%	4,731	\$9,635
2004	\$233,098,141	\$658,674,537	35%	4,866	\$9,358
2008	\$330,998,488	\$791,471,212	42%	4,817	\$12,794
2013	\$216,653,516	\$682,282,964	32%	5,601	\$8,113

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

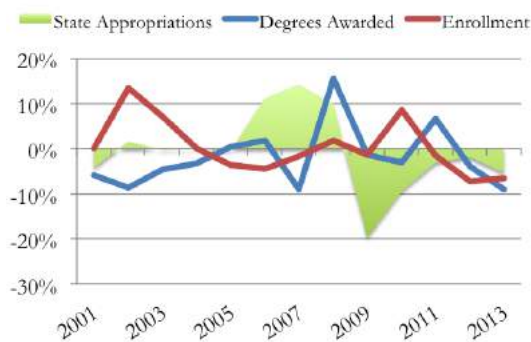
AUBURN UNIVERSITY AT MONTGOMERY

“The academic programs of Auburn University at Montgomery are designed to serve the businesses and people of the Capitol Region, in a manner that is seamless for students at Auburn University’s main campus. This commitment to Montgomery began with the very founding of AUM in the late 1960s, and lives today through programs like the River Region Healthy Minds Network, which seeks to provide better information on behavioral issues for decision-makers. We consider it a privilege for us to serve the Capitol of Dreams.”

—Dr. John G. Veres III, Chancellor



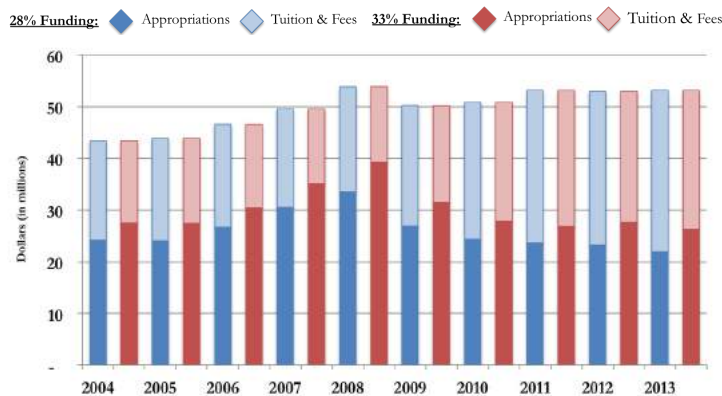
ANNUAL PERCENTAGE CHANGE IN...



Auburn University at Montgomery (AUM) is located in Region 4 (Montgomery) and is designated a Master’s University, Large Program in the 2010 Basic Classification of the Carnegie Foundation for the Advancement of Teaching.

AUM’s establishment in 1969 was an effort to expand opportunities in Alabama’s capital city, supported by the Montgomery Area Chamber of Commerce. AUM’s academic profile reflects this mission of service. AUM has seen steady student growth from 5,994 in 2001 to 6,173 in 2013.

MISSING STATE APPROPRIATIONS RESULT IN HIGHER TUITION & FEES



Enrollments at AUM grew even as state appropriations fell, from \$24,913,712 in 2000 to \$21,947,664 in 2013. State appropriations per AUM student fell from \$3,979 in 2001 to \$3,555 in 2013.

There has been a dramatic shift in key components comprising AUM’s Stable Operating Revenue, which includes state funding, tuition, and other revenue. While SOR grew from \$66,399,248 to \$75,142,864 from 2000 to 2013, state appropriations as a percentage of SOR **decreased** from 37% to 29%, with most of the fall **after** 2008.

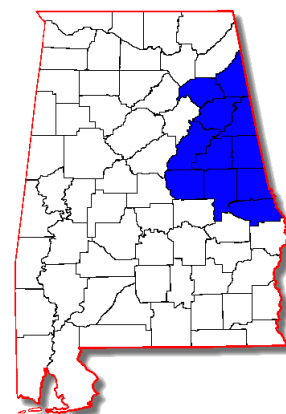
REGION 4 INSTITUTION - AUBURN UNIVERSITY AT MONTGOMERY

Year	State Appropriations	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	State Appropriations per Student
2001	\$23,850,132	\$62,010,524	38%	982	\$3,979
2004	\$24,133,970	\$63,611,196	38%	830	\$3,304
2008	\$33,570,763	\$85,965,763	39%	892	\$4,979
2013	\$21,947,664	\$75,142,864	29%	795	\$3,555

In FY2013, AUM received \$24,913,712 from the State of Alabama. If AUM and other public universities received what they used to get from Education Trust Fund--33%, and not 28%--it would mean a total of **\$26,266,356**, or **\$4,318,692** more in FY2013. The missing revenue must be generated from other sources, including tuition.

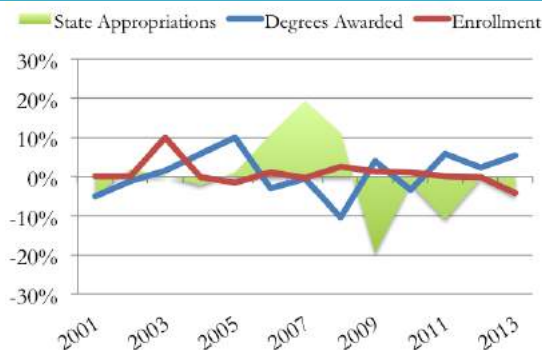
All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

JACKSONVILLE STATE UNIVERSITY



“We are proud of the great value--the academic excellence--we add to Alabama’s businesses through the quality education we deliver to students. Our entering freshman class average ACT/SAT scores are rising each year, from 19 in 2009 to 22.6 in fall of 2014. The Grade Point Average for all of our student-athletes this past fall semester was 3.11; just 2 of our 16 teams were below 3.0. We are pleased with our partnerships with Alabama Power and school districts across eastern Alabama.” --Dr. William Meehan, President

ANNUAL PERCENTAGE CHANGE IN...



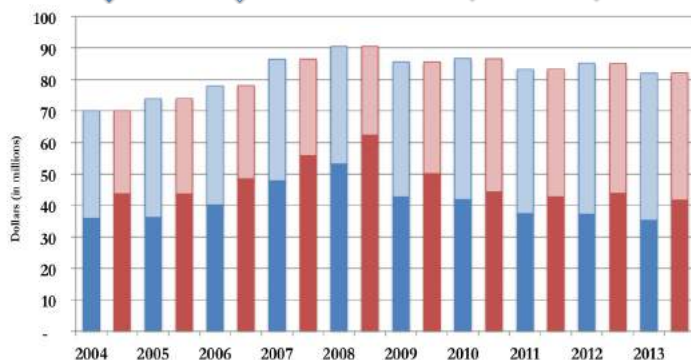
Jacksonville State

University is located in Region 5 (East Alabama), and is designated Master’s University, Large Program in the 2010 Basic Classification of the Carnegie Foundation for the Advancement of Teaching.

From 2001 to 2013, JSU has seen growth in enrollments and degrees awarded, from 9,938 to 10,895, and from 1,473 to 1,705, respectively. The academic quality of JSU is reflected in part by its increasing average ACT scores.

MISSING STATE APPROPS RESULT IN HIGHER TUITION & FEES

28% Funding: Appropriations Tuition & Fees 33% Funding: Appropriations Tuition & Fees



Enrollments at JSU grew even as state appropriations **decreased** by over \$2,000,000. State appropriations per student **fell** from \$3,618 in 2001 to \$3,241 in 2013.

There has been a dramatic shift in key components comprising JSU’s Stable Operating Revenue, which includes state funding, tuition, and other revenue. While SOR grew from \$75,002,672 in 2000 to \$103,725,307 in 2013, state appropriations as a percentage of SOR **decreased** from 50% to 34%. Most of the decline--\$18 million--has occurred since 2008.

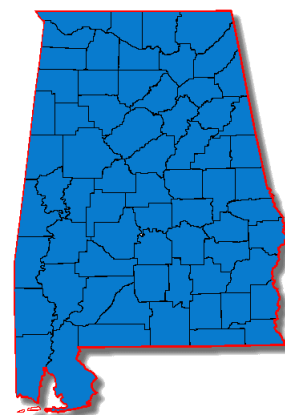
REGION 5 INSTITUTION - JACKSONVILLE STATE UNIVERSITY

Year	State Appropriations	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	State Appropriations per Student
2001	\$35,952,487	\$78,125,474	46%	1,473	\$3,618
2004	\$35,936,679	\$89,524,682	40%	1,565	\$3,292
2008	\$53,349,006	\$108,694,076	49%	1,486	\$4,800
2013	\$35,315,802	\$103,725,307	34%	1,705	\$3,241

In FY2013, JSU received \$35,315,802 from the State of Alabama. If JSU and other public universities received what they used to get from Education Trust Fund--33%, and not 28% it would have received of **\$41,787,384**, or an additional **\$6,471,582** in FY2013. The missing revenue must be generated from other sources, including tuition.

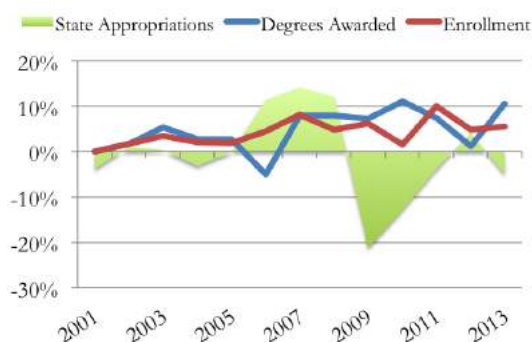


THE UNIVERSITY OF ALABAMA



“The key to a strong economy is an educated workforce. The most important thing The University of Alabama can do for our students is send them into the world with a degree. The most important thing we can do for our state is to increase the number of college graduates. If our state is going to compete in a global, knowledge based economy, we simply must have a college educated workforce. In the last five years, the University of Alabama has increased the number of degrees we grant by 33 percent. With the opening of the Shelby Quad, The University of Alabama will transform our university and our state through state-of-the-art facilities that enable us to attract world class faculty and the best and brightest students.” --Dr. Judy Bonner, Former President

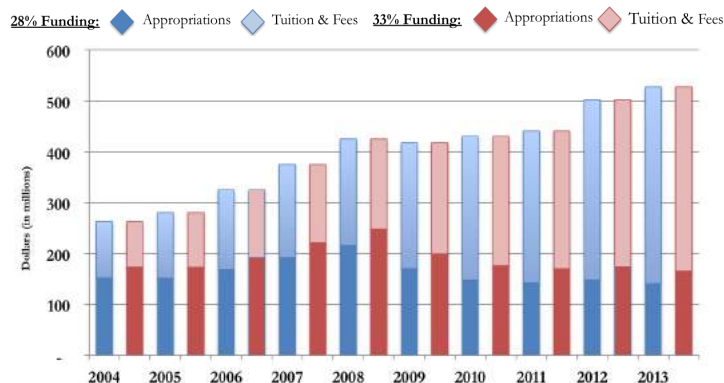
ANNUAL PERCENTAGE CHANGE IN...



The University of Alabama, located in Region 2 (West Alabama), is designated “Research Universities/ High Research Activity” in the 2010 Basic Classification of the Carnegie Foundation for the Advancement of Teaching, which has awarded UA its prestigious Elective Community Engagement Classification.

The state’s oldest university, founded in 1831, is also the largest, with 37,220 students, enrolling 15% of all public and private four-year university students statewide.

MISSING STATE APPROPRIATIONS RESULT IN HIGHER TUITION & FEES



UA has experienced dramatic enrollment growth from 2001 to 2013, rising from 21,973 to 37,220. Degrees awarded have increased, and academic quality is on the rise, with a third of the largest freshmen class in its history (6,856) entering with a 30 or higher average ACT. There has been a dramatic shift in key components comprising UA’s Stable Operating Revenue, which includes state funding, tuition, and other revenue. SOR per capita has **declined**--from \$22,358 in 2000 to \$19,235 in 2013. Most of the decline has occurred since 2008.

In FY2013, the University received \$140,699,901 from the State of Alabama. If UA and other public universities received what they used to get from Education Trust Fund-- 33%, and not 28%-- it would mean \$25,255,701 more per year. The missing revenue must be generated from other sources, including tuition.

REGION 2 INSTITUTION - THE UNIVERSITY OF ALABAMA

Year	State Appropriations	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	State Appropriations per Student
2001	\$154,808,169	\$436,570,319	35%	3,869	\$7,045
2004	\$151,781,186	\$451,821,401	34%	4,254	\$6,433
2008	\$215,768,814	\$646,344,561	33%	4,826	\$7,595
2013	\$140,699,910	\$715,939,698	20%	6,893	\$3,780

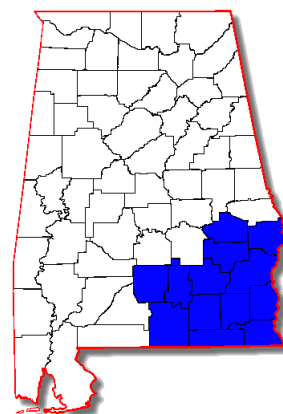
All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.



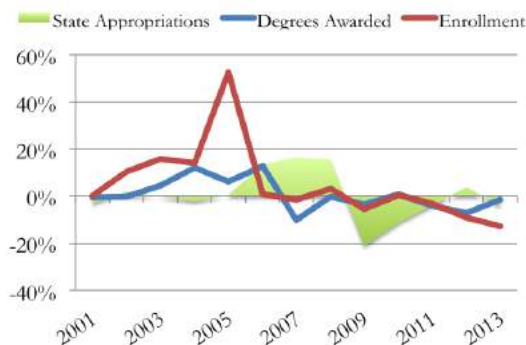
TROY UNIVERSITY

“Alabama’s businesses compete globally, which is why Troy University takes very seriously its globalization efforts. We strongly encourage our students from Alabama to study abroad as part of their Troy experience. Our faculty lead study abroad programs, and we host students from more than 70 countries on our campus. By being Alabama’s ‘international university’ Troy University contributes to Alabama as a global business and industry leader.”

--Dr. Jack Hawkins, Chancellor



ANNUAL PERCENTAGE CHANGE IN...

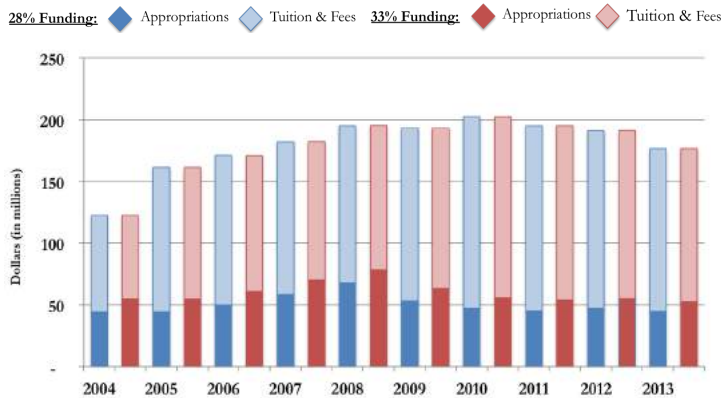


Troy University began

in 1887 when Troy State Normal School was established to train teachers for Alabama’s schools. For six decades, Troy University has been the largest higher education provider among Alabama’s universities to the U.S. Military. Campuses were separately accredited until 2005, when single unified accreditation began.

Known as Alabama’s “international university,” Troy seeks to prepare students to compete globally. With study abroad programs in each of its colleges, and an international engagement in its faculty tenure and promotion process, Troy enrolls 12% of all public and private 4-year students.

MISSING STATE APPROPRIATIONS RESULT IN HIGHER TUITION & FEES



Troy has seen dramatic growth. Enrollments **grew** to 29,109, while degrees awarded from 2000 to 2013 grew from 4,099 to 4,328, or 6%.

Since 2008, Troy University has seen a shift in key components of its Stable Operating Revenue, which includes state funding, tuition, and other revenue. While Troy’s SOR of \$135,068,539 in 2000 grew to \$275,167,166 in 2011, by 2013 it had declined to \$251,106,595. Troy’s SOR per capita fell even as enrollments grew. Troy’s SOR per capita fell from \$10,770 in 2008 to \$8,626 in 2013, or by 20%.

REGION 3 INSTITUTION - TROY UNIVERSITY

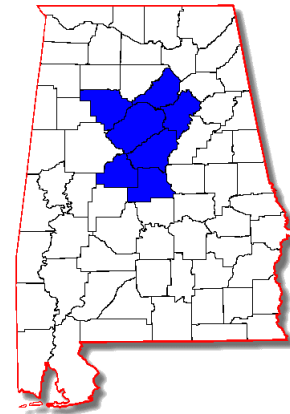
Year	State Appropriations	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	State Appropriations per Student
2001	\$44,452,752	\$135,552,572	33%	4,082	\$2,523
2004	\$44,159,487	\$182,768,396	24%	4,780	\$1,718
2008	\$67,579,387	\$238,727,487	28%	5,104	\$1,684
2013	\$44,923,086	\$251,106,595	18%	4,328	\$1,543

In FY2013, Troy received \$44,923,086 from the State of Alabama. If Troy and other public universities received what they used to get from Education Trust Fund--33%, and not 28%--it would mean \$7.6 million more per year. The missing revenue must be generated from other sources, including tuition.

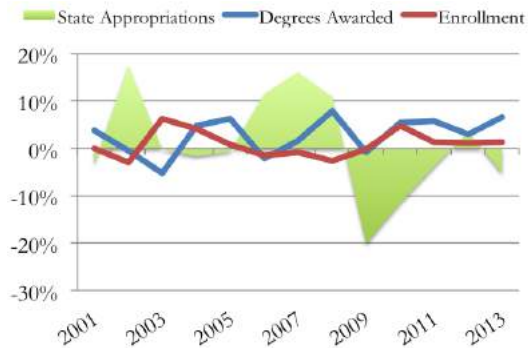
UNIVERSITY OF ALABAMA AT BIRMINGHAM

“As a leader in education, health care and research, and Alabama’s largest single-site employer with an annual economic impact exceeding \$5 billion — one of every 33 jobs in the state is supported by UAB — UAB has an expansive influence and a responsibility to our students, faculty and staff, as well as the city and state, and global health and wellness.”

--Dr. Ray L. Watts, President



ANNUAL PERCENTAGE CHANGE IN...

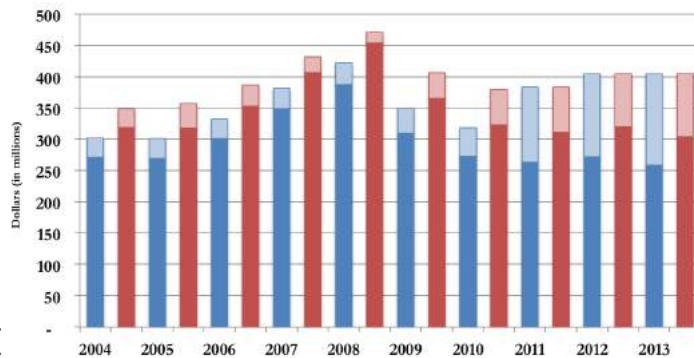


The University of Alabama at Birmingham is located in Region 6 (Birmingham). It is designated as a “Very High Research Activity” University in the 2010 Basic Classification of the Carnegie Foundation for the Advancement of Teaching, which awarded UAB its prestigious Elective Community Engagement Classification.

From 2001 to 2013, UAB has seen growth in enrollments and degrees awarded, from 18,959 to 21,169, and from 2,842 to 3,882, respectively. The academic quality of UAB is reflected in part by its increasing average ACT scores.

MISSING STATE APPROPRIATIONS RESULT IN HIGHER TUITION & FEES

28% Funding: Appropriations Tuition & Fees 33% Funding: Appropriations Tuition & Fees



Enrollments at UAB **grew** even as state appropriations decreased by \$15.3 million. State appropriations per student **fell** from \$12,402 in 2001 to \$12,208 in 2013.

There has been a dramatic shift in key components comprising UAB’s Stable Operating Revenue, which includes state funding, tuition, and other revenue. While SOR grew from \$1,569,480,757 in 2000 to \$2,181,639,177 in 2013, state appropriations as a percentage of SOR **decreased** from 15% to 12%. Most of the decline--\$129 million--has occurred since 2008.

REGION 6 INSTITUTION - UNIVERSITY OF ALABAMA AT BIRMINGHAM

Year	State Appropriations	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	State Appropriations per Student
2001	\$235,132,374	\$1,658,861,391	14%	2,842	\$12,402
2004	\$271,166,644	\$1,888,292,288	14%	2,807	\$13,345
2008	\$387,450,838	\$2,410,566,648	16%	3,202	\$19,878
2013	\$258,429,840	\$2,181,639,177	12%	3,882	\$12,208

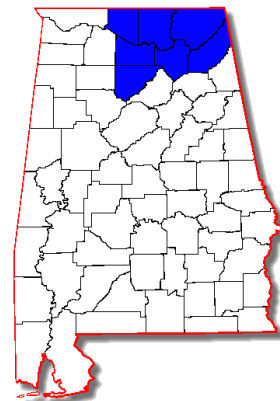
In FY2013, UAB received \$258,429,840 from the State of Alabama. If UAB and other public universities received what they used to get from Education Trust Fund--33%, and not 28%--it would mean a total of **\$304,450,941**, or an additional **\$46,021,101** in FY2013. The missing revenue must be generated from other sources, including tuition.

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

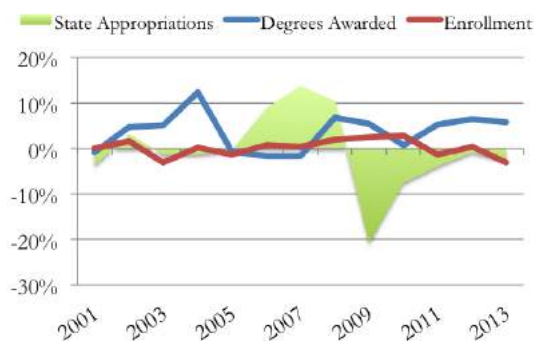
UNIVERSITY OF ALABAMA IN HUNTSVILLE

“Perhaps UAH’s greatest contribution to the local economy is its high-quality, technologically focused graduates, many of whom go on to join the local workforce.”

--Dr. Robert Altenkirch, President



ANNUAL PERCENTAGE CHANGE IN...

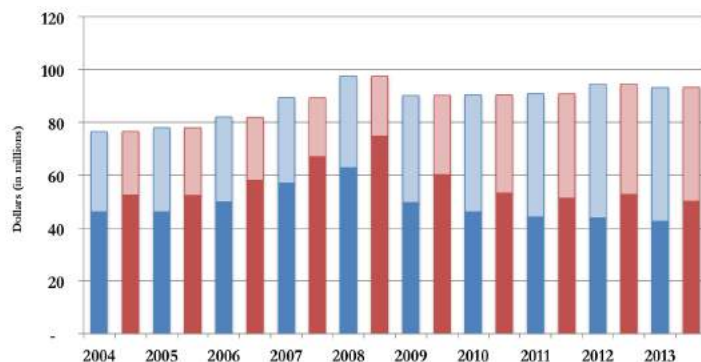


The University of Alabama in Huntsville is located in Region 8, and is designated as a “Very High Research Activity” institution in the 2010 Basic Classification of the Carnegie Foundation for the Advancement of Teaching.

From 2001 to 2013, UAH has seen growth in enrollments and degrees awarded, from 8,585 to 8,728, and 987 to 1,571, respectively. The academic quality of UAH is reflected in part by its increasing average ACT scores.

MISSING STATE APPROPRIATIONS RESULT IN HIGHER TUITION & FEES

28% Funding: Appropriations Tuition & Fees 33% Funding: Appropriations Tuition & Fees



Enrollments at UAH grew even as state appropriations decreased by \$5,000,000. State appropriations per student *fell* from \$5,345 in 2001 to \$4,894 in 2013.

There has been a dramatic shift in key components comprising UAH’s Stable Operating Revenue, which includes state funding, tuition, and other revenue. While SOR grew from \$127,870,918 in 2000 to \$200,776,170 in 2013, state appropriations as a percentage of SOR *decreased* from 37% to 21%. Most of the decline--\$20 million--has occurred since 2008.

In FY2013, UAH received \$42,710,964.00 from the State of Alabama. If UAH and other public universities received what they used to get from Education Trust Fund--33%, and not 28%--it would mean a total of **\$50,144,861**, or an additional **\$7,433,897** in FY2013. The missing revenue must be generated from other sources, including tuition.

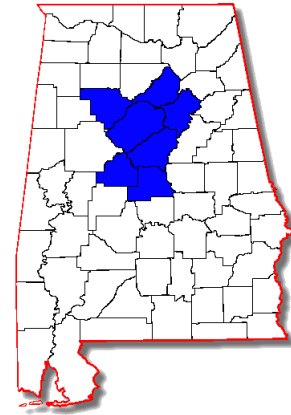
REGION 8 INSTITUTION - UNIVERSITY OF ALABAMA IN HUNTSVILLE

Year	State Appropriations	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	State Appropriations per Student
2001	\$45,889,777	\$127,428,544	36%	987	\$5,345
2004	\$46,160,475	\$147,443,894	31%	1,220	\$5,444
2008	\$62,864,838	\$183,928,483	34%	1,248	\$7,282
2013	\$42,710,964	\$200,776,170	21%	1,571	\$4,894

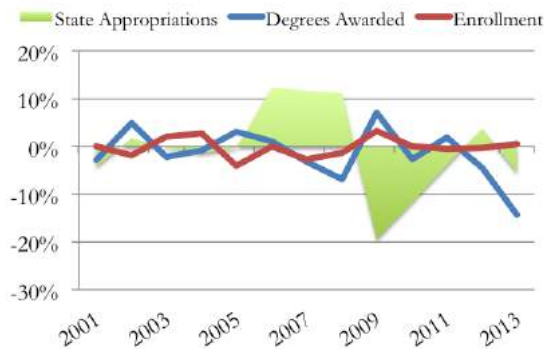


UNIVERSITY OF MONTEVALLO

“As Alabama’s only public liberal arts university, our mission remains unique in higher education.... Montevallo is nationally recognized as a model for quality and affordability in higher education. The average Montevallo graduate finishes with forty percent less debt than those at competing universities. A robust career placement effort helps secure internships and job opportunities for students.” --Dr. John W. Stewart III, President



ANNUAL PERCENTAGE CHANGE IN...



The University of Montevallo

(UM) is located in Region 5 (Birmingham), and is designated “Master’s University, Medium Program” in the 2010 Basic Classification of the Carnegie Foundation for the Advancement of Teaching.

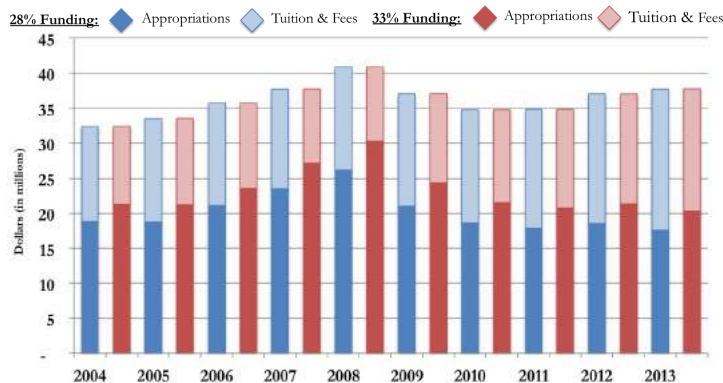
Founded by Julia Tutwiler in 1896, UM trained home economics and social work faculty for Auburn and Alabama. As one of the South’s leading public liberal arts colleges, UM today helps improve Alabama’s economic, civic, & cultural life.

UM has seen a slight decline in students from 3,564 in 2001 to 3,482 in 2013. Enrollments at UM grew even as state

appropriations decreased from \$19,645,225 in 2000 to \$17,551,449 in 2013. State appropriations per UM student rose from \$5,281 in 2001 to \$7,725 in 2008, but fell to \$5,041 in 2013, a cut of nearly \$2,500 per student in just six years.

There has been a dramatic shift in key components comprising UM’s Stable Operating Revenue, which includes state funding, tuition, and other revenue. While SOR grew from \$42,651,856 to \$49,115,016 from 2000 to 2013, state appropriations as a percentage of SOR decreased from 46% to 36%. The decline occurred after 2008.

MISSING STATE APPROPRIATIONS RESULT IN HIGHER TUITION & FEES



REGION 6 INSTITUTION - UNIVERSITY OF MONTEVALLO

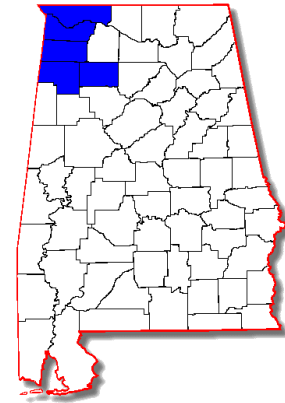
Year	State Appropriations	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	State Appropriations per Student
2001	\$18,822,007	\$41,617,673	45%	593	\$5,281
2004	\$18,838,151	\$45,521,274	41%	603	\$5,140
2008	\$26,134,044	\$56,968,284	46%	565	\$7,725
2013	\$17,551,449	\$49,115,016	36%	491	\$5,041

In FY2013, UM received \$17,551,449 from the State of Alabama. If UM and other public universities received what they used to get from Education Trust Fund--33%, and not 28%--it would mean a total of **\$20,296,729**, or **\$2,745,280** more in FY2013. The missing revenue must be generated from other sources, including tuition.

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.



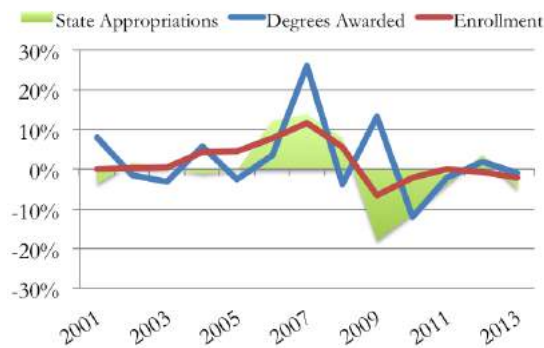
UNIVERSITY OF NORTH ALABAMA



"I am very happy to be back in Florence again. After much persistent hard work by UNA senior administrators and Florence city government officials, we are now ready to begin the implementation stage of creating a world-renowned program for integrative health."

--Zhang Shiting, Chairman, Shengqi Ethnic Medicine College, on signing agreement to create UNA's new U.S.-China International Institute

ANNUAL PERCENTAGE CHANGE IN...



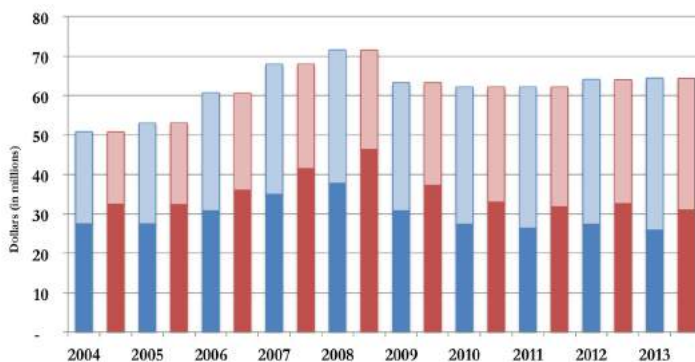
The University of North

Alabama is located in Region 7 (North Alabama), and is designated as a Master's University, Large Program in the 2010 Basic Classification of the Carnegie Foundation for the Advancement of Teaching

From 2001 to 2013, UNA increased enrollments and degrees awarded. Enrollments and degrees have risen from 6,813 to 8,450, and from 1,065 to 1,286, respectively. The academic quality of UNA is reflected in part by its increasing average ACT scores.

MISSING STATE APPROPRIATIONS RESULT IN HIGHER TUITION & FEES

28% Funding: Appropriations Tuition & Fees 33% Funding: Appropriations Tuition & Fees



Enrollments at UNA grew even as state appropriations *decreased* by nearly \$2.4 million. State appropriations per student *fell* from \$4,007 in 2001 to \$3,069 in 2013.

There has been a dramatic shift in key components comprising UNA's Stable Operating Revenue, which includes state funding, tuition, and other revenue. While SOR grew from \$57,100,623 in 2000 to \$82,686,239 in 2013, state appropriations as a percentage of SOR *decreased* from 49% to 32%. Most of the decline--\$11.8 million--has occurred since 2008.

REGION 7 INSTITUTION - UNIVERSITY OF NORTH ALABAMA

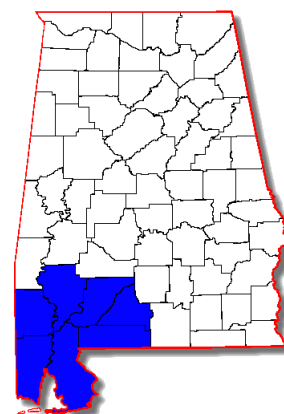
Year	State Appropriations	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	State Appropriations per Student
2000	\$27,300,337	\$56,562,813	48%	1,065	\$4,007
2004	\$27,532,770	\$63,405,770	43%	1,072	\$3,844
2008	\$37,734,647	\$94,291,307	40%	1,310	\$3,972
2013	\$25,934,629	\$82,686,239	31%	1,286	\$3,069

In FY2013, UNA received \$25,934,629 from the State of Alabama. If UNA and other public universities received what they used to get from Education Trust Fund--33%, and not 28%--it would mean a total of **\$31,042,057**, or an additional **\$5,107,428** in FY2013. The missing revenue must be generated from other sources, including tuition.

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

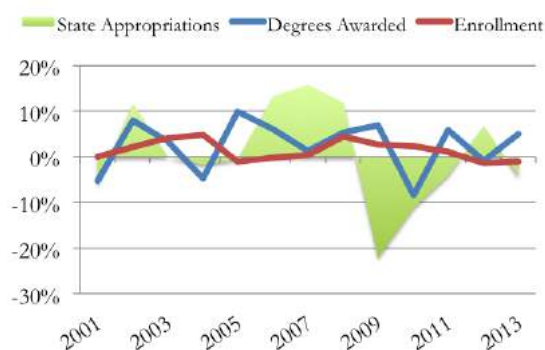


UNIVERSITY OF SOUTH ALABAMA



“Our vision is the University of South Alabama that will be a leading comprehensive public university internationally recognized for educational, research, and health care excellence as well as for its positive intellectual, cultural, and economic impact on those it serves. ...The University of South Alabama is a great university that “Has Made a Difference” for our students and the community...The original goal of higher education was to create an educated society. This must still be our aspiration.” --Dr. Tony G. Waldrop, President

ANNUAL PERCENTAGE CHANGE IN...



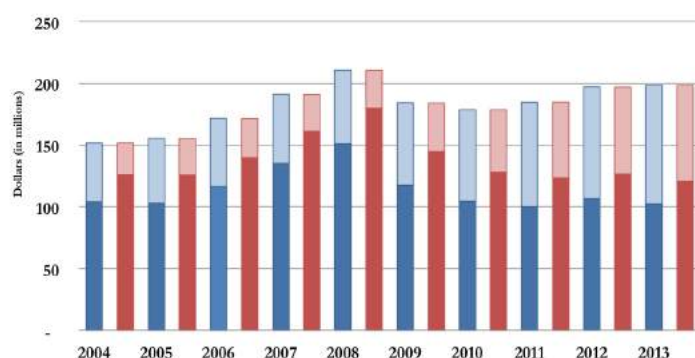
USA is located in Region

1 (Southwest Alabama). It is a Research University/High Research Activity in the 2010 Basic Classification of the Carnegie Foundation for the Advancement of Teaching.

From 2001 to 2013, USA has had growth in enrollments and degrees awarded, from 14,355 to 17,114, and 1,782 to 2,527, respectively. The academic quality of USA is reflected by higher average ACT scores of its entering freshmen, and the success of its faculty in extramural funding.

MISSING STATE APPROPRIATIONS RESULT IN HIGHER TUITION & FEES

28% Funding: Appropriations Tuition & Fees 33% Funding: Appropriations Tuition & Fees



The enrollment growth at USA was not accompanied by corresponding growth in state appropriations. Enrollments grew by 46%, while state appropriations grew by just \$1.5 million (1.4%). State appropriations per student fell from \$6,597 in 2001 to \$5,994 in 2013.

There has been a dramatic shift in key components comprising USA's Stable Operating Revenue, which includes state funding, tuition, and other revenue. USA's SOR declined from \$573,058,354 in 2000 to \$525,204,000 in 2013. State appropriations as a percentage of SOR decreased from 27% in 2008 to 20% in 2013; state appropriations fell by \$49 million since 08.

REGION 1 INSTITUTION - UNIVERSITY OF SOUTH ALABAMA

Year	State Appropriations	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	State Appropriations per Student
2001	\$94,693,719	\$538,807,958	18%	1,782	\$6,597
2004	\$103,878,597	\$529,738,545	20%	1,893	\$6,494
2008	\$151,194,885	\$568,832,384	27%	2,350	\$9,131
2013	\$102,585,000	\$525,204,000	20%	2,527	\$5,994

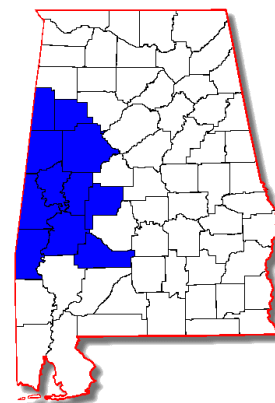
In FY2013, USA received \$102,585,000 from the State of Alabama. If USA and other public universities received what they used to get from Education Trust Fund--33%, and not 28%--it would mean a total of **\$120,586,451** or **\$18,001,451** more in FY2013. The missing revenue must be generated from other sources, including tuition.

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

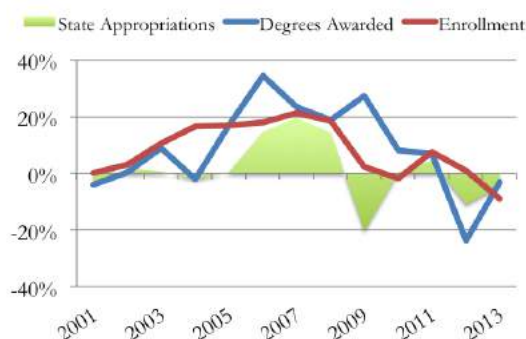


UNIVERSITY OF WEST ALABAMA

“UWA’s goal is to help meet Mercedes’ staffing needs for trained, skilled production workers. By addressing additional labor demand, UWA will in essence help expand Mercedes’ recruiting and retention talent pool.” --Dr. Ken Tucker, President



ANNUAL PERCENTAGE CHANGE IN...

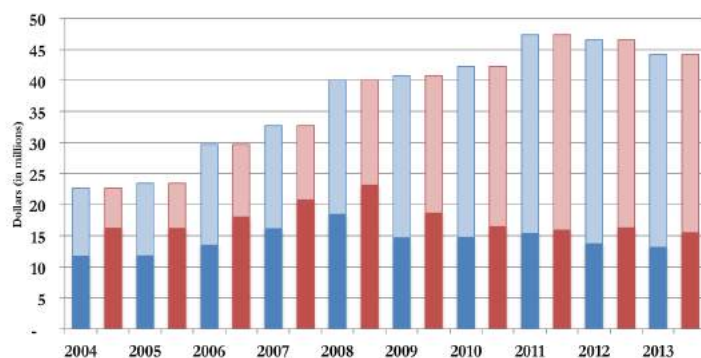


The University of West Alabama is located in Region 2 (West Alabama), and is designated as a Master’s University, Large Program in the 2010 Basic Classification of the Carnegie Foundation for the Advancement of Teaching.

UWA is very committed to serving the Black Belt region of west Alabama. From 2001 to 2013, UWA increased enrollments and degrees awarded. Enrollments and degrees have gone from 2,420 to 6,305, and 338 to 902, respectively.

MISSING STATE APPROPRIATIONS RESULT IN HIGHER TUITION & FEES

28% Funding: Appropriations Tuition & Fees 33% Funding: Appropriations Tuition & Fees



Enrollments at UWA grew along with state appropriations increases. State appropriations per student, though, fell from \$4,827 in 2001 to \$2,078 in 2013.

But there has been a dramatic shift in key components comprising UWA’s Stable Operating Revenue, which includes state funding, tuition, and other revenue. While SOR grew from \$24,898,680 in 2000 to \$58,889,699 in 2013, state appropriations as a percentage of SOR *decreased* from 49% to 22%. Most of the decline-5.4 million-has occurred since 2008.

In FY2013, UWA received \$13,103,552 from the State of Alabama. If UWA and other public universities received what they used to get from

Education Trust Fund--33%, and not 28%--it would mean a total of **\$15,521,028**, or an additional **\$2,417,476** in FY2013. The missing revenue must be generated from other sources, including tuition.

REGION 2 INSTITUTION - UNIVERSITY OF WEST ALABAMA

Year	State Appropriations	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	State Appropriations Per Student
2001	\$11,681,264	\$25,115,559	47%	338	\$4,827
2004	\$11,724,521	\$33,002,095	36%	361	\$3,643
2008	\$18,457,444	\$51,410,141	36%	831	\$2,896
2013	\$13,103,552	\$58,889,699	22%	902	\$2,078

All U.S. dollar figures are adjusted for the 2013 Consumer Price Index found at bls.gov. Refer to Appendix A (p. 98-102) for full data source citations and other notes.

APPENDIX A

Data Sources: (1) Population data is from the U.S. Census Bureau. (2) Stable Operating Revenue is defined by the Delta Cost Project as "Total revenue including revenue from auxiliary, hospitals and other independent operations. Includes sum of tuition; federal, state, and local appropriations, grants, and contracts; auxiliaries; hospitals; and other independent operations; excludes revenues from affiliated entities, private gifts, grants, and contracts; investment return, endowment earnings." (3) Year to Year Change is developed by EPC's analysis of Delta Cost Project and IPEDS data. (4) $\ln(\text{SOR})$ is the natural log of the Stable Operating Revenue variable. (5) Degrees Awarded data are from IPEDS. (6) Number of Students represents full year Unduplicated Headcount figures from IPEDS. 2000-2001 Unduplicated Headcount data are not available through IPEDS. (6) Per Capita Income is from the Bureau of Labor Statistics. (7) Unemployment rate data is for the entire State of Alabama from the Bureau of Labor Statistics. (8) All data representing US Dollars are adjusted for the 2013 CPI Inflation rate found @ www.bls.gov/data/inflation_calculator.htm

Region 4 Institution - Alabama State University							
Year	State Appropriations	State Appropriations (%)	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	Unduplicated Headcount	State Appropriations per Student
2000	\$39,084,708	-	\$85,259,118	46%	715	N/A	N/A
2001	\$37,128,297	-5.01%	\$84,568,838	44%	671	6,664	\$5,571
2002	\$37,866,198	1.99%	\$114,798,562	33%	654	6,832	\$5,542
2003	\$37,851,398	-0.04%	\$100,406,595	38%	864	7,495	\$5,050
2004	\$38,687,661	2.21%	\$97,961,451	39%	810	7,299	\$5,300
2005	\$38,421,716	-0.69%	\$107,423,999	36%	809	6,895	\$5,572
2006	\$39,656,820	3.21%	\$109,307,735	36%	881	6,653	\$5,961
2007	\$47,556,831	19.92%	\$126,417,865	38%	735	6,583	\$7,224
2008	\$53,198,024	11.86%	\$165,968,861	32%	650	6,838	\$7,780
2009	\$49,656,636	-6.66%	\$116,372,374	43%	721	6,806	\$7,296
2010	\$48,944,269	-1.43%	\$123,206,584	40%	774	6,626	\$7,387
2011	\$48,825,786	-0.24%	\$123,101,564	40%	783	6,517	\$7,492
2012	\$44,962,303	-7.91%	\$124,989,050	36%	726	6,368	\$7,061
2013	\$42,658,142	-5.12%	\$121,409,165	35%	750	6,782	\$6,290

Source: Data is from the Integrated PostSecondary Education Data System and analyzed by the Education Policy Center at The University of Alabama.

Region 8 Institution - University of Alabama A&M							
Year	State Appropriations	State Appropriations (%)	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	Unduplicated Headcount	State Appropriations per Student
2000	\$42,414,091	-	\$104,682,295	41%	967	N/A	N/A
2001	\$42,154,746	-0.61%	\$106,822,171	39%	848	6,310	\$6,681
2002	\$42,302,769	0.35%	\$114,119,838	37%	820	6,754	\$6,263
2003	\$42,377,018	0.18%	\$117,322,784	36%	791	7,112	\$5,959
2004	\$41,838,811	-1.27%	\$128,561,946	33%	856	7,638	\$5,478
2005	\$40,832,617	-2.40%	\$126,533,253	32%	920	9,451	\$4,320
2006	\$46,263,411	13.30%	\$124,889,244	37%	928	7,078	\$6,536
2007	\$53,000,804	14.56%	\$148,219,117	36%	849	6,929	\$7,649
2008	\$57,115,257	7.76%	\$137,662,868	41%	912	6,435	\$8,876
2009	\$58,914,568	3.15%	\$121,375,736	49%	878	6,149	\$9,581
2010	\$40,977,982	-30.45%	\$132,878,859	31%	769	6,173	\$6,638
2011	\$40,205,026	-1.89%	\$98,380,946	41%	868	6,388	\$6,294
2012	\$40,997,181	1.97%	\$92,468,535	44%	738	5,557	\$7,378
2013	\$39,335,736	-4.05%	\$129,396,550	30%	825	5,513	\$7,135

Source: Data is from the Integrated PostSecondary Education Data System and analyzed by the Education Policy Center at The University of Alabama.

Region 8 Institution - Athens State University							
Year	State Appropriations	State Appropriations (%)	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	Unduplicated Headcount	State Appropriations per Student
2000	\$11,307,769	-	\$21,334,570	53%	910	N/A	N/A
2001	\$10,998,134	-2.74%	\$20,666,956	53%	1,068	3,664	\$3,002
2002	\$11,198,016	1.82%	\$29,622,986	38%	832	3,517	\$3,184
2003	\$11,279,893	0.73%	\$31,102,058	36%	723	3,191	\$3,535
2004	\$11,247,383	-0.29%	\$33,089,135	34%	740	3,579	\$3,143
2005	\$11,681,966	3.86%	\$34,503,645	34%	738	3,524	\$3,315
2006	\$13,154,398	12.60%	\$36,318,715	36%	762	3,840	\$3,426
2007	\$15,126,533	14.99%	\$39,679,502	38%	814	4,088	\$3,700
2008	\$16,390,718	8.36%	\$44,022,477	37%	756	4,444	\$3,688
2009	\$13,343,522	-18.59%	\$30,687,600	43%	835	4,668	\$2,859
2010	\$11,646,190	-12.72%	\$32,762,136	36%	787	4,918	\$2,368
2011	\$11,193,143	-3.89%	\$34,906,909	32%	961	4,782	\$2,341
2012	\$11,692,716	4.46%	\$34,092,288	34%	940	4,690	\$2,493
2013	\$11,178,201	-4.40%	\$33,313,917	34%	907	4,700	\$2,378

Source: Data is from the Integrated PostSecondary Education Data System and analyzed by the Education Policy Center at The University of Alabama.

Region 5 Institution - Auburn University							
Year	State Appropriations	State Appropriations (%)	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	Unduplicated Headcount	State Appropriations per Student
2000	\$241,585,576	-	\$587,307,204	41%	5,091	N/A	N/A
2001	\$232,446,247	-3.78%	\$585,209,146	40%	4,731	24,125	\$9,635
2002	\$236,035,834	1.54%	\$599,036,763	39%	4,520	24,773	\$9,528
2003	\$236,700,925	0.28%	\$620,150,551	38%	4,532	25,101	\$9,430
2004	\$233,098,141	-1.52%	\$658,674,537	35%	4,866	24,909	\$9,358
2005	\$234,085,309	0.42%	\$653,867,548	36%	4,882	24,867	\$9,413
2006	\$257,223,761	9.88%	\$677,735,196	38%	5,063	25,203	\$10,206
2007	\$293,288,915	14.02%	\$730,768,089	40%	4,819	25,332	\$11,578
2008	\$330,998,488	12.86%	\$791,471,212	42%	4,817	25,872	\$12,794
2009	\$257,197,070	-22.30%	\$743,974,841	35%	5,029	26,221	\$9,809
2010	\$227,950,498	-11.37%	\$761,403,610	30%	5,203	26,464	\$8,614
2011	\$220,486,107	-3.27%	\$702,659,074	31%	5,410	26,840	\$8,215
2012	\$228,247,757	3.52%	\$727,008,011	31%	5,630	27,046	\$8,439
2013	\$216,653,516	-5.08%	\$682,282,964	32%	5,601	26,706	\$8,113

Source: Data is from the Integrated PostSecondary Education Data System and analyzed by the Education Policy Center at The University of Alabama.

Region 4 Institution - Auburn University at Montgomery							
Year	State Appropriations	State Appropriations (%)	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	Unduplicated Headcount	State Appropriations per Student
2000	\$24,913,712	-	\$66,399,248	38%	1,042	N/A	N/A
2001	\$23,850,132	-4.27%	\$62,010,524	38%	982	5,994	\$3,979
2002	\$24,222,392	1.56%	\$60,323,153	40%	898	6,807	\$3,558
2003	\$24,157,238	-0.27%	\$60,563,110	40%	857	7,297	\$3,311
2004	\$24,133,970	-0.10%	\$63,611,196	38%	830	7,304	\$3,304
2005	\$24,034,239	-0.41%	\$68,988,150	35%	833	7,049	\$3,410
2006	\$26,739,616	11.26%	\$79,281,470	34%	848	6,730	\$3,973
2007	\$30,572,470	14.33%	\$83,994,503	36%	772	6,616	\$4,621
2008	\$33,570,763	9.81%	\$85,965,763	39%	892	6,742	\$4,979
2009	\$26,962,645	-19.68%	\$75,757,225	36%	880	6,659	\$4,049
2010	\$24,403,964	-9.49%	\$79,809,867	31%	853	7,227	\$3,377
2011	\$23,640,474	-3.13%	\$80,722,339	29%	910	7,119	\$3,321
2012	\$23,198,302	-1.87%	\$75,427,547	31%	874	6,606	\$3,512
2013	\$21,947,664	-5.39%	\$75,142,864	29%	795	6,173	\$3,555

Source: Data is from the Integrated PostSecondary Education Data System and analyzed by the Education Policy Center at The University of Alabama.

Region 5 Institution - Jacksonville State University							
Year	State Appropriations	State Appropriations (%)	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	Unduplicated Headcount	State Appropriations per Student
2000	\$37,745,387	-	\$75,002,672	50%	1,550	N/A	N/A
2001	\$35,952,487	-4.75%	\$78,125,474	46%	1,473	9,938	\$3,618
2002	\$36,670,457	2.00%	\$86,081,051	43%	1,457	9,939	\$3,690
2003	\$36,741,886	0.19%	\$88,642,151	41%	1,480	10,931	\$3,361
2004	\$35,936,679	-2.19%	\$89,524,682	40%	1,565	10,916	\$3,292
2005	\$36,313,146	1.05%	\$94,679,071	38%	1,719	10,753	\$3,377
2006	\$40,228,212	10.78%	\$98,052,343	41%	1,668	10,869	\$3,701
2007	\$47,991,335	19.30%	\$107,057,954	45%	1,660	10,843	\$4,426
2008	\$53,349,006	11.16%	\$108,694,076	49%	1,486	11,114	\$4,800
2009	\$42,850,059	-19.68%	\$110,890,594	39%	1,545	11,253	\$3,808
2010	\$42,061,955	-1.84%	\$112,021,315	38%	1,491	11,379	\$3,696
2011	\$37,444,576	-10.98%	\$113,668,303	33%	1,578	11,395	\$3,286
2012	\$37,227,282	-0.58%	\$108,175,700	34%	1,616	11,374	\$3,273
2013	\$35,315,802	-5.13%	\$103,725,307	34%	1,705	10,895	\$3,241

Source: Data is from the Integrated PostSecondary Education Data System and analyzed by the Education Policy Center at The University of Alabama.

Region 2 Institution - The University of Alabama							
Year	State Appropriations	State Appropriations (%)	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	Unduplicated Headcount	State Appropriations per Student
2000	\$161,085,128	-	\$430,986,292	37%	3,872	N/A	N/A
2001	\$154,808,169	-3.90%	\$436,570,319	35%	3,869	21,973	\$7,045
2002	\$156,396,965	1.03%	\$431,067,620	36%	3,932	22,333	\$7,003
2003	\$156,764,271	0.23%	\$444,546,220	35%	4,140	23,106	\$6,785
2004	\$151,781,186	-3.18%	\$451,821,401	34%	4,254	23,593	\$6,433
2005	\$151,381,284	-0.26%	\$478,862,577	32%	4,368	24,045	\$6,296
2006	\$168,628,809	11.39%	\$537,726,990	31%	4,147	25,095	\$6,720
2007	\$192,461,801	14.13%	\$592,341,321	32%	4,474	27,117	\$7,097
2008	\$215,768,814	12.11%	\$646,344,561	33%	4,826	28,409	\$7,595
2009	\$169,960,290	-21.23%	\$650,401,765	26%	5,170	30,140	\$5,639
2010	\$148,008,125	-12.92%	\$739,193,590	20%	5,738	30,613	\$4,835
2011	\$142,325,817	-3.84%	\$636,869,207	22%	6,166	33,681	\$4,226
2012	\$148,089,074	4.05%	\$752,877,394	20%	6,236	35,308	\$4,194
2013	\$140,699,910	-4.99%	\$715,939,698	20%	6,893	37,220	\$3,780

Source: Data is from the Integrated PostSecondary Education Data System and analyzed by the Education Policy Center at The University of Alabama.

Region 3 Institution - Troy University							
Year	State Appropriations	State Appropriations (%)	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	Unduplicated Headcount	State Appropriations per Student
2000	\$45,902,599	-	\$135,068,539	34%	4,099	N/A	N/A
2001	\$44,452,752	-3.16%	\$135,552,572	33%	4,082	17,619	\$2,523
2002	\$45,280,900	1.86%	\$154,818,695	29%	4,075	19,480	\$2,324
2003	\$45,151,804	-0.29%	\$175,083,385	26%	4,259	22,558	\$2,002
2004	\$44,159,487	-2.20%	\$182,768,396	24%	4,780	25,709	\$1,718
2005	\$44,292,404	0.30%	\$197,290,355	22%	5,073	39,228	\$1,129
2006	\$50,284,517	13.53%	\$208,097,498	24%	5,712	39,492	\$1,273
2007	\$58,562,933	16.46%	\$222,015,526	26%	5,121	38,901	\$1,505
2008	\$67,579,387	15.40%	\$238,727,487	28%	5,104	40,141	\$1,684
2009	\$53,245,017	-21.21%	\$203,224,568	26%	4,918	37,898	\$1,405
2010	\$47,126,068	-11.49%	\$248,156,680	19%	4,950	38,040	\$1,239
2011	\$45,298,846	-3.88%	\$275,167,166	16%	4,738	36,806	\$1,231
2012	\$46,953,636	3.65%	\$254,251,147	18%	4,390	33,393	\$1,406
2013	\$44,923,086	-4.32%	\$251,106,595	18%	4,328	29,109	\$1,543

Source: Data is from the Integrated PostSecondary Education Data System and analyzed by the Education Policy Center at The University of Alabama.



Region 6 Institution - University of Alabama at Birmingham							
Year	State Appropriations	State Appropriations (%)	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	Unduplicated Headcount	State Appropriations per Student
2000	\$243,070,765	-	\$1,569,480,758	15%	2,738	N/A	N/A
2001	\$235,132,374	-3.27%	\$1,658,861,391	14%	2,842	18,959	\$12,402
2002	\$276,221,251	17.47%	\$1,717,798,023	16%	2,827	18,384	\$15,025
2003	\$275,541,867	-0.25%	\$1,771,038,127	16%	2,679	19,528	\$14,110
2004	\$271,166,644	-1.59%	\$1,888,292,288	14%	2,807	20,319	\$13,345
2005	\$269,535,977	-0.60%	\$1,796,299,646	15%	2,983	20,478	\$13,162
2006	\$300,642,601	11.54%	\$1,868,642,207	16%	2,918	20,180	\$14,898
2007	\$349,234,404	16.16%	\$1,943,110,857	18%	2,966	20,028	\$17,437
2008	\$387,450,838	10.94%	\$2,410,566,648	16%	3,202	19,491	\$19,878
2009	\$309,409,919	-20.14%	\$2,370,418,521	13%	3,177	19,455	\$15,904
2010	\$273,697,539	-11.54%	\$2,513,093,790	11%	3,347	20,395	\$13,420
2011	\$263,352,709	-3.78%	\$2,490,068,641	11%	3,539	20,647	\$12,755
2012	\$272,575,290	3.50%	\$2,161,004,557	13%	3,643	20,892	\$13,047
2013	\$258,429,840	-5.19%	\$2,181,639,177	12%	3,882	21,169	\$12,208

Source: Data is from the Integrated PostSecondary Education Data System and analyzed by the Education Policy Center at The University of Alabama.

Region 8 Institution - University of Alabama at Huntsville							
Year	State Appropriations	State Appropriations (%)	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	Unduplicated Headcount	State Appropriations per Student
2000	\$47,672,445	-	\$127,870,918	37%	995	N/A	N/A
2001	\$45,889,777	-3.74%	\$127,428,544	36%	987	8,585	\$5,345
2002	\$47,378,859	3.24%	\$137,318,069	35%	1,033	8,729	\$5,428
2003	\$46,764,216	-1.30%	\$139,856,160	33%	1,086	8,454	\$5,532
2004	\$46,160,475	-1.29%	\$147,443,894	31%	1,220	8,479	\$5,444
2005	\$45,942,594	-0.47%	\$152,980,768	30%	1,211	8,366	\$5,492
2006	\$50,025,990	8.89%	\$181,256,955	28%	1,190	8,423	\$5,939
2007	\$56,935,939	13.81%	\$176,002,986	32%	1,169	8,461	\$6,729
2008	\$62,864,838	10.41%	\$183,928,483	34%	1,248	8,633	\$7,282
2009	\$49,799,082	-20.78%	\$187,381,233	27%	1,316	8,845	\$5,630
2010	\$46,016,021	-7.60%	\$198,728,622	23%	1,325	9,102	\$5,056
2011	\$44,225,956	-3.89%	\$190,316,922	23%	1,395	8,976	\$4,927
2012	\$43,873,958	-0.80%	\$200,599,354	22%	1,485	9,009	\$4,870
2013	\$42,710,964	-2.65%	\$200,776,170	21%	1,571	8,728	\$4,894

Source: Data is from the Integrated PostSecondary Education Data System and analyzed by the Education Policy Center at The University of Alabama.

Region 6 Institution - University of Montevallo							
Year	State Appropriations	State Appropriations (%)	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	Unduplicated Headcount	State Appropriations per Student
2000	19,645,225	-	42,651,856	46.06%	610	N/A	N/A
2001	18,822,007	-4.19%	41,617,673	45.23%	593	3564	\$5,281
2002	19,145,827	1.72%	45,490,845	42.09%	622	3498	\$5,473
2003	19,098,343	-0.25%	42,391,272	45.05%	608	3571	\$5,348
2004	18,838,151	-1.36%	45,521,274	41.38%	603	3665	\$5,140
2005	18,773,238	-0.34%	46,212,587	40.62%	621	3516	\$5,339
2006	21,077,667	12.28%	49,312,089	42.74%	627	3518	\$5,991
2007	23,514,381	11.56%	51,226,159	45.90%	607	3426	\$6,864
2008	26,134,044	11.14%	56,968,284	45.87%	565	3383	\$7,725
2009	21,055,787	-19.43%	52,966,901	39.75%	605	3493	\$6,028
2010	18,597,783	-11.67%	52,454,846	35.45%	589	3493	\$5,324
2011	17,874,312	-3.89%	48,637,560	36.75%	600	3474	\$5,145
2012	18,550,557	3.78%	50,430,176	36.78%	573	3464	\$5,355
2013	17,551,449	-5.39%	49,115,016	35.74%	491	3482	\$5,041

Source: Data is from the Integrated PostSecondary Education Data System and analyzed by the Education Policy Center at The University of Alabama.

Region 7 Institution - University of North Alabama							
Year	State Appropriations	State Appropriations (%)	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	Unduplicated Headcount	State Appropriations per Student
2000	\$28,360,196	-	\$57,100,623	50%	987	N/A	N/A
2001	\$27,300,337	-3.74%	\$56,562,813	48%	1,065	6,813	\$4,007
2002	\$27,739,914	1.61%	\$57,754,084	48%	1,048	6,835	\$4,059
2003	\$27,837,718	0.35%	\$60,021,119	46%	1,014	6,868	\$4,053
2004	\$27,532,770	-1.10%	\$63,405,770	43%	1,072	7,162	\$3,844
2005	\$27,430,719	-0.37%	\$66,455,606	41%	1,044	7,481	\$3,667
2006	\$30,793,472	12.26%	\$75,894,540	41%	1,081	8,062	\$3,820
2007	\$35,031,501	13.76%	\$84,562,787	41%	1,362	8,998	\$3,893
2008	\$37,734,647	7.72%	\$94,291,307	40%	1,310	9,501	\$3,972
2009	\$30,920,733	-18.06%	\$81,784,144	38%	1,483	8,870	\$3,486
2010	\$27,397,090	-11.40%	\$82,849,722	33%	1,304	8,685	\$3,155
2011	\$26,351,700	-3.82%	\$82,886,401	32%	1,275	8,691	\$3,032
2012	\$27,320,735	3.68%	\$81,793,216	33%	1,299	8,631	\$3,165
2013	\$25,934,629	-5.07%	\$82,686,239	31%	1,286	8,450	\$3,069

Source: Data is from the Integrated PostSecondary Education Data System and analyzed by the Education Policy Center at The University of Alabama.

Region 1 Institution - University of South Alabama							
Year	State Appropriations	State Appropriations (%)	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	Unduplicated Headcount	State Appropriations per Student
2000	\$101,073,760	-	\$573,058,354	18%	1,882	N/A	N/A
2001	\$94,693,719	-6.31%	\$538,807,958	18%	1,782	14,355	\$6,597
2002	\$105,671,056	11.59%	\$583,551,458	18%	1,922	14,669	\$7,204
2003	\$105,651,884	-0.02%	\$593,467,007	18%	1,987	15,265	\$6,921
2004	\$103,878,597	-1.68%	\$529,738,545	20%	1,893	15,995	\$6,494
2005	\$103,324,123	-0.53%	\$540,193,049	19%	2,079	15,839	\$6,523
2006	\$116,944,183	13.18%	\$561,462,183	21%	2,202	15,823	\$7,391
2007	\$135,260,716	15.66%	\$599,526,474	23%	2,231	15,870	\$8,523
2008	\$151,194,885	11.78%	\$568,832,384	27%	2,350	16,558	\$9,131
2009	\$117,762,529	-22.11%	\$566,158,360	21%	2,510	16,985	\$6,933
2010	\$104,547,327	-11.22%	\$588,392,273	18%	2,296	17,372	\$6,018
2011	\$100,403,733	-3.96%	\$474,125,631	21%	2,431	17,544	\$5,723
2012	\$107,186,357	6.76%	\$505,706,449	21%	2,408	17,302	\$6,195
2013	\$102,585,000	-4.29%	\$525,204,000	20%	2,527	17,114	\$5,994

Source: Data is from the Integrated PostSecondary Education Data System and analyzed by the Education Policy Center at The University of Alabama.

Region 2 Institution - The University of West Alabama							
Year	State Appropriations	State Appropriations (%)	Stable Operating Revenue	% of State Appropriations as Stable Operating Revenue	Number of Degrees Awarded	Unduplicated Headcount	State Appropriations per Student
2000	\$12,131,209	-	\$24,898,681	49%	352	N/A	N/A
2001	\$11,681,264	-3.71%	\$25,115,559	47%	338	2420	\$4,827
2002	\$11,877,457	1.68%	\$26,402,799	45%	339	2496	\$4,759
2003	\$11,963,606	0.73%	\$28,297,969	42%	369	2759	\$4,336
2004	\$11,724,521	-2.00%	\$33,002,095	36%	361	3218	\$3,643
2005	\$11,772,678	0.41%	\$33,393,099	35%	422	3757	\$3,134
2006	\$13,505,335	14.72%	\$39,529,787	34%	567	4432	\$3,047
2007	\$16,139,471	19.50%	\$45,742,795	35%	700	5379	\$3,000
2008	\$18,457,444	14.36%	\$51,410,141	36%	831	6373	\$2,896
2009	\$14,690,933	-20.41%	\$55,342,093	27%	1057	6513	\$2,256
2010	\$14,738,602	0.32%	\$57,681,504	26%	1143	6390	\$2,307
2011	\$15,397,485	4.47%	\$63,375,932	24%	1222	6871	\$2,241
2012	\$13,716,669	-10.92%	\$56,946,785	24%	932	6926	\$1,980
2013	\$13,103,552	-4.47%	\$58,889,699	22%	902	6305	\$2,078

Source: Data is from the Integrated PostSecondary Education Data System and analyzed by the Education Policy Center at The University of Alabama.

About the Education Policy Center

In support of the mission of The University of Alabama and its College of Education, the Education Policy Center works to improve the quality of life for all Alabamians through a research agenda that seeks to expand access, strengthen equity, and advance economic and community development, with special focus on issues to benefit of education practitioners and policy-makers in the State of Alabama and the Deep South. On-going Center projects can be accessed at <http://uaedpolicy.ua.edu>, and include:

- The National Survey of Access and Finance Issues (nationwide, conducted annually).
- Student access research: Since 2010, the Center has published 19 issue briefs and technical studies on Pell Grants and student aid/access.
- History of education research: More Than Science or Sputnik, the National Defense Education Act, by EPC Associate Director Wayne J. Urban
- The University of Alabama Superintendent's Academy, a partnership with the Alabama State Department of Education, to broaden the pool of diverse, prepared school leaders.

