



**Economic Impact Study**  
**Fiscal Year 2018-2019**



by

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## UAH Annual Impact on the Alabama Economy

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The University of Alabama in Huntsville fiscal year 2018-19 economic impacts include:

- \$615 million in total economic impact generated for the state of Alabama
- 9,694 jobs created and sustained by UAH in the State of Alabama
- \$25 million in tax revenue generated for state and local governments, including sales, property, income and business tax payments.
- \$52.4 million in state appropriations to UAH are leveraged to generate significant impact throughout the state. The overall \$615 million impact implies that for every dollar of state appropriation, UAH created a return of \$11.74.
- The UAH impact on the local region and the State of Alabama expands with each UAH graduate. An estimated three-quarters of UAH graduates reside in Alabama.

## ***UAH Fast Facts***

- The University of Alabama in Huntsville continues to be named the best return on investment among all Alabama schools for both in-state and out-of-state students most recently by PayScale, Inc. PayScale also ranks UAH in the top 200 universities nationwide with a high return on investment.
- 45% of UAH degrees awarded are in STEM subjects
- UAH ranked #1 in Alabama for the Best Return on Investment by Best Colleges.
- Average Freshman ACT Score of 28.4 is among the highest in Alabama.
- UAH Fall 2019 Enrollment increased 27% compared with Fall 2015.
- UAH researchers conducted \$110 million in research and is #11 in NASA-Funded research and #28 in DoD-Funded Research Expenditures in the nation.
- UAH offers 88 degrees and over 100 areas of study.
- State appropriations account for 20.9% of UAH budget.

## Summary

- **State of Alabama** – The economic impact from the UAH 2018-2019 fiscal year on the State of Alabama is estimated at \$615 million. The tax impact on the state was \$21.6 million with \$15.7 million in state income taxes generated and sales and property taxes of \$4.8 million. The overall estimated \$615 million impact suggests that for every \$1.00 of state appropriations in FY2019, UAH created an economic return in Alabama of \$11.74.
- The total employment impact in the State of Alabama is 9,694 jobs with 9,047 operations related jobs, and 647 capital improvement related jobs.
- The state of Alabama’s \$52.4 million appropriation to UAH will result in a return on investment of 11% over the work life of UAH graduates. The state will receive \$345.8 million (in 2019 dollars) in taxes generated from the flow of UAH graduates’ earnings during their lifetime, assuming continuation of current residence rates and tax rates.
- The real return on investment for a UAH degree, ranges from 6.7 percent to 28.3 percent for the 2018-2019 graduating class, depending on the degree obtained. The real return of pursuing a degree at UAH relative to expected earnings with only a high school diploma, range from 6.7 percent to 19.4 percent, depending on the degree achieved.

Table 1. UAH 2018-2019 Impacts on State of Alabama				
Source	Direct Spending	In Alabama	Multiplier Impact	Total Impact
<b>University of Alabama in Huntsville</b>				
Payroll	\$173,168,000	\$143,487,000	\$118,162,000	\$261,649,000
Purchases	\$60,925,000	\$50,483,000	\$41,573,000	\$92,056,000
Subtotal	\$234,093,000	\$193,970,000	\$159,735,000	\$353,705,000
Student Spending	\$103,759,000	\$103,759,000	\$92,261,000	\$196,020,000
Visitor Spending	\$6,299,000	\$6,299,000	\$4,688,000	\$10,987,000
Capital Improvement	\$32,372,000	\$32,372,000	\$22,485,000	\$54,857,000
<b>Total</b>	<b>\$376,523,000</b>	<b>\$336,400,000</b>	<b>\$279,169,000</b>	<b>\$615,569,000</b>
<b>Employment Impact Jobs</b>		3,782	5,265	<b>9,047</b>
<b>Capital Improvement Jobs Impact</b>		247	400	<b>647</b>
<b>State Tax Impact</b>				
Sales Tax, Licenses & Fees				\$15,747,000
Property Taxes				\$4,868,000
State Income Taxes				\$4,564,000
<b>Total Generated in the State</b>				<b>\$25,179,000</b>

Source: Economics Department and CMER at UAH. Rounding may affect totals.

Table 1

## Components

UAH remains a top 10 employer in the Huntsville/Madison County area, according to the Chamber of Commerce of Huntsville/Madison County. During the fiscal year 2018-2019, UAH employed 2,066 faculty and staff, as well as 1,716 student workers, resulting in a total employment level of 3,782 employees. Multiplier impact of jobs was 5,665 bringing the total employment impact in Alabama to 9,694.

Total expenditures by UAH for the year was \$250 million of which payroll accounted for \$170 million, purchases \$60 million, plus capital improvement of \$52 million. Students spent another \$104 million in the local area on food, clothing, books, housing, transportation, etc.

Visitors come to the UAH campus for many reasons and contribute significantly to the economic impact of the university. Sports fans enjoy UAH games such as hockey, basketball, softball, lacrosse, baseball, and soccer. UAH professional and continuing education programs attract visitors from across the region. Other events including academic conferences, student camps, and presentations for the community, along with other special events attract visitors to UAH. The total visitor spending for FY2018-19 is estimated at \$6.3 million.

Economic impacts may be defined in various terms such as jobs, economic activity (output), payroll, and tax generation among other measures. The impacts are typically shown as direct impacts, and multiplier impacts. Impacts are spread over multiple industry sectors in the region of analysis and are affected by the extent to which a specific industry sector exists in the region analyzed.

Spending by the subject organization (the direct impact) results in spending in other related sectors. The direct expenditures for products and services creates related economic activity (indirect impact) in suppliers and support organizations. The employees working in the primary entity will use their income to make personal purchases, which will increase spending (induced impact) in other industries not related to their employment, e.g. groceries, clothing, etc. The indirect plus induced effects comprise the multiplier effect. The capital improvement activity for construction and equipment also creates indirect and induced impacts.

This impact study was conducted using IMPLAN® software developed by MIG Inc. (now IMPLAN Group, LLC). Tax impact focuses only on sales, property,

and income taxes. State income tax rates in Alabama are capped at 5 percent of taxable income. The tax rate varies by income brackets. The state sales tax rate is 4 percent. Sales tax rates differ from county to county, and city to city, ranging from a low of 2 percent to nearly 7 percent. Most local sales tax rates are 4-5 percent.

### **UAH as a Public Investment**

The State of Alabama and the local region derive many benefits from UAH. While the economic and tax impacts are quantifiable, other benefits are not as readily apparent. UAH not only creates jobs and educates people to get better jobs, other equally significant contributions are made. Contributing to an educated environment leads to innovation, entrepreneurship, and career advancement. Alabama companies, national organizations, and international enterprises, benefit from relationships with UAH.

Additionally, UAH provides benefits to the greater Huntsville area, and the state of Alabama through extensive partnerships with government agencies, including NASA's Marshall Space Flight Center, the U.S. Army Aviation and Missile Command, the Army's Strategic Missile and Defense Command, and the Army Aviation and Missile Research Development & Engineering Center, among others. However, UAH's partnerships extend beyond the bounds of government laboratories. UAH builds competitive alliances with private scientific enterprises, and other technically focused initiatives.

Return on Investment to State of Alabama Class of 2019	
2019 State appropriations to UAH	\$52,365,051
Direct tax collections from UAH expenditures	\$25,179,400
Net Investment by the State of Alabama	\$27,185,651
Working life tax investments by UAH graduates	\$345,855,907
Rate of Return on the State's investment	11%

**Table 2**

The return on investment on the state appropriation of \$52.4 million short-term return of \$25.2 million in direct tax collections resulting in a Net Investment of \$27.2 million.

Long-term returns of taxes from the UAH 2018-2019 graduates will generate approximately \$345.8 million in their career tax payments. The working-life tax investment is comprised of sales and property of taxes and income taxes. Thus, the state investment of \$52.4 million in FY2019 will generate a return on investment of 11%.

UAH Education as Private Investment (Class of 2019)					
	High School	Some college	Bachelors	Masters	Doctorate
Number of years		2	5	2	3
Average starting Salary	\$31,803	\$35,293	\$57,500	\$89,206	\$123,912
Academic Costs (2018\$)		\$78,732	\$203,249	\$112,865	\$216,613
Income Loss (2018\$)		\$141,172	\$143,750	\$89,206	\$185,868
Lifetime Earnings (Current \$)	\$3,901,339	\$4,482,283	\$7,302,916	\$10,247,620	\$10,563,674
Incremental Income (Current \$)		580,944	2,820,633	2,944,704	316,054
Lifetime Earnings (2018\$)	\$1,726,341	\$2,023,685	\$3,284,449	\$4,792,511	\$6,067,324
Incremental Income (2015\$)		297,344	1,260,764	1,508,062	1,274,813
Real Annual Return on Investment		6.70%	18.80%	28.03%	15.65%
Real Return Relative to High School		6.70%	14.27%	19.40%	10.55%

**Table 3**

The return on the investment in a UAH degree is significant for those graduates obtaining a bachelor's, master's, or doctorate degree. Considering the cost of achieving the degree, the increase in earnings over a career will produce a return on investment of 18.8% for a bachelor's degree, 28.0% for a master's degree, and 15.7% for a doctorate. When considering the additional costs of education and additional lifetime earnings relative to having only a high school diploma, the return on investment is 14.3% for a bachelor's degree, 19.4% for a master's degree, and 10.6% for a doctorate. In short, investment in an UAH education prepares graduates for higher earnings and generates public revenues for the State of Alabama.

*Figure 1 Rates of Return on UAH Education*

## Conclusions

For the 2018-2019 fiscal year, UAH had an economic impact of \$615 million, and an employment impact of 9,694 jobs in the state of Alabama. The state tax impact was \$25 million. The return on investment in UAH by the state in terms of state appropriations was 11% percent, which is of great value for the region and the state.

Students who invest in UAH can expect good returns for their investment of costs such as tuition, fees, books, supplies and foregone earnings. A 2019 graduate with a degree can earn a real return of up to 28.0 percent. The university not only brings career rewards but enriches the life of students while providing numerous opportunities for social and academic growth.

There are caveats to the outcomes of this study. Various changes may occur over the lifetime of an individual including earnings levels, place of residence, tax rates, and actual inflation rates.

There are additional unquantifiable benefits of higher education for the local area, state, and individual such as enhanced quality of life, lower crime rates, and better work skills. All contribute to the economic region in which graduates choose to live, learn and work.