

# Federal Research Investment from NSF: **ALABAMA**

## About NSF

As the federal agency charged with the advancement of scientific progress across all of the fields of science and engineering, the National Science Foundation (NSF) is the cornerstone of America's basic scientific research enterprise. NSF's seven directorates fund research in diverse disciplines as well as interdisciplinary, cross-cutting initiatives. Support for education research comes primarily from the Education and Human Resources Directorate and also from the Social, Behavioral and Economic Sciences Directorate.

## Examples of NSF-funded Education Research in Alabama

- Integrating Computing Across the Curriculum (ICAC):** Incorporating Technology into STEM Education Using XO Laptops: Researchers at the University of Alabama at Birmingham provided research assistance and implementation for the One Laptop Per Child program instituted in Birmingham. This program provided XO laptops to all students in first through fifth grades in the city's public school system. The NSF project sought to advance computing, science, and mathematics skills of 4th and 5th grade teachers and students, work with teachers to develop curriculum, and provide professional development for teachers. This project is providing insight for other districts considering one-laptop-per-child programs.
- Making to Advance Knowledge, Excellence, and Recognition in STEM (MAKERS):** A group of researchers at various Alabama universities are implementing and assessing a comprehensive list of hierarchical, evidence-based interventions designed to facilitate transfer, increase persistence and retention, and prepare Scholars for graduation and future careers in STEM fields. The project will provide scholarships to students in STEM fields and encourage their engagement through identifying and investigating problems affecting their local communities, and applying their STEM knowledge to "make" a product that has the potential to solve those problems.



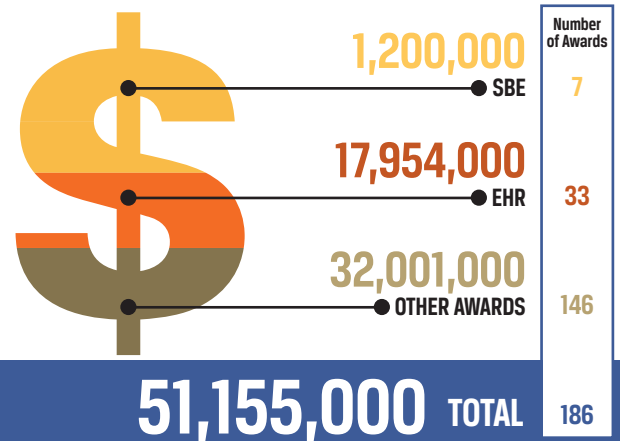
## Top 5 NSF-funded Universities in Alabama

1. University of Alabama Tuscaloosa (\$13,575,000)
2. Auburn University (\$10,869,000)
3. University of Alabama in Huntsville (\$9,768,000)
4. University of Alabama at Birmingham (\$5,296,000)
5. University of South Alabama (\$3,780,000)

## NSF in Alabama

- Alabama received 186 awards in FY 2017.
- Alabama ranks 29<sup>th</sup> overall in NSF funding.
- Alabama received more than .5% of the total NSF award budget in 2017.

## Alabama Funding



# Federal Research Investment from IES: **ALABAMA**

## About IES

The Institute of Education Sciences (IES) is the federal research agency within the U.S. Department of Education that builds knowledge and informs understanding of education from early childhood through postsecondary to adult workforce.

Research, statistics, and evaluations funded by IES provide policymakers and practitioners with reliable information on the condition and progress of education, educational practices that support learning and improve academic achievement, and the effectiveness of education programs.

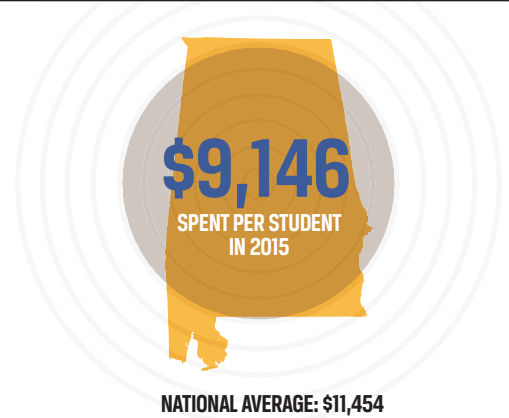
## IES Resources for Schools and Educators in Alabama

- Alabama's data warehouse for K-12 students, the Alabama State Department of Education (ALSDE) Data Center serves as the basis for its reports on assessment, enrollment, graduation rates, and discipline.
- Empowering Teachers with Low-Intensity Strategies to Support Instruction: Funded by the National Center for Special Education Research, this project at the University of Alabama at Birmingham is developing and testing a professional development model, Instructional Choice, intended to improve academic and behavior outcomes for students with and at risk for emotional disturbance.
- The Southeast Regional Educational Laboratory (REL) supported the Improving Low-Performing Schools in Alabama Research Alliance. A partnership of the Alabama State Department of Education and the University of Alabama, this project focused on research-based strategies that could inform the collective goals of the state's lowest-performing schools.

## IES Online Resources

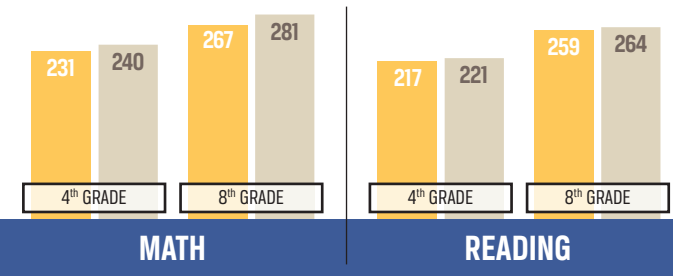
- What Works Clearinghouse:  
<http://ies.ed.gov/ncee/wwc/findwhatworks.aspx>
- Education Resources Information Center:  
<http://eric.ed.gov>

## Average Spending Per Student on Education



Source: Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2014-15 (Fiscal Year 2015): First Look (NCES 2018-301)

## Alabama Performance on the 2015 National Assessment of Educational Progress



Source: <http://nces.ed.gov/nationsreportcard>

## Alabama IES Grants

**86,225** FY 2015

**91,304** FY 2016



**177,529** TOTAL