STATE UNIVERSITY SYSTEM of FLORIDA Board of Governors



# **Information BRIEF**

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### SUS GRADUATES EARN A LIVING WAGE

August 2017

### HIGHLIGHTS

- The annual median wage of SUS graduates working full-time one year after completing their bachelor's degree was approximately \$39,100, which is \$13,900 more than the wage required for one adult to live in Florida and \$22,400 more than a salary earned while working full-time at minimum wage
- The annual median wage for females was \$5,500 less than the median for males
- The annual median wage for Black/African American graduates was \$3,500 less than the annual median wage for all graduates
- The annual median wage for Hispanic graduates was comparable to the annual median wage for all graduates

### Introduction

Students, parents, educators, and policy-makers need information regarding the employment outcomes of bachelor's degree recipients after they complete college. Students need better information to make decisions about education and employment. Parents and educators need that same information to guide students. Policy-makers across the country have shifted their focus from inputs (e.g., enrollments) to outputs (e.g., graduates who work). Employment estimates show that in the next four to eight years, jobs requiring bachelor's degrees or higher will account for somewhere between 15 and 30 percent of all job openings in Florida (2015-2023 Projections Statewide, Florida Department of Economic Opportunity; *Recovery: Job Growth and Education Requirements Through 2020*, Georgetown University Center on Education and the Workforce).

This report is one in a series of information briefs based on a recent study conducted by staff at the Board of Governors. This brief focuses on the earnings outcomes of the Class of 2015. A comprehensive overview of employment and educational outcomes is available in the *Baccalaureate Follow-Up Study: Class of 2015* on the Board's website <a href="http://flbog.edu/forstudents/gfs/">http://flbog.edu/forstudents/gfs/</a>.

### **Study Overview**

Records for 60,333 students who received baccalaureate degrees during the 2015-2015 academic year were used for the study. This includes graduates from 11 of the 12 institutions that make up

the State University System of Florida (SUS). The newest SUS institution, Florida Polytechnic University, enrolled its first students in Fall 2015 and did not have any graduates to include in this analysis. The SUS institutions award degrees in 28 fields of study.

Employment and/or enrollment records were available for 89% of graduates. Data for the remaining 6,843 graduates were not found. Employment information was available from Florida and from the District of Columbia, Puerto Rico, and 40 additional states participating in WRIS 2. Enrollment data was available from the National Student Clearinghouse, which has a database of records from 3,600 colleges and universities nationwide. Refer to the full report for more details.

The study was designed to answer the following four questions.

- 1. Do graduates get jobs?
- 2. Do graduates pursue additional education?
- 3. Do graduates work while pursuing additional education?
- 4. What are the starting salaries of graduates?

This brief focuses on the fourth research question – what are the starting salaries of graduates?

### Findings

The annual median wage of bachelor's degree recipients who worked full-time one year after graduation was approximately \$39,100. According to the living wage calculator developed by the Massachusetts Institute of Technology (<u>http://livingwage.mit.edu/</u>) the minimum annual full-time earnings required for one adult to live in Florida is \$23,200 and the annual salary of Floridians working full-time at minimum wage is \$16,700. The annual median wage of SUS graduates was \$13,900 higher than the living wage salary and \$22,400 higher than the minimum wage salary.

The annual median wages for graduates in each field of study also exceeded both the living wage salary and the minimum wage salary. Annual median wages for full-time workers ranged from \$29,500 for Biological Sciences graduates to \$58,600 for Engineering graduates.

It is important to note that median annual earnings varied widely among graduates within each field. In order to provide more accurate information, additional data points are provided to facilitate a better understanding of the wages earned by recent graduates. Table 1, on the next page, provides wages for graduates at the 5th and 95th percentile to show the variation while controlling for unusually high and low wages.

The field of study with the largest difference between the 5th and 95th percentile wages was Liberal Arts (range = \$74,600). The field with the smallest wage range was Cultural Studies (range = \$31,300). With this much variability across the 28 disciplines, students should consider the full range of wages when establishing their salary expectations. A more detailed explanation follows Table 1. Table 1. Distribution of Wages for Baccalaureate Graduates Employed Full-Time, One Year AfterGraduation, by Fields of Study

		Wage Percentile	ge Percentiles		
Field of Study	5th Percentile	Median	95th Percentile	Wage Range (95 <sup>th</sup> less 5 <sup>th</sup> )	Graduates Employed Full-Time
Liberal Arts & Sciences	\$18,700	\$37,400	\$93,300	\$74,600	420
Computer & Information Sciences	\$26,000	\$53,200	\$97,100	\$71,100	1,077
Engineering	\$28,100	\$58,600	\$92,800	\$64,700	2,619
Health Professions	\$20,200	\$46,100	\$82,200	\$62,000	4,673
Engineering Technician	\$33,000	\$57,600	\$92,500	\$59,500	125
Business & Marketing	\$21,000	\$42,100	\$78,000	\$57,000	7,611
Legal Studies	\$19,500	\$33,600	\$72,400	\$52,900	175
Interdisciplinary Studies	\$18,800	\$35,000	\$71,100	\$52,300	587
History	\$18,200	\$31,300	\$68,500	\$50,300	319
Mathematics & Statistics	\$19,300	\$42,900	\$68,400	\$49,100	221
Education	\$22,900	\$46,100	\$72,000	\$49,100	2,286
Security & Protective Services	\$19,100	\$33,800	\$68,000	\$48,900	1,565
Social Sciences	\$18,700	\$34,400	\$67,100	\$48,400	2,895
Physical Sciences	\$19,200	\$34,900	\$65,700	\$46,500	267
Agriculture	\$18,700	\$33,500	\$64,700	\$46,000	210
Architecture	\$18,100	\$39,100	\$62,700	\$44,600	117
Communication & Journalism	\$19,400	\$34,100	\$63,400	\$44,000	1,926
Public Administration	\$18,700	\$33,600	\$62,200	\$43,500	644
English & Literature	\$18,100	\$32,200	\$61,600	\$43,500	930
Biological Sciences	\$18,100	\$29,500	\$60,400	\$42,300	1,510
Recreation & Fitness Studies	\$18,400	\$32,300	\$60,600	\$42,200	485
Languages & Linguistics	\$17,400	\$31,200	\$58,900	\$41,500	226
Visual & Performing Arts	\$18,600	\$31,300	\$58,600	\$40,000	802
Psychology	\$18,400	\$31,000	\$58,000	\$39,600	2,461
Family & Consumer Sciences	\$19,000	\$34,100	\$56,300	\$37,300	237
Natural Resources	\$19,100	\$32,500	\$52,700	\$33,600	254
Philosophy & Religious Studies	\$18,700	\$31,500	\$52,300	\$33,600	110
Cultural Studies	\$19,400	\$33,000	\$50,700	\$31,300	46
Total	\$19,400	\$39,100	\$76,000	\$56,600	34,798

Sources: Board of Governors staff analysis of data from the Florida Education & Training Placement Information Program and the State University Data System.

Notes: Includes graduates whose degrees were granted in the Summer and Fall terms of 2014 and the Spring of 2015. Wages reflect annualized quarterly wages for values reported in the 4<sup>th</sup> quarter after the degree was granted. Data are for workers with a full-time wage or greater. Includes degree recipients who were only working full-time and those who worked full-time while enrolled in additional education.

For fields of study with smaller wage ranges, the median is a fairly accurate depiction of postbaccalaureate wages for new graduates. For example, the median wage for both Health Profession graduates and Education graduates was \$46,100. However, the range for Education graduates was only \$49,100 (from \$22,900 at the 5th percentile to \$72,000 at the 95th percentile) while the range for Health Profession graduates was \$62,000 (from \$20,200 at the 5th percentile to \$82,200 at the 95th percentile). This indicates that there is less variability among the wages of Education graduates compared to the Health Professions graduate wages. For SUS graduates, this means Education graduates can reasonably expect to earn an annual wage that is close to the median wage of \$46,100. At the same time, Health Professions graduates may earn an annual wage that is considerably more or less than \$46,100 during their first year following completion of a baccalaureate degree because the wage range for graduates in this major is larger.

While median wages may not be an accurate indicator of what a recent graduate is likely to earn, future SUS graduates could – and should - use the median in negotiating for higher wages. Employers should also use this information to ensure that a competitive salary is being offered.

*Follow up question 1: How do the salaries of female graduates compare to the salaries of male graduates?* Overall, the annual median wage for female graduates (\$37,000) was \$5,500 less than the annual median wage for male graduates (\$42,500).

By field of study, the wages for females in some fields were lower than the wages for males with degrees in the same fields. Yet in other fields, the wages for female graduates were higher than the wages for males.

- In 18 of the 28 fields of study, the annual median wage for female graduates was between \$1,000 and \$9,000 *less* than the median wages for males with degrees in the same field.
- Conversely, the annual median wage for female graduates was between \$1,000 and \$5,500 *more* than the median wages for males with degrees in the same field for seven of the 28 fields.

See Table 2 on the following page for more details.

Table 2. Median Wages for Baccalaureate Graduates Employed Full-Time, One Year After Graduation,by Gender, by Fields of Study

Field of Study	Females		Male		
	Median	# Graduates Employed Full-Time	Median	# Graduates Employed Full-time	Median Difference (Females - Males)
Agriculture	\$30,600	108	\$40,000	102	(\$9,400)
Liberal Arts & Sciences	\$35,100	250	\$44,100	170	(\$9,000)
Physical Sciences	\$31,200	122	\$37,600	145	(\$6,400)
Engineering Technician	\$52,900	17	\$57,900	108	(\$5,000)
Social Sciences	\$32,300	1,523	\$36,700	1,372	(\$4,400)
Business & Marketing	\$40,000	3,691	\$44,200	3,920	(\$4,200)
Interdisciplinary Studies	\$33,000	386	\$37,200	201	(\$4,200)
History	\$28,500	125	\$32,500	194	(\$4,000)
Public Administration	\$33,000	527	\$37,000	117	(\$4,000)
Security & Protective Services	\$32,700	785	\$36,100	780	(\$3,400)
Visual & Performing Arts	\$30,200	496	\$33,300	306	(\$3,100)
Legal Studies	\$33,200	114	\$35,800	61	(\$2,600)
Natural Resources	\$31,400	139	\$33,600	115	(\$2,200)
Recreation & Fitness Studies	\$31,500	219	\$33,300	266	(\$1,800)
Biological Sciences	\$28,800	925	\$30,500	585	(\$1,700
Languages & Linguistics	\$30,800	153	\$32,100	73	(\$1,300)
Communication & Journalism	\$33,800	1,409	\$35,000	517	(\$1,200
Computer & Information Sciences	\$52,200	171	\$53,300	906	(\$1,100)
Cultural Studies	\$33,000	36	\$32,900	10	\$100
Psychology	\$31,000	1,969	\$30,500	492	\$500
Philosophy & Religious Studies	\$32,100	41	\$31,400	69	\$700
Engineering	\$59,500	525	\$58,400	2,094	\$1,100
English & Literature	\$32,500	654	\$31,200	276	\$1,300
Education	\$46,400	1,923	\$44,800	363	\$1,600
Mathematics & Statistics	\$43,700	104	\$41,200	117	\$2,500
Health Professions	\$46,600	3,830	\$43,500	843	\$3,100
Architecture	\$40,900	46	\$37,400	71	\$3,500
Family & Consumer Sciences	\$34,500	224	\$29,000	13	\$5,500
Total	\$37,000	20,512	\$42,500	14,286	(\$5,500)

Sources: Board of Governors staff analysis of data from the Florida Education & Training Placement Information Program, the National Student Clearinghouse, and the State University Data System.

Notes: Includes graduates whose degrees were granted in the Summer and Fall terms of 2014 and the Spring of 2015. Enrollments are counted within 14 months, or 426 days, of graduation. Graduates working within one year are counted if they worked at least one quarter within four quarters after graduation.

## *Follow up question 2: How do the salaries of Florida's largest underrepresented minority groups compare to the salaries of all graduates?*

An analysis of the largest racial/ethnic groups revealed several notable disparities in median wages. Black/African American graduates who worked full-time one year after graduation had the lowest annual median wages of \$35,600, which was \$3,500 below the median of \$39,100 for all graduates. The annual median wage for Hispanic graduates was less than the median for all graduates by \$100. The annual median wage for White graduates was more than the median for all graduates by \$1,000. By field of study, outcomes can only be reported for the ten fields of study with the highest number of degrees awarded to the Class of 2015 due to the small numbers of graduates in some fields.

Disparities were noted in nearly all of the top ten fields of study for Black/African American graduates. In nine of the ten fields, Black/African American graduates earned between \$700 and \$8,700 *less* than all graduates with degrees in the same fields. The largest gap was for Black/African American graduates with degrees in Health Professions. Ideally, the median for Black/African American graduates from a given field would be no more than \$500 different than the median for all graduates in that field.

Field of Study	Black / African American		All Students		
	Median	# Graduates Employed Full-Time	Median	# Graduates Employed Full-Time	Median Difference (Black - All)
Health Professions	\$37,400	925	\$46,100	4,673	(\$8,700)
Business & Marketing	\$38,800	728	\$42,100	7,611	(\$3,300)
Communication & Journalism	\$31,600	227	\$34,100	1,926	(\$2,500)
Biological Sciences	\$28,000	177	\$29,500	1,510	(\$1,500)
Security & Protective Services	\$32,500	367	\$33,800	1,565	(\$1,300)
Visual & Performing Arts	\$30,000	59	\$31,300	802	(\$1,300)
Psychology	\$29,900	325	\$31,000	2,461	(\$1,100)
Engineering	\$57,700	186	\$58,600	2,619	(\$900)
Social Sciences	\$33,700	476	\$34,400	2,895	(\$700)
Education	\$46,600	228	\$46,100	2,286	\$500
Total	\$35,600	4,644	\$39,100	34,798	(\$3,500)

Table 3. Median Wages for Black/African American Baccalaureate Graduates Employed Full-Time,One Year After Graduation, by Largest Fields of Study

Sources: Board of Governors staff analysis of data from the Florida Education & Training Placement Information Program (FETPIP) and the State University Data System.

Notes: Includes graduates whose degrees were granted in the Summer and Fall terms of 2014 and the Spring of 2015. Wages reflect annualized quarterly wages reported in the 4th quarter after the degree was granted. Includes degree recipients who were only working full-time and those who worked full-time while enrolled in additional education.

Fewer disparities exist between the median annual wages for Hispanic graduates and the median for graduates across the ten largest fields of study. The largest gap was observed for Hispanic Education graduates, whose median was \$2,400 *less* than the median for all Education graduates. The next two largest gaps were for Hispanic graduates from Engineering and Psychology where their median was \$1,400 and \$1,000 *more*, respectively, than the median for all graduates in those fields. Ideally, the median for Hispanic graduates compared to all graduates in a given field would differ by no more than \$500.

Table 4. Median Wages for Hispanic Baccalaureate Graduates Employed Full-Time, One Year AfterGraduation, by Largest Fields of Study

Field of Study	Hispanic		All St	udents	
	Median	# Graduates Employed Full-Time	Median	# Graduates Employed Full-Time	Median Difference (Hispanic - All)
Education	\$43,700	463	\$46,100	2,286	(\$2,400)
Health Professions	\$45,600	936	\$46,100	4,673	(\$500)
Social Sciences	\$34,400	711	\$34,400	2,895	\$0
Biological Sciences	\$29,900	434	\$29,500	1,510	\$400
Security & Protective Services	\$34,300	457	\$33,800	1,565	\$500
Visual & Performing Arts	\$31,900	210	\$31,300	802	\$600
Business & Marketing	\$43,000	2,093	\$42,100	7,611	\$900
Communication & Journalism	\$35,000	586	\$34,100	1,926	\$900
Psychology	\$32,000	874	\$31,000	2,461	\$1,000
Engineering	\$60,000	707	\$58,600	2,619	\$1,400
Total	\$39,000	8,944	\$39,100	34,798	(\$100)

Sources: Board of Governors staff analysis of data from the Florida Education & Training Placement Information Program (FETPIP) and the State University Data System.

Notes: Includes graduates whose degrees were granted in the Summer and Fall terms of 2014 and the Spring of 2015. Wages reflect annualized quarterly wages reported in the 4th quarter after the degree was granted. Includes degree recipients who were only working full-time and those who worked full-time while enrolled in additional education.

The median annual wages for White graduates were generally comparable to the median for all graduates across the ten largest fields of the study. The most notable difference in median wages was for graduates in Health Professions where the median wages for White graduates (\$48,500) was \$2,400 more than the median for all Health Professions graduates (\$46,100).

Table 5. Median Wages for White Baccalaureate Graduates Employed Full-Time, One Year AfterGraduation, by Largest Fields of Study

Field of Study	White		All St	udents	
	Median	# Graduates Employed Full-Time	Median	# Graduates Employed Full-Time	Median Difference (White - All)
Psychology	\$30,300	1,107	\$31,000	2,461	(\$700)
Engineering	\$58,200	1,468	\$58,600	2,619	(\$400)
Visual & Performing Arts	\$30,900	475	\$31,300	802	(\$400)
Communication & Journalism	\$34,100	1,003	\$34,100	1,926	\$0
Social Sciences	\$34,400	1,500	\$34,400	2,895	\$0
Business & Marketing	\$42,400	4,168	\$42,100	7,611	\$300
Security & Protective Services	\$34,300	679	\$33,800	1,565	\$500
Biological Sciences	\$30,100	750	\$29,500	1,510	\$600
Education	\$47,000	1,482	\$46,100	2,286	\$900
Health Professions	\$48,500	2,406	\$46,100	4,673	\$2,400
Total	\$40,100	18,530	\$39,100	34,798	\$1,000

Sources: Board of Governors staff analysis of data from the Florida Education & Training Placement Information Program (FETPIP) and the State University Data System. N=34,798.

Notes: Includes graduates whose degrees were granted in the Summer and Fall terms of 2014 and the Spring of 2015. Wages reflect annualized quarterly wages reported in the 4th quarter after the degree was granted. Includes degree recipients who were only working full-time and those who worked full-time while enrolled in additional education.

Data for graduates in the other race/ethnic categories cannot be reported due to the low numbers of graduates.

#### Conclusion

The annual median wages of full-time workers from the Class of 2015 was \$39,100, which is higher than the annual wages of minimum wage workers and higher than the minimum living wage salary for Florida. The annual median wage of all female graduates was \$5,500 lower than the wages of all male graduates, though female graduates from some fields of study had higher median wages than the male graduates with degrees in the same field of study. The annual median wage for Black/African American graduates was \$3,500 lower overall and wages were also lower for Black/African American graduates in nine of the ten fields of study reported above. The annual median wages for Hispanic graduates were comparable to or more than the wages of all graduates and for Hispanic graduates in most fields of study except for Hispanic Education graduates whose median was \$2,400 less than the median for all Education graduates.

### Data Sources & Notes

The analysis utilized individual-level data for the 60,333 graduates from the State University Data System (SUDS) maintained by the Florida Board of Governors. These records were matched to records in the National Student Clearinghouse (NSC) and the Florida Education and Training Placement Information Program (FETPIP) to determine employment and education outcomes.

Data reported in this information brief include graduates whose degrees were granted in the Summer and Fall terms of 2015 and the Spring of 2015. Enrollments were counted within 14 months, or 426 days, of graduation. Graduates who worked within one year were counted if they worked at least one quarter within four quarters after graduation. Full- and part-time employment status was based on employment in the 4th quarter following graduation. The outcomes reported in this brief also include graduates who worked while pursuing further education.

### **Additional Information**

For more information about the study or other outcomes for the Class of 2015, refer to the full report – *Baccalaureate Follow-Up Study: Class of 2015* - on the Board's website <a href="http://flbog.edu/forstudents/gfs/">http://flbog.edu/forstudents/gfs/</a>. Details about the methodology, data sources, and data limitations are also available in the full report.

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