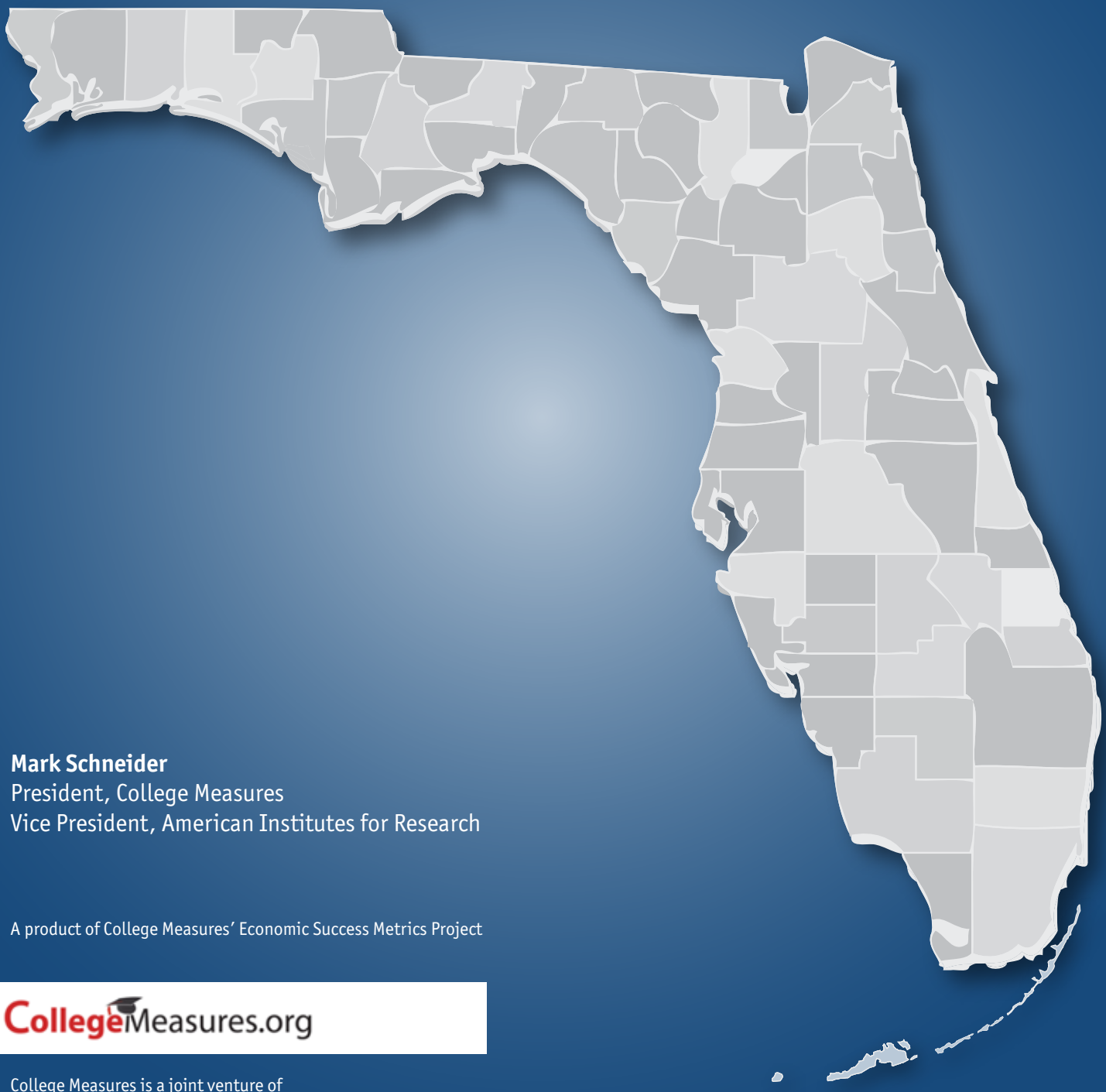
Higher Education Pays:

Measuring the Economic Security of Florida's Postsecondary Graduates



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A product of College Measures' Economic Success Metrics Project

CollegeMeasures.org

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Executive Summary

This report, the result of a partnership between the State of Florida and College Measures, focuses on the median first-year earnings of recent graduates/completers from two-year and four-year institutions across Florida as well as District Technical Centers. It documents the variation in first-year earnings for graduates of specific degree programs at specific colleges and universities. The report also presents data on the percentage of graduates/completers from various institutions that are receiving public assistance, as well as the percentage enrolled in continuing education. Debt accumulated by students, not just graduates, also is reported. The results show that the degrees and certificates students earn, and where they earn them, matter.

The data source for information contained in this report is the Florida Department of Education's Florida Education and Training Placement Information Program (FETPIP). The Office of Student Financial Assistance also contributed. The data discussed in this report reflect outcomes for graduates/completers in their first year after graduation for a five-year period from academic years 2006–07 through 2010–11.

Among the findings in this report:

Florida State Colleges and District Technical Centers

- The bachelor's degree and the associate of arts (A.A.) degree, designed as a pathway to the bachelor's degree, are the two most commonly awarded degrees in Florida. The median first-year earnings of graduates with these degrees are lower, however, than those of graduates of many other degree and certificate programs. For example, graduates with an associate in science (A.S.) degree have median earnings that are more than $11,000 higher than graduates with bachelor's degrees and almost $20,000 higher than graduates with A.A. degrees who are in the labor market.

- The graduate's field of study can greatly affect early career earnings. The median first-year earnings of a graduate with an A.S. degree in child care provider/assistant are around $25,000. A graduate with an A.S. degree in nursing can expect twice as much, and graduates who earned an A.S. degree as an emergency medical technician—paramedic can expect even more.

- There is a range of median first-year earnings across programs awarding the same degree in the same field of study. Median first-year earnings for emergency medicine technology–paramedic range from less than $50,000 (College of Central Florida and Santa Fe College) to around $65,000 or more (Palm Beach State College, Miami Dade College, Indian River State College, Edison State College, and Broward College).

- The average federal debt level per student in 2010–11 across Florida state colleges ranges from less than $3,000 at Pensacola State College, Northwest Florida State College, and Florida Gateway College to more than $5,000 per student at St. Petersburg College; Florida Keys Community College; State College of Florida, Manatee-Sarasota; College of Central Florida; Valencia College; St. Johns River State College; and Broward College.

- District Technical Centers issued far more career Postsecondary Adult Vocational (PSAV) certificates than did Florida colleges. PSAV certificates issued by District Technical Centers accounted for more than 60% of all the certificates awarded in the state.

- However, graduates with certificates from the Florida College System (FCS) are more successful in the labor market. For example, 76% of college graduates/completers who were awarded PSAV certificates were found to be employed compared with 68% with PSAV certificates from District Technical Centers. In addition, the median first-year earnings for the five-year period of study (academic years 2006–07 through 2010–11) of graduates/completers from colleges were higher ($34,628) than the earnings ($28,028) of those with certificates from District Technical Centers.

- More than 15% of graduates/completers who have earned PSAV certificates in District Technical Centers received public assistance, almost double the percentage of those who earned their degrees and certificates from Florida's state colleges.

- Students earning associate's degrees are less likely to have received public assistance than students who earn certificates.

Florida's Universities

- There is variation in the median earnings of graduates with bachelor's degrees from less than $30,000 at Florida Agricultural and Mechanical (A&M) University to more than $36,000 at Florida International University. Some of this variation is no doubt related to the different economic areas of the state where these campuses serve and students choose to work.

- The median wages of graduates of four universities (University of Central Florida, Florida Gulf Coast University, University of South Florida, and the University of North Florida) were within $750 of each other, suggesting many university pathways into the labor market that employers value at roughly the same level.

- Graduates with degrees in psychology, one of the most popular fields of study in state universities, have low first-year earnings, around $6,000 less than the statewide median. Graduates with degrees in political science and English language and literature also fall toward the bottom of the earnings distribution.

- Among the highest paid graduates are those with degrees in business-related fields (business administration, finance, and accounting). In contrast, graduates with degrees in marketing, another business-related field, have lower first-year earnings.

- The median statewide federal loan amount per university student is slightly more than $8,000. The amount varies, however, from around $5,100 at Florida Gulf Coast University to more than $13,000 at the University of Florida. Because this amount includes disbursements to both graduate and undergraduate students, there may be some upward pressure on the amount reported in research universities such as Florida State University and the University of Florida. Moreover, this is only federally issued debt, and other sources of loans students may be using to help finance their education are not included in this estimate.

- During the five-year study period, Florida state colleges awarded more than 6,000 bachelor's degrees, concentrated in a small number of relatively high-paying fields. In turn, the median first-year earnings of graduates with bachelor's degrees from Florida's colleges (around $41,800) are higher than those of graduates with bachelor's degrees from Florida's universities (slightly more than $33,600).

- Graduates with master's degrees earn more, often far more, than graduates with only bachelor's degrees. The median first-year earnings of graduates with master's degrees in Florida is around $49,000 compared with less than $34,000 for graduates with bachelor's degrees.

- For field of study, the earnings gained for having a master's degree, compared with only a bachelor's degree, range from around $5,000 (elementary education and teaching) to more than $25,000 for several business degree programs and nursing.

Where the Jobs Are

The report also presents data on the industries and occupations that are likely to be most in demand in future years. Following are some findings.

- The top three industries with the fastest growth in Florida are related to construction with specialty trade contractors projected to grow the fastest from 2013 to 2021 with annual growth of +3.72%.

- The health care industry is also projected to grow rapidly due to population gains, the aging population, and improved medical technologies.

- Another way to look at where the jobs are is to see which industries will be creating the most new jobs, regardless of the growth rate. Some fast-growing industries are relatively small, others are much larger. For example, ambulatory health care services and professional, scientific, and technical services are expected to add numerous new jobs, and both have high growth rates. In contrast, two industries, hospitals and administrative and support services, have lower growth rates, but because they are large industries, will add many more jobs than most of the faster growing industries.

- Some occupations will have a greater demand relative to supply. Florida projects that only 572 graduates with the academic credentials to become physical therapists will be produced by state colleges and universities between now and 2021. The estimated industry demand, however, is for more than 2,000 therapists during this time, leaving a shortage of around 1,500 trained individuals. Physical therapists are well compensated.

- Similarly, Florida colleges and universities will produce far fewer securities and financial service sales agents than projected industry demand (a shortage of some 1,800 graduates). These graduates are among the most highly paid graduates in the state.

More findings are available at: www.beyondeducation.org

In addition to www.beyondeducation.org, readers interested in more information may want to visit the following sites:

What People are Asking (WPAA) http://www.whatpeopleareasking.com/index.shtm is designed to retrieve Florida job and wage data by area. It features Hot Jobs, What Hot Jobs Pay, and other information of interest to students and parents.

http://smart-college-choices.com/ provides outcome data on graduates of the Florida College System and District Technical Schools.

Introduction

Higher Education Pays

On average, graduates with associate's degrees earn more than high school graduates and are less likely to be unemployed, even in harsh economic times. Graduates with bachelor's degrees do even better. And graduates with master's and professional degrees do better still.[1] Higher education has many benefits besides greater success in the labor market; nonetheless, students, their families, taxpayers, and policymakers should know more about the economic returns on their investment of time and money in the pursuit of postsecondary degrees.

It is important to note that the wages graduates of any higher education program or institution earn are not the only measure of how well a program or institution is performing. And for some institutions and degree levels (e.g., state colleges and the "transfer" associate's degree or bachelor's degree programs focused on preparation for graduate study), first-year postcompletion wage outcomes may be even less important than they are for other degree programs. Each graduate's success reflects a variety of factors that may not be affected by educational experience, such as his or her background, the local job market, and even luck. That said, the labor market success of graduates is valuable information, especially for students and their families as they consider their enrollment plans for higher education and how to finance it.

Measuring the labor market success of graduates depends on the successful merging of two different state data systems. The first is student-level data detailing the year of graduation and the institution, degree, and area of study of each graduate. These data come from the Florida Education and Training Placement Information Program (FETPIP). The data discussed in this report reflect outcomes for graduates/completers in their first year after graduation for a five-year period beginning in the 2006–07 academic year and through the 2010–11 academic year. These data are then matched with unemployment insurance (UI) wage data reported to the state on a quarterly basis. Florida has been matching these two data systems for several years, and this matched dataset is the primary source for this report.

There are some limits to the matched data. Because UI wage data[2] are reported only for workers within a state, the wages of graduates who work outside Florida are not captured.[3] In addition, the wages of graduates who earned a higher credential out of state are categorized in the cohort of graduates who earned their highest degree in Florida. Thus, the matched dataset presents a somewhat limited picture of the total contribution institutions of higher learning make to the success of their graduates.

1 http://www.bls.gov/emp/ep_chart_001.htm

2 This report uses the terms "wages" and "earnings" to cover the data reported by the state's UI records system.

3 In addition, not all workers are covered by the UI system. See, for example, Florida Department of Revenue, *What Employers Need to Know about Reemployment Tax*. Available at http://dor.myflorida.com/dor/forms/2013/rt800058.pdf

From the perspective of any individual state, however, this limitation is less severe than it may seem at first glance. For example, by measuring the percentage of graduates who remain after graduation to work in the state, Florida can see which campuses and programs are contributing the most toward meeting the goal of increasing the state's stock of human capital.

This report is the result of a partnership between the State of Florida and College Measures to make publicly available the first-year wages of recent graduates of programs across the state. The focus of this report, and its accompanying website (www.beyondeducation.org), is on the variation in first-year wages of graduates of higher education institutions in Florida.[4] Longer term earnings are available at Florida's Economic Success Metrics website www.beyondeducation.org.

The data in this report show that wages of graduates vary considerably across programs and institutions in Florida. Because students study subjects within a specific degree area in a specific educational institution, the detailed information in this report matters—students graduating with, say, a psychology degree from one campus may earn substantially more or less than students graduating with the same degree from another.

Information about first-year wages is particularly important for students as they consider which educational institution to enroll in and how much debt they might consider taking on because the ability to repay student debt is clearly related to early career salaries. Taxpayers and their representatives also should know these data as they make decisions about where to invest tax dollars. Institutions themselves should examine these data because the market success of their graduates may be an important indicator of how well they are educating their students for the world after graduation.

4 Additional work exploring variation in the growth of wages of students in different careers who have earned degrees from different programs is clearly necessary to assess more fully the labor market success of graduates.

The Importance of Program-Level Data

Previous work, for example, by the U.S. Department of Labor, Bureau of Labor Statistics[5] and by Georgetown University's Center on Education and the Workforce,[6] has identified the nation's highest paying professions. For the last several years, PayScale[7] has reported the early and midcareer salaries of graduates of nearly 1,000 bachelor's degree-granting institutions. More recently, with the support of College Measures, PayScale expanded its reporting to include salary data on graduates from approximately 600 two-year institutions, available at www.collegemeasures.org.

Each of these studies provides information on the *average returns* of graduating with a degree in a particular area of study or the *average returns* of graduating from a specific college. With the dataset now being made public, the variation in wages of graduates of specific programs at individual colleges and universities can be explored.

Indeed, the data show that the variation across programs is substantial. As evident in Table 1, median first-year wages of recent graduates of some programs in Florida exceed $60,000; whereas the median first-year wages of graduates of other programs hover around $20,000 per year.

Many factors can contribute to this variation, including school mission, student choice of what to study, student enrollment in postgraduate work, and the graduate's occupation. Also of great importance is the variation in labor markets across Florida. For example, the state is characterized by large differences in the composition and size of the labor market surrounding Miami/Dade compared with the northern and more rural areas of the state. Consider that in Miami/Dade, Palm Beach, and Broward counties, the average wage in 2012 exceeded $45,000. In contrast, the average wage in several northern counties, including Holmes, Calhoun, Franklin, and Jefferson counties, was less than $30,000. Although graduates of Florida's colleges and universities are mobile, many graduates are likely to remain near their alma mater. This needs to be kept in mind when looking at the program-level data presented in Table 1 and throughout this report.

5 http://www.bls.gov/bls/blswage.htm

6 http://cew.georgetown.edu/collegepayoff/

7 http://www.payscale.com/college-education-value

Table 1: Highest and Lowest First-Year Earnings of State University System Graduates With Bachelor's Degrees, by Institution and Program

Institution (University)	Program	Median First-Year Earnings
Lowest First-Year Earnings of Graduates With Bachelor's Degrees		
The University of West Florida	Drama and Dramatics/ Theatre Arts, General	$19,548
University of Florida	Russian Language and Literature	$19,700
University of Florida	Botany/Plant Biology	$20,040
University of Florida	Entomology	$20,660
Florida International University	Physics, General	$20,704
The University of West Florida	Anthropology	$20,898
Highest First-Year Earnings of Graduates With Bachelor's Degrees		
The University of West Florida	Electrical and Electronics Engineering	$58,700
University of Florida	Electrical and Electronics Engineering	$59,300
Florida Atlantic University	Nursing/Registered Nurse	$60,220
University of Florida	Nuclear Engineering	$67,842
University of Florida	Fire Science/Firefighting	$69,756

In the following pages, some of the patterns in the median first-year wages of college graduates in Florida are further explored. The reader should go to www.beyondeducation.org for access to the full set of comparative data. The reader is also urged to read the technical appendix that describes some of the limits on the data reported in both this report and the associated website.

Earnings and Other Outcomes of Graduates/Completers of Florida College System Institutions and District Technical Centers

Florida's postsecondary system includes Florida College System (FCS) institutions and District Technical Centers operated by school districts. FCS institutions offer a variety of programs from bachelor's degrees and associate in arts degrees to career and technical programs. District Technical Centers offer only career and technical programs.

The associate's in arts degree (A.A.) is designed for students who intend to earn a bachelor's degree. Other degree programs such as the associate's in applied science (A.A.S.) and the associate in science (A.S.) degrees are career and technical education (CTE) programs where the expectation is that most students completing these degrees are seeking immediate employment following graduation. All three associate's degrees are designed as two-year courses of study.

In addition, career and college credit certificate programs are available in many specialties for students wanting to spend less than two years in career preparation. Career and technical certificate programs fall into several categories: career certificates (commonly known as postsecondary adult vocational [PSAV] certificates), applied technology diplomas (ATD), apprenticeships, and college credit certificates (also known as Postsecondary Vocational Certificates [PSV]). Details about each of these credentials are as follows:

Career Certificates. Career certificate (PSAV) programs are noncollege-credit, career-training programs that vary in length and intensity from 40 hours to more than 1,500 hours.

Applied Technology Diplomas. These diploma programs are offered by colleges as college credit. The program is a course of study that is part of an A.S. degree or an A.A.S. degree, is less than 60 credit hours, and is designed to lead to employment in a specific occupation.

Apprenticeships. Apprenticeship is a structured training system, involving a partnership between a District Technical Center and the registered apprenticeship sponsor, in which the apprentice works full-time (40 hours per week) during the day for a sponsoring employer, learning the skills of the trade (through on-the-job training with a journeyman/mentor). The program of study includes related classroom instruction through the technical center. Apprentices earn a progressive wage while in the program.

College Credit Certificate Programs. College credit certificate (PSV) programs can be completed in one year and provide a set of technical skills in a specific area of study. Each certificate applies toward an A.S. degree.

As noted in the following pages, the postgraduate career earnings of students completing these different credentials vary widely. In addition, it is not necessarily the case that longer courses of study lead to higher earnings following graduation.

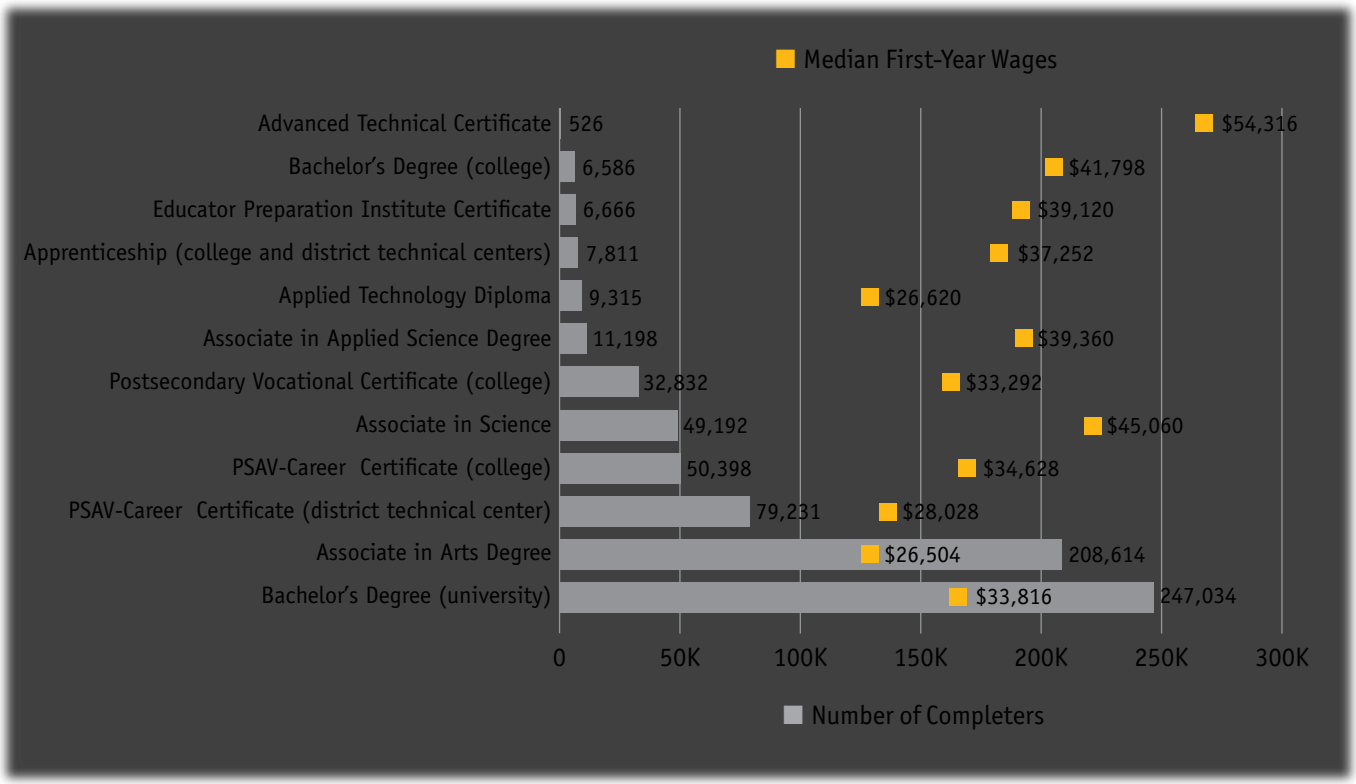
Although the focus in this section is on associate's degrees and CTE program credentials, as a point of reference, Figure 1 shows the number of bachelor's degrees awarded by Florida universities during the five-year study period (academic years from 2006–07 through 2010–11). The two most commonly awarded credentials in Florida are the bachelor's degree and the A.A. degree, which is designed as a pathway to a bachelor's degree.

In contrast, far fewer students are completing CTE programs of study. For example, more than 200,000 A.A. degrees were awarded during the study period; in comparison, fewer than 50,000 A.S. degrees were awarded and only slightly more than 11,000 A.A.S. degrees conferred during the same five-year period. Florida's District Technical Centers and the Florida State College institutions together awarded more than 129,000 career certificates. Colleges also awarded more than 30,000 college credit certificates. This is consistent with a national trend behind a rapid growth in highly focused career-oriented certificates, many of which have considerable value in the job market.

Figure 1 also shows the median first-year wages associated with each credential. The lowest wages are earned by graduates holding an A.A. degree who are in the labor market. Some are graduates who may still be attending school while in the job market, depressing their earnings. With that in mind, note that students who graduate with an A.S. degree earn almost $20,000 more than graduates with the A.A. degree and over $11,000 *more than* graduates with a bachelor's degree. The median earnings of graduates with an A.S. degree are also substantially higher than those of graduates who earned the far less common A.A.S. degree.

Students who completed certificates, on average, earned more than graduates with A.A. degrees who were in the labor market, but less than graduates with an A.S. or A.A.S. degree. The median first-year earnings of graduates with an A.A. degree were $26,504, while graduates/completers with a career certificate from FCS institutions had median earnings of $34,628 and from District Technical Centers had median earnings of $28,028. Graduates with an A.A.S. degree had median earnings of $39,360, and with an A.S. degree, $45,060. The highest wages went to the 500 or so students who earned an advanced technical certificate with median earnings of $54,316.

Figure 1: Median First-Year Earnings and Number of Postsecondary Credentials Awarded, Academic Years 2006–07 Through 2010–11



Variation in First-Year Earnings of Graduates With Associate's Degrees

Associate in Arts Degree

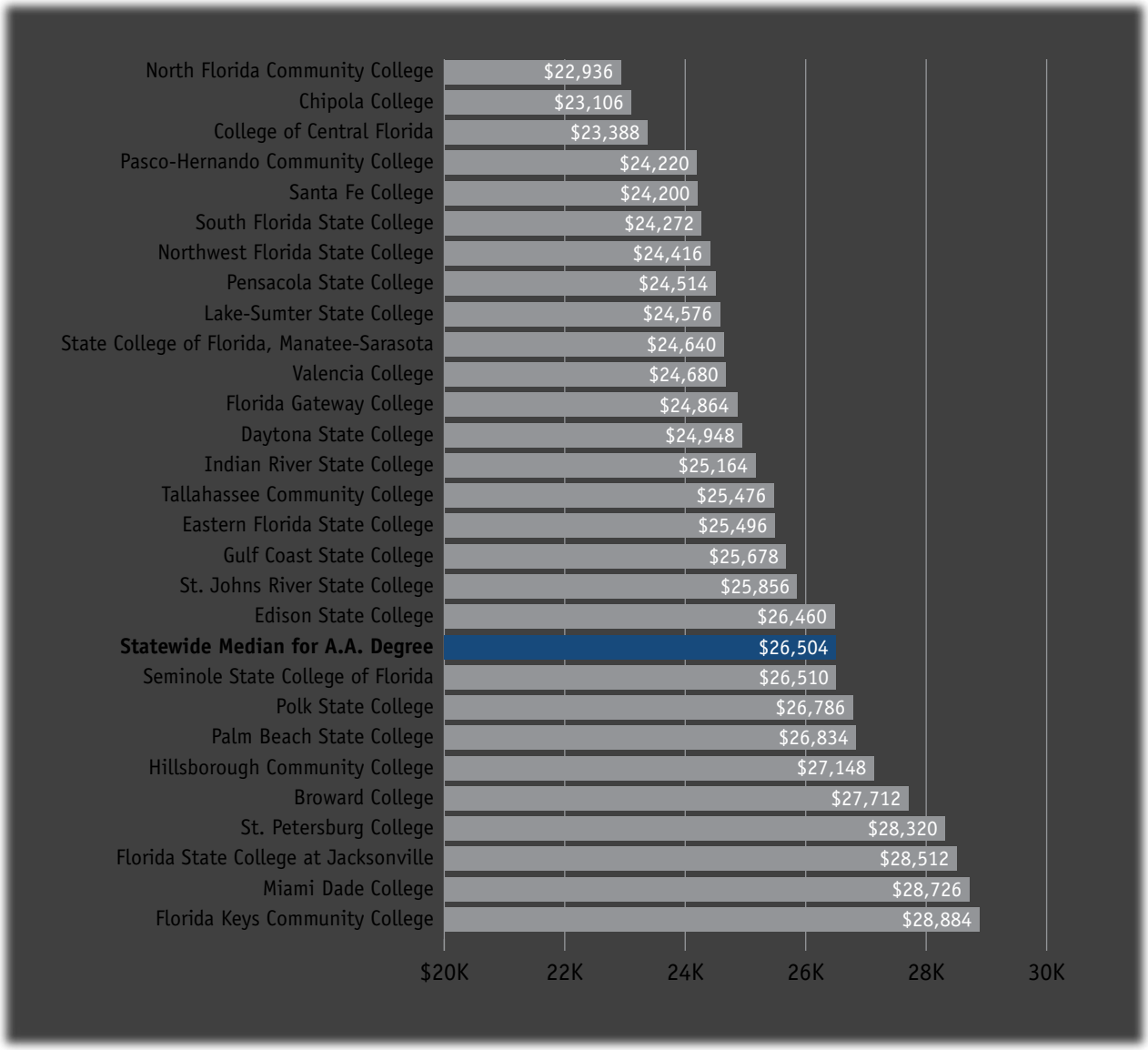
After the bachelor's degree, the most common degree granted in Florida is the A.A. degree with more than 200,000 A.A. degrees conferred during academic years 2006–07 through 2010–11. The A.A. degree is designed for students who plan to enroll in a Florida public four-year institution as a junior and complete a bachelor's degree program. The 60-credit A.A. degree requires 36 credit hours of general education and 24 credit hours of electives.

Figure 1 shows that the median wages of all graduates with A.A. degrees are slightly more than $26,500.[8] Figure 2 displays the median wages of graduates with A.A. degrees from specific institutions across Florida. Almost $6,000 separates the median earnings of graduates of North Florida Community College (at just less than $23,000) from those of graduates of Florida Keys Community College (at around $29,000). However, the first-year earnings of graduates of most colleges in the state are within $3,000 of the state median.

No colleges have graduates whose median first-year earnings are more than $29,504 (the state median plus $3,000). In contrast, graduates of three colleges have median earnings less than $23,500 (the state median minus $3,000). These are North Florida Community College, Chipola College, and the College of Central Florida. Although this report does not provide an explanation for these differences, note that South Florida State College and Northwest Florida State College are located in rural areas of the state where median earnings may be lower than in urban areas. In contrast, two of the schools with graduates with A.A. degrees earning the most are located in the state's largest metropolitan areas (Florida State College at Jacksonville and Miami Dade College) where graduates who stayed in the urban area may experience higher earnings.

8 Unless otherwise noted, the data in all charts and tables in this report are based on the merged student level/unemployment insurance data noted in the introduction. See the technical appendix for more details.

Figure 2: Median First-Year Earnings of Graduates With A.A. Degrees, by College



Associate in Science Degree

After the A.A. degree, the next most common two-year degree conferred in Florida is the A.S. About 50,000 A.S. degrees were granted during the five academic years covered by this study. The A.S. degree program, like other CTE programs, is designed to prepare students who are planning to enter a career at the semiprofessional level.

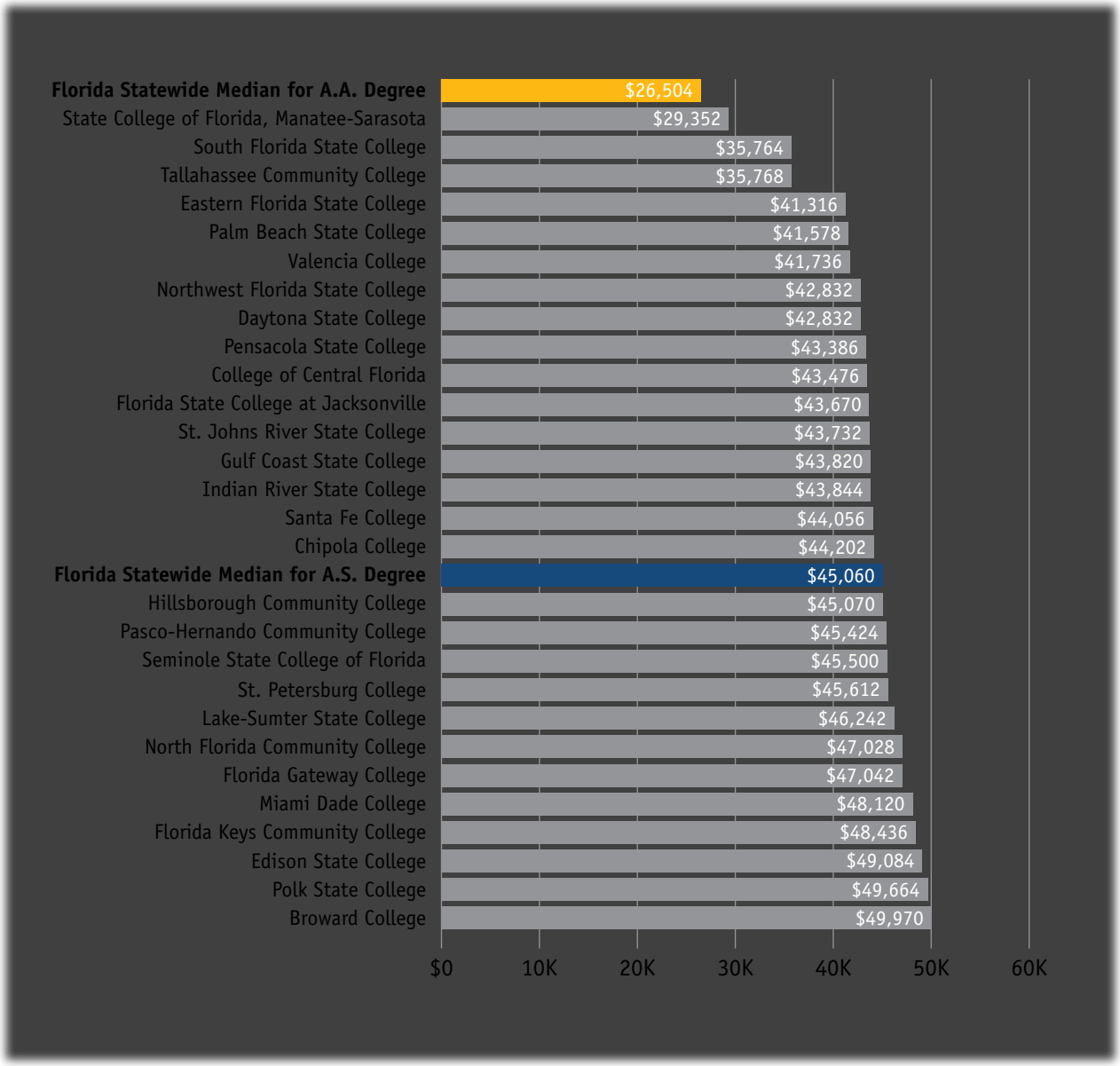
As is shown in Figure 3, graduates with this degree earned far more, with median first-year earnings of more than $45,000, than graduates with an A.A. degree (which was around $26,500). The range in the median earnings of graduates with A.S. degrees across Florida colleges is substantial. At the high end, graduates with A.S. degrees from five colleges (Miami Dade College, Florida Keys Community College, Edison State College, Polk State College, and Broward College) have median earnings that are more than $48,000.

In contrast, graduates with A.S. degrees from three colleges (State College of Florida, Manatee-Sarasota; South Florida State College; and Tallahassee Community College) have median earnings less than $36,000. Note, however, that even among these three colleges, the median earnings of graduates with A.S. degrees still exceed the statewide median for graduates with A.A. degrees.

This could be attributed to several factors as discussed below such as the mix of programs and the strength of the regional labor market. In the section "What a Student Studies Matters" and at other points throughout this report, program comparisons are presented that can help isolate the effects of which programs institutions offer.[9]

9 This report presents highlights of the kinds of comparisons that are possible using the data at www.beyondeducation.org, which allows for more detailed comparisons of various outcomes at the program level.

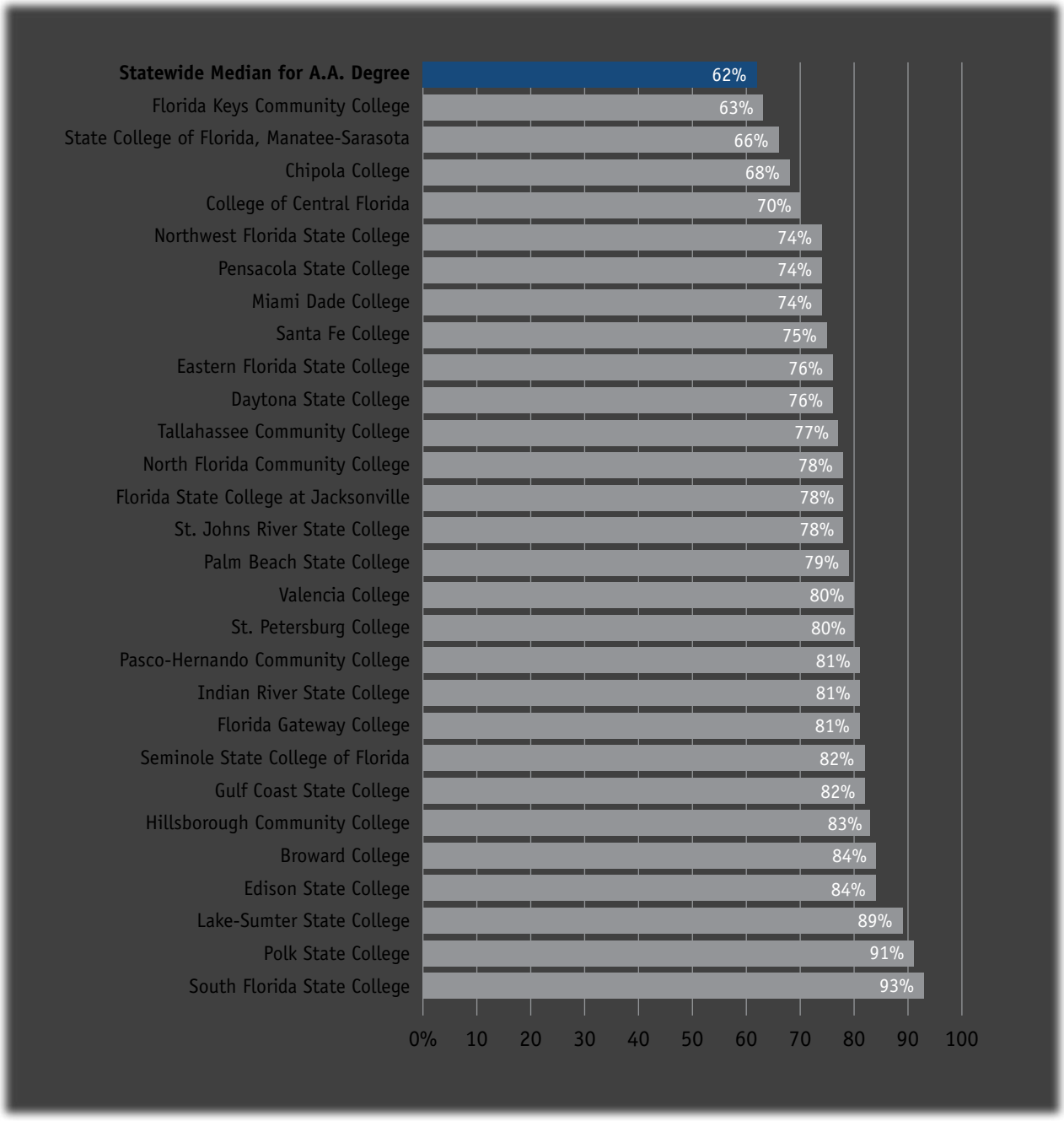
Figure 3: Median First-Year Earnings of Graduates With A.S. Degrees, by College



Employment Outcomes of Graduates With A.S. Degrees

Figure 4 shows the percentage of graduates with A.S. degrees found working across Florida covered by the state's unemployment insurance wage database one year after graduation. Across the state, about 80% of students with A.S. degrees are found employed, but there is a great range by institution. For example, the median employment rate for graduates with A.S. degrees from three colleges (Florida Keys Community College; State College of Florida, Manatee-Sarasota; and Chipola College) is below 70%. At the high end, the median employment rate was more than 90% for graduates of Polk State College and South Florida State College. Note that even the lowest employment rates for graduates with A.S. degrees was higher than the median employment rate for all graduates with A.A. degrees: in short, students completing the A.S. degree are more likely to be found employed in the state than graduates with A.A. degrees who are in the labor market.

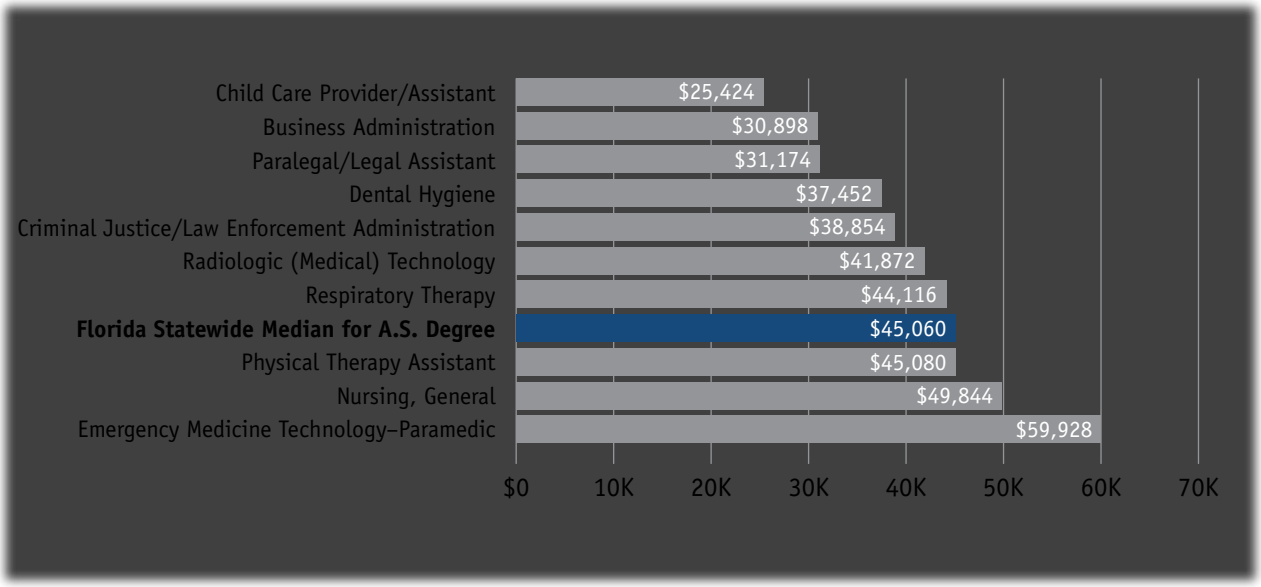
Figure 4: Total Percent of Graduates With A.S. Degrees Employed, by College



What a Student Studies Matters

Although all students earning an A.A. degree are classified into a single area of study, liberal arts and sciences/liberal studies,[10] graduates earning the A.S. degree have a far wider range of areas of study, and graduates of some programs earn far more than graduates of others. Consider Figure 5 that provides a list of the first-year earnings of graduates with A.S. degrees in the ten most popular areas of study. The range starts at $25,424 (for graduates with A.S. degrees in child care provider/assistant) to more than twice that for graduates in emergency medicine technology–paramedic (slightly less than $60,000).

Figure 5: Median First-Year Earnings of Graduates With the Most Popular A.S. Degrees, by Area of Study



10 This classification and information about all other fields of study used in this report, are defined by the U.S. Department of Education Classification of Instructional Programs (CIP) Code.

Table 2 shows that not only do earnings differ across FCS institutions, so does the percent employed in the state of Florida. Only about two-thirds of A.S. graduates with degrees in Business Administration are found employed in Florida one year after graduation. Similarly, only about 70% of graduates with degrees in Child Care Provider/Assistant are found. In contrast, more than 80% of graduates in health care related professions such as Respiratory Therapy or Emergency Medicine Technology–Paramedic are found in Florida's employment database.

Table 2: Number of Graduates/Completers of Most Popular A.S. Degree Areas and Percent Employed, by Program

A.S. Degree Program	# of Completers	Total % Employed
Business Administration	1,205	68%
Child Care Provider/Assistant	1,220	70%
Paralegal/Legal Assistant	1,833	75%
Criminal Justice/Law Enforcement Administration	1,473	77%
Dental Hygiene	1,404	79%
Radiologic (Medical) Technology	1,528	81%
Respiratory Therapy	1,009	82%
Physical Therapy Assistant	1,024	84%
Nursing, General	20,721	87%
Emergency Medicine Technology - Paramedic	1,979	90%

The power of these data becomes evident when the wages of graduates with A.S. degrees from specific programs from specific colleges are reviewed. These detailed data are important because students earn their degrees in an area of study at an individual college.

Figure 6 displays the first-year earnings of graduates of the three largest A.S. degree programs across the 13 colleges in Florida with sufficient data to meet reporting requirements—Paralegal/ Legal Assistant, Emergency Medicine Technology–Paramedic, and Nursing. The variation across programs shows why this level of analysis is important.

Figure 6 shows that, regardless of college, the median first-year wages for paralegal/legal assistant are far lower than wages of graduates with degrees in Emergency Medicine Technology–Paramedic or Nursing. That said, there is still considerable range in the earnings of graduates from different schools. At the low end of the range, graduates of the College of Central Florida and Pasco-Hernando Community College have median earnings of around $25,000 compared to median earnings of more than $35,000 for graduates of Broward College and Miami Dade College. The range is somewhat narrower for nursing, ranging from less than $49,000 (Florida State College at Jacksonville, Eastern Florida State College) to more than $54,000 (Broward College, Miami Dade College). The range is greatest for the emergency medicine technology–paramedic, ranging from less than $50,000 (College of Central Florida, Santa Fe College) to median earnings of around $62,000 or more (Palm Beach State College, Miami Dade College, Indian River State College, Edison State College, and Broward College).

Associate in Applied Science Degree

In addition to students earning A.A. and A.S. degrees during academic years 2006–07 through 2010–11 covered in this report,[11] more than 11,000 students in Florida earned an A.A.S. degree. In general, this degree program focuses on training students for high-technology careers.

The statewide median earnings of graduates with the A.A.S. degree is $39,360, considerably higher than the median of graduates with A.A. degrees ($26,504 statewide) but almost $6,000 less than the median first-year earnings of A.S. graduates. The range in median first-year earnings across colleges granting this degree is substantial, from slightly less than $26,000 (College of Central Florida) to almost twice that for graduates with A.A.S. degrees from Palm Beach State College ($51,836). See Figure 7.

Graduates with A.A.S. degrees from three colleges (College of Central Florida, Pasco-Hernando Community College, and Florida Gateway College) have median earnings of less than $30,000. In contrast, the median first-year earnings of graduates of State College of Florida, Manatee-Sarasota; Seminole State College of Florida; South Florida State College; and Palm Beach State College had median first-year earnings of higher than $45,000, more than 50% greater than graduates of these other institutions. The reader should keep in mind that these differences are affected by the distribution of graduates across programs whose graduates earn high-paying versus low-paying wages in the labor market and also by the location of the school in rural or urban areas or in northern Florida as compared to the larger and higher paying regional economies of Florida's southeast coast.

11 Remember that the data are for first-year graduates from each of the five years.

Figure 6: Median First-Year Earnings of Graduates of the Three Most Popular A.S. Degree Programs, by College

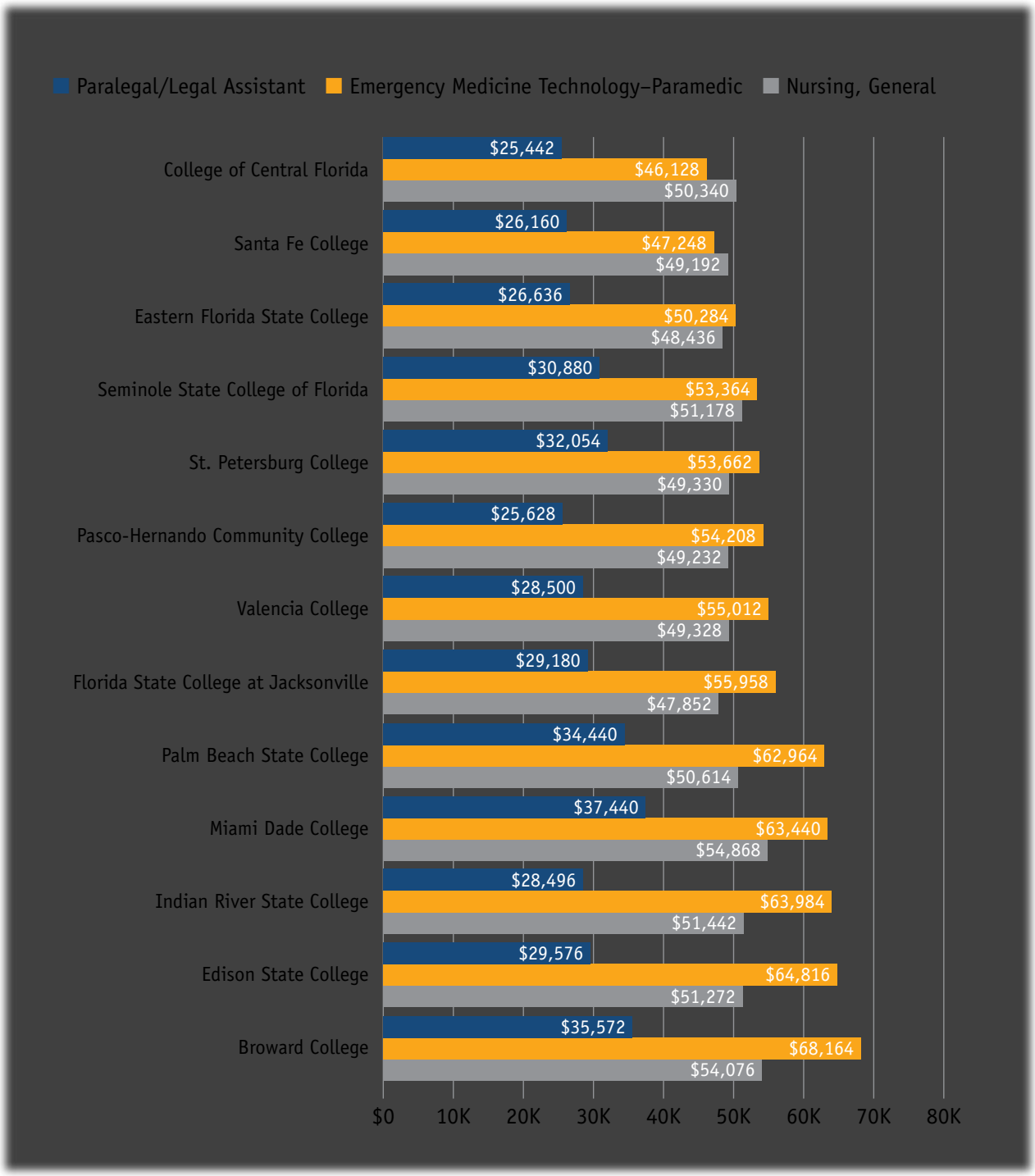


Figure 7: Median First-Year Earnings of Graduates With A.A.S. Degrees, by College

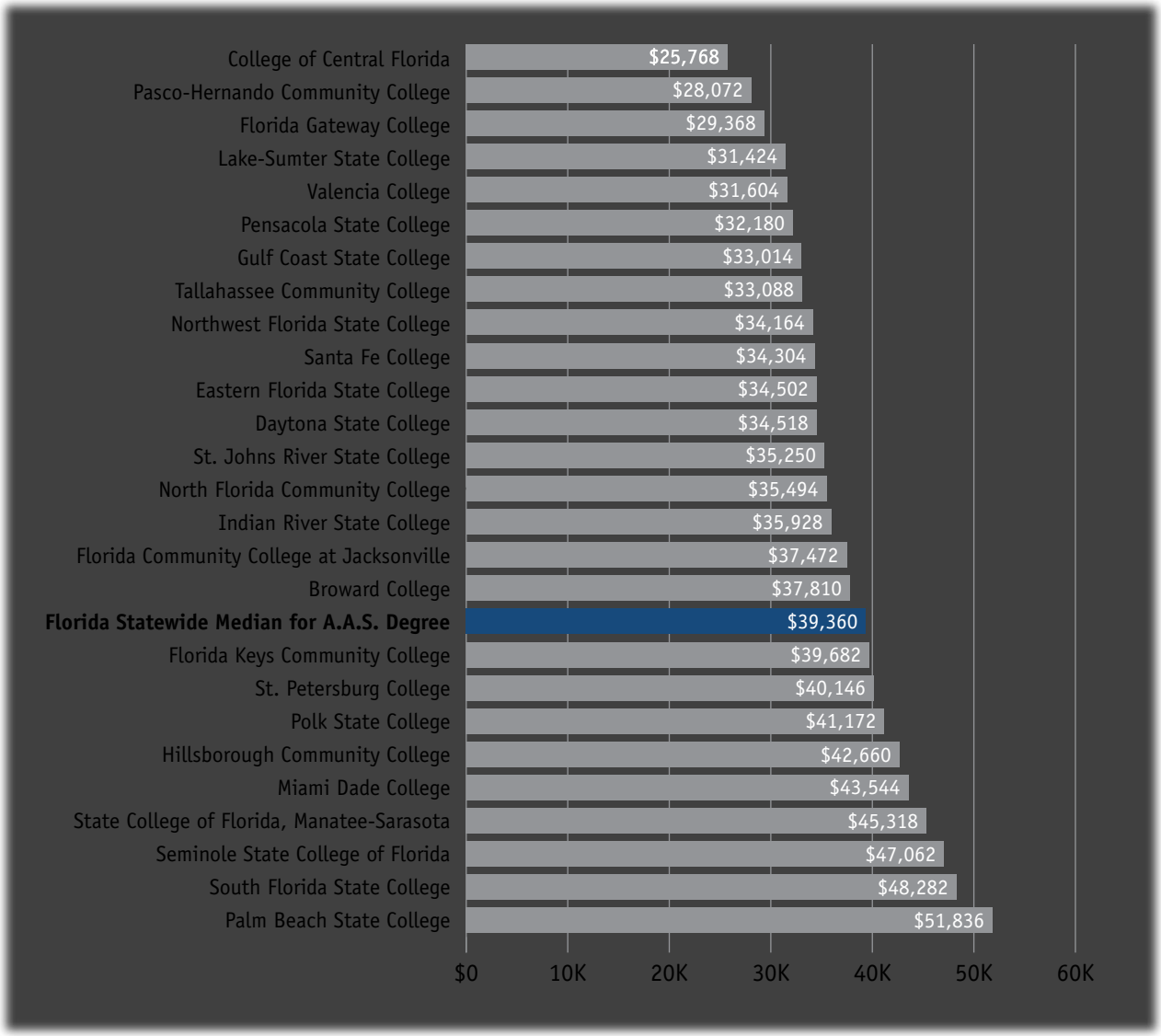


Table 3 shows the number and the percent employed for graduates/completers of Florida's colleges. Far below any other college, only around 40% of Northwest Florida State College graduates/completers with A.A.S. degrees are found employed in the database. This is 20 percentage points lower than the next two colleges—Pensacola State College and Pasco-Hernando Community College. At the high end of the scale are Hillsborough Community College, St. Johns River State College, South Florida State College, Polk State College, North Florida Community College, and the College of Central Florida, all with employment rates greater than 85%.

Table 3: Number of Graduates/Completers With A.A.S. Degrees and Percent Employed, by College

College	# of Graduates/ Completers	Total % Employed
Northwest Florida State College	1,180	41%
Pensacola State College	1,175	63%
Pasco-Hernando Community College	90	64%
Valencia College	307	67%
Florida Keys Community College	26	69%
Gulf Coast State College	359	70%
Santa Fe College	324	72%
St. Petersburg College	65	72%
Florida State College at Jacksonville	889	73%
Indian River State College	701	73%
Daytona State College	979	74%
Lake-Sumter State College	185	75%
Eastern Florida State College	174	75%
Florida Gateway College	20	75%
Tallahassee Community College	128	76%
Seminole State College of Florida	17	76%
Broward College	740	77%
Miami Dade College	207	78%
State College of Florida, Manatee-Sarasota	1,512	81%
Palm Beach State College	837	83%
Hillsborough Community College	632	86%
St. Johns River State College	49	86%
South Florida State College	295	87%
Polk State College	269	88%
North Florida Community College	26	92%
College of Central Florida	15	93%

Figure 8 shows a wide range in earnings across the nine most popular A.A.S. fields of study in the state, with median earnings ranging from a low of around $27,000 (Executive Secretarial) to more than $50,000 (Nursing General, as well as Electrical, Electronic and Communications Engineering Technology/Technician). Falling considerably behind these two top-paying degree programs, four other fields exceed the statewide median—Radiologic (Medical) Technology, Criminal Justice/Law Enforcement Administration, Physical Therapy Assistant, and Trade and Industrial Management.

In contrast, note that graduates with A.A.S. degrees in business administration have median wages below that of A.A.S. graduates in general (this was also true for A.S. graduates with business degrees).

Figure 8: Median First-Year Wages of Graduates With A.A.S. Degrees, by Most Popular Areas of Study

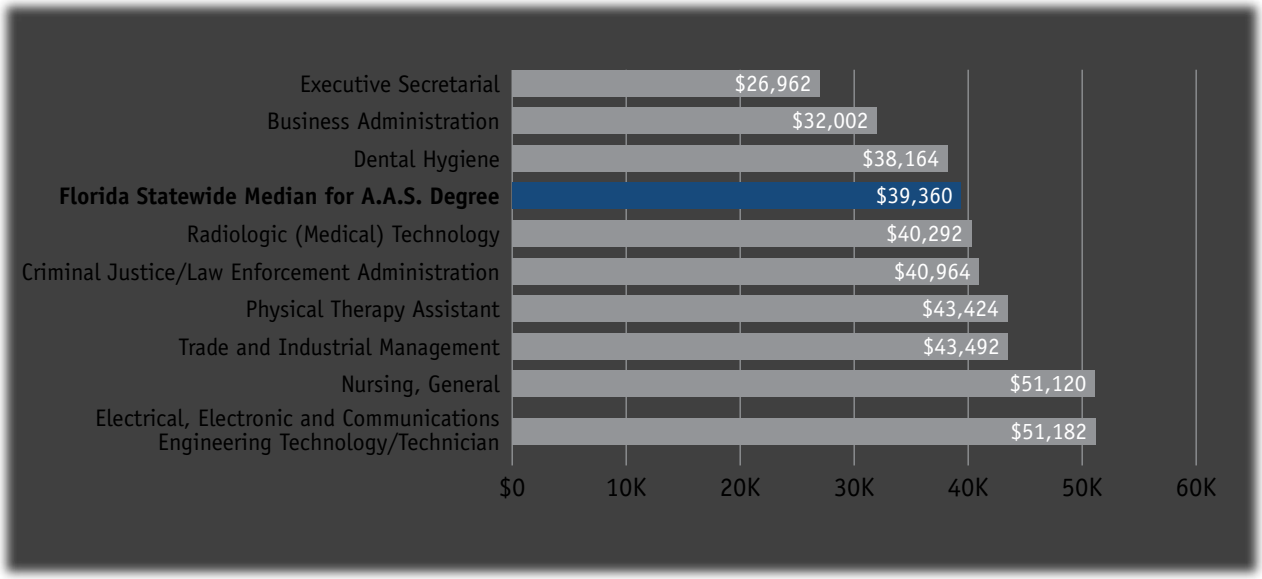
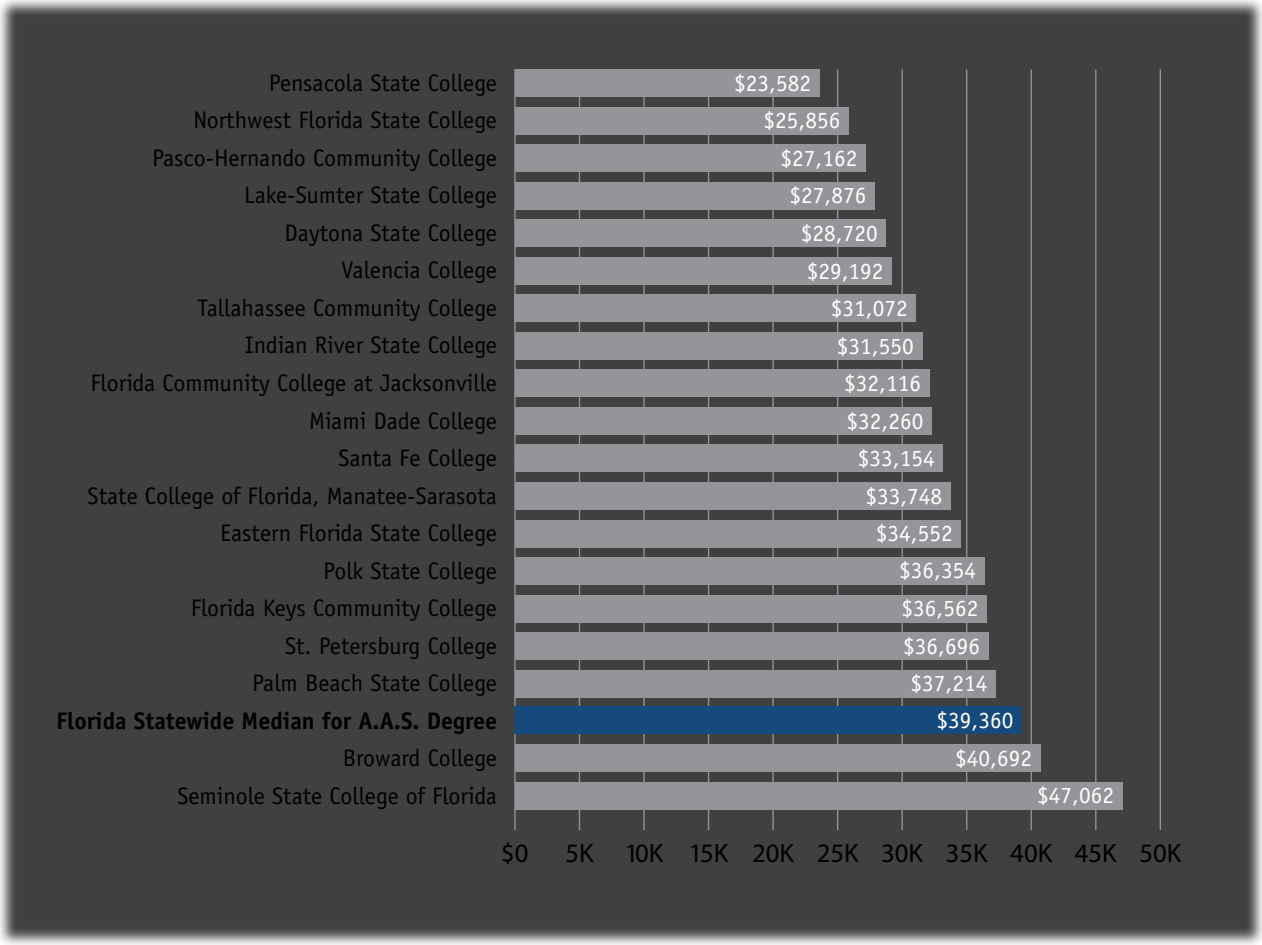


Figure 9 reports the range of earnings of graduates of the popular business major across the 19 state colleges that met reporting requirements. Almost $25,000 separates Pensacola State College, whose graduates have the lowest earnings, from Seminole State College, whose graduates have the highest. The median earnings of graduates with A.A.S. degrees in business administration from six colleges are less than $30,000. In contrast, graduates of two colleges, Broward College and Seminole State College, have earnings of more than $40,000, and for an additional four colleges—Polk State College, Florida Keys Community College, St. Petersburg College, and Palm Beach State College, the median earnings of their graduates with A.A.S. degrees in business administration exceed $35,000.

Figure 9: First-Year Earnings of Graduates With A.A.S. Degrees in Business Administration, by College

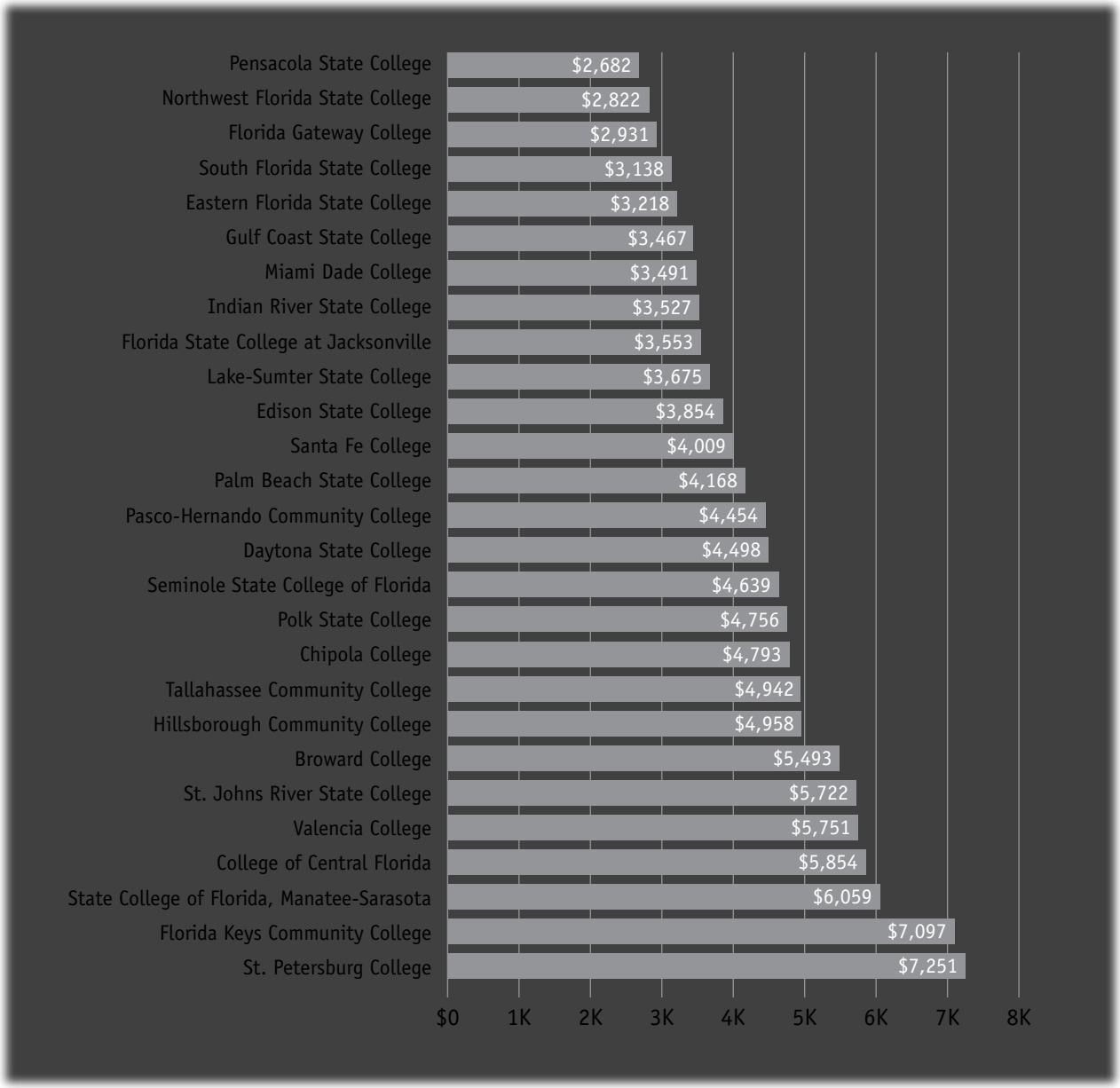


Student Debt Levels in Florida Colleges

The amount of student debt is of growing concern across the nation. This is usually of less concern for students enrolled in shorter degree programs than it is for students pursuing bachelor's or advanced degrees. Nonetheless, many students in Florida colleges are receiving federal loans to help pay for their higher education. Figure 10 shows the average federal debt level per student in 2010–11 at each of the FCS institutions. The range is from less than $3,000 at Pensacola State College, Northwest Florida State College, and Florida Gateway College to more than $5,000 per student at St. Petersburg College; Florida Keys Community College; State College of Florida, Manatee-Sarasota; College of Central Florida; Valencia College; St. Johns River State College; and Broward College.

The debt data are self-reported by each college to Florida's Office of Student Financial Assistance. The data reflect the average federal student loan debt of all students attending the college during 2010–11, not just graduates, and includes federal student loans from Stafford, Perkins, Graduate PLUS, Parent PLUS, and TEACH programs. The average student loan debt represents the total amount of student loans for 2010–11, at each college, divided by the number of students attending the school that academic year. It does not include private loans or other debt issued by nonfederal government sources that a student may have sought to help finance their education.

Figure 10: Average Federal Loan Amount per Student, Florida Colleges, 2010–11



North Florida Community College does not participate in Federal Loan programs and is not included in this figure.

Career Postsecondary Adult Vocational and College Credit Certificates

In addition to associate's degrees, large numbers of students enroll in Florida's public postsecondary institutions to earn certificates or diplomas. Further, almost 1,700 students completed apprenticeships during the academic years 2006–07 through 2010–11.

Two of the largest certificate programs are the college credit certificates and the career Postsecondary Adult Vocational Certificates (PSAV). Along with the previous analysis of associate's degrees, this report highlights key patterns in all certificates granted to more than 10,000 students during the five years covered by this report. Details about all programs, including those not analyzed in this report, are available on the website at www.beyondeducation.org.

Career Certificates (PSAV)

A career certificate program, commonly referred to in the state as PSAV certificate program, consists of a series of technical (noncollege credit) courses designed to prepare students for entry-level employment in specific career fields, including areas such as cosmetology, law enforcement, and practical nursing. PSAV certificates are awarded by both colleges and District Technical Centers. There are systemic differences in the fields in which certificates are awarded by each type of school and in associated first-year earnings and other student outcomes.

As shown in Table 4, District Technical Centers issued far more PSAV certificates than did Florida colleges. PSAV certificates issued by District Technical Centers accounted for more than 60% of all those certificates awarded in the state.

However, students who graduated with certificates from the FCS are more successful in the labor market. For example, 76% of college students who were awarded PSAV certificates were found to be employed, compared to 68% of the graduates/completers with PSAV certificates from District Technical Centers.[12] In addition, the median first-year earnings for the five-year period of study (2006–11) of graduates/completers of colleges were $34,628, while earnings of those with certificates from District Technical Centers were $28,028.

12 Some of this gap may be a function of the coverage of the UI wage data. Most germane to this discussion is the fact that the UI system may not cover all self-employed workers. Many of the occupations for which career certificate training is provided could lead to self-employment, which may not be captured in the UI system.

Table 4: Median First-Year Earnings of Graduates/Completers With Career Certificates (PSAV) Awarded by FCS Institutions and District Technical Centers: Selected Outcomes

	Florida College System Institutions	District Technical Centers
Median First-Year Wages	$34,628	$28,028
Total Completers (Graduates)	50,398	79,231
Total Employed	38,452	53,855
Total Percent Employed	76%	68%

Career Certificates (PSAV) Awarded by District Technical Centers

Table 5 presents selected student outcomes for the 10 largest career certificate programs awarded by District Technical Centers, ordered by earnings. Median first-year wages range from a low of slightly more than $20,000 (Cosmetology) to more than $34,000 (Practical Nursing, Correctional Officer). In addition to Cosmetology, other lower paying PSAV certificates include Nursing Assistant (Long-Term Care), Phlebotomy, Automotive Service Technology, and Child Care Center Operations.

Table 6 shows selected graduate outcomes by District Technical Centers. Graduates/completers from two District Technical Centers, Learey Technical Center and Ridge Career Center, have median first-year earnings of less than $25,000. At the high end, graduates/completers of Miami Lakes Educational Center and Fort Myers Institute of Technology have median first-year earnings of more than $35,000. Graduates/completers of an additional five schools, ranging from Marion County Community Technical and Adult Education Center through Lake Technical Center, have median first-year earnings of more than $30,000. As noted previously, this gap could be driven in part by the labor market the different centers are serving. The mix of program offerings will also affect overall wage outcomes. Technical centers that focus on higher paying occupations and industries will have higher median wages than centers that graduate more students going into lower wage professions.

Table 5: Median First-Year Earnings of Graduates/Completers With Career Certificates (PSAV) Awarded by District Technical Centers: Outcomes, by Program

Area of Study	Median First-Year Earnings	Total Employed	Total % Employed
Cosmetology	$20,070	1,664	61%
Patient Care Technician	$21,562	2,700	66%
Nursing Assistant (Long-Term Care)	$21,792	2,470	68%
Phlebotomy	$22,924	1,724	64%
Automotive Service Technology	$23,014	1,708	61%
Child Care Center Operations	$24,120	1,909	67%
Emergency Medical Technician (Basic)	$27,096	1,656	71%
Florida Statewide Median PSAV Certificate District Technical Centers	**$28,028**	**53,855**	**68%**
Firefighter	$31,584	3,772	78%
Practical Nursing	$34,024	7,496	80%
Correctional Officer	$34,668	1,728	89%

Table 6: Graduates/Completers With Career Certificates (PSAV) Awarded by District Technical Centers: Outcomes, by District Technical Center

District Technical Center	Median First-Year Wage	Total Employed	Total % Employed
Learey Technical Center	$24,000	2,073	66%
Ridge Career Center	$24,400	1,372	70%
Lively Technical Center	$25,642	1,023	63%
Lindsey Hopkins Technical Education Center	$25,864	1,007	53%
Traviss Career Center	$26,088	1,065	75%
Orlando Tech	$26,108	1,446	72%
Robert Morgan Educational Center	$26,536	1,272	66%
Pinellas Technical Education Center (St. Petersburg)	$26,564	1,753	68%
Technical Education Center of Osceola County	$27,152	1,437	68%
Sheridan Technical Center	$27,176	3,032	62%
Lorenzo Walker Institute of Technology	$27,486	1,219	70%
Atlantic Technical Center	$27,520	1,851	64%
McFatter Technical Center	$27,708	2,843	69%
Manatee Technical Institute	$27,744	2,255	72%
Pinellas Technical Education Center-Clearwater	$27,960	1,360	71%
Florida Statewide Certificate Median for District Technical Centers	**$28,028**	**53,855**	**68%**
Erwin Technical Center	$28,304	2,056	71%
First Coast Technical College	$28,788	2,152	74%
Washington-Holmes Technical Center	$29,448	1,076	64%
Withlacoochee Technical Institute	$29,720	1,079	70%
Marion County Community Technical and Adult Education Center	$30,062	2,072	74%
Sarasota County Technical Institute	$31,200	1,622	75%
George Stone Technical Center	$31,238	1,055	66%
Mid Florida Tech	$31,456	2,950	73%
Lake Technical Center	$32,238	2,006	76%
Miami Lakes Educational Center	$35,716	1,727	68%
Fort Myers Institute of Technology	$38,064	2,506	77%

Median First-Year Wages of Graduates/Completers With Career Certificates (PSAV) Awarded by the Florida College System

Florida colleges also award PSAV certificates, although fewer than awarded by District Technical Centers. Florida colleges also tend to produce certificates in somewhat different areas than the District Technical Centers. Table 5 shows selected student outcomes for the PSAV certificate programs of study that have more than 1,000 completers during the five-year study period. (Remember details for all reportable programs can be found at www.beyondeducation.org).

A considerable range of first-year earnings is evident. Cosmetology is among the most popular PSAV certificate programs in Florida colleges and also one of the lowest paid. In contrast, the first-year earnings of graduates/completers of certificates from other popular programs, such as Correctional Officer or Law Enforcement Officer, are above the state median.

As noted in Figure 11, the statewide median for students who complete PSAV certificates in state colleges was almost $35,000. Note that the graduates/completers from seven schools are within $1,000 of the state median and 14 are within $2,000 of the state median. In short, a fairly tight clustering of median first-year wages exists across many of the state's colleges. Only graduates/completers of Pensacola State College have median first-year earnings of less than $30,000. On the other end of the distribution, completers from Florida Keys Community College, St. Petersburg College, and Broward College have median first-year earnings of more than $40,000.

However, this overall convergence hides some great differences at the program level and again shows why detailed program-level analysis is essential.

Figure 12 shows the range of first-year earnings of students who completed a certificate in law enforcement, the most popular PSAV certificate granted by Florida state colleges, compared with the overall college median for all PSAV graduates/completers.

Consider Miami Dade College. Taken together, students who completed PSAV certificates at Miami Dade College were close to the state median for PSAV graduates/completers. However, its students earning a certificate in law enforcement were some $11,000 above the state median. Graduates/completers in law enforcement from Palm Beach State College and Florida State College in Jacksonville also earned substantially more than the state median, while all PSAV graduates/completers in those two campuses were about at the overall state median for PSAV graduates/completers.

In contrast, consider Chipola College, where all PSAV graduates/completers had median first-year earnings several thousand dollars more than those earning a law enforcement certificate. In only three other colleges, the College of Central Florida, Florida Keys Community College and North Florida Community College, do law enforcement graduate/completers earn less than all PSAV graduates/completers from the same school (but in these cases the gap is smaller than at Chipola College).

Figure 11: Median First-Year Earnings of Graduates/Completers With Career Certificates (PSAV), by College

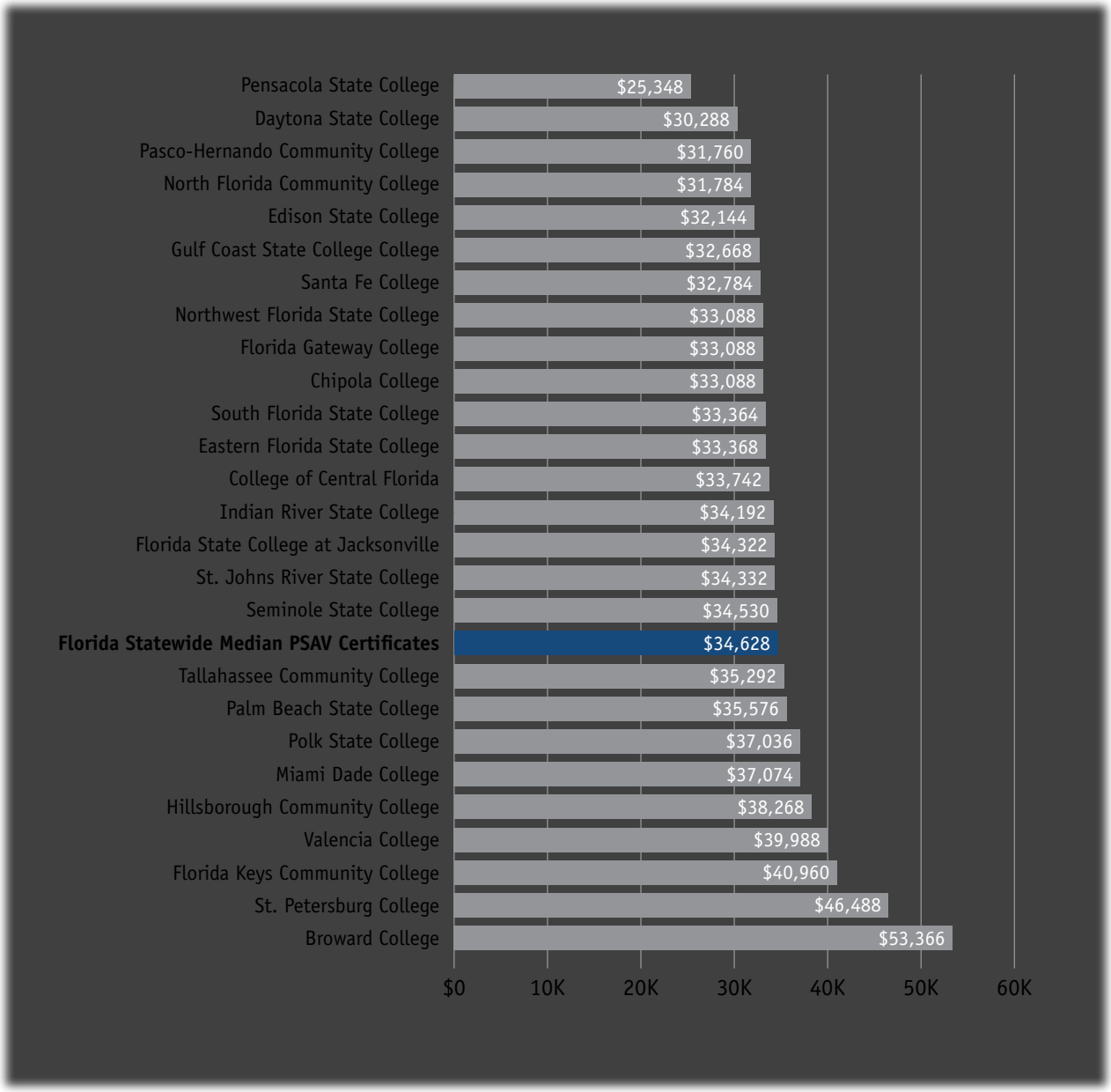
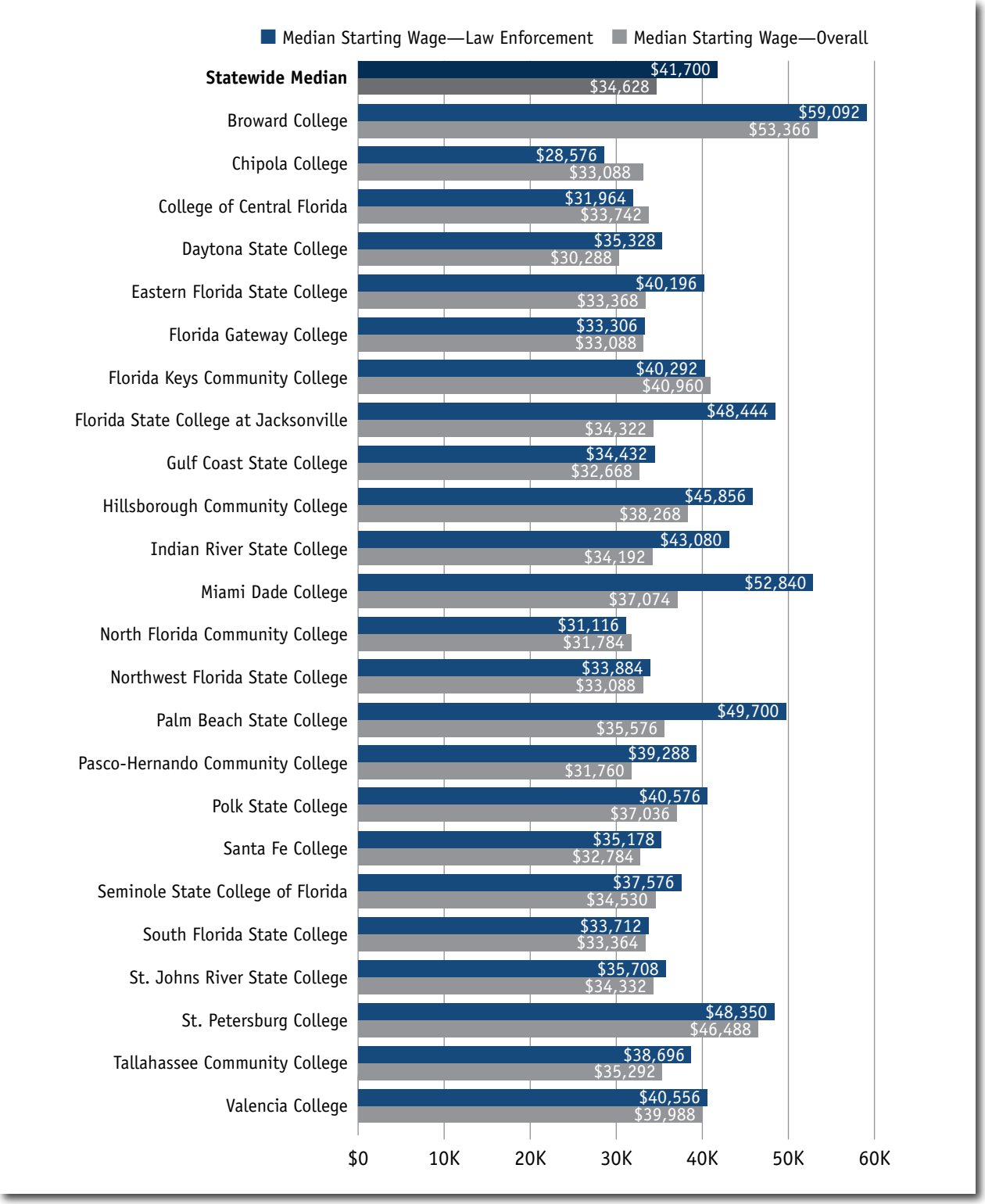


Figure 12: Median First-Year Earnings of Graduates/Completers With PSAV Certificates: Overall Versus Law Enforcement, by College



College Credit Certificates (PSV)

In completing this exploration of the wage outcomes for one- and two-year credentials, college credit certificates (also known as Postsecondary Vocational Certificates [PSV]) were examined. College credit certificates are composed of a program of instruction of less than 60 credits of college-level courses and are part of an associate in science (A.S.) degree or an associate in applied science (A.A.S.) degree program. A college credit certificate program, like the PSAV, consists of a series of college credit courses designed to prepare students for entry-level employment in specific career fields. Programs are available in a wide range of vocations, from automotive collision repair to applied welding technologies. College credit certificate programs vary in length but generally require less than one year of instruction. More than 30,000 such certificates were granted during the five-year study period.

With median first-year earnings slightly more than $33,000, students who complete the college credit certificate earn less than students completing many of the other credentials examined in this section, but more, on average, than students earn who complete a PSAV from a District Technical Center, and more than the median for graduates with A.A. degrees.

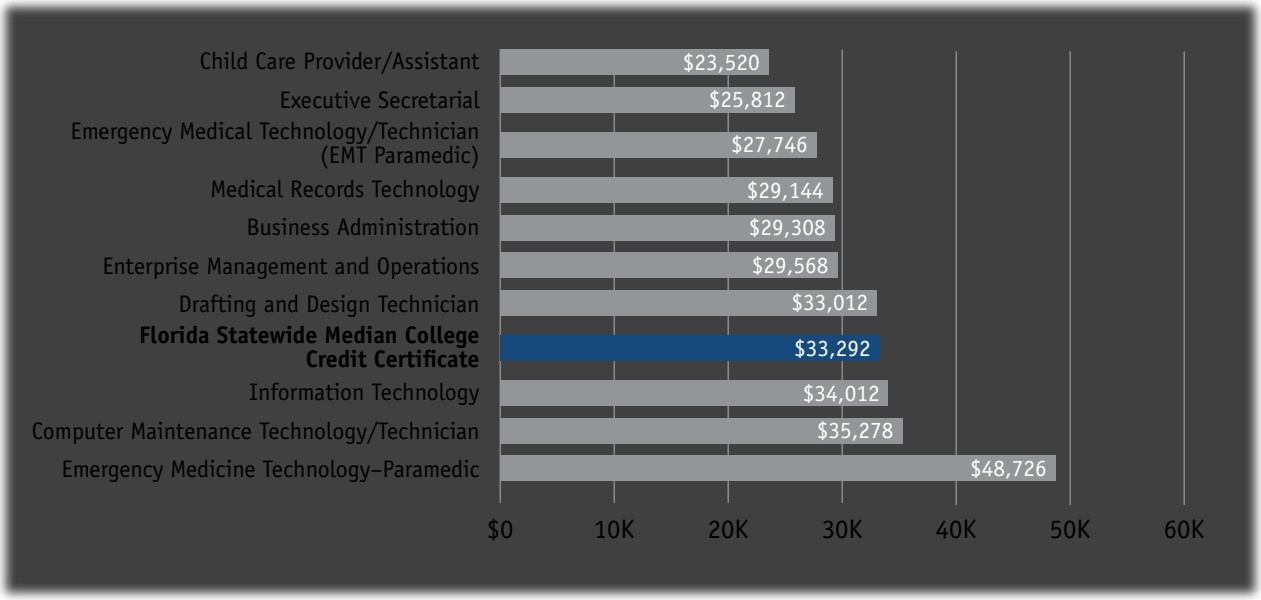
Table 7 shows that students earning a college credit certificate from five institutions have median wages of less than $30,000: Gulf Coast State College, Florida Gateway College, Pensacola State College, Valencia College, and St. Johns River State College. In contrast, students earning college credit certificates from the following five schools have median first-year earnings of more than $40,000: St. Petersburg College, North Florida Community College, Chipola College, South Florida State College, and Lake-Sumter State College. Indeed, students with these credentials from Lake-Sumter State College have median first-year earnings greater than $50,000. Further, recall that the median first-year earnings of graduates with university bachelor's degrees is around $33,000, which is *lower* than the median first-year earnings of graduates/completers with college credit certificates from most institutions. Finally, note the high earnings of students with a college credit certificate from Chipola College, which stands in marked contrast to the standing of Chipola College in the wage data for other credentials.

Figure 13 reports median first-year earnings of graduates/completers with college credit certificates from the most popular college credit certificate programs. Child Care Provider/ Assistant had the lowest median first-year earnings (around $23,500) followed by Executive Secretarial (close to $26,000). At the high end of the scale, students earning college credit certificates in Emergency Medicine Technology-Paramedic earn close to twice that (around $48,700), which is over $13,000 more than the next highest area of study: Computer Maintenance Technology/Technician.

Table 7: Employment Outcomes for Graduates/Completers With College Credit Certificates (PSV), by College

College	# of Completers	Median First-Year Wages	Total Employed	Total % Employed
Florida Keys Community College	59	$31,288	29	49%
Eastern Florida State College	1,390	$30,832	870	63%
Tallahassee Community College	161	$34,708	101	63%
Pensacola State College	605	$29,152	389	64%
Daytona State College	1,349	$34,856	873	65%
St. Johns River State College	195	$29,440	127	65%
Florida Gateway College	220	$27,496	144	65%
Northwest Florida State College	689	$31,804	466	68%
Santa Fe College	1,017	$33,928	701	69%
Seminole State College of Florida	2,266	$30,350	1,593	70%
Florida State College at Jacksonville	2,219	$32,150	1,566	71%
Valencia College	7,119	$29,280	5,151	72%
Florida Statewide Median College Credit Certificate	**32,832**	**$33,292**	**23,831**	**73%**
Miami Dade College	4,081	$34,388	2,968	73%
Pasco-Hernando Community College	479	$36,820	352	73%
St. Petersburg College	1,605	$41,856	1,195	74%
Indian River State College	1,245	$35,648	936	75%
Palm Beach State College	1,612	$31,066	1,215	75%
Hillsborough Community College	1,951	$32,964	1,474	76%
College of Central Florida	875	$38,050	667	76%
Gulf Coast State College	197	$25,476	153	78%
Edison State College	1,304	$36,000	1,049	80%
Polk State College	289	$33,244	235	81%
Broward College	1,549	$39,552	1,272	82%
South Florida State College	117	$48,514	99	85%
North Florida Community College	88	$45,578	75	85%
Lake-Sumter State College	151	$52,240	129	85%
Chipola College	60	$47,696	53	88%

Figure 13: Median First-Year Earnings of Graduates/Completers With College Credit Certificates (PSV), by Most Popular Programs



Levels of Public Assistance

Higher education is often viewed as one of the most productive forms of human capital investment that individuals and taxpayers make. Up to this point, this report has focused primarily on the wages that are associated with the completion of the most common degrees and certificates awarded in Florida. In this section, we look at another indicator of the financial well-being of students who complete different programs. Table 8 reports the percentage of graduates/completers found in the wage database who received public assistance.[13]

13 This number is a unique count of graduates/completers who are receiving Temporary Assistance for Needy Families and/or are in the Supplemental Nutrition Assistance Program.

The range in the percent of graduates receiving public assistance is substantial. Remember that the levels reported are not adjusted for differences in the skill level or income level of students who enroll in these different programs—these outcome measures are "unadjusted" for such factors known to affect student success. Keeping this in mind, Table 8 shows that more than 15% of students who have completed PSAV certificates in District Technical Centers received public assistance, almost double the percentage of graduates/completers who received their degrees/certificates from Florida's state colleges.

Students earning associate's degrees are less likely to have received public assistance than students who earn certificates. Given the higher median wages of students earning the A.S. degree documented earlier, it is perhaps not surprising that only around 4% of these graduates/completers received public assistance in the year following graduation/completion.

Table 8: Levels of Public Assistance, by Degree/Certificate

Credential	# of Graduates/ Completers	# Who Received Public Assistance	% Public Assistance
Career Certificate/PSAV (District Technical Centers)	79,231	12,547	15.8%
Career Certificate/PSAV (Colleges)	50,398	4,055	8.0%
College Credit Certificate	32,832	2,191	6.7%
Associate in Applied Science Degree	11,198	636	5.7%
Associate in Arts Degree	208,614	9,978	4.8%
Associate in Science Degree	49,192	2,036	4.1%

Table 9 shows the percentage of graduates/completers of PSAV certificates who received public assistance by District Technical Centers. More than 30% of graduates/completers from six schools received public assistance: South Dade Educational Center, Brewster Technical Center, Gadsden Technical Institute, Sumter County Adult Center, Imokalee Technical Center, and Suwannee-Hamilton Technical Center. In contrast, fewer than 10% of graduates/completers from four District Technical Centers received public assistance: McFatter Technical Center, Mid Florida Tech, Sarasota County Technical Institute, and George T. Baker Aviation.

Table 9: Graduates/Completers With PSAV Certificates Who Received Public Assistance, by District Technical Center

District Technical Center (County)	# of Graduates/ Completers	# Who Received Public Assistance	% Who Received Public Assistance
South Dade Adult Educational Center (Miami-Dade)	675	264	39.1%
Brewster Technical Center (Hillsborough)	949	367	38.7%
Gadsden Technical Institute (Gadsden)	135	52	38.5%
Sumter County Adult Center	150	51	34.0%
Imokalee Technical Center (Collier)	291	91	31.3%
Suwannee-Hamilton Technical Center (Suwannee)	431	133	30.9%
Lindsey Hopkins Technical Education Center (Miami-Dade)	1,917	546	28.5%
D.A. Dorsey Education Center (Miami-Dade)	142	39	27.5%
DeSoto County Adult Education Center (DeSoto)	243	61	25.1%
Wakulla County Adult and Community Education (Wakulla)	139	34	24.5%
Bradford-Union Area Career Technical Center (Bradford)	374	89	23.8%
Taylor Technical Institute (Taylor)	672	156	23.2%
Marchman Technical Education Center (MTEC) (Pasco)	364	82	22.5%
Adult and Community Education School (Indian River)	1,251	276	22.1%
Aparicio-Levy Technical Center (Hillsborough)	266	58	21.8%
Learey Technical Center (Hillsborough)	3,155	679	21.5%
Lively Technical Center (Leon)	1,618	328	20.3%
The English Center (Miami-Dade)	470	95	20.2%
Pinellas Technical Education Center–St. Petersburg	2,574	502	19.5%
Erwin Technical Center (Hillsborough)	2,893	538	18.6%
Ridge Career Center (Polk)	1,965	364	18.5%
Washington-Holmes Technical Center (Washington)	1,693	310	18.3%
Traviss Career Center (Polk)	1,420	257	18.1%
George Stone Technical Center (Escambia)	1,608	274	17.0%
First Coast Technical College (St. Johns)	2,911	491	16.9%
Withlacoochee Technical Institute (Citrus)	1,544	252	16.3%
Westside Tech (Orange)	914	149	16.3%
Flagler Technical Institute (Flagler)	1,184	188	15.9%
Community Technical and Adult Education Center (Marion)	79,231	439	15.6%
Walton Career Development Center (Walton)	2,817	42	15.3%
Miami Lakes Educational Center (Miami-Dade)	274	385	15.1%
Robert Morgan Educational Center (Miami-Dade)	2,544	275	14.2%
Sheridan Technical Center (Broward)	1,930	690	14.2%
Manatee Technical Institute (Manatee)	4,865	435	13.9%
Fort Myers Institute of Technology (Lee)	3,135	117	13.8%
Orlando Tech (Orange)	846	270	13.4%
Charlotte Technical Center (Charlotte)	2,020	189	13.3%
Tom P. Haney Technical Center (Bay)	1,418	112	12.9%

Table 9: Continued

District Technical Center (County)	# of Completers	# Who Received Public Assistance	% Who Received Public Assistance
Pinellas Technical Education Center–Clearwater (Pinellas)	1,924	247	12.8%
Lorenzo Walker Institute of Technology (Collier)	1,730	222	12.8%
Locklin Technical Center (Santa Rosa)	286	36	12.6%
Winter Park Tech (Orange)	1,416	178	12.6%
Atlantic Technical Center (Broward)	2,896	349	12.1%
Technical Education Center of Osceola (TECO) (Osceola)	2,120	246	11.6%
Okaloosa Applied Technology Center (Okaloosa)	408	47	11.5%
Fort Myers Institute of Technology (Lee)	3,273	376	11.5%
Lake Technical Center (Lake)	2,636	301	11.4%
McFatter Technical Center (Broward)	4,135	410	9.9%
Mid Florida Tech (Orange)	4,025	351	8.7%
Sarasota County Technical Institute (Sarasota)	2,165	154	7.1%
George T. Baker Aviation (Miami-Dade)	442	22	5.0%

There is also a wide range in the percentage of PSAV graduates/completers who received public assistance across Florida's colleges. More than 17% of graduates/completers from North Florida Community College received public assistance. In addition, in five more colleges, more than 10% of graduates/completers received public assistance. By way of contrast, less than 3% of graduates/completers from Valencia College, Broward College, and St. Petersburg College received public assistance. See Table 10.

Table 10: Graduates/Completers With PSAV Certificates Who Received Public Assistance, by College

College	# of Graduates/ Completers	# Who Received Public Assistance	% Public Assistance
North Florida Community College	562	97	17.3%
Pensacola State College	1,334	195	14.6%
Pasco-Hernando Community College	1,913	226	11.8%
Daytona State College	3,475	397	11.4%
College of Central Florida	1,801	201	11.2%
South Florida State College	1,367	152	11.1%
Indian River State College	4,140	406	9.8%
Florida Gateway College	1,378	133	9.7%
Florida State College at Jacksonville	7,942	679	8.5%
St. Johns River State College	828	68	8.2%
Chipola College	939	77	8.2%
Eastern Florida State College	2,596	206	7.9%
Santa Fe College	1,273	98	7.7%
Seminole State College of Florida	1,917	145	7.6%
Miami Dade College	4,276	286	6.7%
Palm Beach State College	4,351	274	6.3%
Gulf Coast State College	1,247	77	6.2%
Northwest Florida State College	657	40	6.1%
Hillsborough Community College	2,380	140	5.9%
Polk State College	550	20	3.6%
Tallahassee Community College	1,677	60	3.6%
Valencia College	1,428	37	2.6%
Broward College	1,470	28	1.9%
St. Petersburg College	833	14	1.7%

Graduates/Completers With College Credit Certificates Who Received Public Assistance

There is a significant range in the percentage of graduates/completers of college credit certificates who received public assistance. More than 10% of graduates/completers from six colleges received public assistance: Gulf Coast State College, St. Johns River State College, Polk State College, Daytona State College, Pensacola State College. In contrast, less than 5% of graduates/completers from five colleges received public assistance: Hillsborough Community College, Santa Fe College, Edison State College, and Broward College.

Table 11: Graduates/Completers With College Credit Certificates Who Received Public Assistance, by College

College	# of Completers	# Who Received Public Assistance	% Public Assistance
Gulf Coast State College	197	25	12.7%
St. Johns River State College	195	24	12.3%
Polk State College	289	33	11.4%
Daytona State College	1,349	153	11.3%
Pensacola State College	605	63	10.4%
Florida Gateway College	220	22	10.0%
Indian River State College	1,245	121	9.7%
South Florida State College	117	11	9.4%
Pasco-Hernando Community College	479	43	9.0%
Eastern Florida State College	1,390	109	7.8%
Northwest Florida State College	689	53	7.7%
Florida State College at Jacksonville	2,219	164	7.4%
Seminole State College of Florida	2,266	156	6.9%
College of Central Florida	875	59	6.7%
Palm Beach State College	1,612	103	6.4%
Valencia College	7,119	446	6.3%
Tallahassee Community College	161	10	6.2%
Miami Dade College	4,081	238	5.8%
St. Petersburg College	1,605	81	5.0%
Hillsborough Community College	1,951	96	4.9%
Santa Fe College	1,017	50	4.9%
Edison State College	1,304	64	4.9%
Broward College	1,549	53	3.4%

The Relationship Between Florida University Degrees and First-Year Earnings

This section of the report focuses on graduates from Florida's universities and begins by displaying the median first-year earnings of graduates according to the degree they completed. Figure 14 displays median first-year earnings of graduates with academic degrees (bachelor's, master's, specialist's, and doctorate's), and Figure 15 shows median first-year earnings of graduates with the three most common professional doctorates granted by Florida's universities (law, medicine, and pharmacy).

Figure 14 shows that earnings increase with every level of academic degree attainment. There is, for example, approximately a $13,000 annual increase in the median first-year earnings of graduates of academic doctoral programs versus graduates of master's programs, and around $15,000 separates the median earnings of graduates with master's degrees from graduates with bachelor's degrees.

In addition to these well-known academic degrees, Florida has a number of programs that offer specialist degrees that are designed for individuals who want to develop advanced knowledge and skills beyond the master's degree but who do not want to pursue a doctorate degree. Just as the specialist's degree fits between a master's degree and a doctorate, so do first-year earnings, although these earnings fall far closer to the earnings of master's graduates than they do to earnings of graduates with doctorate degrees. More detailed information on the earnings associated with these degrees is presented later in this report.

Figure 15 shows the first-year earnings of graduates with professional doctorate degrees. The chart shows that the first-year earnings of graduates with medical degrees are low, slightly more than $47,000. Medical school graduates, however, are not fully licensed as physicians until they have completed their internship requirements, thus their average starting salaries are low. Law school graduates, after passing the bar exam, are fully licensed to practice law. In Florida, their first-year earnings average slightly more than $47,500, about $1,400 less than the median wage of all graduates with master's degrees in the state. Graduates of other professional programs tend to earn far more. The variation in some of these professional degree programs will be reviewed later in this report.

Figure 14: Median First-Year Earnings of Graduates With Academic Degrees, by Degree

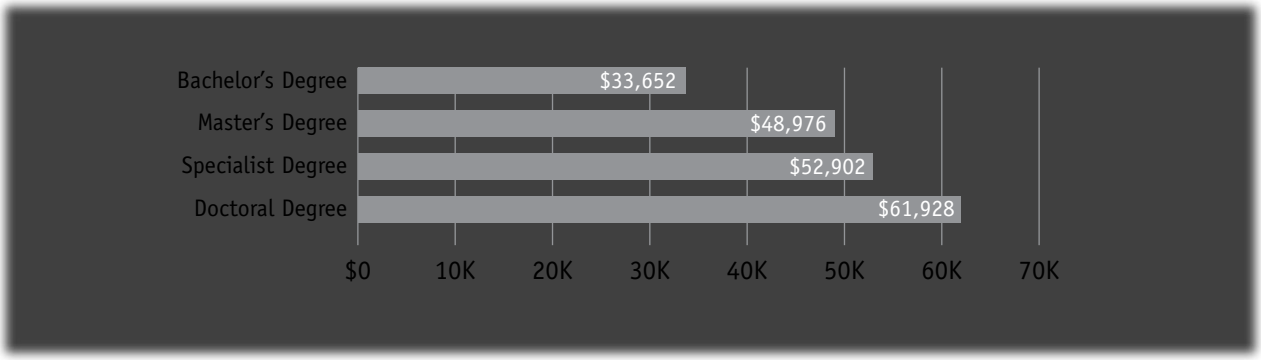
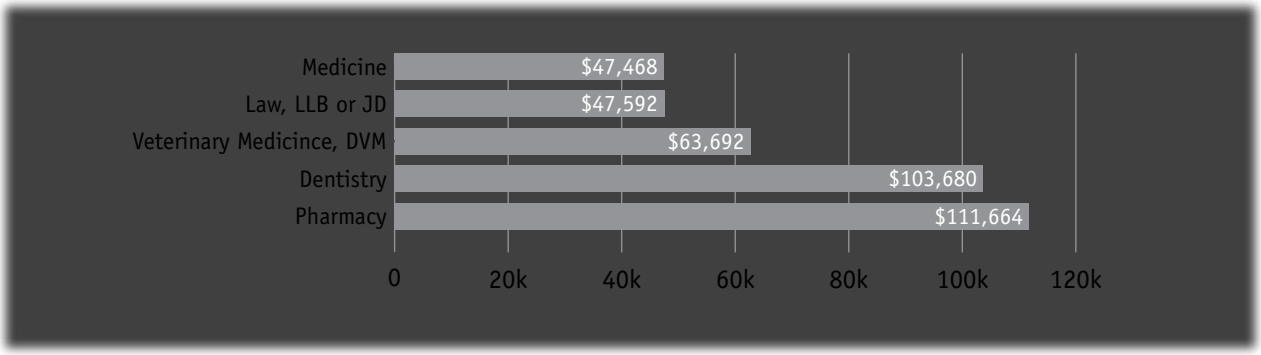


Figure 15: Median First-Year Earnings of Graduates With Professional Doctorate Degrees



First-Year Earnings of Graduates With Bachelor's Degrees

The bachelor's degree is the most common degree granted in the United States. Historically, a bachelor's degree has been a good investment. According to data from the U.S. Department of Labor, Bureau of Labor Statistics, graduates with bachelor's degrees nationwide earn on average about 65% per year more than high school graduates, and graduates with bachelor's degrees are far less likely to be unemployed.[14]

However, these national data mask differences in the labor market outcomes of graduates with bachelor's degrees. As is evident in the following charts, wide variation exists between the returns to graduates of different institutions and from different majors. In short, graduates do not earn just a bachelor's degree; they earn a degree from a specific college or university and in a specific program. And, these choices have consequences as graduates enter the labor market. The data in this report and on the College Measures website enable the reader to delve deeper into this variation.

The first area examined is the range of early career earnings of graduates with bachelor's degrees granted by universities in Florida. Second, the median earnings of graduates who have specialized in different fields of study are reviewed. Third, data are presented looking at how graduates of similar programs across Florida's universities fared in the labor market. This last level of detail is the most important because students earn degrees in specific fields awarded by specific colleges and universities.

A growing number of Florida's colleges, which traditionally have focused on sub-baccalaureate (2-year) degrees and credentials, have been given authority to grant bachelor's degrees. Following the exploration of bachelor's graduates from universities, this report examines selected measures of the success of bachelor's graduates from state colleges.

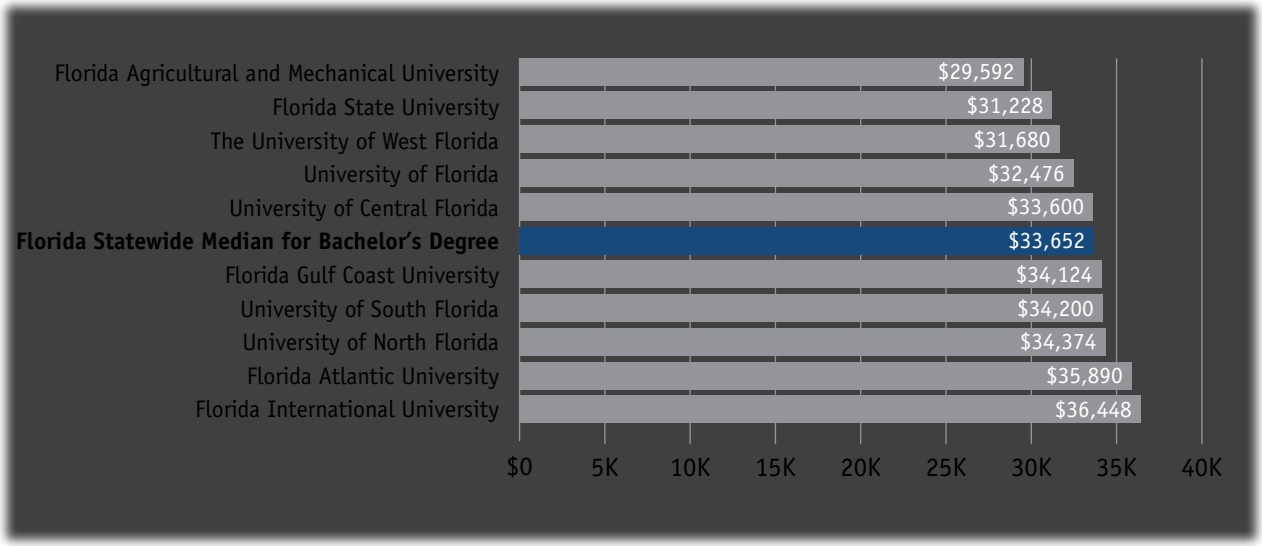
Variation by University

Figure 16 shows the median first-year earnings of graduates by university.[15] There is substantial variation in the median earnings of graduates ranging from Florida A&M University ($29,592) to Florida International University (more than $36,000). It is again important to emphasize that these universities service different economic areas of the state. Florida International University is located in one of the highest wage areas of Florida, compared with, for example, Florida A&M University, located in northern Florida where wages are lower.

14 http://www.bls.gov/emp/ep_chart_001.htm

15 Note that data from New College and Florida Polytechnic University are not included in this report because neither has been part of the Florida State University System long enough to have complete data.

Figure 16: Median First-Year Earnings of Graduates With Bachelor's Degrees, by University



After Florida A&M University, the next three universities with graduates having the lowest median first-year earnings include the state's two flagship institutions, Florida State University and the University of Florida. One possible reason for the lower average first-year earnings of graduates of these universities is that more of their graduates are likely pursuing further studies and/or have left the state for employment. Statewide, 62% of graduates with bachelor's degrees were matched with wage data. The match rate, however, is only 56% for Florida State University graduates and even lower, 47%, for University of Florida graduates. Moreover, more than 10,000 recent University of Florida and more than 6,000 Florida State University graduates have been identified as pursuing further studies. These data suggest that the role of flagship universities in the state's higher education system is broader than the role of regional campuses, whose graduates are more likely to enter the state's labor market after graduation.

Note that the median wages of graduates from four schools (University of Central Florida, Florida Gulf Coast University, University of South Florida, and the University of North Florida) are within $750 of each other, suggesting that there are many university pathways into the labor market that are roughly valued at the same level by employers.

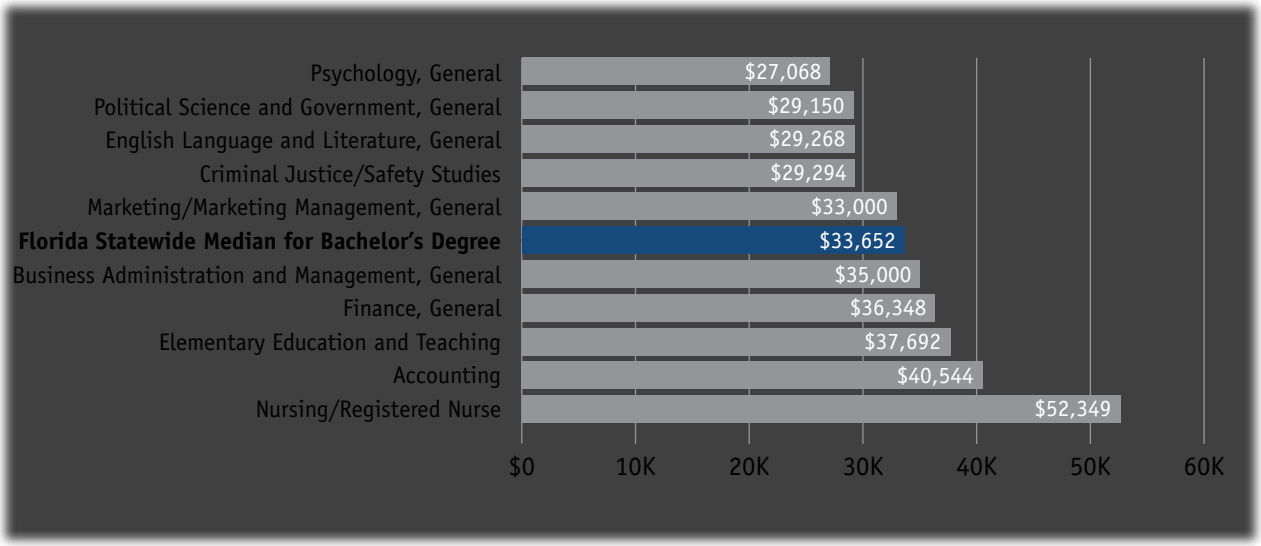
Variation by Fields of Study

Figure 17 displays the median earnings of graduates from the ten most popular fields of study in Florida. The range between the highest and lowest paid fields is far greater than the range between the median first-year earnings by university. Graduates with degrees in psychology, one of the most popular areas of study in the state, also have the lowest first-year earnings, around $6,000 less than the statewide median. Graduates with degrees in political science and English language and literature also fall at the bottom of the earnings distribution, followed by criminal justice.

Among the highest paid graduates are those with majors in business-related fields (business administration, finance, and accounting). In contrast, graduates with degrees in marketing, another business-related field, have first-year earnings below the state median.

Graduates with elementary education and teaching degrees show average first-year earnings $4,000 more than the statewide median, which places them among the highest paid graduates in the state. Nursing graduates are the highest paid, by a wide margin.

Figure 17: Median First-Year Earnings of Graduates With Degrees in Popular Bachelor's Degree Programs, by Program



Variation Across Fields of Study in Different Universities

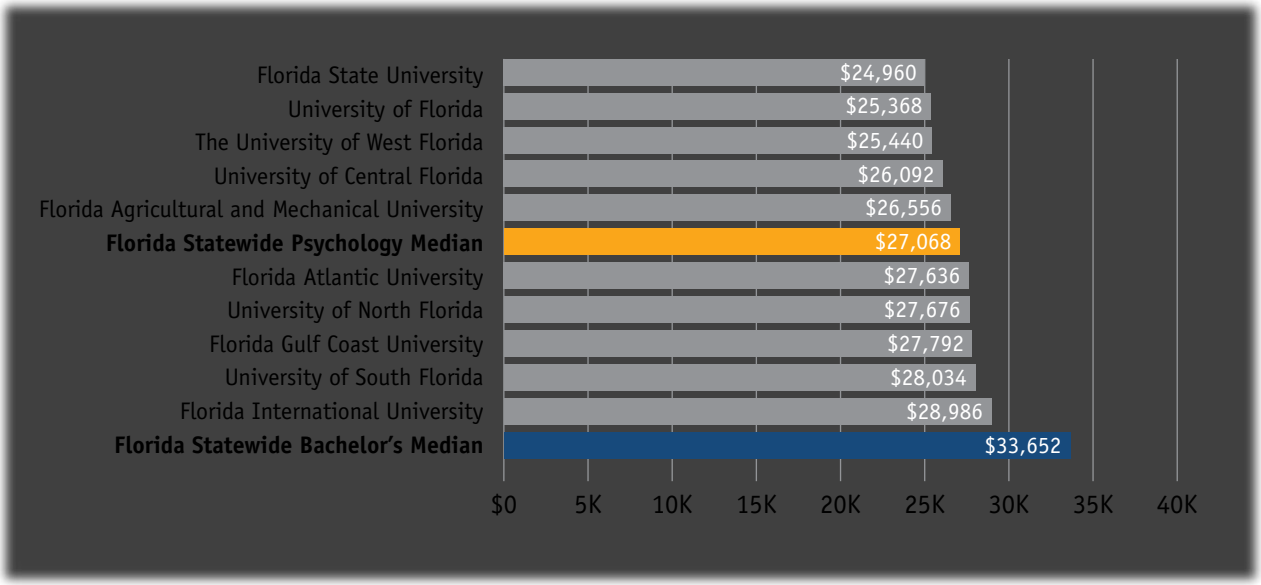
The variation in first-year earnings across the same field offered by different institutions can be substantial. The next few charts show the earnings of graduates from some of the most popular undergraduate areas of study across the state. Both the median wage for each area of study as well as the state median for all bachelor's degrees is displayed. This allows a comparison of the relative performance of each area of study as well as a sense of how well graduates from that study area are faring in the labor market relative to all graduates with bachelor's degrees from state universities. The reader again is urged to keep in mind the disparities in the size and strength of regional economies, a factor that no doubt affects some of the patterns presented.

The next section highlights first-year earnings of graduates in four large areas of study: psychology, business, and two important Science, Technology, Engineering and Mathematics (STEM) fields—biology and mathematics.

Psychology is one of the most popular majors on most campuses. Figure 18 shows that the median earnings of graduates from psychology programs is lower than the statewide median for all bachelor's degree recipients. The figure also shows that a range of around $4,000 separates the median earnings of graduates from Florida State University, who have the lowest median earnings, from graduates of Florida International University, who have the highest median earnings.[16]

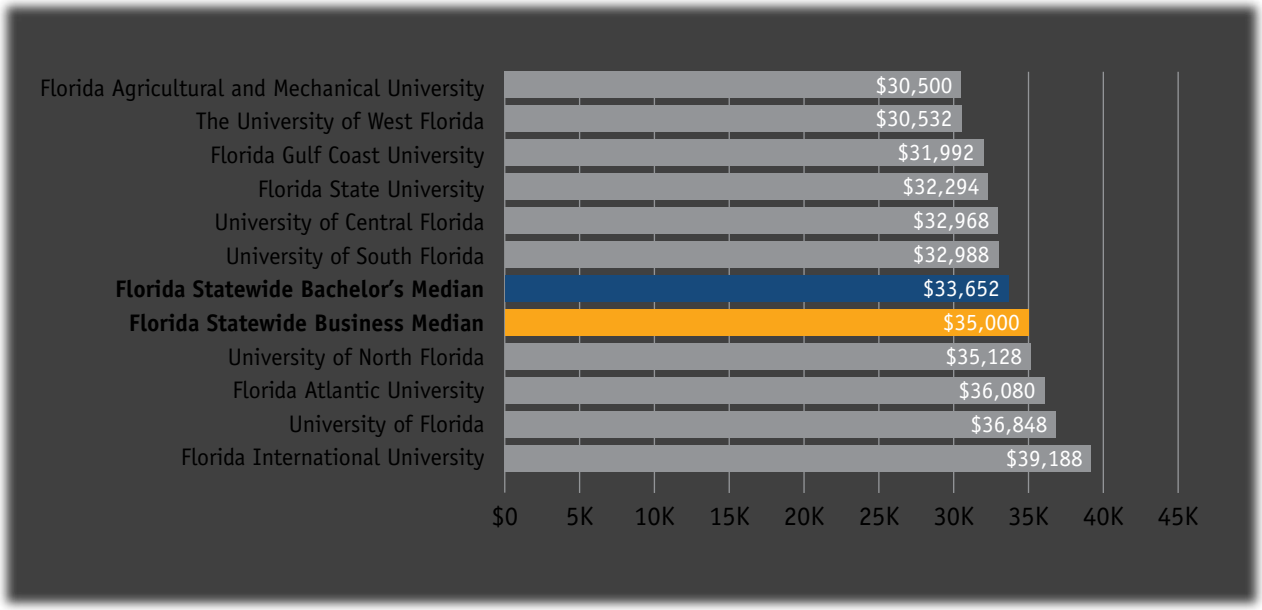
16 When considering the wage data from state flagship universities, remember that many more of their graduates are likely pursuing more advanced training or have sought work out of state. The match rate of graduates with bachelor's degrees in psychology from Florida State is only 54%, lower than the match rate of other programs. The match rate of the University of Florida is even lower (44%). The statewide match rate for graduates with bachelor's degrees in psychology is 61%.

Figure 18: Median First-Year Earnings of Graduates With Bachelor's Degrees in Psychology, by University



In contrast to the relatively low starting wages of graduates with degrees in psychology, students with a degree in business administration tend to earn more. This is immediately evident in the fact that the median first-year earnings of graduates of business programs statewide are higher than the statewide median for all bachelor's degrees (see Figure 19). That said, variation exists in the earnings of students with the same degree from different universities. The wage range for graduates with business degrees is far greater than the range for graduates with psychology degrees, with almost $9,000 in first-year earnings separating graduates of Florida A&M University and the University of West Florida from graduates of Florida International University.

Figure 19: Median First-Year Earnings of Graduates With Bachelor's Degrees in Business, by University



In Florida, like most states, there is an interest in increasing the number of graduates with degrees in the STEM fields. However, as is evident in Figure 20, the market rewards to students completing their studies with majors in the largest science field, biology, are far lower than students earning a bachelor's degree in mathematics. This is evident by comparing the median first-year earnings of graduates with biology degrees with graduates with mathematics degrees and with all graduates with bachelor's degrees.

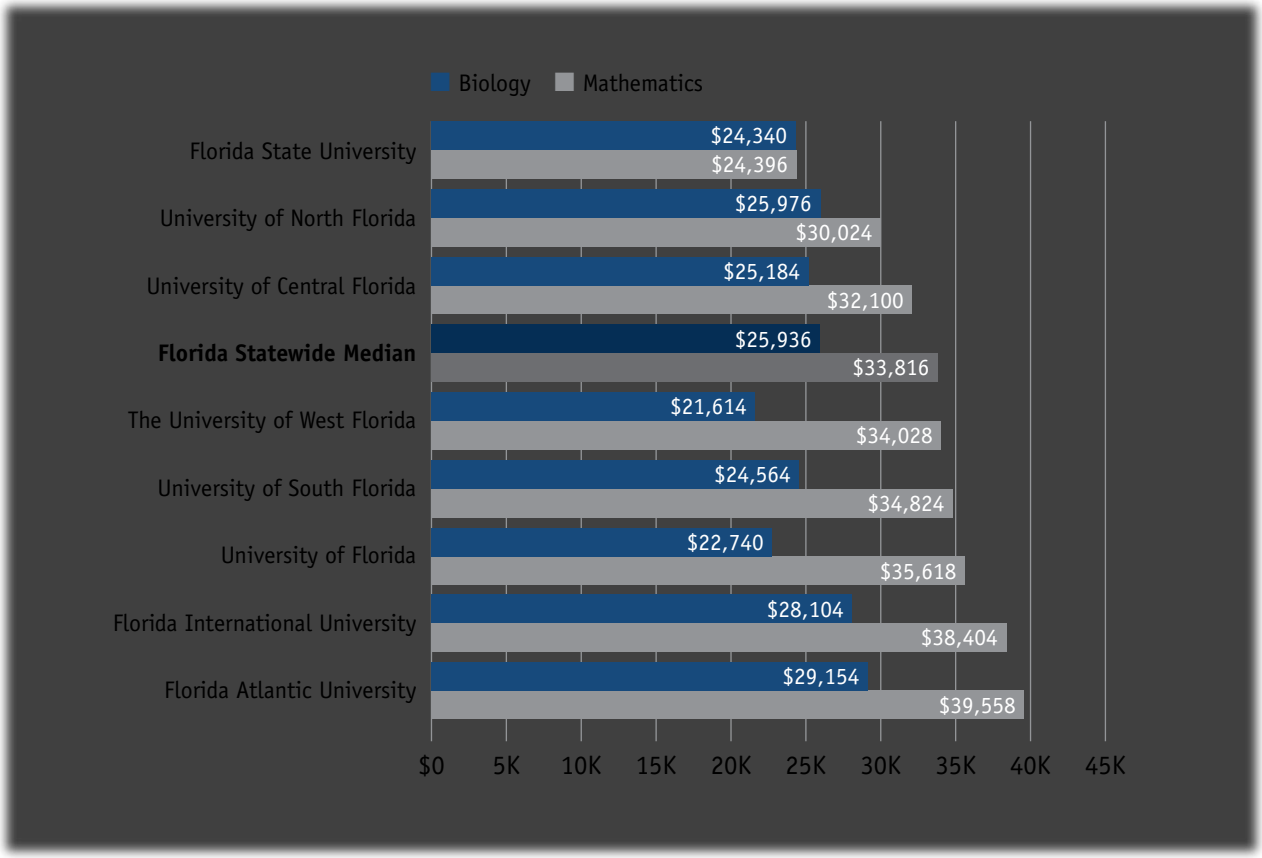
First, note that graduates with biology degrees, even from the most successful program at Florida Atlantic University, and who are now in the labor market, have median earnings below the statewide median for all graduates with bachelor's degrees (about $29,000 compared with $33,000). In contrast, the median first-year earnings of graduates with mathematics degrees are just about the same as the statewide median first-year earnings. But graduates from the most successful mathematics programs have median earnings several thousand dollars more than all graduates with bachelor's degrees.

More interestingly, the earnings of graduates with biology degrees compared with the earnings of graduates with mathematics degrees from the same university are lower. In the case of Florida State University, the difference is miniscule, but more than $10,000 for graduates from several universities. Clearly, the labor market is rewarding graduates with mathematics degrees more than most graduates with other degrees, and it is rewarding the "M" students in STEM far more than the

more numerous "S" students who major in biology and enter the labor market after earning their bachelor's degree.

It is important to remember that these patterns reflect earnings of graduates in their first year following graduation. Patterns may change over time. Indeed, Chapter 445.07, F.S., requires that these longer-term data be included in this report in 2014; and they are shown now in Florida's Economic Success Metrics, available at www.beyondeducation.org.

Figure 20: Median First-Year Earnings of Graduates With Biology and Mathematics Degrees, by University



Enrollment Patterns in Continuing Education of Students With Bachelor's Degrees

As is the case nationwide, for most students attending Florida's universities, the bachelor's degree is the highest degree they will attain. Statewide, about 20% of students who have attained a bachelor's degree are continuing their education one year after graduation.[17] Table 12 below shows the percentage of graduates with bachelor's degrees from each of Florida's universities that meet this criterion. The rate of continuing enrollment is within 2 percentage points of the state median for 8 of Florida's 10 universities. Only two campuses fall outside this tight cluster. At the high end, about 25% of graduates with bachelor's degrees from the University of Florida were enrolled in continuing education. In contrast, graduates with bachelor's degrees from the University of North Florida were 5 percentage points *below* the state median—only 15% of its graduates were found to be enrolled in continuing education.

Table 12: Percent of Students With Bachelor's Degrees Enrolled in Continuing Education, by University

University	% Enrolled in Continuing Education
University of North Florida	15%
Florida Atlantic University	18%
University of Central Florida	18%
The University of West Florida	19%
Florida State University	19%
University of South Florida	19%
Florida Statewide Median percent enrolled in continuing education	**20%**
Florida International University	20%
Florida Agricultural and Mechanical University	21%
Florida Gulf Coast University	21%
University of Florida	25%

Table 13 shows the percentage of students continuing their education by fields of study with the greatest number of enrolled students.[18] Compared with the tight clustering of institutions, there is substantially more variation represented across fields. For example, students who earned bachelor's degrees in business administration and finance are less likely to be enrolled in continuing education than graduates from many of the other fields represented in Table 13. But note that graduates with a bachelor's degree in accounting, another large business-related

17 This can be full time or part time—and the data do not show whether or not they completed an advanced degree or certificate, only that they were enrolled.

18 Each program had more than 1,000 students in the merged database.

program, have high rates of enrollment in continuing education (almost one third of graduates with accounting degrees are continuing their education). Graduates with bachelor's degrees in social work are also more likely than graduates from most programs to be continuing their education. And 45% of graduates with a bachelor's degree in health services/allied health/health sciences are doing so—the highest percentage of all of these large fields of study.

Table 13: Percent of Students With Bachelor's Degrees Enrolled in Continuing Education, by Largest Area of Study

Area of Study	% Enrolled in Higher Education
Business Administration and Management, General	12%
Finance, General	14%
Elementary Education and Teaching	15%
Nursing/Registered Nurse	18%
English Language and Literature, General	19%
Political Science and Government, General	21%
Criminal Justice/Safety Studies	23%
History, General	23%
Psychology, General	24%
Biology/Biological Sciences, General	29%
Accounting	32%
Social Work	39%
Health Services/Allied Health/Health Sciences, General	45%

Student Debt Levels in Florida Universities

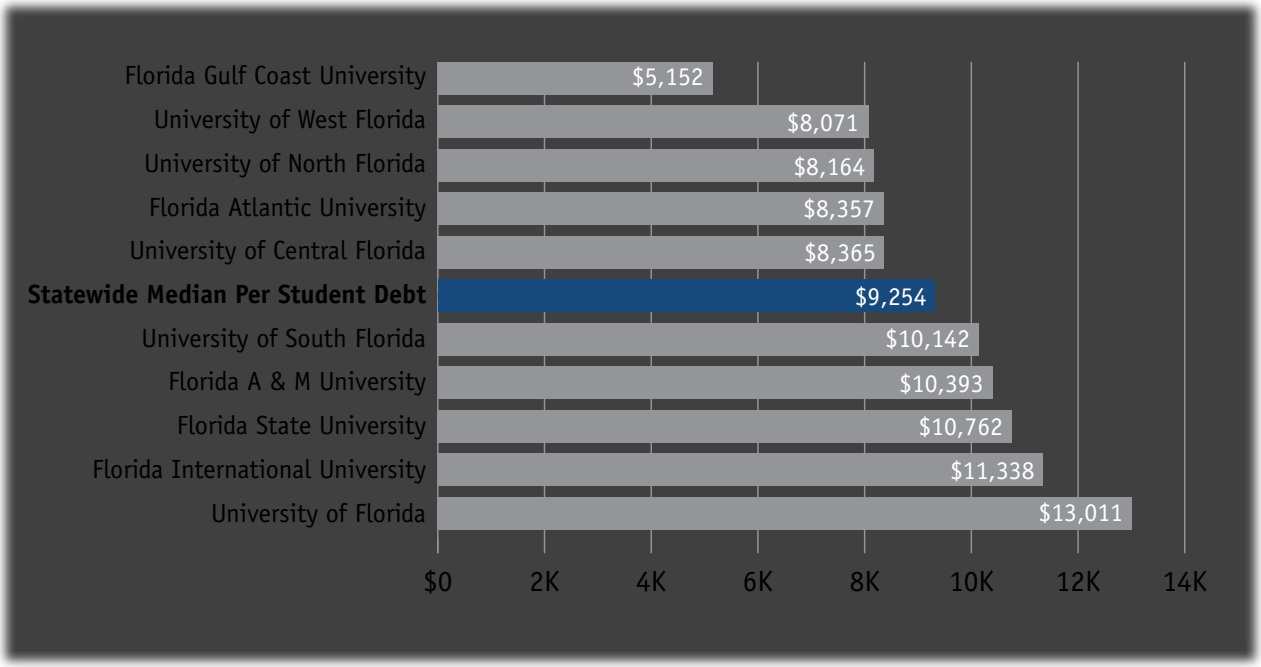
Student debt is of growing concern nationwide. Passing more than $1 trillion, student debt now surpasses outstanding credit card debt and automobile loans and is second only to home mortgages. Many students are also defaulting on their loans and, because student loans cannot be discharged in bankruptcy, the consequences of accumulating debt that cannot be paid off can be long term and financially devastating.

As a reminder, as with the debt levels reported for Florida's colleges earlier in this report, the debt data are self-reported by each public university. The data reflect the average federal student loan debt of *all* students attending the university during 2010–11, not just graduates, and includes federal student loans from Stafford, Perkins, Graduate PLUS, Parent PLUS, and TEACH programs. The average student loan debt represents the total amount of student loans for 2010–11, at each

university, divided by the number of students attending the school that academic year. It does not include private loans or other debt issued by nonfederal government sources that a student may have tapped to help finance their education.

As shown in Figure 21 the median statewide federal loan amount per student is slightly more than $8,000. The range varies, however, from around $5,100 at Florida Gulf Coast University to more than $13,000 at the University of Florida. Because this disbursement amount includes both graduate and undergraduate students, there may be some upward pressure on the amount reported in research universities such as Florida State University and the University of Florida. These data are from 2010–11 and may reflect the economic pressure students were under given the difficult economic conditions of the nation and the state at that time.

Figure 21: Average Federal Loan Amount per Student, State Universities, 2010–11



Bachelor's Degrees Earned at Florida State Colleges

In many states, including Florida, two-year colleges have been awarding bachelor's degrees. The authority to award bachelor's degrees is usually limited to more technical areas aligned with the career-orientation of the certificates and associate's degrees that are a core mission of two-year colleges.

During the five-year study period of academic years 2006–07 through 2010–11, Florida's colleges awarded more than 6,000 bachelor's degrees. Not surprisingly, they were concentrated in a small number of areas of study. See Table 14.

Table 14. Bachelor's Degrees Granted by Florida Colleges, by Area of Study

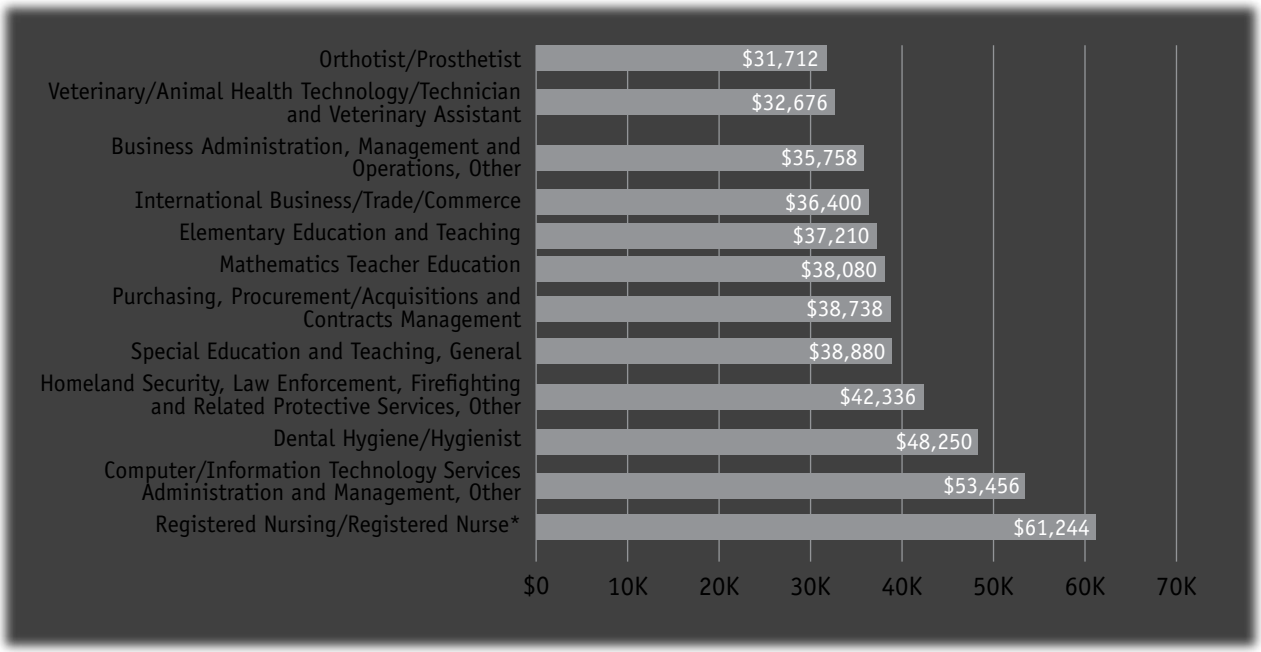
Area of Study	# of Bachelor s Degrees	Percentage
Natural Resources and Conservation	10	0.20%
Legal Professions and Studies	85	1.30%
Computer and Information Sciences and Support Services	407	6.20%
Homeland Security, Law Enforcement, Firefighting and Related Protective Services	575	8.70%
Health Professions and Related Programs	1745	26.50%
Education	1803	27.40%
Business, Management, Marketing, and Related Support Services	1934	29.40%
Total	**6586**	**100.00%**

These are relatively high-paying areas of study and perhaps it is not surprising that the median first-year earnings of graduates with bachelor's degrees from Florida's colleges (around $41,800) are higher than those of bachelor's graduates from Florida's universities (slightly more than $33,600).

Figure 22 shows the variation across the most popular areas of study in which Florida's colleges are awarding bachelor's degrees. Note that except for Orthotist/Prosthetist and Veterinary Technicians, the median first-year earnings of graduates with bachelor's degrees from Florida's colleges are higher than the median for all graduates with bachelor's degrees from the state's universities. As was evident in the analysis of two-year degrees and certificates, technical degrees can have significant labor market values.

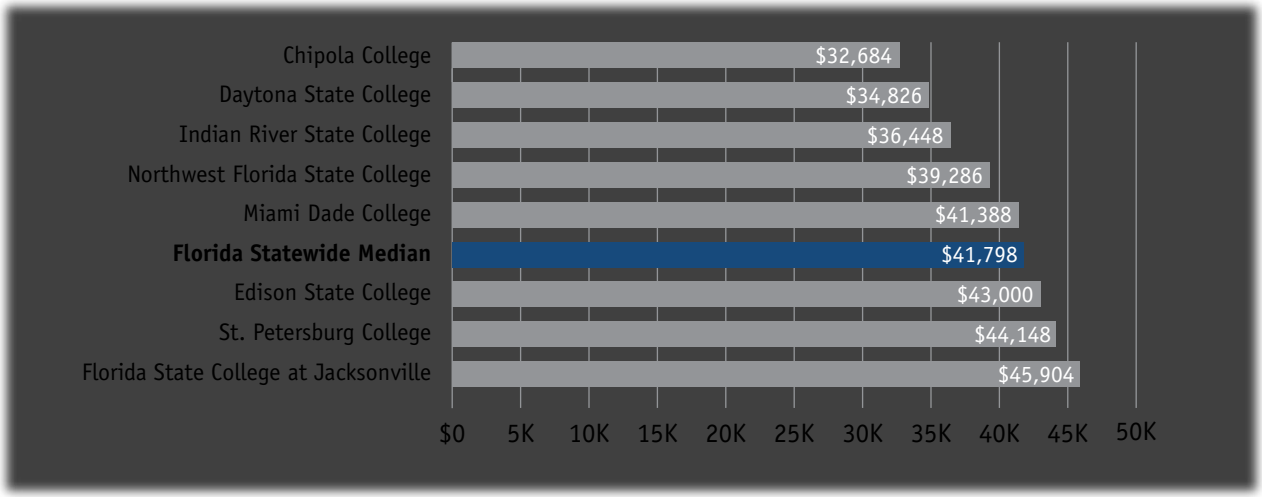
Finally, Figure 23 shows the median first-year earnings by college. These range from less than $35,000 at Chipola College and Daytona State College to more than $45,000 for graduates from Florida State College in Jacksonville.

Figure 22. Median First-Year Earnings of Graduates With Bachelor's Degrees Awarded by Florida's Colleges, by Most Popular Programs of Study



*In 2010, the U.S. Department of Education reclassified Nursing/Registered Nurse (CIP code 51.1601) to Registered Nursing/Registered Nurse (CIP code 51.3801). Some institutions granted both degrees during the transition. This represents the weighted average of those two CIP codes.

Figure 23. Median First-Year Earnings of Graduates With Bachelor's Degrees Awarded by Florida Colleges, by College



First-Year Earnings of Graduates With Master's Degrees

Public education institutions in Florida granted more than 120,000 master's degrees during the five academic years (2006–07 through 2010–11) covered in this report. More than 70% of these graduates are found in the matched student record/unemployment insurance wage database used in this report.

With median first-year earnings far higher than those of graduates with bachelor's degrees, graduates with master's degrees are rewarded in the labor market. Some of this, no doubt, is attributable to the fact that many graduates with a master's degree are older and already in careers, and one would expect their wages to be higher. Thus, further work is needed to separate the added value of the skills learned when attaining a master's degree from the characteristics of the students who earn the master's degrees. But as the data show, graduates with master's degrees earn more, often far more, than graduates with only a bachelor's degree. Consider, for example, that the median first-year earnings of graduates with master's degrees in Florida is around $49,000 compared with less than $34,000 for graduates with bachelor's degrees from universities.

However, just as there was considerable variation in the first-year earnings of graduates with bachelor's degrees, there is also considerable variation in the first-year earnings of graduates with master's degrees by area of study and by institution.

For area of study, the earnings gained for having a master's degree, not just a bachelor's degree, ranges from around $5,000 (elementary education and teaching) to more than $25,000 for the two types of business degree programs and nursing.[19] Clearly, the payoff for the master's degree is associated with area of study. See Figure 24.

Figure 24: Median First-Year Earnings of Graduates With Bachelor's Degrees Compared With Earnings of Graduates With Master's Degrees, by Six Large Fields of Study

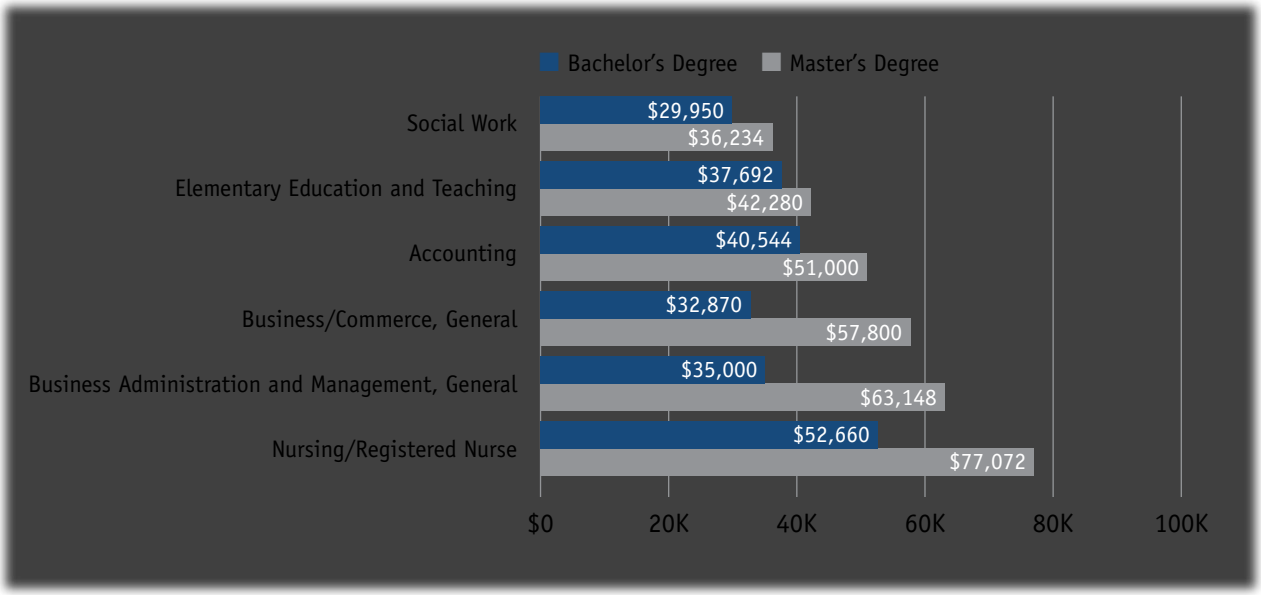
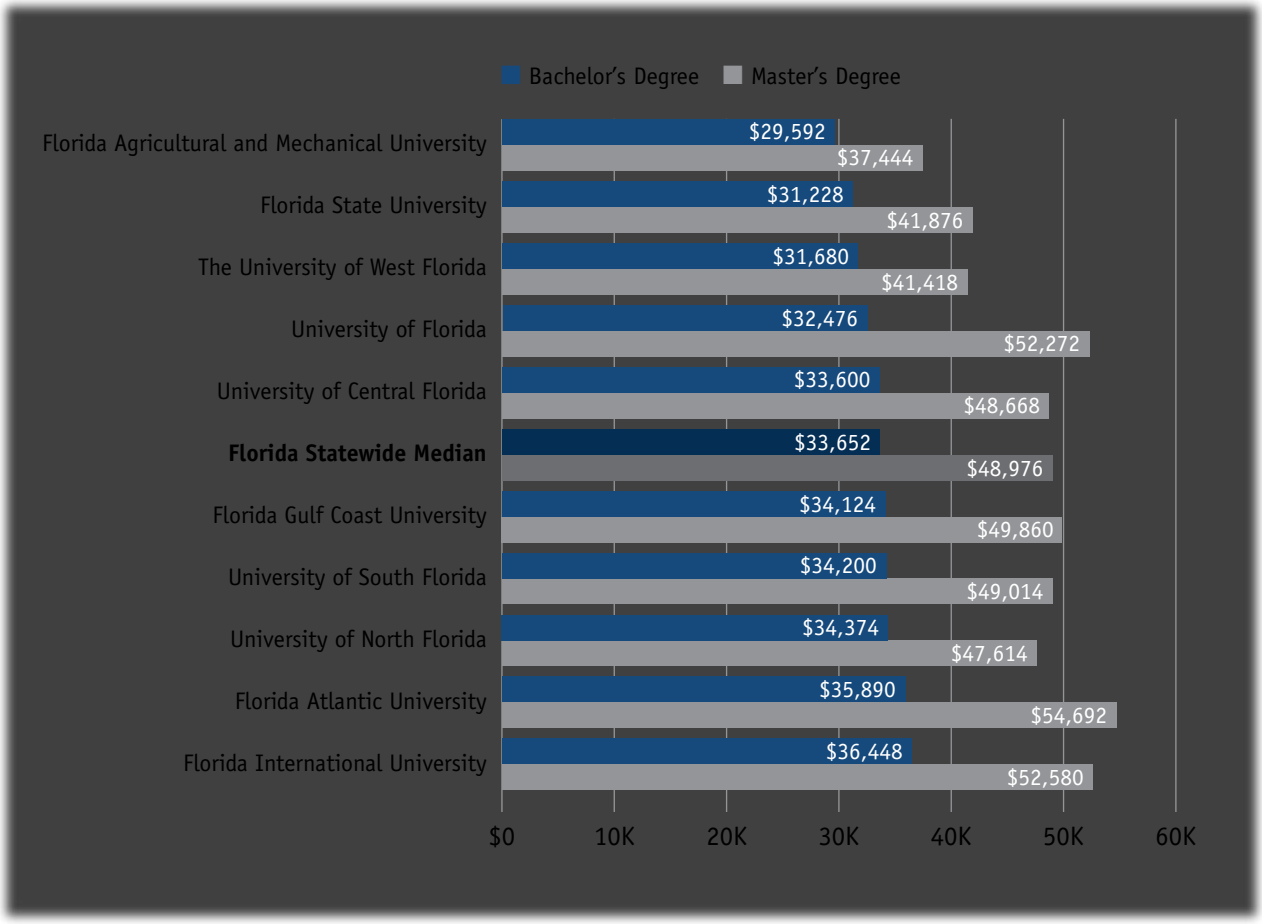


Figure 25 shows the wage premium for the master's degree for each university across Florida with sufficient numbers of graduates in the database to report. Differences range from around $10,000 (Florida A&M University, Florida State University) to around $20,000 (University of Florida, Florida Atlantic University). These within-university differences, to some degree, take into account the differences in local labor markets and confirm the value of the master's degree, but also confirm that greater differences can exist in the added value of the master's degree. The reader should keep in mind that wage outcomes reported at the university level will reflect the mix of majors within each degree: universities that graduate more students in higher paying areas in the labor market such as business or nursing will have an advantage over universities that graduate more students in lower paying areas such as social work.

19 The median first-year earnings of nursing graduates reported in Figure 24 are based on graduates from Florida's universities. These earnings are lower than the first-year earnings displayed in Figure 22 for graduates of Florida's colleges. However, because the comparison being made is master's to bachelor's degrees, the university median is appropriate.

Figure 25: Median First-Year Earnings of Graduates With Bachelor's or Master's Degrees, by University

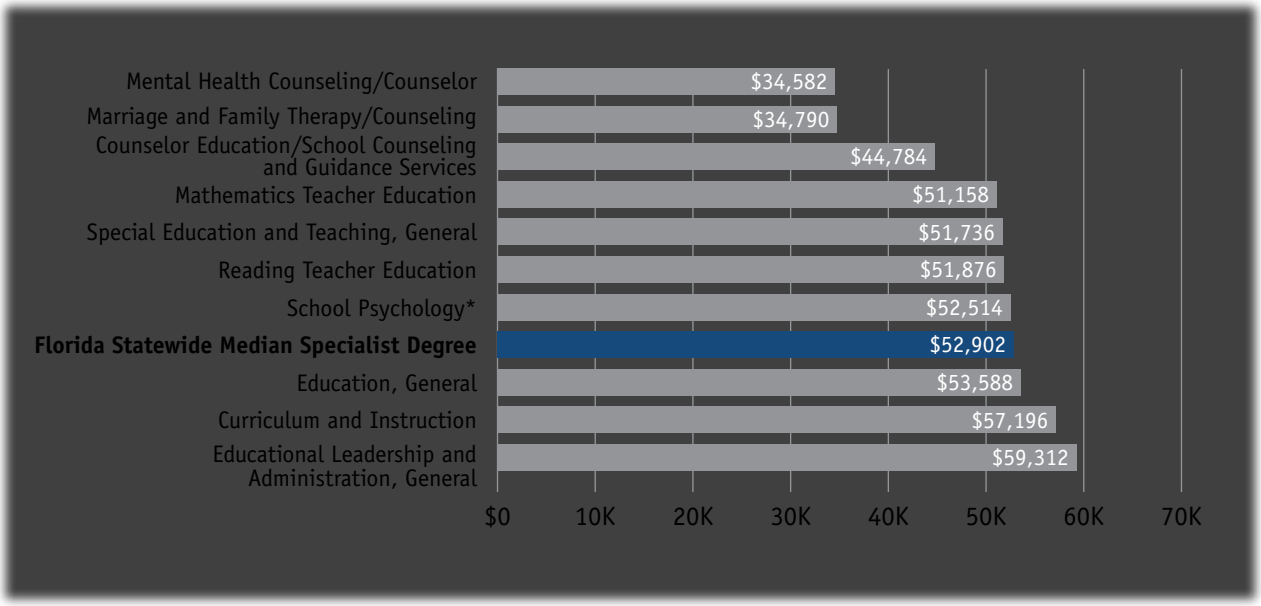


Specialist Degree

During the five academic years reported, Florida universities awarded more than 1,300 specialist degrees. As noted earlier, the specialist is an advanced degree designed for people who want to develop skills beyond the master's level, but who are not interested in pursuing a doctorate. Most of the specialist degrees granted were concentrated in school-based professions with programs in school psychology (179 specialist degrees), counselor education/school counseling and guidance services (266), curriculum and instruction (273), and educational leadership and administration (349) representing the four largest concentrations. Figure 26 displays the median first-year

earnings of graduates with specialist degrees for all programs across Florida. There is a wide range in starting salaries, with almost $25,000 separating the median of graduates with specialist degrees in mental health and marriage and family therapy counseling from the highest median earnings of graduates with specialist degrees in education leadership and administration. Clearly, choosing the right specialty for this degree can have a significant impact on earnings.

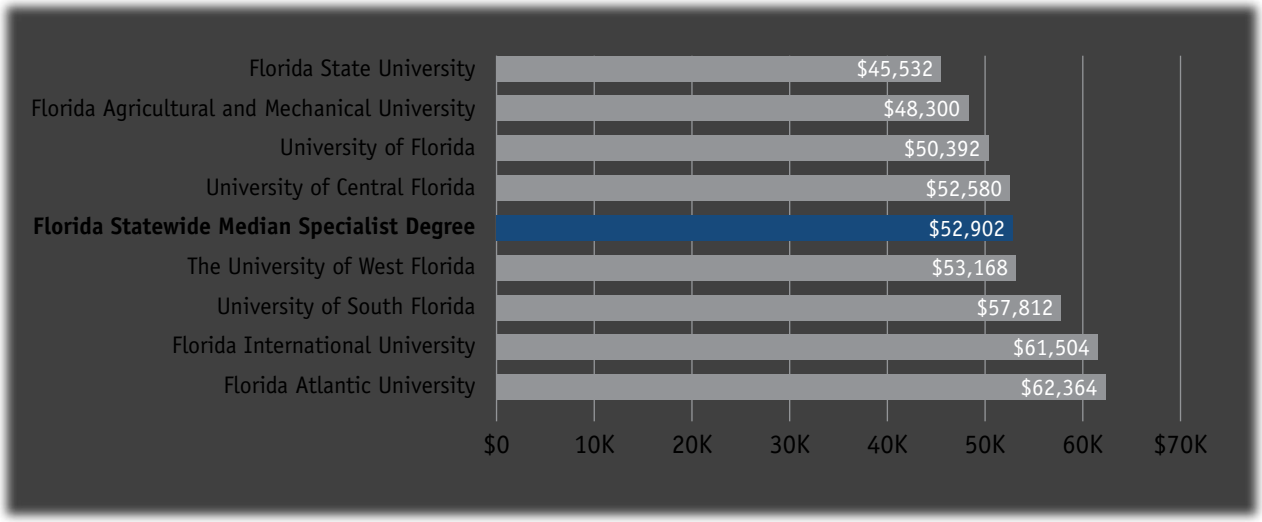
Figure 26: Median First-Year Earnings of Graduates With Specialist Degrees, by Program



* In 2010, CIP code 42.1701 was replaced with 42.2805 and both areas appear in the database. This is the weighted average of these two different CIP codes.

Figure 27 displays the median earnings of graduates with specialist degrees by the university granting that credential. Here again, the data show a large range, from less than $50,000 (Florida State University, Florida A&M University) to more than $60,000 (Florida International University, Florida Atlantic University), with higher wages earned by graduates from universities closer to the Miami metropolitan region.

Figure 27: Median First-Year Earnings of Graduates With Specialist Degrees, by University



As previously noted, one of the main values of the data used in this report is that they are built around the earnings of graduates from specific programs in specific universities. This allows a more detailed analysis than the area of study or the institutional-level analysis presented in the two previous charts. In the next two charts, the earnings of graduates at all three levels of post-baccalaureate degrees (master's, specialists, doctorate [Ph.D.]) are reported by program, focused on the two largest specialties: Curriculum and Instruction (more than 1,400 master's degrees, 273 specialists, 398 Ph.D.s) and Education Leadership and Administration (more than 2,500 master's degrees, 349 specialists, 369 Ph.D.s).

Unfortunately, only four universities award all three degrees in both Classification of Instructional Programs (CIP) codes, and only two of them, the University of South Florida and the University of Florida, award all three credentials in both areas of study. However, even these limited data validate the value of the specialist degree while reinforcing the importance of students choosing a program and institution carefully.

Figure 28 reports the program-level data for the largest specialist degree program in the state, education leadership. Statewide, there are substantial gains to be had by earning either the specialist or the Ph.D. credentials after the master's degree. Although graduates with doctoral degrees have higher median earnings than graduates of specialist programs in this area of study, they have also invested more resources in earning that degree. For students who do not want or cannot invest that extra time and money, the specialist degree may represent a valuable option.

That said, considerable variation exists across programs. For example, graduates of the University of Florida in both the master's and the Ph.D. levels have first-year earnings that lag the state median by almost $5,000. The earnings of University of Florida graduates with the specialist credential in education leadership also lag behind the state median, but only by a small amount. The earnings of graduates of the University of Central Florida with master's and specialist credentials lag statewide medians by even larger amounts than University of Florida graduates. In contrast, graduates at all three levels from the University of South Florida and especially Florida Atlantic University surpass the state median for their credential level.

Figure 28: Median First-Year Earnings of Graduates With Educational Leadership and Administration Credentials, by Post-baccalaureate Credential

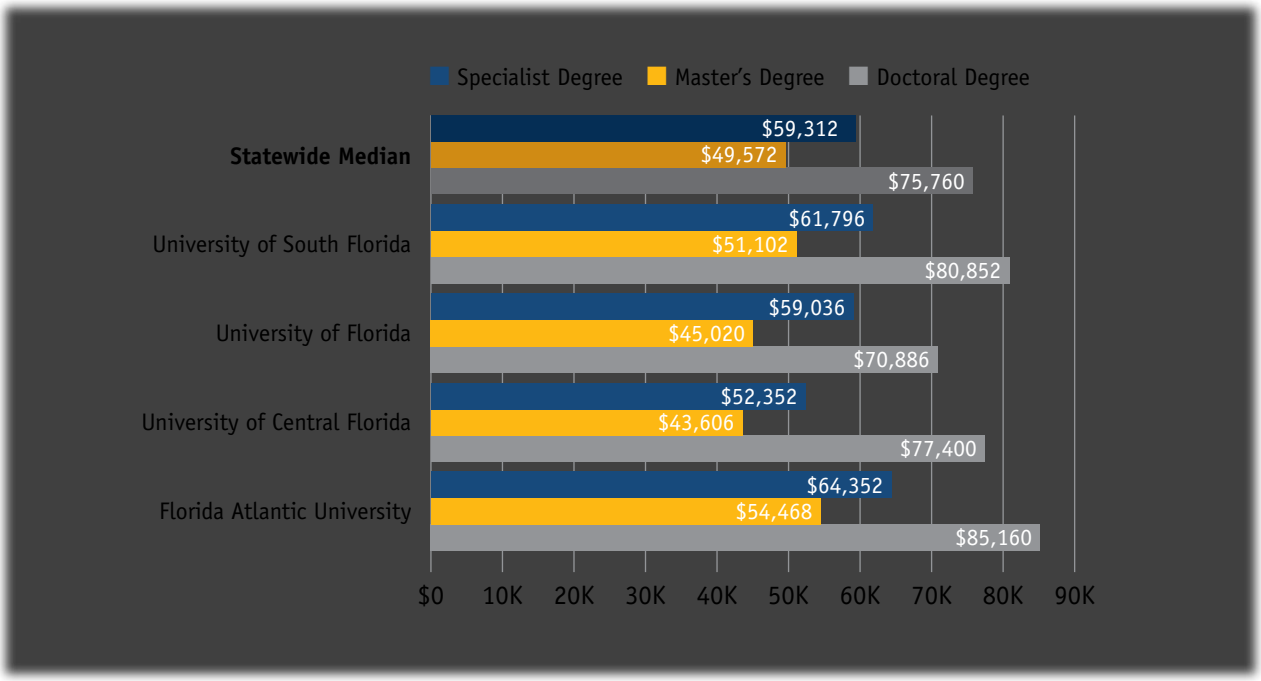
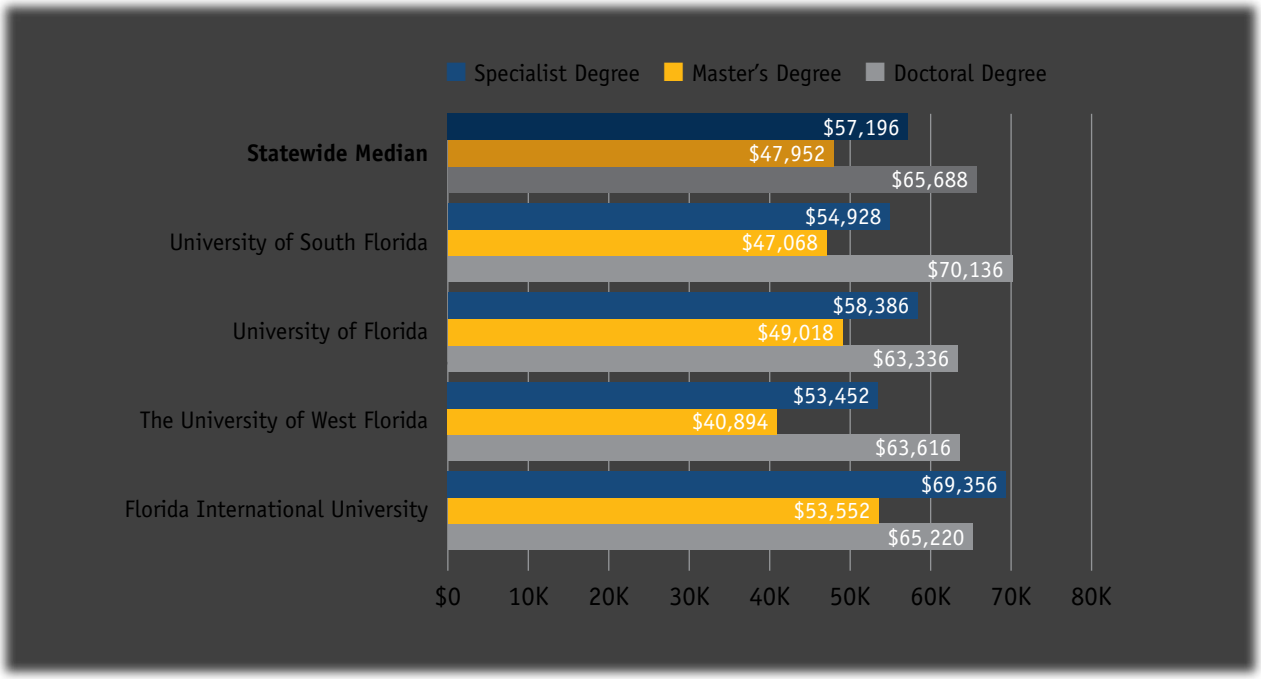


Figure 29 displays the first-year earnings of graduates at each of the three levels of post-baccalaureate credentials for the field of curriculum and instruction. Statewide, graduates with Ph.D. and specialist degrees earn substantially more compared with graduates with the master's degrees. (Note, however, that graduates with degrees in this field are paid less than those with degrees in education leadership, especially at the Ph.D. level.) Keeping that in mind, one can see that graduates of the University of Florida with the specialist and master's degrees earn

more than the statewide median but its Ph.D. graduates' earnings lag. Also, graduates from the University of West Florida at any of these three degree levels lag statewide medians, especially those with master's degrees. Finally, graduates with specialist degrees from Florida International University arguably have the best outcomes in terms of wages. Their median wages are almost as high as Ph.D. graduates from the University of South Florida, the group of graduates with the highest median income in this area of study.

Students considering their options for advanced degrees should keep this program variation in mind.

Figure 29: Median First-Year Earnings of Graduates With Curriculum and Instruction Credentials, by Post-baccalaureate Credential



Professional Doctorates

Many students in Florida seek professional doctorates that will qualify them for licenses to work in a chosen profession. In Table 15, the first-year earnings of graduates of three professional doctoral programs in Florida are reported. There were more than 1,600 pharmacy graduates in the database and more than 1,200 graduates in law and medicine in the programs for which data can be reported.

Interestingly, graduates in medicine make almost the same in the first year following graduation, regardless from which school they graduated.[20] And, the median for graduates is less than $50,000. But as noted earlier, this is no doubt the result of the structure of the profession where the vast majority of medical school graduates are serving as interns, an essential step in gaining a license to practice medicine unsupervised.

Far more variation is found among graduates of law programs, although given the time and money spent earning a law degree entails, the return on investment, at least in the short run, seems to be low. Graduates of Florida A&M University Law School have median earnings of slightly more than $41,000, about $4,000 less than graduates from Florida State University and about $5,000 less than graduates of Florida International University. Law graduates from the University of Florida do best, with a median wage of more than $53,000.

Two of Florida's three pharmacy programs met reporting requirements, and although there is a spread of almost $8,000 separating the first-year earnings of graduates from Florida A&M University from graduates of the University of Florida, the median first-year earnings of graduates from both programs tops $100,000, twice the earnings of law graduates. What you study matters!

20 This is based on data for three medical schools in Florida. Data for graduates of Florida Atlantic University, Florida International University, and the University of Central Florida were not included in the database.

Table 15: First-Year Earnings of Graduates With Professional Degrees, by Program and Institution

Degrees	Median First-Year Earnings
Law Degrees	
Florida Agricultural and Mechanical University	$41,302
Florida State University	$45,522
Florida International University	$46,152
University of Florida	$53,342
Pharmacy Degrees	
Florida Agricultural and Mechanical University	$105,100
University of Florida	$113,272
Medicine Degrees	
University of South Florida	$46,988
Florida State University	$48,396
University of Florida	$48,996

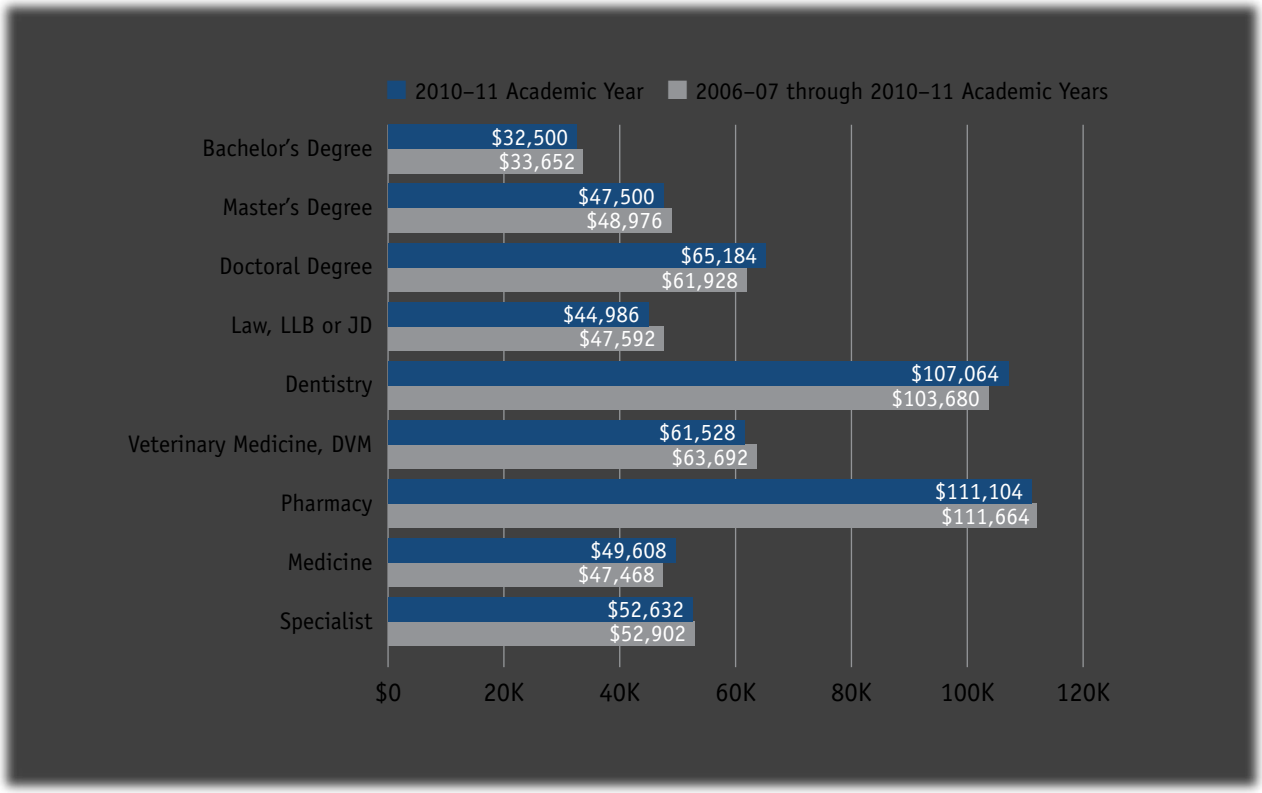
Changes in First-Year Earnings of Graduates of State Universities

The median first-year earnings of graduates during the five academic years 2006–07 through 2010–11 can be compared with the 2010–11 year in isolation. Although many programs will not have a sufficient number of graduates to enable reporting consistent with confidentiality constraints, reporting at higher levels of aggregation, however, is possible. Overall the analysis shows a decline in first-year earnings.[21]

As shown in Figure 30, compared with the five-year reporting period, in 2010–11 median first-year earnings of university graduates decreased for bachelor's degrees (-3.4%); master's degrees (-3.0%); law, LLB or JD (-5.5%); veterinary medicine, DVM (-3.4%); pharmacy (-0.5%); and specialist (-0.5%) in 2010–11 compared with the median median from 2006 through 2011. Earnings increased, however, for doctoral degrees (5.3%), dentistry (3.3%), and medicine (4.5%).

21 This decline is underestimated as earnings from the 2010–11 years are used both in the aggregated median of the five years and individually. Because median earnings of graduates with degrees from most programs and institutions declined in 2010–11, the five-year totals are lower than they would have been were 2010–11 not included.

Figure 30: Median First-Year Earnings of University Graduates, by Degree Level



At the bachelor's degree level, accounting remains the program with the highest median earnings of graduates at $38,934 (a 4.0% decrease) and biology/biological sciences, general, remains the program with the lowest earnings of graduates with a median of $25,084 (a 3.3% decrease).

All reportable bachelor's degree programs saw decreased earnings of graduates. The greatest decrease was in English language and literature, general, at -7.7% ($29,268 to $27,008). Finance, general, saw the least decrease at -0.8% ($36,348 to $36,072).

Florida International University remained the institution with the highest earnings of graduates at $35,000 (a -4.0% decrease). Florida Agricultural and Mechanical University remains the institution with the lowest earnings of graduates with $27,888 (a -5.8% decrease).

There were decreased earnings of graduates with bachelor's degrees from all universities. The greatest decrease was graduates of the University of North Florida, down -6.3% ($34,374 to $32,194). Graduates of the University of South Florida had the least decrease, down -1.7% ($34,200 to $33,624).

Changes in Median First-Year Earnings of Graduates With Master's Degrees

Comparing the 2006–07 through 2010–11 academic years, in 2010–11 the master's-level program with the highest median earnings of graduates in the labor market remains electrical and electronics engineering at $67,408 (a 0.7% increase). Social work remains the program with the lowest earnings of graduates at $34,084 (a -5.9% decrease).

The greatest decreases in graduates' earnings were -8.2% in educational leadership and administration, general ($49,572 to $45,484) and -5.9% in social work ($36,234 to $34,084). Only two programs saw increased earnings: business/commerce, general, increased by 2.4% ($57,800 to $59,168) and electrical and electronics engineering increased by 0.7% ($66,962 to $67,408).

Florida International University became the institution with its graduates with master's degrees having the highest median earnings ($49,996). Florida Agricultural and Mechanical University remains the institution with graduates' earnings the lowest at $36,706 (a -2.0% decrease).

All institutions saw a decrease in the earnings of their graduates. The greatest decrease was among graduates of Florida Atlantic University with -9.5% ($54,692 to $49,520). The least decrease was -0.2% at the University of North Florida ($47,614 to $47,536).

Where the Jobs Are

Although this report focuses on the first-year wages of graduates for academic years 2006–07 through 2010–11, clearly the wages graduates command is not only a function of the programs from which they graduate but also the strength of the labor market they are entering. The following section provides additional information on jobs currently in demand including information on the fastest growing industries and occupations forecast to 2021. Additionally, this section provides information on the top 15 statewide jobs that require a postsecondary credential where the demand for workers is projected to surpass the supply of workers. This section aims to supplement the wage data presented throughout this report to help students anticipate where the demand for workers may be the strongest across Florida during the next decade.

As students consider their educational options, the size of the industries in which they might find postgraduation/completion employment and the industry's growth rate are important. Table 16 shows that in October 2013, the largest industry sectors in Florida were trade, transportation, and utilities (21.0% of total employment); education and health services (14.9%); professional and business services (14.6%); total government (14.0%); and leisure and hospitality (13.7%). Together, these five industries accounted for 78.2% of Florida's total nonagricultural employment.

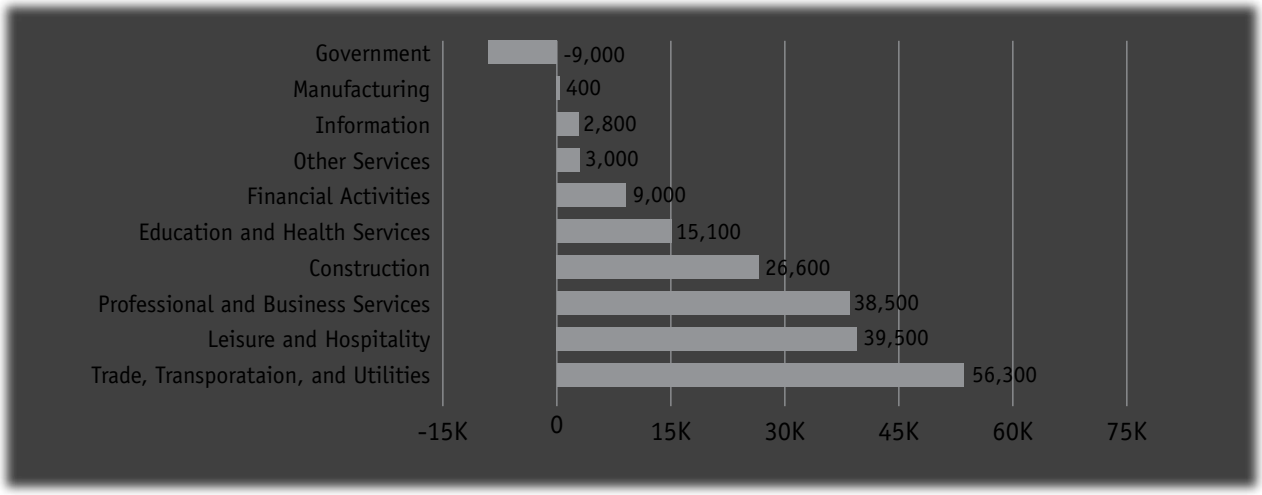
Figure 31 shows that of these 10 large industries, nine gained jobs over the year in October 2013. Only "Total Government" declined over the year, losing 9,000 jobs.

Table 16: Nonagricultural Employment, by Industry: Florida, October 2013 (Seasonally Adjusted)[22]

Industry	Number	% of Total
Total	7,618,900	
Trade, Transportation, and Utilities	1,602,000	21.0%
Education and Health Services	1,134,000	14.9%
Professional and Business Services	1,113,600	14.6%
Total Government	1,066,900	14.0%
Leisure and Hospitality	1,043,500	13.7%
Financial Activities	509,300	6.7%
Construction	373,700	4.9%
Other Services	317,500	4.2%
Manufacturing	317,300	4.2%
Information	135,400	1.8%

Source: U.S. Department of Labor, Bureau of Labor Statistics, Current Employment Statistics Program, released November 22, 2013. Prepared by: Florida Department of Economic Opportunity, Bureau of Labor Market Statistics.

Figure 31: Trade, Transportation, and Utilities Gained the Most Jobs the Year: Florida, October 2012–October 2013, Seasonally Adjusted



Source: U.S. Department of Labor, Bureau of Labor Statistics, Current Employment Statistics Program, released November 22, 2013.
Prepared by: Florida Department of Economic Opportunity, Bureau of Labor Market Statistics.

22 The data in this section come from U.S. Department of Labor, Bureau of Labor Statistics, Current Employment Statistics Program, released November 22, 2013.

Perhaps of greater importance than short term growth trends are the long-term projections of growth by industry and by occupation. Clearly, it will be easier to find employment in a rapidly expanding industry or occupation than one with slower growth.

Table 17 shows the industries where growth is likely to be found. The top three fastest-growing industries are related to construction with specialty trade contractors projected to grow the fastest from 2013 to 2021 with annual growth of +3.72%. The healthcare industry is also projected to grow rapidly due to population gains, the aging population, and improved medical technologies.

Table 17: Fastest-Growing Industries*: Florida, Forecast to 2021

Rank	Industry	Annual Change	
		Total	%
1	Specialty Trade Contractors	8,860	3.72
2	Construction of Buildings	2,710	3.67
3	Heavy and Civil Engineering Construction	1,609	3.49
4	Ambulatory Health Care Services	14,185	3.38
5	Nursing and Residential Care Facilities	5,151	2.82
6	Professional, Scientific, and Technical Services	12,409	2.67
7	Social Assistance	2,818	2.46
8	Educational Services	3,707	2.41
9	Nonmetallic Mineral Product Manufacturing	360	2.27
10	Wood Product Manufacturing	206	2.25

*This table includes industries with a minimum of 3,500 jobs in 2013.
Source: Florida Department of Economic Opportunity, Bureau of Labor Market Statistics. Released November 2013.

High growth rates do not necessarily mean many new jobs will be created. For example, Wood Product Manufacturing has a projected annual growth rate of more than 2%, but the number of new jobs created is only around 200 per year. Another way to look at where the jobs are is to see which industries will be creating the *most* new jobs, regardless of the growth rate. Table 18 presents the 10 industries in which the most jobs are likely to be created. There is some overlap between these two tables. For example, Ambulatory Health Care Services is a large industry that is expected to grow rapidly over the next decade. Similarly, Professional, Scientific and Technical Services is expected to add numerous new jobs and has a high growth rate. In contrast, two industries, Hospitals and Administrative and Support Services, have lower growth rates, but because they are large industries, will add many more jobs than most of the faster growing industries displayed in Table 17.

Table 18: Industries Gaining the Most New Jobs: Florida, Forecast to 2021

Rank	Industry	Annual Change	
		Total	%
1	Ambulatory Health Care Services	14,185	3.38
2	Professional, Scientific, and Technical Services	12,409	2.67
3	Local Government	10,649	1.46
4	Food Services and Drinking Places	10,350	1.58
5	Administrative and Support Services	10,152	1.88
6	Specialty Trade Contractors	8,860	3.72
7	Nursing and Residential Care Facilities	5,151	2.82
8	Hospitals	4,160	1.54
9	Educational Services	3,707	2.41
10	Social Assistance	2,818	2.46

Source: Florida Department of Economic Opportunity, Bureau of Labor Market Statistics. Released November 2013.

Growth in Occupations

Also important is the growth in occupations. Table 19 shows the occupations with the expected fastest growth over the next decade. The home health aides occupation is projected to grow the fastest annually (+5.05%). Note that nine of the top ten fastest growing occupations require educational attainment beyond high school, but only one (Market Research Analysts and Marketing Specialists) requires a bachelor's degree. This confirms the data presented throughout this report about the value of technical credentials granted by Florida's colleges and District Technical Centers.

Table 19: Fastest-Growing Occupations*: Florida, Forecast to 2021

Rank	Occupation	Annual Change		2013 Hourly Wage	Educational Attainment
		%	Level		
1	Home Health Aides	5.05	1,578	10.52	PSAV
2	Personal and Home Care Aides	4.66	687	10.08	PSAV
3	Cement Masons and Concrete Finishers	4.17	440	15.05	PSAV
4	Veterinary Technologists and Technicians	4.12	307	13.94	CC Cert./Degree
5	Diagnostic Medical Sonographers	4.07	198	28.80	PSAV
6	Cost Estimators	4.06	454	28.30	CC Cert./Degree
7	Market Research Analysts and Marketing Specialists	3.96	587	28.33	Bachelor's
8	Heating, A.C., and Refrigeration Mechanics and Installers	3.94	972	20.11	PSAV
9	Physical Therapist Assistants	3.65	172	28.00	CC Cert./Degree
10	Nonfarm Animal Caretakers	3.60	387	10.77	Less than H.S.

*Includes occupations with a minimum employment greater than 4,000 jobs in 2013.
H.S. = High School, PSAV = Postsecondary Adult Vocational Certificate, CC Cert. = College Credit Certificate, Bachelor's = Bachelor's Degree.
Note: Because most industries experienced job declines in the economic downturn that began in 2007, some of the job growth projected in this forecast includes the recapturing of jobs lost since that time.
Source: Florida Department of Economic Opportunity, Bureau of Labor Market Statistics. Released November 2013.

Where Is the Greatest Demand Relative to Supply?

Table 20 is based on Florida's Occupational Supply/Demand report that compares total supply (education/training graduates by occupation) against short-term demand (employer-posted Internet job ads by occupation).

The supply gap is the difference between occupational demand and supply. Supply gaps are indicated by minus signs reflecting that demand is greater than supply. These are occupations in which students will likely experience high probabilities of finding employment. Entry, median, and experienced wages for each occupation listed are also shown, so students can determine likely wages for the occupation.

As an example, consider the physical therapist occupation. Florida projects that only 572 graduates will be produced by state colleges and universities through 2021. However, the estimated demand is for more than 2,000 therapists. This leaves a shortage of around 1,500 trained individuals. Reading the other entries for physical therapists in this table shows that entry wage is $28 per hour, with a median wage of almost $38, and an experienced wage of $44. This occupation requires a master's or higher degree. These statistics reflect a good investment for prospective students due to strong job demand, an existing occupational shortage, and wages that are among the highest of these 15 occupations. Other occupations show similar gaps between supply and demand that students should consider in choosing among their postsecondary options.

Table 20: The Supply Gap of 15 Occupations Requiring Postsecondary Credentials

Occupation	Total Supply	Short-Term Demand	Supply Gap or Overage	Entry Wage	Median Wage	Experienced Wage	Florida Postsecondary Credential
Securities, Commodities, and Financial Services Sales Agents	975	2796	-1821	$17.57	$30.38	$52.70	5
Occupational Therapists	322	1891	-1569	$23.47	$36.32	$41.63	6
Physical Therapists	572	2095	-1523	$28.11	$37.93	$44.13	6
Industrial Engineers	331	1037	-706	$21.08	$32.51	$39.58	5
Speech-Language Pathologists	516	1105	-589	$23.35	$32.93	$38.77	6
Physician Assistants	186	768	-582	$30.84	$42.09	$48.54	5
Internists, General	106	576	-470	$62.25	N/R	$113.53	6
Surgeons	10	423	-413	N/R	N/R	N/R	6
Psychiatrists	10	284	-274	$50.45	$79.51	$98.88	6
Nurse Practitioners	189	401	-212	N/R	N/R	N/R	6
Medical Scientists, Except Epidemiologists	251	461	-210	$20.13	$38.33	$50.67	6
Pediatricians, General	25	111	-86	$43.05	$70.87	$96.61	6
Sales Engineers	196	269	-73	$25.70	$38.60	$46.30	5
Obstetricians and Gynecologists	21	93	-72	N/R	N/R	N/R	6
Anesthesiologists	19	84	-65	N/R	N/R	N/R	6

Florida Education Levels 5 = Bachelor's Degree 6 = Master's or Higher N/R = Not Reported
Source: Florida Department of Economic Opportunity, Bureau of Labor Market Statistics, December 2013

Higher Education Pays: But Far More for Some Programs Than for Others

The U.S. Department of Labor, Bureau of Labor Statistics, and the Census Bureau have documented the "Big Payoff" for higher education,[23] but this report shows that the payoff varies considerably from program to program and from institution to institution. The bottom line: The degree students earn, and where they earn it, matters.

Most notably, many pathways to success exist in the labor market. For example, the high labor-market value of technical associate's degrees is clear. And certain certificates may represent a new and efficient pathway into the labor market. At the bachelor's degree level, the data show that graduates from many campuses in the state, not just the state's best-known campuses, earn, on average, roughly the same first-year wages.

In short, many pathways to good earnings are available to students in Florida, and it is hoped that the data being made available can help students find them.

As students and others consider these data, some of the cautions put forward earlier in this report should be reiterated. Although wide variations occur in the first year in the financial success of graduates from different programs, these variations have not been explained, leaving this issue for further analysis. For example: the credentials of incoming students vary across institutions; missions vary across institutions; and many schools serve regional labor markets where earnings vary. And the data reported here are all *short-term* labor market results. In the long-term, graduates with bachelor's degrees tend to increase their earnings faster than those with associate's degrees, so that the greater differences documented here may erode over time. Indeed, the reader is encouraged to look at the longer term wage data now available on Florida's Economic Success Metrics website, www.beyondeducation.org.

Additionally, postsecondary education has many rewards in addition to the boost in earnings; however, if a student borrows $50,000 and is earning $25,000, he or she likely will be so consumed by trying to pay off the loans as to have little time to enjoy these other rewards.

To reiterate, knowing about the variations in the economic payoff of degrees and programs of study is important—and further analysis may be needed to better understand specific institutional and program implications and nuances. The data reported here, however, should be made widely accessible to the public and should inform students, their families, taxpayers, and their representatives about the labor market outcomes of programs, degrees, and colleges.

23 http://www.census.gov/prod/2002pubs/p23-210.pdf and more recently http://www.census.gov/prod/2011pubs/acs-14.pdf.

Appendix

Table 21: Match Rate for University Graduates

Institution	% of Graduates/ Completers With Wage Data/Bachelor s Degree	% of Graduates/ Completers With Wage Data/Master s Degree
Florida Agricultural and Mechanical University	42%	44%
Florida Atlantic University	56%	67%
Florida Gulf Coast University	55%	74%
Florida International University	55%	64%
Florida State University	40%	42%
Florida Statewide Median	**48%**	**55%**
The University of West Florida	45%	54%
University of Central Florida	52%	63%
University of Florida	31%	41%
University of North Florida	58%	71%
University of South Florida	54%	61%

Table 22: Match Rate for State College Graduates/Completers

Institution	% of Graduates/ Completers With Wage Data
Associate in Applied Science Degree	
Eastern Florida State College	75%
Broward College	77%
College of Central Florida	93%
Daytona State College	74%
Florida State College at Jacksonville	73%
Florida Keys Community College	69%
Florida Statewide Median A.A.S. Degree	**72%**
Gulf Coast State College	70%
Hillsborough Community College	86%
Indian River State College	73%
Florida Gateway College	75%
Lake-Sumter State College	75%
State College of Florida, Manatee-Sarasota	81%
Miami Dade College	78%
North Florida Community College	92%
Northwest Florida State College	41%
Palm Beach State College	83%
Pasco-Hernando Community College	64%
Pensacola State College	63%
Polk State College	88%

Institution	% of Graduates/ Completers With Wage Data
St. Johns River State College	86%
Santa Fe College	72%
Seminole State College of Florida	76%
South Florida State College	87%
St. Petersburg College	72%
Tallahassee Community College	76%
Valencia College	67%

Associate in Arts Degree	
Eastern Florida State College	60%
Broward College	63%
College of Central Florida	60%
Chipola College	60%
Daytona State College	62%
Edison State College	66%
Florida State College at Jacksonville	62%
Florida Keys Community College	57%
Florida Statewide Median A. A. Degree	**62%**
Gulf Coast State College	58%
Hillsborough Community College	65%
Indian River State College	60%
Florida Gateway College	62%
Lake-Sumter State College	65%
State College of Florida, Manatee-Sarasota	62%
Miami Dade College	63%
North Florida Community College	54%
Northwest Florida State College	52%
Palm Beach State College	65%
Pasco-Hernando Community College	66%
Pensacola State College	58%
Polk State College	67%
St. Johns River State College	65%
Santa Fe College	55%
Seminole State College of Florida	64%
South Florida State College	61%
St. Petersburg College	63%
Tallahassee Community College	60%
Valencia College	66%

Institution	% of Graduates/ Completers With Wage Data
Associate in Science Degree	
Eastern Florida State College	76%
Broward College	84%
College of Central Florida	70%
Chipola College	68%
Daytona State College	76%
Edison State College	84%
Florida State College at Jacksonville	78%
Florida Keys Community College	63%
Florida Statewide Median A.S. Degree	**79%**
Gulf Coast State College	82%
Hillsborough Community College	83%
Indian River State College	81%
Florida Gateway College	81%
Lake-Sumter State College	89%
State College of Florida, Manatee-Sarasota	66%
Miami Dade College	74%
North Florida Community College	78%
Northwest Florida State College	74%
Palm Beach State College	79%
Pasco-Hernando Community College	81%
Pensacola State College	74%
Polk State College	91%
St. Johns River State College	78%
Santa Fe College	75%
Seminole State College of Florida	82%
South Florida State College	93%
St. Petersburg College	80%
Tallahassee Community College	77%
Valencia College	80%
Postsecondary Adult Vocational Certificate: State Colleges	
Eastern Florida State College	63%
Broward College	82%
College of Central Florida	76%
Chipola College	88%
Daytona State College	65%
Edison State College	80%
Florida State College at Jacksonville	71%
Florida Keys Community College	49%
Florida Statewide Median PSAV Certificate: State Colleges	**73%**
Gulf Coast State College	78%
Hillsborough Community College	76%
Indian River State College	75%

Institution	% of Graduates/ Completers With Wage Data
Florida Gateway College	65%
Lake-Sumter State College	85%
State College of Florida, Manatee-Sarasota	50%
Miami Dade College	73%
North Florida Community College	85%
Northwest Florida State College	68%
Palm Beach State College	75%
Pasco-Hernando Community College	73%
Pensacola State College	64%
Polk State College	81%
St. Johns River State College	65%
Santa Fe College	69%
Seminole State College of Florida	70%
South Florida State College	85%
St. Petersburg College	74%
Tallahassee Community College	63%
Valencia College	72%

Postsecondary Adult Vocational Certificate: State Colleges	
Eastern Florida State College	77%
Broward College	86%
College of Central Florida	71%
Chipola College	80%
Daytona State College	77%
Edison State College	86%
Florida State College at Jacksonville	70%
Florida Keys Community College	82%
Florida Statewide Median PSAV Certificate: State Colleges	**76%**
Gulf Coast State College	83%
Hillsborough Community College	78%
Indian River State College	71%
Florida Gateway College	79%
Miami Dade College	81%
North Florida Community College	80%
Northwest Florida State College	77%
Palm Beach State College	73%
Pasco-Hernando Community College	76%
Pensacola State College	62%
Polk State College	92%
St. Johns River State College	79%
Santa Fe College	73%
Seminole State College of Florida	80%
South Florida State College	81%
St. Petersburg College	77%
Tallahassee Community College	87%
Valencia College	89%

Table 23: Match Rate for District Technical Centers Graduates/Completers

Institution	% of Graduates/ Completers With Wage Data
Postsecondary Adult Vocational Certificate: District Technical Centers	
Aparicio-Levy Technical Center	61%
Atlantic Technical Center	64%
Bradford-Union Area Career Technical Center	56%
Brewster Technical Center	58%
Charlotte Technical Center	69%
Erwin Technical Center	71%
D.A. Dorsey Education Center	54%
DeSoto County Adult Education Center	68%
First Coast Technical College	74%
Flagler Technical Institute	57%
Florida Statewide Median PSAV Certificate: District Technical Centers	**68%**
Gadsden Technical Institute	64%
George Stone Career Center	66%
George T. Baker Aviation School	78%
Imokalee Technical Center	61%
Indian River Adult and Community Education School	58%
Lake Technical Center	76%
Learey Technical Center	66%
Fort Myers Institute of Technology	77%
Cape Coral Institute of Technology	67%
Lindsey Hopkins Technical Education Center	53%
Lively Technical Center	63%
Lorenzo Walker Institute of Technology	70%
Manatee Technical Institute	72%
Marchman Technical Education Center (MTEC)	64%
Marion County Community Technical and Adult Education Center	74%
McFatter Technical Center	69%
The English Center	51%
Miami Lakes Educational Center	68%
Mid Florida Tech	73%
Monroe County Adult and Community Education	60%
Okaloosa Applied Technology Center	63%
Orlando Tech	72%
Pinellas Technical Education Center—St. Petersburg	68%
Pinellas Technical Education Center-Clearwater	71%
Locklin Technical Center	59%
Ridge Career Center	70%
Robert Morgan Educational Center	66%
Sarasota County Technical Institute	75%
Sheridan Technical Center	62%
South Dade Educational Center	47%
Sumter County Adult Center	63%

Institution	% of Graduates/ Completers With Wage Data
Suwannee-Hamilton Technical Center	67%
Taylor Technical Institute	65%
Technical Education Center-Osceola	68%
Tom P. Haney Technical Center	71%
Traviss Career Center	75%
Wakulla County Adult and Community Education	71%
Walton Career Development Center	65%
Washington-Holmes Technical Center	64%
Westside Tech	62%
Winter Park Tech	65%
Withlacoochee Technical Institute	70%

Methodology

Completers Cohort 2006–07 Through 2010–11

The cohort includes graduates/completers in their first year from Florida's public university, college, and career and technical education programs for each academic year 2006–07 through 2010–11. The data for this cohort reflect wages, continuing education, and public assistance for the fall following these students' graduation.

Key Concepts

Median earnings and continuing education are key concepts related to employment and continuing education outcomes used throughout the report. The rates reported are combined five-year rates for 2007, 2008, 2009, 2010, and 2011 graduates. This approach provides sufficient data at the local program level to enable students, parents, and other stakeholders to view more complete results. The minimum number of graduates to allow reporting in the related web portal for this project is ten (10 cell size). Results are suppressed when fewer graduates appear on any specific topic.

The *median* is the middle score in a distribution, and graduate earnings figures reported here reflect a five-year median. Annualized calendar year fourth quarter (October–December) wages of graduates for each year were arranged by institution from lowest to highest, and the middle value was selected for each institution and from a combined sorted statewide list. Florida wage data are the underlying source of the earnings data and they cover approximately 95% of the Florida labor market. Some information such as wages for out-of-state workers, sole proprietorships, and federal employees may not be included in the data.

The *continuing education* figures reflect a five-year average. The number of students enrolled in higher education in the academic year following graduation (academic years 2008–12) was totaled and divided by the total number of graduates from across the five years. Out-of-state continuing education is not included in this report.

As part of the state education system's efforts to continuously improve, the nationally recognized Florida Education and Training Placement Information Program (FETPIP) tracks employment, earnings, and continuing education outcomes.

Definitions

Area of Study

The Area (or Field) of Study (CIP) Code, and Program refer to the Classification of Instructional Program (CIP developed and maintained by the U.S. Department of Education's National Center for Education Statistics [NCES]). According to NCES, "The Classification of Instructional Programs (CIP) provides a taxonomic scheme that supports the accurate tracking and reporting of fields of study and program completions activity. CIP was originally developed by the U.S. Department of Education's National Center for Education Statistics (NCES) in 1980, with revisions occurring in 1985, 1990, 2000, and 2010." For more information about CIP codes, please visit NCES's website: http://nces.ed.gov/ipeds/cipcode/. For school district technical centers and college noncollege credit programs, Florida uses a 10-digit CIP code for the classification of programs. The middle 6-digits are part of the NCES taxonomy.

Number of completers

The total number of students who completed or graduated from the program in the cohort.

Employment records

Employment data obtained from the Florida unemployment insurance (UI) wage records provided by the Florida Department of Revenue.

First-year full-time earnings

The wages earned by the completers during the fourth quarter (October–December) following graduation. The wages are equal to or exceed the full-time threshold. The full-time threshold equals the hourly minimum wage, multiplied by 40 hours per week, multiplied by 13 weeks. The wage is annualized by multiplying by four.

Total found employed percentage

The number of completers with earnings divided by the total number of completers.

Total found employed full-time percentage

The number of completers with earnings at or exceeding the full-time threshold divided by the total number of completers.

Median first-year earnings

The middle score in a distribution. Graduate earnings figures reported here reflect a five-year median. Annualized calendar year fourth quarter (October–December) wages for each year are arranged by college from lowest to highest, and the middle value was selected for each college and from a combined sorted statewide list.

Found continuing education percentage

The number of completers found enrolled at a Florida public university, college, district career and technical education programs in the fall and spring semesters following graduation or completion of an educational program divided by total number of completers.

Public assistance percentage

The number of completers who received Supplemental Nutrition Assistance Program or Temporary Assistance for Needy Families during the fourth quarter of the year divided by total number of completers.

Student loan debt

The total average amount of student loans for 2010–11, at an educational institution, divided by the number of students attending the school for the same period.

Data Disclosure

The data provided for the cohorts include only completers with valid social security numbers, and the earnings represent completers who meet the full-time threshold. The full-time threshold equals the hourly minimum wage, multiplied by 40 hours per week, multiplied by 13 weeks. Earnings and public assistance data presented reflect the fourth quarter of the year (October–December). The wages presented are annualized by multiplying by four. Finally, the records are unduplicated between years, therefore students are represented only once per year. Student loan debt data are self-reported by each public educational institution at the institution level. The data reflect the average student loan debt of all students attending the educational institution during 2010–11, not just graduates. The data include federal student loans from Stafford, Perkins, Graduate PLUS, Parent PLUS, and TEACH.

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