

# SARreport

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## Introduction

This issue of the SARreport focuses on student graduation rates, counts, trends, and comparisons, and a discussion of students enrolled in FSCJ baccalaureate programs after completing a FSCJ associate degree. In addition to presenting the numbers, we will look at the context, definitions, and calculations behind the numbers as well as compare and contrast a specific kind of standardized graduation rate methodology with straight annual graduation counts.

Although graduation rate percentages can be calculated in various ways, the current report discusses a particular type of methodology in which a particular group or cohort of entering students is tracked over time to determine the number and percentage of students who complete a degree or certificate within a prescribed amount of time. For example, if a beginning cohort consisted of 100 Associate of Arts (A.A.) degree seeking students, and 50 completed an A.A. degree within a defined period, for example within two years, then the two-year graduation rate for this cohort would be 50/100, or 50%. Key considerations associated with the actual practice and implementation of such calculations include

- how beginning students are selected to define the original cohort (i.e., the starting cohort count used as the denominator in percentage calculations),
- the criteria used to specify how a student who is originally counted may be removed to adjust (i.e., decrease) the cohort size over time to arrive at an adjusted cohort count,
- which awards (i.e., degrees and certificates) are counted as successful completions, and
- how the time period(s) or number of academic years are defined for tracking purposes.

The methodology described next serves to address such considerations to allow for the comparison of graduation rates at U.S. post-secondary institutions.

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## IPEDS Graduation Rate

The federal Student Right-to-Know Act of 1990 legally established the requirement that all institutions participating in Title IV (student financial assistance) programs must annually report their graduation rate for all first-time, full-time, degree or certificate seeking students. To carry out this requirement, the National Center for Education Statistics (NCES) developed the Graduation Rate Survey (GRS) as part of its Integrated Postsecondary Education Data System (IPEDS). The 1998 Higher Education Act (HEA) Amendments extended this, charging NCES with making specific consumer information, including graduation rates, available online. The NCES release of the first GRS data was significant in the sense that institutional graduation rates on a national level had not been previously published<sup>1</sup>. This further solidified the “IPEDS” graduation rate (as defined in GRS) as a commonly used indicator of student success, specifically in terms of timely degree completion.

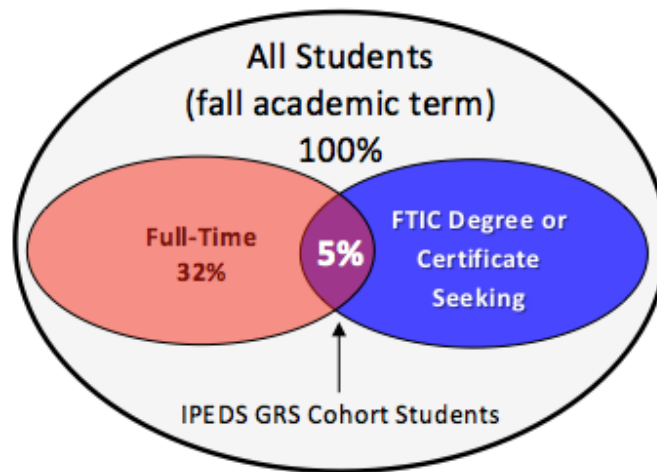
IPEDS graduation rate computations involve calculating the percentage of students who complete a degree or certificate within a specific period of time for both associate and bachelor degrees. For associate degrees, 100% of “normal time” is considered as two academic years<sup>2</sup>; 150% of normal time is defined as three years; and 200% of normal time is defined as four years. Of these, the 150% measure is most often used and reported. Applying this same schema to bachelor degrees, 150% of normal time is considered to be six years.

For most of its history as an associate degree granting institution, Florida State College at Jacksonville reported its IPEDS graduation rate using the three-year follow-up schedule (150% of normal time) for associate degrees. However, beginning in 2007-2008 (and coinciding with its status change to a bachelor degree granting institution), the College began reporting 150% of normal time using the six-year follow-up schedule for bachelor degrees.

It is important to recognize that the IPEDS beginning student cohorts include only a subset of all students registered in any given fall term. This subset includes only Full-Time (FT), First-Time-in-College (FTIC) degree or certificate seeking students.<sup>3</sup> Of all students registered in any particular fall term, those comprising the IPEDS cohort may represent a relatively small fraction of the total at any given institution.<sup>4</sup> As shown in **Figure 1**, of 100% of students registering at FSCJ in fall 2012 and fall 2013, only an average of 32% are full-time and of these, only about 5% are considered full-time, first-time, degree/certificate seeking.<sup>5</sup> It is this relatively small subset of entering fall term student that comprise the IPEDS GRS student cohort at FSCJ.

For each cohort year, students are removed (i.e. subtracted) from the original cohort count to arrive at an “adjusted” count (which will always be less than the original cohort count). These adjustments are based upon a narrowly defined set of guidelines. A student is removed if he or she

- left school to serve in the armed forces or was called to active duty,
- left school to serve with a foreign aid service of the federal government (e.g., Peace Corps),
- became deceased or totally and permanently disabled, or
- left school to serve on an official/recognized church mission.



**Figure 1. Annual GRS cohort student selection used to calculate IPEDS graduation rate**

# FSCJ IPEDS Graduation Rates

For IPEDS reporting years 2007-08 through 2013-14<sup>6</sup> adjusted cohort sizes for FSCJ ranged between 1,018 (2007-08) and 2,029 (2013-14) students with a median 1,876 students and an average of 1,805 students. During this same period, eligible completions occurring within 150% of normal time (i.e., 6-years for a bachelor’s institution) ranged between 355 (2007-08) and 702 (2013-14) with a median of 607 and an average of 583. As shown in **Figure 2**, the relationship between the number of degree/certificate completions and the IPEDS (150%) graduation rate can be negatively correlated<sup>7</sup> and can change over time. The degree of correlation between the IPEDS graduation rate and award count depends on both the number of completers (numerator) and the adjusted cohort count (denominator). Hence, for any given year, the graduation percentage could be relatively high based on a lower number of completers (numerator) if the adjusted cohort count (denominator) is disproportionately low for that year. Referencing Figure 2, that was the case in 2007-08 (however, the opposite can also occur as in 2009-10). This is important to understand when looking at straight award (graduation) counts as shown later in this report, because these provide only a limited view which does not account for beginning student cohort size.

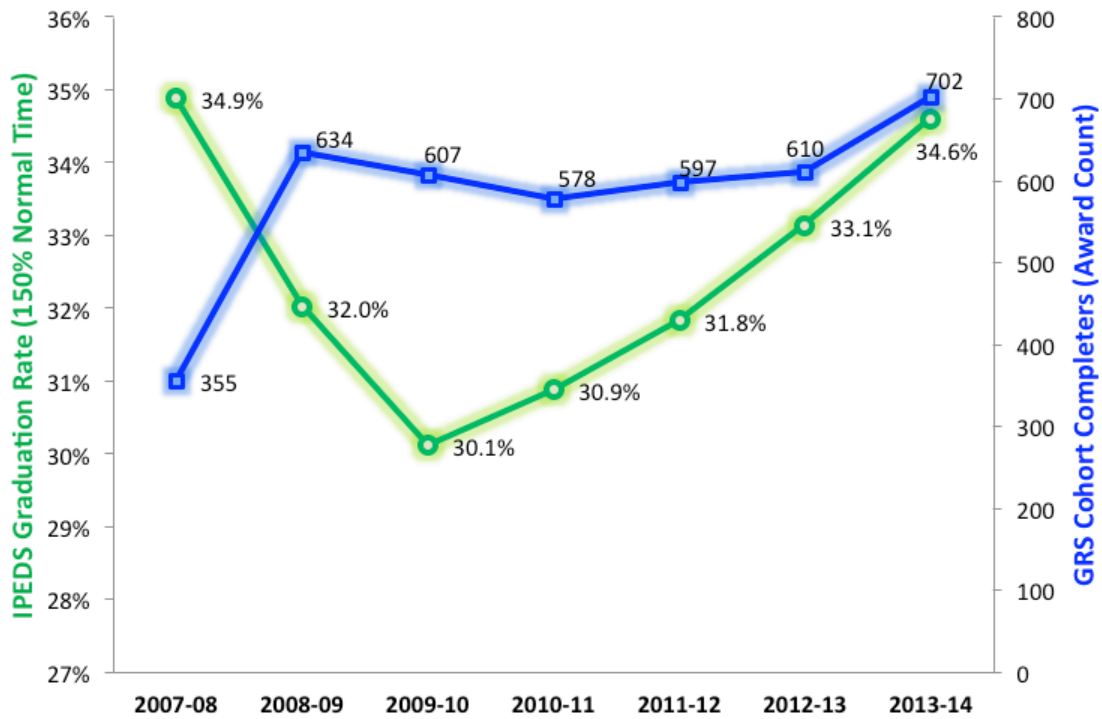
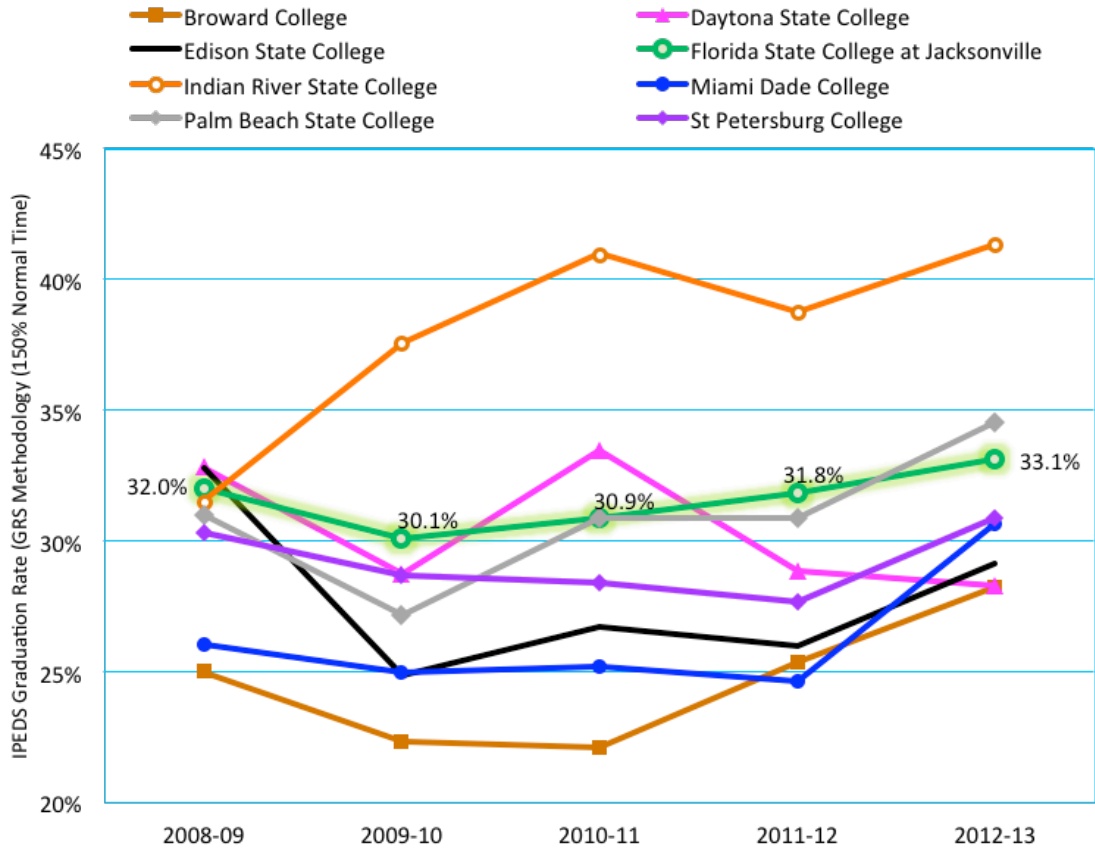


Figure 2. FSCJ IPEDS Graduation Rate and Completer (Award) Count 7-Year Trend Comparison

# IPEDS Graduation Rates

The IPEDS (150%) graduation rates for eight selected Florida College System (FCS) institutions are shown in **Figure 3**. Of all FCS colleges, the institutions (shown) were selected for comparison based on their bachelor degree granting status, and size (student headcount) in terms of annual unduplicated upper division students served.<sup>8</sup>

The average graduation for this group is 29.9% with a minimum rate of 22.1% (2010-11, Broward) and a maximum of 41.3% (2012-13,



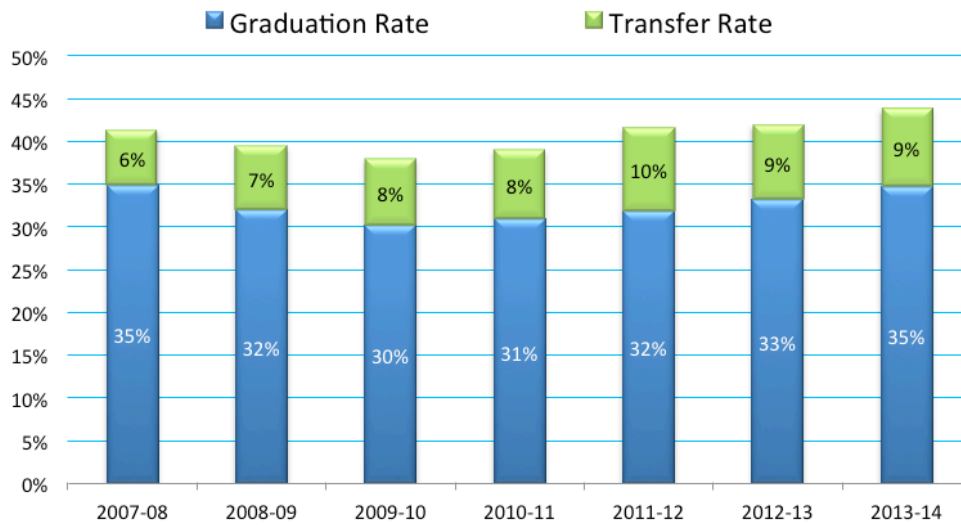
**Figure 3. Five-Year IPEDS Graduation Rates for Selected Florida College System Institutions**

Indian River). Regarding possible explanations for the differences, Bailey, Crosta, and Jenkins (2006) used multinomial regression to estimate expected graduation rates for the 28 colleges in the Florida system based on student demographic characteristics, institutional resources, size, and other factors and found that larger colleges and colleges with larger minority and part-time student proportions tended to have lower graduation rates compared to peer institutions with opposite characteristics. **Table 1** contains yearly percentages for each of the eight institutions compared above.

**Table 1. Five-Year IPEDS Graduation Rates for Selected Florida College System Institutions**

Institution	IPEDS Graduation Rate by Year				
	2008-09	2009-10	2010-11	2011-12	2012-13
Broward College	25.0%	22.3%	22.1%	25.4%	28.2%
Daytona State College	32.8%	28.8%	33.5%	28.9%	28.3%
Edison State College	32.8%	24.9%	26.7%	26.0%	29.1%
Florida State College at Jacksonville	32.0%	30.1%	30.9%	31.8%	33.1%
Indian River State College	31.5%	37.6%	41.0%	38.8%	41.3%
Miami Dade College	26.0%	25.0%	25.2%	24.6%	30.7%
Palm Beach State College	31.0%	27.1%	30.9%	30.9%	34.5%
St Petersburg College	30.3%	28.7%	28.4%	27.7%	30.9%

In addition to graduation rate, the IPEDS methodology also allows for the calculation of a student transfer rate prior to graduation. The transfer rate is the percentage of the full-time, first-time students from the GRS cohort who transferred to another institution prior to completion of the student's chosen certificate or degree program.<sup>9</sup> **Figure 4** shows the combined graduation and transfer rates for FSCJ from 2007-08 through 2013-14.



**Figure 4. FSCJ IPEDS Combined 7-Year Graduation and Transfer Rates (prior to graduation)**

# Graduation Counts

As mentioned, it is also possible to examine straight graduation counts on a term-to-term or annual basis. While such counts provide a measure of the number of degrees completed, they reveal nothing about when (or where) each graduating student began in the program completed.<sup>10</sup> **Figure 5** shows the five-year counts for A.A. and A.S. degrees and **Figure 6** shows equivalent trends for bachelor's degrees.

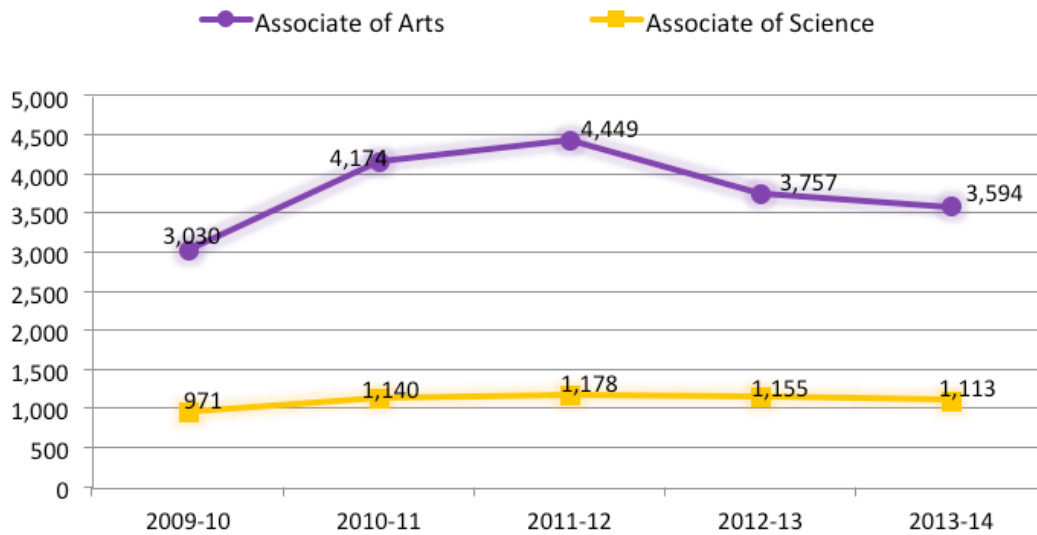


Figure 5. Florida State College at Jacksonville AA and AS Award Counts (5-Year Trends)

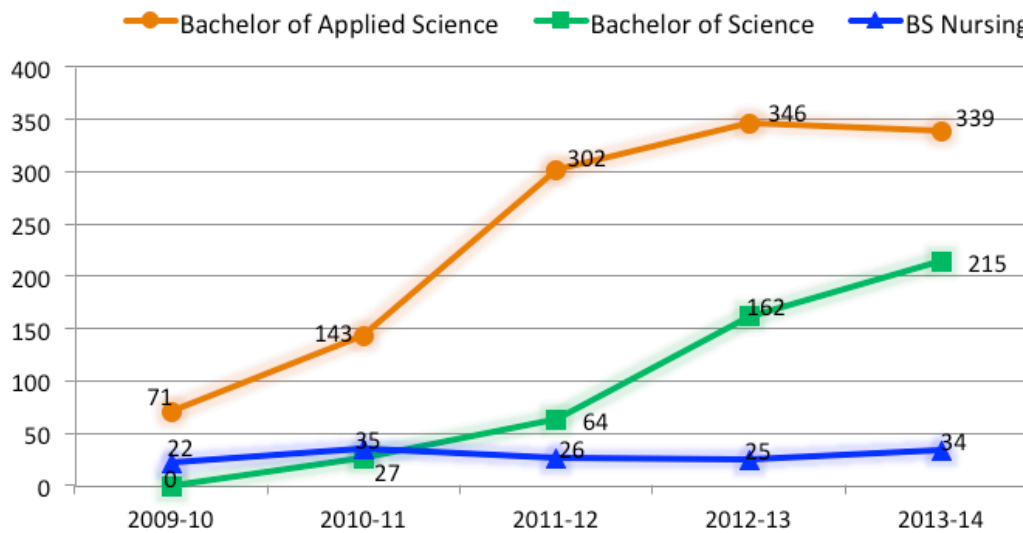


Figure 6. Florida State College at Jacksonville BAS, BS, BSN Award Counts (5-Year Trends)

# Counts of FSCJ Associate Degree Graduates in FSCJ Baccalaureate Programs

Native students include those who complete an associate degree at FSCJ and matriculate, or transfer, into a FSCJ baccalaureate program.<sup>11</sup> A native student is defined as one who earned either an A.A. or A.S. degree from FSCJ prior to, or in the same term as, the student started a B.S. or B.A.S. program. An analysis of ten specific baccalaureate programs<sup>12</sup> revealed 86.8% (4,011) of enrolled students to be FSCJ native students (13.2% or 610 were non-native students).<sup>13</sup> Figure 7 contains a term-to-term count of native FSCJ baccalaureate students between fall 2009 and summer 2013.<sup>14</sup>

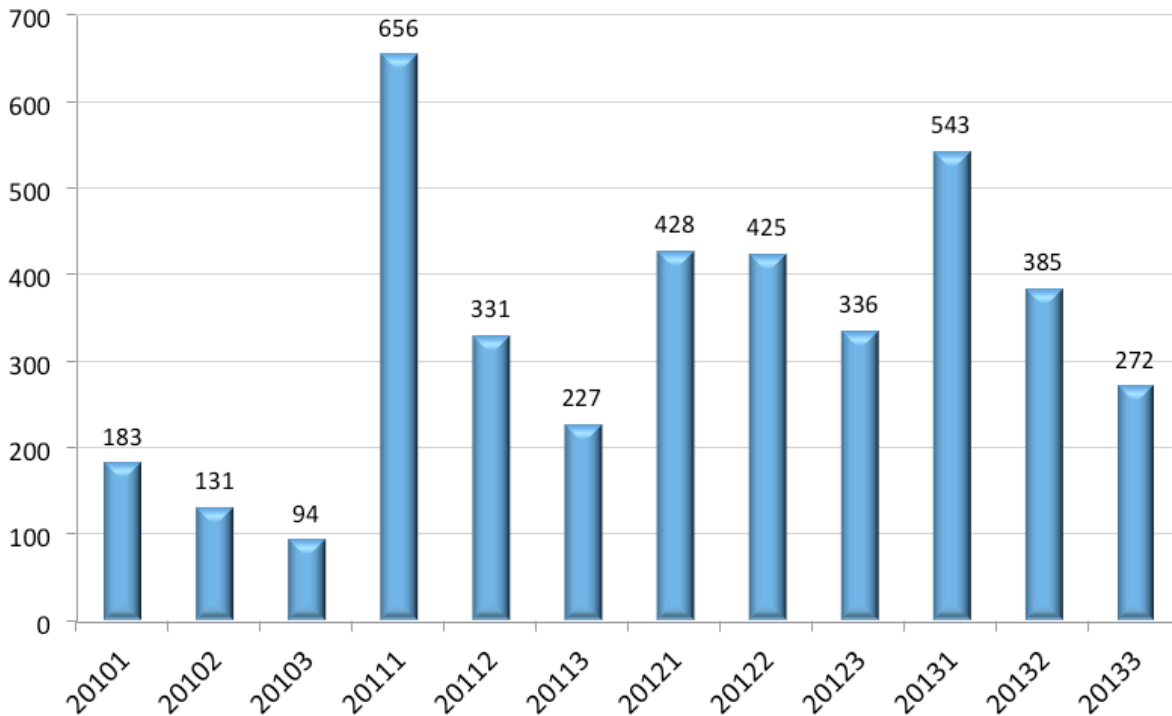


Figure 7. FSCJ Associate Degree Graduate (Native student) counts in selected baccalaureate programs by academic term

## End Notes

- <sup>1</sup> Note—while certain states (including Florida), decide GRS parameters for all state institutions (thereby facilitating comparisons within the state), institutional comparisons across states must be undertaken with an awareness of potential definitional differences.
- <sup>2</sup> Regardless of the exact number of credit hours required to complete a specific associate degree program
- <sup>3</sup> A more formal definition follows: Include all full-time, first-time degree/certificate-seeking undergraduate students entering the institution either during the fall term. Include students enrolled in the fall term who attended college for the first time in the prior summer term. Students must be enrolled in courses creditable toward a degree, diploma, certificate, or other formal award. Include students enrolled in courses that are part of a vocational or occupational program. For reporting purposes a formal award is defined as a combination of two or more courses with some level of recognition as identified by the institution..
- <sup>4</sup> Beginning in 2014-15, IPEDS will collect data on both full- and part-time students and both first-time and non-first-time-in-college students. IPEDS will also collect status updates from two- and four-year institutions for eight years after the cohort enters the institution. Institutions will initially report on a 2006 student cohort. These changes will allow states to report to IPEDS on a wider cross section of the diverse student groups who participate in higher education.
- <sup>5</sup> Based on average fall 2012 and fall 2013 fall beginning of term EFS (full-time, FTIC degree/certificate seeking) data for FSCJ
- <sup>6</sup> Entering cohort years 2001-02 through 2007-08
- <sup>7</sup> For the relationship shown in Figure 2, the Pearson product-moment correlation coefficient (R) = -.3054 and the coefficient of determination (R<sup>2</sup>) = .0933.
- <sup>8</sup> Top Eight Florida College System Institutions Offering Upper Division Courses (4-year Degrees) Based on 2011-12 Annual Unduplicated Student Headcount Enrollment, Upper Division Students Served %fall 2010 through fall 2013 combined for credit types 01, 02, 03, 05, 14
- <sup>9</sup> Note—By definition, the IPEDS transfer rate includes non-completing transfers only. This excludes students who complete their chosen certificate or degree program with FSCJ and then transfer to another institution. IPEDS transfer rate is subject to change over time.
- <sup>10</sup> A SAR research project undertaken to analyze native (i.e. non-transfer) students at FSCJ found that of 4,011 native A.A./A.S. completers active in, or graduated from, FSCJ B.S. or B.A.S. programs (fall 2009 through summer 2013), nearly 37% completed their associate degree prior to fall 2009 (ranging as far back as spring 1973). Of the total native cohort, 21% (853) completed, and 79% (3158) were still active (summer 2010 through summer 2013).
- <sup>11</sup> Since 2007, FSCJ associate degree graduates have had opportunities to remain at FSCJ and earn a baccalaureate degree, instead of transferring to another institution. FSCJ's baccalaureate programs enroll graduates from FSCJ associate degree programs as well as graduates from other postsecondary institutions.
- <sup>12</sup> (1) Supervision and Management (S100), (2) Computer Systems Networking and Telecommunications (S300), (3) Information Technology Management (S301), (4) Public Safety Management (S400), (5) Digital Media (S500), (6) Fire Science Management (S911), (7) Early Childhood Education (T100), (8) Business Administration (T200), (9) Biomedical Sciences (T300), and (10) Converged Communications (T400). Note--Excludes BSN, Transient, Non-Degree Seeking, Teacher Certification.
- <sup>13</sup> Note about duplication elimination—because students can be associated with multiple baccalaureate programs, and because students may have completed multiple associate degrees, duplicates were eliminated as follows: (1) Associate degree duplications were eliminated by selecting the earliest AA or AS degree completion. If two degrees were completed at the same time, the earliest start date was used. If a student started and completed both an AA and AS degree at the same time, the AA degree was selected. Students were included only if their Associate degree completion date was less than, or equal to, their BS or BAS program start date. No provisionally admitted BS or BAS are included; and (2) To eliminate baccalaureate duplications the most recent BS or BAS start date was used.
- <sup>14</sup> For additional details see SAR study Baccalaureate Analysis BS and BAS Programs FSCJ Native Students.

## References

- Bailey, T. R., Calcagno, J. C., Jenkins, D., Leinbach, T., & Kienzl, G. (2006). Is Student Right-to-Know all you should know? An analysis of community college graduation rates. *Research in Higher Education*, 57(5), 491-519.
- Bailey, T.R., Crosta, P.M., & Jenkins, D. (2006, August). What can Student Right-to-Know graduation rates tell us about community college performance? Community College Research Center, Working Paper No. 6. New York: Columbia University.
- Florida College System (2014, June). What are the 100 percent, 150 percent, and 200 percent graduation rates for fall, full-time, first-time-in-college students across the Florida College System? Tallahassee, FL, FCS Research and Analytics.
- Howard, R. D. (2012). *The handbook of institutional research*. San Francisco: Jossey-Bass, a Wiley imprint.
- National Postsecondary Education Cooperative (2010). Suggestions for improving the IPEDS graduation rate survey data collection and reporting. Washington, DC: NPEC 2010-832.

## Further Information

The comprehensive 2012-2013 Edition of the College Fact Book (FACTOR) is currently available on FSCJ's website at <http://www.fscj.edu/discover-fscj/about-us/>. The 2013-2014 Edition of FACTOR to be published fall of 2014, will provide additional summaries and comparisons. For additional information, please contact [Student Analytics and Research](#).

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