

# Performance Funding Metrics Post-Graduation Data

(Percent Employed or Enrolled & Average Salary)

## OVERVIEW OF METHODOLOGY AND PROCEDURES

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STATE UNIVERSITY SYSTEM *of* FLORIDA  
Board of Governors



The Board of Governors included a post-graduation metric goal in its State University System 2012-2025 Strategic Plan that was approved in 2011. Since then, the Board of Governors created a new Performance-Based Funding Model that included two post-graduation metrics that have further elevated their importance. This document provides details on the methodology and procedures used by Board of Governors staff during the development and analysis of the post-graduation data that is reported in the annual Accountability Reports and used in the Performance-Based Funding model.



## 1. Defining the Post-Graduation Cohort

The State University System of Florida Board of Governors (BOG) maintains a student unit record database titled the State University Database System (SUDS). This database contains over 400 data elements about students, faculty, and programs at SUS institutions. This metric is based on the data that universities submit to the Board office as part of the Degrees Awarded table on the Degrees Awarded (SIFD) file submission<sup>1</sup>.

- a. Board staff query SUDS to identify all students who earned a bachelor's degree during the academic year – includes graduates from the summer, fall, spring terms.
- b. These graduates serve as a 'post-graduation cohort' that is used to track a particular group of students forward. This dataset is comprised of one record per bachelor's recipient. Note: The number of rows reflects the headcount number of baccalaureates, which will not match published counts of degrees awarded because one student can earn multiple degrees.
- c. Note about duplicates: Students who receive a bachelor's degree from two separate SUS institutions during the same academic year are included in both institutions' cohorts.

## 2. Collecting Post-Graduation Data

Florida Board of Governors staff collect enrollment and employment information about State University System of Florida students from three sources: the National Student Clearinghouse (NSC), the Florida Education and Training Placement Information Program (FETPIP) division within the Florida Department of Education, and the State University System institutions.

### a. National Student Clearinghouse (NSC)<sup>2</sup> Data Match

- In compliance with FERPA and other applicable laws, the Board's Institutional Research (IR) staff sends student-level data to NSC StudentTracker staff in a file that includes the following 8 columns: first, middle, last names, suffix, date of birth, school code, search date, and a requestor return field.
- NSC requires that data be submitted to them in a particular format. For example, they require an YYYYMMDD date format from which they start the search for a particular individual – known as the Search Date. Since SUDS data only shows the term of graduation, IR staff transformed the graduation date to the last day of the month of the degree term to serve as a start date for the post-graduate search. So, for those who graduated in the spring term, we use the date YYYY0531 (for May 31). Similarly, for the summer and fall terms, we use the dates YYYY0831 (for August 31) and YYYY1231 (for December 31) respectively.
- NSC staff match the students on four criteria (first, middle, last names, and date of birth) and add enrollment and graduation records to the original dataset that we provided to NSC.
  - *Note: Social Security Numbers are not used during the NSC match process.*
- Due to limitations in the NSC data, the continuing enrollment data includes any enrollment the following year regardless of whether the enrollment was post-baccalaureate or not.
- As a quality assurance step, Board staff send two identical, yet separate, files to NSC for enrollment matching. If a discrepancy is found in the return results, a third matching request will be sent.

<sup>1</sup> The SUDS Data Dictionary has detailed definitions for the 21 elements included within the Degrees Awarded table and is available at: [https://prod.flbog.net:4445/pls/apex/f?p=112:50:5018573689494::NO::P50\\_ROW\\_DISPLAY\\_COLUMNS:50](https://prod.flbog.net:4445/pls/apex/f?p=112:50:5018573689494::NO::P50_ROW_DISPLAY_COLUMNS:50).

<sup>2</sup> For more information about the National Student Clearinghouse, visit their website at: <http://www.studentclearinghouse.org/>.



## b. Florida Education and Training Placement Information Program (FETPIP)<sup>3</sup> Data Match

FETPIP was created by the Florida Legislature to compile, maintain, and disseminate information concerning the educational histories, placement and employment, enlistments in the United States armed services, and other measures of success of former participants in state educational and workforce development programs – see Florida Statutes, 1008.39.

- FETPIP matches student Social Security numbers to wage records that are collected as part of the Unemployment Insurance (UI) data. The UI employment data does not include individuals who are self-employed, temporarily employed, employed by a church or association of churches, employed by the military or federal government, or those without a valid Social Security number.
- FETPIP staff are also able to access U.S. Office of Personnel Management wage records for Federal civilian employees via the Federal Employment Data Exchange System (FEDES) pilot project sponsored by the U.S. Department of Labor and staffed by The Jacob France Institute at the University of Baltimore.
- FETPIP staff are able to access non-Florida wage records via the Wage Record Interchange System version 2 (WRIS2)<sup>4</sup>. This voluntary data sharing system allows participating states to share Unemployment Insurance (UI) wage records to calculate aggregate outcomes for select people.
  - Note: reporting individual level data is prohibited by the WRIS2 data sharing agreement.
  - As of February 2016, forty-one states, the District of Columbia, and Puerto Rico were members of the WRIS2 data sharing agreement. Note: Georgia data was not yet available as of the end of April.



## c. State University System Institutions

- The State University System of Florida is dedicated to serving the military with over 10,000 students receiving military benefits annually. Unfortunately, Board staff are not able to access employment wage records via the Defense Manpower Data Center (DMDC).
- Board staff ask each university to self-report the number of ROTC Graduates who enter the military following graduation. For documentation purposes, universities should use 'Certificates of Commission' records (for example, 'DD Form 1AF' or 'AF Form 133' in the Air Force), or the Defense Manpower Data Center (free batch file matching services), to serve as documentation for these headcounts.

<sup>3</sup> For more information about FETPIP, visit the Florida Department of Education website at: <http://www.fldoe.org/fetpip/>.

<sup>4</sup> For more information about WRIS2, visit the U.S. Dept. of Labor website at: <https://www.doleta.gov/performance/wris2.cfm>.



### 3. Data Analysis

The enrollment and employment data matching processes typically identify post-college outcomes for about 90% of the State University System’s baccalaureate cohort. It is important to note that people without employment data should not be interpreted as indicating there were unemployed. Again, the UI employment data does not include individuals who are self-employed, temporarily employed, or those without a valid Social Security number.

#### a. Board Staff Analysis of NSC Data

- **Defining One Year After Graduation**

Board staff assessed all NSC records to determine whether the student had enrolled again anywhere in the United States within 14 months (or, 426 days) of the baccalaureate degree being awarded - so 'BEGIN DATE' was less than 426 days after the 'SEARCH DATE'.

- **Multiple Records**

The data received from the NSC match typically contains multiple records per student. It was necessary to ‘clean’ the data by removing duplicate records for the same student. Only the duplicate enrollment records were deleted, so that only one record per individual was kept. If the NSC didn’t find any particular individual, then that student had only one record (row) in the data – with no enrollment data. After the IR unit finished this de-duplication step, the total number of rows was equal to the number included in the original file produced by IRM staff.

#### b. Board Staff Analysis of FETPIP Data

Board staff do not have access to student-level employment data that includes non-Florida data, so the employment data that Board staff receive from FETPIP is aggregated. Board staff provide FETPIP with a report template(s) and FETPIP enters the data into template(s). This means that FETPIP is directly responsible for the quality assurance work of the employment data, and limits Board staff’s ability to respond to additional stakeholder questions in a timely manner.

#### 1. Defining One Year After Graduation

Board staff aligned academic semesters and fiscal quarters in order to define one year after graduation – see Table 1 below. The students who graduate in the spring and summer semesters enter the workforce in the middle of a fiscal quarter, so these graduates are given a fifth fiscal quarter – see tables 1 & 2 below.

**Table 1. Alignment of Semesters and Fiscal Quarters**

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
SPRING SEMESTER				SUMMER SEMESTER			FALL SEMESTER				
1 <sup>st</sup> Fiscal Quarter			2 <sup>nd</sup> Fiscal Quarter		3 <sup>rd</sup> Fiscal Quarter			4 <sup>th</sup> Fiscal Quarter			

**Table 2. Graduating Term and Fiscal Quarters after Graduation**

Graduating Term	FISCAL QUARTERS AFTER GRADUATION				
	1 <sup>st</sup>	2nd	3rd	4th	5 <sup>th</sup>
SUMMER	FQ-3	FQ-4	FQ-1	FQ-2	FQ-3
FALL	FQ-1	FQ-2	FQ-3	FQ-4	
SPRING	FQ-2	FQ-3	FQ-4	FQ-1	FQ-2

Note about Fiscal Quarters: FQ1=Jan-Mar; FQ2=Apr-Jun; FQ3=Jul-Sep; FQ4=Oct-Dec.



**2. Defining ‘Full-Time Worker’**

Florida law requires the Florida Department of Economic Opportunity to calculate a minimum wage rate each year. The annual calculation is based on the percentage increase in the federal Consumer Price Index for Urban Wage Earners and Clerical Workers in the South Region for the 12-month period prior to September 1 each year.<sup>5</sup>

For the purposes of the Board’s post-graduation employment data, full-time employment is measured as an annualized wage that’s greater than or equal to the annualized minimum wage for that year. The annual minimum wage equals the hourly minimum wage times 2,080 hours (52 weeks times 40 hours per week).

**Table 3. History of Full-time Wage Thresholds**

Calendar Year	FL Min. Wage	Annualized	Bachelor's Cohort
2011	\$7.31	\$15,205	2010-11
2012	\$7.67	\$15,954	2011-12
2013	\$7.79	\$16,203	2012-13
2014	\$7.93	\$16,494	2013-14

**3. Defining a Wage Threshold to Reflect Added Value of Baccalaureate Degree**

The Board of Governors asked staff to determine an alternate measure of labor market success for SUS graduates that was higher than just a proxy ‘full-time’ threshold. Board staff analyzed the 2016 U.S. Census Bureau’s Annual Social and Economic Supplement to the Current Population Survey (using a 2012 to 2014 three-year average) and found that the median personal income of a 25-29 year old full-time worker in Florida with a High School Diploma was \$25,000 – see table 4 below. This represents the income of someone who decided to work instead of pursue a bachelor’s degree, which suggests a logical place to compare with a bachelor’s recipient income as an measure of the *immediate* impact of the university on their income.

**Table 4. Median Personal Income of Florida's Full-Time Workers by Educational Attainment and Age (2012 to 2014)**

AGE	NO HIGH SCHOOL DIPLOMA	HIGH SCHOOL DIPLOMA	SOME COLLEGE, LESS THAN 4YR DEGREE	BACHELOR'S DEGREE OR HIGHER	TOTAL
18 to 24	\$15,000	\$17,420	\$20,000	\$32,000	\$20,000
25 to 29	\$19,100	\$25,000	\$29,010	\$42,000	\$31,000
30 to 34	\$20,000	\$28,200	\$35,000	\$53,000	\$39,650
35 to 44	\$20,002	\$30,000	\$40,000	\$60,000	\$41,130
45 to 54	\$25,000	\$30,020	\$40,830	\$60,000	\$42,000
55 to 64	\$22,000	\$39,000	\$43,000	\$62,000	\$46,370
65 to 80+	\$25,820	\$38,160	\$50,140	\$75,000	\$49,730
TOTAL	\$20,160	\$30,000	\$37,500	\$56,000	\$40,000

Source: Board of Governors staff analysis of U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2016. Data available online at: <http://www.census.gov/cps/data/cpstablescreator.html#>.

<sup>5</sup> For more information, see the Department of Economic Opportunity’s summary of minimum wages in Florida at: <http://www.floridajobs.org/minimumwage/FloridaMinimumWageHistory2000-2014.pdf>.



### c. Board Staff Analysis of University Data

Universities provide an aggregate total number of headcounts per year in response to Board staff's data request. Board staff add this military headcount number to the total enrolled and/or employed counts from the other sources. Note: Because this data is not provided at the student level, there is a possibility that a small number of individuals *may* be counted twice (in the employment/enrollment data and in the military headcount).

Board staff provide special consideration for New College of Florida due to the small size of their graduating cohorts. Board staff ask for the university to provide a detailed list of the overseas scholarships that any of the students in the graduating cohort received.

## 4. Using Outcomes

### The Performance-Based Funding Model

The Board of Governors includes two metrics that are related to post-graduation outcomes in the Performance-Based Funding (PBF) model: (1) the percent employed or enrolled one year after graduation, and (2) the median wage for those employed full-time. At their January 2016 meeting, the Board of Governors decided to raise the wage threshold for the first PBF metric from the 'full-time' threshold to \$25,000.<sup>6</sup>

#### a. Identifying the Percentage Enrolled or Employed Earning at least \$25,000

FETPIP staff provide the data in the format that Board staff requested – this includes data for each university that identifies the headcounts from the graduating cohort for the following:

1. total number of graduates in cohort,
2. total number of graduates in cohort found enrolled in year1,
3. total number of graduates in cohort with invalid SSNs that were not found enrolled in year1,
4. total number of graduates in cohort found employed at the full-time threshold in year1,
5. total number of graduates in cohort found enrolled or employed at the full-time threshold in year1,
6. total number of graduates in cohort found enrolled or employed at the \$25,000 threshold in year1,

Board staff compare the data in columns 1&2 to the dataset that was provided to FETPIP. If outputs agree with inputs, Board staff then add the supplemental information received from the universities regarding their graduates who enter the military (and NCF's overseas scholars), as column 7.

The percentage enrolled or employed is based on the numerator (column6 + column7) divided by the denominator (column1 – column 3).

#### b. Identifying the Median Wage

This metric is designed to reflect the median average wage for graduates within the first year of graduation. The median was used instead of the mean so that outliers did not skew the average. In recognition that many graduates are both employed and continuing their education, the focus for this metric is on those graduates who earned more than a full-time worker making minimum wage. So, the wages of part-time employed are not included in this data.

FETPIP provides Board staff with student-level employment data (only for Florida wages). Board staff query each student's wages a year following graduation and Board staff calculate the median for each university.

<sup>6</sup> The \$25,000 threshold gained national prominence as one of the key metrics in the U.S. Department of Education's 2015 release of the College Scorecard website.



## The Graduate Follow-up Study

This post-graduation data is used by Board staff to produce graduate follow-up studies. These reports provide additional insights into the outcomes of baccalaureate degree recipients as they transitioned into jobs or as they pursued further education. To this end, the studies answer the following primary questions:

- 1) Do graduates get jobs in Florida?
- 2) Are graduates pursuing further education? Do they complete additional credentials?
- 3) To what extent are graduates enrolled in further education while working?
- 4) What are the starting salaries of graduates working in Florida? How much do they increase over time?

The answers to these questions provide critical information to students, parents, educators, and policy-makers about the experiences of graduates after they complete baccalaureate degrees. The report does not represent the experiences of graduates for whom post-graduation activities are unknown; rather it depicts those outcomes that are known – known outcomes – as a result of the data matching process. Missing data cannot be interpreted as unemployed or not enrolled. Additional information about the limitations of the data sources and the methodology are available in the reports.

Reports are available from <http://www.flbog.edu/forstudents/gfs/>.