

Office of Internal Audit

Audit of the Performance Based Funding Metrics Data Integrity

Report No. 18/19-06

January 23, 2019



OFFICE OF INTERNAL AUDIT

Date:

January 23, 2019

To:

Kenneth G. Furton, Provost and Executive Vice President

Hiselais Perez, Acting Vice Provost of Office of Analysis and Information

Management

From:

Trevor L. Williams, Chief Audit Executive

Subject: Audit of the Performance Based Funding Metrics Data Integrity

Report No. 18/19-06

Beginning in fiscal year 2013-14, the State University System of Florida Board of Governors (BOG) instituted a performance-funding program based on 10 performance metrics used to evaluate Florida's public universities. Of the \$560 million dollars in performance-based awards made by the BOG for fiscal year 2018-2019 FIU received \$73.7 million.

Pursuant to a request by the (BOG), we have completed an audit relating to the University's performance based funding metrics. The primary objectives of our audit were to:

- 1) Determine whether the processes established by the University ensures the reliability, accuracy, and timeliness of data submissions to the BOG, which support the Performance Based Funding Metrics; and
- 2) Provide an objective basis of support for the University Board of Trustees Chair and President to sign the representations made in the *Performance Based Funding Data Integrity Certification* that will be submitted to the Board of Trustees and filed with the BOG by March 1, 2019.

Our annual audit confirmed the results of past audits that FIU continues to have good process controls for maintaining and reporting performance metrics data. In our opinion, the system in all material respects continues to function in a reliable manner. We made two recommendations to further reduce that risk which management agreed to implement.

I would like to take this opportunity to express our appreciation for the cooperation and courtesies extended to us during this audit.

Attachment

C: FIU Board of Trustees
 Mark B. Rosenberg, University President
 Kenneth A. Jessell, Chief Financial Officer and Senior Vice President
 Javier I. Marques, Chief of Staff – Office of the President
 Carlos Castillo, General Counsel

TABLE OF CONTENTS

<u>Pa</u>	ige
OBJECTIVES, SCOPE, AND METHODOLOGY	1
BACKGROUND	2
FINDINGS AND RECOMMENDATIONS	6
1. Review of Process Flows of Data	7
2. System Access Controls and User Privileges Follow-up	9
a. Review and Deactivate State University Database System User Accounts	9
b. Limit Access to Production Data	9
c. Review Log Reports	10
3. Data Accuracy Testing	12
Metrics 4 & 5	13
4. Data File Submissions and Resubmissions	16
Data File Submissions	16
Data File Resubmissions	17
5. Review of University Initiatives	19
APPENDIX A - In-Score BOG Data Flaments	20

OBJECTIVES, SCOPE, AND METHODOLOGY

As directed by the State University System of Florida (SUS) Board of Governors (BOG), we have completed an audit of the data integrity and processes utilized in the University's Performance Based Funding Metrics ("PBF" or "Funding Metrics"). The primary objectives of our audit were to:

- (a) Determine whether the processes established by the University ensure the completeness, accuracy, and timeliness of data submissions to the BOG, which support the Performance Based Funding Metrics; and
- (b) Provide an objective basis of support for the University Board of Trustees Chair and President to sign the representations made in the *Performance Based Funding Data Integrity Certification*, which will be submitted to the Board of Trustees and filed with the BOG by March 1, 2019.

Our audit was conducted in conformance with the International Standards for the Professional Practice of Internal Auditing and ISACA IS Audit and Assurance Standards, and included tests of the supporting records and such other auditing procedures, as we considered necessary under the circumstances.

During the audit, we:

- 1. Updated our understanding of the process flows of data for all of the relevant data files from the transactional level to their submission to the BOG;
- 2. Reviewed BOG data definitions, SUS Data workshop documentation, and meeting notes to identify changes to the BOG Funding Metrics;
- Interviewed key personnel, including the University's Data Administrator, functional unit leads, and those responsible for developing and maintaining the information systems;
- 4. Observed current practices and processing techniques;
- 5. Tested the system access controls and user privileges within the State University Database System (SUDS) application, upload folders, and production data; and
- 6. Tested the latest data files for two of the 10 performance based funding metrics submitted to the BOG as of August 31, 2018. Sample sizes and transactions selected for testing were determined on a judgmental basis applying a non-statistical sampling methodology.

Audit fieldwork was conducted from August to December 2018. In fiscal year 2017-2018, we issued the report <u>Audit of Performance Based Funding Metrics Data Integrity</u> (Report No. 17/18-07), dated January 29, 2018. During the current audit, we reviewed the prior audit report and found that no recommendations were issued, which otherwise would have required follow-up.

BACKGROUND

The Florida Board of Governors (BOG) has broad governance responsibilities affecting administrative and budgetary matters for Florida's 12 public universities. Beginning in fiscal year 2013-2014, the BOG instituted a performance based funding program, which is based on 10 performance metrics used to evaluate the institutions on a range of indicators, including graduation and retention rates, job placement, and access rate, among others. Two of the 10 metrics are "choice metrics" – one picked by the BOG and one by each University's Boards of Trustees. These metrics were chosen after reviewing over 40 metrics identified in the Universities' Work Plans but are subject to change yearly.

The BOG model has four guiding principles:

- 1. Use metrics that align with SUS Strategic Plan goals;
- 2. Reward Excellence or Improvement;
- 3. Have a few clear, simple metrics; and
- 4. Acknowledge the unique mission of the different institutions.

The Performance Funding Program also has four key components:

- 1. Institutions are evaluated and receive a numeric score for either Excellence or Improvement relating to each metric;
- 2. Data is based on one year data;
- 3. The benchmarks for Excellence were based on the Board of Governors 2025 System Strategic Plan goals and analysis of relevant data trends, whereas the benchmarks for Improvement were decided after reviewing data trends for each metric; and
- 4. The Florida Legislature and Governor determine the amount of new state funding and the proportional amount of institutional funding that would come from each university's recurring state base appropriation.

In 2016, the Florida Legislature passed and the Governor signed into law the Board of Governors' Performance-Based Funding Model, now codified into the Florida Statutes under Section 1001.66, *Florida College System Performance-Based Incentive*.

	FIU's Performance Based Funding Metrics					
1.	Percent of Bachelor's Graduates Employed (Earning \$25,000) or Continuing their Education One Year After Graduation	6.	Bachelor's Degrees Awarded in Areas of Strategic Emphasis			
2.	Median Average Wages of Bachelor's Graduates Employed Full-Time One Year After Graduation	7.	University Access Rate (Percent of Undergraduates with a Pell-grant)			
3.	Average Cost to the Student (Net Tuition and Fees per 120 Credit Hours)	8.	Graduate Degrees Awarded in Areas of Strategic Emphasis			
4.	Four Year Graduation Rate (Full-Time, First-Time-In-College)	9.	Board of Governor's Choice - Percent of Bachelor's Degrees Without Excess Hours			
5.	Academic Progress Rate (2nd Year Retention with GPA above 2.0)	10.	Board of Trustee's Choice - Bachelor's Degrees Awarded to Minorities			

The following table provided by the BOG summarizes the performance funds allocated for the fiscal year 2018-2019 using the performance metrics results from fiscal year 2017-2018, wherein FIU earned 90 points.

Florida Board of Governors Performance Funding Allocation, 2018-2019 ¹					
	Points*	Allocation of State Investment	Allocation of Institutional Investment	Total Performance Funding Allocation	
UF	93	\$ 57,631,857	\$ 53,002,618	\$110,634,475	
FIU	90	39,996,601	33,730,710	73,727,311	
FSU	86	51,607,104	47,135,335	98,742,439	
USF	86	37,650,670	41,913,010	79,563,680	
UWF	86	10,772,844	11,992,412	22,765,256	
FAU	84	20,553,876	22,880,729	43,434,605	
UCF	77	37,522,699	41,770,552	79,293,251	
FGCU	75	9,264,349	10,313,143	19,577,492	
NCF	75	-	3,921,395	3,921,395	
FAMU	72	-	14,765,439	14,765,439	
UNF	68	-	13,574,657	13,574,657	
Totals		\$265,000,000	\$295,000,000	\$560,000,000	

^{*}Institutions scoring 50 points or less or the three lowest scoring universities will not receive any State Investment. Any ties in scores are broken using the tiebreaker policy in BOG Regulation 5.001.

¹ The amount of state investment is appropriated by the Legislature and Governor. A prorated amount is deducted from each university's base recurring state appropriation (Institutional Investment) and is reallocated to each institution based on the results of the performance based funding metrics (State Investment).

In 2018, the Florida Legislature changed the graduation rate metric (Metric 4) included in the PBF from a six-year to a four-year measure and changed from accounting for all First-Time-In-College (FTIC) students to only Full-Time, FTIC. The new metric was used in calculating the performance metrics results on the previous page.

Organization

FIU's Office of Analysis and Information Management (AIM) consists of Institutional Research (IR) and the Office of Retention & Graduation Success. One of the goals of AIM is to provide the University community with convenient and timely access to information needed for planning and data driven decision-making and to respond to data requests from external parties. IR is currently responsible for:

- Faculty Perception of Administrators (FPOA) formerly Faculty Assessment of Administrator System; Assisting with the online system used to credential faculty;
- Academic Program Inventory; and
- Assignment of CIP (Classification of Instructional Program) codes to courses and certificate programs.

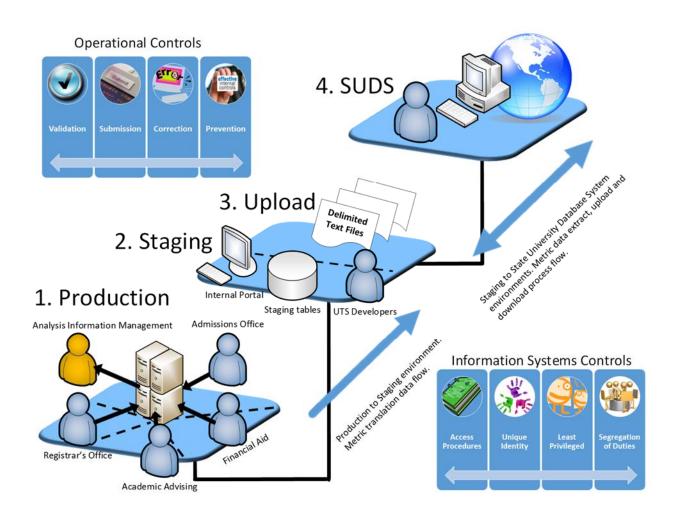
IR has been the official source of FIU's statistics, providing statistical information to support decision-making processes within all academic and administrative units at FIU, and preparing reports and files for submission to the BOG and other agencies. It is also responsible for data administration, enrollment planning, and strategic planning.

The Office of Retention & Graduation Success identifies barriers to student success and works to eliminate those barriers. This Office helps to carry out the Graduation Success Initiative (GSI), primarily by providing "Major Maps" and alerts for students and academic advisors, and information and analyses to departments and decision-makers.

The Acting Vice Provost for AIM who is also the University's Data Administrator reports directly to the Provost and is responsible for gathering data from all applicable units, preparing the data to meet BOG data definitions and requirements, and submitting the data.

At FIU, the Performance Funding Metrics reporting process flows consist of four layers: (1) Production, (2) Staging, (3) Upload, and (4) the State University Database System (SUDS) application. The Production data (extracted from the PantherSoft databases) are originated from the following functional units—the Admissions Office, Registrar's Office, Academic Advising, and Financial Aid. AIM and the BOG team from the University's Division of IT (DoIT) work collaboratively to translate the production data, which are then sent to Staging (either to tables or directly to Upload folders) where dedicated developers perform data element calculations that are based on BOG guidelines and are used to develop the Internal Portal. Once the calculations are completed, the data are formatted into text files and moved to an Upload folder. Users then log into the SUDS and depending on their roles, they upload, validate, or submit the data to the BOG. The DoIT assists with the entire consolidation and upload process.

The diagram below illustrates the operational controls and the information system access controls currently implemented in the overall data element process flows.



FINDINGS AND RECOMMENDATIONS

Based on our audit, we concluded that there are no material weaknesses or significant deficiencies in the processes established by the University to report required data to the Board of Governors in support of their Performance Based Funding Metrics. While there is always room for improvement as outlined in the detailed findings and recommendations that follow, the system is functioning in a manner that can be relied upon to provide complete, accurate, and timely submission of data to the BOG.

Accordingly, in our opinion, this report provides an objective basis of support for the Board of Trustees Chair and the University President to sign the representations made in the BOG *Performance Based Funding Data Integrity Certification*, which the BOG requested be filed with them by March 1, 2019. Our evaluation of FIU's operational and system access controls that fall within the scope of our audit is summarized in the following table:

INTERNAL CONTROLS RATING				
CRITERIA	SATISFACTORY	FAIR	INADEQUATE	
Process Controls	X			
Policy & Procedures Compliance	X			
Effect	X			
Information Risk	X			
External Risk	X			
	INTERNAL CONT	TROLS LEGEND		
CRITERIA	SATISFACTORY	FAIR	INADEQUATE	
Process Controls	Effective	Opportunities exist to improve effectiveness	Do not exist or are not reliable	
Policy & Procedures Compliance	Non-compliance issues are minor	Non-compliance Issues may be systemic	Non-compliance issues are pervasive, significant, or have severe consequences	
Effect	Not likely to impact operations or program outcomes	Impact on outcomes contained	Negative impact on outcomes	
Information Risk	Information systems are reliable	Data systems are mostly accurate but can be improved	Systems produce incomplete or inaccurate data which may cause inappropriate financial and operational decisions	
External Risk	None or low	Potential for damage	Severe risk of damage	

The results of our audit are as follows:

1. Review of Process Flows of Data

During prior years' audits, we obtained an understanding of the processes the University implemented to ensure the complete, accurate, and timely submission of data to the BOG. During this audit, we met with the Data Administrator and other key personnel to update our understanding of the processes in place to gather, test, and ensure that only valid data, as defined by the BOG, are timely submitted to the BOG. Based on our updated understanding, we determined that no significant changes have occurred in the process flows of data.

At FIU, the PantherSoft Security Team and AIM collaborated and developed a tool that generates edit reports similar to the ones found in the State University Database System (SUDS). This tool allows users at functional units more time to work on their file(s) since the BOG edits are released closer to the submission deadline. The purpose of the review is for users at functional units to correct any problems concerning transactional errors before submitting the files. We found the Registrar's Office, which generates data for five of the 10 performance based metrics, along with the Office of Financial Aid and the Graduation Office using the tool. The Data Administrator's team routinely reviews error and summary reports to identify and correct any data inconsistencies. As explained, the Data Administrator's team is responsible for the day-to-day reporting and understands the functional process flows, while the functional units are responsible for their data and understand the technical process flows. According to AIM, they plan to continue to extend the use of the tool to all appropriate users. Furthermore, for certain files, there are additional PantherSoft queries in place that users run to identify errors or bad data combinations.

In addition to the internal FIU reports, the BOG has built into the SUDS a data validation process, which through many diagnostic edits flags errors by critical level. SUDS also provides summary reports and frequency counts that allow for trend analysis. The AIM team reviews the SUDS reports and spot-checks records to verify the accuracy of the data. Once satisfied as to the validity of the data, the file is approved for submission.

As a result of a prior audit recommendation, AIM developed the *OPIR-BOG Business Process Manual*. The Manual addresses BOG SUDS Portal Security, BOG SUDS File Submission Process (see table on the following page and description and diagram of the process on page 5 of this report), and details of the process for each file submitted to the BOG. It is also evident that the Manual has been continually updated since its implementation.

Steps	BOG Files Submission Cycle
1.	The PantherSoft (PS) team extracts data from the PantherSoft database. Data are formatted according to the BOG data elements definitions and table layouts.
2.	The PantherSoft team uploads data to SUDS and runs edits.
3.	SUDS edits the data for possible errors and generates dynamic reports.
4.	Functional unit users are notified that edits are ready to be reviewed.
5.	Functional unit users review the edits and make any required transactional corrections in the PantherSoft database.
6.	AIM Lead/PS Team/Functional Unit users communicate by email, phone, or in person about any questions/issues related to the file.
7.	Steps 1-6 are repeated until the freeze date.
8.	On the freeze date, a final snapshot of the production data is taken.
9.	The file is finalized, making sure all Level-9 (critical) errors were corrected or can be explained.
10.	AIM Lead reviews SUDS reports, spot-checks data, and contacts functional unit users if there are any pending questions.

Conclusion

Based on the review performed, the data submitted to the BOG is properly validated prior to submission and approval and no material weaknesses were found in the University's current process flows of data.

2. System Access Controls and User Privileges Follow-up

Access controls testing included examination of user privileges within the SUDS application and examination of audit log files and production data. Annually, AIM works with the functional units and the PantherSoft Security Team to:

- Review user accounts to ensure on-boarded and off-boarded SUDS users have an associated PAWS ticket and the existing users' access match their current job description;
- b) Review and reduce access privileges to production and stage environments to appropriately mitigate least privileged and segregation of duties risks; and
- c) Review log reporting for all metric data files, where appropriate, to ensure the integrity of the data sent to the BOG.

On September 27, 2018, AIM completed their data integrity review. The following were the results of our follow-up into these areas:

a. Review and Deactivate State University Database System User Accounts

In our prior audits, we noted that AIM relied on expired passwords as a mitigating access control. However, a BOG Database Administrator stated that this is not a good control, as the system will prompt the user to create a new password. She also said that user accounts would need to be deactivated in order to revoke their access. With this understanding of SUDS user accounts, AIM identified 21 questionable user accounts. These are accounts where the access rights granted to the users might not be needed in order for them to perform their job duties, based on the least-privilege principle of "need-to-have and need-to-know." After communicating with the functional units, they deactivated two of the 21 user accounts and one terminated employee's account.

Job duties may change as the user account sits dormant and can increase the risk of inappropriate access should the user reactivate their account. AIM has adequately identified and deactivated user accounts from the SUDS, deemed warranted as indicated above.

b. <u>Limit Access to Production Data</u>

On the following page, Figure 1 – *Production Data Elements Process Flows*, illustrates the four departments: Admissions Office, Registrar's Office, Academic Advising, and Financial Aid that feed data into the production system available to AIM.

1. Production

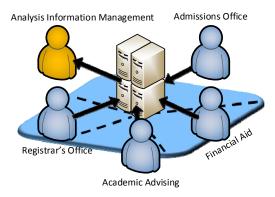


Figure 1 – Production Data Elements Process Flows

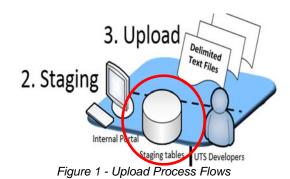
According to documentation provided by AIM, they reviewed write-access for all metrics. In their write-access reviews for Metrics 4 and 5, they identified four questionable user accounts. The users had the ability to modify data, which appeared to be in conflict with their job titles and duties. User access was changed to view-only for one of the four users after obtaining approval from the functional units.

By continually reviewing and limiting user access, as appropriate, AIM adequately reduces the integrity risk² to the data uploaded to the BOG.

c. Review Log Reports

Documentation provided by AIM showed that they reviewed log files and identified four users that made changes to the BOG data as questionable. After communicating with the functional units, the PantherSoft Security Team changed access to read-only on one user's account.

However, we noted that none of the fields in the Staging environment had its logging capabilities



activated. This is where AIM uploads data to the SUDS. In addition, we identified one production field requiring a change in a user's access but did not have its logging capabilities activated. Ultimately, the University Data Administrator is accountable for the data provided to the BOG. Activating audit log capabilities in the Staging and Production environments, as appropriate, increases the effectiveness of detection control to help the Data Administrator mitigate least privileged and segregation of duties risks.

Conclusion

The actions taken to deactivate dormant accounts, continuously review log reports, and limit access reduce the integrity risks to the data uploaded to the BOG. However, activating audit log capabilities to all fields in the Staging environment and as needed in Production, further reduces the likelihood that an unauthorized data change can be made and go undetected.

 $^{\rm 2}$ COBIT 5.0 correlates Integrity to the information quality goals of completeness and accuracy.

Recommendation

The Office of Analysis and Information Management should:

Work with the PantherSoft Department to activate auditing log capabilities to the Staging and Production environment fields, as appropriate, for inclusion into their annual analysis report.

Management Response/Action Plan:

1.1 The Office of Analysis and Information Management will work with IT to add more audit logs to capture updates to other high-risk fields. Both teams (AIM/IT) will begin work during the spring term. As with current audits, they will have a date search parameter. Therefore, although expected availability will be for summer, the date parameter will be able to capture any updates regardless of when it was completed.

Implementation date: May 2019

3. Data Accuracy Testing

This is our fifth audit of the performance based funding (PBF) metrics since it became effective in 2014. During our first-year audit, we performed data accuracy testing on all 10 metrics as requested by the BOG. In subsequent years' audits, we limited our data accuracy testing to specific metrics and followed up on any prior year recommendations as depicted in the following table.

	AUDIT COVERAGE OF PBF METRICS					
Audit FY Metrics Tested			Comment			
1.	2014-15	1-10	First year; test of all metrics required by BOG			
2.	2015-16	6, 7, 8, & 10				
3.	2016-17	1, 2, 4, & 5				
4.	2017-18	3 & 9	First year of the revised Metric 3			
5.	2018-19	4 & 5	First year of the revised Metric 4			

At the May 2018 meeting of the *State University Audit Council* (SUAC), the BOG Chief Data Officer presented a risk rating, ranging from low to high, for each PBF metric. In developing this year's audit scope, since there were no prior year audit findings stemming from our data accuracy testing, we determined to test Metrics 4 and 5, two of the four metrics identified during the said meeting to be of moderately high and moderate audit risk, respectively. The remaining two metrics were audited in the prior year. Furthermore, this is the first year of the revised Metric 4. In addition, the University received the highest possible points (10) for both metrics. Points are distributed based on a rating of either "Excellence" or "Improvement." Both Metrics 4 and 5 saw improvements of greater than 5 percent. Based on the PBF benchmarks, improvements of 5 percent or greater are given the maximum of 10 points.

Metrics Testing

The two PBF metrics tested were as follows:

- Metric 4 Four Year Graduation Rate (Full-time, First-Time-In-College).
- Metric 5 Academic Progress Rate (Second Year Retention with GPA Above 2.0).

We identified the main data files and tables related to the calculations of the two metrics under review, as follows:

- Student Instruction file (SIF), Enrollment table;
- Degrees Awarded file (SIFD), Degrees Awarded table; and
- Retention file (RET), Retention Cohort Changes table.

The BOG provided us with the in-scope data elements for each of the metrics under review (see Appendix A – In-scope BOG Data Elements), which we used in our testing.

Data accuracy for the two metrics was tested by reviewing the corresponding data files, tables, and elements, and by tracing them to the source document data in PantherSoft. Testing was limited to the PantherSoft data itself as the objective of our testing was to corroborate that the data submitted were in fact unabridged and identical to the data contained in the University's PantherSoft system.

Metrics 4 and 5

As a result of the *Florida Excellence in Higher Education Act of 2018*, signed into law by the Governor on March 11, 2018, Metric 4 was changed from a six-year graduation standard to a four-year measure and from all first-time-in-college students to full-time, first-time-in-college students. Universities achieving or exceeding the 50 percent mark under the new standard will secure the maximum points in the formula, while universities with a four-year graduation rate below 38.8 percent will receive no points.

Metric 4, Four Year Graduation Rate (Full-time, First-Time-In-College), is based on the percentage of first-time-in-college (FTIC) students who started in the Fall (or Summer continuing to Fall) term and were enrolled full-time in their first semester and had graduated from the same institution during the Summer term of their fourth year. FTIC includes 'early admits' students who were admitted as a degree-seeking student prior to high school graduation.

Metric 5, Academic Progress Rate (2nd Year Retention with GPA above 2.0), is based on the percentage of FTIC students who started in the Fall (or Summer continuing to Fall) term and were enrolled full-time in their first semester and were still enrolled in the same institution during the Fall term following their first year with a grade point average (GPA) of at least 2.0 at the end of their first year (Fall, Spring, Summer).

The data for Metrics 4 and 5 are generated by the BOG from the Student Instruction file (SIF), Degrees Awarded file (SIFD), and Retention file (RET) submitted by the University.

In order to verify that the data submitted in the SIF file to the BOG were accurate, we selected a sample of 25 students from the Fall 2017 SIF and verified that the data provided to the BOG were the same as the data contained in PantherSoft student records. We verified the 14 elements relevant to Metrics 4 and 5 and found no exceptions.

In addition, to verify the data submitted in the SIFD file, we judgmentally selected a sample of 25 students for testing. We verified without exception the one element related to Metrics 4 and 5. As evidenced by the supporting documentation, all students had graduated in Fall 2017 as reported in the Fall 2017 SIFD file.

The BOG builds the Retention file annually using the SIF and SIFD files. The BOG then annually provides the retention data to the University. FIU's Office of Institutional Research (IR) reconciles the data with the files (SIF and SIFD) originally submitted to the BOG and investigates and resolves any differences. They work with the BOG Information

Resource Management (IRM) staff to make edits, if necessary, before the Data Administrator approves and submits the data to the BOG IRM.

We reviewed IR's reconciliation process of retention data and concluded that FIU's IR staff adequately performed the reconciliation of data provided by the BOG against FIU's data. We reviewed the retention data for cohort year 2013-2014 and determined that the cohort count of 1,652 students matched the data found in the Fall 2016, Spring 2017, and Summer 2017 SIF files, with the difference of one student, which we determined was properly accounted for in PantherSoft.

To validate further that the data submitted to the BOG in the Retention file were accurate, we selected a sample of 15 students from the Annual 2016 RET file. We reviewed the supporting documentation related to three relevant elements and verified that the data provided to the BOG were the same as the data contained in the PantherSoft student records. No exceptions were found.

However, during our review of the reconciliation process, we found that there were no written guidelines in place detailing the process. Moreover, only one employee who is the sole employee that is fully knowledgeable of the system's reconciliation process performs the reconciliations. In addition, management stated they relied heavily on the internal programs to pick up any discrepancies.

Conclusion

Our testing of the SIF, SIFD, and RET files data found no differences between the information submitted to BOG and the data in FIU's system relating to the relevant elements for Metrics 4 and 5. However, we found that there were no written guidelines in place detailing the RET reconciliation procedures performed and the employee performing these reconciliations had no backup.

Recommendation

The Office of Analysis and Information Management should:

Develop written guidelines detailing the reconciliation procedures for the Retention file received from the BOG and ensure that more than one employee is able to perform the procedures.

Management Response/Action Plan:

1.2 The Office of Analysis and Information Management will enhance the current BOG documentation with a manual of written procedures that document the steps taken in the verification and validation of the annual Retention file. Furthermore, another technical employee at AIM will be trained and delegated with additional

responsibilities to handle the BOG files with an emphasis on mastering the reconciliation procedures for the Retention file.

Implementation date: June 2019

4. Data File Submissions and Resubmissions

Data File Submissions

To ensure the timely submission of data, AIM used the due date schedule provided by the BOG as part of the SUS data workshop to keep track of the files due for submission and their due dates. AIM also maintains a schedule for each of the files to be submitted, which includes meeting dates with the functional unit leads, file freeze date, file due date, and actions (deliverables) for each date on the schedule. We used data received directly from the BOG-IRM Office in addition to data provided by AIM to review the timeliness of actual submittals.

The following table and related notes, where applicable, reflects the original due dates and original submission dates of all relevant Performance Based Funding Metrics files during our audit period:

File	File Submission	Period	Original Due Date	Original Submission Date
SFA	Student Financial Aid	Annual 2016	10/09/2017	10/09/2017
ADM	Admissions	Fall 2017	10/06/2017	10/06/2017
SIFD	Degrees Awarded	Summer 2017	10/11/2017	10/11/2017
IRD	Instruction & Research	Annual 2016	10/23/2017	10/23/2017
SIFP	Student Instruction Preliminary	Fall 2017	10/17/2017	10/17/2017
HTD	Hours to Degree	Annual 2016	11/08/2017	11/08/2017
EA	Expenditure Analysis	Annual 2016	10/30/2017	10/30/2017
SIF	Student Instruction Fall 2017		01/19/2018	01/19/2018
RET	Retention	Annual 2016	01/23/2018	01/23/2018
SIFD	Degrees Awarded	Fall 2017	02/02/2018	02/02/2018
ADM	Admissions	Spring 2018	03/02/2018	03/02/2018
SIF	Student Instruction	Spring 2018	06/14/2018	06/14/2018
SIFD	Degrees Awarded	Spring 2018	06/28/2018	07/02/2018 [*]

^{*}Management informed us that the Spring 2018 Degrees Awarded file (SIFD) was submitted four days late due to a delay in the SIF file being accepted by the BOG. According to management and BOG, the SIFD file cannot be submitted until the SIF file is accepted by the BOG. Based on the records provided, the SIF file was submitted by the due date, June 14, but was not accepted by the BOG until July 2. Once the SIF was accepted, the SIFD was submitted on the same day, July 2.

Data File Resubmissions

The list of resubmissions since the last audit was obtained from the BOG-IRM staff. The Data Administrator described the nature and frequency of these resubmissions and provided correspondence between the BOG and the University related to the data resubmissions. AIM examined the correspondence to identify lessons learned and to determine whether any future actions can be taken that would reduce the need for resubmissions.

The Data Administrator has acknowledged that although their goal is to prevent any resubmissions, they are needed in cases where inconsistencies in data are detected by either University or BOG staff after the file has been submitted. According to her, a common reason for not detecting the error before submission is that some inconsistencies only arise when the data are cross-validated among multiple files. "When logic changes are implemented or added, it is an additional edit in our internal tool," said the Data Administrator.

In regards to the frequency of the resubmissions, a list was provided by the BOG-IRM staff for all files submitted pertaining to the 10 PBF metrics. For files with due dates between October 1, 2017, and August 31, 2018, the University submitted 13 files to the BOG.

The following table describes the two files resubmitted and AIM's reasons for each resubmission.

No.	File Submission	Period	Original Due Date	Original Submission Date	Resubmission Date	
1	Hours to Degree	Annual 2016	11/08/2017	11/08/2017	11/20/2017	
	AIM Reason for Resubmission: In preparing the annual HTD file, we discovered a student's record as it related to elements 01413 and 01468 had been reported incorrectly. The error resulted from our institution's transition to reporting the data from a legacy system to the current student information system as well as a bug in the logic. Our institution requested feedback from the BOG office to determine the best course of action in correcting the errors. We did not know if the BOG would require resubmission of all the files where the error was listed or simply request the corrections via an email from our University's data administrator to the BOG office. Unfortunately, we were unable to receive a response in time for the original submission due date. Subsequently, the BOG informed our institution to resubmit the file in order for their office to make the necessary data corrections.				orrectly. The error cy system to the titution requested recting the errors. ere the error was a administrator to me for the original	
2	Retention	Annual 2016	01/23/2018	01/23/2018	03/12/2018	
	AIM Reason for Resubmission: At the request of the BOG, the cohort adjustment table for the Retention file was resubmitted in order to include adjustments (72 exclusions) to the 2012 cohort. This allowed the same methodology to be used when comparing the cohorts and scoring the performance metric.					

In both instances observed, the BOG staff authorized the resubmission by reopening the SUDS system for resubmission. Furthermore, continuing improvements have been noted from prior years' where two files were resubmitted in FY 2017-18, four in FY 2016-17, and nine in FY 2015-16.

Conclusion

Our review disclosed that the process used by the Data Administrator provides reasonable assurance that complete, accurate, and for the most part timely submissions occurred. The one late filing was the result of a system issue, not considered systemic, while the two resubmissions were necessary and authorized. In addition, we noted no reportable material weaknesses or significant control deficiencies related to data file submissions or resubmissions.

5. Review of University Initiatives

We obtained the following list of the University initiatives that are meant to bring the FIU's operations and practices in line with SUS Strategic Plan goals:

- Implemented E&G revenue reallocation model
- Implemented faculty reallocation model for academic units
- Provided greater access to on-demand analytics relevant to the metrics
- Implemented student level graduation benchmarking
- Implemented student attendance and midterm progress monitoring and outreach
- Integration of career and academic advising
- Strategic enrollment planning and course scheduling optimization via Noel Levitz and Platinum Analytics
- Created an Office of Scholarships and Academic Program Partners to support all colleges in their efforts to apply foundation scholarship funds to student success and enrollment goals
- Expanded merit scholarship opportunities and initiated two new scholarships –
 "Jumpstart FIU" and "Panther Achievement Award"
- Implemented centralized coordination and local deployment for student recruitment efforts
- Established centralized retention, graduation, and student success outreach

Conclusion

None of the initiatives provided appears to have been made for the purposes of artificially inflating performance goals.

APPENDIX A

	In-Scope BOG Data Elements						
No.	Metric	Definition	Submission/Table/Element Information	Relevant Submission			
4	Four Year FTIC Graduation Rate	This metric is based on the percentage of first-time-in-college (FTIC) students who started in the Fall (or summer continuing to Fall) term and were enrolled full-time in	Submission: SIFD Table: Degrees Awarded Elements: 02001 – Reporting Time Frame	October 11, 2017 February 2, 2018 July 2, 2018			
	term and were enrolled full-time in their first semester and had graduated from the same institution by the summer term of their fourth year. FTIC includes "early admits" students who were admitted as degree-seeking student prior to high school graduation.	their first semester and had graduated from the same institution by the summer term of their fourth year. FTIC includes "early admits" students who were admitted as degree-seeking student prior to high school	Submission: SIF Table: Enrollments Elements: 01063 - Current Term Course Load 01067 - Last Institution Code 01068 - Type of Student at Date of Entry 01085 - Institutional Hours for GPA 01086 - Total Institutional Grade Points 01088 - Term Credit Hours for GPA 01099 - Term Credit Hours Earned 01090 - Term Grade Points Earned 01060 - Student Classification Level 01112 - Degree Highest Held 01107 - Fee Classification Kind 01420 - Date of Most Recent Admission 01413 - Type of Student at Time of Most Recent Admission	January 19, 2018 June 14,2018			
			01411 – Institution Granting Highest Degree Submission: RET Table: Retention Cohort Changes Elements: 01429 – Cohort Type 01437 – Student – Right-to-Know (SRK) Flag 01442 – Cohort Adjustment Flag	January 23, 2018			
5	Academic Progress Rate 2nd Year Retention with GPA Above 2.0	This metric is based on the percentage of first-time-in-college (FTIC) students who started in the Fall (or summer continuing to Fall) term and were enrolled full- time in their first semester and were still enrolled in the same institution during the Fall term following their first year with had a grade point average (GPA) of at least 2.0 at the end of their first year (Fall, Spring, Summer).	Same as No. 4 above.				

Definition Source: State University Database System (SUDS).



of data to the Board of Governors Office.

Performance Based Funding March 2019 Data Integrity Certification

Un	iversity Name:Florida International University			
IN the	STRUCTIONS: Please respond "Yes" or "No" for each representation below representation you are making to the Board of Governors. Modify representation	entatio	ons to	reflect any noted audit findings.
	Performance Based Funding Data Integrity Certif			
	Representations	Yes	No	Comment / Reference
1.	I am responsible for establishing and maintaining, and have established	\boxtimes		
	and maintained, effective internal controls and monitoring over my			
	university's collection and reporting of data submitted to the Board of			
	Governors Office which will be used by the Board of Governors in			
	Performance Based Funding decision-making.			
2.	These internal controls and monitoring activities include, but are not	\boxtimes		
	limited to, reliable processes, controls, and procedures designed to			
	ensure that data required in reports filed with my Board of Trustees and			
	the Board of Governors are recorded, processed, summarized, and			
	reported in a manner which ensures its accuracy and completeness.			
3.	In accordance with Board of Governors Regulation 1.001(3)(f), my Board	\boxtimes		
	of Trustees has required that I maintain an effective information system			
	to provide accurate, timely, and cost-effective information about the	-		
	university, and shall require that all data and reporting requirements of			
	the Board of Governors are met.			
4.	In accordance with Board of Governors Regulation 3.007, my university	\boxtimes		
	shall provide accurate data to the Board of Governors Office.			
5.	In accordance with Board of Governors Regulation 3.007, I have	\boxtimes		
	appointed a Data Administrator to certify and manage the submission			

Performance Based Funding Data Integrity Certification

Performance Based Funding Data Integrity Certification Representations				
Representations	Yes	No	Comment / Reference	
6. In accordance with Board of Governors Regulation 3.007, I have tasked	\boxtimes			
my Data Administrator to ensure the data file (prior to submission) is				
consistent with the criteria established by the Board of Governors Data				
Committee. The due diligence includes performing tests on the file	0.0			
using applications/processes provided by the Board Office.				
7. When critical errors have been identified, through the processes	\boxtimes			
identified in item #6, a written explanation of the critical errors was			,	
included with the file submission.				
8. In accordance with Board of Governors Regulation 3.007, my Data	\boxtimes			
Administrator has submitted data files to the Board of Governors Office	-			
in accordance with the specified schedule.				
9. In accordance with Board of Governors Regulation 3.007, my Data	\boxtimes			
Administrator electronically certifies data submissions in the State	- F ₀			
University Data System by acknowledging the following statement,				
"Ready to submit: Pressing Submit for Approval represents electronic	H			
certification of this data per Board of Governors Regulation 3.007."				
10. I am responsible for taking timely and appropriate preventive /	\boxtimes			
corrective actions for deficiencies noted through reviews, audits, and				
investigations.				
11. I recognize that the Board's Performance Based Funding initiative will				
drive university policy on a wide range of university operations – from				
admissions through graduation. I certify that university policy changes				
and decisions impacting this initiative have been made to bring the	22			
university's operations and practices in line with State University				
System Strategic Plan goals and have not been made for the purposes of				
artificially inflating performance metrics.				
12. I certify that I agreed to the scope of work for the Performance Based				
Funding Data Integrity Audit conducted by my chief audit executive.			7	

Performance Based Funding Data Integrity Certification

Performance Based Funding Data Integrity Certification Representations, Signatures

I certify that all information provided as part of the Board of Governors Performance Based Funding Data Integrity Certification is true and correct to the best of my knowledge; and I understand that any unsubstantiated, false, misleading, or withheld information relating to these statements render this certification void. My signature below acknowledges that I have read and understand these statements. I certify that this information will be reported to the board of trustees and the Board of Governors.

Governors.	•
Certification: President	Date 3 4 2019
I certify that this Board of Governors Performance Based Fur university board of trustees and is true and correct to the bes	nding Data Integrity Certification has been approved by the set of my knowledge.
Certification: Board of Trustees Chair	Date