



Item: AC: A-1

Tuesday, January 30, 2024

**SUBJECT: AUDIT REPORT: FY24-A-01, PERFORMANCE BASED FUNDING DATA
INTEGRITY FY2024**

PROPOSED Board ACTION

Acceptance of this completed audit of the University's Performance Based Funding Data Integrity as a basis of support for the University President and Board of Trustees (BOT) Chair to sign the Data Integrity Certification that will be filed with the BOG by March 1, 2024.

BACKGROUND INFORMATION

The integrity of data provided to the BOG is critical to the performance-based funding (PBF) decision-making process. This is the tenth consecutive year the BOG has requested each university conduct an annual data integrity audit to determine whether the processes established by them ensure the completeness, accuracy, and timeliness of data submissions to the BOG that support the PBF metrics.

This is the report of our completed audit of the University Performance Based Funding Data Integrity for FY2024. We found that FAU's controls and processes are adequate to ensure the completeness, accuracy, and timeliness of data submitted to the BOG to support performance funding metrics. There were no material errors found within the data files submitted by FAU that would affect the University's overall ranking among State University System (SUS) institutions. However, we identified an error on the SIF (Student Instruction File) Fall 2022 Enrollments file that had no impact on PBF metric 5 (Academic Progress Rate). In response to our inquiry, the Data Administrator indicated that FAU has already implemented a full set of new queries for SIF starting in the spring 2023 term to improve the efficiency of querying the Banner system and does not expect to see this same issue in other SIF submissions.

IMPLEMENTATION PLAN/DATE

Not Applicable.

FISCAL IMPLICATIONS

University data integrity is foundational to fiscal accountability and critical to future BOG performance-based funding of Florida's public universities.

Supporting Documentation: Audit Report FY24-A-01, Performance Based Funding Data Integrity FY2024


Presented by – Mr. Reuben Iyamu, Inspector General

Phone: 561-297-6493



MEMORANDUM

TO: FAU BOT Audit and Compliance Committee
Stacy Volnick, Interim President

FROM: Reuben Christian Iyamu, Inspector General 

DATE: January 30, 2024

SUBJECT: **Audit of University Performance Based Funding Data Integrity FY2024**
Report No. FY24-A-01

Pursuant to BOG (Board of Governors) Regulation 5.001(8) and Florida Statute 1001.706, we have completed our annual audit of the University's Performance Based Funding (PBF) data integrity. The objectives of the audit were to determine whether the processes established by the University ensure the completeness, accuracy, and timeliness of data submissions to the BOG that support the PBF metrics; and to provide an objective basis of support for the University's President and Board of Trustees (BOT) Chair to sign the Data Integrity Certification that will be submitted to the BOT and filed with the BOG by March 1, 2024.

We submit this report which contains our conclusions and recommended actions, response from the Provost/Vice President (VP) for Academic Affairs, and management action plans. We will periodically review and report on management's actions to address the recommendation within this report.

We would like to thank the staffs of the Offices of the Registrar, Student Financial Aid (SFA), and Institutional Effectiveness & Analysis (IEA) for their full cooperation and assistance during this audit.

Respectively Submitted,

cc: University Provost
Vice Presidents
Inspector General, Florida Board of Governors
Florida Auditor General
Jason Ball, Associate Provost & Chief Information Officer
Dr. Ying Liu, Assistant Provost for Institutional Effectiveness and Analysis (IEA)
Tracy Boulukos, Assistant Vice President for Financial Aid & New Student Services Initiatives
Marie Claire DeMassi, University Registrar

Executive Summary

The integrity of data provided to the BOG is critical to the PBF decision-making process. This is the tenth consecutive year the BOG has required a data integrity audit to determine whether the processes established by the University ensure the completeness, accuracy, and timeliness of data submissions to the BOG that support the PBF metrics. We also performed data accuracy testing of files submitted during the audit period (12/1/22 to 11/30/23) that were used in the calculations of performance-based funding metrics 1, 2, 4, 5, and 7.

Based on our audit, we concluded that FAU's controls and processes are adequate to ensure the completeness, accuracy, and timeliness of data submitted to the BOG to support performance-based funding decisions. There were no material errors found within the data files submitted by FAU that would affect the University's overall ranking among State University System (SUS) institutions. This report provides an objective basis of support for the University's President and BOT Chair to sign the Data Integrity Certification.

However, we identified instances where inaccurate data on the SIF (Student Instruction File) Fall 2022 Enrollments file was submitted to the BOG. In response to our inquiry, management indicated that the error was due to a programming logic issue that added GPA data (for a small portion of Spring 2023 intersession students) incorrectly to the start of Fall 2022. Since none of the student's GPAs dropped below 2.0 at the end of their first year, the incorrect data did not impact the actual PBF metric value.

To ensure the error is corrected, the Data Administrator indicated that FAU has already implemented a full set of new queries for SIF starting in the Spring 2023 term to improve the efficiency of querying the Banner system and does not expect to see this same issue in other SIF submissions. We provided a recommendation and management developed a corrective action plan to address the issue.

Background

Florida Statute 1001.706(5)(e)¹ requires each university to conduct an annual audit to verify that the data submitted pursuant to ss. 1001.7065² and 1001.92³ complies with the data definitions established by the board and submit the audits to the Board of Governors Office of Inspector General as part of the annual certification process required by the Board of Governors. To ensure consistency, the Board of Governors shall define the data components and methodology used to implement the ss. Beginning in fiscal year 2013-2014, the BOG instituted a performance-based funding program, which is predicated on 10 performance metrics used to evaluate the universities on a range of issues. One of the 10 performance metrics is a "choice

¹ http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=1000-1099/1001/Sections/1001.706.html

² http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=1000-1099/1001/Sections/1001.7065.html

³ http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=1000-1099/1001/Sections/1001.92.html

metric” selected by each university’s Board of Trustees. These metrics were chosen after reviewing over 40 metrics identified in the University’s Work Plans.

The 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 key components of the model are: 1) institutions will be evaluated on either Excellence or Improvement for 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 determined after reviewing data trends for each metric, and 4) the Florida Legislature and Governor determine the amount of new state funding and an amount of institutional funding that would come from each university’s recurring state base appropriation. The 10 metrics pertaining to Florida Atlantic University (FAU) are depicted in the following table.

FAU’s 2023 Performance Based Funding Metrics			
1.	Percent of Bachelor's Graduates Enrolled or Employed (Earning \$40,000+) One Year After Graduation	6.	Bachelor's Degrees Awarded within Programs of Strategic Emphasis
2.	Median Wages of Bachelor’s Graduates Employed Full-time One Year After Graduation	7.	University Access Rate (Percent of Undergraduates with a Pell-grant)
3.	Cost to the Student (Net Tuition and Fees for Resident Undergraduates per 120 Credit Hours)	8a.	Graduate Degrees Awarded within Programs of Strategic Emphasis
4.	Four-Year FTIC (First-Time- In-College) Graduation Rate	9a.	Three-Year Graduation Rate for FCS (Florida College System) Associate in Arts Transfer Student
		9b.	Six-Year Graduation Rate for Students who are Awarded a Pell Grant in their First Year
5.	Academic Progress Rate (2 nd Year Retention with GPA above 2.0)	10b.	FAU Board of Trustees’ Choice – Total Research Expenditures

For fiscal year 2023-2024, FAU earned 82 points and received \$46.5 million of the performance funds allocated.⁴

The university President has appointed the Assistant Provost for Institutional Effectiveness and Analysis (IEA) as the institutional data administrator (DA) as required by BOG Regulation 3.007(2)⁵. The DA is responsible for ensuring the completeness, timeliness, and accuracy of SUDS (State University Data System) files submitted to the BOG.

⁴ <https://www.flbog.edu/wp-content/uploads/2023/07/BUD-07a-PBF-Information-2023-24.pdf>

⁵ https://www.flbog.edu/wp-content/uploads/3.007_SUS_InfoMgmt_FINAL_Format2018-06-28.pdf

Objectives, Scope, and Methodology

The **objectives** of the audit were to:

- Determine whether the processes established by the University ensure the completeness, accuracy, and timeliness of data submissions to the BOG that support the PBF metrics; and,
- Provide an objective basis of support for the University’s President and BOT Chair to sign the Data Integrity Certification, which will be submitted to the BOT and filed with the BOG by March 1, 2024.

The **scope** of the audit included a review of the university’s processes for completeness, accuracy, and timeliness of performance-based funding data submissions. We verified the accuracy and integrity of data files submitted to the BOG during the audit period, 12/1/22 to 11/30/23, that were used in the calculations of performance-based funding metrics 1, 2, 4, 5, and 7.

To achieve our stated objectives, we conducted the following audit procedures:

- Reviewed audit reports pertaining to PBF Data Integrity issued by other SUS universities.
- Identified and evaluated the key processes used by the Data Administrator and data custodians to ensure the completeness, accuracy, and timeliness of data submissions to the BOG.
- Reviewed 2023 metric definitions and other key documents to identify any changes to the BOG PBF metrics.
- Performed an analysis of the *Annual OIT* (Office of Information Technology) *Review*. This review includes an assessment of system access controls, and user privileges within Banner, Workday, and other systems.
- Interviewed key personnel regarding processes, data integrity, and responsibilities for data submitted to the BOG.
- Tested the accuracy and integrity of data files submitted to the BOG during the audit period, 12/1/22 to 11/30/23, that were used in the calculations of performance-based funding metrics 1, 2, 4, 5, and 7. See Appendix A for the submissions/tables/elements reviewed.

We conducted this audit in accordance with the *International Standards for the Professional Practice of Internal Auditing* and with *Principles and Standards for Offices of Inspector General*. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Observations and Recommendation

Overall, we found that FAU’s controls and processes are adequate to ensure the completeness, accuracy, and timeliness of data submitted to the BOG to support performance-based funding decisions. There were no material errors found within the data files submitted by FAU that would affect the University’s overall ranking among SUS institutions.

We noted the following good management practices and key controls in place:

- ✓ Data owners formally certify the completeness and accuracy of data to be submitted prior to IEA’s review of the data.
- ✓ IEA maintains a repository of the data owner certifications, checklists, and detailed procedures performed by IEA in validating each submission file. A Data Quality Review Summary documents data issues noted for each submission and serves as a reference/knowledge base for future submissions.
- ✓ IEA uses analytical tools, including automated Statistical Analysis System (SAS) and Structured Query Language (SQL) reports, to identify missing values or issues and compares to previous year values to identify shifts that would require researching.
- ✓ The Data Administrator (DA) has taken a proactive role in fostering a collaborative culture among core offices and enhancing accountability through bi-weekly meetings with the data owners which allows timely discussions regarding file submissions. The DA promotes data stewardship on campus by working with the different functional areas to resolve data issues, improve data quality, and assure that external reporting requirements are met.
- ✓ FAU security managers for SUDS grant access to the SUDS portal when tickets requesting access submitted through TeamDynamix are approved by the employees' supervisor.
- ✓ An encrypted share drive is used by the data owners and FAU OIT staff to document their quality control and validation procedures for each file submission and includes narratives, supporting reports, and email communications. These procedures include reviewing SUDS edit reports and internal queries of source systems to identify errors or data inconsistencies.
- ✓ Data owners run reports throughout the year to monitor known issues that have caused corrections during a previous file build. Data owners work with FAU OIT to create additional monitoring reports or modify programming codes to detect or prevent these errors, as appropriate.
- ✓ Change management procedures include testing by data owners to ensure that the change is producing the desired results and documented approval from the data owner before implementing programming code changes. If the change impacts the file build or its data, they are logged. An updated SQL report for each change is attached to the log for future reference.

We commend University management for establishing and implementing appropriate controls and processes designed to ensure the integrity of data submitted to the BOG. However, we identified an area described in detail below where enhancements and improvements were made to increase the level of assurance that the SIF (Student Instruction File) submitted to the BOG is accurate.

Observation #1: Data Accuracy Testing – Performance Based Funding Metric 5

To verify the accuracy and integrity of data submissions as mandated by Florida Statutes, we obtained the SIF Fall 2022 Enrollments table submitted to the BOG and randomly selected a sample of 30 first-time-in-college (FTIC) students who started in the Fall 2021 (or summer 2021 continuing to Fall) term and returned during the Fall 2022 term with a grade point average (GPA) of at least 2.0 at the end of their first year. Our testing of the accuracy of the eight relevant elements used for PBF metric 5 (Academic Progress Rate) noted one student whose Banner data did not agree with the BOG element GPA_INST_GRD_PTS (1086).

When brought to management’s attention, they indicated the total institutional grade points generated by the student at the institution prior to the fall 2022 term incorrectly included GPA data from the Spring 2023 intersession term (December 17, 2022, to January 6, 2023). An older version of the SIF build query was

accidentally run to generate BOG elements GPA_INST_HRS (1805) and 1086. The old query contains programming logic issues that did not account for the intersession terms correctly. After removing the incorrect GPA data from the start of the Fall 2022 term, IEA (Institutional Effectiveness & Analysis) identified a total of 42 intersession students that were affected and recalculated metric 5 with the correct GPAs.

Since none of the student's GPAs dropped below 2.0 at the end of their first year, the incorrect data did not impact the actual PBF metric value. Nonetheless, inaccurate data was submitted to the BOG. To ensure the error is corrected, the Data Administrator indicated that FAU has already implemented a full set of new queries for SIF starting in the spring 2023 term to improve the efficiency of querying the Banner system and does not expect to see this same issue in other SIF submissions.

We recommend that IEA consider contacting the BOG ODA (Office of Data & Analytics) to inform them of the inaccurate data on the SIF Fall 2022 Enrollments file and resubmit the updated file if requested by BOG ODA.

Provost/VP Response



Dr. Russ Ivy, Interim Provost & Vice President for Academic Affairs

I have reviewed the findings from the audit of the University Performance Based Funding Data Integrity for FY2024. After discussing the findings with Information Technology and Institutional Effectiveness and Analysis teams, I concur with the findings. Though there was no impact on performance funding, corrections to the process have been made. The underlying issues were already corrected for the Spring 2023 submission when an updated process was implemented. The Fall 2022 submission, where the error occurred, will be re-submitted by the end of February 2024.

Management Action Plan



Action plan	Responsible Employee	Target Date
Recommendation #1 - We recommend that IEA consider contacting the BOG ODA (Office of Data & Analytics) to inform them of the inaccurate data on the SIF Fall 2022 Enrollments file and resubmit the updated file if requested by BOG ODA.		
IEA will contact the BOG ODA as recommended and resubmit the file if necessary.	Ying Liu	2/29/2024

Engagement Team

Audit Conducted by: Allaire Vroman, Internal Auditor/Investigator

Audit supervised and approved by: Reuben Iyamu, MBA, CIA, CFE, CIGA, CIG
FAU Inspector General

Please address inquiries regarding this report to: Reuben Iyamu, FAU Inspector General, by email at riyamu@fau.edu or by phone at 561-297-6493.

APPENDIX A: BOG FILES REVIEWED

No.	Metric	Definition	Submission/Table/Elements Information	Submission Reviewed
1	Percent of Bachelor's Graduates Enrolled or Employed (\$40,000+)	This metric is based on the percentage of a graduating class of bachelor's degree recipients who are enrolled or employed (earning at least \$40,000) somewhere in the United States. Students who do not have valid social security numbers and are not found enrolled are excluded. This data now includes: non-Florida data from all states and districts, including the District of Columbia and Puerto Rico; and military enlistment as reported by the institutions. Note: effective with the 2023 Accountability Plan, the denominator was revised to only include those graduates who were found employed (in the target fiscal quarter) or enrolled (in the first year after graduation).	Submission: SIFD Table: Degrees Awarded Elements: 01081 – Degree – Level Granted 01045 – Reporting Institution 01412 – Term Degree Granted 02001 – Reporting Time Frame	Spring 2023
2	Median Wages of Bachelor's Graduates Employed Full-time	This metric is based on annualized Unemployment Insurance (UI) wage data from the fourth fiscal quarter after graduation for bachelor's recipients. This data does not include individuals who are self-employed, employed by the military, those without a valid social security number, or making less than minimum wage. This data now includes non-Florida data from all states and districts, including the District of Columbia and Puerto Rico.	Same as No. 1 above.	Same as No. 1 above.
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 their first semester and had graduated from the same institution by the summer term of their fourth year. FTIC includes 'early admit' students who were admitted as a degree-seeking student prior to high school graduation. Students who were enrolled in advanced graduate programs during their 4th year were excluded.	Submission: SIF Table: Enrollments Elements: 01060 – Student Classification Level 01112 – Degree - Highest Level Held 01107 – Fee Classification – Kind 01420 – Date of Most Recent Admission 01413 – Type of Student at Time of Most Recent Admission 01063 – Current Term Course Load Table: Person_ID_Chgs Elements: 01029 – Person Identification Number (New)	Fall 2022

			01427 – Person Identification Number - Previous	
			Submission: RET Table: Ret_Cohort_Chgs Elements: 01442 – Cohort Adjustment Flag	Annual 2021-22
5	Academic Progress 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 their first semester and were still enrolled in the same institution during the next Fall term with a grade point average (GPA) of at least 2.0 at the end of their first year (Fall, Spring, Summer).	Submission: SIF Table: Enrollments Elements: 01060 – Student Classification Level 01112 – Degree – Highest Level Held 01107 – Fee Classification – Kind 01420 – Date of Most Recent Admission 01413 – Type of Student at Time of Most Recent Admission 01063 – Current Term Course Load 01086 – Total Institutional Grade Points 01085 – Institutional Hours for GPA Table: Person_ID_Chgs Elements: 01029 – Person Identification Number (New) 01427 – Person Identification Number - Previous	Fall 2022
			Submission: RET Table: Ret_Cohort_Chgs Elements: 01442 – Cohort Adjustment Flag	Annual 2021-22
7	University Access Rate	This metric is based the number of undergraduates, enrolled during the fall term, who received a Pell-grant during the fall term. Students who were not eligible for Pell-grants (e.g., Unclassified, non-resident aliens, post-baccs) were excluded from the denominator for this metric.	Submission: SIF Table: Enrollments Elements: 01060 – Student Classification Level 01107 – Fee Classification – Kind 02041 – Demo Time Frame 01413 – Type of Student at Time of Most Recent Admission Table: Person Demo Elements: 02043 – Non-resident Alien Flag 02041 – Demo Time Frame	Fall 2022
			Submission: SFA Table: Financial Aid Awards	Annual 2022-23

			Elements: 02001 – Reporting Time Frame 01253 – Financial Aid Award Program Identifier 02040 – Award Payment Term	
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