

Performance-Based Funding Metrics Data Integrity Audit



Report AR 15-07
March 6, 2015



THE
FLORIDA STATE
UNIVERSITY

Office of Inspector General Services

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Audit Report



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Summary

Overall, we concluded that the University has adequate processes for collecting and reporting Performance-Based Funding Metrics data to the Board of Governors (BOG). In addition, we can provide an objective basis of support for the University's President and Board of Trustees Chair to sign the Performance-Based Funding – Data Integrity Certification, which the BOG requested to be filed with them by March 6, 2015. We have two recommendations for improvement for which management has agreed to take appropriate actions.

Scope, Objectives, and Methodology

The purpose of the audit was to assess the effectiveness of the processes established by the University to ensure the completeness, accuracy, and timeliness of Academic Year 2012-13 data submissions to the BOG that support the University's Performance-Based Funding (PBF) Metrics, and to provide an objective basis of support for the University's President and Board of Trustees Chair to sign the representations included in the Performance-Based Funding – Data Integrity Certification, which will be submitted to the Board of Trustees and filed with the BOG by March 6, 2015.

This audit was designed to assess those controls that address the topic of data integrity, including an analysis of the processes, procedures, system-based controls, and other data verification measures in place to support the integrity of information presented by the University to the BOG for the University's Performance-Based Funding Metrics calculations. The audit included testing to support that the controls in place are effective. The focus of the audit was specifically on the controls surrounding the development and submission of data upon which the University's 10 Performance-Based Funding Metrics are based, as outlined and approved by the BOG Budget and Finance Committee at its January 2014 Committee meeting. Those metrics include:

1. Percent of Bachelor's Graduates Employed Full-Time in Florida or Continuing Their Education in the U.S. One Year After Graduation;

2. Median Wages of Bachelor's Graduates Employed Full-Time in Florida One Year After Graduation;
3. Average Cost per Bachelor's Degree (Instructional Costs to the University);
4. Six-Year Graduation Rate for First-Time-in-College Students (Full- and Part-Time);
5. Academic Progress Rate (Second Year Retention Rate with Grade Point Average (GPA) Above 2.0);
6. Bachelor's Degrees Awarded within Programs of Strategic Emphasis (Science, Technology, Engineering, and Mathematics (STEM));
7. University Access Rate (Percent of Undergraduates with Pell Grants);
8. Graduate Degrees Awarded within Programs of Strategic Emphasis (STEM);
9. Faculty Awards (FSU's Choice of Board of Governors' Choice Metrics); and
10. National Rank Higher than Predicted by the Financial Resources Ranking, Based on U.S. News and World Report (FSU's Board of Trustees Choice Metric).

This audit solely addresses the integrity of the University's data submissions to the BOG that support the University's Performance-Based Funding Metrics for the Academic Year 2012-13. Our evaluation of controls and testing includes the University's most recent data submissions available up to September 30, 2014. The BOG extracts data from the files provided it by the University and performs additional calculations to derive the final Performance-Based Funding Metrics data published by the BOG. The University is not involved in these extractions or additional calculations by the BOG.

Specifically, our nine audit objectives were the following.

1. Verify the appointment of the Data Administrator by the University President and that duties related to these responsibilities are incorporated into the Data Administrator's official position description.
2. Review the processes used by the Data Administrator to ensure the completeness, accuracy, and timely submission of data to the Board of Governors.
3. Evaluate any available documentation including policies, procedures, and desk manuals of appropriate staff and assess their adequacy for ensuring data integrity for University data submissions to the Board of Governors.
4. Review system access controls and user privileges to evaluate if they are properly assigned and periodically reviewed to ensure only those authorized to make data changes do so.
5. Test data accuracy.
6. Evaluate the veracity of the University Data Administrator's data submission statements that indicate "I certify that this file/data represents the position of this University for the term being reported."
7. Review the consistency of data submissions with the data definitions and guidance provided by the Board of Governors through the Data Committee and communications from data workshops.
8. Review the University Data Administrator's data resubmissions to the Board of Governors with a view toward ensuring these resubmissions are both necessary and authorized. This review should also evaluate how to minimize the need for data resubmissions.

9. Provide an objective basis of support for the University's President and Board of Trustees Chair to sign the representations made in the Performance-Based Funding - Data Integrity Certification.

Our detailed methodology for each of our nine objectives is included in the report section for each. In general, to complete the stated audit objectives, we conducted interviews with the Data Administrator and other key data managers and analyzed supporting documentation related to the objectives. Such supporting documentation included available data and information related to:

- The Data Administrator's appointment and position duties and responsibilities;
- Processes, policies, procedures, and desk manuals concerning data input, error identification and correction, compliance with the BOG guidance, etc., to determine whether these are adequate to provide reasonably sufficient internal control over data;
- Data file submissions by the University to the BOG, to determine whether they were made in a timely manner and included any resubmissions and the reasons for these;
- State University Database System (SUDS) and University systems access by individuals associated with the University, to determine if that access is appropriate;
- Written guidance from the BOG and the University's related training and communications, to demonstrate the University's efforts to attain agreement of its efforts with BOG expectations; and
- Latest data files submitted to the BOG that contained elements used in calculating Performance-Based Funding Metrics, and the University's related source data, to ensure that data submitted to the BOG was consistent with University transactional data and the BOG requirements.

This audit was performed in conformance with the *International Standards for the Professional Practice of Internal Auditing*. Those standards require 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 the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

The Florida Board of Governors, created in 2002, is authorized in Article IX, Section 7(d), Florida Constitution to "operate, regulate, control, and be fully responsible for the management of the whole university system," which consists of the state's 12 public institutions.

Beginning in fiscal year 2013-14, the BOG instituted a Performance-Based Funding Program based on 10 performance metrics used to evaluate the institutions on a range of issues, including graduation rates, job placement, cost-per-degree, etc. According to information published by the BOG in May 2014, the BOG funding model has four guiding principles:

1. Use metrics that align with State University System (SUS) Strategic Plan goals.
2. Reward excellence or improvement.
3. Have a few, clear, simple metrics.

4. Acknowledge the unique mission of the different SUS institutions.

The Performance-Based Funding Program also has four key components:

1. Institutions will be evaluated on either Excellence or Improvement for each metric.
2. Data are based on one year.
3. The benchmarks for Excellence were based on the BOG's 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.
4. The Florida Legislature has approved 100 million in new funding for performance funding and a proportional amount to total \$65 million would come from each university's recurring state base appropriation and another \$35 million from other system initiatives.

To provide assurance that data submitted by the 12 state public universities to the BOG in support of their Performance-Based Funding Metrics are reliable, accurate, and complete, the BOG developed a Data Integrity Certification process. In his June 27, 2014 letter and instructions to each university President and Board of Trustees Chair, the BOG Chair requested each university President to execute a Data Integrity Certification affirmatively certifying each representation on the Certification form and/or providing an explanation as to why the representation could not be made as written. These certifications and any necessary explanations are to be provided to the BOG following approval by the University's Board of Trustees.

Additionally, the BOG Chair requested each university Board of Trustees to direct its Chief Audit Executive to perform, or cause to have performed by an independent audit firm, an audit of the university's processes to ensure the completeness, accuracy, and timeliness of data submissions to the BOG. According to the BOG's Performance-Based Funding website, the BOG plans to periodically test the veracity of the universities' representations through independent audits or reviews.

Findings

Overall, we concluded that the University has adequate processes for collecting and reporting Performance-Based Funding Metrics data to the BOG. In addition, we can provide an objective basis of support for the University's President and Board of Trustees Chair to sign the Performance-Based Funding – Data Integrity Certification, which the BOG requested to be filed with it by March 6, 2015. We have two recommendations for improvement for which University management has agreed to take appropriate action.

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 to be filed with them upon approval by the Board of Trustees at its March 6, 2015 meeting.

Objective # 1: Verify the appointment of the Data Administrator by the University President and that duties related to these responsibilities are incorporated into the Data Administrator's official position description.

Audit Steps:

1. Review the Data Administrator's position description; note details of the description, paying special attention to responsibilities related to coordinating the gathering of data from departmental sources, quality assurance procedures applied, and other data integrity checks prior to submission to the BOG.
2. Determine if the Data Administrator was appointed by the President.
3. Conclude on whether the institution's Data Administrator's responsibilities include the requirements identified in Board of Governors Regulation 3.007. (For example, verify the Data Administrator's data submission statements indicated "I certify that this file/data represents the position of this University for the term being reported.")

Findings:

The University's current Data Administrator, Richard R. Burnette III, Ph.D. (Dr. Burnette) who is the University's Institutional Research Director, assumed University Data Administrator responsibilities effective May 13, 2013, following the retirement of Ralph Alvarez, the prior University Data Administrator and the Associate Vice President for Budget/Planning and Financial Services. To communicate this assumption of duties, on May 8, 2013, the University Associate Vice President for Academic Affairs informed the Chancellor of the State University System of the retirement of Mr. Alvarez and the assumption of University Data Administrator duties by Dr. Burnette. Among the recipients of this communication were the University President, Provost, and Dr. Burnette.

Ralph Alvarez highly recommended Dr. Burnette to assume University Data Administrator responsibilities, stating he had the following qualities/expertise/qualifications.

- Typically, Data Administrators are in the academic areas and are related to the Institutional Research Director's Office, as is true for Dr. Burnette.
- He has excellent technical skills and came from Admissions and the Registrar; therefore, he has extensive knowledge regarding a number of the BOG student-related files. Data Administrators are expected to be more than data processors. They consult with BOG staff, as needed (e.g., at the Annual Data Workshops), regarding development of and changes to data, and should know much about data across different BOG files, such as relationships between the Admissions File and the Student Instruction File (SIF), or the relationships between the SIF and the courses in it and course locations, versus the Physical Facilities Space File and classrooms and other spaces in that file (submitted by Facilities).
- He had a role in the development of certain parts of the University's Campus Solutions system, which is the University's primary data source for student-related BOG files. He had a responsibility to help ensure that BOG files/reports continue to be generated and submitted timely.

Dr. Burnette's appointment as University Data Administrator by the President was further and more officially documented on November 25, 2014, when President John Thrasher sent a letter to the BOG's Chancellor Marshall Criser listing Dr. Burnette as the University's Data Administrator in a list of University appointments.

We reviewed Dr. Burnette's Position Description on September 22, 2014, which had an effective date of April 2, 2009. This was prior to him assuming University Data Administrator responsibilities and, therefore, made no reference to him as the Data Administrator. His Position Description was revised effective November 21, 2014. The revisions included his role as serving as the University's Data Administrator and listed among his responsibilities "Responsible for the preparation and submission of files as required by the Board of Governors."

Conclusion for Objective #1:

Dr. Burnette has been officially appointed by the University President as the Data Administrator and his Position Description reflects this appointment and the related responsibility of preparing and submitting files as required by the BOG.

Recommendations:

We have no recommendations for Objective #1.

Objective # 2: Review the processes used by the Data Administrator to ensure the completeness, accuracy, and timely submission of data to the Board of Governors.

Audit Steps:

1. Interview the Data Administrator and other key data managers to understand the internal processes in place to gather, test, and ensure that only valid data, as defined by the BOG, is timely submitted to the BOG.
2. Identify and evaluate key processes over data input and submission. Consider evaluating the processes from the point of incoming information to the submission of the data file to the BOG.
3. Review internal records such as time management schedules and relevant correspondence which purport to demonstrate that complete and accurate data are timely submitted to the BOG. (See due dates addressed in the SUS data workshop.)
http://www.flbog.edu/resources/doc/FHES-14/2014_Workshop_Proceedings.pdf
4. According to BOG Regulation 3.007, prior to submitting a data file, the university shall ensure the file is consistent with the criteria established in the specifications document by performing tests on the file using applications/processes provided by the BOG Information Resource Management (IRM) office. Review the process for timely and accurately addressing data file error reports.
5. Evaluate the results and document your conclusion on the Data Administrator's processes. Consider communicating strengths and opportunities for process

improvements related to documentation, reports, calculations, data handling, and verification.

Findings:

Based on our interviews of the University Data Administrator and his written statements, along with supporting documentation we obtained to address this Objective, for Florida State University (FSU) there were two important transitions that have a bearing on this audit report. The first is that Ralph Alvarez was the Data Administrator until his retirement in May 2013. As such, he was responsible for all reports up to that point. Dr. Burnette has been the Director of Institutional Research since July of 2009 and had been associated with most of the file submissions from then to the present. The mechanisms for producing and auditing files have been changing since Dr. Burnette assumed the role of University Data Administrator.

The second transition has been the transition to a new Student Information System (SIS), a process that began in 2010-2011 and culminated with a "go-live" effective the Fall term, 2013 for all student, course, degree, and financial aid functions. Admissions more recently came online for the Spring 2015 semester. These changes have affected data sourcing and reporting mechanisms.

For the purposes of this report, the effective file reporting periods are split between legacy and Campus Solutions reporting. The Admissions File (2011-2012), Student Financial Aid File (2012-2013), Retention Adjustments File (2012-2013), and the Expenditure Analysis File (2009-2012) were all derived from University legacy processes. The SIF, SIF Preliminary (SIFP), and SIF Degrees Awarded (SIFD) (2013-2014) were all sourced from Campus Solutions as were the Student Financial Aid File effective 2013-2014 and the Admissions File effective Spring 2015.

FSU has dedicated significant resources for over two decades to assure the ability to submit data to the prior Board of Regents and current Board of Governors in an accurate and timely manner, and draws from a strong base of institutional knowledge. All of the current Institutional Research staff has been employed by the University for many years and most of them have had long tenures in the Office of Institutional Research. During our audit, there were 11 IR staff members. Their tenures with the University ranged from five years to 41 years, with an average of approximately 18 years. Their tenures with Institutional Research ranged from one year to 22 years, with an average of nine years. For the historic legacy reporting, the prior Data Administrator and the University Registrar funded dedicated programmers to produce all legacy BOG files in conjunction with functional data owners, with a somewhat decentralized ownership of these processes. Effective with the Fall 2013 SIS "go-live," data for BOG reporting was mapped into a data warehouse, with reporting produced using Oracle Business Intelligence Enterprise Edition (OBIEE) software. The rationale for this approach is to leverage modern reporting tools and the newer SIS data structure to surface the logic used to extract and transform data, thus allowing the earlier engagement of functional data owners in the process of producing BOG files. With this new approach, the model has changed to one of cooperative ownership of the reporting process whereby the Office of Institutional Research and the Data Administrator are active partners in scoping and designing the BOG reports, with help from the PeopleSoft data warehouse and reporting team, the PeopleSoft functional and technical leads, and the directors

and staff from the functional offices (e.g., Admissions and Records/Registrar, and Financial Aid).

Legacy reporting was established decades ago and reports were revised in 2008 with the introduction of the State University Database System (SUDS) reporting structure by the BOG. Legacy file builds were historically completed by programmers including, or under the guidance of, Jeff Bowman, who was hired by the Registrar for the purpose of generating files for the Board of Regents and, later, the Board of Governors. Although a programmer by training, he was placed in Admissions and Records so as to be able to interact with functional data owners who were charged with validating his reports. He has also attended all of the statewide Data Administrator Workshops for decades. Most notably for this audit, the Director of Admissions had the ultimate authority to validate the Admissions File. The current Data Administrator previously supervised Mr. Bowman and was directly involved in the data validation prior to moving to Institutional Research in 2009. The 2012-2013 Admissions File was generated using a hybrid of OBIEE reports and direct legacy queries.

The Student Financial Aid File for 2012-2013 was produced by programmers in the Office of Student Financial Aid using procedures established under the prior Data Administrator. The file was produced using a series of queries written by a dedicated financial aid programmer under the direct guidance of the Associate Director of Financial Aid, who is also a programmer by training. Effective with the Student Financial Aid File for 2013-2014, the University Data Administrator was directly involved in the validation of data pulled from Campus Solutions using the aforementioned OBIEE approach.

The Retention Cohort Adjustments are the product of a list maintained by the Registrar of students known to have been affected by one of the cohort exclusion reasons including: active military deployment, death, church mission, and permanent disability. Cohort adjustments are submitted by a database analyst in Institutional Research in a process that is monitored by the Director of Institutional Research/University Data Administrator.

The collaborative model was used for each of the SIF files mentioned in this report. For each of the affected files there are numerous individuals who were involved in the identification and generation of file data. The effects of this method are two-fold: 1) it assures that there are at least two people reviewing how each data point is defined, and 2) the resulting query/report is transparent as to the logic associated with generating each data point. This methodology was deployed for the first time on the SIFP submission in early Fall of 2013 and has continued with all subsequent reports to the extent that data were available in the data warehouse. In cases where the data were not available via the OBIEE query tool, data were obtained by subject matter experts using PeopleSoft query tools and the results were joined with the other data.

The scoping for these PeopleSoft data processing efforts began in the early Fall of 2012 and weekly meetings were first scheduled on October 15, 2012, to include an average of eight people per meeting representing Institutional Research, the PeopleSoft data warehouse and reporting team, and affected functional areas. These meetings were used to review all data elements required for reporting the SIF, SIFP, and SIFD files, and to create data mapping documents identifying the data lineage and transformations necessary for these BOG files.

The present chain of custody is as follows:

- Student information necessary for reporting is captured in the Campus Solutions/PeopleSoft transactional Student Information System.
- Data are captured in the data warehouse on a nightly basis. These data cannot be edited by individual users and as such are “read only.” These transactional views are supplemented with an extract view that was created from external sources and parked in the data warehouse so it can be compared against warehoused transactional data.
- Over a month before the due date for the file, the reporting team consisting of Institutional Research, the functional office for the data, and the Campus Solutions reporting team begin extracting data and creating a draft file via OBIEE.
- OBIEE has data transformation logic in place to represent transactional data using BOG defined codes and to match BOG field names.
- In cases where external data must be merged with the file, the data are moved to Excel for the purpose of comparison.
- Once a file is sufficiently complete and formatted for submission, it is loaded to the BOG SUDS beta environment.
- After all files are added, the edits are run to generate the dynamic reports and frequency distributions.
- Institutional Research and functional users review the errors to determine whether there are simply translation errors or if data in the Student Information System is incorrect.
- Corrections are made to the transactional system so that the change is permanent.
- The Data Administrator emails the BOG if there are any questions about interpretation that are not addressed in the online data dictionary, the SUDS release notes, or the annual Data Administrators’ Conference Proceedings.
- Corrected files are reloaded and the audit process continues until all the errors have been cleaned up or explained.
- The final data are pulled using OBIEE and the data warehouse team is instructed to make a snapshot of the data at that point in time. Because data change over time, it is important to retain an exact copy of the source data for these reports.
- The file is loaded into production and edits are run one last time and checked for possible errors.
- The Data Administrator enters an explanation on all errors that the BOG has defined as Level 9 (critical) errors. There are circumstances where data nuances are explainable and this is where the BOG captures the explanations.
- The Data Administrator submits the file for BOG review.
- The BOG has three levels of review. BOG staff occasionally asks for clarification when frequencies differ and if they and the Data Administrator agree that data are in error or were interpreted in a way that was not consistent with BOG intent or other institutions, the file is reopened for a resubmission.

Although most requests for clarification sent to the BOG are in the moment, FSU has been an initiator among SUS Data Administrators in seeking operational definitions of data elements and for seeking corrections to reporting categories or documentation, as evidenced by emails

between the University Data Administrator and the Chief Information Officer for the State University System Board of Governors.

The Data Administrator provided us a copy of an internal recurring meeting request in Microsoft Outlook that was formalized on October 15, 2012 to review the University's mechanisms for extracting data from Campus Solutions for BOG reporting. These meetings continue today. All the members of the data submission team have the calendar of due dates that was published in the BOG Workshop Proceedings. Additionally, four members of Institutional Research, three people from the Budget Office, and usually three or more people from Admissions and Records (combined) attend the annual SUS Data Administrators Workshops, where they discuss expectations and changes to the BOG reporting format. With the exception of one person in Institutional Research and one in the Budget Office, all of the others have been attending these meetings for well over ten years.

The Office of Institutional Research has created a SharePoint workflow that automatically sends all BOG emails to the University Data Administrator and converts them into tasks for the Institutional Research Analyst, who tracks BOG requests for the Data Administrator. This site captures all incoming requests and has a record of all submitted files and responses for ad hoc and scheduled reports including the due dates, completion dates, and the primary contacts, as well as copies of the communications to the BOG.

To test the timeliness of the University's submission of required files to the BOG that relate to FSU's Performance-Based Funding Metrics, we used Submission History information from the BOG SUDS system.

The following seven BOG-required files relate to the University's Performance-Based Funding Metrics. Because the University Data Administrator asserted that we would find that these file submissions were timelier before the advent of the new Campus Solutions system, for each of these required files we reviewed the University's current and historical submissions back to the fifth most recent submission. The listing below shows the time span of each file's submissions that we reviewed.

1. Admissions File (Summer 2013 through Fall 2014 Terms)
2. Student Instruction File (SIF) (Spring 2013 through Summer 2014 Terms)
3. Expenditure Analysis (EA) File (Annual 2009 through Annual 2013)
4. Student Instruction File Preliminary (SIFP) (Fall 2012 through Fall 2014)
5. Retention File (Annual 2009 through Annual 2013)
6. Student Financial Aid (SFA) File (Annual 2009 through Annual 2013)
7. Degrees Awarded File (Spring 2013 through Summer 2014)

The table below shows the University student information system from which the files were obtained and the time period covered.

File	Legacy	Campus Solutions
Admissions	2011-2012	Spring 2013
SIF		2013-2014
EA	2009-2012	
SIFP		2013-2014
Retention	2012-2013	
SFA	2012-2013	2013-2014
Degrees Awarded		2013-2014

We determined the Data Administrator’s assertion was correct, i.e., the more recent file submissions for each type of file were less timely. For the most current submission for each of the seven types of files, four of the seven were late (57 percent). The days late ranged from six to 28 days, with an average of 17 days late for the four late submissions. For the second most recent round of file submissions for the seven types of files, five of the seven (71 percent) were not timely. For this second most recent round of submissions, the days late ranged from eight to 29 days, with an average of 19.2 days late for the five late submissions. For all of the files in our testing that were submitted late, the information was obtained from the new Campus Solutions system—with the exception of Student Financial Aid data for the second and fourth most recent file submissions, which data came from the legacy system. Please see the following table.

Most Recent Submission				
File	Term	SUDS Due Dates	Submission to BOG	Days Late
Admissions File	Fall 2014	9/26/2014	10/2/2014	6 days
Student Instruction File	Summer 2014	10/1/2014	10/1/2014	N/A - On Time
Expenditure Analysis File	Annual 2013	10/28/2014	11/18/2014	21 days
Student Instruction File Preliminary	Fall 2014	10/10/2014	10/23/2014	13 days
Retention File	Annual 2013	1/21/2015	1/21/2015	N/A - On Time
Student Financial Aid File	Annual 2013	10/6/2014	11/3/2014	28 days
Degrees Awarded File	Summer 2014	10/7/2014	10/6/2014	N/A - Early
Second Most Recent Submission				
File	Term	SUDS Due Dates	Submission to BOG	Days Late
Admissions File	Summer 2014	9/5/2015	9/19/2014	14 days
Student Instruction File	Spring 2014	6/12/2014	7/11/2014	29 days
Expenditure Analysis File	Annual 2012	10/22/2013	10/22/2013	N/A - On time
Student Instruction File Preliminary	Spring 2014	3/7/2014	3/26/2014	19 days
Retention File	Annual 2012	1/22/2014	1/22/2014	N/A - On time
Student Financial Aid File	Annual 2012	10/7/2013	10/15/2013	8 days
Degrees Awarded File	Spring 2014	6/25/2014	7/21/2014	26 days
Third Most Recent Submission				
File	Term	SUDS Due Dates	Submission to BOG	Days Late
Admissions File	Spring 2014	2/28/2014	2/28/2014	N/A - On time
Student Instruction File	Fall 2013	1/17/2014	2/26/2014	40 days
Expenditure Analysis File	Annual 2011	10/22/2012	10/18/2012	N/A - Early
Student Instruction File Preliminary	Fall 2013	10/11/2013	10/24/2013	13 days
Retention File	Annual 2011	4/10/2013	4/8/2013	N/A - Early
Student Financial Aid File	Annual 2011	10/5/2012	10/5/2012	N/A - On time
Degrees Awarded File	Fall 2013	2/7/2014	3/11/2014	32 days
Fourth Most Recent Submission				
File	Term	SUDS Due Dates	Submission to BOG	Days Late
Admissions File	Fall 2013	9/27/2013	9/27/2013	N/A - On time
Student Instruction File	Summer 2013	9/13/2013	9/12/2013	N/A - Early
Expenditure Analysis File	Annual 2010	10/18/2011	9/12/2011	N/A - Early
Student Instruction File Preliminary	Spring 2013	2/22/2013	2/22/2013	N/A - On time
Retention File	Annual 2010	4/13/2012	4/5/2012	N/A - Early
Student Financial Aid File	Annual 2010	10/5/2011	10/12/2011	7 days
Degrees Awarded File	Summer 2013	10/8/2013	10/8/2013	N/A - On time
Fifth Most Recent Submission				
File	Term	SUDS Due Dates	Submission to BOG	Days Late
Admissions File	Summer 2013	9/6/2013	9/6/2013	N/A - On time
Student Instruction File	Spring 2013	6/12/2013	6/12/2013	N/A - On time
Expenditure Analysis File	Annual 2009	10/18/2010	10/14/2010	N/A - Early
Student Instruction File Preliminary	Fall 2012	10/12/2012	10/12/2012	N/A - On time
Retention File	Annual 2009	4/13/2011	4/7/2011	N/A - Early
Student Financial Aid File	Annual 2009	10/15/2010	10/12/2010	N/A - Early
Degrees Awarded File	Spring 2013	6/25/2013	6/25/2013	N/A - On time

The University Data Administrator is aware of BOG Regulation 3.007, which states that, prior to submitting a file the universities shall ensure the file is consistent with the criteria established in the specifications document by performing tests on the file using applications/processes provided

by the BOG Information Resource Management (IRM) Office. According to the Data Administrator, prior to the implementation of Campus Solutions, the Office of Institutional Research conducted a review of the edits and frequencies (compared to prior years) of files that were not generated by Institutional Research. Now, Institutional Research is partnering with all functional areas as active partners in the creation of the data files. The error and frequency checking still occurs, but the new process assures a transparent review and that contextual nuances are being learned by the Institutional Research staff that will help them to better detect and explain differences in data between submissions.

In summary, Office of Institutional Research staff was able to demonstrate their documentation of the scoping and data mapping necessary for the creation of various SUDS tables from the new Student Information System. Their intranet site had links to the BOG definition for each data element and a description of the data extraction and transformation process. A separate spreadsheet posted on the same site contained a list of action items, responsible parties, and suggested outcomes. The University Data Administrator not only described his collaborative approach to reporting from Campus Solutions via the data warehouse and OBIEE, but he also demonstrated the method was organized, planned, documented, and thorough. However, this is a “work-in-progress” and the processes, although demonstrated with sufficient evidence of due diligence, will need to be formally documented once the modifications to the data warehouse structures are finalized. (Please see Objective #3 concerning written policies, procedures, and desk manuals.) Additionally, there was sufficient evidence of practices to conclude that the University Data Administrator and his staff were reviewing and comparing SUDS edits, errors, and reports prior to submission of the files. We determined the processes followed by Institutional Research staff were adequate to ensure the completeness and accuracy of data submitted to the BOG.

The University Data Administrator acknowledged that the identification and design of the data warehouse items needed for BOG reporting from the new SIS was an iterative process that was more complex and time-consuming than initial expectations, and that University data reporting requires improvements to achieve more timely submissions to the BOG. The Campus Solutions Student Information System deployment placed intense demands on Institutional Research staff, the PeopleSoft functional and technical teams, the data warehouse and reporting team, and the functional offices such as Admissions and Records/Registrar, and Financial Aid. With a tight “go-live” deadline for Fall 2013, priority was given to making sure the transactional application was functioning and useable. As a result, some of the formal reporting mechanisms were delayed, which affected the timeliness of some of the reports. The creation of the reporting environment required reporting guidance from Institutional Research staff, technical analysis and design from the data warehouse and reporting team, and functional scoping by the subject-matter experts. The latter two groups remained heavily engaged in fine-tuning the transactional system for the first year. The result is that Institutional Research staff has had to use a hybrid approach to reporting to this point. As a positive outcome, their experiences in creating these BOG reports have allowed them to better identify what is needed to have a comprehensive data warehouse reporting environment that helps ensure the University’s data submissions to the BOG are complete and accurate.

Senior administration at the University acknowledged the importance of preparing data warehouse representations of Campus Solutions data for BOG reporting as the biggest issue beyond the Spring 2015 Admissions rollout (since completed). The current project list shows BOG reporting development and enhancement among the top ten items for all of the affected files. At present, all SUDS files that rely on Campus Solutions data have been deployed or are in active scoping activities. The University Data Administrator and his staff are actively engaged in those activities and it is expected that all reporting of Campus Solutions data in Academic Year 2015-16 will be drawn from the data warehouse using OBIEE, as planned.

Conclusion for Objective #2:

We concluded the processes used by the University Data Administrator and his staff in Institutional Research reasonably ensure the completeness and accuracy of data submitted to the BOG, including compliance with BOG criteria for the data. The University's submissions of files to the BOG have been uncharacteristically late with the implementation of the University's new SIS in Campus Solutions, due to staff resources constraints, compared to its more timely reporting prior to that. It is expected that all reporting of Campus Solutions data in Academic Year 2015-16 will be drawn from the data warehouse using OBIEE, which will improve the timeliness of data file submissions for the University's Performance-Based Funding Metrics.

Recommendations:

We recommend that University administrators periodically check on the progress of the ongoing process to finish the scoping and development of the SUDS reporting structures so as to assure timely reporting. We suggest they continually assess the allocation of resources and the assignment of priorities to accomplish this end.

Objective # 3: Evaluate any available documentation including policies, procedures, and desk manuals of appropriate staff and assess their adequacy for ensuring data integrity for University data submissions to the Board of Governors.

Audit Steps:

1. Request the Data Administrator provide policies, procedures, minutes of meetings, and any other written documentation used as resources to ensure data integrity; note whether these documents are sufficiently detailed, up-to-date, and distributed to appropriate staff.
2. Evaluate the results and document your conclusion. If necessary, consider benchmarking with peer universities.

Findings:

Objective #2 above discusses processes used by the University Data Administrator to ensure the completeness and accuracy of data submissions to the BOG, i.e., data integrity. However, these processes were not formalized into written policies and procedures, or desk manuals. We cited

the recent implementation of Campus Solutions and its intense demands on the Office of Institutional Research, the PeopleSoft functional and technical teams, the PeopleSoft data warehouse and reporting team, and the directors and staff from the functional offices such as Admissions and Records/Registrar, and Financial Aid, as a major contributing factor to the absence of such formal written documents—along with the need to allow the reporting sources to mature.

The University Data Administrator stated his goal is to collect and maintain all of his policies, procedures, minutes of meetings, and other documentation online. As mentioned above in Objective #2, Institutional Research has used SharePoint to track data requests and submissions and has also used it for scoping and data mapping activities. Additionally, we noted that the generation of file building instructions is somewhat premature, as the reporting environment is still being refined. Nonetheless, the Data Administrator demonstrated to us two examples of non-SUDS related Institutional Research procedures on its “Wiki” web application, including a comprehensive SharePoint manual for the creation of the Delaware file.¹ This online Wiki page discusses the context, intent, timing, definitions, and mechanisms for producing the file. The benefit of using a Wiki web application manual is that it is a living document that includes a history of who made changes while allowing the Data Administrator to review all versions of the page—not just the latest one. This encourages active updating and allows access via a browser from any location.

Conclusion for Objective #3:

Descriptions of the processes used by the University Data Administrator to ensure the completeness and accuracy of data submissions to the BOG, i.e., data integrity, were available, but were not in the form of formal written policies and procedures, or desk manuals. The absence of such formal written documents is due to the implementation of the University’s new SIS in Campus Solutions and its limited staff resources for reporting, along with the need to allow the reporting sources to mature. The University Data Administrator stated his goal is to collect and maintain all of his policies, procedures, minutes of meetings, and other documentation online via the Institutional Research “Wiki” web application.

Recommendations:

Whereas the University can be commended for thorough processes that yielded consistent validation of data, ***we recommend*** that these policies and procedures be documented and amended as the reporting environment matures.

Objective # 4: Review system access controls and user privileges to evaluate if they are properly assigned and periodically reviewed to ensure only those authorized to make data changes do so.

¹ The Delaware File is a national faculty salary comparison that uses the same data as is found on the University’s Institutional Research Data File (IRDF).

Audit Steps:

1. Obtain a list of individuals that have access to the State University Database System (SUDS).
2. Obtain the definitions for the roles in the SUDS system. <http://www.flbog.edu/resources/ditr/suds/doc/userguide.pdf>
3. Review the procedures to grant system access and/or initiate, monitor, and cancel user privileges.
4. Perform a test of system access controls and/or user privileges to determine if only appropriate employees have access or need the privilege.
5. Consider other Information Technology (IT) systems and related system access controls or user privileges that may impact the data elements used for each measure reviewed.
6. Evaluate the results and conclude on the reasonableness of procedures and practices in place for the setup and maintenance of system access, specifically addressing employees with SUDS access.

Findings:

There are system access controls throughout the BOG data submission process. Florida State University has role-based and application-based security on the prior legacy student information system and Campus Solutions/PeopleSoft. The PeopleSoft role management process is an integrated online workflow that, at a minimum, depending on the sensitivity of the role, requires an employee's direct supervisor and the functional owner of the application or module to approve each request. Additionally, there are sufficient automated safeguards to remove access when employees are terminated, and supervisors and subject-area owners are responsible for auditing access logs on at least a quarterly basis. This same role-based and reporting-subject-area based protocol is used for the OBIEE access to the data in the data warehouse. Institutional Research employees do not have security to change transactional data in Campus Solutions or the data warehouse (which is read only), therefore adding an additional layer of control.

The University Data Administrator and his BOG Analyst are the designated security managers for the SUDS database access. This system was designed with redundant fail-over protections to assure against inappropriate access. Access to SUDS is segregated by role, and each role has to be assigned online by one of the two security managers. Every time a user access or password is modified, the security managers each receive an email indicating the change and the person who submitted it. SUDS passwords also must be changed every three months. There are usually less than two dozen people with access to at least one application, and they are all personally known by the University Data Administrator. From our review of SUDS access, we found no inappropriate access. Finally, the access does not allow for the manipulation of previously submitted data. To change data, the University Data Administrator would have to submit a request with justification to the BOG to reopen the file for resubmission. Only at that time could someone submit a new table. However, the SUDS system captures his/her identity, a timestamp, and the name of the source file in a way that is visible to any user.

Conclusion for Objective #4:

System access controls and user privileges for the University's Campus Solutions and BOG SUDS systems are properly assigned and periodically reviewed to ensure only those authorized to make data changes can do so.

Recommendations:

We have no recommendations for this Objective #4.

Objective # 5: Test data accuracy.***Audit Steps:***

1. Identify and evaluate data validity controls to ensure that data extracted from the primary systems of record are accurate and complete. This may include review of controls over code used to create the data submission. Review each measure's definition and calculation for the consistency of data submissions with the data definitions and guidance provided by the BOG.
2. As appropriate, select samples from data the University has submitted to the BOG for its Performance-Based Funding Metrics. Vouch selected data to original source documents. (This will most likely include the University's student and financial systems used to capture relevant information.)
3. Evaluate the results of the testing and conclude on the completeness and accuracy of the submissions examined.

The University's 10 Performance-Based Funding Metrics are as follows.

Key Metrics Common to All Universities:

1. Percent of Bachelor's Graduates Employed Full-Time in Florida or Continuing Their Education in the U.S. One Year After Graduation
2. Median Wages of Bachelor's Graduates Employed Full-Time in Florida One Year After Graduation
3. Average Cost per Bachelor's Degree (Instructional Cost to the University)
4. Six Year Graduation Rate for First-Time-in-College Students (Full-and Part-Time)
5. Academic Progress Rate (Second Year Retention Rate with GPA Above 2.0)
6. Bachelor's Degrees Awarded within Programs of Strategic Emphasis (STEM)
7. University Access Rate (Percent of Undergraduates with Pell Grants)
8. Graduate Degrees Awarded within Programs of Strategic Emphasis (STEM)

Institution-Specific Metrics for Florida State University:

9. Faculty Awards (FSU's Choice of Board of Governors' Choice Metrics).
10. National Rank Higher than Predicted by the Financial Resources Ranking, Based on U.S

News and World Report (FSU's Board of Trustees Choice Metric).

The State University System of Florida Board of Governors maintains a student unit record database titled the State University Database System (SUDS). The database contains over 400 data elements about students, faculty, and programs at State University System institutions. The metrics are based on the data that universities submit to the BOG as part of various data tables and file submissions. The BOG provided SUS audit departments with an overview of the methodology procedures; submission descriptions; and data mapping for tables and elements for each metric.

We interviewed the Data Administrator, Institutional Research staff, and key departmental Data Managers to determine the primary sources of data used for the calculations of the metrics. The University has been transitioning from a legacy student information system to the new Campus Solutions system, a process that began in 2010-2011 and culminated with a "go-live" effective the Fall term, 2013 for all student, course, degree, and financial aid functions. Admissions more recently came online for the Spring 2015 semester. Because of the transition, some of the earlier data produced and used for previous academic terms may have changed or is no longer readily available from the legacy system. With the assistance of the Data Administrator and Data Managers we developed an Excel spreadsheet which mapped tables and data elements the BOG provided to us to University data.

Findings:

Metrics 1 (Percent of Bachelor's Graduates Employed Full-Time in Florida or Continuing Their Education in the U.S. One Year After Graduation), 2 (Median Wages of Bachelor's Graduates Employed Full-Time in Florida One Year After Graduation), 6 (Bachelor's Degrees Awarded within Programs of Strategic Emphasis (STEM)), and 8 (Graduate Degrees Awarded within Programs of Strategic Emphasis (STEM))

Files that were submitted to the BOG for these four metrics were the Admissions File and the Degrees Awarded File. The data used to produce the University's Admissions File submissions to the BOG reside in the University's data warehouse, with reporting produced using Oracle Business Intelligence Enterprise Edition software (Subject Area FSU – Campus Solutions Warehouse (CSW) Student Records Academic Plan Summary Admission Master Table). The data used for the Degrees Awarded File submissions to the BOG reside in the OBIEE Subject Area FSU – CSW Student Records – Academic Plan Summary Table.

We developed queries in the OBIEE environment to extract data from the same table(s) used to create the Admissions and Degrees Awarded Files submissions to determine if we could produce the same results independently. The Degrees Awarded File is used for Performance-Based Funding Metrics 1, 2, 6, and 8. We were granted access to the most current Degrees Awarded File submitted, to use for our audit fieldwork, which was submitted to the BOG in July 2014. These data were for Spring 2014. For degrees awarded information, we also developed queries for the same period in the University's Campus Solutions system, which is now the system of record.

Degrees Awarded File Testing

The Degrees Awarded File submitted that we reviewed contained 6,997 degree awarded records. We examined all of the BOG's specified data elements in the submitted Degrees Awarded File, including the CIP (Classification of Instructional Programs) code for Areas of Strategic Emphasis (metrics 6 and 8) to assure the data in the University's source files agreed with the data submitted to the BOG.

We traced all 6,997 students to the University's Campus Solutions system, and we verified that the information for the elements tested as reported to the BOG were the same as the student information maintained in the Campus Solutions system. To calculate the final results for metrics 1 and 2, aside from using the University's data in its submitted Degrees Awarded File, the BOG separately obtained non-FSU derived employment and education data. Validation of data obtained separately by the BOG was outside the scope of this audit.

Admissions File Testing

The Admissions File submitted to the BOG is used for metrics 1 and 2 of the Performance-Based Funding Metrics. The file contains student personal demographic information. We tested 61 student IDs in the Admissions File submissions for Summer, Fall, and Spring 2011-12 to determine if the student IDs matched data in the submitted Degrees Awarded File we reviewed and in the Campus Solutions system. We determined that 23 student IDs in the submitted Admissions Files did not match data in the submitted Degrees Awarded File or data in the Campus Solutions system. In discussions with the Data Administrator he explained that Student Public IDs have to be cross-referenced because they are from the legacy system, which uses FSU Student Number (FSUSN) student identifier or social security numbers. The employee IDs (EMPLIDs) in the Campus Solutions system replaced the use of FSUSN or social security numbers. Using a system crosswalk for SSNs, FSUSNs, and EMPLIDs, we were able to cross-reference all 61 sampled items from the legacy system to the new Campus Solutions system and to satisfy ourselves that records in the two systems are accurate and reliable. We determined the 23 students in the submitted Admissions File were not found in the submitted Degrees Awarded File because they did not ultimately enroll in the University.

Based on the results of our testing for metrics 1, 2, 6, and 8, we found no difference in any of the data elements reviewed as part of the submitted Degrees Awarded File. The legacy Admissions File submissions had unique identifiers that were different from those used for the Degrees Awarded File. As a result, an external crosswalk was developed to more efficiently address differences between files, in terms of student identifiers, and expedite data validation. Institutional Research began a new practice with each submission of data to the BOG from the University's Campus Solutions system of including the internal systems key (EMPLID) in a user-defined (FSU-defined) space on the submitted file. This practice allows for more efficient and convenient validation of data between the SUDS files that are submitted to the BOG and the transactional database, and between the various SUDS file submissions.

Metric 3 (Average Cost per Bachelor’s Degree (instructional costs to the University rounded to tens digit))

The calculation of this measure was to be done as follows, according to BOG definitions in its 2014 Performance-Based Funding Model Final Data publication on its website:

“For each of the last four years of data, the annual total undergraduate instructional expenditures were divided by the total fundable student credit hours to create a cost-per-credit hour for each year. This cost-per-credit-hour was then multiplied by 30 credit hours to derive an average annual cost. The average annual cost for each of the four years was summed to provide an average cost per degree for a baccalaureate degree that requires 120 credit hours.”

Sources: *State University Database System (SUDS), Expenditure Analysis: Report IV (2009-2010 through 2012-2013)*.

State fundable credit hours are defined on the Student Instruction File (SIF) using the Student Section Funding Flag as found in the SUS Data Dictionary. State fundable credit hours are considered those for which the Legislature has provided direct funding through the general appropriations to the University. Whether credit hours are fundable or not is determined by properties of the course section and the students in that class. All course sections that are taught by instructors paid with state-appropriated Education and General (E&G) funds are fundable course sections. Course sections taught using Auxiliary or Contracts and Grants (C&G) funded instructors can be designated as fundable or non-fundable. Courses funded from non-University sources (e.g., military or corporation) are non-fundable. Additionally, remedial courses and courses that do not count towards any degree are non-fundable. All credits generated in non-fundable course sections are not state fundable.

In fundable courses, the state-fundable credit hours are those generated by fundable students. Students in a given course section are deemed as generating non-fundable credit for various reasons: they are using state waivers to attend the course on a space-available basis, they are on a reciprocal exchange agreement, they are non-resident students admitted via a profile exception, they have repeated the course too many times, or they have defaulted on payment for the course or were canceled for non-payment.

The purpose of this metric is to present a cost accounting of the total and per-hour cost of instruction in each approved program (identified by discipline) and at each level of instruction for every institution and the State University System as a whole. The cost consists of both direct instructional costs and indirect instructional expenditures (and the person year effort of instruction). Data for this metric are collected from the Instruction and Research Data (IRD), Operating Budget (OB), and Expenditure Analysis (EA) file submissions to the BOG. The EA file is derived by the BOG based on the University’s OB and IRD file submissions.

IRD File Testing

Global Testing of Results from Queries of the University’s Source Files against Files Submitted to the BOG. The IRD File is composed of data from various tables including the

University's Workload Activity Table, which is built by Institutional Research staff in the Faculty Assignments, Commitments, and Effort Certification Tracking (FACET) component of the University's Online Management of Networked Information (OMNI) Human Resources (HR) system. The Workload Activity Table includes the instructor portion of fundable credit hours per course section by course level, segregated by funding source. We obtained data from the Workload Activity Tables of the IRD files that were submitted by FSU to the BOG for the academic years 2009-10, 2010-11, 2011-12, and 2012-13. We ran queries for each term in these four academic years in the University's OMNI HR system in the production environment, which is the University's official source of data, and reconciled the Instructor's total fundable credit hours by course level from this source data to the Instructor's total fundable credit hours in the files the University submitted to the BOG, identifying an immaterial amount (45 credit hours) of differences for all four academic years.

Focused Testing of Course Levels. As additional assurance, using the SUDS Data Dictionary description for course level classifications, which specifies lower level courses as those with course numbers between 1000 and 2999, and upper level courses as those with course numbers between 3000 and 4999, we used results from our Spring 2013 query that was run in the OMNI HR production environment to review the levels by course number. We ran a pivot table on the data to show the course level by the first digit of the course number. All course numbers beginning with "1" or "2" had an IRD file code of 11 (lower level) and all course numbers beginning with "3" or "4" had an IRD file code of 12 (upper level). The total entries for the query results (6,526) reconciled with the total rows on the original query data sent to the BOG for Spring 2013.

Focused Testing of Student Credit Hours and Fundable Credit Hours. Using the data from the Workload Activity Tables that were submitted by FSU to the BOG, we filtered by the Spring 2013 term and course level (11 and 12). We then sorted the data by largest instructor total *fundable* credit hours per course section per funding source per instructor. We selected the 50 largest instructor total *fundable* credit hours per course section per funding source per instructor as our sample to test to the University's FACET source data. For each of our sampled items from data submitted to the BOG, we searched the University's source FACET Legacy Course Data by course section number and confirmed the contact hours, additional contact hours, and workload percentage per course section per funding source per instructor. We also ran a query in the University's OMNI HR system in the production environment, for the Spring 2013 term, which showed the total credit hours and total *fundable* credit hours per course section per instructor. From these data we could calculate each instructor's total credit hours per course section by multiplying the instructor's workload percentage from FACET by the total credit hours per course section obtained from the OMNI HR query. Similarly, we could calculate each instructor's total *fundable* credit hours per course section by multiplying the instructor's workload percentage from FACET by the total *fundable* credit hours for that course section obtained from the OMNI HR system query. We compared these calculated amounts with the instructor's total student credit hours per course section and the instructor total *fundable* credit hours per course section listed on the University's file submitted to the BOG. We noted that all of the calculated amounts agreed with the amounts in the file submitted.

To ensure the University's Workload Activity Table was accurately capturing FACET data, for each instructor in our sample of 50, we searched for his/her FACET certification form in the University's FACET component in the OMNI HR system and reconciled the total contact hours per course section per funding source per instructor for all 50. Also for our sample of 50, we tested to ensure the University's Workload Activity Table agreed with the Spring 2013 Courses Taken Report from the BOG SUDS database. We reconciled the total amount of credit hours and total amount of *fundable* credit hours for each course and section. The data in the Spring 2013 Courses Taken Report was generated by BOG from data submitted by the University in its Student Instruction File (SIF). We were provided with the University's Spring 2013 Courses Taken Table, which is a portion of the SIF File submitted to the BOG, and reconciled the total credit hours and total *fundable* credit hours per course section in this file for each of our sampled items to the amounts in the BOG's Spring 2013 Courses Taken Report.

EA File Testing

To test the expenditures reported in the EA file, we ran a query in the University's OMNI Financials System for each year that was included in the metric's calculation (academic years 2009-10, 2010-11, 2011-12, and 2012-13). We ran this query for all funds beginning with "1" and "2" (Education and General (E&G) funds and Medical School funds) for accounts beginning with "7" (expenditures). Accounts beginning with "78" and "79" were excluded from the original query data. These accounts are depreciation expense, gain/loss on sale of asset, and Capital Improvement Plan (CIP) facilities. Additional inclusions and exclusions were applied based on the BOG's directions for the years audited. We reconciled the total expenses in the results of our queries to the total expenses submitted to the BOG and noted only immaterial differences, which were due to rounding. We also reviewed a Comparison Report from the BOG SUDS database that compares expenditures submitted in the OB report versus the EA report. Based on our analysis, we noted that there were no differences in the submitted expenditures.

Based on our testing, the University's data submitted to the BOG for the Metric 3 Performance-Based Funding Metric were complete and accurate, and in accordance with BOG guidance.

Metrics 4 (Six Year Graduation Rate for First-Time-in-College Students (Full-and Part-Time)) and 5 (Academic Progress Rate (Second Year Retention Rate with GPA Above 2.0))

Metrics 4 and 5 use the Retention File to define the *denominator*/cohort. This file is built by the BOG using the Enrollments Table, which is one of 10 tables comprising the University's SIF File that is submitted to the BOG. For the *denominator*/cohort, the BOG uses the value "first-time-in college (FTIC)," which is students who started in the Fall (or Summer continuing to Fall) term, including students in degree programs longer than four years.

The University also creates the Retention Cohort Adjustments Table, which the BOG uses to exclude individual students who meet certain criteria when using a prior year Retention File for performance measurement. According to the BOG's Retention and Graduation Rates Overview of Methodology and Procedures, "Students may be removed from the cohort if they left the institution for one of the following reasons: death or total and permanent disability; service in the armed forces (including those called to active duty); service with a foreign aid service of the

federal government, such as the Peace Corps; or service on official church missions.” The information is coordinated and maintained in the Registrar’s Office from information provided by third parties, and from students readmitted to the University. The Registrar’s Office provides this information to the University’s Institutional Research staff for development of the Retention Cohort Adjustments Table.

Consistent with the Integrated Post-Secondary Education Data System (IPEDS) survey definitions and pursuant to Institutional Research staff’s attainment of clarification from the BOG, the University also includes students who are studying abroad (e.g., at a foreign university) in the Retention Cohorts Adjustment Table if their enrollments at such institutions are only administrative records and the fees are nominal, so that they may be excluded from the cohort in the *denominator*.

Metric 5 also uses the Retention File, along with grade-related elements of the subsequent year’s Enrollments Table, to identify the student count to be included in the measure’s *numerator*. The *numerator* is defined as “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, who had a grade point average (GPA) of at least 2.0 at the end of their first year (Fall, Spring, Summer).”

To determine which of the original cohort graduated from the same institution within six years, Metric 4 also uses the Degrees Awarded Table in the Degrees Awarded file (SIFD) submitted to the BOG subsequent to the SIF Enrollments Table.

We tested individual data elements in the Enrollments Table in the SIF File for Spring 2014, submitted by the University to the BOG on July 11, 2014, and the Degrees Awarded Table in the SIFD File for Spring 2014, submitted to the BOG on July 21, 2014, to determine whether these elements accurately reflected transactional data in the University’s Campus Solutions system. Given that the Retention Cohort Adjustments Table is based on ad hoc information sources, we did not test these data. This file contained only 18 records—eight of which related to deaths that were known to the University and 10 were records of students studying abroad who met the IPEDS survey definition for exclusion.

Enrollments Table Testing (from the SIF File)

The Enrollments Table in the University’s SIF File submitted to the BOG is based on transactional data in Campus Solutions. We selected a random sample of 30 records in the Enrollments Table and tested the following data elements for accuracy and consistency with data definitions provided by the BOG in the State University System Data Dictionary (SUDS Data Dictionary).

Focused Testing of Last Institution Code. The Last Institution Code element is a code for the student’s most recent post-secondary educational training previous to attending FSU (Source: SUDS Data Dictionary) and uses the Office of Postsecondary Education’s Identifier (OPEID) for its coding structure. We translated the numerical data element in this field to the

institution name using both OPEID and the SUDS Data Dictionary. We then verified for any relevant students that the individual students received the reported degrees. Degrees issued by Florida State University were traced to Campus Solutions transactional data. Degrees external to FSU were traced to the University's legacy data system.

Focused Testing of Type of Student at Date of Entry. The Type of Student at Date of Entry element is a code for the type of student at the time of first registration for credit courses at FSU (Source: SUDS Data Dictionary). Coding is based on criteria in the SUDS Data Dictionary and is developed based on several transactional data elements. To determine whether students were correctly classified, we tested this data element by reviewing student information in Campus Solutions in conjunction with the University's OBIEE "Student Upload Admissions File" created by University Institutional Research staff, which is based on legacy data, as described to us by the University's Data Administrator, presented below:

The transition of student data into Campus Solutions created a confound where FSU legacy Student Information Systems did not contain sufficient database elements to simply migrate the data into the Campus Solutions Admissions Module. In Campus Solutions, the Admissions Module is the only transactional file that contains much of the information that must be reported on the SIFP and SIF Files. Because the historic data could not be migrated into the Campus Solutions data structure, the decision was made to extract the legacy data into a permanent flat file that would be parked in the data warehouse and made available for reporting in a table called "Student Upload Admissions."

This extract file includes the historical information from before the Spring 2015 go-live of the Campus Solutions Admissions Module. These data are point-in-time representations so they are not to be modified or updated. These data include: the student type at first entry (e.g., freshman, Florida Public Junior College/Community College/State College transfer, other transfer, degree-seeking graduate student, transient student, dual enrollment student, and non-degree student). The file also includes the type at last entry; dates for that and the original entry; highest degree and the associated institution and date; degree sought, last institution and date; high school name, code, academic units, graduation date and GPA; residency at admissions; county of residence; full-time versus part-time; and various student attributes (e.g., National Merit Scholar, admissions basis).

The determination of a First-Time-in-College (FTIC) student is based on the IPEDS definition as follows:

*First-time student
(undergraduate)*

A student who has no prior postsecondary experience (except as noted below) attending any institution for the first time at the undergraduate level. This includes students enrolled in academic or occupational programs. It also includes students enrolled in the fall term who attended college for the first time in the prior summer term, and students who

entered with advanced standing (college credits earned before graduation from high school).

The BOG definition extends the IPEDS definition beyond the Fall and Summer after graduation by noting students who have earned less than 12 earned post-secondary hours after graduation.

Focused Testing of Type of Student at Most Recent Admission. The Type of Student at Most Recent Admission element should reflect the type of student at the “most recent admission or readmission to the institution” (SUDS Data Dictionary) and should not change from the Type of Student at Date of Admission unless the student has been readmitted. We tested this data element by reviewing student information in Campus Solutions in conjunction with the University’s OBIEE “Student Upload Admissions File.”

Focused Testing of Fee Classification – Kind. The Fee Classification element provides the “type of registration fees (money charged by the University for instruction) and other payments made to the institution for instructional purposes” (SUDS Data Dictionary). All students are classified as “G” for general instruction unless they are registered for no credit or are not registered but are only reported for degree posting purposes. This data element was readily verifiable in term-based information provided in Campus Solutions.

Focused Testing of Date of Most Recent Admission. The Date of Most Recent Admission element reflects the “year and month of the student’s most recent admission or readmission to the institution” (SUDS Data Dictionary). This data element was readily verifiable in term-based information provided in Campus Solutions.

Focused Testing of Student’s Classification Level. The Student’s Classification Level element categorizes “the student’s progress at the beginning of the term toward a specific degree or certificate” (SUDS Data Dictionary). This data element was readily verifiable in term-based information provided in Campus Solutions.

Focused Testing of Degree - Highest Level Held. The Degree – Highest Level Held element is the “highest educational degree, certificate, or diploma held by the individual” (SUDS Data Dictionary). This element was traced to the Campus Solutions system. Where the data element reflected the student earned a degree at Florida State University, the information was readily available in Campus Solutions transactional data. If the student received his/her degree from outside Florida State University, the information was found in the legacy data system. According to University Instructional Research staff:

Degree records for students who applied prior to Spring 2015 are still available in the University’s legacy data system using the OBIEE Student subject area. The Admissions area was (until spring 2015) the source for the admissions files submitted to BOG, which becomes the source for the SIF and the extract that we use for this type of admissions data.

Focused Testing of Institution Granting Highest Degree. The Institution Granting Highest Degree element is the OPEID code of the post-secondary institution where the student received

his/her highest degree (SUDS Data Dictionary). Where the student record reflected that the student earned a degree at Florida State University, the information was readily available in Campus Solutions transactional data. If the student received his/her degree from outside Florida State University, the information was traced to legacy data via the aforementioned “*Student Upload Admission*” extract file.

Focused Testing of Institutional Hours for GPA. The Institutional Hours for GPA element reflects the “total number of credit hours attempted in current degree level” (SUDS Data Dictionary). This data element was readily verifiable in term-based information provided in Campus Solutions. Where the data element in Campus Solutions was no longer consistent with the data in the Enrollments Table we determined there were subsequent transactions that impacted the students’ total instructional hours and confirmed that the amounts reported were correct at the time of file submission to the BOG.

Focused Testing of Total Institutional Grade Points. The Total Institutional Grade Points element reflects the “total institutional grade points generated in current degree level” (SUDS Data Dictionary). This data element was readily verifiable in term-based information provided in Campus Solutions. Where the data element in Campus Solutions was no longer consistent with the data in the Enrollments Table we determined there were subsequent transactions that impacted the students’ total instructional hours and confirmed that the amounts reported were correct at the time of file submission to the BOG. Law School Institutional Grade Points were calculated in a different manner.

Law School grades are based on a 100 point system and must be translated prior to inclusion in the Enrollments Table. Law School grade points in our sample were traced from the values reported in Campus Solutions through their translation to the University’s 4.0 system. University Institutional Research staff provided the following explanation for this translation:

To calculate Law grade points for a term, we used the following formula in Excel for any student who took a class in the term with the grade basis of “Law”.

GR is the Grade Earned in the class.

CH is the number of units taken for the class.

*=IF(GR="A-",3.75*CH,IF(GR="A",4*CH,IF(GR="B+",3.25*CH,IF(GR="B",3*CH,IF(GR="B-",2.75*CH,IF(GR="C+",2.25*CH,IF(GR="C",2*CH,IF(GR="C-",1.75*CH,IF(GR="D+",1.25*CH,IF(GR="D",1*CH,IF(GR="D-",0.75*CH,0))))))))))*

For the Cumulative Beginning of Term Grade Points of returning Law students, we simply used the value from the SIF submission of the prior semester.

For new Law students, the Cumulative Beginning of Term Grade Points value was set to zero.

Focused Testing of Term Credit Hours for GPA. The Term Credit Hours for GPA element reflects the “total credit hours for the current term which are to be used for grade point average

calculation based on a 4.0 system” (SUDS Data Dictionary). This data element was readily verifiable in term-based information provided in Campus Solutions. Where the data element in Campus Solutions was no longer consistent with the data in the Enrollments Table we determined there were subsequent transactions that impacted the students’ total instructional hours and confirmed that the amounts reported were correct at the time of file submission to the BOG.

Focused Testing of Term Credit Hours Earned. The Term Credit Hours Earned data element reflects the total credit hours based on the institution’s current calendar for which the student earned a passing grade in the term being reported. It also includes all non-instructional credit hours awarded during the term (SUDS Data Dictionary). This data element was readily verifiable in term-based information provided in Campus Solutions. Where the data element in Campus Solutions was no longer consistent with the data in the Enrollments Table we determined there were subsequent transactions that impacted the students’ term credit hours earned and confirmed that the amounts reported were correct at the time of file submission to the BOG.

Focused Testing of Term Grade Points Earned. Term Grade Points Earned are the “total grade points on a 4.0 system earned by the student in the term being reported” (SUDS Data Dictionary). This data element was readily verifiable in term-based information provided in Campus Solutions. Where the data element in Campus Solutions was no longer consistent with the data in the Enrollments Table we determined there were subsequent transactions that impacted the students’ total instructional hours and confirmed that the amounts reported were correct at the time of file submission to the BOG. Law School grades are based on a 100 point system and must be translated prior to inclusion in the Enrollments Table. Law School grade points in our sample were traced from the values reported in Campus Solutions through their translation to the 4.0 system.

Degrees Awarded Table Testing (from the SIFD File)

We selected a random sample of 30 degrees awarded from the Degrees Awarded Table and verified these degrees by tracing them to Campus Solutions transactional data.

Based on our testing, the University’s data submitted to the BOG for Metrics 4 and 5 Performance-Based Funding Metrics were complete and accurate, and in accordance with BOG guidance.

Metric 7 (University Access Rate (Percent of Undergraduates with Pell Grants))

The University Access Rate metric is based on the number of undergraduates enrolled during the Fall term who received Pell grants during that term. Unclassified students, who are not eligible for Pell grants, are excluded from this metric. To test this metric, we accessed the University’s Student Instruction File (SIF) for Spring 2014 that was submitted to the BOG on July 11, 2014 and the Student Financial Aid (SFA) File for the Annual 2012 term that was submitted to the BOG October 15, 2013. These were the most current file submissions at the time of our fieldwork for this testing.

Student Instruction File Testing

The data used to produce the Student Instruction File submitted to the BOG reside in OBIEE, Subject Area FSU - CSW - IR - Student Records - Enrollment – Temporary.² The SIF File submitted consisted of three files: 1) a Main Enrollment File (with 39,103 uniquely identified students), a Law Student Enrollment File (with 692 unique student records), and an Add-on File (with 14 uniquely identified students). Together, these three files contained records for 39,809 unique students. We examined all of the BOG-specified data elements in the SIF File that was submitted to the BOG and compared these to the source data in OBIEE. We were able to reconcile the University's source data to the SIF File submitted to the BOG.

Student Financial Aid (SFA) File Testing

The Student Financial Aid (SFA) File that was submitted to the BOG was generated by Office of Financial Aid (OFA) staff, in partnership with Institutional Research and Information Technology Services. OFA reported the following steps are performed to build the SFA File to be submitted to the BOG.

- The Financial Aid Awards and Financial Aid Demo file layouts are reviewed based on the information and edits provided in the relevant section of <https://prod.flbog.net:4445/pls/apex/f?p=112:7>.
- The file is then built using the subject areas available in OBIEE; however, since there are a number of data elements that are not available in the OBIEE environment, OFA staff also works in conjunction with Enterprise Resource Planning staff in Information Technology Services to build the necessary data.
- Once the file is created, preliminary reports to validate the data are constructed, which include:
 - A review of the definitions provided by the BOG in its data dictionary for the fields being reported, to ensure accuracy of the data being reported;
 - Total amounts disbursed by fund types;
 - A comparison with prior-year submissions; and
 - A review of sample students.
- Based on the successful results of the review described above, the file is uploaded via the State University Server (SUS) secure server.
- The file edits are available shortly thereafter and any errors are reviewed and corrective actions taken before resubmission.
- During the process of file submission, OFA frequently works with IR and the OBIEE team for clarifications, with the goal of updating IR staff and also to eliminate edits which prevent a final submission.
- Most of the discussions related to the BOG Student Financial Aid File submission are done in meetings or emails.

² According to the University Data Administrator, initially this location was viewed as a temporary repository. However, as the University engaged in the production of the file, staff realized the information would not change and would be necessary for years to come.

The SFA File that was submitted to the BOG contained records for 38,661 unique students, with any unclassified students being excluded from this file.

The University's source records for Financial Aid for 2012-13 are located in the OFA's Staff Toolkit system. We were granted access to this system in order to determine student eligibility for federal aid. We compared Pell award amounts in the University's Staff Toolkit system to award data in the SFA File that was submitted to the BOG for 60 students. Our testing found no differences in the Pell award amounts in the SFA File submitted to the BOG and the University's source Financial Aid records for the student records reviewed.

Based on our testing, the University's data submitted to the BOG for the Metric 7 Performance-Based Funding Metric were complete and accurate, and in accordance with BOG guidance.

Metric 9 (Faculty Awards (FSU's Choice of Board of Governors' Choice Metrics))

Metric 9 is defined as the number of awards that faculty have earned in the arts, humanities, science, engineering, and health fields as reported in the annual "Top American Research Universities" report. Twenty-three of the most prominent awards are considered, including: Getty Scholars in Residence, Guggenheim Fellows, Howard Hughes Medical Institute Investigators, MacArthur Foundation Fellows, National Endowment for the Humanities (NEH) Fellows, National Medal of Science and National Medal of Technology, Robert Wood Johnson Policy Fellows, Sloan Research Fellows, Woodrow Wilson Fellows, to name a few awards.

The Center for Measuring University Performance, which describes itself as a "research enterprise that is focused on the competitive national context for major research universities," determines the Top American Research Universities by their rankings on nine different measures: Total Research, Federal Research, Endowment Assets, Annual Giving, National Academy Members, Faculty Awards, Doctorates Granted, Postdoctoral Appointees, and SAT scores.

The Top American Research Universities (TARU) report is the source used by the Florida Board of Governors to determine and report the number of faculty awards achieved. Metric 9 is one of two institution-specific choice measures and is the Board of Governors Choice Metric for Florida State University and the University of Florida.

Our initial test was to assure that faculty awards shown in the TARU report agreed with the Board of Governors annual reports. We determined the number of faculty awards shown in the TARU annual report issued by the Center for Measuring Performance agrees with the number of awards reported by the Board of Governors in its Annual System Accountability Reports, as follows:

	BOG 2012-13 Annual Accountability Report	TARU 2012 Annual Report	BOG 2013-14 Annual Accountability Report	TARU 2013 Annual Report
Applicable Fiscal Year for Awards	2011	2011	2012	2012
Number of Awards Reported	11	11	7	7

Note: The TARU Annual Report for 2014 is not yet available.

Next, and to gain an understanding of processes within the University relating to this metric, we met with the University Data Administrator. We then interviewed the Director of the Office of Faculty Recognition to determine procedures for knowing whether awards reported by TARU and the Board of Governors are previously known by the University and that numbers reported are accurate. We were told faculty members are requested to report any awards received to the Office of Faculty Recognition.

The above table shows 18 total awards were received by FSU faculty in 2011 and 2012. For comparison, the Office of Faculty Recognition provided us ten letters of awards and five notifications of awards for both years, or 15 unique awards in total. This is three fewer letters and notifications than awards shown for the TARU report. For purposes of documentation, letters of awards are preferable to notifications of awards, which are often shown on organization printouts. Even with this information, it was not possible to match the year in which a letter of award or notification of award was received to the awards reported in the TARU report. TARU does not show the names of award recipients. As a result, a complete reconciliation process was not in place for the 2012 and 2013 TARU reporting years. Prior to the 2013 reporting year it has been the University's practice to accept the numbers reported in the TARU annual report.

To address this issue, beginning in 2014, the Office of Faculty Recognition initiated contact with TARU to request the names of award recipients by year. Having the names of faculty receiving awards allows the Office to compare award notifications it independently receives from FSU faculty to the names and numbers of awards reported in the TARU annual reports. With this internally received information from faculty, and with subsequent reports from TARU identifying award recipients by name, the Office will have a robust and complete reconciliation process.

In discussions with the Director of Faculty Recognition we were told the Office has partnered with Institutional Research to develop a Share-Point site that will document the faculty awards verification process. The site and related processes will be used to account for, monitor, and reconcile awards reported directly to the University and awards reported in the TARU annual reports. This site will be fully operational and processes documented by the end of the 2015 Spring semester.

In summary, we concluded the numbers of faculty awards reported by the Center for Measuring University Performance in the Top American Research Universities annual reports are in

agreement with awards reported for this Performance-Based Funding Metric in the Board of Governors Annual System Accountability Reports.

Metric 10 (National Rank Higher than Predicted by the Financial Resources Ranking Based on U.S. News and World Report)

Metric 10 is based on rankings reported by the U.S. News and World Report, a multi-platform publisher of news and information, which includes www.usnews.com and www.rankingsandreviews.com. The U.S. News publishes annual print and e-book versions of its authoritative rankings of Best Colleges and Best Graduate Schools.

This metric is one of two institution-specific choice measures and this particular metric is the FSU Board of Trustees Choice Metric. According to the BOG's 2014 Performance-Based Funding Model Final Data Publication, Metric 10 is defined as "the difference between the Financial Resources rank and the overall University rank. U.S. News measures financial resources by using a two-year average spending per student on instruction, research, student services, and related educational expenditures – spending on sports, dorms and hospitals doesn't count."

The table below shows U.S. News Best Colleges Ranking Report for Florida State University for the last Five Years.

Magazine Edition	Survey Year	Fall Statistics for:	Financial Resources Rank	University Rank	Metric 10 Ranking
2011	2010	2009	209	104	105
2012	2011	2010	208	101	107
2013	2012	2011	212	97	115
2014	2013	2012	211	91	120
2015	2014	2013	214	95	119

The reason the University chose this metric is the belief that it operates very efficiently. For example, U.S. News 2015 edition shows the University's Financial Resources rank as 214, and when the overall University Rank of 95 is subtracted from that number the difference is significant, or 119. This does not mean that the University will strive to increase the difference between the two numbers in the future. Very possibly, to improve the University Rank by a small number may require significantly more resources. Therefore, reporting the above number of 119 for year 2015 and the percentage change from one year to the next does not without additional explanation provide a readily apparent appreciation for this chosen metric.

To help place this metric in perspective, the Data Administrator provided additional tables and graphs that show that the 119 point difference between the Financial Resources rank of 214 and the University Rank of 95 for 2015 places the University in the 99th percentile. This is 64 points above the 90th percentile and 93 points above the 75th percentile. The Metric 10 ranking shown above for the last five years shows stability, which should remain as long as efficiency data continue to be reported.

The U.S. News has also published data on the top-ranked colleges that operate most efficiently. It defines efficiency as a college's fiscal year resources per student divided by its overall score, which is made up of several categorical rankings.

The table below shows U.S. News Best College Efficiency Ranking for Florida State University for the Last Two Years.

U.S. News Reporting Year	Fiscal Year Financial Resources	U.S. News National Universities Rank	Overall Score	Financial Resources Rank	Spending per Student for each point in the U.S. News Overall Score	National Rank for Efficiency
2014	2012	91	50	211	\$355.32	1 st
2015	2013	95	47	214	\$392.77	2 nd

The U.S. News reported that its national ranking for efficiency indicates a school's ability to produce the highest education quality while also spending relatively less on education programs to achieve that quality. Also, to be ranked schools had to be numerically ranked in the top half of the U.S. News ranking category in the Best Colleges annual rankings. Based on this calculation, the University received a ranking for efficiency of 1st and 2nd nationally for 2014 and 2015, respectively.

The purpose of the above table is to show that, as currently calculated, U.S. News views the University as very efficient. At this time there is no assurance that U.S. News will continue to publish articles on this measure; however, there is evidence, based upon the above two tables, that the University will continue to strive to always be efficient.

We interviewed the Data Administrator and Institutional Research Assistant Director to determine procedures for reporting rankings and ensuring that the numbers reported are accurate. The Assistant Director reported that Institutional Research completes a survey using Academic Insights, a software application located on the U.S. News and World Report website. Institutional Research also builds queries and produces various reports from the information reported by FSU and other participating universities. IR completes the BOG's Work Plan template (Word file) using the data provided in the Academic Insights report. We reviewed copies of the U.S. News and World Report Best Colleges Rankings Report 2015, US News Rankings for FSU – Historical listing, and the Academic Insights report provided by the FSU Institutional Research Office.

For metric 10 for 2015, National Rank Higher than Predicted by the Financial Resources Ranking Based on U.S. News and World Report, we found no difference between the financial resources rank and overall rank values reported by the Board of Governors and what was reported in the U.S. News and World Report for colleges.

Conclusion for Objective #5:

Based on our data accuracy testing for the University's 10 Performance-Based Funding Metrics, we determined the University's data submitted to the BOG were complete and accurate, and in accordance with BOG guidance.

Recommendations:

We have no recommendations for this Objective #5, which addresses the completeness and accuracy of data file submissions to the BOG for Performance-Based Funding Metrics 1 through 10.

Objective # 6: Evaluate the veracity of the University Data Administrator's data submission statements that indicate "I certify that this file/data represents the position of this University for the term being reported."

Audit Steps:

1. Interview the University Data Administrator to understand and assess the reasonableness of the various coordination efforts with the Data Administrator's staff, the other University data custodians' staff, the BOG's Information Resource Management (IRM) Office staff, and other knowledgeable individuals to attain the Data Administrator's personal and professional satisfaction that data submitted to the BOG is complete, accurate, and submitted timely.
2. Inquire how the Data Administrator knows the key controls are in place and operating effectively. If not already done, consider verifying these key controls are in place and adequate to support their assertions.

Findings:

University Data Administrator certifications to the BOG regarding University file submissions were executed as memos prior to the tenure of the current Data Administrator. With the introduction of SUDS, each electronic submission of a file (wherein the userid for the submitter and a timestamp were captured in the SUDS interface) was considered sufficient evidence of certification of the file. Effective January 15, 2015, the BOG IRM staff updated the SUDS interface to include a statement that submitting the file "represents electronic certification of this data per Board of Governors Regulation 3.007."

The University Data Administrator expressed very high confidence in the methodology and personnel associated with the University's reporting from both the legacy and Campus Solutions environments. Much of this confidence is based on the longevity of experience of the people executing the files for the affected submissions. Having 26 years of experience in enrollment management including 22 at FSU, the University Data Administrator has personal knowledge of the data constructs and the people associated with the referenced BOG reports. While in Admissions and Records at FSU, he was one of the primary forces behind the University

adopting a business-intelligence-based reporting environment beginning in 1990. He was responsible for research and reporting for the enrollment management functions at FSU for ten years prior to becoming the Director of Institutional Research.

Additionally, the new scoping and reporting methodology he has developed has led to an institutional review of all the data elements from Campus Solutions that are required by the BOG for its reports. The scoping and mapping exercises usually have involved more than one person from each of the key constituencies: Institutional Research, the data warehouse and reporting team, and the Campus Solutions technical and functional teams. These discussions frequently have involved validating output data from sample cases with live transactional data. At all times, there was someone available in the room or via electronic media who was able to define the context and constraints of the data for each data element. Questions about BOG interpretations were discussed with the BOG staff and with institutional research directors at other SUS institutions.

The present University Data Administrator was an active participant in the analysis, collection, and validation of all but two of the files related to the University's Performance-Based Funding Metrics. One was the Admissions file that he used to validate data in his prior job and which is still produced by his former employee, and the other is the Operating Budget file. The latter file is validated by the Budget Director, who shares a suite with the Office of Institutional Research. The prior University Data Administrator used to produce the operating budget and was known by the current University Data Administrator to review and validate the file with the current Budget Director.

Conclusion for Objective #6:

As explained, it has only been since January 15, 2015, that the BOG IRM staff updated the SUDS interface to include a statement that submitting the file "represents electronic certification of this (sic) data per Board of Governors Regulation 3.007." The University's Data Administrator adequately expressed valid reasons for his personal and professional satisfaction that data submitted to the BOG is complete and accurate. As stated in Objective #2, the University's submissions of files to the BOG have been uncharacteristically late with the implementation of the University's new SIS in Campus Solutions, due to staff resources constraints, compared to its timely reporting prior to that, and we have offered a recommendation in Objective #2 to address the timeliness of reporting.

Recommendations:

We have no recommendations for this Objective #6.

Objective # 7: Review the consistency of data submissions with the data definitions and guidance provided by the Board of Governors through the Data Committee and communications from data workshops.

Audit Steps:

1. Evaluate the University's procedures for periodically obtaining and communicating definitions and due dates as provided by the BOG through the Data Committee and communications from data workshops.
2. Verify with the University Data Administrator that the most current data file definitions are used as a basis for preparation of data to be submitted to the BOG.
3. Review SUDS most recent cumulative release notes and workshop agendas. <http://www.flbog.edu/resources/ditr/suds/>
4. Request evidence of the most recent formal staff training/workshops, internal discussions, or communications with other responsible employees and the BOG Data Committee necessary to ensure the overall integrity of data to be submitted to the BOG.
5. Conclude as to the University's data submissions' consistency with BOG data definitions and guidance.

Findings:

The aforementioned methodology for scoping and mapping data to the BOG SUDS file structure and the documentation provided therein are ample evidence that data are being mapped to the current BOG data elements as defined in the SUS Data Dictionary <https://prod.flbog.net:4445/pls/apex/f?p=112:20:3927762986410::NO:::>. The University Data Administrator demonstrated that sufficient personnel have been consistently attending the annual Data Administrators' Workshops. The University Data Administrator provided evidence of requests sent to the BOG for clarification of BOG SUDS data elements and of requests sent to FSU subject-matter experts to reinforce BOG interpretations. Additionally, the University Data Administrator demonstrated a largely automated online (SharePoint) tracking tool for data submissions and resubmissions. Using that information source, concerning data elements that are germane to this audit there was no evidence of inconsistency with BOG requirements in the reporting of these and no files were resubmitted to correct or change data materially in these fields, as discussed in Objective #8, to follow. Finally, our testing of data accuracy for Objective #5 included certain tests of the University's adherence to BOG guidance for the data, and we noted no inconsistencies.

Conclusion for Objective #7:

We found no evidence that the University's data submissions to the BOG, specifically those pertaining to data elements germane to this audit, were inconsistent with BOG reporting requirements for these data elements, and no files were resubmitted to correct or change data in these fields.

Recommendations:

We have no recommendations for this Objective #7.

Objective # 8: Review the University Data Administrator’s data resubmissions to the Board of Governors with a view toward ensuring these resubmissions are both necessary and authorized. This review should also evaluate how to minimize the need for data resubmissions.

Audit Steps:

1. Interview the University Data Administrator about the types and quantity of recent data resubmissions and the level(s) of approvals necessary for corrective actions.
2. Request and examine any correspondence between the University and the BOG IRM Office related to data resubmissions that pertain to the Performance-Based Funding Metrics. Determine if these resubmissions represent problems and, if so, whether they tend to be reoccurring and management has taken or plans to take corrective actions in order to reduce them.
3. Conclude as to the frequency, need, and authorization of the resubmission process.

Findings:

The University Data Administrator was asked to describe the resubmission process in general and as it relates to the data elements in this audit. He reported that there are three triggers for resubmissions: 1) the BOG staff determines that the way the institution is interpreting or reporting data is either incorrect or inconsistent with the way most of the other institutions are interpreting the requirements; 2) University staff determines there are inconsistencies with data in a current file that have to be cross-validated with data on an earlier submission of a different file (e.g., SFA file cohort must match SIF cohort for the same term), requiring resubmission of the earlier file; 3) University staff finds new ways to improve on the granularity of data being submitted and they choose to apply the new understanding or method to a previously-submitted file.

From the BOG’s SUDS system, we searched for files with due dates between July 1, 2012 and June 30, 2013 and found that the University submitted 29 files to the BOG and resubmitted only four of these files. For a more in-depth analysis of more current file resubmissions and reasons for these, also using the SUDS system, we noted the University submitted 35 files from July 1, 2013 through September 30, 2014, and only three resulted in resubmissions—two of which (the Operating Budget File and the Student Instruction File) contained data relating to the University’s Performance-Based Funding Metrics, along with other information. For the resubmitted Operating Budget File, the 2013-14 Operating Budget electronic files were resubmitted to eliminate a program component level deficit in the University’s E&G – College of Medicine estimated year amounts. No other changes were made. Because the changes were made to the estimated year amounts and did not affect the expenditures, that year’s Expenditure Analysis File, and therefore the related metric, was not affected. The Enrollment Table was the only table that was resubmitted from the Student Instruction File. When IR submitted the SIFD degree hours, it found cases where some degree credits were not successfully posted in the University’s Campus Solutions system. The University identified the logic that led to this issue, and the Registrar and Campus Solutions teams were able to revise their data, which were included in the resubmitted SIF file. The only Performance-Based Funding data element that

would be affected by this would have been element number 01083 – Degree Program Fraction of Degree Granted.

Conclusion for Objective #8:

We determined that resubmissions by the University have been very rare, are both necessary and authorized, and have had minimal to no effect on the University's Performance-Based Funding Metrics.

Recommendations:

We have no recommendations for this Objective #8.

Objective # 9: Provide an objective basis of support for the University's President and Board of Trustees Chair to sign the representations made in the Performance-Based Funding - Data Integrity Certification.

Audit Steps:

1. Review the results of all audit steps and make an assessment of whether reasonable assurance can be provided that processes in place, if consistently followed, ensure the completeness, accuracy, and timeliness of data submissions to the Board of Governors.
2. Review the results of all audit steps and, based on tests performed, make an assessment of whether processes followed and data submitted resulted in submissions to the Board of Governors that were materially complete, accurate, and timely.
3. For any exceptions noted in all audit steps make recommendations for further improvement.
4. Compare the audit program approved by the Board of Trustees Chair to the Board of Governors concerning Data Integrity Certification for completeness and/or inconsistencies to determine whether additional audit steps should be performed.
5. Work with University management as they develop any needed corrective action plan and for which they take responsibility and ownership. The action plan shall identify the issues noted, the individuals by title responsible for actions needed, and proposed dates for timely completion.
6. As a result of the above, provide an objective basis of support for the University's President and Board of Trustees Chair to sign the representations made in the Performance-Based Funding – Data Integrity Certification.
7. Upon approval by the Board of Trustees submit the final audit report to the Board of Governors.

Findings/Conclusion for Objective #9:

Overall, we concluded that the University has adequate processes for collecting and reporting Performance-Based Funding Metrics data to the Board of Governors. In addition, we can provide an objective basis of support for the University's President and Board of Trustees Chair

to sign the Performance-Based Funding – Data Integrity Certification which the BOG requested to be filed with it by March 6, 2015. We have two recommendations for improvement for which management has agreed to take appropriate actions and for which an overall action plan is attached. We have no additional procedures to offer that should be designed to support the representations.

Recommendations:

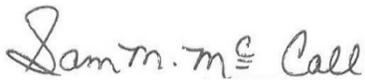
We have no recommendations for this Objective #9.

Acknowledgements

An action plan was developed by management to address each of our two recommendations.

We would like to acknowledge the full and complete cooperation and support of all involved University faculty and staff, and especially the assistance of Dr. Richard Burnette, the Florida State University Data Administrator.

Respectfully submitted,



Sam M. McCall, Ph.D., CPA, CGFM, CIA, CGAP, CIG
Chief Audit Officer

President's Response

We thank the Office of Inspector General Services for their thorough report. The Provost and the Vice President of Finance and Administration will oversee the timely implementation of the action plan.

John Thrasher, President

Audit conducted by:	Carolyn Williams-Lawyer, CISA (Assigned Lead Auditor) Kitty Aggelis, CIA, CGAP, CRMA Janice Foley, MBA, CPA, CISA, CFE, CRMA, CIG Heather Harrell, CPA
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Audit supervised by:	Sam M. McCall, Ph.D., CPA, CGFM, CIA, CGAP, CIG
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Appendix A – Management’s Action Plan

Action Steps	Responsible Employee(s)	Target Date
<ol style="list-style-type: none"> 1. University administrators will periodically check on the progress of the ongoing process to finish the scoping and development of the SUDS reporting structures so as to assure timely reporting. They will continually assess the allocation of resources and the assignment of priorities to accomplish this end. 2. The University Data Administrator and his staff will develop SUDS-related formal written policies and procedures on Institutional Research’s Wiki web application, as they have done for certain non-SUDS policies and procedures, as soon as the reporting sources have matured. 	<p>The Provost, Vice President of Finance and Administration, and their direct reports</p> <p>Dr. Richard Burnette</p>	<p>First instance in the 2015-16 Reporting Cycle</p> <p>July 1, 2015</p>