Audit of the Performance Based Funding Metrics Data Integrity

Report No. 15/16-03

October 27, 2015
Date:          October 27, 2015

To:            Kenneth G. Furton, Provost and Executive Vice President
                Joyce Elam, Interim Vice Provost for the Office of Analysis and Information
                Management

From:          Allen Vann, Audit Director

Subject:       Audit of the Performance Based Funding Metrics, Report No. 15/16-03

Pursuant to a request by the State University System of Florida - Board of Governors
(BOG), we have completed an audit relating to the University’s performance based
funding metrics. The primary objectives of our audit were to:

1) Determine whether the processes established by the University ensures the
   reliability, accuracy, and timeliness of data submissions to the BOG, which
   support the Performance Based Funding Metrics; and,

2) Provide an objective basis of support for the University Board of Trustees Chair
   and President to sign the representations made in the Performance Based
   Funding - Data Integrity Certification which will be submitted to the Board of
   Trustees and filed with the BOG by March 1, 2016.

Overall, our audit disclosed that the University has good process controls for maintaining
and reporting performance metrics data. In our opinion, the system in all material
respects is functioning in a reliable manner. We made two recommendations to further
reduce risk that management agreed to implement.

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

Attachment

C: Albert Maury, Chair, FIU Board of Trustees
   Gerald C. Grant, Jr., Chair, FIU Board of Trustees Finance & Audit Committee
   FIU Board of Trustees Finance & Audit Committee Members
   Mark B. Rosenberg, University President
   Kenneth A. Jessell, Chief Financial Officer and Senior Vice President
   J Kristina Raattama, General Counsel
   Javier I. Marques, Chief of Staff – Office of the President
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OBJECTIVES, SCOPE, AND METHODOLOGY

Pursuant to a request by the State University System of Florida - Board of Governors (BOG), we have completed an audit of the Data Integrity over the University’s Performance Based Funding Metrics. The primary objectives of our audit were to:

(a) Determine whether the processes established by the University ensure the reliability, accuracy, and timeliness of data submissions to the BOG, which support the Performance Based Funding Metrics; and

(b) Provide an objective basis of support for the University Board of Trustees Chair and President to sign the representations made in the Performance Based Funding - Data Integrity Certification, which will be submitted to the Board of Trustees and filed with the BOG by March 1, 2016.

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

During the audit we:

1. Updated our understanding of the process flow of data for all of the relevant data files from the transactional level to their submission to the BOG;
2. Reviewed BOG data definitions, SUS Data workshop documentation, and meeting notes;
3. Interviewed key personnel including the University’s Data Administrator, functional unit leads, and those responsible for developing and maintaining the information systems;
4. Observed current practices and processing techniques;
5. Followed-up on prior audit recommendations;
6. Tested the system access controls and user privileges within the State University Database System (SUDS) application, upload folders and production data; and
7. Tested the latest data files for four of the ten performance based funding metrics submitted to the BOG as of September 30, 2015. Sample sizes and transactions selected for testing were determined on a judgmental basis.

Audit fieldwork was conducted from August to September 2015. In 2014 we issued the Audit of Performance Based Funding Metrics (Report No. 14/15-06), dated December 18, 2014. During the current audit, we observed that some recommendations previously reported as implemented by management were not fully implemented. These instances are highlighted in applicable sections of this report.
BACKGROUND

The Florida Board of Governors (BOG) has broad governance responsibilities affecting administrative and budgetary matters for Florida’s 12 public universities. Beginning in fiscal year 2013-2014, the BOG instituted a performance funding program, which is based on 10 performance metrics used to evaluate the institutions on a range of issues including graduation and retention rates, job placement, and cost per degree, among other things. Two of the 10 metrics are Choice metrics; one picked by the BOG and one by each University’s Boards of Trustees. These metrics were chosen after reviewing over 40 metrics identified in the Universities’ Work Plans.

The BOG model has four guiding principles:

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

The Performance Funding Program also has four key components:

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

1. Percent of Bachelor’s Graduates Employed and/or Continuing their Education Further;
2. Average Wages of Employed Baccalaureate Graduates;
3. Cost per Undergraduate Degree;
4. Six Year Graduation Rate (Full-time and Part-time FTIC);
5. Academic Progress Rate (2nd Year Retention with GPA Above 2.0);
6. Bachelor's Degrees Awarded in Areas of Strategic Emphasis (includes STEM);
7. University Access Rate (Percent of Undergraduates with a Pell-grant);
8. Graduate Degrees Awarded in Areas of Strategic Emphasis (includes STEM);
9. Board of Governor’s Choice - Percent of Bachelor Degrees Without Excess Hours; and
10. Board of Trustee’s Choice - Bachelor's Degrees Awarded to Minorities.

The following table summarizes the performance funds allocated for the fiscal year 2015-2016 using the performance metrics results from 2013-2014, wherein FIU earned 39 points.

| Florida Board of Governors Performance Funding Allocation, 2015-2016 |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Points | Allocation of State Investment | Allocation of Institutional Investment | Total Performance Funding Allocation |
| UF | 44 | $30,598,527 | $46,582,818 | $77,181,345 |
| USF | 42 | $23,627,973 | $35,165,896 | $58,793,869 |
| FIU | 39 | $18,599,436 | $27,086,005 | $45,685,441 |
| UCF | 39 | $23,096,767 | $34,581,558 | $57,678,325 |
| FGCU | 38 | $4,940,666 | $8,234,443 | $13,175,109 |
| FAU | 37 | $11,366,318 | $18,943,864 | $30,310,182 |
| UWF | 37 | $5,876,438 | $9,794,063 | $15,670,501 |
| FSU | 36 | $24,945,913 | $41,576,522 | $66,522,435 |
| UNF | 36 | $6,947,962 | $11,579,937 | $18,527,899 |
| NCF | 35 | - | $2,457,467 | $2,457,467 |
| FAMU | 26 | - | $13,997,427 | $13,997,427 |
| Total | $150,000,000 | $250,000,000 | $400,000,000 |

*The maximum point an institution can score is 50. Institutions scoring 25 points or less or the three lowest scoring universities will not receive any State Investment. Any ties in scores will go to the benefit of the university.
On September 10, 2015, the University Provost announced a restructuring in which the Office of Analysis and Information Management (AIM) would merge the efforts of the Office of Planning and Institutional Research (OPIR), amongst other offices, into a single office. OPIR is now referred to as Institutional Research (IR). One of the goals of AIM will be to provide the University community with convenient and timely access to information needed for planning and data driven decision-making and to respond to data requests from external parties. IR has been the official source of FIU’s statistics, providing statistical information to support decision-making processes within all academic and administrative units at FIU, preparing reports and files for submission to the BOG and other agencies. It is also responsible for data administration, surveys, assessment of instruction, enrollment planning, and strategic planning. The Director of Institutional Research/Data Administrator reports to the newly appointed Interim Vice Provost for AIM, and is responsible for gathering data from all applicable units, preparing the data to meet BOG data definitions and requirements, and submitting the data. Throughout this report we will refer to AIM, which will encompass IR.

At FIU, the Performance Funding Metrics reporting process flow consists of four layers that range from the University Production environment to the State University Database System application, as follows: (1) The Production data originated at the functional units, the Registrar’s Office, Academic Advising, Financial Aid, and Financial Planning departments is sent to (2) Staging tables (or directly to Upload folders). In the Staging environment, dedicated developers perform data element calculations that are based on BOG guidelines and are used to develop the Internal Portal. Once the calculations are completed, the data is formatted into text files and moved to an (3) Upload folder. Users then log into the (4) State University Database System (SUDS) and depending on their roles, they upload, validate, or submit the data.
The diagram below illustrates the operational controls and the information system access controls currently implemented in the overall data element process flow.
FINDINGS

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

Accordingly, in our opinion, this report provides an objective basis of support for the Board of Trustees Chair and the University President to sign the representations made in the BOG Performance Based Funding – Data Integrity Certification, which the BOG requested be filed with them by March 1, 2016.

Our evaluation of FIU's operational and system access controls that fall within the scope of our audit is summarized in the following table:

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>SATISFACTORY</th>
<th>FAIR</th>
<th>INADEQUATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Controls</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Policy &amp; Procedures Compliance</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Effect</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Information Risk</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>External Risk</td>
<td></td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

**INTERNAL CONTROLS LEGEND**

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>SATISFACTORY</th>
<th>FAIR</th>
<th>INADEQUATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Controls</td>
<td>Effective</td>
<td>Opportunities exist to improve effectiveness</td>
<td>Do not exist or are not reliable</td>
</tr>
<tr>
<td>Policy &amp; Procedures Compliance</td>
<td>Non-compliance issues are minor</td>
<td>Non-compliance issues may be systemic</td>
<td>Non-compliance issues are pervasive, significant, or have severe consequences</td>
</tr>
<tr>
<td>Effect</td>
<td>Not likely to impact operations or program outcomes</td>
<td>Impact on outcomes contained</td>
<td>Negative impact on outcomes</td>
</tr>
<tr>
<td>Information Risk</td>
<td>Information systems are reliable</td>
<td>Data systems are mostly accurate but can be improved</td>
<td>Systems produce incomplete or inaccurate data which may cause inappropriate financial and operational decisions</td>
</tr>
<tr>
<td>External Risk</td>
<td>None or low</td>
<td>Potential for damage</td>
<td>Severe risk of damage</td>
</tr>
</tbody>
</table>
The result of the review of our objectives follows:

1. Review of Processes Flow of Data

During the prior year’s audit, the Data Administrator provided us with an understanding of how the University ensured the completeness, accuracy, and timely submission of data to the BOG. Based on our conversation during this year’s audit with the Data Administrator and other key personnel, no significant changes have occurred to the process flow of data.

The AIM developed a tool within PeopleSoft that generates edit reports similar to the ones found in the State University Database System (SUDS). This tool allows functional unit users more time to work on their file(s) since the BOG edits are released closer to the submission deadline. The purpose of the review is for functional unit users to correct any problems concerning transactional errors before submitting the files. During the prior audit, we found only the Registrar’s Office using the tool (however, they handle 5 of the 10 metrics). After the prior audit, the tool use was extended and was implemented in the Office of Financial Aid and the Graduation Office. The Data Administrator’s team then routinely reviews the error reports and summary reports to identify and correct any data inconsistencies. According to the AIM, they plan to continue to extend the use of the tool to all appropriate users.

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

We also met with the Data Administrator to update our understanding of the processes in place to gather, test, and ensure that only valid data, as defined by the BOG, is timely submitted to the BOG. As explained, the Data Administrator’s team is responsible for the day-to-day reporting and understands the functional process flow, and that the Assistant Director of University Computer Systems is responsible for the data and understands the technical process flow.

<table>
<thead>
<tr>
<th>Steps</th>
<th>BOG Files Submission Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The PeopleSoft team and the Office of Financial Planning (Metric 3) extracts data from the PeopleSoft database. Data are formatted according to BOG data elements definitions and table layouts.</td>
</tr>
<tr>
<td>2.</td>
<td>The PeopleSoft team and the Office of Financial Planning (Metric 3) uploads data to SUDS and runs edits.</td>
</tr>
<tr>
<td>3.</td>
<td>SUDS edits the data for possible errors and generates dynamic reports.</td>
</tr>
<tr>
<td>4.</td>
<td>Functional unit users are notified that edits are ready to be reviewed.</td>
</tr>
<tr>
<td>5.</td>
<td>Functional unit users review the edits and make any required transactional corrections in the PeopleSoft database.</td>
</tr>
</tbody>
</table>
**Steps**

<table>
<thead>
<tr>
<th>Steps</th>
<th>BOG Files Submission Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>AIM Lead/PS Team/Functional unit users communicate by email, phone or in person about any questions/issues related to the file.</td>
</tr>
<tr>
<td>7.</td>
<td>Steps 1-6 are repeated until the freeze date.</td>
</tr>
<tr>
<td>8.</td>
<td>On the freeze date, a final snapshot of the production data is taken.</td>
</tr>
<tr>
<td>9.</td>
<td>The file is finalized, making sure all Level-9 (critical) errors were corrected or can be explained.</td>
</tr>
<tr>
<td>10.</td>
<td>AIM Lead reviews SUDS reports, spots-checks data and contacts functional unit users if there are any pending questions.</td>
</tr>
</tbody>
</table>

In summary, the data is extracted from the PeopleSoft system and moved to a staging table where data calculation is performed for the elements required by the BOG. There are four layers within the data process flow that included Production, Staging, Upload and the SUDS application. The Production Data element is extracted from Financial Aid, Academic Advising, and the Registrar’s Office. The AIM in collaboration with four application developers from University Technology Services (UTS) translated the production data into separate staging database tables where the data elements were then programatically calculated. Data was then extracted from the Staging tables, formatted into specific file formats, and then uploaded to the SUDS online application. Separately, the Office of Financial Planning extracts, translates and uploads data for Metric 3.

**Follow-up on Timely Submissions**

During the prior audit, we noted that there were instances where submissions were late. As a result, we recommended that the AIM “Further examine past instances of submittal delays to determine what steps can be taken to provide for timelier submittals. For example, rolling out OPIR’s [now AIM] internal edit tools to other users may speed up the process.”

As noted previously, the AIM has rolled out the internal edit tools to an additional two functional areas during this past year. As for the timely submission of data, the AIM used the due date schedule provided by the BOG as part of the SUS data workshop to keep track of the files due for submittal and their due dates. The AIM also maintains a schedule for each of the files to be submitted, which includes meeting dates with the functional unit leads, file freeze date, file due date, and actions (deliverables) for each date on the schedule. We used data received directly from the BOG-IRM Office in addition to data provided by AIM to review the timeliness of actual submittals.

The following table reflects the due dates and actual submittal dates of all relevant files submitted during 2015:

<table>
<thead>
<tr>
<th>File</th>
<th>Title</th>
<th>Term</th>
<th>Due Date</th>
<th>Submitted Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>RET</td>
<td>Retention</td>
<td>Annual 2013-2014</td>
<td>01/21/2015</td>
<td>03/04/2015</td>
</tr>
<tr>
<td>SIF</td>
<td>Student Instruction File</td>
<td>Spring 2015</td>
<td>06/11/2015</td>
<td>06/11/2015</td>
</tr>
<tr>
<td>SIFD</td>
<td>Degrees Awarded</td>
<td>Spring 2015</td>
<td>07/01/2015</td>
<td>07/01/2015</td>
</tr>
<tr>
<td>OB</td>
<td>Operating Budget</td>
<td>Annual 2015-2016</td>
<td>08/18/2015</td>
<td>08/18/2015</td>
</tr>
<tr>
<td>File</td>
<td>Title</td>
<td>Term</td>
<td>Due Date</td>
<td>Submitted Date</td>
</tr>
<tr>
<td>------</td>
<td>------------------------------------</td>
<td>------------------</td>
<td>--------------</td>
<td>----------------</td>
</tr>
<tr>
<td>SCD</td>
<td>Salary Category Detail</td>
<td>Annual 2015</td>
<td>08/18/2015</td>
<td>08/18/2015</td>
</tr>
<tr>
<td>ADM</td>
<td>Admissions File</td>
<td>Summer 2015</td>
<td>09/04/2015</td>
<td>09/04/2015</td>
</tr>
<tr>
<td>ADM</td>
<td>Admissions File</td>
<td>Fall 2015</td>
<td>09/25/2015</td>
<td>09/25/2015</td>
</tr>
<tr>
<td>SIF</td>
<td>Student Instruction File</td>
<td>Summer 2015</td>
<td>09/28/2015</td>
<td>09/29/2015</td>
</tr>
<tr>
<td>SIF</td>
<td>Student Instruction File</td>
<td>Summer 2015</td>
<td>09/28/2015</td>
<td>09/29/2015</td>
</tr>
</tbody>
</table>

**Conclusion:**

Our review disclosed that the process used by the Data Administrator provides reasonable assurance that complete, accurate and for the most part timely submissions occurred. There were no discernable reasons for the few late filings. No material weaknesses were found.
2. Prior System Access Controls and User Privileges Follow-up

Access control testing included follow-up on prior audit recommendations and examination of user privileges within the State University Database System (SUDS) application, upload folders and production data. In our prior audit, we recommended that the Office of Analysis and Information Management implement formal access procedures that provide for: a) tracking State University Database System access requests and timely deactivation of terminated user's access; b) limiting access to production data as appropriate; and c) the deactivation of the delivered generically-named user account. Management agreed with the recommendations and responded that they would develop an electronic access request form, establish annual communication to remind departments of the importance of data integrity and remove the generically-named database user account.

a. Formal tracking of access requests and timely deactivation

On March 20, 2015, the OPIR-BOG Business Process Manual document was implemented. The document requires that the functional unit lead create a PAWS ticket when requesting new user access or making changes to existing SUDS accounts. Since its implementation, there were two new users added and one modified account. By containing the user's name, access roles and purpose, the PAWS' tickets were properly created by the functional unit lead and adequately followed the Business Process Manual.

The Business Process Manual document states that the SUDS is reviewed annually to determine if any security changes are required. Just prior to the PAWS ticket requirement, 10 active employees' access to the SUDS were deactivated. Our testing determined that 11 of the remaining 43 active user accounts had their passwords expire in 2014. On average, the passwords were expired for 512 days.
The Business Process Manual document states that it is the responsibility of the functional unit lead to notify AIM’s Security Manager when an employee no longer requires SUDS access. Over time, job duties may change as the user account sits dormant. There is a higher degree of risk of inappropriate access as compared to actively used accounts should the dormant account become reactivated. We spoke with two of the functional unit leads and they agreed that the user accounts should be deactivated. The Office of Analysis and Information Management can reduce the risk of inappropriate access by creating PAWS tickets to deactivate users and expired accounts.

b. **Limit access to production data**

Figure 1 – *Production Data Elements Process Flow* illustrates the four departments of Financial Planning, Financial Aid, Academic Advising and the Registrar’s Office’s data that feed into the production system available to the Office of Analysis and Information Management. Prior audit testing identified 17 individuals that had the ability to edit one or more of 18 performance based funding data fields in production. The Office of Analysis and Information Management responded by sending a memo on January 28, 2015 to the respective Vice Presidents and Deans requesting that they review their employee’s access to production data that could have an impact on the performance funding metrics. Our testing of the production data fields revealed that access remained mainly unchanged. In the production environment the edit capability of software developers, an associate dean, and senior management from the Registrar’s Office, increases the data integrity risk to performance based funding calculations. In addition to reviewing employee’s production access, an audit log on the identified production data fields could be reviewed at a later date. This would add an additional layer of protection in reducing the data integrity risk to performance based funding production data.

Not all of the data uploaded to the State University Database System flows through staging tables. The Office of Financial Planning uploads their performance based funding data directly. The department copies their delimited-text files to specific folders and then only specific users are able to upload the data files to the State University Database System.
We examined the user lists of the upload folders and found that only 3 of the 21 users had the appropriate access to upload the Operating Budget performance data. By limiting access to the upload folder reduces the integrity risk of an inappropriate modification to performance based funding data. The Assistant Vice President of Financial Planning agreed with our finding and is creating a new user group for those directly involved in the State University Database upload process.

c. **Deactivation of generically-named database user account**

In our prior audit, our testing of database accounts identified a generically-named user account that still used the default password. The PeopleSoft Team responded that they removed the user account. During this year's audit testing, we noted that the user account was not listed. Additionally, the number of Database Administrators was adequately reduced from 8 to 5 user accounts.

**Conclusion:**

The combination of system access control deficiencies noted above, while less severe than a material weakness in internal control, should nevertheless be promptly corrected or mitigated to reduce the likelihood that an unauthorized data change can be made and go undetected. Some of the access control deficiencies were noted in the prior year audit.
3. Follow-up on Adequacy of Policies and Procedures

During the prior year audit, it was noted that, “Although the staff at the OPIR [now AIM] is knowledgeable of the BOG requirements and updates, we observed that there were no formal policies and procedures or written documentation over the process of data gathering, review and submittal in existence to ensure data integrity for submission to the BOG.” As a result, we recommended the AIM “Prepare internal written procedures that serve to enhance documentation of the steps taken to ensure data integrity including: data gathering, review, verification and analysis processes, and submission procedures.”

As a result of our prior audit recommendation, on March 20, 2015 the AIM developed the aforementioned OPIR-BOG Business Process Manual. The Manual addresses BOG SUDS Portal Security, BOG SUDS File Submission Process, and details of the process for each file submitted to the BOG. It is also evident that the Manual has been continually updated since its implementation. This Manual became invaluable during the year when AIM experienced key employee turnover.

**Conclusion:**

Management has developed a business process manual to address our prior audit finding regarding the lack of formal policies and procedures or written documentation over the process of data gathering, review and submittal in existence to ensure data integrity for submission to the BOG.
4. Data Accuracy Testing

We identified the main data files and tables related to the calculations of the four performance based funding metrics under review, as follows:

- Degrees Awarded File;
- Enrollments Table;
- Student Instruction File;
- Student Financial Aid File; and
- Person Demographic Table

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

Data accuracy for four of the ten metrics was tested by reviewing the corresponding data files, tables and elements, and by tracing them to the source document data in PeopleSoft. A number of reconciliations were also performed. Testing was limited to the PeopleSoft data itself as the objective of our testing was to corroborate that the data submitted was in fact unabridged from/identical to the data contained in the University’s PeopleSoft system.

Metrics Testing

The 4 performance based funding metrics tested were as follows:

**Common to All Universities:**
- Metric 6 - Bachelor’s Degrees Awarded in Areas of Strategic Emphasis (includes STEM).
- Metric 7 - University Access Rate Percent of Undergraduates with a Pell-grant.
- Metric 8 - Graduate Degrees Awarded in Areas of Strategic Emphasis (includes STEM).

**Institution-Specific Metrics:**
- Metric 10 - Bachelor’s Degrees Awarded to Minorities.

**Metrics 6, 8, and 10**

The Degrees Awarded File is used for 5 of the 10 performance based funding metrics. During the current audit, data accuracy testing for the Degrees Awarded File focused on: Metric 6-Bachelor’s Degree Awarded within Programs of Strategic Emphasis; Metric 8-Master’s Degree Awarded within Program of Strategic Emphasis; and Metric 10-Bachelor’s Degrees Awarded to Minorities, as the other two metrics (Metric 1 and 2) also utilize external data and are calculated by the BOG, thus they are considered low-risk.
The most current submission file contiguous with our audit fieldwork was obtained. (The File is uploaded after every semester, thus the spring 2015 file uploaded in June 2015 was the most current file as of September 30, 2015.)

The Degrees Awarded File submitted in spring 2015 contained 4,701 students earning 4,959 degrees (4,443 students earning single degrees, 210 students earning 420 double-major degrees, and 48 students earning 96 dual degrees). The BOG rule allows for the multiple degrees, not double-majors, to be counted individually. Thus, double-majors are counted as half (.5).

Included in the 4,959 degrees were 44 out-of-term degrees. The out-of-term degrees were earned in spring, summer, and fall 2014. The Office of the Registrar informed us that the late reporting was due to either the student submitting the completion form late or an academic department delay.

Our reconciliation of the Degrees Awarded File submitted to the BOG and the file provided to us by the Office of the Registrar to test against showed differences in the number of degrees reported due to timing differences in the posting of degrees, including the 44 out-of-term degrees reported above. The reasons for 23 degrees being posted late (after the spring 2015 Degrees Awarded File was submitted to the BOG) were reviewed, as well as the supporting documentation provided by the Office of the Registrar. The reasons degrees were posted late varied between students applying late for graduation and the academic department approving the student to graduate late. The 23 degrees earned in spring 2015 will be reported to the BOG as part of the subsequent Degrees Awarded File submission.

The data elements applicable to the three Performance Based Funding metrics tested remained unchanged from the prior audit period. We reviewed the applicable data elements and obtained the definitions for each of the elements to be tested.

Thirty-two students’ records were selected for testing. The students’ records (as it relates to the applicable data elements for Performance Based Funding) in PeopleSoft were the same as reported to the BOG, and they earned the required credit hours for the degree program awarded. For 6 of the 32 students who earned two degrees and/or double majors, their records were also verified to ensure that they were awarded the degrees as reported to the BOG. There were no exceptions as to the data provided to the BOG for these 32 students.

The CIP code for FIU and the CIP code for Areas of Strategic Emphasis were identified, specifically for Metrics 6 and 8. Without exception, the academic program for the 32 students reported to the BOG was the same as the student information contained in students’ records in PeopleSoft.

The controls over the approval/certification process of graduating students were also reviewed. The University Registrar informed us that his office is responsible for processing students for graduation. The graduation approval process is as follows:
Once the student applies for graduation and the system approves the student as having fulfilled the minimum requirements for the program, the Advisor advances the form to the Chair as “will graduate” or “will not graduate”. After reviewing the fulfilment requirements, the Chair approves and advances the form to the Dean. The Dean approves and advances the form to the Graduation Office who designates the form as “award”. Student is then notified of the approval and any pending items to clear prior to graduation. The Registrar’s Office orders diplomas for all students approved for graduation. If a student’s application for graduation is denied, an explanation of the reason for denial is given and the student can re-apply once requirements are completed.

The approval documentation was reviewed for 11 of the 32 students sampled and we determined that the approval process was followed for all 11 students and that the documentation provided supported that each of the students fulfilled their program requirements.

For Metric 10, the person demographic elements were identified and 15 students were selected from the Enrollment Table and verified that the student’s Ethnicity/Race reported to the BOG matched the data in PeopleSoft. (All other applicable data elements were tested as part of Metrics 6 and 8).

**Conclusion:**

Based on the procedures performed and the results obtained, the data submitted to the BOG in the Degrees Awarded File for Metrics 6, 8, and 10 accurately reflects the data in the University’s PeopleSoft system.

**Metric 7**

The Student Instruction File is used for Metric 7 (University Access Rate Percent of Undergraduates with a Pell-grant). This metric is based on the number of undergraduates enrolled during the fall term who received a Pell-grant during the term. Unclassified students, who are not eligible for Pell-grants, were excluded from this metric.

The Student Information File (SIF) – Enrollment Table for fall 2014 and the Student Financial Awards File (SFA) for the 2013-2014 academic year were obtained, as these were the most current submissions as of September 30, 2015. The Enrollment Table contained enrollment records for 54,099 students and the SFA File contained financial aid award information for 43,937 students.

As part of testing the Enrollment Table, a sample of 25 students was selected for testing and verified against the data provided to the BOG, more specifically that the BOG specified data elements’ information matched the University’s data maintained
in PeopleSoft. No differences were found in the elements reviewed against the data submitted to the BOG for the 25 students tested.

**Prior Audit Follow-up**

During the prior audit, we had found an exception resulting from one student’s most recent admission date, which was 1 of the 5 tested elements. We determined that the student was admitted in fall 2011 as an undergraduate student and in spring 2014 as a certificate-seeking student. The student enrollment record in PeopleSoft had both of the admission dates for the student and his most recent admission was reported to the BOG. The AIM staff informed us last year that they were in discussions with the Registrar’s Office to adjust for these occurrences. The prior recommendation was to, “Continue to work with the Office of the Registrar to resolve how to properly report those limited instances where there are multiple admission dates for individual students.”

In our follow-up of this matter, the AIM staff informed us that they continue to have discussions with the Registrar’s Office but at this time similar instances can be found within the database.

**Conclusion:**

The reported data was successfully traced to source documents on a sample basis without exceptions. However, the prior audit finding remains unresolved and could result in inaccurate data being submitted to the BOG for those cases where a student is admitted both as a degree-seeking student and as a certificate-seeking student.
5. Data Resubmissions

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

The Data Administrator has previously noted that “Resubmissions are needed in the case of data inconsistencies detected by us or the BOG staff after the file has been submitted. Of course, our goal is to prevent any resubmissions; however, there are some instances when this happens. A common reason for not detecting the error before submission is that there are some inconsistencies that only arise when the data is cross-validated among multiple files... We used the resubmission process as a learning tool to identify ways to prevent having the same problems in the future. When logic changes are implemented or added it is an additional edit in our internal tool.”

In regards to the frequency of the resubmissions, a list was provided by the BOG-IRM of all relevant files submitted. For files with due dates between October 1, 2014 and July 1, 2015, the University submitted 14 files to the BOG, 3 of which were eventually resubmitted. In addition, there were 6 relevant files resubmitted with original due dates prior to October 1, 2014.

The following table describes the 9 files resubmitted and the reasons for resubmission.

<table>
<thead>
<tr>
<th>No.</th>
<th>Due Date</th>
<th>Resubmitted Date</th>
<th>File Submission</th>
<th>Term/Year</th>
<th>Reason for Resubmission</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10/22/2013</td>
<td>2/27/15</td>
<td>Expenditure Analysis</td>
<td>Annual 2013</td>
<td>Had to be resubmitted because whenever there is a change in the IRD or Operating Budget file, the EA file needs to be re-run and resubmitted. The IRD file below (No. 3) was also resubmitted the same day.</td>
</tr>
<tr>
<td>2</td>
<td>10/21/2014</td>
<td>3/3/15</td>
<td>Hours-to-Degree</td>
<td>Annual 2014</td>
<td>The BOG noticed an error in one of their edit reports and changed it after the file had been submitted. They gave the universities a chance to resubmit the file after correcting any errors that emerged as a result of their change.</td>
</tr>
<tr>
<td>No.</td>
<td>Due Date</td>
<td>Resubmitted Date</td>
<td>File Submission</td>
<td>Term/Year</td>
<td>Reason for Resubmission</td>
</tr>
<tr>
<td>-----</td>
<td>------------</td>
<td>------------------</td>
<td>-------------------</td>
<td>-------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>3</td>
<td>10/8/2013</td>
<td>2/27/15</td>
<td>Instruction &amp; Research</td>
<td>Annual 2012</td>
<td>Resubmitted to correct an error in effort relating to non-sponsored research. Non-sponsored research effort was being reported as other instructional effort.</td>
</tr>
<tr>
<td>4</td>
<td>1/17/2014</td>
<td>2/25/2015</td>
<td>Student Instruction</td>
<td>Fall 2013</td>
<td>Resubmitted as part of SIF 2013-2014 files as explained below (No. 5).</td>
</tr>
<tr>
<td>5</td>
<td>6/12/2014</td>
<td>2/24/2015</td>
<td>Student Instruction</td>
<td>Spring 2014</td>
<td>Resubmitted to correct change in student grades such as pending grades that excluded student from the retention file. This action required all SIF files for 2013-2014 period to be resubmitted.</td>
</tr>
<tr>
<td>6</td>
<td>10/15/2013</td>
<td>12/15/2014</td>
<td>Hours-to-Degree</td>
<td>Annual 2013</td>
<td>Resubmitted to correct the highest degree held or number of majors for seven students. (Some of the students had received a degree from another State of Florida university previously).</td>
</tr>
<tr>
<td>7</td>
<td>6/25/2014</td>
<td>12/1/2014</td>
<td>Degrees Awarded</td>
<td>Spring 2014</td>
<td>Resubmitted as the correction in the Hours-to-Degree above affected the data contained in Degrees Awarded file.</td>
</tr>
<tr>
<td>8</td>
<td>1/16/2015</td>
<td>2/2/2015</td>
<td>Student Instruction</td>
<td>Fall 2014</td>
<td>FIU's Controllers Office did not code the out of state waivers correctly. A resubmission was required to submit the correct waivers information.</td>
</tr>
<tr>
<td>9</td>
<td>10/1/2014</td>
<td>2/24/15</td>
<td>Student Instruction</td>
<td>Summer 2014</td>
<td>Resubmitted as part of SIF 2013-2014 files as explained above (No. 5).</td>
</tr>
</tbody>
</table>

Resubmission requests originated from both the BOG and FIU. The reasons for resubmissions varied, such as the BOG requesting edits/additional information when a file does not reconcile with other records, FIU discovering some errors after submission, or when a resubmission of a related file triggered correction and resubmission. In regards to the resubmissions being authorized, in all instances observed, the BOG staff authorized the resubmission by reopening the SUDS system for resubmission.
The 9 resubmissions were necessary and authorized, and as the Data Administrator explained previously, some of the reasons for the resubmission are the subject of discussions between FIU and the BOG on how the process could be improved.

**Conclusion:**

There were no reportable material weaknesses or significant control deficiencies that surfaced relating to resubmissions.
6. Review of University Initiatives

A listing of University initiatives that are meant to bring the University’s operations and practices in line with SUS Strategic Plan goals were obtained. Below is a list of such initiatives:

- Implemented the learning assistant program
- Redesigned gateway courses
- Hired a student success manager
- Implemented Adjunct to Instructor conversions in Math and English to improve teaching
- Improved student financial aid support model (i.e., Noel Levitz)
- Implemented faculty incentives for new online and hybrid teaching
- Restructured the advising model
- Graduation Success Initiative
- STEM success, HHMI, HHMI2, STEM Transformation Institute
- Preparing students for the workforce through internships and private partnerships

The University also listed the following initiatives with the SUS as part of its intended use of the 2014-2015 performance funds:

- Implementation of an academic term redesign project to assist students in enrolling and progressing more timely towards their degree goals; and
- Investing in classroom enhancements, initiatives to retain students, and student academic support to help students excel in their degree programs.

Conclusion:

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

The Office of Analysis and Information Management should:

1. Work with the functional units and PeopleSoft Security Team to:
   a) Review and deactivate the State University Database System user accounts with expired passwords from 2014 and create PAWS tickets for the deactivated user accounts;
   b) Limiting access to production data as appropriate; and
   c) Add audit logging capability to production fields, where appropriate, to reduce the data integrity risk to the State University Database System.

2. Continue to work with the Office of the Registrar to resolve how to properly report those limited instances where there are multiple admission dates for individual students.

Management Response/Action Plan:

1. a) AIM developed an electronic access request form using the PAWS system. PAWS allows us to keep track of the requests and the final actions taken. The form is also being utilized to request user access deactivation. It should be noted that, with the exception of the few employees authorized to upload data or to submit the files, access to SUDS is limited to a “validator” role that provides only view access to the data.

   The functional units were provided with an access policy/training guide. The guide includes a deactivation process where the directors of the functional units are required to inform AIM of any changes in their employees’ access requirements. AIM will also schedule an annual review of SUDS users at the beginning of each fall term to confirm that all SUDS users meet the requirements to keep their access.

   Additionally, AIM will conduct an annual review of active SUDS users to see when they last accessed the system. For those who have not accessed the system for the entire year, we will be reaching out to their supervisors to ensure that the employee in question still requires SUDS access.

   Implementation date: Annual review will be held December 15, 2015.

   b) AIM does not control access to production database systems but has, and will continue to establish annual communications with all Vice Presidents and Directors to remind them of the importance of data integrity; particularly as it...
relates to the data that feeds the performance metrics and encourage them to manage production access appropriately.

Implementation date: January 2016, with annual follow-up.

c) AIM will contact PantherSoft security to create an audit trail report, which will indicate whenever a change is made to any of the 18 high-risk fields identified in the audit. Access to this report will be restricted to only the AIM data administrator, and her designees.

Implementation date: December 2015, with quarterly follow-up.

2. AIM will continue to have communications with the University Registrar to discuss any issues related to data integrity.

Implementation date: November 2015, with quarterly follow-up.
## APPENDIX A

### In-Scope BOG Data Elements

<table>
<thead>
<tr>
<th>No.</th>
<th>Metric</th>
<th>Definition</th>
<th>Submission/Table/Element Information</th>
<th>Relevant Submission(s)</th>
</tr>
</thead>
</table>
| 6   | Bachelor's Degrees Awarded within Programs of Strategic Emphasis      | This metric is based on the number of baccalaureate degrees awarded within the programs designated by the Board of Governors as ‘Programs of Strategic Emphasis’. A student who has multiple majors in the subset of targeted Classification of Instruction Program codes will be counted twice (i.e., double-majors are included). | Submission: SIFD  
Table: Degrees Awarded  
Elements:  
01082 – Degree Program Category  
01083 – Degree Program Fraction of Degree Granted (This field is a summed field)  
01045 – Reporting Institution  
01412 – Term Degree Granted  
01081 – Degree Level Granted  
02015 – Major Indicator                                                                 | June 24, 2015                                                                                                                                                                                                                                                                                                                                                                                                   |
| 7   | University Access Rate  
Percent of Undergraduates with a Pell-grant                          | This metric is based on the number of undergraduates, enrolled during the fall term, who received a Pell-grant during the fall term. Unclassified students, who are not eligible for Pell-grants, were excluded from this metric.                                                                                                                                                                                                                     | Submission: SIF  
Table: Enrollments  
Elements:  
02041 – Demo Time Frame  
01045 – Reporting University  
01413 – Student at Most Recent Admission Type  
01060 – Student Classification Level  
01053 – Degree Level Sought  
01107 – Fee Classification Kind  
Submission: SFA  
Table: Submission: SIFD  
Table: Degrees Awarded  
Elements:  
01082 – Degree Program Category  
01083 – Degree Program Fraction of Degree Granted (This field is a summed field)  
01045 – Reporting Institution  
01412 – Term Degree Granted  
01081 – Degree Level Granted  
02015 – Major Indicator  
Elements:  
01045 – Reporting University  
02040 – Award Payment Term  
02037 – Term Amount  
01253 – Financial Aid Award Program Identifier                                                                 | January 16, 2015                                                                                                                                                                                                                                                                                                                                    |
| 8   | Graduate Degrees Awarded within Programs of Strategic Emphasis       | This metric is based on the number of graduate degrees awarded within the programs designated by the Board of Governors as ‘Programs of Strategic Emphasis’. A student who has multiple majors in the subset of targeted Classification of Instruction Program codes will be counted twice (i.e., double-majors are included). | Submission: SIFD  
Table: Degrees Awarded  
Elements:  
01082 – Degree Program Category  
01083 – Degree Program Fraction of Degree Granted (This field is a summed field)  
01045 – Reporting Institution  
01412 – Term Degree Granted  
01081 – Degree Level Granted  
02015 – Major Indicator                                                                 | June 24, 2015                                                                                                                                                                                                                                                                                                                                    |
| 10  | Bachelor's Degrees Awarded to Minorities (BOT Metric)                | This metric is the number, or percentage, of baccalaureate degrees granted in an academic year to Non-Hispanic Black and Hispanic students. This metric does not include students classified as Non-Resident Alien or students with a missing race code.                                                                                                                                   | Submission: SIFD  
Table: Degrees Awarded  
Elements:  
01082 – Degree Program Category  
01083 – Degree Program Fraction of Degree Granted (This field is a summed field)  
01045 – Reporting Institution  
01412 – Term Degree Granted  
01081 – Degree Level Granted                                                                 | June 24, 2015                                                                                                                                                                                                                                                                                                                                    |
<table>
<thead>
<tr>
<th>No.</th>
<th>Metric</th>
<th>Definition</th>
<th>Submission/Table/Element Information</th>
<th>Relevant Submission(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Submission: SIFD</td>
<td>Summer 2013</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Table: Person Demographic Elements:</td>
<td>Fall 2013</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>01044 – Racial/Ethnic Group</td>
<td>Spring 2014</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>01491 – Hispanic or Latino</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>01492 – American Indian/Alaska Native</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>01493 – Asian</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>01494 – Black or African American</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>01495 – Native Hawaiian or Other</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pacific Islander</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>01496 – White</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>02043 – Non – resident Alien Flag</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>01497 – No Race Reported</td>
<td></td>
</tr>
</tbody>
</table>

*Definition Source for 4 – 10: State University Database System (SUDS).*