An Audit Report on

Performance Measures at the
Higher Education Coordinating Board

August 2019
Report No. 19-047

State Auditor’s Office reports are available on the Internet at http://www.sao.texas.gov/.
Overall Conclusion

The Higher Education Coordinating Board (Board) reported reliable results for all five key performance measures audited for fiscal year 2018. A performance measure result is considered reliable if it is certified or certified with qualification.

All audited performance measures were certified with qualification. The Board calculated four of the five audited performance measures using data that higher education institutions self-reported to the Board. While the reported results were accurate, the controls over measure calculation and reporting were not adequate to ensure continued accuracy. Specifically, the Board did not have documented policies and procedures for calculating and reviewing most measures, Board personnel did not document reviews of performance measure data, and the Board could strengthen controls over the collection of the performance measures data. Those issues were identified previously in the State Auditor’s Office’s 2013 audit of performance measures at the Board.

Table 1 on the next page summarizes the certification results, discussed in Chapter 1 of this report, for the five performance measures tested.
## Performance Measure Results for the Higher Education Coordinating Board (Agency No. 781)

<table>
<thead>
<tr>
<th>Related Objective or Strategy, Classification</th>
<th>Description of Performance Measure</th>
<th>Fiscal Year</th>
<th>Results Reported in ABEST</th>
<th>Certification Results a</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.1.5, Outcome</td>
<td>Percentage of University Students Graduating in Four Years b</td>
<td>2018</td>
<td>36.8%</td>
<td>Certified With Qualification</td>
</tr>
<tr>
<td>A.1.7, Outcome</td>
<td>Percentage of University Students Graduating within Six Years b</td>
<td>2018</td>
<td>60.9%</td>
<td>Certified With Qualification</td>
</tr>
<tr>
<td>A.1.9, Outcome</td>
<td>Number of Master’s Degrees, Bachelor’s Degrees, Associate’s Degrees and Certificates Awarded c</td>
<td>2018</td>
<td>333,920</td>
<td>Certified With Qualification</td>
</tr>
<tr>
<td>F.1.3, Outcome</td>
<td>Percent of First Year Medical Resident’s Headcount to Texas Medical School Graduates b</td>
<td>2018</td>
<td>115%</td>
<td>Certified With Qualification</td>
</tr>
<tr>
<td>C.1.1, Output</td>
<td>Number of Students Receiving Texas Grants d</td>
<td>2018</td>
<td>77,377</td>
<td>Certified With Qualification</td>
</tr>
</tbody>
</table>

a A performance measure is **certified** if reported performance is accurate within plus or minus 5 percent of actual performance and if it appears that controls to ensure accuracy are in place for collecting and reporting performance data.

A performance measure is **certified with qualification** when reported performance appears accurate but the controls over data collection and reporting are not adequate to ensure continued accuracy. A performance measure is also certified with qualification when controls are strong but source documentation is unavailable for testing. A performance measure is also certified with qualification if agency calculation of performance deviated from the performance measure definition but caused less than a 5 percent difference between the number reported to ABEST and the correct performance measure result.

A performance measure is **inaccurate** when the actual performance is not within 5 percent of the reported performance, or when there is a 5 percent or greater error rate in the sample of documentation tested. A performance measure also is inaccurate if the agency’s calculation deviated from the performance measure definition and caused a 5 percent or greater difference between the number reported to ABEST and the correct performance measure result.

A **factors prevented certification** designation is used if documentation is unavailable and controls are not adequate to ensure accuracy. This designation also will be used when there is a deviation from the performance measure definition and the auditor cannot determine the correct performance measure result.

b The Board calculated this fiscal year 2018 performance measure using fiscal year 2017 data, which was the most recent certified data available. The Board did not disclose this limitation in its definition for this measure.

c The Board calculated this fiscal year 2018 performance measure using fiscal year 2017 data, which was the most recent certified data available. The Board disclosed this limitation in its definition for this measure.

d **Acronym for Toward Excellence, Access and Success.**

Auditors communicated other, less significant issues separately in writing to Board management.

## Summary of Management’s Response

At the end of each subchapter in this report, auditors made recommendations to address the issues identified during this audit. The Board agreed with the recommendations in this report.
Audit Objectives and Scope

The objectives of this audit were to determine whether the Board:

- Is accurately reporting its performance measures to the Automated Budget and Evaluation System of Texas (ABEST).
- Has adequate controls in place over the collection, calculation, and reporting of its performance measures.

The scope of this audit covered five key performance measures that the Board reported for fiscal year 2018 (September 1, 2017, through August 31, 2018).
Contents

Detailed Results

Chapter 1
The Board Reported Reliable Results for Five Performance Measures Tested; However, It Should Improve Controls Over Calculating Measures and Verifying Data Completeness ............................. 1

Appendix

Objectives, Scope, and Methodology .......................... 6
Detailed Results

Chapter 1
The Board Reported Reliable Results for Five Performance Measures Tested; However, It Should Improve Controls Over Calculating Measures and Verifying Data Completeness

The Higher Education Coordinating Board (Board) reported reliable results for all five key performance measures tested for fiscal year 2018. All performance measures audited were certified with qualification (see text box).

While the reported results were accurate, the controls over performance measure calculation and reporting were not adequate to ensure continued accuracy. Specifically, the Board did not have documented policies and procedures for calculating and reviewing most measures, Board personnel did not document reviews of performance measure data, and the Board could strengthen controls over the collection of the performance measures data. In its 2013 performance measures audit of the Board, the State Auditor’s Office recommended that the Board implement policies and procedures for reporting its performance measure data into the Automated Budget and Evaluation System of Texas (ABEST) as recommended in that audit; however, the Board had not implemented policies and procedures for the calculation and review of most measures.

Auditors determined that the Board had implemented documented policies and procedures for reporting its performance measure results into the Automated Budget and Evaluation System of Texas (ABEST) as recommended in that audit; however, the Board had not implemented policies and procedures for the calculation and review of most measures.

In addition, the Board could strengthen its processes and controls over the higher education institutions’ (institutions) self-reported data by ensuring that institutions submit complete data.

Certified With Qualification

A performance measure is certified with qualification when reported performance appears accurate but the controls over data collection and reporting are not adequate to ensure continued accuracy. A performance measure is also certified with qualification when controls are strong but source documentation is unavailable for testing. A performance measure is also certified with qualification if an agency’s calculation of performance deviated from the performance measure definition but caused less than a 5 percent difference between the number reported to ABEST and the correct performance measure result.


2 The Board calculated the audited fiscal year 2018 measures (except Number of Students Receiving Texas Grants) using fiscal year 2017 data because it was the most recent certified data available. Of the four audited measures prepared using fiscal year 2017 data, the Board disclosed its use of prior year data only in its definition for Number of Master’s Degrees, Bachelor’s Degrees, Associate’s Degrees and Certificates Awarded.

Policies and Procedures

While the Board had procedures for reporting performance measure results into ABEST for all measures, it did not have documented internal policies and procedures for the calculation and review of four of the five audited performance measures. The Board had documented procedures for only one measure: Number of Students Receiving Texas\textsuperscript{4} Grants. The \textit{Guide to Performance Measure Management} (State Auditor’s Office Report No. 12-333, March 2012) (Guide) states that an agency’s written policies and procedures should clearly document all steps performed in the collection, calculation, review, and reporting of the performance measure data.

The lack of written policies and procedures increases the likelihood that performance measures could be calculated incorrectly and that the Board may not be able to reproduce the calculation results. For example, in fiscal year 2018, the Board modified the data described in the measure definition for Percent of First Year Medical Resident’s Headcount to Texas Medical School Graduates to improve the measure’s accuracy. The modifications included deducting residents from certain programs that are not residency programs in their first year. Board staff members asserted that they made the modifications based on their knowledge of the programs, but the Board did not have detailed procedures that documented the modification process. Therefore, staff members without prior knowledge of the calculation modifications may not be able to produce accurate results for that measure. Developing detailed written procedures would help provide assurance that Board personnel will calculate this measure, and all others, consistently and in a manner that matches the measure definition.

Data Review

The Board did not have documented policies and procedures for all of its data review processes, which contributed to the Board not having required documented reviews of (1) its calculations of performance measures or (2) its performance measure prior to data entry into ABEST. The Board asserted that it performed those reviews; however, auditors could not verify that the reviews occurred due to the lack of documentation. Specifically,

- The Board asserted that before it enters each performance measure’s results into ABEST, each division’s executive officer initials and dates an approval routing sheet as indication of review. However, the Board did not retain those routing sheets, which would have indicated that a review occurred.

\textsuperscript{4} Acronym for Toward Excellence, Access and Success.
As part of the quarterly report process, Board procedures require the Texas Grants program manager to compare the total number of students listed in a sample of fund request forms, which are the source documents, to the corresponding entries in its Texas Grants ledger. The Board did not have documentation to support that review.

Management asserted that it compared the final numbers for two of the audited performance measures against prior years’ results for consistency, but did not document this review. Those measures were

(1) Percentage of University Students Graduating in 4 Years and
(2) Percentage of University Students Graduating in 6 Years.

The Guide states that a supervisor or other individual should perform a documented review of the performance measure calculations to help ensure that they are consistent with the performance measure definition and free of mathematical errors. The Guide also states that those responsible for the accuracy of performance measure information should review all performance measure data entered into ABEST before the data is submitted in that system. A lack of documented reviews increases the risk that the Board could report inaccurate performance measure results in ABEST.

Data Verification

The Board had processes and controls over the institutions’ self-reported data; however, it could strengthen the controls over the collection of performance measure data by ensuring that institutions submit complete data for the measure calculations. Four of the audited performance measures relied primarily on data that institutions self-reported to the Board. While the Board has automated edit checks to help provide assurance over the accuracy of data submitted, the Board could improve its data collection process by ensuring that all records transmitted by institutions were received and included in those edit checks. By ensuring that it has all necessary data, the Board would be able to comprehensively evaluate the completeness and accuracy of the institutions’ submitted data.

---

5 The Number of Students Receiving Texas Grants performance measure is not calculated based on institutions’ self-reported data.
Recommendations

The Board should:

- Develop detailed written policies and procedures for all performance measures, including procedures for creating and retaining documentation of reviews.
- Perform and document reviews of its calculation of performance measure results.
- Perform and document reviews of the performance measure results entered into ABEST prior to submitting those results into that system.
- Consider strengthening its data collection processes by ensuring that all records transmitted by institutions are included in performance measure calculations.

Management’s Response

Recommendation 1: Management agrees with the auditor’s recommendation to develop (and strengthen existing) written policies and procedures for all performance measures, including more detailed procedures for creating and retaining documentation of reviews. Management agrees that it is important to enhance its current documentation to ensure staff unfamiliar with the measures can easily and consistently produce (and reproduce) accurate and reliable results. In response to this recommendation, management is ensuring each division has more detailed, step-by-step written policies and procedures for all key performance measures that include instructions relating to the specific location of pertinent data, the derivation of the final percentage or number reported, and when applicable, limitations on the collection of data.

Recommendation 2: Management agrees with the auditor’s recommendation to strengthen its documentation of staff calculations of performance measure results and will document that the reviews were performed.

Recommendation 3: Management agrees with the auditor’s recommendation to enhance its reviews of performance measure results entered into ABEST prior to submitting those results into the system. In response to this recommendation, management has modified existing written policies and procedures by adding an additional or secondary review by a staff member who is not in the division that prepared the draft performance measure report prior to submission into ABEST. This review will compare the
divisional submissions to the draft ABEST report. A signature page has also been added directly to the report for required signatures from the Assistant Commissioner/CFO, Deputy Commissioner of Agency Operations and Communications/COO, and Deputy Commissioner of Academic Planning and Policy/CAO to capture final review and approval of the report prior to submission into ABEST.

**Recommendation 4:** Management acknowledges that the current practice of notifying institutions about discrepancies between their reported number of records in a file and the actual number of records submitted can be strengthened from a control standpoint. To enhance controls, the number of records as reported by the institution will be incorporated into the edit report so that a discrepancy/error between institutional counts and the THECB counts will be flagged for review in the CBM report as an alert to the analyst and institution. Institutions will be asked to resolve the discrepancy along with any other errors before the report is certified.
Appendix

Objectives, Scope, and Methodology

Objectives

The objectives of this audit were to determine whether the Higher Education Coordinating Board (Board):

- Is accurately reporting its performance measures to the Automated Budget and Evaluation System of Texas (ABEST).
- Has adequate controls in place over the collection, calculation, and reporting of its performance measures.

Scope

The scope of this audit covered five key performance measures that the Board reported for fiscal year 2018 (September 1, 2017, through August 31, 2018).

Methodology

The audit methodology included auditing the Board’s reported performance measure results for accuracy and adherence to performance measure definitions, evaluating internal controls over the Board’s performance measure calculation, and reporting processes. Auditors tested the controls that impacted the performance measure collection, calculation, and reporting processes to ensure that controls were in place and operating effectively to enable the Board to continue accurately reporting its performance measures. Auditors assessed the reliability of the data obtained from the Board’s information systems that supported the performance measure data, logical access testing, and reviewing the data queries that the Board used to extract performance measure information. Auditors did not rely on sampling to support their findings, conclusions, or recommendations. Instead, auditors used techniques including recalculation, data analysis, and automated query reviews for that support.

Data Reliability and Completeness

Auditors assessed the reliability and completeness of data from the Board’s Education Data Center (EDC) system and the Statistical Analysis System (SAS) that was significant to the following four of the five audited performance measures:

- Percentage of University Students Graduating in Four Years.
- Percentage of University Students Graduating within Six Years.

- Number of Master’s Degrees, Bachelor’s Degrees, Associate’s Degrees and Certificates Awarded.

- Percent of First Year Medical Resident’s Headcount to Texas Medical School Graduates.

To do that, auditors tested (1) the automated query that the Board used to evaluate data that higher education institutions (institutions) self-reported during the Board’s data certification process; (2) the automated application used to transfer that data into the Board’s main database to ensure that the Board used all data received from institutions in its calculations; and (3) the SAS queries that the Board used to extract the data it used to calculate the performance measures. Auditors also reviewed user access. Auditors did not test the reporting institutions’ source data. Instead, they tested the Board’s certification process to determine whether the Board’s data review controls in that process correctly identified data errors as defined by the Board. Auditors also examined automated queries that perform comparative analysis of the data submitted by the institutions necessary to meet their objectives. Additionally, auditors examined the audit processes that the Board’s compliance monitoring function used to perform monitoring of data at the institutions. Auditors determined that the information and data obtained was sufficiently reliable for this audit.

Auditors also assessed the reliability of data that was significant to the fifth audited performance measure: Number of Students Receiving Texas Grants. Auditors reviewed the Excel spreadsheet that the Board internally maintained as a grant ledger for its Toward Excellence, Access and Success (Texas) Grants. To do that, auditors (1) determined that the population was complete; (2) compared all fiscal year 2018 ledger entries to source documentation; and (3) evaluated user access to the ledger. Auditors determined that for fiscal year 2018, data from that spreadsheet was sufficiently reliable for the purposes of this audit.

Information collected and reviewed included the following:

- Student data, including graduation and enrollment data, that was significant to the performance measures tested.

- Completed Texas Grant fund request forms.

- Texas Grant expenditure data, including the number of grant recipients, in the fiscal year 2018 Texas Grant ledger.
• Board policies and procedures.

• The Board’s supporting documentation of its performance measure calculations.

• Reports of information system users and automated queries.

• Selected financial aid audits and formula funding audits performed by the Board’s compliance monitoring function and the supporting working papers for those audits.

**Procedures and tests conducted** included the following:

• Interviewed Board staff to gain an understanding of the processes used to calculate performance measures.

• Evaluated the sufficiency of the Board’s policies and procedures to determine whether they were adequate to help ensure the correct calculation of the performance measures.

• Reviewed performance measure calculations for accuracy and to determine whether the calculations were consistent with the methodology on which the Board, the Legislative Budget Board, and the Governor’s Office of Budget, Planning, and Policy agreed.

• Used original supporting documentation to recalculate reported performance measures to verify their accuracy and the effectiveness of controls.

• Reviewed the Board’s queries used to retrieve, calculate, and report performance measures.

• Tested EDC data for the presence of error values to ensure that automated edit checks used during the data certification process detected and corrected those error values.

• Performed logical access control testing.

• Assessed performance measure results in one of the four categories: certified, certified with qualification, inaccurate, and factors prevented certification.

**Criteria used** included the following:

• ABEST performance measure definitions.
• The Texas Department of Information Resources’ Security Controls Standards Catalog, version 1.3.
• Board reporting and procedures manuals for institutions to self-report data.
• Board policies and procedures.

Project Information
Audit fieldwork was conducted from January 2019 through May 2019. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The following members of the State Auditor’s staff performed the audit:
• Gregory Scott Adams, MPA, CPA, CGFM (Project Manager)
• Eric Ladejo, MPA, CFE (Assistant Project Manager)
• Kayla Barshop
• Robert P. Burg, MPA, CPA, CFE, SAS Certified Base Programmer for SAS 9
• Alana Montoro
• Dana Musgrave, MBA (Quality Control Reviewer)
• Michael Owen Clayton, CPA, CISA, CFE, CIDA (Audit Manager)
Copies of this report have been distributed to the following:

**Legislative Audit Committee**
The Honorable Dan Patrick, Lieutenant Governor, Joint Chair
The Honorable Dennis Bonnen, Speaker of the House, Joint Chair
The Honorable Jane Nelson, Senate Finance Committee
The Honorable Robert Nichols, Member, Texas Senate
The Honorable John Zerwas, House Appropriations Committee
The Honorable Dustin Burrows, House Ways and Means Committee

**Office of the Governor**
The Honorable Greg Abbott, Governor

**Higher Education Coordinating Board**
Members of the Higher Education Coordinating Board
   Mr. Stuart Stedman, Chair
   Dr. Fred Farias III, Vice-Chair
   Mr. John Steen Jr., Secretary
   Mr. S. Javaid Anwar
   Mr. Ricky Raven
   Ms. Donna Williams
   Mr. Welcome Wilson Jr.
   Ms. Lauren McKenzie, Student Representative
Dr. Raymund A. Paredes, Commissioner of Higher Education
This document is not copyrighted. Readers may make additional copies of this report as needed. In addition, most State Auditor’s Office reports may be downloaded from our Web site: www.sao.texas.gov.

In compliance with the Americans with Disabilities Act, this document may also be requested in alternative formats. To do so, contact our report request line at (512) 936-9500 (Voice), (512) 936-9400 (FAX), 1-800-RELAY-TX (TDD), or visit the Robert E. Johnson Building, 1501 North Congress Avenue, Suite 4.224, Austin, Texas 78701.

The State Auditor’s Office is an equal opportunity employer and does not discriminate on the basis of race, color, religion, sex, national origin, age, or disability in employment or in the provision of services, programs, or activities.

To report waste, fraud, or abuse in state government call the SAO Hotline: 1-800-TX-AUDIT.