State (THECB) Reporting Processes Review
Audit Report
July 25, 2012

Prepared by: Alamo Colleges' Internal Audit Department
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OVERVIEW OF STATE REPORTING
The Texas Higher Education Coordinating Board (THECB) recommends a funding formula for higher education as directed by Texas Education Code §61.059 (b). THECB requires that colleges submit a series of Coordinating Board Management (CBM) Reports as authorized by Texas Education Code §61.062. THECB publishes a Reporting and Procedures Manual for Texas Community, Technical, and State Colleges annually that details the CBM reporting requirements. Alamo Colleges receives approximately twenty-four percent of its operating revenue from state appropriations based on this formula.

Each Alamo College has designated a State Reporting Official with the THECB. Campus State Reporting Officials must know the reporting guidelines and procedures. These individuals also serve as the Residence Determination Official required by Texas Administrative Code §21.29.

Alamo Colleges’ generates its CBM Reports using the Banner System Texas Connection Consortium (TCC) Modifications Module baseline jobs run by the District Information Technology Services Department. The Campus State Reporting Officials review the output, correct edit errors, and resolve questionable items flagged. They also certify the final revised CBM Reports.

ELLUCIAN AND THE TEXAS CONNECTION CONSORTIUM
The consortium is a cooperative of Texas higher education institutions including 27 universities and 14 community colleges. It is an informal organization of Ellucian customers.

Ellucian invoices Texas A&M in Corpus Christi annually for routine product maintenance and the TCC Technical Support Center. Texas A&M then bills each member in advance for the annual fees based on a percentage of the cost of software purchased from Ellucian. Alamo Colleges’ charges for 2011-2012 totaled $587,000.

Ellucian is responsible for developing and maintaining the software, including Banner and the TCC Modifications Module. Ellucian staff program the TCC Module based on THECB reporting guidelines, including the Apply Texas System requirements, and members’ input. Institutions submit requests for modifications following the Recommendation for Texas Enhancement Procedure. A TCC subcommittee helps users define requests, prioritize, and manage them.

IMPACT OF REGULATORY REPORTING FOR ALAMO COLLEGES
Inappropriate and undocumented changes to state reports may result in regulatory noncompliance issues. Inaccurate data, such as contact or credit hours, in the CBM Reports could affect Alamo Colleges’ funding and performance statistics. In addition, a student’s cumulative education record may have errors if the data submitted to the THECB is incorrect. This information is also used in the Integrated Postsecondary Education Data System, Financial Aid Data Submission, and National Student Clearinghouse reports. District or College Management may be making business decisions based on inaccurate or incomplete data.

OVERVIEW OF AUDIT RESULTS – Leveraging Strategic Vendor Relationships
THECB adopted a common application form for admission as required by the Texas Administrative Code §4.11 and Texas Education Code §51.762. Public junior colleges, state colleges, and technical institutes must accept this common application known as Apply Texas.
The Apply Texas System provides two-year institutions with only one application, while eight forms are available to four-year schools. THECB, with the assistance of an advisory committee, annually reviews and recommends changes to the applications.

Alamo Colleges pays the THECB over $20,000 annually to maintain the Apply Texas System. The District can appoint representative(s) to the Apply Texas Advisory Committee. This working committee meets four times a year to discuss and vote on changes to the applications. In 2012, Alamo Colleges did not have representation on this important committee.

Alamo Colleges is a member institution of the Texas Connection Consortium. The District paid Ellucian about $250,000 in 2012 to operate the TCC Technical Support Center. The District can designate a voting representative; and can appoint other staff to various Banner User Groups. The activities of these representatives were not effective in 2012.

Alamo Colleges lacks appropriate internal procedures to coordinate administrative system change requests for submission to these entities. In addition, the District is not using its voting rights with these two organizations to achieve critical automation needs.

OVERVIEW OF AUDIT RESULTS – District Processes and Application Controls

The financial and operational impact of state reporting is crucial to Alamo Colleges; however, there are no clear definitions for the roles and responsibilities. The current decentralized state reporting process has various control deficiencies that increase the risks of reporting inaccurate information to the THECB and others. The Colleges expend substantial staff resources annually to correct numerous CBM report errors. Since the process or system root causes are not resolved, some errors occur in subsequent reporting periods such as high school, classification, residence, and transfer codes.

State reporting problems also occur because the Banner Implementation Project lacked critical components, including:

- Thorough business process analyses; especially for the TCC Modifications Module
- Testing the state reporting process prior to “go live”
- Establishing electronic records retention before or since implementation

Preventing inappropriate changes to student master and regulatory records used also depends on properly managed Student and TCC Modifications Modules security. The security processes do not embody the information security standards of the Texas Administrative Code 202.71. The current controls for the Student and TCC Modules are not effective. A review of March 2012 security reports indicated inconsistent and inappropriate class structure and user access.

The District Information Technology Services Department developed custom programming to address Apply Texas and Banner Student or TCC Modifications Module inadequacies. Such workarounds cause unintended consequences when synchronizing these modifications with subsequent Banner releases.

Banner validation tables did not match the College Board and THECB databases so errors occur on future CBM Reports. The Ellucian documentation instructs users to update both the Student and TCC Modules for changes after creating the student record, which indicates the integration of the Modules is not adequate.

State reporting exceptions indicated that the District might be losing revenue due to inadequate controls for “Out-of-District” residence changes and dual-credit student registration.
RECOMMENDATIONS

Apply Texas Application for Admission
1. Strategically participate on the THECB’s Apply Texas Advisory Committee
   • Appoint representatives as allowed by membership guidelines
   • Develop internal procedures to coordinate change requests
   • Request multiple on-line applications for two-year institutions
   • Propose improvements to the student instructions

Texas Higher Education Coordinating Board
2. Request that its Reporting and Procedures Manual Appendix M College Board High School Codes include guidance for reporting closed schools or those changing names
3. Promptly notify THECB if the edit report flags for high school code errors are inconsistent with its Appendix M College Board High School Codes

Ellucian Texas Connection Consortium
4. Strategically participate in the Texas Connection Consortium Committees
   • Define roles and responsibilities of representatives, especially the voting member
   • Develop internal procedures to coordinate change requests

Submit Recommendations for Texas Enhancements to:
5. Extract the admit type, student type, family information, and race elements from the Apply Texas Applications and post them to the related Banner forms; and Develop controls to detect and report inconsistent information
6. Program the TCC Modifications Module to determine the correct “Affected by Funding” flag response rather than defaulting to “N”
7. Extract students’ high school codes as submitted in their Apply Texas Application (without the graduation date comparison)

Alamo Colleges’ Processes
8. Establish accountability for state reporting with clearly defined roles and responsibilities
9. Create a centralized reporting function at the District level with responsibility for CBM, Integrated Postsecondary Education Data System, Financial Aid Data Submission, National Student Clearinghouse, and institutional reports
10. Perform appropriate business process analyses for state reporting
11. Improve the state reporting processes and controls
   • Require the College Administration to approve the final CBM Reports
   • Document a formal regulatory reporting procedure manual
   • Provide on-going substantive training
   • Reconcile Banner TCC output with the THECB Edit Report as CBM data is revised
12. Comply with the Texas regulations and District Policy and procedure for records retention, including electronic forms
13. Improve the Apply Texas Application error correction processes with procedures, training, and reporting
14. Revise BPAs 140 – Change of Curriculum and 242 – Change of Primary College Curriculum to require using only the “Update” button
15. Provide training for college personnel to ensure curriculum records are appropriately updated without changing the student type
RECOMMENDATIONS CONTINUED
Alamo Colleges’ Processes Continued
16. Implement appropriate controls for the residence change process by:
   - Improving Procedure F.2.1.1 State Residency
   - Providing training and exception reporting
17. Improve the process to ensure dual credit students are:
   - Registered for courses authorized in agreements with the school districts, and
   - Coded with a status of “RD Registered Dual Credit” in the Banner SZAREGS form

Banner System Security and Access Controls
18. Improve the Banner Student and TCC Modules security processes and controls:
   - Implement the Texas Administrative Code (TAC) Title 1 Administration Part 10 Department of Information Resources Chapter 202 Information Security Standards Subchapter C Security Standards for Institutions of Higher Education Rule §202.71 Management and Staff Responsibilities, sections (a) through (c.1)
   - Conduct a Business Process Analysis
   - Categorize and classify data using risk based guidelines
   - Consolidate/centralize data ownership and accountability
   - Document procedures for the data owners
   - Provide training to the data owners
19. Monitor and report on the effectiveness of the Banner Student and TCC Modules security by:
   - Implementing sections (c.2) and (d) of the Texas Administrative Code (TAC) Title 1 Administration Part 10 Department of Information Resources Chapter 202 Information Security Standards Subchapter C Security Standards for Institutions of Higher Education Rule §202.71 Management and Staff Responsibilities

Alamo Colleges’ General IT Controls
20. Implement adequate interface controls to ensure that all Apply Texas records are properly transferred into Banner and that errors are addressed timely

Banner General Application Controls
21. Establish an automated process with a procedure and training to ensure synchronization of Banner validation tables with the College Board and THECB databases, including:
   - STVSBGI Source/Background Institution Code
   - SZVMCIP State Major CIP (Classification of Instructional Programs) Code

Banner Student Module Configuration
22. Adjust the Banner Student Module configuration to discontinue changing the type in the SGASTDN form for continuing students
23. Adjust the Banner Student Module configuration to discontinue changing the student type in the SGASTDN form for continuing students when records are updated using the “Duplicate” or “Replace” buttons
24. Adjust the Banner configuration to prevent inappropriate dual credit student registration
State (THECB) Reporting Processes Review

Detailed Recommendations,

Conclusions, and Conditions
Apply Texas Application for Admission

**Recommendation**

1. Strategically participate on the THECB’s Apply Texas Advisory Committee
   - Appoint representatives as allowed by membership guidelines
   - Develop internal procedures to coordinate change requests
   - Request multiple on-line applications for two-year institutions
   - Propose improvements to the student instructions

**Conclusions**

Alamo Colleges is not effectively using its membership on this THECB Advisory Committee. As a result, the District is underutilizing the Apply Texas system and services.

This system is a robust automated tool for students applying to Texas higher education institutions. However, the one universal application for two-year schools and the related instructions are significantly inadequate. About fifteen percent of the students enrolling in Alamo Colleges annually, who are first-time-in-college, benefit from this on-line form.

**Conditions**

THECB adopted a common application form for admission of freshman and transfer students as required by the Texas Administrative Code §4.11 and Texas Education Code §51.762. Public junior colleges, state colleges, and technical institutes must accept this common application known as Apply Texas. THECB, with the assistance of an advisory committee, annually reviews and recommends changes to the application.

THECB entered into an agreement with the University of Texas System to administer the Apply Texas Application. Each participating institution pays a portion of the annual operating costs based on their percentage of enrollment. Alamo Colleges’ paid about $21,000 for academic year 2012.

This Advisory Committee meets quarterly to discuss and vote on changes to the application system. It includes representatives from community colleges, universities, and private higher education institutions. Membership for each organization depends on the type of institution and its enrollment. Two-year schools can have three to five representatives. For the 2012 academic-year, Alamo Colleges had no representation on the Advisory Committee.

In 2012, eight applications were available for students applying to four-year institutions. These included U.S. freshman, U.S. transfer, U.S. graduate, international freshman, international transfer, international graduate, readmission, and transient.

However, students applying to two-year schools had only one on-line form. Freshman, transfer, continuing, international, and transient students use the single application for community colleges. Transfer, transient, and readmission students may be answering unnecessary questions due to the universal form for community colleges. The website instructions for the two-year institution do not clearly advise continuing students that an application is not required to change majors or to transfer to a college within this district.

Alamo Colleges requires students, except for dual credit and continuing education, to apply for admission using this system. Only one application per student is necessary for admittance to any of the colleges. Students must reapply through the system if they have not enrolled in the past year. Students currently enrolled can update their application data using the Banner System and Web Self-service rather than submitting a new on-line form through Apply Texas.
Recommendation

2. Request that its Reporting and Procedures Manual Appendix M College Board High School Codes include guidance for reporting closed schools or those changing names

3. Promptly notify THECB if the edit report flags for high school code errors are inconsistent with its Appendix M College Board High School Codes

Conclusions – THECB Appendix M Improvements

Each year, the THECB makes few changes to the list of high school codes for additions, closures, or name changes. However, it does not highlight these revisions for users, or provide instructions for alternate coding.

In addition, the Campus State Reporting Officials inconsistently correct student records flagged by THECB due to invalid high school codes.

Conditions


Appendix M, issued with the Reporting and Procedures Manual on an annual basis, provides a list of over two thousand Texas College Board (CEEB) Codes. The appendix refers users to the College Board website for CEEB Codes of high schools not in Texas. Using these tools with Alamo Colleges’ processes is inefficient because of the volume of codes.

Three continuing student records flagged for invalid high school codes were reviewed. Campus State Reporting Officials deleted the code for one student record. They changed the others to “Texas Unknown CEEB Code” on the CBM001 Student Report.

Conclusions – THECB Appendix M or Database Exceptions

THECB’s database table for high school codes did not agree with its summer 2011 Reporting and Procedures Manual Appendix M. As a result, records in Alamo Colleges’ CBM001 Student Report had errors flagged.

This inconsistency also affects the Apply Texas System high school code table used by students.

Conditions

Closed high school deleted from THECB database listed in Appendix M

One continuing student record reviewed was flagged for an invalid high school code. Bishop Byrne High School closed in 1983; however, the code was in the THECB Appendix M for summer 2011 and 2012. A Campus State Reporting Official deleted the code on the CBM001 Student Report. There was no documentation to show notification to the Coordinating Board for correcting its records.

High school code not added to THECB database or it is manual

Numerous student records showed an invalid high school code in fall 2011 related to Judson Early College Academy. This code was subsequently accepted by THECB and added to its summer 2012 Appendix M.

Alamo Colleges’ staff was unclear about who is responsible for reporting to the National database or THECB new high schools opened without assigned codes. In addition, the Apply Texas System uses this database to provide a drop-down menu for students to select their high school attended.
Ellucian Texas Connection Consortium (TCC)

Recommendation

4. Strategically participate in the Texas Connection Consortium Committees
   • Define roles and responsibilities of representatives, especially the voting member
   • Develop internal procedures to coordinate change requests

Conclusion

Alamo Colleges is not effectively using its voting rights with the Texas Connection Consortium to ensure that critical automation needs are fulfilled. The activities of the Alamo Colleges voting and user group representatives were not effective in 2012.

Alamo Colleges lacks appropriate internal procedures to coordinate Requests for Texas Enhancements for submission to the Texas Connection Consortium for consideration and prioritization.

Conditions

The consortium is a cooperative of Texas higher education institutions including 27 universities and 14 community colleges. It is an informal organization of Ellucian customers.

Ellucian invoices Texas A&M in Corpus Christi annually for routine product maintenance and the TCC Technical Support Center. Texas A&M then bills each member in advance for the annual fees based on a percentage of the cost of software purchased from Ellucian.

Alamo Colleges is a member institution of the Texas Connection Consortium. The District's 2011-2012 invoice from Texas A&M totaled $587,000. This included approximately $250,000 for the TCC Technical Support Center.

Ellucian is responsible for developing and maintaining the software, including Banner and the TCC Modifications Module. Ellucian staff program the TCC Module based on THECB reporting guidelines, including the Apply Texas System requirements, and members' input. Institutions submit requests for modifications following the Recommendation for Texas Enhancement Procedure. A sub-committee manages the requests; and works with the users to define and prioritize them.

The District designated a voting representative and appointed staff to various Banner User Groups in 2012. The Alamo Colleges' designees did not meet to discuss, evaluate, and prioritize Recommendations for Texas Enhancements that would strategically benefit the District.
Ellucian Texas Connection Consortium (TCC) Continued

**Recommendation**

5. Submit Recommendations for Texas Enhancements to:
   - Extract the admit type, student type, family information, and race elements from the Apply Texas Applications and post them to the related Banner forms
   - Develop controls to detect and report inconsistent information

**Conclusion**

Alamo Colleges bypassed TCC Modifications Module functions by developing custom programming to address system deficiencies. While this approach was helpful, these actions have unintended consequences in the form of potentially long-term maintenance when upgrades are released for the Banner System. The goal of implementing an integrated administrative system, such as Banner, is to use its base functionality and automated controls to the greatest degree possible with minimal manual intervention.

**Conditions**

Four-year institutions wanted the ability to set up some of their own unique coding structure instead of using those required by THECB. Therefore, Ellucian purposely programmed the TCC Modifications Module not to populate some required state reporting data elements. Tables within the TCC Modifications Module give institutions the ability to prepare crosswalks translating their unique coding structure to THECB requirements. This programming design resulted in a significant number of manual updates by Alamo Colleges to populate student records.

The District ITS Department developed several programming scripts to populate some of the information not captured by the TCC Modifications. This involved extracting information from the Apply Texas Applications and populating the related TCC forms. Examples of scripts created include updating the:
   - Admit type, student type, and residence status
   - Code to indicate nursing as a restricted program
   - Tuition waiver code for veterans or their dependents
   - Family information, such as education, income
   - Race codes

The District ITS Department did encourage the Campus State Reporting Officials to review and approve these scripts. The District Director of Information Technology Services also approved moving the scripts from the test site to production.

Neither the College users nor the District ITS Department has attempted to work with TCC to submit a Consortium RTE for these issues.
Ellucian Texas Connection Consortium (TCC) Continued

**Recommendation**

6. Submit a Recommendation for Texas Enhancement to determine the correct “Affected by Funding” flag response rather than defaulting to “N”

**Conclusions**

Alamo Colleges overrode TCC Modifications Module programming to change a default setting, which could affect the tuition charged to students. While this approach was helpful, overriding Ellucian’s program has significant risk. This action can have unintended consequences in the form of potentially long-term maintenance when upgrades are released for the Banner System. The goal of using an integrated administrative system, such as Banner, is to use its base functionality and automated controls to the greatest degree possible with minimal manual intervention.

This programming exception implemented by Ellucian/TCC creates significantly more work for campus personnel, and increases the potential for errors.

**Conditions**

Texas Education Code §54.014 specifies limits on the number of hours an undergraduate student may attempt when paying in-state tuition. Higher education institutions can charge students exceeding these limits a higher tuition rate. This includes students with 30 to 45 hours in excess of those required to complete a degree. Students who enrolled in a Texas public institution of higher education before fall 1999 are exempt from these rules.

Based on requests from members, primarily four-year institutions, the TCC Modifications Module was set up to default the “Affected by Funding” flag to “N.” This indicates the undergraduate state funding rules do not apply to the student.

The District ITS Department overrode this TCC programming to have the “Affected by Funding” flag default to “Y.” They subsequently created two scripts to identify those students that are exempt from the rules to change the “Affected by Funding” flag back to “N.” This includes students with a bachelor’s degree or those with academic history prior to 1999.

Neither the College users nor the District ITS Department has submitted a Consortium RTE for this issue to TCC.
**Ellucian Texas Connection Consortium (TCC) Continued**

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<td>7. Submit a Recommendation for Texas Enhancement to extract students’ high school codes as submitted in their Apply Texas Application (without the graduation date comparison)</td>
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**Conclusions**

The TCC Modifications Module extracts the high school code only if there is a graduation date, which results in many errors due to blank codes on the CBM Student Report. THECB requires the institution code but not the date of graduation.

Alamo Colleges developed a custom script to handle this application inadequacy. This action does not represent best practices for a new integrated administrative system. Custom programming can also result in unintended and long-lasting consequences with new system releases.

**Conditions**

The Apply Texas Application Educational Background Section asks students for the high school they expect to graduate. The system provides a drop down menu of high schools to select which then populates the name, code, city, and state fields. The application also asks for the expected graduation month/year.

The Banner baseline job SARETMT – Electronic Application Verify/Load Process verifies and pushes data, except for the anticipated graduation month/year, from Apply Texas into Banner. For first-time-in-college applicants, staff manually enters the actual graduation date in the Banner SOAHSCH High School Information form after reviewing a student’s transcript.

Banner SOAHSCH form populates Item 39 High School Code in the CBM001 Student Report. The TCC Modifications Module will only extract the high school code for the CBM001 Student Report if the actual graduation date is populated. Since the implementation of the Banner Student Module in fall 2010, lengthy delays have occurred in manually reviewing transcripts and updating SOAHSCH. As a result, numerous high school codes were not included in the new student CBM records; THECB requires correcting these for first-time-in-college students.

Two student records reviewed with error 1232 “CEEB HS Code (Item39), is required and is space or zeroes” were first-time-in-college. These student records did not have the graduation field populated when generating the initial CBM001 Student Report; therefore, the high school codes defaulted to zeroes in the report.

In spring 2012, District ITS Department personnel created a script to modify the TCC program to extract the high school code from the Banner SOAHSCH form regardless of the graduation date field. This initiative was to reduce the number of errors to correct manually.
Alamo Colleges’ Processes

Recommendations

8. Establish accountability for state reporting with clearly defined roles and responsibilities
9. Create a centralized reporting function at the District level with responsibility for CBM, Integrated Postsecondary Education Data System, Financial Aid Data Submission, National Student Clearinghouse, and institutional reports

Conclusions

Alamo Colleges missed an opportunity to improve the quality and efficiency of the state reporting processes during the 2010 Banner implementation and transition to a single student database.

The financial and operational impact of state reporting is critical to Alamo Colleges. However, there are no clear definitions for the roles and responsibilities.

The current decentralized state reporting process has various control deficiencies that increase the risks of reporting inaccurate information to the THECB and others.

For more information on the process and/or control deficiencies refer to recommendations 10 through 17.

Conditions

Each College has designated a State Reporting Official responsible for the review, correction, and submission of the CBM Reports to the Texas Higher Education Coordinating Board.

The Campus State Reporting Officials’ practices are inconsistent and demonstrate various skill set levels. In addition, some of these have multiple responsibilities to perform both operational and reporting functions, which are incompatible. In several respects, the Campus State Reporting Officials are not in a position to resolve or fix the root causes of problems and errors. Their knowledge of the Banner System Modules and the flow of information to the state reports remains a work-in-progress.

Other Alamo Colleges departments have responsibilities for federal and state reporting, which may create inconsistencies in the information reported. The Institutional Research and Effectiveness Services Department is responsible for submitting the Integrated Postsecondary Education Data System report to the Department of Education. The Student Financial Services Department sends the Financial Aid Data Submission report to the Texas Higher Education Coordinating Board. The National Student Clearinghouse reports are submitted by the Center for Student Information.
### Alamo Colleges’ Processes Continued

#### Recommendation

10. Perform appropriate business process analyses for state reporting

#### Conclusions – Business Process Analyses (BPA)

The Pre and Post-Banner Student Implementation Project Methodology lacked critical components, including:

- Thorough business process analyses; especially for the TCC Modifications Module
- Testing the state reporting process prior to “go live”
- Establishing electronic records retention before or since implementation

As a result, the fall 2010 CBM reports generated using the new Banner Student and TCC Modifications Modules were submitted to the THECB with a time extension. Subsequent reports continue to reflect numerous problems.

#### Conditions – Business Process Analyses (BPA)

BPAs for the CBM Reporting process were not completed. Typically, these would review current practices for opportunities to streamline the work, to improve efficiency, and to ensure proper controls. In 2009, Phase I of the Banner Student Module implementation included over eighty BPAs. The Phase II Post Implementation completed an additional 39 BPAs in 2011 and 2012. For purposes of this project, the following eight BPAs were reviewed:

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<th>Phase II # and Title</th>
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<td>55 Admissions Application Process</td>
<td>123 Change of Address &amp; Phone Number</td>
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<td>72 Application Apply Texas Admissions Process</td>
<td>133 Changes to Student Residence</td>
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<tr>
<td>152 Change of Curriculum</td>
<td>140 Change of Curriculum</td>
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<td></td>
<td>169 Registering Dual Credit Students</td>
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<td></td>
<td>242 Change of Primary College</td>
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These BPAs were not adequate because they lacked integration. They provided overviews that were too summarized. Key steps were not addressed in sufficient detail for consistent performance. The manual and automated process activities were not clearly differentiated.

The BPA for the Apply Texas Application did not adequately explain how integration with the Banner Student Module would work. In addition, the issues with using a single universal application for admission could have been identified and addressed in this BPA but was not.

#### Testing Prior to Go Live

During the Banner Student Module implementation in April 2010, the external consultant advised the Project Team that testing of the CBM Reports was not necessary prior to go live. Therefore, the Project Team did not complete a Business Process Analysis or related testing for the CBM Reporting processes.

The lack of testing left the District ITS Department and the Campus State Reporting Officials unprepared for the production challenges. The reports generated had numerous data errors; including but not limited to:

- Inaccurate reporting of dual credit students because a unique status code was not set-up
- Improperly including students who registered or paid after the census date
- Supplemental data for new students was not populated in the reports
- Duplicate course section numbers
Alamo Colleges' Processes Continued

**Recommendations**

11. Improve the state reporting processes and controls
   - Require the College Administration to approve the final CBM Reports
   - Document a formal regulatory reporting procedure manual
   - Provide on-going substantive training
   - Reconcile Banner TCC output with the THECB Edit Report as CBM data is revised

12. Comply with the Texas regulations and District Policy and procedure for electronic records retention

**Conclusions**

The current state reporting process has various control deficiencies that increase the risks of reporting inaccurate information to the THECB and others.

The review, correction, and submission of CBM Reports have been delegated to the Campus State Reporting Officials (CSROs) who are not administrators. Campus and District Administration should be formally engaged in the state reporting process.

The lack of a documented procedure manual and training left the District and College Personnel without the necessary tools to develop their knowledge. In addition, the lack of reconciling records as CBM Reports are revised increases the risk that errors with the corrections made will not be detected.

Inadequate Banner System integration or configuration problems substantially affected staff workload because of redundant data entry. This increases the risks of data entry errors, of potential reliability issues, and of inconsistencies between the Student and TCC forms.

Alamo Colleges did not comply with the Texas regulation and District Policy and procedure for records retention regarding the copy of the production database used for the fall 2010 reports.

**Conditions**

**Procedures**

There are no formal procedures for the CBM Reporting process from April 2010 to April 2011. The Banner Team Student Process Functional Manager drafted thirty pages of preliminary procedures in May 2011 to assist the Campus State Reporting Officials (CSROs). However, there has been no further action to complete and implement these procedures.

The CSROs indicated that they rely on the THECB Reporting and Procedures Manual for Texas Community, Technical, and State Colleges for guidance.

The District ITS Department provided copies of two manuals available from the Texas Connection Consortium. The Student Data Map provides a crosswalk of the items reported in the CBM Reports to the Banner/TCC forms and/or Validation Tables.

The Student User Guide is a technical manual providing guidance on data entry, processing, and reporting using Banner Student and TCC Modifications. Both of these manuals are excellent reference material. However, the Campus State Reporting Officials are not using them for their day-to-day activities.
Alamo Colleges’ Processes Continued

Training

Alamo Colleges’ staff did not receive the training necessary to develop their knowledge and skill sets during the pre-implementation phase. The external consultant did not provide sufficient assistance or adequate training on the Banner Student Module, the TCC Modifications Module, and the CBM Reporting process. The challenges faced during and since the fall 2010 reporting period demonstrate this deficiency.

The errors noted during the audit also suggest that District and College Personnel still do not have an adequate understanding of Banner Student and TCC functionality. The integration of the two modules and their impact on state reporting compounds this lack of understanding.

Inadequate and Inefficient Practices

The CSROs work from the text files and Excel versions of the TCC baseline job reports generated. They use filters to identify missing or incorrect data in the reports, which is a manually intensive process. As evidenced by the errors noted during testing, this approach does not detect all of the potentially inaccurate data that requires correction.

Some CSROs make corrections to the Excel versions and then convert it to a text file. Other CSROs make corrections directly to the text file. The CSROs also correct student records in the applicable Banner/TCC forms. If the CSROs do not have Banner security access, they contact District or College personnel to make updates. However, there are some instances where only the CBM Report is changed, and not the student’s Banner/TCC form.

CSROs do not have sufficient time to review and correct data in the CBM Reports prior to the THECB deadlines because they wait until after census to validate the data. They focus on correcting the errors flagged by the THECB while other discrepancies may go uncorrected.

No Reconciliations

Record counts for students or courses, and contact or semester credit hours reported by category are not reconciled between the original CBM reports generated and those certified to the THECB.

Reconciliation would have detected errors in the academic and developmental education semester credit hours reported for the fall 2010 CBM Reporting cycle. The NVC Director of Institutional Research, Plan, and Effectiveness raised this issue during spring 2012. Developmental education semester credit hours were included with academic. They copied these hours to the developmental education column when correcting the text versions of the CBM Reports submitted to the THECB. However, they did not delete the developmental education hours from the academic column, which overstated the total semester credit hours.

In addition, the District ITS Department Banner Office conducted a recent analysis of the fall 2010 CBM Reports to determine the impact of not validating course schedules. This analysis indicated that 172 courses for over 114,000 contact hours were not included for funding in the CBM Reports. The value of these omissions was several hundred thousand dollars.
Alamo Colleges’ Processes Continued

THECB Edit Report Variances

The THECB provides institutions with an edit report of their submitted CBM Reports if corrections are necessary. The THECB edit report includes a comparison of the current data to similar information for the previous year.

This gives institutions an opportunity to determine whether the reports have incorrect data. THECB flags significant variances that require research and justification by institutions.

The CSROs refer some variances to College personnel for review and explanation since these may involve course-related information and campus initiatives. However, College personnel are not proactive in providing explanations. In these instances, the CSROs use their best judgment in preparing responses to THECB.

No Review by College Administration

The CSROs email THECB a signed statement certifying that the report is accurate and the data is usable. The CSROs sign the certification statement; at NLC and SPC, the Vice Presidents of Student Success sign the statements instead of the CSROs.

Neither District nor College Administration review these reports or the variance explanations provided for accuracy and completeness. Therefore, there is a risk that THECB receives inaccurate information.

Records Retention

The District ITS Department made a copy of the production database to correct and generate the fall 2010 CBM Reports. This was necessary because the corrections needed would create issues with the tuition charges and fees in the production version.

College Administrators recently expressed their concerns about the fall 2010 CBM filings, and requested further reviews of the data submitted. However, the production copy used to run these reports was no longer available in April 2012. District ITS Department Management indicated that this copy was lost during a storage area network failure in 2011.

The expectation is that the Campus State Reporting Officials (CSROs), with assistance from the District ITS Department, would try to reconstruct the records. Losing this database is a records retention regulatory compliance exception involving the State Administrative Code and District Policy.

This records retention issue is not limited to the District ITS Department. The CSROs are not appropriately managing their electronic records. CSROs indicated that they save working copies of the CBM Reports on their desk computer drives; these are not periodically backed up. The original output generated from the TCC baseline jobs, some interim and final CBM reports are saved on the CSROs District server, which is backed up daily. However, the file structure and naming conventions are not adequate making it difficult to locate documents. In addition, the THECB Edit Reports, which indicate the errors and questionable items identified, available after each submission are not always retained by the CSROs. These reports must be maintained to show an audit trail of the changes to the CBM Reports.
Alamo Colleges’ Processes Continued

<table>
<thead>
<tr>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Improve the Apply Texas Application error correction processes with procedures, training, and reporting</td>
</tr>
</tbody>
</table>

Conclusions
A significant control deficiency exists because Alamo Colleges does not have an adequate process with a procedure and training to correct errors in Apply Texas Applications. In addition, the exception reporting available is not sufficient.

Conditions
A Banner baseline report for the SARETMT Electronic Applicant Verify/Load Process job is available almost daily in the e-Print library. This report includes all Apply Texas Application records; those pushed to Banner and others with errors. This report does not reflect cumulative application records. The record count and page length of each report varies based on the day’s activities. The August 2011 SARETMT reports averaged 20 pages in length with 300 student records and 70 errors per day.

A SARTEMT Report for a student included in the fall 2011 CBM Report showed an error in the application. The social security number on the application did not agree to the student’s existing Banner Student Module record. No documentation was available explaining how the issue was resolved. It appears the Banner Team Process Functional Manager corrected the social security number using the student’s Free Application for Federal Student Aid.

Recommendations
14. Revise BPAs 140 – Change of Curriculum and 242 – Change of Primary College Curriculum to require using only the “Update” button
15. Provide training for college personnel to ensure curriculum records are appropriately updated without changing the student type

Conclusions
A Banner Student Module deficiency exists because the student types appear to reset to first-time-in-college. This involves the Banner SGASTDN General Student form curricula tab “Replace” or “Duplicate” buttons. BPAs 140 Change of Curriculum and 242 Change of Primary College Curriculum improperly instruct staff to select the “Replace” option.

Conditions
Alamo Colleges Business Process Analysis (BPA) 140 – Change of Curriculum and 242 – Change of Primary College Curriculum approved 01/23/2012 recommend using the “Replace” or “Update” buttons to modify a student’s record because it maintains an audit trail. The BPAs instruct users to select the “Replace” button, complete the program, level, campus, and degree fields, and have the rest of the information default to the rules already established for the form.

However, the BPAs indicate that the “Update” button is an alternative. The BPAs do not suggest the “Duplicate” button since it does not maintain an audit trail. In addition, the related training for this process is inadequate.

The District ITS Department stated that using the Banner SGASTDN curricula tab “Duplicate” or “Replace” buttons resets the student type to first-time-in-college. However, selecting the “Update” button will not alter the student type.
Recommendation

16. Implement appropriate controls for the residence change process by:
   - Improving Procedure F.2.1.1 State Residency
   - Providing training and exception reporting

Conclusion

A systemic control deficiency exists because residence status changes are not consistently supported with adequate documentation (utility bills, tax receipts, etc.); and there is no secondary review or approval of changes. The Alamo Colleges Policy F.2.1 Student Enrollment Requirements and Procedure F.2.1.1 State Residency do not fully address all the requirements of Texas Administrative Code §21.25 for residence determination.

An exception report to identify students with address changes that affect the residence status is not available. The Residence Determination Officials should review such a report on a daily basis and make changes to residence status as appropriate.

Residence status has an effect on tuition revenue and there is an incentive to want the in-district classification.

Conditions

The Apply Texas Application asks students for their permanent and local addresses in the Biographical Section. Addresses can be changed in the Banner System by students online using Web Self-service or by notifying the Campus Enrollment Services Office.

Two custom reports are available in ARGOS to review residency but they must be requested.

The STU0019 Admissions Residency and Entry Status Report provides a student’s residence information based on their Apply Texas Application responses. It includes thousands of student records for each term. If a student provides insufficient information in the Apply Texas Application, the residence status defaults to out-of-state. The Residence Determination Officials are not currently reviewing this report.

The STU0008 Web Address Change Report includes updates made by students using Self-service. It shows the original and revised permanent addresses submitted. It is not currently run and distributed to the Residence Determination Officials on a daily basis. This report does not highlight students whose new address requires a change in their residence status. The Residence Determination Official must manually review all of the records to determine if any changes in residence are required, which is inefficient.

Two fall 2011 CBM student records reviewed had changes to their residency status.

Student A was initially determined as out-of-state based on the information provided in their December 2010 Apply Texas Application. The student’s residency changed to in-district in August 2011. However, the supporting documentation used was not adequate.

Student B’s residence was determined to be out-of-district based on a permanent Comal County address provided in their December 2010 Apply Texas Application. The student’s residence changed to in-district in May 2011 based on a lease for a Bexar County home.
Alamo Colleges’ Processes Continued

Student B had conflicting residence status in spring 2011. The Banner SGASTDN form showed in-district while the TCC SZASSTD form had out-of-district. The SZASSTD residency information was updated to in-district in summer 2011. However, it appears that when the new SZASSTD was created, only the residence information was entered. Other attributes used for CBM Reporting from the original form were not entered into the new SZASSTD. This will result in CBM Report errors in subsequent periods. This may be a TCC Modifications Module configuration deficiency because information is not maintained when updating the SZASSTD form.

The residence status determined when an Apply Texas Application is processed is based on the permanent address provided. However, subsequent residence changes by College staff are based on the local address.

Alamo Colleges Policy F.2.1 refers to the college catalogs for the general admission requirements. Related Procedure F.2.1.1 states that a student who is a resident of Texas and lives within the Alamo Colleges boundaries is charged in-district tuition. It does not specify whether the permanent or local address should be used when determining residence.

**Recommendation**

17. Improve the process to ensure dual credit students are:
   - Registered for courses authorized in agreements with the school districts, and
   - Coded with a status of “RD Registered Dual Credit” in the Banner SZAREGS form

**Conclusions**

A control deficiency exists when dual credit students can register for courses not authorized in agreements, which inappropriately results in tuition and fee accommodations.

Another control deficiency exists because Alamo Colleges is not reconciling academic and dual credit semester credit hours (SCH) data for CBM reporting purposes.

**Conditions**

A fall 2011 CBM001 Report error in Item 39 high school code involved a Judson Early College Academy dual credit student.

The Student Course Registration form SZAREGS included a kinesiology course at SAC with a status code of “RE – Registered” instead of “RD – Registered Dual Credit”. The Account Detail Review form TSAAREV documented that an advisor registered this student in June 2011. The dual credit agreement with Judson Independent School District did not include this course. This student’s dual credit waiver prevented collecting tuition and fees for this course.

The fall 2011 CBM001 Student Report shows the kinesiology semester credit hour reported under Item 27 Academic SCH Affected by Undergraduate Limit and not Item 26 Dual SCH of High School Student. Neither the Campus State Reporting Officials nor THECB identified this as a discrepancy.
Banner System Security and Access Controls

Recommendations

18. Improve the Banner Student and TCC Modules security processes and controls:
   - Implement the Texas Administrative Code (TAC) Title 1 Administration Part 10 Department of Information Resources Chapter 202 Information Security Standards Subchapter C Security Standards for Institutions of Higher Education Rule §202.71 Management and Staff Responsibilities, sections (a) through (c.1)
   - Conduct a Business Process Analysis
   - Categorize and classify data using risk based guidelines
   - Consolidate/centralize data ownership and accountability
   - Document procedures for the data owners
   - Provide training to the data owners
   - Develop monitoring and exception reports, including user transaction logs

Conclusions – Overall Security Processes and Controls

Alamo Colleges missed an opportunity to elevate the quality of its security processes in conjunction with the Student and Texas Connection Consortium (TCC) Modules implementation, and the transition to a single student database. The Banner Student and TCC Modules security processes and controls are inadequate to serve the College District.

The overall design of the processes does not embody the information security standards in TAC 202.71 sections (a) through (c.1). These sections describe the higher education institution leadership and data owners’ responsibilities to secure information.

Two critical controls missing from the processes are a:
   - Business Process Analysis for Banner security; and
   - Requestable report of unusual user transactions for the data owner to review

The number of data owners, sixteen, is excessive and not consistent with the other Banner Modules. Typically, data ownership is limited to optimize consistency and accountability.

The Student and TCC Module owners had inadequate tools and knowledge to perform their responsibilities. Alamo Colleges supplied minimal documentation to guide the data owners when performing these duties. There does not appear to have been any training about the regulatory requirements and performance expectations for the data owners. Information about the Banner Forms assigned to each security class, or that some are in multiple classes, was not provided to the data owners.

Conclusions – Specific Security Controls

District Procedure C.1.9.1 - Appropriate Use of Information Technology Resources and its supplemental forms and instructions for the Banner System do not incorporate all of the Management and Staff Responsibilities stated in TAC 202.71. It insufficiently addresses how to develop a "role-based security structure" for the Banner System.
Banner System Security and Access Controls Continued

The Enterprise Banner Access Request Form and related instructions give no clarification for the data owners about the relationship between a security class (role names) and College District job titles. The Request Form Student System roles do not agree with the associated Banner User Access Role Definitions matrix. As a result, the data owners have no guidance on assigning access to over twenty roles.

The Module User Access Role Definitions developed in March 2010 are outdated and not appropriate. This one matrix covers both the Student and TCC Modules; comingling can result in segregation of duties issues. Various security classes show contradictions in the descriptions and recommendations. The underlying data was not categorized and classified based on risks prior to establishing these classes, which is essential for a robust security structure.

The monthly Student Role Analysis Report provided through March lacked appropriate information for the data owners. The District Enterprise Information Technology Risk and Security Office discontinued sending the monthly report in April without an alternative version or action plan. This document lacked integration with other security reports in the ePrint Repository.

The Banner ePrint Repository included four related security reports. The data owners could use several of these to perform their responsibilities; not all owners have access to them. However, these ePrint Reports are lengthy and cumbersome, which makes them not suitable.

The data owners do not have a tool to monitor user update transactions for exceptions, inappropriate activity, or fraud.

Conditions – Regulatory Standards

The Texas Administrative Code Title 1 Administration Part 10 Department of Information Resources Chapter 202 Information Security Standards Subchapter C Security Standards for Institutions of Higher Education Rule §202.71 Management and Staff Responsibilities states requirements for the Chancellor, or his designated representative, on information ownership and the related responsibilities. These were developed because information resources are valuable assets that need safeguarding

TAC Rule 202.71 addresses an institution’s responsibility for:
- Defining information classification categories
- Designating an information security officer for the institution
- Identifying data owners, custodians, and users
- Defining and documenting responsibilities for the four individuals or groups
- Developing guidelines for their roles and responsibilities

It outlines nine responsibilities for data owners:
- Approve access and assign custody
- Specify data control requirements
- Confirm that controls are in place
- Review access lists
- Classifying business functional information
- Determine the information assets’ value
- Specify appropriate controls
- Assign custody for data
- Approve, justify and document exceptions
Banner System Security and Access Controls Continued

District Procedure C.1.9.1 - Appropriate Use of Information Technology Resources for administrative systems, including Banner, requires a “role-based security structure” for employees.

Other guidance available for data owners included the:
Enterprise Banner Access Request Form
Banner User Access Procedure (Instructions for completing the Access Request)
Banner User Access Procedure – QuickStart (Instructions for completing the Access Request)
Banner Module Role Matrices/Tables (includes role names, definitions, and recommendations)

The Student Module data owners, according to the Banner Access Request Form, are the College Vice Presidents of Academic Affairs, Student Services, College Services, Dean of Continuing Education, and the Center for Student Information. These designees evaluate new requests for access to either approve or deny them.

In contrast, the Financial Aid, Payroll, Student Accounts Receivable, and Human Resources Modules have one data owner. The Finance System has a primary and alternate data owner.

The Student System Banner User Access Role Definitions developed in March 2010 show that the Project Implementation Team established 14 security classes. However, there are 37 security classes available for the Student and TCC Modules according to the Enterprise Banner Access Request Form and the Student Role Analysis Report.

These role definitions indicate if a class will update or modify information; or if it involves running processes and reports. The definitions also denote security classes with query access. The accompanying recommendations refer to a few departments or offices, including the Center for Student Information and Human Resources. The recommendations do not provide guidance as to specific job titles to assign to the various roles, especially Campus staff.

The security class table did not reflect categorization of Student or TCC Modules data as confidential, restricted use, or public. Nor did it identify risks associated with this information.

Security reports included the:
The Student Role Analysis Report shows each user, their assigned security classes, job titles, and organization descriptions. This document does not provide a listing of the Banner forms associated with each security class or if user access is inquiry or update. The District Enterprise Information Technology Risk and Security Office discontinued these reports in April.

The Security Classes – Objects in a Class in the ePrint Repository provides a listing of the associated Banner forms. It includes all System Modules so the report exceeds 500 pages. The Banner ePrint Repository also includes a daily or weekly version of three other security and access reports. These are in pdf format or text, and are very lengthy making them difficult to review.
Recommendation

19. Monitor and report on the effectiveness of the Banner Student and TCC Modules security by:
   - Implementing sections (c.2) and (d) of the Texas Administrative Code (TAC) Title 1
     Administration Part 10 Department of Information Resources Chapter 202 Information
     Security Standards Subchapter C Security Standards for Institutions of Higher
     Education Rule §202.71 Management and Staff Responsibilities

Conclusions

Current state security processes and controls for the Banner Student and TCC Modules are not
effective, and they could be more efficient. In addition, Alamo Colleges' security processes do not
fully incorporate critical TAC 202.71 responsibilities for the:
   - Custodian of information resources - Section (c.2), and
   - Information security officer - Section (d)

Conditions – Regulatory Standards

The Texas Administrative Code Title 1 Administration Part 10 Department of Information
Resources Chapter 202 Information Security Standards Subchapter C Security Standards for
Institutions of Higher Education Rule §202.71 Management and Staff Responsibilities.

Section c.2 - Custodians of information resources should:
   - Implement the controls specified by the data owners
   - Provide physical, technical, and procedural safeguards for information
   - Assist data owners with evaluations of the cost-effectiveness of controls and monitoring
   - Implement monitoring techniques & procedures for detecting, reporting, & investigating incidents

Section (d) - The Information Security Officer designated by the Chancellor should:
   - Develop and recommend policies to ensure that information resources are secure
   - Establish procedures and practices that prevent or detect inappropriate data activity
   - Document and maintain an institution security program that is reviewed and approved annually
   - Monitor the effectiveness of defined information controls
   - Report annually to the Chancellor on the effectiveness of the organization’s security controls

Conditions – Alamo Colleges

The College District Information Technology Services Department is responsible for the Banner
System and the hardware to support it. The Department District Director and his staff are the most
likely group to perform the data custodian duties outlined in TAC 202.71 Section (c.2).

The District has an Enterprise IT Risk Security Services Office with a Manager and a Security
Officer, which is currently an unfilled position. Their mission statement and the one job description
available appear to align with the TAC 202.71 Section (d) information security duties.

Both groups report to the Vice Chancellor for Planning, Performance, and Information Systems.
Banner System Security and Access Controls Continued

Conditions – Alamo Colleges Practices

The effectiveness of the Banner Student and TCC Modules’ security practices was evaluated based on discussions with District and Campus personnel during this audit project. This included:

- Management and staff from the District IT Services Department
- District Director of Institutional Research, Effectiveness and Planning
- Director of Strategic Initiatives and Performance Excellence
- Director and an Associate Director from the Center for Student Information, and
- Five Campus State Reporting Officials

In addition, the TAC 202.71 data custodian and security officer duties were assessed using various security documentation. A sample of users’ access and a selection of Banner forms were also analyzed.

The March Student Role Analysis Report listed 890 users with access; it did not show if they could update, query, or both. This report provided Banner identifiers, organization codes, job descriptions, department names, and locations for each user. The security classes in this report did not agree to the Enterprise Banner Access Request Form or the Student System Banner User Access Role Definitions Matrix.

Campus State Reporting Officials had inconsistent access. These individuals are assigned to numerous security classes; however, some do not seem appropriate based on their job description. According to the last activity dates, the State Reporting Officials are using only one security class, CBM Maintenance.

Generic Users – Ten “IT System” and two “Test” users have update access to the Banner General Student SGASTDN, TCC Supplemental Student Data SZASSTD, and TCC Student Course Registration SZAREGS forms.

Other Fifteen Employees – Most had update access inconsistent with other users in the same Alamo Colleges job. Many had not updated the Banner SGASTDN, TCC SZASSTD, or TCC SZAREGS forms in more than six months, which suggests that they do not need this access for their job duties.

Three Sample Forms reviewed included the Banner General Student SGASTDN, TCC Supplemental Student Data SZASSTD, and TCC Student Course Registration SZAREGS forms. These forms contain fields for residence and student type, which affect CBM Reports or in some cases tuition revenue. Since the March 2012 reports do not provide information about access by screen, the IT Security/Risk Management Manager provided customized security reports.

Analysis of the three forms showed assignments to multiple classes and to many users. Several security classes, including Accounts Receivable, Information Technology, Financial Aid, and Librarian had update access to the two TCC Module forms, which appears inappropriate. Over fifty percent of the users were dormant, with last activity dates exceeding a year.

The TCC Module forms do not automatically capture changes made to the related Student forms, an example is SGASTDN. Therefore, updates have to be entered twice. This condition contradicts the functions of an administrative system with integrated modules. It may explain why so many users have access to the two TCC forms reviewed.
Alamo Colleges’ General IT Controls

Recommendation

20. Implement adequate interface controls to ensure that all Apply Texas records are properly transferred into Banner and that errors are addressed timely.

Conclusion
There is no process, procedure, or adequate report for reconciling records transferred between the Apply Texas and Banner Systems.

Conditions
The Apply Texas Application data can be loaded into Banner manually (SAAEAPS) or through an automated process (SARETMT).

The Banner SAAEAPS Electronic Admissions form is a set of Apply Texas Application temporary records to verify and push into Banner permanent tables. It is a record of each Apply Texas Application received, and includes a “Process Note” field indicating the processing stage.

The Banner baseline job SARETMT – Electronic Application Verify/Load Process performs the SAAEAPS steps in the background. The District ITS Department personnel stated that Alamo Colleges opted to use the SARETMT automated process when implementing the Banner Student Module in spring 2010.

In its November 2011 Student Guide, TCC recommended not using SARETMT but did not elaborate on the reasons why.

A Banner baseline report for the SARETMT Electronic Applicant Verify/Load Process job is available almost daily in the e-Print library. This report includes all Apply Texas Application records; those pushed to Banner and others with errors. The report does not reflect cumulative application records. The record count and page length of each report varies based on the day’s activities. The August 2011 SARETMT reports averaged 20 pages in length with 300 student records and 70 errors per day.

The Business Process Analysis (BPA) 55 “Admissions Application Process” did not mention this SARETMT e-Print Report.

Systems Interface Controls
The District ITS Department does not have formal procedures to account for records transferred between the Apply Texas and Banner Systems. The District ITS Department stated that the Center for Student Information (CSI) Department should review the Banner SAAEAPS form and the SARETMT e-print Report to make sure that the job runs successfully each day. However, CSI does not receive independent record counts or control totals to verify the data in the job.

The SAAEAPS form flags hundreds of errors on a weekly basis. The District CSI Department does not have an adequate procedure to ensure that all Apply Texas Applications are loaded into the temporary table, and that errors are corrected timely.
Alamo Colleges’ General IT Controls Continued

As of June 14, 2012, the SAAEAPS form had over 140,000 (temporary table) records. The following analysis indicates no purging of pushed data since the Banner Student implementation.

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
<th>Records</th>
<th>Date Range</th>
<th>Audit Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>Pushed</td>
<td>107,846</td>
<td>4/7/10 – 6/14/12</td>
<td>Should be purged</td>
</tr>
<tr>
<td>V</td>
<td>Data verified or overridden</td>
<td>4,898</td>
<td>6/2/10 – 5/30/12</td>
<td>Should be pushed</td>
</tr>
<tr>
<td>E</td>
<td>Data verified but has errors</td>
<td>18,625</td>
<td>6/2/10 – 6/14/12</td>
<td>Errors not resolved</td>
</tr>
<tr>
<td>N</td>
<td>Not verified</td>
<td>10,153</td>
<td>6/2/10 – 6/14/12</td>
<td>Records not worked</td>
</tr>
<tr>
<td></td>
<td>Total Apply Texas Records</td>
<td>141,522</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This suggests that BPAs 55 “Admissions Application Process” and 72 “Application Apply Texas Admissions Process” did not provide sufficient guidance on purging the records.

Records with a status of “V” appear to reflect applications corrected and processed manually but not purged. The records with a status of “E” or “N” appear to be applications with errors that have not been resolved.

Banner General Application Controls

<table>
<thead>
<tr>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Establish an automated process with a procedure and training to ensure synchronization of Banner validation tables with the College Board and THECB databases, including:</td>
</tr>
<tr>
<td>• STVSBGI Source/Background Institution Code</td>
</tr>
<tr>
<td>• SZVMCIP State Major CIP (Classification of Instructional Programs) Code</td>
</tr>
</tbody>
</table>

Conclusions

Alamo Colleges is not updating at least annually the Banner STVSBGI and SZVMCIP validation tables with the national/state databases prior to generating the CBM001 Student Report. Identifying issues with the Classification of Instructional Programs (CIP) or College Board (CEEB) codes earlier in the process could accelerate corrections and reduce the errors found by the THECB. The Banner codes and their descriptions should be consistent with the THECB.

Condition – STVSBGI Source/Background Institution Code Validation Table

According to the Banner/TCC Data Map, the Banner SOAHSCH High School Information form populates Item 39 High School Code in the CBM001 Student Report. The Banner System uses the STVSBGI Source/Background Institution Code, which lists the defined high school and college or university codes. This Banner Table should contain a valid CEEB Code that agrees to the College Board and THECB’s databases and THECB’s Reporting Manual Appendix M. It currently has over 38,000 high school codes.

Condition – SXVMCIP State Major CIP Code Validation Table

The THECB Reporting and Procedures Manual for Texas Community, Technical, and State Colleges states that a CIP (Classification of Instructional Programs) Code for the major area of concentration be reported for each student in the CBM001 Report. Appendix C Classification of Instructional Program (CIP) Codes, issued with the Reporting and Procedures Manual on an annual basis, provides a link to a website listing several thousand Texas CIP Codes.
Banner General Application Controls Continued
Banner SGASTDN General Student form populates report Item 12 Major Area of Concentration in the CBM001 Student Report. The Banner System uses the SZVMCIP State Major CIP (Classification of Instructional Programs) Code Validation Table, which includes the state CIP Code for majors. It should also agree with THECB’s Reporting Manual Appendix C. This validation table includes over 1,600 Major CIP Codes.

Two of the eight fall 2011 CBM001 student records with errors in Item 39 High School Codes also had incorrect information for Item 12 Major Area of Concentration. The CIP Codes reported for these two students were in THECB’s Reporting Manual Appendix C. However, the code description in the Appendix did not agree with Alamo Colleges’ SZVMCIP validation table title. THECB did not flag either of these records as an error, due to the inconsistent title, in the CBM001 Student Report.

One student included in the fall 2011 CBM001 Student Report had a CIP Code of 30.9999.00. The Texas CIP Inventory shows this code’s title as Multi-Interdisciplinary Studies and education major codes beginning with “13” not “30”. The description in the SZVMCIP Validation Table for this code is NLC Associate of Arts in Teaching.

A second student included in the fall 2011 CBM001 Student Report had a CIP Code of 30.9999.99. The Texas CIP Inventory lists this as Absentia. The SZVMCIP Validation Table shows an update to this CIP code on 10/31/2011 to 13.1210.00 with the title PAC Associate of Arts in Teaching.
Banner Student Module Configuration

**Recommendation**

22. Adjust the Banner Student Module configuration to discontinue changing the type in the SGASTDN form for continuing students

**Conclusions**

The Banner Student Module SARETMT baseline job incorrectly changes the student type to first-time-in-college for individuals with prior academic history. The system has sufficient data to identify Apply Texas Applications for continuing students from any college.

If Apply Texas offered community colleges applications by student type as they do for four-year schools, then the Banner System might not change the student type incorrectly. Better instructions for the community college Apply Texas on-line form might reduce the incorrect student answers contributing to the type change.

The custom script has decreased the TCC CBM reporting errors caused by the Student Module; it does not resolve the root cause of the student type problem. This action does not represent best practices for a new integrated administrative system. Custom programming can also result in unintended and long-lasting consequences with new application releases.

**Conditions**

Only one application per student is necessary for admittance to any of the Alamo Colleges. The Texas Administrative Code requires that students update residency responses after a one-year absence. However, the Apply Texas System does not provide two-year institutions applications for readmission or for updating residence status. The District instructs students to reapply through Apply Texas if not enrolled in the past year. In some cases, students incorrectly respond to questions on the single community college on-line form concerning their prior academic history, which affects the student type.

The Banner Student Module SARETMT baseline job will accept and process multiple applications for a student from Apply Texas during an academic year but only one per term. This job updates the Banner SGASTDN General Student form, which includes the student type (New First Time, Transfer, Continuing, etc.).

Sometimes this issue occurs because an existing District student unnecessarily submits a subsequent Apply Texas Application to change their major or college. Alamo Colleges’ personnel can update the Banner Student Module at the student’s request and bypass Apply Texas.

The initial fall 2011 CBM001 Student Report had a record with error 1232 “CEEB HS Code (Item39), is required and is space or zeroes” incorrectly categorized as first-time-in-college. This student submitted an application in spring 2011 for attendance in the fall. This individual completed a second application several weeks later to attend an earlier summer 2011 term at a different college with a new major. Therefore, she was a continuing student for the fall 2011 term.

It is common for Alamo Colleges’ students to submit multiple applications through Apply Texas. This usually results in student type records incorrectly coded as first-time-in-college. THECB edit reports do not always flag these errors. Since the Campus State Reporting Officials primarily focus on identified errors these occurrences may go undetected.
Banner Student Module Configuration Continued
In spring 2012, District ITS Department created a custom script for the TCC Modifications Module data extraction to identify continuing students based on prior academic history improperly coded by the Banner Student Module as first-time-in-college. This initiative was to reduce the manual CBM error correction.

Recommendation
23. Adjust the Banner Student Module configuration to discontinue changing the student type in the SGASTDN form for continuing students when records are updated using the “Duplicate” or “Replace” buttons

Conclusions
The Banner Student Module incorrectly change the student type to first-time-in-college when the SGASTDN General Student form curricula tab “Replace” or “Duplicate” buttons are used.

BPAs 140 Change of Curriculum and 242 Change of Primary College Curriculum improperly instruct staff to select the “Replace” option. However, the BPAs indicate that the “Update” button is an alternative. The BPAs do not suggest the “Duplicate” button since it does not maintain an audit trail.

The State Reporting Officials have corrected numerous first-time-in-college errors created by this Banner deficiency and the inadequate related procedure.

A script developed by the IT Department to address electronic student type errors is detecting and correcting some of these. However, it is not resolving the root cause with these buttons; and this does not represent best practices for a new integrated administrative system. This custom programming can also result in unintended and long-lasting consequences with new application releases.

Conditions
An Apply Texas Application loaded into the system results in a Banner SGASTDN General Student form. The SGASTDN General Student form populates Item 9 Transfer or First-Time-in-College of the CBM001 Student Report, according to the Banner/TCC Data Map. If a student initiates additional Apply Texas Applications, then the SGASTDN form is electronically changed. Some of these changes are errors, such as first-time-in-college.

College personnel routinely use this form to modify a student’s curricula, including college, major, or field of study. By selecting the SGASTDN “Replace” or “Duplicate” buttons, numerous student types reset to first-time-in-college incorrectly.

Alamo Colleges Business Process Analysis (BPA) 140 – Change of Curriculum and 242 – Change of Primary College Curriculum approved 01/23/2012 recommend using the “Replace” or “Update” buttons to modify a student’s record because it maintains an audit trail. The BPAs instruct users to select the “Replace” button, complete the program, level, campus, and degree fields, and have the rest of the information default to the rules already established for the form.
Banner Student Module Configuration Continued
The initial fall 2011 CBM001 Student Report had a record with error 1232 “CEEB HS Code (Item39), is required and is space or zeroes” incorrectly categorized as first-time-in-college for NVC. The student’s academic history showed that he started at NVC in the spring and continued in the summer of 2011. Staff manually changed his primary college to PAC on 01/13/2011; however, he never registered for any classes at PAC.

The District ITS Department stated that using the Banner SGASTDN curricula tab “Duplicate” or “Replace” buttons resets the student type to first-time-in-college. However, selecting the “Update” button will not alter the student type.

Revisions to student curriculum records are common; consequently, there may be numerous first-time-in-college student type errors. The Campus State Reporting Officials focus mainly on those errors identified by THECB. Therefore, corrections to these student type errors occur only if flagged by THECB for other reasons.

Recommendation
24. Adjust the Banner configuration to prevent inappropriate dual credit student registration

Conclusions
Banner Student Module application controls should restrict the dual credit student type from registering for unapproved academic courses.

Registration process controls should prevent staff from manually registering dual credit students for classes not authorized in the school district agreements.

Conditions
A fall 2011 CBM001 Report error in Item 39 high school code involved a Judson Early College Academy dual credit student.

The Student Course Registration form SZAREGS included a kinesiology course at SAC with a status code of “RE – Registered” instead of “RD – Registered Dual Credit”. The Account Detail Review form TSAAREV documented that an advisor registered this student in June 2011. The dual credit agreement with Judson Independent School District did not include this course. This student’s dual credit waiver prevented collecting tuition and fees for this course.
OBJECTIVES – To determine:
The reasons for significant edits/changes to the CBM Reports generated using Texas Connection Consortium (TCC) baseline jobs.

If the Apply Texas System has adequate controls

If the Banner Student and TCC Modifications Modules -
   Are adequately designed for CBM Reporting
   Have effective controls

If Apply Texas and Banner Systems interface controls are adequate

If Alamo Colleges’ has adequate and effective
   Process controls
   Application/system security and access controls
   General information technology (IT) controls
   Application controls for Banner

SCOPE AND METHODOLOGY
Walkthroughs and interviews were conducted with District ITS Department personnel and State Reporting Officials at four of the Colleges to gain an understanding of the process. Others interviewed for this project included: CSI Management, and District and Northwest Vista College IRES Department Directors. Documentation evaluated included business process analyses, available process procedures, and other related workpapers.

The effectiveness of the Banner Student and TCC Modules Security practices was assessed based on discussions with District and Campus personnel and various documentation reviews. In addition, the access for a sample of users and three judgmentally selected Banner forms was analyzed.

Primary focus was the errors identified by THECB in the fall 2011 CBM001 Student Reports. Over sixty percent of the errors identified in the initial THECB edit reports related to Item #39 High School Codes. Eight student records were reviewed in detail to determine the cause of the missing or invalid high school code. The final CBM001 Student Report records were checked to verify the corrections. These student records were traced to the Banner System and if possible to the Apply Texas applications submitted.

CRITERIA
Texas Administrative Code
§4.11 Common Admission Application Forms
§6.10 Texas State Records Retention Schedule
§21.25 Information Required to Initially Establish Resident Status
§21.29 Residence Determination Official
§202.71 Management and Staff Responsibilities
§202.75 Information Resources Security Safeguards
CRITERIA Continued
Texas Education Code
   §51.762 Common Admission Application Forms
   §54.014 Tuition for Repeated or Excessive Undergraduate Hours
   §61.059 Appropriations
   §61.062 Powers Respecting Junior Colleges

Alamo Colleges Policies and District Procedures
   A.1.2 Geographic Boundaries and Service Area Policy
   C.2.4 Records Management Policy
   F.2.1 Student Enrollment Requirements Policy
   F.2.1.1 State Residency Procedure
   F.2.2 Student Tuition Policy

THECB’s Reporting and Procedures Manual for Texas Community, Technical, and State Colleges
   and Appendices dated summer 2011

Banner / Texas Connection Consortium Student Data Map Texas Community, Technical & State
   Colleges dated February 2010

Banner / Texas Connection Consortium Student User Guide v1.1 dated November 2011

Dual Credit Agreement with Judson Independent School District dated August 2011

AUDITING STANDARDS
We conducted this performance audit in accordance with generally accepted governmental
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 the
audit objectives. We believe that the evidence obtained provides a reasonable basis for the
findings and conclusions based on our audit objectives.

This audit was also conducted in conformance with the International Standards for the Professional
Practice of Internal Auditing issued by the Institute of Internal Auditors.

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in completing this project. The Campus State Reporting Officials were also very helpful. The
District Director of Institutional Research and Effectiveness Services and the Center for Student
Information Director provided assistance as well.

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