Texas Legislative Budget Board

Community College Financial Ratios Report

Final Report

October 22, 2010

Executive Summary

Background

Community colleges play a very important role in the State, providing postsecondary education options for people of all ages and backgrounds. The Texas community college system includes 50 districts encompassing more than 75 individual institutions. These entities rely on multiple sources of funding, including funding from the State of Texas, local taxes and student tuition and fees.

The Legislative Budget Board (LBB) identified a major concern regarding the community college system in its January 2009 report titled *Texas State Government Effectiveness and Efficiency*, which stated: the Texas Higher Education Coordinating Board (THECB) "lacks a formal mechanism to assist 18 public community college districts that may have financial difficulties. Without this mechanism, the State's assistance to resolve the financial condition of identified districts may be too late." The LBB recommended requiring THECB "use standard financial ratios to detect early concerns at Texas public community college districts and to work with the districts to improve financial conditions and decrease financial risks."

The LBB initiated this project to take the next step toward defining and implementing a proactive monitoring effort that could be used by the LBB, community college boards, legislative committees, the THECB and other similar entities.

In 1980, KPMG LLP published a series of financial ratios for public and private 4-year institutions. These ratios have been adjusted over time and remain in use by many colleges and universities. As the KPMG indicators are the standard for 4-year institutions, determining whether these ratios are applicable to community colleges (given the differences between 4-year institutions and community colleges) was the starting point for this review.

The objectives of this project were to:

1. Assess the applicability of existing KPMG financial ratios to Texas community college districts;
2. Identify other, non-financial indicators to use in conjunction with financial ratios, if appropriate;
3. Make a recommendation regarding whether this early-warning approach would be valuable in predicting the financial health of Texas community college districts; and
4. If the approach has value, develop guidelines on how to use the indicators.

The *Report* is organized into four principal parts:

- **Section 1 – Introduction**: presents the project background, scope and approach used during this assessment.
- **Section 2 – Financial indicators**: presents the financial indicators recommended for use by Texas community colleges. This section reviews four core strategic KPMG ratios and explains which of those are recommended for use, and why. In addition, it introduces three non-KPMG financial indicators recommended for use by the Texas community college system.
- **Section 3 – Non-financial indicators**: presents non-financial indicators that are complementary to the financial indicators and that are recommended for use in identifying financial distress.

- **Section 4 – Implementation guidelines**: explains how the financial and non-financial indicators should be captured and used, including data sources, reporting frequency and initial thresholds to assess community college health.
- **Section 5 – Conclusion:** provides a wrap-up of the report, discussing at a high level findings and observations, recommendations and next steps.

Financial ratios

There are four core strategic KPMG ratios: primary reserve ratio, return on net assets ratio, net operating revenues ratio and viability ratio. The assessment team reviewed each of the four core strategic KPMG ratios for applicability to the Texas community college system and recommends three of the four core strategic KPMG ratios for use. The team does not recommend using the return on net assets ratio as an indicator of financial distress for Texas community colleges.

In addition to three of the KPMG core strategic ratios, the assessment team recommends using two additional financial indicators of potential distress: diversification of revenue sources and revenue-backed debt coverage ratio and one alternate financial ratio: the equity ratio.

Applicability of non-financial indicators

The assessment team developed four non-financial indicators to complement financial indicators and provide a broader perspective to this early warning system. These non-financial indicators reflect input provided by all subject matter experts interviewed and best practices for community college operations. They are: audit opinions, community college leadership, bond ratings and the enrollment fluctuation ratio.

Implementation

Because THECB has a legislative mandate[1] to oversee community colleges, the assessment team recommends that THECB monitor, on an annual basis, community college's performance against 6 primary indicators (shown below along with the alternate primary indicator and 3 secondary indicators). Three additional indicators are provided to offer insight into the stability and financial well-being of a college when one or more flags are raised as a result of primary indicators.

Indicator
Primary
Diversification of revenue sources
Primary reserve ratio
Viability ratio
Alternate: Equity ratio
Operating revenue ratio
Audit opinions
Community college leadership
Secondary

[1] THECB was created by the Texas Legislature in 1965 and "represents the highest authority in the state in matters of public higher education." (Texas Education Code, Sec. 61.051(a)) THECB was charged with providing "leadership and coordination for the Texas higher education system" so that Texas may "achieve excellence for college education of its youth through the efficient and effective" use of resources and "elimination of costly duplication in program offerings, faculties, and physical plants." (Texas Education Code, Sec. 61.002(a))

Bond ratings
Enrollment fluctuation ratio
Revenue-backed debt coverage ratio

The assessment team recommends that each community college district report the proposed indicators through an annual assessment following year-end financial reporting. Because a majority of data for the financial ratios is currently collected through the THECB CARAT database, there should be limited additional effort necessary for community college districts.

For those financial indicators that require data from the community college district's financial report that are not currently captured in the CARAT database, the team recommends using additional data entry fields for such data. The non-financial indicators will require self-reporting and new data collection, ideally through the CARAT database.

The assessment team also recommends that the THECB calculate and present these indicators in the CARAT database. If implemented through the CARAT database, there will be a single source of data entry for community college districts and a single repository for financial and non-financial indicator review. These ratios build on those already reviewed by the THECB through the CARAT database. Maintaining all indicators should further the THECB's ability to monitor community colleges.

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Section 1: Introduction

This introduction briefly characterizes the background that led to the community college financial ratios review project, describes the scope of the review and presents the review methodology. In addition, it describes the purpose and structure of this report, the *Community College Financial Ratios Report*.

1.1 Background

Community colleges play a very important role in the State, providing postsecondary education options for people of all ages and backgrounds. The Texas community college system includes 50 districts encompassing more than 75 individual institutions. These organizations rely on multiple sources of funding, including funding from the State of Texas, local taxes and student tuition and fees.

Texas currently does not employ a proactive monitoring system to identify potential issues with the financial state of community colleges, although such an approach has been used for postsecondary institutions elsewhere for quite some time. In 1980, KPMG LLP published a series of financial ratios for public and private 4-year institutions. These ratios have been adjusted over time and remain in use by many colleges and universities.

The Legislative Budget Board (LBB) identified a major concern in its January 2009 report titled *Texas State Government Effectiveness and Efficiency*, which stated: the Texas Higher Education Coordinating Board (THECB) "lacks a formal mechanism to assist 18 public community college districts that may have financial difficulties. Without this mechanism, the State's assistance to resolve the financial condition of identified districts may be too late." The LBB recommended requiring THECB "use standard financial ratios to detect early concerns at Texas public community college districts and to work with the districts to improve financial conditions and decrease financial risks."

To date no Texas community college districts have failed; however, several have experienced issues with fraud and the ability to fund some districts is increasingly at risk. Failure would be costly to the State and also would adversely impact the availability of needed education for students. The LBB initiated this project to take the next step toward defining and implementing a proactive monitoring effort that could be used by the LBB, community college boards, legislative committees, the THECB or other similar entities. As the KPMG indicators are the standard for 4-year institutions, determining whether these ratios are applicable to community colleges (given the differences between 4-year institutions and community colleges) were the starting point for this review.

1.1.1 Understanding Texas community colleges

Understanding what makes Texas community colleges unique in relation to other higher education institutions is important when developing an early warning system. Four key characteristics make community colleges unique are their mission, their local control, their fluctuating enrollment and their diverse revenue sources.

Texas community college **missions** focus on providing affordable and accessible education and training for students in their defined service areas. Community colleges are significant contributors to State-wide education and economic growth. Therefore, to be responsive to the needs of the local

population and economy, the programs offered may change with some regularity. Community colleges also must serve varied populations in their communities, including both degree-seeking and non-degree-seeking students.

Community colleges are governed by Boards comprising representatives from districts' local communities, thereby providing the colleges **local control**. Board members define the vision, mission and policies that direct and govern each institution. To support the evolving education and training needs of the local community, local Boards have a great deal of authority to influence change.

Community college **enrollment can fluctuate** significantly, particularly with economic cycles, as community colleges typically do not limit enrollment (as do most other higher education institutions). While increased enrollment creates greater net revenue, community colleges rarely prosper from increased enrollment—instead, they face greater expenses and may need additional revenue as a result of increases in enrollment. This is because tuition and fees typically do not cover per student costs.

Revenue sources are very different for community colleges when compared to other institutions of higher education. Texas community colleges receive revenue from three principal sources: State appropriations (which are based on a bi-annual funding formula that relies primarily on student contact hours), local taxes and tuition and fees. Tuition and fees often cover a small percent of community college costs and are set to foster affordability for those students served. Although some community colleges have endowments, these are less common than in larger public and private schools and, to the extent that they exist, they are usually set aside for tuition assistance and are not available for use as a revenue source for the college. This is another differentiation in community college revenue sources.

Community colleges have performance measures included on Texas Higher Education Coordinating Board (THECB) Accountability System for monitoring efficiency and performance. However, these performance measures do not identify potential financial distress.

1.1.2 Assessment environment

The environment in which community colleges operate is changing substantially. Community colleges are growing, while their revenue sources are shifting. Meanwhile, as a result of the State's *Closing the Gaps* plan, there is a push to focus on success rates for institutions of higher education.[2] This could have a significant impact on the financial standing of community colleges if it led to success-based (rather than enrollment-based) State funding for community colleges, a move that was debated but not made in the last legislative session.

[2] *Closing the Gaps* identifies four critical challenges that must be overcome to ensure an educated population and workforce for the future well-being of Texas:

- *Goal 1*: Close the Gaps in Participation – By 2015, close the gaps in participation rates across Texas to add 500,000 more students.
- *Goal 2*: Close the Gaps in Success – By 2015, increase by 50 percent the number of degrees, certificates and other identifiable student successes from high quality programs.
- *Goal 3*: Close the Gaps in Excellence – By 2015, substantially increase the number of nationally recognized programs or services at colleges and universities in Texas.
- *Goal 4*: Close the Gaps in Research – By 2015, increase the level of federal science and engineering research funding to Texas institutions by 50 percent to $1.3 billion.

Texas community college enrollment has grown steadily over the last decade[3]. The national economic decline has further boosted enrollment in some community colleges (primarily those in large metropolitan areas). This growth puts community colleges in the difficult position of having increased demand for instruction at a time of national economic instability, leading to shifts in revenue available to fund colleges. As a result, many colleges have to rely more on tuition and fees (which can hinder accessibility of colleges). And yet *Closing the Gaps* asserts that community colleges should set tuition and fees to maintain affordability for all students.

Community college site visit participants mentioned that, as a result of these dual pressures, they have relied more heavily on student aid programs to help fund student tuition. The performance of a community college's student aid office can, therefore, become an important factor supporting success. Some community colleges are also looking to develop more partnerships (public and private) to widen their revenue sources and deliver on their mission.

If community colleges are to maintain tuition and fees while increasing enrollment, the State will face increased demands for community college funding. This, in turn, increases the State's interest in ensuring that its investments in community colleges are successful and that community colleges not fail.

1.1.3 Tools in use

The THECB currently is implementing a CARAT (Community College Annual Reporting and Analysis Tool) database to publish a set of ratios, including a subset of the latest KPMG ratios, drawn from data provided in community college annual financial reports from 2003 forward. These ratios are, to a varying degree, being reviewed by community college leadership to monitor performance and to strategically manage their financial profiles.

Although non-financial indicators are currently used by representatives of the Texas community college system, they are not used consistently throughout the state. Individual community colleges maintain local control where the Board, with assistance from Administration, sets parameters for areas of local importance. Through community college site visits, the assessment team found that community colleges use different measures of efficiency (e.g., classroom size and student to teacher ratios, full-time vs. part-time faculty). When community colleges do use the same measures, their target for success is often different given their geographic location, programs offered, and the management styles of the Board and Administration. THECB is developing *The Higher Education Accountability System* to track performance on the four *Closing the Gaps* target areas of: participation, success, excellence and research. Factors being tracked include graduation and persistence rates, degrees and certifications issued, student transfers, and program awards received.

1.2 Project scope

The objectives of this project were to:

1. Assess the applicability of existing KPMG financial ratios to Texas community college districts;
2. Identify other, non-financial indicators to use in conjunction with financial ratios, if appropriate;

[3] Based on total enrollment data between 2000 and 2009 pulled from THECB Accountability System

3. Make a recommendation regarding whether this early-warning approach would be valuable in predicting the financial health of Texas community college districts; and
4. If the approach has value, develop guidelines on how to use the indicators.

The study focused on identifying indicators specific to community colleges, recognizing that they may be different than those appropriate for other higher education institutions.

1.3 Methodology

The project methodology combined independent analysis of available data with obtaining input from subject matter experts (SMEs) and from selected representatives of Texas community colleges. This methodology was designed to benefit from the experience and multiple viewpoints of the SMEs and to increase the practical value of, and buy-in to, the recommended indicators.

1.3.1 Analyze available data and identify candidate indicators

The assessment team members began their work by assessing the applicability to Texas community colleges of KPMG-developed ratios for higher education institutions. The team compiled information regarding current and historic ratio values for Texas community college districts and institutions, looked at trends and compared the ratio values and trends with other available sources of information regarding community college financial stability or performance. In addition, to the extent the data was accessible, the team gathered benchmark data for the financial performance of other community colleges or districts from California, Massachusetts and Ohio.

The team considered non-financial data that may be applicable to an early warning system, for example demographics, graduation rates, enrollment numbers and trends, student-teacher ratios and aspects of leadership. In addition, the team considered the availability of quality and timely data to support possible indicators. The team then prioritized candidate non-financial indicators based upon their expected value, and identified correlations among indicators.

1.3.2 Interview SMEs

The team worked with LBB staff to identify SMEs to interview regarding use of financial ratios and other early warning indicators. To gain a varied perspective, the team identified six SMEs, including three current Texas community college Chief Financial Officers (CFOs), a representative from the Texas State Auditor's office, a representative from a bond rating house and a representative from the Southern Association of Colleges and Schools (SACS). Unfortunately, the representative from the State Auditor's office was not available to participate as a SMEs for this project. As a result, a community college president was substituted as the sixth SME.

To gain feedback on consistent themes, the assessment team used an interview guide approved by the LBB, for SME interviews. During SME interviews, the team gathered input regarding community college management, operations and stability, and regarding financial and non-financial indicators either currently in use or suggested by the interviewee.

1.3.3 Develop preliminary set of indicators

Based on the results of data analysis and SME interviews, the assessment team developed a preliminary set of indicators, including both financial ratios and non-financial indicators. For each indicator, the team included a definition, the expected data source(s) and the expected value. The

team used this comprehensive set of indicators for the remaining interviews and community college site visits.

1.3.4 Validate preliminary set of indicators

The assessment team validated the preliminary indicators via follow-up SME discussions, community college site visits and LBB review.

The team conducted follow-up meetings with all SMEs previously interviewed to discuss the preliminary indicators and how well they align to initial feedback. The early warning indicators identified through this project are intended to be measures for all Texas community colleges. Therefore, the team required input from a diverse cross-section of these colleges to ensure the broadest applicability. The team selected 10 community colleges to visit based on:

- **2007 and 2009 condition based on KPMG ratios.** As discussed in the January 2009 LBB report, "*Strengthen Financial Monitoring and Assessment for Community Colleges*," the LBB used the KPMG ratios to assess the financial condition of Texas community colleges for fiscal year 2007. Through this analysis, the LBB categorized schools as Satisfactory, Watch or Unsatisfactory. The assessment team included colleges within each category in the site visits as colleges in varying financial conditions could have different views on relevant indicators. For example, those identified in the Watch and Unsatisfactory categories might believe other factors would better indicate the actual condition of their colleges. To create a diverse and representative group of colleges to visit, the assessment team selected at least one college that fell into each of the three categories introduced by the LBB in 2007 and at least one college that fell into each of the three categories in 2009.

- **Setting and community size.** Colleges in rural or small town settings have different challenges than those in urban areas. These include limits on types of programs offered, difficulties in student and faculty recruitment, and smaller taxable districts. Administrators of these colleges may have a different focus on the most important factors in assessing the health of their institutions.

  Using the College Board's categorization of schools by setting and community size, setting refers to the surroundings of the campus and community size refers to the population of the city in which the school is located. Urban settings are located in densely populated city areas, suburban settings are more residential areas away from the heart of the city and rural settings are located near open areas.

Community sizes (as categorized by the College Board and presented on their web site) are as follows:

Description	Population
Rural community	Under 2,500
Small town	2,500 – 9,999
Large town	10,000 – 49,999
Small city	50,000 – 249,999
Large city	250,000 – 499,999
Very large city	Over 500,000

Table 1-1: Community sizes (as categorized by the College Board)

The assessment team selected for visits at least one college from each setting (urban, suburban and rural) and included colleges that represented diverse community sizes (rural, large town, small city, large city and very large city communities were represented).

- **Debt.** The ability to repay debt is an important factor in the financial condition of community colleges. Almost all of the colleges have debt, which may be tax-funded or may be revenue bonds. As different indicators may be more useful to issuers of one type of debt versus another, the visits included community colleges with tax-funded debt only, revenue-funded debt only and both.

- **Enrollment.** Colleges with differing enrollments may have different views on relevant indicators, particularly those involving enrollment. The team considered colleges with enrollments 50,000 or more to be large schools; enrollments between 10,000 and 49,999 to be medium schools; and enrollments of less than 10,000 to be small schools. The team visited at least one school from each category.

- **Multi-college/multi-campus districts.** Some community college districts comprise multiple colleges or campuses that are administered independently within the overall system. One poorly performing college or campus within a district could cause a change in the overall ratios for the district. The team visited one multi-college and two multi-campus districts to understand the relevance of proposed indicators.

Table 1-2 profiles the characteristics of community colleges selected for site visits.

	2007 and 2009 conditions based on KPMG ratios	Setting and community size	Debt	Enrollment	Multi-college/campus districts
1	• 2007: Satisfactory • 2009: Unsatisfactory	• Urban community college district • Very large city	Both tax- and revenue-backed bonds	• Large community college district • Enrollment of 86,099	Multi-college district, with five colleges

2	• 2007: Watch • 2009: Watch	• Rural community college • Large town	Revenue-backed bonds; no tax-backed bonds	• Medium community college • Enrollment of 25,662	Single-college entity
3	• 2007: Unsatisfactory • 2009: Watch	• Rural community college • Large town	Revenue-backed bonds; no tax-backed bonds	• Small community college • Enrollment of 6,536	Single-college entity
4	• 2007: Satisfactory • 2009: Satisfactory	• Rural community college • Large town	Both tax- and revenue-backed bonds	• Small community college • Enrollment of 8,754	Single-college entity
5	• 2007: Unsatisfactory • 2009: Satisfactory	• Urban community college district • Large city	Both tax- and revenue-backed bonds	• Medium community college • Enrollment of 15,828	Single-college entity
6	• 2007: Watch • 2009: Watch	• Suburban community college district • Very large city	Tax-backed bonds; no revenue-backed bonds	• Large community college district • Enrollment of 75,823	Multi-campus district, with five campuses
7	• 2007: Satisfactory • 2009: Satisfactory	• Urban community college district • Small city	Revenue-backed bonds; no tax-backed bonds	• Medium community college • Enrollment of 10,722	Single-college entity
8	• 2007: Watch • 2009: Satisfactory	• Rural community college • Rural community	Neither tax- nor revenue-backed bonds	• Small community college • Enrollment of 1,221	Single-college entity
9	• 2007: Satisfactory • 2009: Satisfactory	• Suburban community college district • Very large city	Tax-backed bonds; no revenue-backed bonds	• medium community college district • Enrollment of 40,776	Multi-campus district, with three campuses
10	• 2007: Satisfactory • 2009: Watch	• Urban community college district • Small city	Revenue-backed bonds; no tax-backed bonds	• Medium community college • Enrollment of 20,281	Single-college entity

Table 1-2: Characteristics of community colleges selected for site visits

The goal of the site visits was to assess the relevance of the preliminary indicators to community college performance and their potential value to community college managers and executives. These discussions also shed light upon the availability of needed data to calculate indicator values and upon potential risks or shortcomings in the indicators. In addition, these interviews provided an opportunity for community college representatives to participate in defining the early warning system. During each meeting, the interviewee had an opportunity to review and comment on all preliminary indicators. Participants also provided input regarding other potential indicators and general thoughts or concerns regarding the development of an early warning system to detect potential community college distress. At each site visit the assessment team met with the chief executive (Chancellor or President), CFO, a member of the Board and the internal auditor, if one existed. The assessment team conducted site visits at the 10 representative community colleges or districts between August 9, 2010 and August 25, 2010.

Throughout this process, the assessment team coordinated with the LBB to share key feedback and to gather LBB input regarding the ratios. The team presented a revised set of indicators to the LBB after completing all site visits and received approval before moving forward with the remaining stages of analysis.

1.3.5 Develop implementation guidelines

Once the LBB approved a revised suite of indicators based on input from all SMEs and community college representatives, the team developed guidelines regarding use of the early warning system, taking into consideration factors such as:

- Sources of data
- Timing of assessments
- Fit with types of community college districts or institutions
- Risk and/or weaknesses
- Predictive window

Taking into account best practices and reviewing calculated values of indicators (to the extent that data existed to allow for calculation), the team then developed applicable thresholds for each indicator. In some instances, the thresholds are two-tiered, with certain thresholds that trigger a "yellow flag" and additional criteria or thresholds that serve to either clear the flag or turn the "yellow flag" into a "red flag."

1.4 Document organization

The *Report* is organized into four principal parts:

- **Section 1 – Introduction**: presents the project background, scope and approach used during this assessment.
- **Section 2 – Financial indicators**: presents the financial indicators recommended for use by Texas community colleges. This section reviews four core strategic KPMG ratios and explains which of those are recommended for use, and why. In addition, it introduces three non-KPMG financial indicators recommended for use by the Texas community college system.
- **Section 3 – Non-financial indicators**: presents non-financial indicators that are complementary to the financial indicators and that recommended for use in identifying financial distress.
- **Section 4 – Implementation guidelines**: explains how the financial and non-financial indicators should be captured and used, including data sources, reporting frequency and initial thresholds to assess community college health.
- **Section 5 – Conclusion:** provides a wrap-up of the report, discussing at a high level findings and observations, recommendations and next steps.

Section 2: Financial indicators

2.1 Introduction

This section is intended to provide an overview of the financial indicators recommended by the assessment team for use in the Texas community college system. It begins with a review of each of the four core strategic KPMG ratios, together with an explanation of whether each of these ratios was selected as a key ratio for Texas community colleges and why or why not such a selection was made. It then presents three non-KPMG financial ratios that are recommended for use in monitoring the Texas community college system.

2.2 KPMG financial ratios

The financial ratios that were published by KPMG in 1980 were intended to help stakeholders, such as trustees and leadership of 4-year institutions, credit agencies and policy makers to more easily assess the financial health of an institution using information provided in financial statements. In addition, these ratios were intended to be a simple-to-calculate, easy-to-communicate way of presenting financial analysis to stakeholders.

The KPMG financial ratios have been refined multiple times over the past 4 decades. The fourth edition, *Measuring Past Performance to Chart Future Direction*, published in 1999, introduced new concepts to higher education financial analysis, including the use of financial ratios in strategic planning. The fifth and sixth editions, published in 2002 and 2005, respectively, combined ratios for public and private institutions as the financial reporting model used by public institutions became more similar to their private counterparts. The seventh and latest edition, *Strategic Financial Analysis for Higher Education: Identifying, Measuring, and Reporting Financial Risks*, reflects dramatic changes in the economic environment that, in turn, change the way institutions must manage risk. Since KPMG introduced the first edition of *Ratio Analysis in Higher Education* in 1980, college and university trustees and interested external stakeholders have used financial ratio analysis as a tool to better understand and interpret public and private financial statements.

KPMG identified four key financial questions for all public postsecondary education institutions:

- "Are resources sufficient and flexible enough to support the mission?"
- "Does asset performance and management support the strategic direction?"
- "Do operating results indicate the institution is living within available resources?"
- "Are debt resources managed strategically to advance the mission?"[4]

These questions serve the basis for defining four core strategic KPMG ratios:

- Primary reserve ratio
- Return on net assets ratio

[4] KPMG, Prager, Sealy & Co, LLC, and Attain: *Strategic Financial Analysis for Higher Education: Identifying, Measuring & Reporting Financial Risks, Seventh Edition*, page 86.

- Net operating revenues ratio
- Viability ratio

The assessment team reviewed each of the four core strategic KPMG ratios for applicability to the Texas community college system and recommends three of the four core strategic KPMG ratios for use. For each core strategic KPMG financial ratio, the subsections below provide a definition and purpose as well as whether that ratio is recommended for use.

2.2.1 Primary reserve ratio

The *Primary reserve ratio* measures the financial strength of an institution by comparing expendable net assets to total expenses. Expendable net assets represent those that the institution can access quickly and spend to satisfy obligations. This ratio provides a snapshot of financial strength and flexibility by indicating how long the institution could function using its expendable reserves without relying on additional revenues generated by operations. Expenses, rather than revenues, are a better indicator of operating size since they are typically less volatile and under greater management control. It is reasonable to expect expendable net assets to increase at least in proportion to the rate of growth in operating size. If they do not, the same dollar amount of expendable net assets will provide a smaller margin of protection against adversity as the institution grows in dollar level of expenses.

The *Primary reserve ratio* is defined by KPMG as follows:

$$\frac{Expendable\ net\ assets}{Total\ expenses}$$

The numerator includes all unrestricted net assets and all expendable restricted net assets, excluding those to be invested in plant. Nonexpendable restricted net assets are not included because they may not be used to extinguish liabilities incurred for operating or plant expenses without special legal permission.

The denominator comprises all expenses in the statement of revenues, expenses and changes in net assets including operating expenses and non-operating expenses such as interest expense.

This indicator is applicable to Texas community colleges because they are just as likely as other institutions of higher education to use net assets in an emergency situation given reduced or absent funding. The indicator provides valuable insight into a college's ability to operate without additional funding as it would for other institutions of higher education. However, the calculation must be modified to conform to how Texas community colleges report their annual financial reports.

The proposed ratio for Texas community college use is:

$$\frac{Unrestricted\ net\ assets}{Total\ operating\ expenses}$$

(Unrestricted net assets represent those assets that an institution can access quickly and spend to satisfy its obligations.)

Expendable net assets is replaced with unrestricted net assets to be consistent with the terminology used in Texas community college CAFRs. Expendable restricted net assets (the numerator in the KPMG definition) cannot be used to fund all operating expenses. In addition, the portion of expendable restricted net assets that is for plant support was excluded from KPMG's definition.

Total expenses is replaced with total operating expenses because this provides a better picture of how well the community college could fund its operations and excludes noncash expenses such as depreciation and investment losses.

2.2.2 Return on net assets ratio

The *Return on net assets ratio* determines whether the institution is financially better off than in previous years by measuring total economic return. This ratio is better applied over several years so that the results of long-term plans are measured. Single-year events can introduce significant year-to-year volatility. Long-term returns may be quite volatile and vary significantly based on the prevailing level of inflation in the economy.

The *Return on net assets ratio* is defined by KPMG as follows:

$$\frac{Change\ in\ net\ assets}{Total\ net\ assets}$$

The numerator is the change in total net assets regardless of whether they are expendable or non-expendable, restricted or unrestricted. The denominator is the beginning of the year total net assets.

This indicator is not considered useful to Texas community colleges. Numerous factors (such as increased enrollment, using reserves to fund new infrastructure, and market value losses on investments) could cause fluctuations or declines in this ratio that would not necessarily signal financial distress regarding operations.

2.2.3 Net operating revenues ratio

The net operating revenues ratio indicates whether total operating activities resulted in a surplus or deficit, demonstrating whether the institution is living within available resources. When reviewed over multiple periods or years, this will indicate whether there will be an inability to fund operations at existing levels. This ratio helps to explain how the surplus from operating activities affects the behavior of the other strategic ratios.

The net operating revenues ratio is defined by KPMG as follows:

$$\frac{Operating\ income\ (Loss)\ plus\ net\ non-operating\ revenues}{Operating\ revenues\ plus\ non-operating\ revenue}$$

The numerator includes non-operating revenues and expenses, including governmental appropriations, investment income, interest expenses on plant debt and operating gifts since these items support operating activities of the institution. The denominator is equal to total operating

revenues plus total non-operating revenues, excluding capital appropriations and gifts and additions to permanent endowments.

This indicator provides valuable insight into a community college's ability to operate within their available resources as it would for other institutions of higher education. Texas community colleges need to evaluate how well they project and manage their revenues and expenses and should not resort to deficit spending, particularly over consecutive years. However, the calculation must be modified to conform to how Texas community colleges report their annual financial reports.

The proposed ratio for Texas community college use is:

$$\frac{Increase\ or\ decrease\ in\ net\ assets}{Operating\ revenues\ plus\ non-operating\ revenues}$$

The numerator is replaced with the increase or decrease in net assets as reported on the Statement of Revenues, Expenses, and Changes in Net Assets. The denominator remains operating revenues plus non-operating revenues.[5]

2.2.4 Viability ratio

The viability ratio measures the availability of expendable net assets to cover debt should the institution need to settle its obligations as of the balance sheet date. This is used to measure if the institution is managing debt strategically to advance their mission. Ultimately, a distressed financial condition will impair the ability of an institution to fulfill its mission and meet its service obligations to students, since resources must be diverted to fulfill financial covenants and debt service requirements. "An institution in a continually fragile financial condition will find itself driven by fiscal rather than programmatic issues and short-term rather than long-term objectives."[6]

The viability ratio is defined by KPMG as follows:

$$\frac{Expendable\ net\ assets}{Long-term\ debt}$$

The numerator is the same as for the primary reserve ratio. The denominator is defined as all amounts borrowed for long-term purposes from third parties and includes all notes, bonds, and capital leases payable that impact the institution's credit, whether or not the institutions directly owes the obligation. This would include debt of the institution's affiliated foundations, partnerships, and other special-purpose entities. It would also include amounts owed to a system or state-financing agency as it represents debt issued on the institution's behalf. It includes both the current and non-current portions of debt used for long-term purposes; it does not include debt whose related assets are cash or assets convertible to cash in the normal course of business, such as unexpended bond proceeds for plant purposes and amounts borrowed for student loan programs.

[5] Revenues are defined and classified into operating and nonoperating on the SRECNA in the CAFR.

[6] *Ratio Analysis in Higher Education: New Insights for Leaders of Public Higher Education*, 2002

This indicator is applicable to Texas community colleges. It provides valuable insight into the institution's ability to assume new debt as it would for other institutions of higher education. However, the calculation must be modified to conform to how Texas community colleges report their annual financial reports.

The proposed ratio for Texas community college use is:

$$\frac{Unrestricted\ net\ assets\ plus\ restricted\ expendable\ net\ assets\ for\ debt\ service}{Long-term\ debt}$$

Expendable net assets are more appropriately defined as unrestricted net assets plus restricted expendable net assets for debt service because these would be the resources available to settle the debt. The definition of long-term debt is still appropriate as this covers the obligations of Texas community colleges.

2.3 Additional financial ratios

This subsection will introduce additional financial ratios that are proposed for use by the Texas community college system. These ratios are based on input from SMEs, community college representatives, and community college best practices. For each additional financial ratio, the subsections below provide a definition and purpose as well as whether that ratio is recommended for use by the Texas community college system.

2.3.1 Diversification of revenue sources

Texas community colleges receive a majority of their revenue from three key sources: State appropriations, local community (ad valorem) taxes, and tuition and fees. This indicator assesses whether there is a disproportionate dependency or reliance on one revenue source to operate a college. Community college representatives consistently stated that they currently track such changes in revenue sources and understand the risks associated with relying on a single source.

Over-reliance on one revenue source can indicate potential distress if that source becomes unstable (e.g., declining appraised values which impact local tax revenue, a shrinking State budget). The assessment team has defined this indicator as follows:

$$(Revenue\ source/total\ revenue) * 100$$

Revenue includes (1) tuition and fees (operating revenue), (2) State appropriations and (3) ad valorem tax (unrestricted non-operating revenue), (4) student aid (federal non-operating revenue), and (5) other. These represent a portion of operating revenue [tuition and fees], a portion of unrestricted non-operating revenue [State appropriations and ad valorem tax], and the sum of all other revenues included on the financial statement.

While this ratio does not have a direct relationships with most other recommended indicators, unstable revenue sources will impact net assets down the road.

2.3.2 Equity ratio

This indicator is included as part of the early warning system as a substitute for the *Viability ratio* if a community college does not carry debt. This ratio was introduced by the U.S. Department of Education in its Financial Responsibility Ratios[7] as a replacement for the *Viability ratio* because not all institutions carry debt. It measures capital resources available, the college's ability to borrow, and overall financial viability. A low ratio and decreasing trend suggests the college is becoming increasingly leveraged in its liabilities (even without debt). This ratio is defined as follows:

$$\frac{Net\ assets}{Total\ assets}$$

2.3.3 Revenue-backed debt coverage ratio

The KPMG report on financial ratios states that "the financial analysis must measure leverage or indebtedness that the institution has incurred. Debt levels and capacity need to be monitored continuously."[8] This ratio examines a community college's ability to generate enough revenue to meet its debt payments for which that revenue is pledged.

While community colleges can hold tax-backed and/or revenue-backed debt—and not all community colleges hold either or both types of debt—this ratio looks at only revenue-backed debt as tax-backed debt is covered by adjusting local tax rates as required. This is mandated by State law. Tax backed debt must be voted on an approved by the local community.

This ratio is defined as follows:

$$\frac{Pledged\ revenue}{Revenue - backed\ debt\ service}$$

As an additional consideration, some community colleges may have debt covenants that require this ratio to be maintained at a minimum level. Failure to meet that requirement would constitute a default on debt, which could lead to higher interest rates or accelerated payments.

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[7] The Department of Education used the primary reserve ratio, the equity ratio and a net income ratio to provide oversight of institutions participating in programs authorized by title IV of the Higher Education Act of 1965, as amended (title IV, HEA programs). See 34 CFR Part 668, RIN 1840–AC36, Student Assistance General Provisions as published in the Federal Register on November 25, 1997 http://www.nacubo.org/Documents/BusinessPolicyAreas/1997FRp62830.pdf .

[8] *Ratio Analysis in Higher Education: New Insights for Leaders of Public Higher Education*, 2002

Section 3: Non-financial indicators

3.1 Introduction

This section is intended to provide an overview of the non-financial indicators selected by the assessment team for use in the Texas community college system. The non-financial indicators developed by the assessment team are intended to serve as indicators of financial risk, rather than quality, success, or efficiency.

3.2 Proposed non-financial indicators

This section introduces the non-financial indicators that are proposed for use by the Texas community college system. The assessment team developed non-financial indicators to complement financial indicators and provide a broader perspective to this early warning system. These non-financial indicators reflect input provided by all SMEs interviewed and best practices for community college operations. The following subsections provide definitions, the expected value, data sources, and relationships with other indicators for each ratio.

3.2.1 Audit opinions

Qualified or adverse opinions related to the financial statements or single audit can be one of the most significant indicators of potential financial or management issues for an institution. All Texas community colleges are required to have an annual audit performed by an independent accounting firm. The auditors provide opinions on the financial statements and grant compliance (federal and state single audits). Audit results assess internal financial control measures and identify reoccurring issues that could lead to other errors or fraud.

An organization will not be able to function effectively with poor financial or internal controls. These issues could also be damaging to the college's reputation. The assessment team has therefore defined this indicator as follows:

Is there a qualified or adverse opinion in either a recent financial statement or single audit?

This indicator addresses some issues similar to those that would be addressed by the community college leadership indicator, described below. Poor internal controls, financial controls, and leadership can quickly lead to the mismanagement and breakdown of a community college's financial strength.

3.2.2 Community college leadership

Leadership is a critical factor for any institution. A community college with a strong financial foundation can quickly head toward distress if leadership is inconsistent or ineffective. Community college leadership must arm itself with the tools necessary to effectively manage their institution

towards a successful future. If the college has active, strategic and responsible oversight, there is a higher probability the school is going to be successful.

This indicator measures leadership and oversight regarding the overall control environment. The assessment team has developed a set of questions relating to the components deemed critical to community college leadership. The assessment team has defined this indicator as follows:

1. *Have the CEO or CFO positions been stable and held by only one or two people over the prior 5 years?*
   Limited turnover in key positions is critical to providing a consistent direction for the institution. If there is high turnover, it is important to understand why individuals no longer want to work for the same institution or why members of the Board feel they should not.
2. *Does the college have a strategic plan updated within the last 3 years that is posted online and available to the public?*
   Having current, documented, available, and results oriented planning materials provides a clear, consistent direction for the institution.
3. *Does the college have a deferred maintenance schedule updated within the last 3 years?*
   No two colleges are exactly the same, but many community colleges have aging infrastructure. Some colleges are located on historic sites and/or count historic buildings as part of their campus. Other community colleges are relatively new and have had periods of time (sometimes decades) in which they could all but avoid caring for their new infrastructure. However, as infrastructure ages, it may require overhaul (e.g., to support new technology) or significant repair. Without having a handle on the costs of deferred maintenance, a college could rather abruptly find itself in a position of financial distress.
4. *Does the Board approve the strategic plan and deferred maintenance schedule? Does it use a quantitative method to assess the college's progress toward those plans at least annually?*
   In order to effectively oversee community colleges, Boards must be part of the effort that establishes the institution-wide strategic direction and must have a method for understanding whether the intended direction is being followed.
5. *Does the college have Board-approved policies, including formal financial policies, that have been reviewed within the last 3 years?*
   For colleges to be effectively managed, they need clear, standard, up-to-date policies. For Boards to be fully engaged in community college management, they should be part of the effort that establishes these institution-wide governing policies.
6. *Is the Board informed about any instances of fraud or litigation and actions taken in response?*
   Keeping the Board informed of the college's cases of fraud and litigation is essential to its fully executing its fiduciary responsibilities.
7. *Is at least one member of the Board trained in reviewing public financial statements?*
   The Board must have an appropriate context for executing its fiduciary responsibilities. If no members of the Board have training or background that support their financial statement review, this becomes quite difficult. (A corollary to this question that would be interesting data to collect is the number or percent of Board members that have training in reviewing public financial statements.)
8. *Does the Board receive monthly financial updates and progress against budget statements?*

Keeping the Board informed of the college's financial standing supports its ability to execute its fiduciary responsibilities.

For these indicators to be valuable to all institutions across the Texas community college system, there must be consistent understand of what each element includes. Therefore, the assessment team is defining the following key terms.

A strategic plan must be developed by each community college.[9] The **strategic plan** (referenced in question #2) must include the institution's direction for the upcoming two to five years and provide an overall goal beyond that time period. The community college must include its vision and mission and key attributes for how they plan to achieve each.[10] The purpose of the Strategic Plan is to document the ideas of the Board and administration so that all stakeholders involved can operate under a consistent set of parameters. While not a component of the community college leadership indicator, some institutions also establish performance measures throughout the organization that directly link to goals outlined in the Strategic Plan.[11] One college visited by the team embraced a promising practice by associating the college's strategic plan and the performance measures contained therein directly with personnel performance plans.

The **deferred maintenance plan** (referenced in question #3) should include maintenance as defined in the THECB *Report and Recommendations of the Workgroup on Campus Condition Index: FY 2010*, which identifies the following types of maintenance for an institution:

- ***Critical Deferred Maintenance –*** Any deferred maintenance that if not corrected in the current budget cycle places its building occupants at risk of harm or the facility at risk of not fulfilling its functions.
- ***Deferred Maintenance –*** The accumulation of facility components in need of repair or replacement brought about by age, use, or damage for which remedies are postponed or considered backlogged that is necessary to maintain and extend the life of a facility. This includes repairs postponed due to funding limitations. Deferred maintenance excludes on-going maintenance, planned maintenance performed according to schedule, and Facilities Adaptation items.

Community colleges may consider modeling deferred maintenance plan strategies after best practices included in THECB's report referenced above.

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[9] "In 1991, House Bill 2009 mandated that each state agency (including each public community college) develop a strategic plan based on guidelines issued by the Governor's Office and the Legislative Budget Board. In 1993, the Texas Legislature amended the statute to exclude individual submission of strategic plans by public community/junior colleges, and directed the Coordinating Board and its staff to assist in the development of a consolidated strategic plan for all public community colleges." Texas Higher Education Coordinating Board: *Strategic Plan for Texas Public Community Colleges 2009-2013, April 2008*.

[10] Instructions for preparing and submitting agency strategic plans are published by the Governor's Office of Budget, Planning and Policy and the Legislative Budget Board. See http://www.lbb.state.tx.us/Strategic_Plans/StrategicPlansInstructions_forFY_2011-2015.pdf for the instructions to cover fiscal years 2011-2015, as published in March 2010.

[11] Community colleges must submit select success and demographic data, referred to as performance data, to THECB on an annual basis as required in the Texas Education Code, Section 130.0035.

Although not part of deferred maintenance plans, the following capital and maintenance projects should also be accounted for by a college in its planning activities:

- ***Facilities Adaptation*** – Includes facility improvements and changes to a facility in response to evolving needs. The changes may occur because of new programs or to correct functional obsolescence. This category is sometimes referred to as Capital Renewal.
- ***Planned Maintenance*** – A systematic approach to repairing or replacing major building subsystems including, but not limited to roofs, HVAC, electrical and plumbing systems, which have predictable life-cycles, to maintain and extend the life of the facility. This category is sometimes referred to as Facility Renewal or Capital Repair. Planned maintenance is normally funded by an institution's capital budget.
- ***On-going Maintenance*** – Routine upkeep to include, but not limited to, the lubrication of moving parts, checking electrical systems, and patching of roofs. Failure to attend to these tasks may result in accelerated deterioration of facilities and increases the likelihood of extensive emergency repairs. On-going maintenance is normally funded by an institution's operating budget.

There is currently no consistency to what **policies** (referenced in question #5) ought to be developed by community colleges, how often they should be updated, and what level of visibility they should have. For example, each community college is able to decide if it should establish a reserves policy and then what that policy should be. Each community college is then responsible for sticking to that policy or implementing a plan when they are not able to maintain their reserves as established. Many SMEs with whom we met felt that it was a critical element of sound leadership to have established policies that are Board-approved and that are reviewed for currency on a regular basis. The Texas Association of Community Colleges (TACC) publishes a *Policy Reference Manual* that can serve as a template for policy development and that is periodically updated in accordance with new federal and State laws and regulations.[12]

There are many important aspects of leadership for any institution. This proposed indicator provides those that the assessment team deemed most applicable to potential community college distress. Site visit participants provided valuable insight into this area, including other potential leadership questions. Other suggested topics for a community college leadership indicator include:

- Leadership turnover at levels below the CEO and CFO
- Consensus of Board votes (consistently split votes could indicate tension on the Board)
- Depth and format of financial reports being delivered to the Board (e.g., percentage of total expenditures for the year)
- Tenure issues (e.g., number of tenured faculty)
- Whether there is an internal auditor
- Whether an ethics hotline is in place
- Whether external auditors report directly to the Board; whether the auditors are permitted to report in a closed session

[12] See http://www.tasb.org/policy/pol/private/000006/ for the TACC Policy Reference Manual.

- Whether the external audit contract is re-competed regularly (e.g., every 5 years)

While these are important leadership elements, the assessment team believes that they relate more to leadership effectiveness than to identifying short-term distress.

Elements of community college leadership will impact all other indicators provided through this *Report*. In general, poor or inconsistent leadership can diminish the quality of education provided by a community college, placing the institution in risk of financial distress. For example, inconsistent leadership or a lack of Board involvement can lead to operating outside of available resources and diminished reserves.

3.2.3 Bond ratings

Bond ratings are based on an in-depth investigation that reviews similar aspects as those provided in the proposed suite of indicators. These ratings summarize the financial riskiness of an institution for potential investors and the institution's ability to pay back such investors. Low or non-investment grade ratings identify institutions that likely do not have sustainable financial standing or effective management to improve potential existing distress. A poor or reduced rating could also be damaging to the college's reputation. The assessment team has defined this indicator as follows:

Bond rating for revenue-backed or tax-backed bonds
that has been issued in the last three years as trended from prior years

Although not all colleges have bond ratings, and the ratings will not be updated annually (meaning that not all colleges with bond ratings will have something to report against this indicator each year), for those colleges that do have bond ratings, this indicator will reflect findings and analysis of many other of the financial and non-financial indicators provided in this *Report*. Aspects reviewed by rating houses can identify poor management or financial standing and quantify the overall riskiness of a community college.

3.2.4 Enrollment fluctuation ratio

Student enrollment is the single largest driver for community college operations. Tuition and fees and State appropriations through contact hours typically drive a majority of a college's revenue. This indicator demonstrates the potential impact to revenue and/or expenses as a result of rapid changes to the student population. This indicates whether a student population is likely to get too small to cover infrastructure costs or too large for other revenue sources to cover its expenses. A college with too few students will have problems covering fixed costs such as deferred maintenance, staff and full-time faculty salaries, and debt service. These are expenses a community college will incur regardless of student enrollment because these expenses can not be changed in the short-term. On the other side, a college with too many students will have problems covering the additional variable costs per student. Tuition, fees, and State appropriations per student typically only cover a portion of the total cost for instruction of that student. Enrollment beyond expected capacity can cause increased costs for an institution including temporary building space to hold additional students and adjunct faculty to teach additional classes.

The assessment team has defined this indicator as follows:

$$\frac{Current\ full-time\ student\ enrollment\ (FTSE)\ -\ prior\ year\ FTSE}{Prior\ year\ FTSE}$$

FTSE for this indicator is the same as defined in the THECB AFR Guide. FTSE is the number of full-time students plus total hours taken by part-time students divided by twelve. The hours per student should only include certified hours. The assessment team uses certified hours per student, as opposed to a headcount of all students enrolled, because this is more closely tied to tuition and State appropriation revenue streams, and provides better comparability across years and across colleges.

As enrollment is the lifeblood of an institution of higher education, this indicator will impact all financial indicators. Changes in enrollment will shift revenue sources received by the community college. As institutions are required to cover either infrastructure expenses or operating expenses given fluctuating enrollment, they will either be able to build reserves and grow net assets or use such reserves to cover expenses.

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Section 4: Implementation guidelines

This section will provide guidelines for implementing indicators at the community college district and composite levels.

4.1 Reporting guidelines

The assessment team recommends that each community college report the proposed indicators through an annual assessment following year-end financial reporting. Because a majority of data for the financial ratios is currently collected through the THECB CARAT database, there should be limited additional effort necessary for community college districts.

For those financial indicators that have require additional data from the community college district's financial report, the team recommends using additional data entry fields for such data. The non-financial indicators will require self-reporting and new data collection, ideally through the CARAT database. As AFRs are due by January 1st, the assessment team recommends that additional data be due to be reported to CARAT by January 31st, with THECB certification occurring by February 28th of each year.

The assessment team also recommends that the THECB to calculate and present these indicators in the CARAT database. If implemented through the CARAT database, there will be a single source of data entry for community college districts and a single repository for financial and non-financial indicator review. These ratios build on those already reviewed by the THECB through the CARAT database. Maintaining all indicators should further the THECB's ability to track community college districts as they work toward the goals outlined in the *Closing the Gaps* initiative.

The assessment team has developed thresholds identifying acceptable limits for financial indicators. Community college districts falling outside of these limits will raise a "red" flag during the annual review. Non-financial indicators may result in a "red" flag based on a single response or a "yellow" flag that could become "red" based on secondary information. The following subsections provide data sources and the applicable thresholds or required secondary information for each proposed indicator.

The assessment team has divided the recommended indicators into primary and secondary categories. Table 4-1 presents primary and secondary indicators as defined by the assessment team and recommended for use by the community college system. The primary indicators are recommended for use by all community colleges. The secondary indicators are intended to shed additional light on the financial well-being of those colleges that have triggered flags of concern through the review of primary indicators.

Indicator	
Primary	
Diversification of revenue sources	Operating revenue ratio
Primary reserve ratio	Audit opinions
Viability ratio	Community college leadership
Alternate: Equity ratio	
Secondary	
Bond ratings	Revenue-backed debt coverage ratio
Enrollment fluctuation ratio	

Table 4-1: Primary and secondary indicators

4.1.1 Diversification of revenue sources

The information for this indicator is already reported in the community college CAFR and included in the CARAT database.

The assessment team identified thresholds for this indicator as follows. If a college is reliant upon any source to provide 50% or more of its revenue from a single source, this triggers a "yellow flag." If the revenue source for which the college has greater than 50% reliance is deemed risky given an affirmative response to either of the following questions, a "red flag" is triggered:

- *State appropriations:* Is the State in a period of decreasing budgets and/or reducing appropriations?
- *Tax revenue:* Has the tax rate been increased in the last two years or have property valuations been declining over the last 3 years (based on assessed valuation included in the CARAT database)?

It is worth noting when community colleges rely on tuition and fees for more than 50% of their revenue, this is not seen as a risky revenue source in its own right. Excessive tuition and fees can have two potential impacts on a college (1) they can lead to shrinking enrollment (which would show up in the enrollment indicator) or (2) they can lead a community college to fail in accomplishing its mission of accessibility (which does not necessarily pose a financial threat).

Results summary:

In looking at the State appropriations portion of diversification, we find that for the last fiscal year (2009), only Ranger College relied on State appropriations for more than 50% of its revenue.

Diversification of revenue sources: Dependence on State revenue results	
College	**Results**
Ranger College	2009 (51.9%)

Table 4-2: Diversification of revenue sources: Dependence on State revenue results[13]

Because the State is in a period of decreasing budgets and appropriations, the "yellow flag" triggered by Ranger College being more than 50% dependent on the State is turned into a "red flag."

In looking at the tax revenue portion of diversification, we find that only Tarrant College District relied 50% or more on ad valorem taxes for 2007, 2008, and 2009. However, the district's assessed values increased significantly throughout these years (based on property valuation data found in the CARAT database), resulting in this remaining a "yellow flag" and not triggering a "red flag."[14]

4.1.2 Primary reserve ratio

The information for this indicator is already reported in the community college CAFR and included in the CARAT database.

A good minimum target for community colleges is to have unrestricted reserves that could cover 2-3 months of operations, which would result in a ratio of 0.20. Site visit respondents, indicated they generally target being able to fund 3-6 months of operations, if necessary. If this ratio is below 0.10 or 10%, this is a "red flag" value.

Results summary:

In 2009, the following colleges were below 10%, triggering a "red flag":

Primary reserve ratio results	
College	**Results**
Austin	2009 (9.5%)
Northeast Texas	2009 (5.9%)

[13] Although we are only using 2009 data to determine "flags," when we look at the last three years of data, we find that in 2007 Howard Community College also relied on the State for 50.6% of its revenue. In addition, Ranger College relied on the State for greater than 50% of its revenue in 2007 and 2008 (52.6% in 2007 and 50.4% in 2008).

[14] Property value data for 2010 is expected to look different as the Tarrant College District Legislative Appropriations Request for Fiscal Years 2012 and 2013 (submitted to the Governor's Office of Budget, Planning and Policy and the Legislative Budget Board on August 16, 2010) stated that "Valuations in Tarrant County for the first time in more than a decade fell by $5.7 billion or about 4.5 percent. At the same time, the college district is in an unprecedented growth mode." See http://www.tccd.edu/Documents/CommunityReports/LegistlativeAppropRequests/Legislative_Appropriations_Request_FY2012_and_2013.pdf page 4.

Western Texas	2009 (-3.4%)

Table 4-3: Primary reserve ratio results[15]

There are reasons that a college could have a reduced primary reserve ratio without it being an indicator of distress. For example, reserves could be used for major infrastructure projects during a time of increased enrollment, resulting in a decline in this ratio by design and with appropriate planning and opportunity for recovery. As a next step to using these indicators, the assessment team recommends that THECB contact each college with a "red flag" to determine the reason for the flag.

4.1.3 Viability ratio

The information for this indicator is already reported in the community college CAFR and included in the CARAT database.

Ideally, a community college would have an indicator between 1.0 and 1.25 or 100% and 125%. However, because there can be single-year shifts that do not serve as indicators of the long-term health of a college, reviewing changes year over year is a more appropriate way to assess potential distress. If a community college has experienced 3 straight years of a declining viability ratio with at least 2 of those 3 years at under 100%, this is seen as a "red flag."

Results summary:

The following colleges have had 3 years of declines, with ratios of under 100% for at least two of those years, triggering a "red flag":

Viability ratio results	
College	**Results**
Amarillo	2007 (149%)
	2008 (66%)
	2009 (50%)
Angelina	2007 (85%)
	2008 (49%)
	2009 (41%)
Austin	2007 (17%)
	2008 (10%)
	2009 (8%)
Brazosport	2007 (71%)
	2008 (16%)
	2009 (15%)
Frank Phillips	2007 (109%)
	2008 (78%)

[15] Although we are only using 2009 data to determine "flags," when we look at the last three years of data, we find that a number of other colleges were at less than 10% in 2007 or 2008: Alvin (in 2007, 0%), Grayson (in 2007, 0%), Northeast Texas (in 2007, 6% and in 2008, 4.4%), South Plains (in 2007, 8.7% and in 2008, 7.6%), Texas Southmost (in 2007, 4.2%) and Western Texas (in 2007, 0.5% and in 2008, 1.1%).

	2009 (70%)
Northeast Texas	2007 (10%)
	2008 (9%)
	2009 (7%)

Table 4-4: Viability ratio results

As a next step to using these indicators, the assessment team recommends that THECB contact each college with a "red flag" to determine the reason for the flag.

4.1.4 Equity ratio

The information for this indicator is already reported in the community college CAFR and included in the CARAT database.

If this ratio is below 0.20, that is seen as a "red flag."

Results summary:

No schools fell below 0.20 over the past 3 years.

4.1.5 Operating revenue ratio

The information for this indicator is already reported in the community college CAFR and included in the CARAT database.

If this ratio is below 0 (meaning the community college operated in a deficit for the given fiscal year), that is seen as a "yellow flag" value. If a deficit is deemed risky given an affirmative response to any of the following questions, a "red flag" is raised:

- Were more than 5% of the college's reserve funds used to cover operations?
- Has the community college operated in a deficit over the last 3 years?

Results summary:

Those schools whose ratio fell below 0 for 2009, triggering a "yellow flag" are as follows:

Operating revenue ratio results	
College	**Results**
Alamo	2009 (-1.5%)
Alvin	2009 (-0.2%)
Brazosport	2009 (-0.7%)
Texarkana	2009 (-7.6%)
Wharton	2009 (-1.0%)

Table 4-5: Operating revenue ratio results[16]

No colleges operated in a deficit for 3 straight years, resulting in no "red flags" for that reason. Data were not readily available to determine if any of the 5 colleges that operated in a deficit for 2009 used more than 5% of the college's reserve funds to cover operations.[17] Accordingly, there may be "red flags" as a result of that rule.

4.1.6 Audit opinions

The information for this indicator will need to be self-reported by community colleges based on their audited CAFR reports.

A "red flag" is raised if any qualified or adverse opinion in the current year's financial statement or single audit.

Results summary:

There is currently no repository of audit opinions to analyze such results. Audit opinions are received by THECB and the SAO, but not aggregated or analyzed on a statewide basis.

4.1.7 Community college leadership

The information for this indicator will need to be self-reported by community colleges each year when entering CAFR data into the CARAT database. Ideally, the CARAT database data entry can include self-reporting of management and Board members for each question identified.

If a community college responds "no" to any of the identified leadership questions, this is seen as a "red flag."[18]

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[16] Additional colleges with a negative ratio for 1 of the last 3 years include: Amarillo (-1.7% in 2008), Coastal Bend (-3.4% in 2007), Del Mar (-1.2% in 2008), Frank Phillips (-0.4% in 2008), Laredo (-3.1% in 2007) and Northeast Texas (-0.6% in 2008).

[17] A discussion of why a school's net assets decreased (e.g., were they used to fund operations or make capital improvements or pay debt service) is likely provided in the MD&A section of the CAFR. However, the assessment team did not have ready access to each of these CAFRs. This is exploration that the assessment team recommends be completed by THECB after initial results are generated as to which schools should receive further queries.

[18] Although a "no" response to any question triggers a "red flag" for further review and analysis, not all questions deal with short-term issues. Those questions that are most likely to indicate a critical short-term issue include questions numbered 1 (*Have the CEO or CFO positions been stable and held by only one or two people over the prior 5 years?),* 3 (*Does the college have a deferred maintenance schedule updated within the last 3 years?),* 4 (*Does the Board approve the strategic plan and deferred maintenance schedule? Does it use a quantitative method to assess the college's progress toward those plans at least annually?*) and 6 (*Is the Board informed about any instances of fraud or litigation and actions taken in response?*).

Results summary:

The questions identified in the community college leadership area have not been asked of community colleges in the past. Accordingly, there is currently no repository to allow for results analysis.

4.1.8 Bond ratings

The information for this indicator will need to be self-reported by community colleges each year when entering CAFR data into the CARAT database. The assessment team is aware that not all community colleges will have an active bond rating and some colleges might have multiple ratings. For the purpose of this indicator, the community college should include its tax-backed rating received within three years of year-end reporting. If a community college's bond rating increases more than two classifications it should be considered a positive sign (i.e., a "green flag").

If a community college bond rating has been reduced by more than one level (ex. from AA to A+) by any rating agency, this is seen as a "yellow flag." If a rating decrease was as a result of a material change to the community college's financial situation or management or if a community college has a bond rating below an acceptable level (Baa1 for Moody's ratings and BBB for S&P ratings), this would raise a "red flag."

Results summary:

There is currently no easily accessible repository of bond ratings for review and analysis.

4.1.9 Enrollment fluctuation ratio

The information for this indicator is currently presented in the CAFR statistical section and included in the CARAT database. This indicator is based on the FTSE calculation currently used by the THECB; FTSE is defined as the number of full time students plus total hours taken by part-time students divided by 12.[19] Site visit participants shared frustration with the multiple FTSE definitions for those agencies they must report such information. The assessment team recommends that Texas community colleges, in conjunction with the THECB, should work with other institutions (e.g., the rating agencies) to develop a consistent definition for FTSE.

A decline of 5% or more or an increase of 10% or more is seen as a "yellow flag."

A decline would be deemed risky (or "red") if there were an affirmative response to any of the following questions:

- Has the community college made a significant infrastructure investment (e.g., built a new building) in order to accommodate increasing enrollment over the last 3 years?
- Does the community college have a majority of tenured faculty or faculty on long-term (more than 3-year) contracts?
- Is there a consistent decline of FTSE over the previous 3 years?

An increase would be deemed risky if there were an affirmative response to the following question:

[19] THECB Budget Requirements and Annual Financial Reporting Requirements for Texas Public Community and Junior Colleges, 2009

- Is revenue generated per FTSE less than 50% of the cost per FTSE?

Results summary:

The following community colleges had annual enrollment declines of 5% or more for 2009, triggering a "yellow flag":

Enrollment fluctuation ratio declining results	
College	**Results**
Frank Phillips College	2009 (-28%)
Galveston College	2009 (-12%)

Table 4-6: Enrollment fluctuation ratio declining results[20]

Neither of these colleges is in the "red flag" zone as a result of multi-year declines. However, data are not readily available to determine whether they are in the "red flag" zone as a result of infrastructure investment and/or tenured faculty or long-term faculty contracts. As a next step to using these indicators, the assessment team recommends that THECB contact each college to determine the reason for their results and whether they are in a "red flag" zone as a result of infrastructure investments and/or faculty contracts.

The following community colleges had annual enrollment increases of 10% or more for at 2009, triggering "yellow flags":

Enrollment fluctuation ratio growth results	
College	**Results**
Dallas County Community College District	2009 (11%)
South Texas College	2009 (10%)
Western Texas College	2009 (51%)

Table 4-7: Enrollment fluctuation ratio growth results[21]

[20] Additional colleges with enrollment declines of 5% or more for 1 of the last 3 years include: Cisco College (-7% in 2008), Coastal Bend College (-11% in 2007), Hill College (-16% in 2008), Laredo Community College (-7% in 2007), Northeast Texas Community College (-10% in 2008), Odessa College (-10% in 2007), Panola College (-17% in 2008), Paris Junior College (-18% in 2008), Ranger College (-13% in 2008), Southwest Texas Junior College (-10% in 2008), Vernon College (-10% in 2007) and Weatherford College (-11% in 2008). In addition, Frank Phillips College had a decline of 43% in 2008 (as well as declines in 2009). The assessment team is aware that some districts manage their enrollment to maximize their funding formula benefits, beefing up enrollment in years that count for the funding formula and easing off on enrollment in alternate years. Accordingly, the team recommends watching the results of this indicator to determine if colleges that are not at risk appear in the "flagged" category and, if so, altering the threshold values accordingly (e.g., show the threshold as a value over a two-year period).

[21] Additional colleges with enrollment increases of 10% or more for 1 of the last 3 years include: Alvin Community College (13% in 2007), Clarendon College (13% in 2008), Grayson County College (12% in 2007), Hill College (24% in 2007), Kilgore College (16% in 2008), Panola College (18% in 2007), Paris Junior College (15% in 2007), and Texas Southmost College District (14% in 2007). In addition, Western Texas College had an increase of 20% in 2008 (as well as increases in 2009).

Available revenue generated per FTSE are not readily available to determine whether these colleges should also be considered as having "red flags". As a next step to using these indicators, the assessment team recommends that THECB contact each college to determine whether they are in a "red flag" zone as a result of revenue generated per FTSE.

4.1.10 Revenue-backed debt coverage ratio

The information for this indicator is currently presented in the CAFR statistical section but is not currently included in the CARAT database. Community colleges would need to include this information along with current CAFR data when entering their CAFR data in the CARAT database.

A target ratio for debt coverage is 3-5.[22] A "yellow flag" would result from a debt-coverage ratio of less than 1.5 and declining or within 0.5 of bond covenant requirements. This would become "red" if it were less than 1 or less than the limits required by the bond covenants.

Results summary:

There is currently no repository of CAFR data to support running this calculation on an all-college basis.

4.2 Analysis guidelines

The assessment team has recommended indicators of potential financial risk for community colleges. The team recommends that at the outset of implementation, three years of data be collected, all "flags" be reviewed, and a discussion be held with colleges that appeared to be at risk based on the initial criteria to determine what triggered the flags and where there were association among those flags. For example, if a college appeared to be at risk due to having three "red flags" and yet all were due to a single cause—such as pulling funds out of reserves and acquiring additional debt in order to open a new campus—the scenarios in which "flags" should be associated and colleges should be removed from the watch list could be developed. As part of this first run of multi-year data, thresholds should also be reviewed and, as necessary, refined.

With scenarios fully developed and thresholds refined, the indicators should be used by THECB to monitor high-risk colleges. When flags appear, conversations should be had with college leadership to understand the reason. If the reason is an anomaly that can easily be explained by a single or set

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[22] As a result of HB 1621, effective June 2003, revenue backed debt cannot exceed 25 percent of tuition and fees. Chapter 130.123(e), Education Code, was amended as follows:

In addition to the revenues, fees, and other resources authorized to be pledged to the payment of bonds issued hereunder, each board further shall be authorized to pledge irrevocably to such payment, out of the tuition charges required or permitted by law to be imposed at its institution or institutions, an amount not exceeding [~~$15~~] 25 percent of the tuition charges collected from each enrolled student for each [~~regular~~] semester or [~~and $7.50 from each enrolled student for each summer~~] term, and each board also shall be authorized to pledge to such payment all or any part of any grant, donation, or income received or to be received from the United States government or any other public or private source, whether pursuant to an agreement or otherwise.

of traceable events, the college should remain on the watch list to determine whether indicators reverse in short order. If the reason is circumspect or overly complex, a site visit should follow.

4.3 Next steps

The assessment team recommends that a number of next steps be undertaken:

- **Training guides and roll-out training for indicators:** As the indicators are rolled-out across the community college system, training guides and web-based training programs will be needed to provide colleges an understanding of what is required of them and also what is available in the way of early warning as generated from the indicators.
- **Training for board members and senior leadership:** Many board members have professional backgrounds that include accounting or financial management. However, there are some college boards that have no one with background or experience to read public financial statements—and many college's senior leadership also lack this background. Accordingly, the assessment team recommends that training be provided to both Board members and senior leadership to allow them to execute their fiduciary responsibilities and understand the value and meaning of this discrete set of indicators, providing a common set of data for review and monitoring.
- **Analysis of initial data set:** The assessment team recommends THECB collect three years of data, review all "flags" and discuss with colleges what triggered the flags and where there were association among those flags. With initial complete data sets, scenarios can be developed in which "flags" are associated with one another and in which colleges are removed from the watch list. As part of this first run of multi-year data, the assessment team recommends that THECB and the LBB review and refine, as needed, proposed thresholds.
- **Associate financial indicators with an overall accountability system:** THECB, SACS, the LBB and others recommend methods for colleges to monitor their performance, fiscal and otherwise. The resulting impact is a series of dashboards and spreadsheets that flood colleges with numbers but don't always provide actionable data. To provide college leadership with a single set of financial, performance and efficiency indicators that could be used to monitor the health and success of their institution would be a benefit to the colleges, their boards and their stakeholder and oversight groups.

Section 5: Conclusion

Although no community colleges have failed to date, Grant Thornton recommends using financial indicators to monitor whether colleges are at risk of failure. A set of 10 indicators are proposed for use in Texas community colleges. In order to fulfill its oversight role, THECB should gather the requisite data for community colleges and report on college performance. The LBB and others will benefit from having the insight into college performance that will be provided by this effort.

While the Grant Thornton charge was to determine appropriate indicators of potential financial risk, a number of other issues came up during our discussions with community college leadership and stakeholders. Some of these should be examined further to determine if they could be used to support college improvements. For example:

- Some large colleges have internal auditors, but this is the exception rather than the rule. Where internal auditors exist, they play different roles and have different relationships with their boards.
- While all colleges use NACUBO cost account codes, there are not common definitions for these codes and, as a result, college to college benchmarking is quite difficult.
- Many of those with whom we met expressed that they had lots of data but no training on how to use those data and which to pay most attention to. Training and a coordinated performance and indicators process could help in responding to this gap.

Appendix A: Community college indicator results

	Primary Reserve Ratio			Viability Ratio			Equity Ratio			Operating Margin Ratio			Appropriations to Total Revenue			Tax Revenue to Total Revenue		
	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009
Alamo	30%	30%	23%	15%	16%	14%	28%	27%	28%	15%	9%	-1%	25%	24%	22%	31%	32%	34%
Alvin	0%	22%	21%	N/A	41%	43%	N/A	47%	47%	2%	1%	0%	35%	35%	32%	33%	35%	35%
Amarillo	27%	29%	28%	149%	66%	50%	81%	68%	62%	5%	-2%	2%	35%	34%	30%	22%	23%	24%
Angelina	24%	28%	29%	85%	49%	41%	64%	56%	50%	7%	9%	3%	39%	39%	37%	14%	14%	17%
Austin	11%	13%	9%	17%	10%	8%	26%	21%	21%	7%	7%	3%	24%	26%	24%	36%	37%	39%
Blinn	10%	13%	12%	33%	44%	48%	53%	56%	58%	7%	8%	7%	39%	38%	37%	2%	2%	2%
Brazosport	26%	22%	18%	71%	16%	15%	74%	47%	47%	5%	-6%	-1%	31%	32%	27%	31%	32%	38%
Central Texas	21%	22%	15%	1098%	N/A	N/A	84%	88%	86%	8%	11%	9%	19%	19%	18%	7%	7%	8%
Cisco	25%	25%	26%	38%	39%	43%	35%	35%	34%	0%	2%	4%	43%	44%	45%	2%	3%	2%
Clarendon	25%	24%	13%	89%	95%	64%	68%	69%	75%	3%	1%	50%	46%	45%	35%	6%	6%	6%
Coastal Bend	18%	18%	15%	132%	141%	152%	66%	64%	58%	-3%	0%	1%	36%	34%	30%	7%	7%	6%
College of the Mainland	38%	42%	36%	850%	1374%	1520%	74%	77%	74%	7%	6%	2%	23%	22%	22%	49%	49%	48%
Collin	201%	202%	166%	297%	350%	345%	77%	79%	81%	36%	28%	24%	25%	27%	26%	45%	46%	46%

	Primary Reserve Ratio			Viability Ratio			Equity Ratio			Operating Margin Ratio			Appropriations to Total Revenue			Tax Revenue to Total Revenue		
	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009
Dallas	47%	52%	49%	127%	159%	46%	66%	55%	44%	6%	6%	6%	31%	32%	29%	34%	35%	37%
Del Mar	21%	15%	16%	22%	15%	16%	33%	29%	32%	7%	-1%	6%	25%	25%	23%	36%	37%	38%
El Paso	13%	13%	13%	45%	46%	47%	46%	47%	46%	6%	3%	3%	29%	30%	29%	23%	24%	24%
Frank Phillips	24%	16%	14%	109%	78%	70%	64%	66%	69%	3%	0%	14%	38%	36%	32%	12%	12%	12%
Galveston	54%	59%	60%	244%	298%	388%	71%	75%	79%	17%	9%	11%	31%	30%	31%	39%	40%	42%
Grayson	0%	59%	63%	N/A	26%	32%	57%	31%	34%	13%	2%	15%	30%	32%	27%	30%	31%	36%
Hill	35%	34%	33%	137%	157%	174%	70%	71%	72%	7%	11%	5%	43%	43%	43%	17%	17%	18%
Houston	22%	24%	22%	13%	13%	14%	29%	29%	29%	8%	8%	3%	27%	27%	26%	31%	33%	34%
Howard	33%	34%	30%	40%	46%	46%	51%	55%	53%	1%	14%	7%	51%	47%	45%	14%	18%	19%
Kilgore	28%	39%	34%	207%	355%	425%	81%	82%	83%	11%	13%	12%	38%	36%	33%	15%	13%	15%
Laredo	14%	20%	25%	15%	20%	27%	21%	25%	28%	-3%	4%	9%	28%	27%	24%	32%	32%	32%
Lee	30%	29%	21%	46%	53%	39%	47%	49%	45%	4%	5%	3%	28%	26%	27%	36%	35%	38%
Lone Star	19%	20%	18%	22%	27%	17%	37%	43%	34%	1%	10%	5%	26%	27%	25%	44%	45%	45%
McLennan	14%	14%	12%	8%	8%	8%	24%	27%	27%	14%	10%	1%	33%	29%	28%	21%	25%	25%
Midland	22%	23%	22%	21%	21%	21%	52%	52%	53%	1%	13%	8%	27%	27%	27%	31%	33%	34%
Navarro	15%	13%	16%	23%	23%	25%	41%	42%	42%	10%	2%	8%	39%	39%	36%	8%	7%	7%
North Central Texas	51%	55%	47%	142%	172%	178%	65%	67%	71%	67%	10%	8%	35%	38%	35%	7%	6%	6%

	Primary Reserve Ratio			Viability Ratio			Equity Ratio			Operating Margin Ratio			Appropriations to Total Revenue			Tax Revenue to Total Revenue		
	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009
Northeast Texas	6%	4%	6%	10%	9%	7%	30%	30%	32%	3%	-1%	4%	30%	30%	28%	23%	23%	23%
Odessa	61%	58%	48%	106%	116%	111%	43%	47%	48%	8%	7%	7%	30%	29%	28%	34%	36%	38%
Panola	40%	53%	53%	283%	110%	131%	65%	52%	57%	6%	11%	12%	19%	31%	29%	18%	29%	30%
Paris	38%	45%	55%	69%	86%	113%	49%	55%	58%	10%	15%	14%	35%	35%	35%	10%	10%	10%
Ranger	19%	27%	26%	N/A	N/A	N/A	80%	84%	86%	0%	6%	2%	53%	50%	52%	4%	4%	4%
San Jacinto	52%	51%	59%	132%	151%	38%	60%	63%	37%	7%	7%	15%	29%	29%	26%	31%	32%	36%
South Plains	9%	8%	10%	210%	128%	383%	78%	73%	83%	6%	6%	10%	36%	37%	34%	14%	14%	17%
South Texas	65%	62%	58%	84%	98%	117%	60%	65%	69%	15%	16%	18%	24%	24%	22%	30%	32%	31%
Southwest Texas	18%	17%	17%	62%	61%	69%	48%	47%	48%	0%	0%	3%	32%	33%	31%	6%	6%	6%
Tarrant	199%	73%	63%	743%	330%	408%	86%	85%	88%	40%	39%	32%	20%	20%	18%	50%	52%	52%
Temple	21%	21%	19%	37%	45%	49%	27%	30%	31%	6%	7%	4%	28%	28%	26%	20%	20%	19%
Texarkana	77%	75%	58%	N/A	N/A	N/A	91%	91%	91%	2%	5%	-8%	50%	49%	49%	4%	5%	5%
Texas Southmost	4%	11%	14%	2%	16%	16%	36%	37%	39%	13%	15%	15%	22%	22%	21%	23%	24%	25%
Trinity Valley	34%	40%	35%	255%	358%	414%	84%	86%	87%	5%	7%	3%	44%	44%	41%	18%	19%	19%
Tyler	22%	20%	20%	23%	24%	28%	42%	43%	46%	14%	8%	7%	33%	35%	33%	19%	21%	20%
Vernon	17%	17%	20%	45%	49%	62%	50%	50%	51%	3%	3%	5%	43%	44%	40%	12%	13%	11%

	Primary Reserve Ratio			Viability Ratio			Equity Ratio			Operating Margin Ratio			Appropriations to Total Revenue			Tax Revenue to Total Revenue		
	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009
Victoria	19%	21%	18%	30%	32%	31%	60%	59%	62%	4%	4%	4%	32%	32%	30%	22%	23%	24%
Weatherford	52%	74%	78%	226%	375%	457%	66%	72%	74%	8%	24%	14%	35%	33%	29%	27%	27%	27%
Western Texas	0%	1%	-3%	9%	14%	-5%	54%	64%	57%	6%	32%	1%	31%	30%	28%	26%	25%	24%
Wharton	59%	56%	48%	223%	253%	260%	70%	71%	71%	9%	4%	-1%	33%	34%	32%	13%	13%	14%

Appendix B: Community college indicator results

Recognizing that data have not yet been collected for all proposed indicators—and that completing this table with results from all indicators is a first step to implementation, the table below shows those colleges that have "red" or "yellow" flags as a result of the 2009 data that were available.

	Primary						Secondary		
College	Diversification of revenue sources	Primary Reserve	Viability	Operating revenue	Audit opinions	Leadership	Bond ratings	Enrollment fluctuation	Revenue-backed debt coverage
Alamo Community College District (ACCD)									
Alvin Community College									
Amarillo College									
Angelina College									
Austin Community College									
Blinn College									
Brazosport College									
Central Texas College									
Cisco College									
Clarendon College									
Coastal Bend College									
College of the Mainland									
Collin County Community College District									
Dallas County Community College District (DCCCD)									

Del Mar College									
El Paso Community College District									
Frank Phillips College									
Galveston College									
Grayson County College									
Hill College									
Houston Community College System (HCCS)									
Howard College									
Kilgore College									
Laredo Community College									
Lee College									
Lone Star College System (LSCS)									
McLennan Community College									
Midland College									
Navarro College									
North Central Texas College									
Northeast Texas Community College									
Odessa College									
Panola College									
Paris Junior College									
Ranger College									
San Jacinto College District (SJCC)									
South Plains College									
South Texas College									
Southwest Texas Junior College									
Tarrant County College District (TCCD)									
Temple College									

Texarkana College									
Texas Southmost College District									
The Victoria College									
Trinity Valley Community College									
Tyler Junior College									
Vernon College									
Weatherford College									
Western Texas College									
Wharton County Junior College									

Appendix C: Recommended indicators at a glance

Diversification of revenue sources

Purpose	Texas community colleges receive a majority of their revenue from three key sources: State appropriations, local community (ad valorem) taxes, and tuition and fees. This indicator assesses whether there is a disproportionate dependency or reliance on one revenue source to operate a college.
Definition	$(Revenue\ source/total\ revenue) * 100$ *Revenue includes (1) tuition and fees (operating revenue), (2) State appropriations and (3) ad valorem tax (unrestricted non-operating revenue), (4) student aid (federal non-operating revenue), and (5) other. These represent a portion of operating revenue [tuition and fees], a portion of unrestricted non-operating revenue [State appropriations and ad valorem tax], and the sum of all other revenues included on the financial statement.*
Data Source(s)	Reported in the community college CAFR and included in the CARAT database.
Thresholds	If a college is reliant upon any source to provide 50% or more of its revenue from a single source, this triggers a "yellow flag." If the revenue source for which the college has greater than 50% reliance is deemed risky given an affirmative response to either of the following questions, a "red flag" is triggered: • *State appropriations:* Is the State in a period of decreasing budgets and/or reducing appropriations? • *Tax revenue:* Has the tax rate been increased in the last two years or have property valuations been declining over the last 3 years (based on assessed valuation included in the CARAT database)?

Primary reserve ratio

Purpose	Provides a snapshot of financial strength and flexibility by indicating how long the institution could function using its expendable reserves without relying on additional revenues generated by operations. Expendable net assets represent those that the institution can access quickly and spend to satisfy obligations.
Definition	$\frac{Unrestricted\ net\ assets}{Total\ operating\ expenses}$ *(Unrestricted net assets represent those assets that an institution can access quickly and spend to satisfy its obligations.)*
Data Source(s)	Reported in the community college CAFR and included in the CARAT database.
Thresholds	A good minimum target for community colleges is to have unrestricted reserves that could cover 2-3 months of operations, which would result in a ratio of 0.20. If this ratio is below 0.10 or 10%, this is a "red flag" value.

Viability ratio

Purpose	Measures the availability of expendable net assets to cover debt should the institution need to settle its

	obligations as of the balance sheet date. This is used to measure if the institution is managing debt strategically to advance its mission.
Definition	$\frac{Unrestricted\ net\ assets\ plus\ restricted\ expendable\ net\ assets\ for\ debt\ service}{Long-term\ debt}$
Data Source(s)	Reported in the community college CAFR and included in the CARAT database.
Thresholds	Ideally, a community college would have an indicator between 1.0 and 1.25 or 100% and 125%. However, because there can be single-year shifts that do not serve as indicators of the long-term health of a college, reviewing changes year over year is a more appropriate way to assess potential distress. If a community college has experienced 3 straight years of a declining viability ratio with at least 2 of those 3 years at under 100%, this is seen as a "red flag."

Equity ratio

Purpose	A substitute for the *viability ratio* if a community college does not carry debt. This ratio measures capital resources available, the college's ability to borrow, and overall financial viability. A low ratio and decreasing trend suggests the college is becoming increasingly leveraged in its liabilities (even without debt).
Definition	$\frac{Net\ assets}{Total\ assets}$
Data Source(s)	Reported in the community college CAFR and included in the CARAT database.
Thresholds	If this ratio is below 0.20, that is seen as a "red flag."

Net operating revenues ratio

Purpose	Indicates whether total operating activities resulted in a surplus or deficit, demonstrating whether the institution is living within available resources. When reviewed over multiple periods or years, will indicate whether there will be an inability to fund operations at existing levels. Helps to explain how the surplus from operating activities affects the behavior of the other strategic ratios.
Definition	$\frac{Increase\ or\ decrease\ in\ net\ assets}{Operating\ revenues\ plus\ non-operating\ revenues}$
Data Source(s)	Reported in the community college CAFR and included in the CARAT database.
Thresholds	If this ratio is below 0 (meaning the community college operated in a deficit for the given fiscal year), that is seen as a "yellow flag" value. If a deficit is deemed risky given an affirmative response to any of the following questions, a "red flag" is raised: • Were more than 5% of the college's reserve funds used to cover operations? • Has the community college operated in a deficit over the last 3 years?

Audit opinions

Purpose	Qualified or adverse opinions related to the financial statements or single audit can be one of the most significant indicators of potential financial or management issues for an institution. All Texas community colleges are required to have an annual audit performed by an independent accounting firm. The auditors provide opinions on the financial statements and grant compliance (federal and state single audits). Audit results assesses internal financial control measures and identify reoccurring issues that could lead to other errors or fraud.
Definition	*Is there a qualified or adverse opinion in either a recent financial statement or single audit?*
Data Source(s)	Will need to be self-reported by community colleges based on their audited CAFR reports.
Thresholds	A "red flag" is raised if any qualified or adverse opinion in the current year's financial statement or single audit.

Community college leadership

Purpose	A community college with a strong financial foundation can quickly head toward distress if leadership is inconsistent or ineffective. Community college leadership must arm itself with the tools necessary to effectively manage their institution towards a successful future. If the college has active, strategic and responsible oversight, there is a higher probability the school is going to be successful.
Definition	9. *Have the CEO or CFO positions been stable and held by only one or two people over the prior 5 years?* 10. *Does the college have a strategic plan updated within the last 3 years that is posted online and available to the public?* 11. *Does the college have a deferred maintenance schedule updated within the last 3 years?* 12. *Does the Board approve the strategic plan and deferred maintenance schedule? Does it use a quantitative method to assess the college's progress toward those plans at least annually?* 13. *Does the college have Board-approved policies, including formal financial policies, that have been reviewed within the last 3 years?* 14. *Is the Board informed about any instances of fraud or litigation and actions taken in response?* 15. *Is at least one member of the Board trained in reviewing public financial statements?* 16. *Does the Board receive monthly financial updates and progress against budget statements?*
Data Source(s)	Will need to be self-reported by community colleges each year when entering CAFR data into the CARAT database.
Thresholds	If a community college responds "no" to any of the identified leadership questions, this is seen as a "red flag."[23]

[23] Although a "no" response to any question triggers a "red flag" for further review and analysis, not all questions deal with short-term issues. Those questions that are most likely to indicate a critical short-term issue include questions numbered 1 (*Have the CEO or CFO positions been stable and held by only one or two people over the prior 5 years?),* 3 (*Does the college have a deferred maintenance schedule updated within the last 3 years?),* 4 (*Does the Board approve the strategic plan and deferred maintenance schedule? Does it use a quantitative method to assess the college's progress toward those plans at least annually?*) and 6 (*Is the Board informed about any instances of fraud or litigation and actions taken in response?*).

Bond ratings

Purpose	Bond ratings are based on an in-depth investigation that reviews similar aspects as those provided in the proposed suite of indicators. These ratings summarize the financial riskiness of an institution for potential investors and the institution's ability to pay back such investors. Low or non-investment grade ratings identify institutions that likely do not have sustainable financial standing or effective management to improve potential existing distress.
Definition	*Bond rating for revenue-backed or tax-backed bonds that has been issued in the last three years as trended from prior years*
Data Source(s)	Will need to be self-reported by community colleges each year when entering CAFR data into the CARAT database[24]
Thresholds	If a community college bond rating has been reduced by more than one level (ex. from AA to A+) by any rating agency, this is seen as a "yellow flag." If a rating decrease was as a result of a material change to the community college's financial situation or management or if a community college has a bond rating below an acceptable level (Baa1 for Moody's ratings and BBB for S&P ratings), this would raise a "red flag."

Enrollment fluctuation ratio

Purpose	Demonstrates the potential impact to revenue and/or expenses as a result of rapid changes to the student population. Indicates whether a student population is likely to get too small to cover infrastructure costs or too large for other revenue sources to cover its expenses.
Definition	$\frac{Current\ full-time\ student\ enrollment\ (FTSE) - prior\ year\ FTSE}{Prior\ year\ FTSE}$ *(FTSE for this indicator is the same as defined in the THECB AFR Guide.)*
Data Source(s)	Presented in the CAFR statistical section and included in the CARAT database.
Thresholds	A decline of 5% or more or an increase of 10% or more is seen as a "yellow flag." A decline would be deemed risky (or "red") if there were an affirmative response to any of the following questions: • Has the community college made a significant infrastructure investment (e.g., built a new building) in order to accommodate increasing enrollment over the last 3 years? • Does the community college have a majority of tenured faculty or faculty on long-term (more than 3-year) contracts? • Is there a consistent decline of FTSE over the previous 3 years? An increase would be deemed risky if there were an affirmative response to the following question: • Is revenue generated per FTSE less than 50% of the cost per FTSE?

[24] Not all community colleges will have an active bond rating and some colleges might have multiple ratings. For the purpose of this indicator, the community college should include its tax-backed rating received within three years of year-end reporting. If a community college's bond rating increases more than two classifications it should be considered a positive sign (i.e., a "green flag").

Revenue-backed debt coverage ratio

Purpose	Examines a community college's ability to generate enough revenue to meet its debt payments for which that revenue is pledged.
Definition	$\frac{Pledged\ revenue}{Revenue - backed\ debt\ service}$
Data Source(s)	Presented in the CAFR statistical section but is not currently included in the CARAT database. Community colleges would need to include this information along with current CAFR data when entering their CAFR data in the CARAT database.
Thresholds	A target ratio for debt coverage is 3-5. A "yellow flag" would result from a debt-coverage ratio of less than 1.5 and declining or within 0.5 of bond covenant requirements. This would become "red" if it were less than 1 or less than the limits required by the bond covenants.

Appendix D: Other states' accountability systems

The following information is included to provide context on indicator or accountability systems in place in other states.

State of Ohio

Background

Senate Bill 6 of the 122nd General Assembly was enacted into law in 1997. It is designed to increase financial accountability of State colleges and universities by using a standard set of measures with which to monitor the fiscal health of campuses. Using the year-end audited financial statements submitted by each public institution, the Board of Regents annually applies these standards to monitor individual campus finances. In addition, Senate Bill 6 requires State colleges and universities to submit quarterly financial reports to the Board of Regents within 30 days after the end of each fiscal quarter.

Ratio Analysis Methodology

In order to meet the legislative intent of Senate Bill 6, the Board of Regents computes three ratios from which four scores are generated. The original methodology for computing the ratios was modified to recognize the new reporting format required by GASB statements 34 and 35, which became effective in FY 2002.

The methodology for calculating the three ratios is as follows:

- *Viability ratio*: Expendable net assets divided by plant debt. (Note: if plant debt is zero, then the viability ratio is not calculated and a viability score of 5 is automatically assigned.)
- *Primary reserve ratio*: Expendable net assets divided by total operating expenses.
- *Net Income Ratio*: Change in total net assets divided by total revenues.

Assignment of Scores

Based on the calculations described above, each ratio is assigned a score ranging from zero to five according to the criteria listed in the table below. A score of 5 indicates the highest degree of fiscal strength in each category.

Based on these scores, a summary score termed the composite score is determined, which is the primary indicator of fiscal health. The composite score equals the sum of the assigned viability score multiplied by 30%, the assigned primary reserve score multiplied by 50%, and the assigned net income score multiplied by 20%.

Quarterly Financial Reports

State colleges and universities are required to submit quarterly financial reports (unaudited) to the Board of Regents within 30 days after the end of each fiscal quarter. Pursuant to Senate Bill 6, a campus's failure to comply with these reporting guidelines requires the Board of Regents to withhold that campus's monthly subsidy payment until its quarterly report is received. Deadlines for the quarterly reports are shown in the table below.

The quarterly report consists of two parts:

1. **Report of Financial Actions**: Consists of six yes/no questions to be answered by the campus fiscal officer. The questions are designed to uncover the presence of serious cash flow problems and to provide early warning of significant problems with the current year budget. This part also includes a certification form that requires the signature of the campus fiscal officer attesting to the accuracy of the quarterly report.
2. **Statement of Current Funds Revenues, Expenditures, and Other Changes**: A comparison of revenues to expenditures and transfers for the period of July 1 through the end of a given quarter within the fiscal year. Data are unaudited and regarded as being subject to subsequent revisions and adjustments.

State of California

Background

The annual financial report of the district is the vehicle for summarizing and communicating the results of budgetary decisions and transactions. The Annual Financial and Budget Report (CCFS-311) of each district contains, as specified by the Chancellor's Office, a statement of the actual revenues and expenditures for the fiscal year just completed, plus the estimated revenues and proposed expenditures for the succeeding fiscal year (CCR §58303).

The annual financial and compliance audit, as required by Education Code Section 84040, is the final examination of the annual financial statements' fairness and reliability. The audit is conducted by certified public accountants licensed by the State Board of Accountancy. In the event the governing board of a community college district fails to provide for an audit, the Board of Governors shall provide for such audit, and if the Board of Governors fails or is unable to make satisfactory arrangement for such an audit, the Department of Finance shall make arrangements for the audit. The cost of any audit described above shall be paid from district funds.

The annual financial statements are the responsibility of the district. Audit adjustments must be recorded in the district's accounting system to ensure the accuracy and consistency of financial reports. Differences between the district's CCFS-311 and its audited financial statements should be reconciled and reported in the notes to the financial statements.

Education Code Section 84040 also provides that the Board of Governors must adopt criteria and standards for periodic assessment of the fiscal condition of community college districts. The Board of Governors must also take actions to improve the districts' fiscal conditions as necessary to encourage sound fiscal management practices.

Through review of the Fiscal Trend Analysis, Quarterly Reports, Self Assessment, and other changes in expenditures and revenue the Chancellor's Office determines when a district needs periodic monitoring, management assistance, or other intervention.

Fiscal Trend Analysis of the Unrestricted General Fund and Other Fiscal Data

The Fiscal Standards and Information portal within the Chancellors Office is responsible for maintaining the budget and accounting structure and fiscal reporting procedures for the community colleges. The portal collects and analyzes fiscal information and prepares reports; monitors changes in related laws, regulations, generally accepted accounting principles, and GASB requirements; and monitors and reports on district compliance with the Fifty Percent Law and Full-Time/Part-Time Faculty statutes and regulations.

Notes concerning the data and analysis:

- Analysis is focused on Unrestricted General Fund revenues, expenditures and changes in fund balance and data primarily comes from district submissions of Annual Financial and Budget Reports (CCFS-311).
- For purposes of this analysis, the 8900-Other Financing Sources account is combined into Total Revenues and 7000-Other Outgo account is combined into Total Expenditures.
- Except for Budget 2009-10, FTES comes from Fiscal Data Abstracts; 2009-10 FTES data comes from the Quarterly Financial Status Report (CCFS 311Q) for the quarter ended September 30, 2009.
- Fifty Percent Law data comes from the Fiscal Data Abstract. General Fund Cash Balances are from the Quarterly Financial Status Report (CCFS-311Q) for years and quarters indicated
- The data reflects what is certified and submitted by the districts to the Chancellor's Office. Therefore, the account balances may not be the same as the district's audited balances

Quarterly Financial Reports

Districts are required to provide the Chancellors office with quarterly fiscal information of their expenditures. As of October 15, 2007, Information is submitted through a new web based CCFS-

311Q reporting system. Beginning 2007-08 first quarter, districts should use the website in preparing their Quarterly Financial Status Report.

Quarterly reports include

Self Assessment Checklist

Districts are encouraged to complete a Self Assessment checklist and periodic reviews of their fiscal condition.

The Self assessment includes

State of Massachusetts

Background

The Board of Higher Education's Research office works with the public institutions of higher education in Massachusetts on data collection and analysis and oversees a comprehensive performance measurement system on behalf of the State and community colleges. The Research office also maintains public higher education data systems including the Higher Education Information Research System (HEIRS) and the School-to-College Database, and produces reports and data analyses to inform public higher education policy development.

It is mandated to develop, in collaboration with the institutions, a performance measurement system for State and community colleges "in order to promote accountability for effective management and stewardship of public funds and to achieve and demonstrate measurable educational outcomes." The University of Massachusetts develops its own performance measurement system in consultation with the Board of Higher Education.

The performance measurement system has undergone continuous enhancements and review. The performance measurement system consists of indicators in the following categories:

- Access
- Affordability
- Student Success
- Cost-Effective Use of Resources

The **Higher Education Information Resource System (HEIRS)** is a data warehouse into which each public higher education institution submits data at regular intervals during the year. These data

are carefully reviewed by the Board of Higher Education before being published in the Linear Trend books. Once published, the data become the basis for the annual Performance Measurement Report.

The **School-to-College Database** is a collaborative project between the Board of Higher Education and the Department of Education. The shared database contains public PreK-16 (pre-kindergarten through college graduation) information. The purpose of the shared database is to allow the Board of Higher Education and Department of Education to conduct longitudinal studies of student success and performance and to inform policy decisions. This project was funded through the National Governors Association grant.

Linear Trends

The Linear Trend books are a compilation of data submitted by the public higher education institutions to the Higher Education Information Research System during the year. The data are submitted for each of the performance measurement indicators. The data in the Linear Trend books create the foundation upon which the Performance Measurement Report is issued each year.

Performance Measurement System

Performance Measurement Report

The Performance Measurement Report demonstrates the effectiveness of Massachusetts public colleges in meeting legislatively mandated accountability objectives. The Report, prepared annually by the Board of Higher Education and presented to the Governor and the Legislature, provides data analyses of the success of the seven comprehensive State and 15 community colleges in fulfilling responsibilities to their students and meeting the needs of the Commonwealth. The University of Massachusetts, Massachusetts Maritime Academy and Massachusetts College of Art and Design, because of their special status, prepare their own performance measurement reports.

The Report covers a broad array of indicators dealing with the core areas of college performance, including access to higher education, college affordability, student success and the efficient use of college resources. The indicators are measured against a variety of benchmarks, including segmental, state, regional, national and longitudinal comparisons. Taken together, these indicators reflect the many ways in which the public colleges provide service to students and the Commonwealth.

Performance indicators

The following indicators for the State and community colleges have been approved by the Board of Higher Education for inclusion in the annual Performance Measurement Report.

ACCESS INDICATORS

Fall Enrollment Headcount: Fall Headcount is used as a measure of student population at the traditional peak entry time.

Fall Enrollment FTE: Fall Full-Time Equivalency (FTE) indicates the mix of full-time and part-time students at the institution's peak entry time.

Annual Enrollment Headcount: Annual Headcount reflects the population of students in all terms throughout the academic year.

Annual Enrollment FTE: Annual Full-Time Equivalency (FTE) indicates the mix of full-time and part-time students who are enrolled at any point throughout the year.

Minority Enrollment: Minority Headcount Enrollment is compared with the minority composition of the institutions service region. These areas are defined by the cities and towns where the first 80 percent of an institution's student population resides. The minority composition of the college is also compared with the minority composition of the geographic region in which the institution resides. These regions were identified and labeled by the Massachusetts Department of Economic Development.

AFFORDABILITY INDICATOR

% Median Family Income: This indicator measures full-time tuition and mandatory fees as a percentage of median family income, as sourced from the US Census Bureau American Community Survey 2007.

SUCCESS AND QUALITY INDICATORS

First-Year Persistence Rates: This measure shows the percent of first-time, full-time new freshmen who return to the same institution in the fall following their first year. It also shows the percent of first-time, full-time new freshmen who return to any postsecondary institution in the fall following their first year. This includes students enrolling at private or public institutions in Massachusetts and students enrolling in out-of-State institutions.

Community College Student Success Indicator: Fall 2003 Cohort Four-Year Success Rate: This is the first time that this student success indicator is being incorporated into Performance Measurement. This indicator measures students who have earned a degree/certificate, transferred to another institution, earned 30 or more credits, or are still enrolled after four years. Although a four-year rate is currently presented, the intent is to track this outcome measure over 4, 5, and 6 years for this and successive cohorts. (The cohort is new students who entered community college in fall 2003 and who attempted at least 18 credits within two years of initial enrollment and did not enroll in ESL.)

Fall-to-Spring Retention Rate: This measure shows the percent of first-time and transfer degree-seeking students enrolled in a fall term (not enrolled in any ESL coursework) who earn nine or more credits by the end of the fall term and reenroll in credit courses the subsequent spring semester.

Credit Course Completion Rate: The percent of students enrolled in credit courses that attempted to earn credit and successfully completed the course and earned the credit(s).

Degrees Conferred: This measure includes all degrees and certificates that are conferred during the fiscal year.

Pass Rate for the National Nursing Licensure Examination: Passing the National Council Licensure Exam (NCLEX) is required to become a registered nurse. We measure pass rates on this exam for first-time test-takers, as an indication of academic quality and learning outcomes (the inclusion of repeat test takers would increase the annual pass rate). The source for this indicator is the Massachusetts Board of Registration in Nursing. National Council of State Boards of Nursing.

Enrollment in Workforce Development Courses: The provision of non-credit workforce development instruction is one way community colleges serve an important economic development role in their community.

EFFECTIVENESS AND EFFICIENCY INDICATORS

Efficiency and Innovation: Projects and initiatives that result in cost savings and regional collaborations that result in more efficient use of system resources. Examples must be based on quantifiable results, not aspirations.

Resource Allocation: Utilizing IPEDS expenditure data, we measure the spending per student in each of five key expenditure areas. Spending for peer institutions is provided as a comparison. We also included estimated spending using budget formula requirements, which provides a measure of true fiscal need at the colleges.

Compliance: All Massachusetts public colleges are required to undergo an independent annual audit of their fiscal practices. A positive audit has an unqualified opinion and no material weaknesses.

Financial Health Indicator: The Fiscal Health Indicator provides a graphic depiction of the Primary Reserve Ratio, which measures Unrestricted Reserves vs. Total Operating Expenses. This ratio is a measure of how long an entity could continue operations using only reserves, if all other revenues stopped. KPMG has recommended a target ratio of 40%. The source for this indicator is FY08 Audited Financial Statements.