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Texas Community College Funding  
Structure: Closing the Gaps While  
Assessing the Attitudes and Perceptions  
of Community College Senior  
Administrators

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**TEXAS COMMUNITY COLLEGE FUNDING STRUCTURE: CLOSING THE  
GAPS WHILE ASSESSING THE ATTITUDES AND PERCEPTIONS OF  
COMMUNITY COLLEGE SENIOR ADMINISTRATORS**

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## **Abstract**

Community colleges provide gateways to higher education and are critical to guaranteeing the future success of the Texas economy (Texas Association of Community Colleges, 2005, 1). More Texans begin their educational journey at community colleges. These institutions train individuals for the current shortages in the teaching and allied health professions. Nationally there are 1,200 community colleges which make-up 45 percent of all undergraduates. However, the funding for community colleges continues to decrease in state appropriations. Like most institutions of higher education, the immediate challenge facing community colleges are: 1) the diminishing fiscal resources, 2) increase in student diversity, and 3) the growing demands of accountability. Community college senior administrators have been challenged to balance quality education and funding constraints.

In 2002, Michelle Cruz identified the declining funding and increasing enrollment as an impending crisis facing Texas community colleges. The inverse relationship between community college funding and student enrollment is further exacerbated by the “Closing the Gaps by 2015” initiative established in 2000 by the Texas Higher Education Coordinating Board (THECB). As a follow up study of Cruz (2002), the purpose of this applied research project is to explore the attitudes and perceptions of community college leadership about current funding issues. Emphasis will be placed on the following:

- 1) Political nature of funding
- 2) Budgeting issues
- 3) Revenue sources
- 4) Alternative funding mechanisms

This applied research project, as well as Cruz’s 2002 applied research project provides an important leadership prospective to funding issues which community college senior administrators face.

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## Chapter 1: Introduction

*“Community colleges are building the skills of the nation's workforce, helping bridge the digital divide and giving people a convenient and cost-effective way to pursue lifelong learning.”-Richard L. Ferguson<sup>1</sup>*

Community colleges provide gateways to higher education and are critical to guaranteeing the future success of the Texas economy (Texas Association of Community Colleges, 2005, 1). More Texans begin their educational journey at community colleges. Considered the backbone “of the workforce,” these higher educational institutions increase enrollments for universities (Texas Association of Community College, 2005, 1). About half of the nation’s undergraduates and half of all first time freshmen are educated by community colleges (Townsend, 57, 2001). Community colleges also train individuals for the current shortages in the teaching and allied health professions.

The presence of community colleges cater to the needs of it’s students. Many offer evening and weekend, self pace degreed programs, and ties to local employers (Levinson, 2005, 2).

Nationally there are 1,200 community colleges which make-up 45 percent of all undergraduates. Texas community colleges are projected to enroll 175,000 more students than universities by 2040 (Murdock, 2005, 11). However, the funding for community colleges continues to decrease in state appropriations. Like most institutions of higher education, the immediate challenge facing

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<sup>1</sup> Richard Ferguson is the president of ACT. ACT is a standardized test which many students take for college level entry.

community colleges are: 1) diminishing fiscal resources<sup>2</sup> 2) increase in student diversity, and 3) growing demands of accountability (Townsend, 58, 2001). Community college senior administrators<sup>3</sup> have been challenged to balance quality education and funding constraints.

In 2002, Michelle Cruz identified the declining funding and increasing enrollment as an impending crisis facing Texas community colleges. The inverse relationship between community college funding and student enrollment is further exacerbated by the “Closing the Gaps by 2015” initiative established in 2000 by the Texas Higher Education Coordinating Board (THECB). THECB is a state entity whose mission is dedicated to helping Texas meet the goals of the state’s higher education plan. This initiative calls for Texas community colleges to enroll an additional 630,000 students by the year 2015- an insurmountable challenge for Texas community college administrators providing quality education on a diminishing budget.

### **Texas Demographics**

In 2004, the State of Texas had approximately 22.5 million residents (U.S. Census Bureau). By the year 2010, Texas is projected to have 25 million residents and 51.7 million by 2040. The Texas Data Center (2004) estimates that

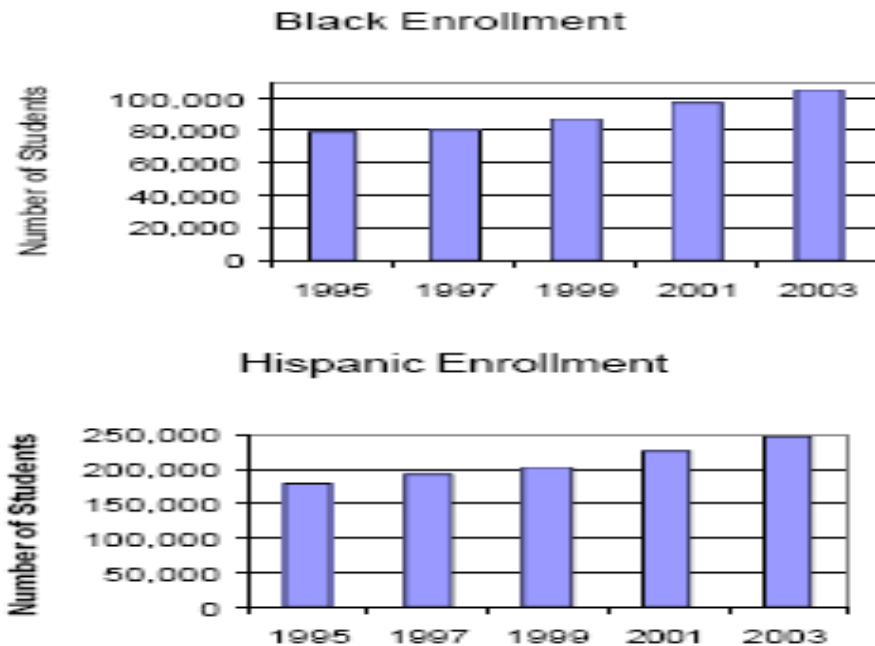
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<sup>2</sup> According to the American Association of Community Colleges state funding has been dramatically cut which lead to an 11 percent tuition increase in Fall 2003.

<sup>3</sup> For purposes of this study, administrators of public community colleges in Texas are defined as Presidents/chancellors, chief business/financial officers, vice presidents, community college board members, and/or their equivalents.

by 2010 Anglo American will be less than 50 percent of the total population and Texas will be a predominately Hispanic state.

**Table 1.1 Current growth in minority populations**



Though Anglo Americans are most likely to go to college, more minorities are becoming first generation college students. Minorities are the fastest growing population which adds to Texas' overall population. Between the years of 2000 and 2040, the African American population will increase between 40.5 to 71 percent and the Hispanic population will by 181.9 to 358.9 percent.

Overall, by the year 2040, Texas population is projected to increase to 71.5 percent which equates to 14.9 million people. The United States population is projected to only increase by 49 percent, which shows a significantly slower growth rate than Texas (Texas Data Center, 2004).

## **Research Purpose**

As a follow-up to the study by Michelle Cruz (2002), the purpose of this applied research project is to explore the attitudes and perceptions of community college leadership about current funding issues. Emphasis will be placed on the following:

- 1) Political nature of funding,
- 2) Budgeting issues,
- 3) Revenue sources, and
- 4) Alternative funding mechanisms.

Cruz interviewed Texas community college senior administrators, to learn their attitudes and perceptions toward the current funding structure. This applied research project uses survey research to investigate the same question. The responses from the survey will supplement Cruz's 2002 results in order to better understand the attitudes and perceptions. This applied research project will also provide an important leadership perspective to the problems of community college senior administrators.

## **Chapter Summaries**

Chapter Two provides an overview of the conceptual framework developed for the research. This chapter also presents the rationale for the "Closing the Gaps by 2015" Initiative and the history of community colleges. Chapter Three discusses the political nature of education funding, budgetary concerns, revenue sources and alternatives for community colleges.

Chapter Four presents and explains the methodology for this research project. Research methods and sampling techniques are further described and discussed. The results of this research are presented and analyzed in Chapter Five after which comparisons, recommendations, and conclusions are drawn; and offered in Chapter Six. The results and recommendations offer valuable information for senior administrators of Texas community colleges and serves as a framework to promote change.

## Chapter Two: History of Community College

### *History of Community Colleges*

In 1901, the first public community college in the United States was established in Joliet, Illinois. Joliet Junior College<sup>4</sup> represents 100 years of the community college movement (Halder, 2006). World events<sup>5</sup> led to the rapid growth of community colleges. Many individuals needed to be trained in specific skills and trades in order to transition from military to civilian life. George Vaughn<sup>6</sup> drew attention to the benefits of community colleges. He stated that community colleges were accessible to individuals by providing training, assistance with employment, upper division study, and personal development programs (Halder, 2006). The original curriculum consisted of assisting students to transfer to a university, but soon vocational studies were added. Eventually the vocational courses grew and began focusing on specific skills such as allied health. In the 1960s and 1970s, the name junior college changed to community college.

Today, community colleges enroll 10 million students annually. Of the 5.4 million students, minorities represent a large percentage of undergraduates (Halder, 2006). In United States community colleges, 46 percent are African-American, 55 percent are Hispanic American, 46 percent are Asian/Pacific

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<sup>4</sup> During the 1970s the name junior college changed to community college.

<sup>5</sup> World events refer to World War II, the Great Depression and the Truman Commission Report. The Truman Commission Report called for the establishment of a network of public community colleges which would charge little or no tuition and offer comprehensive programs and serve the area which they were located (Halder, 2006).

<sup>6</sup> George Vaughn is the author of *The Community College Story: A Tale of American Innovation*.

Islander, and 55 percent are Native American. This diversity of students reflects the population for which community colleges accommodate.

Community colleges offer five components which can enhance a students' success. The *first component* is the presence of transfer services. Transfer resources allow students the opportunity to earn fully transferable credits to four-year colleges or universities (Halder, 2006). The *second component* is the existence of technical programs which provide formal instruction in fields such as allied health, auto mechanics, and semi conductor technology. Community college partnerships with local businesses supply cutting-edge training to students and employment opportunities. Remedial education is the *third component of service* that community colleges offer to its students. This is particularly important because remedial coursework assist students who are unprepared for undergraduate coursework (Halder, 2006). This allows students to improve their math, reading, and writing skills. The *fourth component* is continuing education or lifelong learning. Students have the opportunity to enroll in non-credit<sup>7</sup> courses to advance their education in different fields. The workforce development is the *fifth component* which community colleges “market” their courses to the likes of community businesses and industries. These components as well as the rich history of community colleges in the United States sustain long time results for all students.

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<sup>7</sup> Non-credit course is a course which does not require extensive homework or examinations and which do not offer college credit. Students frequently take non-credit courses for basic skills improvement, job training or career enhancement, or personal enrichment.

### ***Historical View of Community Colleges in Texas***<sup>8</sup>

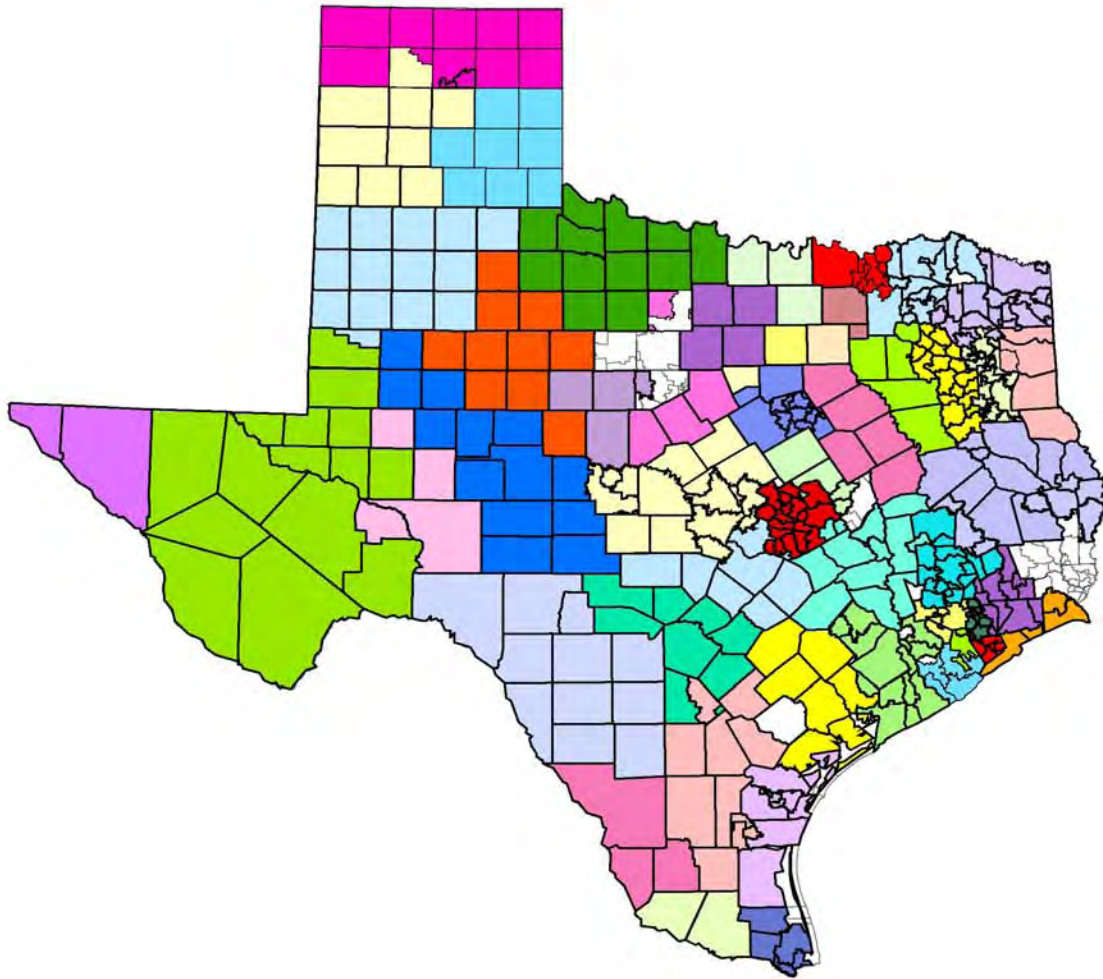
Community colleges have played a vital role in higher education and the “success and growth of the two-year college in Texas” (*Texas Online Handbook*, 2006, 1). According to the *Texas Online Handbook*, the junior college movement started in the 1890’s (2006, 1). In Texas, the first junior college is noted to be Decatur Baptist College (known as Dallas Baptist University). Two year colleges like Decatur College were usually operated by churches, who offered courses similar to the universities. The first publicly supported junior college was established in Wichita Falls in 1922. They shared facilities with the existing independent school district. Between 1922 and 1928 17 junior colleges were established and received state recognition and authorization for funding. These junior colleges were under the administration of local school district’s board of trustees (*Texas Handbook Online*, 1). In the formation of community colleges, the students were predominately white, yet today more minorities are enrolling. Texas has 50 community college districts, each established at different times and possessing different enrollment rates. Table 1.1 shows the location of all community college districts in Texas. The establishment of community colleges grew rapidly.

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<sup>8</sup> Texas Handbook Online,2006,1).

Table 2.1 illustrate the Texas Community College Service Area.

## Texas Community College Service Areas



**Legend**

- |  |  |  |  |
|--|--|--|--|
| Temple Community College District        | McLennan Community College District      | Tyler Junior College District                      | Grayson County Junior College District |
| Austin County Community College District | Laredo Community College District        | Wharton County Junior College District             | Galveston College District             |
| Navarro College District                 | Howard County Junior College District    | Western Texas College District                     | College of the Mainland District       |
| Central Texas College District           | Hill College District                    | Weatherford College District                       | Clarendon College District             |
| Midland Community College District       | Del Mar Community College District       | Vernon Regional Junior College District            | Brazosport College District            |
| South Plains College District            | Dallas County Community College District | Trinity Valley Community College District          | Borger Junior College District         |
| South Texas Junior College District      | Collin County Community College District | Texas Southmost College District                   | Alvin Community College District       |
| Ranger Junior College District           | Cisco Junior College District            | Texarkana College District                         | Amarillo College District              |
| Paris Junior College District            | Central Texas College District           | Tarrant County Community College District          |  |
| Panola College District                  | Blinn Junior College District            | Southwest Texas Junior College District            |  |
| Midland Community College District       | Alamo Community College District         | San Jacinto College District                       |  |
|  | Bee County College District              | Northeast Texas Community College District         |  |
|  | Angelina County Junior College District  | North Harris Montgomery Community College District |  |
|  | El Paso Community College District       | North Central Texas College District               |  |
|  | Odessa College District                  | Lee College District                               |  |
|  |  | Kilgore Junior College District                    |  |
|  |  | Houston Community College District                 |  |

Map Prepared By:  
Texas Higher Education Coordinating Board  
February 28, 2006

Data Source:  
Subchapter J, Section 130.161 of the  
Texas Education Code  
Texas Education Agency  
Texas Higher Education Coordinating Board

Empty areas are not part of a community college service area.

The establishment of taxing power to local school districts allowed for more junior colleges to be established. “Many tax payers saw the new junior college tax as nothing more than a surcharge on current school district taxes (Texas Handbook Online, 2006, 1).

Between the 1960’s and 1970’s, the name of junior college changed to community college, and in the 20<sup>th</sup> century community colleges were solidified as institutions of higher education. Community colleges offer a variety of programs and certificates for students to advance their educational goals. Community colleges are known for accommodating first generation students<sup>9</sup>, and non-traditional students<sup>10</sup>. Community colleges in Texas are governed by the Texas Higher Education Coordinating Board, which is composed of 18 members appointed by the governor to six-year terms (Community College Policy Center, 2003).

The Texas Higher Education Coordinating Board responsibilities to community colleges include the following: 1) enhancing academic programs, 2) increasing and managing finances, and 3) implementing new academic programs such as allied health. Each community college district has its own popularly elected governing board, each of which appoints a chief officer (Cruz, 2002, 10). Community colleges in Texas possess missions similar to those described by Leonardo de La Garza which are:

- To meet specific local needs,

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<sup>9</sup> First generation students are those who will be the first in their family to gain education from a higher education institution.

<sup>10</sup> Non-traditional students are those who are returning to school or attending for the first time at a later age. Those who did not attend college shortly after graduating from high school.

- To compensate for geographical remoteness from a senior college or university,
- To compensate for financial difficulties,
- To provide vocational training, and
- To provide educational opportunities for those students unable to qualify for university admission.

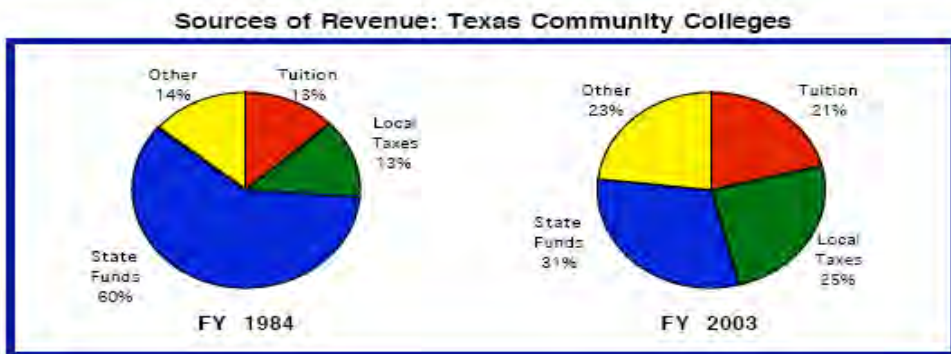
Community colleges are held to their missions and accountability measures. A newly implemented accountability measure is the “Closing the Gaps by 2015” Initiative which promotes community college enrollment growth as well as the quality of education.

### **Funding Process for Texas Community College**

Institutions of higher education each have their own unique governance, the Coordinating Board, and funding structure. Funding can be presented in the form of grants, loans, tuition & fees, taxes, and other sources. “Generally community colleges are funded through state appropriations, tuition and fees, federal appropriations, local contributions, and other sources of revenue. There are over 70 community colleges and 50 community college districts in the state of Texas and they all receive funding from the same entities. The entities include: tuition and fees, the local tax base, grants, federal, state, and other source. Between 1998 and 2000 state appropriations for higher education reached \$60.6 billion dollars, however in 2001 total state appropriations for higher education declined 12.8 percent (Moak, 2001, 1). According to the Texas Higher Education

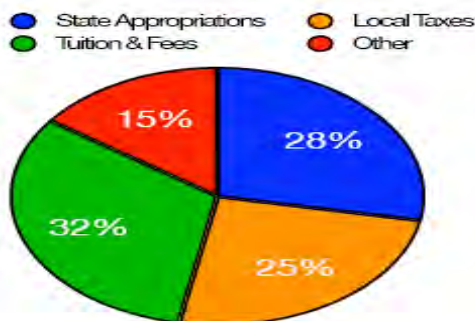
Coordinating Board, the funds appropriated to education represent more than 45 percent of the states total funds appropriation. This makes education one of largest expenditure for the state of Texas, with health care being the other (Texas Higher Education Coordinating Board Strategic Plan, 2006, 16). Table 2.2 show the sources of revenue community colleges receive.

**Table 2.2 Sources of Revenue for Texas Community Colleges**



There has been minimum change to the sources of revenue for Texas community colleges. Table 2.3 shows the changes.

**Table 2.3 Sources of Revenue 2005**



## **Texas Community College**

### ***“Closing the Gaps by 2015”***

“*Closing the Gaps by 2015*” is an initiative posed by Texas Governor Rick Perry and the Texas Higher Education Coordinating Board. The purpose of this initiative falls into two categories, which include *Participation and Success* and *Academic Excellence and Research*. Statistics show that the enrollment in Texas Higher Education institutions will grow by 300,000 students within the next few years. Hence, the *Participation and Success* task Texas institutions of higher education to not only accommodate the increase of students, but to increase the number of students that graduate. The increase in enrollment growth is important however, the quality of education is equally important. The *Academic Excellence and Research* initiative emphasizes that the quality of education be such that students can compete in the workforce and strengthen the economy. The “*Closing the Gaps*” initiative is design to assist first generation students or students, “that traditionally have not viewed college as a pathway to the future” (THECB, 2006). In order to assist these students however, community colleges must make room for growth. Unfortunately, “enrollment in the state’s public and independent colleges and universities are not keeping pace with the booming Texas population” (THECB, 2006).

“Closing the Gaps” has four goals to ensure the success of student enrollment in Texas and promote excellence among the higher education institutions. The four goals are: 1) *Close the Gaps in Participation* in which

recruitment and retention of students and the establishment of affordability is encouraged. 2) *Close the Gaps in Success* focuses on the increase of graduates from community colleges and universities while establishing partnerships with community businesses. 3) Implementing different levels of excellence<sup>11</sup> for different types of institutions fulfill the *Close the Gaps in Excellence* initiative. 4) *Close the Gaps in Research* is the final goal which focuses on increasing funds for the expansion of research and the development of research universities (THECB, 2006).

“Closing the Gaps by 2015” can be accomplished if there is participation between the state of Texas and educational institutions. Unless there is change in the funding structure, colleges will have difficulty accommodating the large number of students projected to enroll. The “Closing the Gaps” initiative only made recommendations on funding, not the funding source and does not address the need of funding for community colleges. (THECB, 2006).

## **Summary**

The mission of community colleges is still the same as the day the first community college was founded. The movement of community colleges and its progression has been discussed. The “Closing the Gaps by 2015” initiative affects community college leaders and students. The initiative is concerning the budgeting process as a whole, while still promoting quality education for students.

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<sup>11</sup> An example of different level of excellence would be the competitive grants which community colleges and universities produce in order to aid in maintaining the benchmarks.

## Chapter Three: Working Hypotheses

### Chapter Purpose

This chapter develops and reviews the working hypotheses. Key issues concerning the funding for community colleges are also examined.

### **The Political Nature of Funding<sup>12</sup>**

Allocating funds for community colleges is a complex process. Aaron Wildavsky stated that, “no change can be made in the budgetary process without affecting the political process” (1964, 132). A component of the research purpose is to explore the political nature of funding and it has been stated that higher education funding is viewed as a political process. Changes in the higher education budget lead to changes in education reform which is again considered a political process. According to King (2000, 413) the government is pressuring to stretch the public dollar to serve more students. Community colleges are constantly competing with other entities for funding. Higher education funding is supported by state government, yet the state legislation has to take into account departments of public safety, highway safety, and corrections (Adult and juvenile). Entities such as Medicaid and other health care programs and human services compete with higher education for state funds. Funding for community

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<sup>12</sup> This section summarizes literature from the following sources: Austin American Statesman, 2006, Berdahl, 1971, Cruz, 2002, Community College Policy Center, 2002, Community College Week, 2005, De la Garza, 2000, Hans, 2003, Hovey, 1999, Jones, 2003, Katinsas, 2004, King, 2000, Lutz, 1986, Rejino, 2000, Sennholz, 2003, Wildavsky, 1964.

colleges are, then, negatively affected by competition with other state funded programs.

In 2000, David Rejino conducted a survey to learn the attitudes and perceptions of university officials on the current budgeting and formula process. He asked whether the budgetary process and budgeting in higher education is political. Overwhelming the respondents agreed that the budgeting process for higher education was political in nature. In 2002, Michelle Cruz interviewed Texas public community college leaders to determine their attitudes and perceptions toward the current funding structure in Texas. Cruz asked 12 administrators in a structured interview if they viewed the appropriation of funds to community colleges as a political process. All 12 respondents agreed that the appropriation process for community colleges is a political process. Many of the respondents believed that the budgeting process was political because the state legislative is in control of funding appropriations. Senior administrators monitor closely the state appropriation process. Because the state is a large contributor (31%) of funding for community colleges, administrators need to understand the political nature of the funding process. If the senior administrator has an understanding, this allows him/her to be a more effective leader. The political nature of the funding process would expect that:

***Working Hypothesis One:***

*Community college leaders will identify the appropriations of funds as a political process.*

## Competition for Funds<sup>13</sup>

The next section examines the dimensions of the political process of competition for funds across state agencies and between community colleges. Funding for higher education is considered political when educational institutes have to compete for resources from the state. "In most states, higher education is the largest discretionary item in the entire state budgets, and competition is fierce for scarce state tax dollars" (Katsinas, 2004, ii). There is significant competition during the appropriation phase. Due to the competitiveness for funding, the state finds itself under continuous pressure.

Community colleges also compete with one another for funding. Cruz's structured interview results show that some community college administrators felt the competitive dividing lines were large community college district versus small community college districts, older community college districts versus newer community college districts or rural versus suburban community college districts. Hans (2003) noted that in the area of higher education colleges compete with other colleges and students with other students. This supposition could draw to us conclude that the funding for community college districts is negatively affected by the competition across Texas community colleges and:

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<sup>13</sup> Cruz, 2002, Community College Policy Center, 2002, Community College Week, 2005, Hans, 2003, Jones, 2003, Katsinas, 2004, Rejino, 2000, Sennholz, 2003.

***Working Hypothesis One a:***

*Community College leaders will identify competition between Texas public community colleges for state appropriation.*

“While institutions of higher education must compete against one another for appropriations, they also must compete against other governmental entities in the fight for appropriations” (Cruz, 2002, 25). The economic status of Texas is also a determining factor of how the funds will be appropriated. “If the economic growth is slower than normal, if states continue to cut taxes, or if states increase spending outside of higher education, then the outlook for support of public education will be even worse,” (Jones, 2003, 2).

Though each entity must present their program as a priority for the usage of state dollars, Hovey (1999, 14) noted that over the past decade the percentage in the state support for higher education have been smaller than the percentage increases in total budgets. This means that higher education isn’t competing successfully in comparison to other programs. Cruz’s literature and data support the contention that funding is political in nature and competitive. Therefore, if the allocation process of appropriations is political, one would expect that:

***Working Hypothesis One b:***

*Community college leaders will identify competition between community colleges and other state funded programs*

## Budgeting Issues<sup>14</sup>

This section will define formula funding as it relates to Texas community colleges, as well as its purpose, uses, advantages and disadvantages.

Furthermore, this section will explore if community college senior administrators believe that formula funding creates obstacles for community college leaders to achieve their mission.

Texas is one of many states that uses formula funding as a means of allocating funds. Steve (2002) defines *formula funding* as the algebraic expression of the relationship among quantifiable factors for the purpose of allocating funds among different institutions. Another definition of *formula funding* is “an objective procedure for estimating future budgetary requirements of an institution by manipulating data about future programs and by utilizing relationships between programs and cost” (Floyd, 1982, 18).

The overall objective of formula funding is to remove the political aspect from resource allocation and distribution which will result in equity. Staff members of The Texas Legislative Budget Board stated that formula funding is the method of allocating funds among institutions and generally, formula funding flows:

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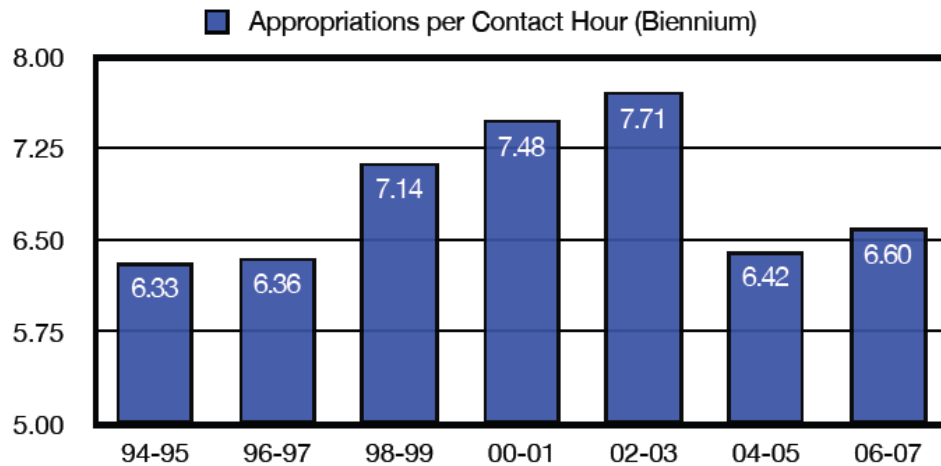
<sup>14</sup> <sup>14</sup> Cruz, 2002, De la Garza, 2000, Floyd, 1982, Johnstone, 1999, Jones, 2003, King, 2000, Steve, 2002, Texas Higher Education Coordinating Board Statistic Plan, 2006, Townsend, 2001.

80 percent through Instructions & Operations and Teaching Supplement and 20 percent through Infrastructure.

### **What Drives Formula Funding**

The 2000 State Funding for Community Colleges survey stated that enrollment is the key component of community college funding formula and Texas is one of the states that uses enrollment as a major factor (5). Texas community colleges have been recognized as major participants in generating the increase in higher education enrollment by providing an “open access” viewpoint (Waller, 2003, 409). This brings unto the conclusion that community colleges need to increase enrollment so they can receive more funding. The more students enrolled in a certain program, the more funding that program will receive. Since enrollment is the receipt of more funding, community college leaders have developed a mindset favoring growth (Townsend, 2001, 21). This trend challenges the concept of formula funding connecting to educational objectives. Table 3.1 shows the formula funding appropriations for Texas community colleges throughout the years.

**Table 3.1 Appropriations per Contact Hour**



Moreover, the fairness of formula funding is questionable. Population growth is another determinant for formula funding. The increase in various age groups attending college for the first time or returning students wanting to increase their marketable skills also led to an increase in enrollment.

### **Advantages of Formula Funding**

Formula funding can be beneficial for community colleges and the following list of advantages of formula funding are recognized by Moss and Gaither (Cruz, 2002, 33):

- Provide uniformity and ease in budget preparation and presentation;
- Provide an objective cost productivity measure for comparison preparation between institutions and between activities with institutions;

- Provide equal distribution of funds and also minimize institutional rivalry and conflict between state officials and institutions;
- Result in more adequate levels of support for all institutions, not merely who has political clout and;
- Tend to generate funds, thereby, providing a means to ensure that higher education receives its share of total state resources.

Some respondents from Cruz's structured interview support formula funding by noting this process as an appropriate method to address community college needs. The Board of Higher Education (2003) also supports formula funding because of its capability to develop more rational and equitable approaches to funding higher education. Formula funding has the ability to tie funding to needs, and the ability to encourage a more stable resource allocation (3). THECB, also connects formula funding to achieving educational objectives. Texas is one of the many states that use formula funding as a means of allocating funds. When allocating, some states report a single consolidated appropriation for all community colleges. Other states allocate funds to each individual institution. Texas allocates its funds to each individual institution according to the State Funding for Community Colleges survey (2000, 4).

### **Disadvantages of Formula Funding**

While formula funding has some advantages, Floyd (1982, 19-20) recognizes the restrictions and disadvantages that formula funding has in higher education which are:

- Formulas reduce an institutions incentives to implement innovative practices;
- Formulas discourage non-traditional and non-credit instruction;
- Formulas provide no start-up cost funding for new programs; and
- Formulas place too much emphasis on “fundable” units without regard to quality.

Community colleges face a difficult time when trying to initiate new programs due to funds not being appropriated to support them. The amount of funds appropriated to colleges based on enrollment growth fail to measure the quality of education the students are receiving. Another problem with depending on enrollment growth for funding is that the colleges depend too heavily upon it. The disadvantages of formula funding is supported by the Legislative Analysis Office which point out that most enrollment projections have had limited success as predictors of actual enrollment demands (2005, 1). Several respondents from Cruz’s 2002 interviews felt frustrated with the formula funding system and it’s outcome. One respondent referred to the formula funding system as, “an antiquated model that does not take productivity, efficiency, or effectiveness into consideration” (p.60). Though considered one of the most popular ways to allocate funds to colleges, formula funding has its short comings.

The Texas Higher Education Coordinating Board allocate the fluctuating funds of formula funding, forcing the colleges to make up the differences by raising additional revenue from other sources (Cruz, 2002, 29). The Legislative

Budget Board explained in its 2002 report that institutions of higher education receive a lump sum, or estimated appropriations. “Unlike other state agencies, higher education institutions are not bound to spend the appropriation within the specified strategy. The funding formulas reflect how state funds are earned and not how they must be spent,” (Legislative, 2002, 3). This supports the question that formula funding increases fiscal uncertainty. Since formula funding has advantages and disadvantages, one would expect:

***Working Hypothesis Two:***

*Community college leaders believe that formula funding creates obstacles for community college leaders to achieve their mission.*

**Revenue Sources<sup>15</sup>**

This section discusses in further detail the appropriation process for community colleges. The key contributors: state appropriations, federal appropriation, local revenue sources and tuition and fees will be emphasized. The perception of community college leaders toward the available sources will be conversed.

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<sup>15</sup> Community College Policy Center, 2001, Texas Association of Community College, 2006, Legislation Budget Board, 2004, American Association of Community Colleges, 2003, Texas Higher Education Coordinating Board 79<sup>th</sup> Legislative Session, 2005, American Association of Community Colleges, 2003, Texas Higher Education Coordinating Board 79<sup>th</sup> Legislative Session, 2005, THECB Strategic Plan, 2006.

The decline in funding for community colleges has been a reoccurring trend. Carol Keeton Strayhorn has predicted that the State of Texas will experience revenue shortfall ranging from 5 to 10 billion dollars over the next biennium (Waller, 2003, 410). For example, in 2003, the state cut the colleges support by 7 percent and the budget was 12.5 percent less than the previous budget cycle (American Association of Community Colleges, 2003, 110). In order to continually provide quality education to students, community colleges have to increase revenue from other sources. With state appropriations not funding at full formula rates, and only when resources are available, state funding is not deemed a reliable source of funding. Due to the availability of this resource it can be anticipated that:

***Working Hypothesis Three:***

*Community college leaders will consider available revenue sources as unreliable.*

**Local Revenue Sources**

The prominence of community college funding is reflected in state legislation. Community college funding has been a responsibility shared by the state, local taxpayers, students, and the federal government as well as a major source of revenue for Texas' Local contributions can also used to supplement state revenue to community colleges. "Prior to the 1940's, junior colleges in

operation were financed entirely from local funds” (Townsend, 2001, 8). These contributions come in the form of property taxes are primary source of revenue for local governments. The property tax is a tax on the assessed value of property. The tax rate formula is tax rate times the assessed value owned by a taxpayer. This amount is what taxpayers owe the government.

**Table 3.2 Illustrates the current tax and valuation in Texas**

50 of 50 districts reporting:

College	Valuation (\$)	2005-06 M&O Rate	2005-06 Debt Rate	2005-06 Total Rate	2005-06 Levy (\$)
Alamo	70,051,241,214	0.0923	0.01475	0.10705	74,989,854
Alvin	3,799,795,271	0.208306	0.029249	0.237555	9,026,604
Amarillo	7,900,113,657	0.13296	0.02747	0.16043	12,674,152
<b>Amarillo's Maintenance T.D.</b>	<b>2,566,979,373</b>	<b>0.04612 to .05</b>		<b>0.04612 to .05</b>	<b>1,207,263</b>
Angelina	2,912,572,640	0.0909	0.025	0.1156	3,366,934
Austin	53,869,912,191	0.09	0.0091	0.0991	53,385,083
Blinn	1,735,974,984	0.051		0.051	885,347
Brazosport	5,839,765,280	0.119		0.119	6,949,321
Central Texas	4,819,087,918	0.146		0.146	7,035,868
Cisco	179,594,020	0.15017		0.15017	269,696
Clarendon	166,307,204	0.2065		0.2065	343,424
Coastal Bend	900,135,165	0.16189		0.16189	1,457,229
College of the Mainland	7,278,442,251	0.24302		0.24302	17,688,070
Collin	56,262,029,392	0.08	0.009422	0.089422	50,310,632
Dallas	140,647,666,399	0.0778	0.0038	0.0816	114,768,496
Del Mar	12,865,532,757	0.190908	0.037419	0.228327	29,375,485
El Paso	23,593,908,630	0.132844		0.132844	31,343,092
Frank Phillips	495,955,070	0.22		0.22	1,091,101

<b>Frank Phillips' Maintenance T.D.</b>	<b>678,368,600</b>	<b>0.05</b>		<b>0.05</b>	<b>339,184</b>
Galveston	3,970,203,693	0.1918		0.1918	7,614,851
Grayson	5,020,358,343	0.14002		0.14002	7,029,506
Hill	1,177,832,624	0.067775		0.067775	798,276
<b>Hill's Maintenance T.D.</b>	<b>3,653,336,479</b>	<b>0.0255 to 0.05</b>		<b>0.0255 to 0.05</b>	<b>1,674,003</b>
Houston	83,165,500,060	0.081333	0.014436	0.095769	79,646,768
Howard	1,240,419,918	0.273		0.273	3,386,346
Kilgore	2,505,384,684	0.174		0.174	4,359,369
Laredo	7,527,317,767	0.190315	0.043397	0.233712	17,592,245
Lee	7,158,132,936	0.18299	0.023780	0.20677	14,800,871
McLennan	8,648,049,449	0.104593	0.016483	0.121076	10,470,712
Midland	6,309,278,023	0.1794	0.0453	0.2247	14,176,948
Navarro	1,740,732,641	0.1405		0.1405	2,445,729
North Central	1,950,989,658	0.0932		0.0932	1,818,322
North Harris Montgomery	80,562,339,779	0.086	0.0347	0.1207	97,238,744
Northeast Texas	3,477,431,103	0.06392	0.03231	0.09623	3,346,332
Odessa	5,819,985,993	0.20		0.20	11,639,972
Panola	3,309,985,772	0.10085		0.10085	3,338,121
Paris	1,139,747,527	0.1922		0.1922	2,190,595
Ranger	71,480,010	0.24		0.24	171,552
San Jacinto	28,324,291,465	0.1159	0.02944	0.145365	41,173,606
South Plains	2,518,364,291	0.24650		0.246497	6,207,692
South Texas	21,411,282,310	0.11	0.0489	0.1589	34,022,528
Southwest Texas	1,287,165,313	0.11		0.11	1,415,882
Tarrant	92,396,145,630	0.13046	0.00892	0.13938	128,781,748
Temple	2,646,005,795	0.1667	0.0387	0.2054	5,434,896
Texarkana	1,062,812,747	0.0827		0.0827	878,946
Texas Southmost	7,663,218,167	0.109161	0.053611	0.162772	12,473,573
Trinity Valley	8,124,579,326	0.0640		0.064	5,199,731
<b>TVCC's Maintenance T.D.</b>	<b>873,253,708</b>	<b>0.05</b>		<b>0.05</b>	<b>436,627</b>
Tyler	8,181,921,079	0.1272		0.127169	10,404,867
Vernon	804,324,340	0.24993		0.24993	2,010,248
Victoria	3,954,906,247	0.1129	0.0287	0.1416	5,600,147
Weatherford	5,685,314,665	0.1034	0.0136	0.117	6,651,818
Western Texas	1,777,596,908	0.1596		0.1596	2,837,045
Wharton	2,521,592,035	0.15595		0.15595	3,932,423
<b>Total Valuation &amp; Levy</b>	<b>\$814,244,662,501</b>				<b>\$967,707,875</b>
<b>Average Rates</b>		<b>0.14280</b>	<b>0.01176</b>	<b>0.15456</b>	

In Texas, the Higher Education Coordinating Board has the authority to impose property taxes to support local college functions. A problem with using taxes for additional funding is that tax payers do not want to have their property taxes increased. In 2003, Senator Florence Shapiro confirmed that local property taxes supported 62 percent of the funding for community colleges in Texas (Shapiro, 2003). Leonardo De la Garza (2000) noted that there are two common sales properties to support community colleges. One is the maintenance and operation tax (M&O), which raises revenue for general operating expenses, and the second tax is the Debt Service and Shrinking rate (I&S). This tax generates income to pay off interest bonds sold to finance construction projects or major capital projects (2000, 9). During 2004, 39 of the 50 community college districts in Texas showed an increase in assessed valuation. However, 20 community college districts did not meet the minimum required assessed property valuation (Texas Higher Education Coordinating Board Strategic Plan, 2006, 16). Another issue is that many community colleges “have reached, or are near their maximum local tax levy,” making it difficult to use this source of funding any further (Texas Higher Education Coordinating Board Strategic Plan, 2006, 16). THECB has suggested that the Texas legislature redesign the funding structure of the states community college system to minimize the dependency on local property tax. However, community colleges still depend heavily on that source of funding (Waller, 2003, 418). Given that local revenue sources are heavily used, local revenue sources can be seen as a reliable source of funding for community colleges. This concludes that:

### ***Working Hypothesis Three a:***

*Community college leaders will identify that local revenue sources are an appropriate funding source for community colleges.*

### **Federal Funding**

“Although the movement of the community college has been well documented, little, if anything is known about the extent of federal influences on community colleges” (Townsend, 2001, 23). Federal appropriations serve as another source of revenue for community colleges. Federal funding comes in the form of loans, grants, and student work study. Federal funding is generally considered a poor source of funding for community colleges because most of the funding from federal government is for university-based research, which accounts for more than 75 percent of all federal funding (Cruz, 2002, 42). The federal government provides much of the funds for research at the university level and also a wide variety of grants (Rejino, 2000, 19). The State of Texas in 2003 was ranked one of the top four states in the U.S., which received federal research funding. Due to the size of community colleges, they cannot compete with programs deemed worthy for federal appropriations. Most federal funding provided to community colleges comes in the form of financial aid assistance such as Pell Grants which are awarded to individual students. Pell grants are

awarded solely on demonstrated financial need to every eligible undergraduate student who has not already earned an undergraduate or professional degree. The amount of the Pell grant is contingent upon financial need. For the above reasons, one would expect:

***Working Hypothesis Three b:***

*Community college leaders will identify that federal government funding is not a reliable funding source for community colleges.*

**Tuition<sup>16</sup> and Fees<sup>17</sup>**

Tuition and fees are major contributors to funding community colleges. States are eagerly seeking ways to keep state appropriations down, in turn, increasing tuition and fees for students. Community colleges have become very dependent on tuition and fees to supplement their operating budgets (Texas, 1981, 6). Tuition and fees represent a significant portion of the community college budget and rely on out-of-district fees, out-of-state fees, and international student fees to assist as well. “Half of the 50 community college districts receive from 50 percent to 97 percent of their students from outside the taxing district” (THECB, 2002). Table 3.3 shows the tuition and fees for the fiscal year 2002-2003.

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<sup>16</sup> De la Garza, 2000, Rejino, 2000, Cruz, 2002, Austin American Statesman, 2006, Wildasky, 1964, THECB 79<sup>th</sup> Legislative Session, 2005, Texas Association of Community Colleges, 2003, THECB Strategic Plan, 2006.

<sup>17</sup> Tuition and fees are the charges for services and for the use of equipment or facilities.

**Table 3.3 Tuition & Fees 2003-2004 Full Time Student (12 hours)**

	In-District Resident	Out-of-District Resident	Non-Resident
Average Tuition (2003-04)	\$337	\$463	\$905
Average Fees (2003-04)	\$195	\$288	\$274
Average Tuition & Fees	\$531	\$751	\$1,179

Source: TACC Survey

In Texas, tuition and fees are determined as amount paid per semester hour (De la Garza, 2000, 10). The average tuition and fee bill for a Texas public community college student enrolled twelve semester hours in 1999-2000 school year was \$377 (De La Garza, 2000, 19). David Rejino's 2000 study showed that university administrators felt that an increase in tuition and fees must be justly thought out before implementation because of the political ramifications that would follow (68). Cruz's 2002 research yielded that most of the community college administrators interviewed agreed that tuition and fees were a reliable source of funding. De la Garza (2000, 10), continues to note that fees have continued to increase over the years and fees such as laboratory, library, technology, building maintenance, and student services are in place. With the increase of student enrollment in community colleges and the funding from state appropriations limited, tuition and fees are still increasing. With the community colleges having limited revenue sources available, it can be anticipated that:

### ***Working Hypothesis Three c:***

*Community college leaders will identify that tuition and fee charges are not a reliable source of funding for community colleges.*

### **Alternatives to Funding<sup>18</sup>**

This section highlights the alternatives available to community colleges. Some of these options are currently being utilized by community colleges, allowing them to obtain additional funding. This premise will support that the working hypothesis of community college leaders will support alternative funding mechanisms to increase funding. Alternatives for community colleges are not often utilized. There was a lack of information pertaining to alternatives available to community colleges. Private donations and community involvement were the major sources of additional funding.

### **Private Donations**

Private donations endow community colleges with an overwhelming amount of additional funds. Alumni associations on the community college level are a great source of alternative funds. They are able to aid the college in increasing political support, by promoting a positive public outlook, and

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<sup>18</sup> Cohen, 2003, Brightman, 1989, Hellway, 1980.

recruitment of new students (Hellweg, 1980, 5). Grants are a long receive source for additional funding. It is noted that "Successful grants development requires financial and administrative investment, but the returns make it worthwhile" (Hellweg, 1980, 5). Institutional foundations are considered alternates to funding. These organizations serve as vehicles for receiving funds from alumni, other donors and philanthropic agencies (Cohen, 2003, 157). Large corporations, as well as private donated grants, are used to supplement revenue shortages.

### **Community Partnership & Entrepreneurial Activities**

Community partnerships are those which include the relationships between the community college, community businesses or organizations. In a study by Brightman (1989) he showed how community colleges could make additional revenue by using the organization for different services. Services include facility rentals within guidelines of state statute or tax laws (Cohen, 2003, 157). Other communities are supplementing funds by arranging short term leases to host athletic activities, county fairs, swap meets and horse shows. Growth of partnerships and entrepreneurial activities within the community is another alternative recommended to increase community college revenue. Partnerships and activities with businesses allow the businesses to utilize the various training components for their employees. There is no secret that community colleges are in need of additional revenue, therefore alternatives are needed. It can be stated that:

### ***Working Hypothesis Four:***

*Community college leaders will support alternatives funding mechanisms to increase funding.*

### **Summaries of Working Hypotheses**

The four working hypotheses developed serve as a way to organize the connection to the literature and have been summarized in Table 3.3. Working Hypothesis 1 focuses on the budgeting process in community colleges. It takes into account the political aspect of funding as well as the competitive component of community college funding. Formula funding and the examination of the allocation process serves as hypothesis 2. This hypothesis also explores the fairness of formula funding. Working hypothesis 3 focuses on the reliability of revenue sources which include: local funds, state funds, federal funds, and tuition and fees. Alternatives for community college funding serves as working hypothesis 4. This hypothesis focuses on other options which community colleges can utilize in order increase revenue.

**TABLE 3.4: Summary of Conceptual Framework linked to Literature**

Working Hypotheses	Scholarly Support
WH1: Community college leaders will identify the appropriations of funds as a political process.	Berdahl (1971), De La Garza (2000), Waller (2003), Cruz (2002), Rejino (2000), Austin American Statesman (2006), Hans (2003), Jones (2003), Sennholz (2003), Lutz (1986), King (2000), Wildavsky (1964), Cruz (2002), Katinsas (2004), Hovey (1999)
Wh1a: Community college leaders will identify competition between Texas public community colleges for state appropriations.	De La Garza (2000), Johnstone (1999), Waller (2003), Cruz (2002), Hans (2003), Katinsas (2004), Hovey (1999), Rejino (2000), Jones (2003), Community College Week (2005), Sennholz (2003)
WH1b: Community college leaders will identify competition between community colleges and other state funded programs.	De La Garza (2000), Waller (2003), Cruz (2002), Hans (2003), Katinsas (2004), Hovey (1999), Rejino (2000), Community College Week (2005), Sennholz (2003)
WH2: Community college leaders believe that formula funding creates obstacles for community college leaders to achieve their mission.	De La Garza (2000), Johnstone (1999), Waller (2003), Wildavsky (1964), Cruz (2002), Steve (2002), Floyd (1982), King (2000), Townsend (2001),
WH3: Community college leaders will identify consider available revenue sources as unreliable.	Community College Policy Center (2001), Texas Association of Community College (2006), Legislation Budget Board (2004), American Association of Community Colleges (2003), Texas Higher Education Coordinating Board 79 <sup>th</sup> Legislative Session (2005), Moak (2001), Cruz (2002), Rejino (2000),
WH3a: Community college leaders will identify that local revenue sources are not an appropriate funding source for a community college.	Berdahl (1971), De la Garza (2000), National Center for Public Policy (2002), Cruz (2002), Rejino (2000), Katsinas (2004), Legislation Budget Board (2004), American Association of Community Colleges (2003), Texas Higher Education Coordinating Board 79 <sup>th</sup> Legislative Session (2005), THEBC Strategic Plan (2006)

WH3b: Community college leaders will identify that federal government funding is not a reliable funding source for community colleges.	Community College Policy Center (2001), Education Commission of the States (2001), Johnstone (1999), National Center for Public Policy (2002), Cruz (2002), Rejino (2000), Townsend (2001)
WH3c: Community college leaders will identify that tuition and fees are not a reliable source of funding for community colleges.	De La Garza (2000), Rejino (2000), Cruz (2002), Austin American Statesman (2006), Austin Community College (2006), Wildavsky (1964), THECB 79 <sup>th</sup> Legislative Session (2005), Texas Association of Community Colleges (2003), Texas (1981), THECB (2002)
WH4: Community college leaders will support alternative funding mechanisms to increase funding.	Cohen (2003), Brightman (1989), Hellway (1980)
WH4 a: Community college leaders should increase partnerships and workforce programs.	Cohen (2003), Brightman (1989), Hellway (1980)
WH4b: Community college leaders should increase entrepreneurial activities (i.e. courses utilized by businesses to promote trade or certificate).	Cohen (2003), Brightman (1989), Hellway (1980)

## Conclusion

This chapter addresses the literature on budgeting, formula funding and revenue sources and their availabilities. The literature addressed the political and competitive aspects of the budgeting process. It highlighted the functions of formula funding and its reliability, and lastly, the literature addressed the various revenue sources which community colleges receive as well as their reliability. Each of these exploratory categories will assist in building the framework for this applied research project.

## **Chapter Four: Methodology**

### **Chapter Purpose**

This chapter describes the methodology used to assess the attitudes and perceptions of Texas public senior community college administrators. This chapter operationalizes the conceptual framework developed by the various funding sources for community colleges, which are: 1) budgeting, 2) formula funding, 3) revenue sources, and 4) alternatives. Each factor is prepared into a working hypothesis and sub-hypotheses. The conceptual framework is operationalized by developing survey questions from each working hypotheses and connecting the conceptual framework to the senior community college administrators' assessment. Survey research was used to supplement Michelle Cruz's 2002 applied research project. Survey research was the research technique selected for this applied research project because it provided greater breadth for the exploratory purpose.

### **Research Technique**

Structured interviews are most appropriate for this research because it allows the interviewer to gain insight on a larger group (Babbie, 2004, 274). Thus, survey research is the instrument tool used for this applied research project. Survey research possesses a weakness as well. Validity is a weakness in survey research due to the limited response options. The options may not fully capture the respondents' actual opinion.

The survey questions were developed using the four working hypotheses and the Lickert scale was utilized for each questionnaire item<sup>19</sup>. The working hypotheses and sub-hypotheses were operationalized as a 22 item survey. The coding for the survey items are as follows:

Strongly Agree= SA  
Agree= A  
Neutral= N  
Disagree= SA  
Strongly Disagree= SD

### **Operationalization of Conceptual Framework**

The survey instrument used to explore the attitudes and perceptions of community college senior administrators on current fiscal issues among community colleges was designed using the working hypotheses developed in Chapter 3. Table 4.1 shows the connection between the questionnaire items and the working hypotheses. For example, working hypothesis 2, deals with the potential obstacles to achieving educational missions produced by formula funding. The questionnaire includes items which relate concerns about fiscal uncertainty, fairness, and equity with formula funding.

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<sup>19</sup> Refer to Appendix C for a listing of the survey questionnaire items.

**TABLE 4.1: Connecting the Survey to the Working Hypotheses**

CATEGORY	WORKING HYPOTHESES	QUESTIONNAIRE ITEM
<p><b>Political Process</b></p> <p><b>Working Hypothesis 1</b></p> <p>Community College leaders will identify the appropriation of funds as a <b>political process</b>.</p>	<p>Working Hypothesis 1a: Community college leaders will identify competition between Texas public community college for state appropriations.</p> <p>Working Hypothesis 1b: Community college leaders will identify competition between community colleges and other state funded programs.</p>	<p>WH1a: The funding for community college districts are negatively affected by competition across Texas community colleges.</p> <p>WH1b: The finances of community college districts are negatively affected by competition across other Texas state funded programs (i.e. Medicare).</p> <p>WH1: Understanding the politics of the budgeting process produces a more effective leader.</p> <p>WH1: Communication with legislator produces a more effective leader.</p>
<p><b>Formula Funding</b></p> <p><b>Working Hypothesis 2</b></p> <p>Community college leaders believe that <b>formula funding</b> creates obstacles for community college leaders to achieve their mission.</p>		<p>WH2: Formula funding increase fiscal uncertainty.</p> <p>WH2: Formula funding connects to educational objectives.</p> <p>WH2: Formula funding is fair.</p> <p>WH2: Formula funding facilitates the Closing the Gaps initiative.</p> <p>WH2: Formula funding results in equitable outcomes.</p>
<p><b>Revenue Sources</b></p> <p><b>Working Hypothesis 3</b></p> <p>Community college leaders will consider available <b>revenue sources</b> as unreliable.</p>	<p>Working Hypothesis 3a: Community college leaders will identify that local revenue are not an appropriate source for appropriating funds to community colleges.</p> <p>Working Hypothesis 3b: Community college leaders will identify that federal government funding is not a reliable funding source for community colleges.</p> <p>Working Hypothesis 3c: Community college leaders will identify that tuition and fee charges are not a reliable source of funding for community colleges.</p>	<p>WH3a: Local revenue sources are a reliable source of funding for community colleges.</p> <p>WH3b: Federal revenue funds such as student financial aid are an unreliable source of funding for community college.</p> <p>WH3c: Tuition and fees are a reliable source of funding for community college.</p> <p>WH3c: Tuition and fees continue to increase due to decrease in state funding.</p> <p>WH3a: A cut of 10% in state appropriation would lead to:</p> <ul style="list-style-type: none"> <li>a) no increase in tuition &amp; fees</li> <li>b) 0-5% increase in fees</li> <li>c) 5-10% increase in fees</li> <li>d) 10-15% increase fees</li> <li>e) 15+% increase in fees</li> </ul> <p>WH3: Revenue funds are an unreliable source of funding for</p>

		community colleges.
<p><b>Alternatives</b></p> <p><b>Working Hypothesis 4</b></p> <p>Community college leaders will support <b>alternatives</b> funding mechanisms to increase funding.</p>	<p>Working Hypothesis 4a: Community college leaders will support private donations as a mechanism to increase funding.</p> <p>Working Hypothesis 4b: Community college leaders should increase partnerships and workforce programs.</p> <p>Working Hypothesis 4c: Community college leaders should increase entrepreneurial activities (i.e. courses utilized by businesses to promote trade or certificate).</p>	<p>WH4a: Private donations are a good mechanism to increase community college funding.</p> <p>WH4b: Community partnerships and workforce programs are a good mechanism to increase funding for community colleges.</p> <p>WH4c: Entrepreneurial activities Are a good mechanism to increase funding for community colleges.</p> <p>WH4: The funding mechanism with the most promise for raising revenue is:</p> <ul style="list-style-type: none"> <li>a) private donations</li> <li>b) community partnerships</li> <li>c) entrepreneurial activities</li> <li>d) other, please specify.</li> </ul>
<p><b>Closing the Gaps</b></p>	<p>Community college leaders will believe that "Closing the Gaps by 2015" is achievable.</p>	<ul style="list-style-type: none"> <li>• Current funding for colleges support the Closing the Gaps initiative adequately.</li> <li>• Your community college will be able to achieve the Closing the Gaps initiative.</li> <li>• Texas will be able to achieve the Closing the Gaps initiative.</li> </ul>

## Sample

The sample for this research included all senior administrators of Texas public community colleges which include: presidents, vice-presidents, chancellors, vice-chancellors, and financial directors. In total, 86 senior community college administrators were sampled. The unit of analysis in this research was each senior administrator of the Texas public community colleges identified. The survey was pre-tested by the president of Austin Community College and the Vice President for Institutional Effectiveness and Accountability at Austin Community College in May 2006. In July 2006 an introductory

statement<sup>20</sup> and a link to the survey was sent to 86 senior administrators of Texas public community colleges via email. Of the 86 surveys emailed, 31 surveys were received for a response rate of 36%.

One questionnaire item was included in the survey to gather descriptive information on the sample. The item queried the Texas Community College senior administration on their position at the community college they serve. Majority (25) of the respondents held the position of president, while two individuals serve as vice-presidents of financial services and one as the executive director of Institutional Research.

### **Rights of Participants**

This Applied Research Project has been reviewed and approved by the Institutional Review Board of Texas State University-San Marcos. Training on ethical practices and awareness in relation to human subjects, has been undertaken by the researcher. No inflection of harm was presented to any participant within the duration of the applied project. The identities of participants remained anonymous and the listing of their position was optional. The research was on a voluntary basis. The approval number is 05-12234.

### **Statistics**

Since a set of sample observations are being summarized, descriptive statistics will be used to summarize the data collected. The descriptive statistics will present the attitudes and perceptions of senior community college

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<sup>20</sup> Refer to Appendix E to review introductory letter and link to survey.

administrators which allow the reader a larger understanding of their attitudes and perceptions. The tables and statistics display the mode and percentage of respondents answering “Strongly Agree” and “Agree” combined into a single percentage for each survey question. “Disagree” and “Strongly Disagree” responses are used in discussion but do not appear in the tables. “Neutral” responses remain unchanged. This method allows the reader to assess the frequency in perception and the ability to analyze the senior administrator’s perception.

## **Summary**

The data in this study was analyzed utilizing descriptive statistics to explore the attitudes and perceptions of the senior administrators in relation to the working hypotheses. Chapter 5 describes the results of the survey and if the results support or fail to support the working hypotheses developed for this applied research project.

## Chapter Five- Results

### Chapter Purpose

Chapter Five presents the results of the data gathered to assess the current funding structure of Texas public community colleges. The survey results are organized by the working hypotheses and sub-hypotheses and are used to determine the level of support community college senior administrators have for each working hypothesis. Each survey item is summarized and presented in a table format. Thirty-one Texas public community college senior administrators responded to the survey via email to a sample of 86 senior administrators, for a response rate of 36%. Comparative data in relations to Cruz's research are also provided in order to review any consistency in responses.

**Table 5.1 Response Rate**

POSITION	# OF QUESTIONNAIRES SENT	# OF QUESTIONNAIRES RESPONSES
Presidents, Vice-Presidents, Chancellors, Vice-Chancellors, Financial Directors, Accountability Directors.	86	31

### **Working Hypothesis One: Political Process**

The budgeting process for community colleges formed the first working hypothesis. Working hypothesis one and sub-hypotheses addressed the political

nature of the budget process as well as competition for state appropriations. Specifically, the attitudes about the political process were explored.

The research overall supports working hypothesis one (100% agreed). Respondents believe that understanding politics and communication with legislators produce a more effective leader (93.5% agreed). The majority of the participants also disagreed (only 16.2% agreed) that funding for community college districts are negatively affected by competition across Texas community colleges. In addition, respondents agreed (83.8%) that the finances of community college districts are negatively affected by competition across other Texas state funded programs. As indicated in Table 5.2, “agree” is the most frequently occurring response to the survey items. Therefore the data supports working hypothesis one. Community College leaders will identify the appropriation of funds as a political process.

These findings contradicted Cruz’s 2002 findings. Her findings stated that competition existed between, large community college district and small community college district” or “poor district and wealthy district” (2002, 58). Competition indeed exists, however not among community college districts but with other state entities.

**Table 5.2 Working Hypothesis One: Political Process**

Working Hypothesis	Survey Question	N	% SA/A	Mode	Consistency with Cruz's findings
<b>Working Hypothesis 1: Community College leaders will identify the appropriation of funds as a political process.</b>	WH1: Understanding the politics of the budgeting process produces a more effective leader.	31	100 %	Strongly Agree	n/a
	WH1: Communication with legislator produces a more effective leader.		93.5%	Agree	n/a
Working Hypothesis 1a: Community college leaders will identify competition between Texas public community college for state appropriations.	WH1a: The funding for community college districts are negatively affected by competition across Texas community colleges.	31	16.2%	Disagree	No
Working Hypothesis 1b: Community college leaders will identify competition between community colleges and other state funded programs.	WH1b: The finances of community college districts are negatively affected by competition across other Texas state funded programs (i.e. Medicare).	31	83.8%	Agree	n/a

*n/a- not present in Cruz's study*

**Working Hypothesis Two: Formula Funding**

The second set of hypotheses dealt with formula funding. The objective of formula funding is to remove the political aspect from resource allocation and distribution and create a more equitable system. Therefore, in agreement with the literature, the respondents were generally favorable toward formula funding.

Respondents agreed (64.5%) that formula funding is fair and a stable source of appropriating funds.

Responses to formula funding connects to educational objectives were mixed with 51% agreeing. Respondents in Cruz's study were split in their attitudes in regards to formula funding. Respondents agreed (51.6%) that formula funding connects to educational objectives. Respondents also had mixed feelings about formula funding resulting in equitable outcomes (43.3%). Respondents, disagreed (only 38.7% agree) that formula funding increase fiscal uncertainty and disagree (only 22.6% agree) that formula funding facilitates the Closing the Gaps initiative. "Disagree" is the most frequently reoccurring response by respondents as indicated in Table 5.3. Therefore, working hypothesis two is supported. Community college leaders believe that formula funding creates obstacles for community college leaders to achieve their mission.

Cruz's applied research project results found that her participants also agreed that formula funding is fair and is an accurate tool for appropriating funds. (Cruz, 2002, 59).

**Table 5.3 Working Hypothesis Two: Formula Funding**

<b>Working Hypothesis</b>	<b>Survey Question</b>	<b>N</b>	<b>% SA/A</b>	<b>Mode</b>	<b>Consistency with Cruz's findings</b>
<b>Working Hypothesis 2</b> Community college leaders believe that <b>formula funding</b> creates obstacles for community college leaders to achieve their mission.	WH2: Formula funding increase fiscal uncertainty.	31	38.7%	Disagree	n/a
	WH2: Formula funding connects to educational objectives.	31	51.6%	Agree	n/a
	WH2: Formula funding is fair.	31	64.5%	Agree	Agree
	WH2: Formula funding facilitates the Closing the Gaps initiative.	31	22.6%	Disagree	n/a
	WH2: Formula funding results in equitable outcomes.	31	43.4%	Disagree	n/a

*n/a- not presented in Cruz's study*

### **Working Hypothesis Three: Revenue Sources**

Revenue sources that community colleges receive, serve as the third set of working hypotheses. Revenue sources are the fuel which drives community colleges to operate. Revenue sources are present in the forms of local revenue, state revenue, and federal revenue. Literature as well as senior administrators support community colleges receiving majority of it's funding through revenue sources.

Majority of the respondents disagreed (only 38.7% agreed) that revenue funds are an unreliable source of funds for community colleges. Majority of the respondents (58.1%) also did not recognize local revenue as reliable source of funding for community colleges. Therefore, respondents also failed to agree (38.7%) that federal funds are a reliable source of funding. Tuition and fees, on

the other hand, were unanimously supported (93.5%) by the respondents as a reliable source of funding for community colleges. As shown in Table 5.4 “Disagree” is the most frequently occurring response. As a result, working hypothesis three is not supported by the respondents. Community college leaders will consider available resources as unavailable.

The respondents in Cruz’s research expressed mixed feelings toward the reliability of funds. Some respondents agreed that local revenue funding was unreliable because of the political pressure applied to the budget process.

**Table 5.4 Working Hypothesis Three: Revenue Resources**

<b>Working Hypothesis</b>	<b>Survey Question</b>	<b>N</b>	<b>% SA/A</b>	<b>Mode</b>	<b>Consistency with Cruz’s finding</b>
<b>Working Hypothesis 3 Community college leaders will consider available revenue sources as unreliable</b>	WH3: Revenue funds are an unreliable source of funding for community colleges.	31	32.3%	Disagree	Partial
Working Hypothesis 3a: Community college leaders will identify that local revenue are not an appropriate source for appropriating funds to community colleges.	WH3a: Local revenue sources are not a reliable source of funding for community colleges.	31	22.6%	Disagree	Partial
	WH3a: A cut of 10% in state appropriation would lead to: a) no increase in tuition & fees b) 0-5% increase in fees c) 5-10% increase in fees d) 10-15% increase fees e) 15+% increase in fees	31	34.5%	Option C- 5-10% increase in fees	n/a
Working Hypothesis 3b: Community college leaders will identify that federal government funding is not a reliable funding source for community colleges	WH3b: Federal revenue funds such as student financial aid are an unreliable source of funding for community college.	31	38.7%	Disagree	Partial

Working Hypothesis 3c: Community college leaders will identify that tuition and fee charges are not a reliable source of funding for community colleges.	WH3c: Tuition and fees are a reliable source of funding for community college.	31	93.5%	Agree	Yes
	WH3c: Tuition and fees continue to increase due to decrease in state funding.	31	100%	Strongly Agree	n/a

*n/a- not presented in Cruz's study*

### **Working Hypothesis Four: Alternatives**

Alternatives for community college funding are a relatively new component for community colleges. Though, very little literature exists on alternative methods for funding community colleges, it serves as the last working hypothesis developed.

Overwhelming, all working hypotheses were supported. Respondents (41.9%) supported private donations as a good mechanism to increase community college funding and they (74.2%) supported community college partnerships and workforce programs. Respondents also backed (61.3%) entrepreneurial activities as a good mechanism to increase funding for community colleges. Hence, these findings support working hypothesis four. Community college leaders will support alternative funding mechanisms to increase funding.

**Table 5.5 Working Hypothesis Four: Alternatives**

<b>Working Hypothesis</b>	<b>Survey Question</b>	<b>N</b>	<b>% SA/A</b>	<b>Mode</b>	<b>Consistency with Cruz's finding</b>
<b>Working Hypothesis 4 Community college leaders will support alternatives funding mechanisms to increase funding.</b>	WH4: The funding mechanism with the most promise for raising revenue is: a) private donations b) community partnerships c) entrepreneurial activities d) Other, please specify.	31	40%	Option D-full formula	n/a
Working Hypothesis 4a: Community college leaders will support private donations as a mechanism to increase funding.	WH4a: Private donations are a good mechanism to increase community college funding.	31	42%	Agree	n/a
Working Hypothesis 4b: Community college leaders should increase partnerships and workforce programs.	WH4b: Community partnerships and workforce programs are a good mechanism to increase funding for community colleges.	31	72.2%	Agree	n/a
Working Hypothesis 4c: Community college leaders should increase entrepreneurial activities (i.e. courses utilized by businesses to promote trade or certificate).	WH4c: Entrepreneurial activities are a good mechanism to increase funding for community colleges.	31	61.3%	Agree	n/a

*n/a- not presented in Cruz's study*

## Closing the Gaps by 2015

The Closing the Gaps initiative is a new accountability measurement tool challenging all Texas community colleges to enroll over 630,000 students. At the time of Cruz's applied research project, the Closing the Gaps initiative had not been introduced. Now in full motion, many Texas community colleges are trying to keep up with the demands of the new initiative. The participants supported their respective community college to achieve the initiative (54.8% agreed) but felt Texas as a whole would not (only 6.4% agreed).

One can conclude that the Closing the Gaps initiative is not favorable among senior community college administrators. Community college leaders belief in the Closing the Gaps initiative is partially supported.

These questionnaire items were formulated to receive the view on the new accountability measurement.

**Table 5.6 Closing the Gaps**

Closing the Gaps	N	% SA/A	Mode
Current funding for community college support the Closing the Gaps initiative.	31	6.4%	Strongly Disagree
Your community college will be able to reach the Closing the Gaps initiative.	31	59.9%	Agree
Texas will be able to achieve the Closing the Gaps initiative	31	12.9%	Disagree

## Summary

The purpose of this study was to assess the attitudes and perceptions of Texas public community college senior administrators regarding the current funding structure of Texas community colleges. The working hypotheses

consisted of the different factors which affect the funding structure which include: political process, formula funding, revenue sources, and alternatives. Working hypothesis one is supported by the research which states that community college leaders will identify the appropriation of funds as a political process. The evidence shows that community college leaders have identified competition in funding among other Texas programs.

The results for working hypothesis two had mixed support. This hypothesis and sub hypotheses are based on formula funding. Generally, community college leaders agreed that formula funding is fair but fail to agree that formula funding results in equitable outcomes.

The reliability of resources makes up working hypotheses three. Overall, Texas senior community college leaders disagreed that the revenue sources were unreliable. Local, federal, state, and tuition and fees were all deemed reliable resources of funding for community. Evidence also revealed that tuition and fees will continue to increase due to a decrease in state funding.

With acknowledgement to the current funding structure, the findings revealed that there is a lack of research on alternative funding mechanisms. Senior community college leaders recognized the importance of alternative mechanisms to increase funding, thus support working hypothesis four and its sub-hypothesis. Further research should be conducted in order to increase funding for Texas community colleges.

Finally, the new accountability measurement known as "Closing the Gaps" was not supported. Research findings show that senior community college

leaders believe their individual campus will achieve the accountability measurement tool but not Texas community colleges as a whole.

Survey data was presented in this chapter, assessing the attitudes and perceptions of Texas senior community college leaders. Survey results were described by working hypotheses as well as the level of support for each one. Insights on the findings were provided, which allows for a conclusion and recommendations to be drawn and provided in chapter 6.

Table 5.6 shows the support of the responses with the conceptual framework of study.

**TABLE 5.7: Evidence to Support Conceptual Framework**

<b>BUDGETING</b>	<b>Survey Response</b>
<b>Working Hypothesis One:</b> Community college leaders will identify the appropriations of funds as a political process.	<b>Strongly Agree</b>
<b>Working Hypothesis One (a):</b> Community college leaders will identify competition between Texas public community college for state appropriations.	Agree
<b>Working Hypothesis One (b):</b> Community college leaders will identify competition between community colleges and other state funded programs.	Agree
<b>FORMULA FUNDING</b>	<b>QUESTIONNAIRE ITEM</b>
<b>Working Hypothesis Two:</b> Community college leaders believe that formula funding creates obstacles for community college leaders to achieve their mission.	Disagree
<b>REVENUE SOURCES</b>	<b>QUESTIONNAIRE ITEM</b>
<b>Working Hypothesis Three: Community college leaders will consider available revenue sources as unreliable.</b>	<b>Disagree</b>
<b>Working Hypothesis Three (b):</b> Community college leaders will identify that local revenue sources are not an appropriate funding source for a community college.	Disagree
<b>Working Hypothesis Three (c):</b> Community	Agree/Disagree

college leaders will identify that federal government funding is not a reliable funding source for community colleges.	
<b>Working Hypothesis Three (d):</b> Community college leaders will identify that tuition and fee charges are not a reliable source of funding for community colleges.	Strongly Disagree
<b>ALTERNATIVES</b> <b>Working Hypothesis Four: Community college leaders will support alternatives funding mechanisms to increase funding.</b>	<b>QUESTIONNAIRE ITEM</b>
<b>Working Hypothesis Four (a):</b> Community college leaders will support private donations as a mechanism to increase funding.	Agree
<b>Working Hypothesis Four (b):</b> Community college leaders should increase partnerships and workforce programs.	Agree
<b>Working Hypothesis Four (c):</b> Community colleges leaders should increase entrepreneurial activities (i.e. courses utilized by business to promote trade or certificate).	Agree
<b>CLOSING THE GAPS BY 2015</b>	<b>QUESTIONNAIRE ITEM</b>
<b>Working Hypothesis Five:</b> Community college leaders will believe that Closing the Gaps by 2015 goal is achievable.	Disagree
<b>Working Hypothesis Three (a):</b> Community college leaders will identify that state appropriated funds are not a reliable source of funding for community colleges.	Disagree
<b>Working Hypothesis Four:</b> Community college leaders will support alternatives funding mechanisms to increase funding	Agree

## **Chapter Six: Conclusion & Recommendation**

### Chapter Purpose

This chapter provides the concluding observations and recommendations on the applied research project. The purpose of this applied research project was to assess the attitudes and perceptions of Texas community college senior leaders on the current funding structure. Literature on the political process of budgeting, formula funding, funding resources and alternatives were examined to provide historical information of the topic and develop a conceptual framework that was used to collect data. 4 working hypotheses and corresponding sub-hypotheses made up the framework. Texas community college senior leaders' attitudes and perceptions were explored by survey research allowing for the collection of data to provide an assessment of performance measurement. Based on the survey results, these following conclusions were prepared.

### **Conclusion**

The study results of the applied research project display the attitudes and perceptions of Texas community college senior leaders on the funding structure for community colleges. The results are outlined by the conceptual framework as an ongoing device. Two of the three hypotheses were supported. The community college leaders believed the appropriation process is political (WH1) and, leaders support the exploration of alternative funding mechanisms (WH4). Perhaps they

believe this because funding is considered unreliable (WH3) although support for this hypothesis was more mixed.

**Table 6.1 Summary of Findings/Linkage Table of Working Hypothesis**

<b>WORKING HYPOTHESES</b>	<b>EVIDENCE</b>	<b>Consistency with Cruz's finding</b>	<b>COMMENTS/ RECOMMENDATIONS</b>
<b>WH1: Community college leaders will identify the appropriation of funds as a political process.</b>	<b>Support</b>	Yes	There is a general consensus that political issues affect the funding process.
WH1a: Community college leaders will identify competition between Texas public community colleges for state appropriations.	Mixed	Yes	Cruz's 2002 research and the literature support this hypothesis, however the participant's responses does not.
WH1b: Community college leaders will identify competition between community colleges and other state funded programs.	Support	Yes	More senior leaders believed competition existed between community colleges and state funded programs; not between other community colleges.
<b>WH2: Community college leaders believe that formula funding create obstacles for community college leaders to achieve their mission.</b>	<b>No Support</b>	No	More senior administrators support formula funding as being a fair and adequate method of allocating funds since Cruz's 2002 study.
<b>WH3: Community college leaders will consider available revenue sources as unreliable.</b>	<b>Mixed</b>	No	Literature supports the working hypothesis however the participants' responses do not.
WH3a: Community college leaders will identify that local revenue sources are not an appropriate funding source for a community college.	Mixed	Yes	Cruz's research and the literature support this hypothesis, however the participant's responses does not. There was an overall disagreement with this working hypothesis.
WH3b: Community college leaders will identify that federal government funding is not a reliable source for community colleges.	Support	Yes	

WH3c: Community college leaders will identify that tuition and fees charges are not a reliable source of funding for community colleges.	Mixed	Yes	Literature and Cruz's research support this hypothesis; however participant's responses do not.
<b>WH4: Community college leaders will support alternative funding mechanisms to increase funding.</b>	<b>Support</b>	n/a	Alternative will allow for community colleges to capitalize on revenue sources that have not been present.
WH4a: Community college leaders will support private donations as a mechanism to increase funding.	Support	n/a	More grant writing efforts are needed in order to maximize that funding. Hiring personnel to that specific task is recommended.
WH4b: Community college leaders should increase partnerships and workforce programs.	Support	n/a	
WH4c: Community college leaders should increase entrepreneurial activities.	Minimal Support	n/a	It is recommended that community colleges research the needs of local businesses and develop training and/or courses to best fit their needs. This will allow the community college to receive additional revenue since the businesses will be paying for the services.

## Limitations

This applied research project, though well-designed, has limitations. Due to the approval process of the IRB, the survey was issued with a limited response time. Therefore, many Texas community college leaders were not able to participate (36% response rate). With the low response rate, a poor representation of the attitudes and perceptions of Texas community college leaders may exist.

## **Recommendation**

Indeed community colleges are challenged with the funding process, yet the applied research yields an area that community colleges can explore further. Alternatives, which were deemed favorable among Texas senior community college leaders, are a constructive option to increase funds for community college. More research is needed to explore the benefits and feasibility of alternative sources. Mentioned in chapter two, alternatives are presented in many forms. Though some community colleges are already treading new grounds incorporating them, some community college lack the initiative or the direction. More community colleges should build partnerships with other businesses and organizations. For example, building partnerships with independent school districts will increase the support of higher education and increase the taxing district. Some community colleges contract with local businesses to offer certificates, additional training, and self enrichment courses which provide additional funding for community colleges.

Another option to increase funding is to rent the community college rooms or buildings to the public. Events such as fairs, private events and community programs can occupy the community college campus on the weekend if classes are not offered. This allows the community college to generate monies while not in use for academics. The establishment of alumni associations would also serve as an alternative to additional funding. The alumni associations, which a few community colleges practice, would request former students to donate money to

their former community college. This will allow community colleges to capitalize the money on projects, upgrades, or campus improvements. Lastly, increasing grant writers to actively research funds available can be an alternative. Hiring the manpower to assist in the research, would allow for the possibility of grants or additional funding to be available. Alternative revenue options would be a great source of additional funding and will be the impetus of community college districts to continue the flow of funds.

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## Appendix A: Survey Contact Email

Greetings,

My name is Bethany Duncan-Bell and I am completing my Applied Research Project at Texas State University. I am exploring the attitudes and perceptions of community college administrators in regards to the Texas community college funding structure. You all have been selected as potential participants because of your active role and knowledge with the community college funding structure. I am requesting for you to take some time to respond to a short survey about the funding for community colleges and the Closing the Gaps initiative. These responses will reflect your personal opinion and the collection of data will be used in my Results Chapter. My Applied Research project is supervised by Dr. Patricia Shields at Texas State University in the Political Science Department, in case you have any questions about my survey and/or research. I want to thank you in advance for taking time to answer these short questions. I would like to receive your responses by Monday, July 10th. I am not requesting for you to provide any personal information, just the title of your position. If you would like to receive an electronic copy of my Applied Research Project once completed, please email me at [bd1084@txstate.edu](mailto:bd1084@txstate.edu). If you have any questions pertaining to the survey or my research please contact me at the email address provided. Below is the link to the survey.

<http://www.surveymonkey.com/s.asp?u=432492290930>

Thank you,  
Bethany Duncan-Bell

## Appendix B- Survey Tool and Results

## Appendix C- 2004-2005 Enrollment

## Appendix D- 2005-2006 Tuition and Fees

## Appendix E- 2005-2006 Tax Valuation