

**FORMULA FUNDING IN THE TEXAS BUDGETING PROCESS:
ATTITUDES AND PERCEPTIONS OF
UNIVERSITY PRESIDENTS
AND
CHIEF FINANCIAL OFFICERS**

By

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An Applied Research Project
Submitted to
The Department of Political Science
Southwest Texas State University
In Partial Fulfillment of the Requirements for the
Degree of Masters in Public Administration

SPRING 2000

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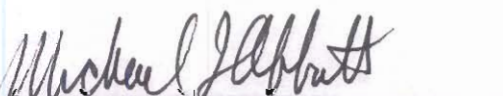

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ABSTRACT

The purpose of this paper is to explore the impact of higher education formula funding in the Texas biennial budgetary process. The following exploratory categories guide the discussion:

1. The political environment that impacts the budgeting process;
2. The political relationships between the Legislature and state public institutions of higher education; and
3. The general characteristics of formula funding and their impact upon the state public institutions of higher education.

The Texas perspective of the three exploratory categories is discussed.

Discussion highlights the Texas public higher education budgeting. Texas university presidents and university chief financial officers are surveyed to learn their attitudes and perceptions regarding budgeting and formula funding. The results from the survey show general support for the literature and provide an assessment of viewpoints on the higher education funding formulas currently in place in Texas

CHAPTER ONE INTRODUCTION

The public budgeting process has been referred to as a “political phenomenon” (Wildvasky, 1964: 1). Politics impacts the decisions that are made during the budgetary process because there exists a political relationship between those who are soliciting the revenue and those who hold the purse strings. Politics, however, also affects the policy issues that are addressed as “priorities” by elected officials.

This is the situation that higher education in Texas currently finds itself in. Lieutenant Governor Rick Perry, who holds the most legislative powerful statewide-elected office, designated higher education a priority in the state by creating the Special Commission on 21st Century Colleges and Universities in September of 1999. The Commission is tasked to examine and assess the public higher education system in the state and then offer recommendations that will place the higher education system in a position that is ready to meet the challenges of the next century.

The Commission has been examining many of the issues that Texas’ public universities are facing; the role and missions of particular universities, distance education, and remedial education are just some of the issues that have been addressed. At a hearing held in Austin on April 11, 2000, the Commission focused on the topic that directly impacts all of the other issues facing higher education: **funding**. Kent Caruthers, a nationally recognized expert on higher education funding, offered testimony to the Commission (please see Appendix F

for a copy of the material presented to the Commission by Mr. Caruthers)¹. Since Texas is one of approximately thirty states that relies on formula funding for at least a part of the budgeting mechanism, it was no surprise to see the subject of formula funding at the center of discussion. Mr. Caruthers testified that there is no single "correct" mathematical relationship for funding formulas, but rather it is best judgement that sets the relationship of the funding mechanisms. The testimony given by Mr. Caruthers to the Commission highlighted an issue facing higher education that will never be given a definitive answer. Budgeting, like politics, is always subject to change.

Texas uses formula funding as a critical input during the legislative phase of the budgeting process. Formulas were introduced into the budgeting process because formulas were designed to minimize the impact of politics on funding allocation. Ideally, formulas are an objective procedure that transforms program and cost data into fair and reliable estimations of future budgetary requirements. Formulas have both advantages and disadvantages that must be weighed and contemplated so that equity can be achieved when utilized; it is this equity among institutions that is the goal of formulas. By utilizing formula funding, it is hoped that the political influences of the budgetary process can be limited. It is this subject that is the focus of this project.

¹ Mr. Caruthers's testimony to the Commission is archived on the Internet. To access, go to <http://www.senate.state.tx.us/> and click on the "Senate Committee" icon. All Senate committee hearing proceedings are archived at this site.

RESEARCH PURPOSE

The purpose of this paper is to explore the impact of higher education formula funding in the Texas biennial budgetary process. The exploration will:

- (1) examine the larger literature on public budgeting and formula funding in higher education, and
- (2) describe the attitudes and perceptions of Texas higher education administrators regarding budgeting and formula funding and their impact upon state public institutions of higher education in the state of Texas.

The literature provides a discussion of the subject categories addressed by this research project. Interviews with individuals associated with the Texas budget process and formula funding for public universities provide specific examples and implementation experiences in Texas. Via a survey, this study examines the opinions and viewpoints of university presidents and chief financial officers of state public institutions of higher education regarding the conceptual exploratory categories set forth by this applied research project.

CHAPTER SUMMARIES

Chapter Two reviews the literature on budgeting, with a focus upon the general and political characteristics associated with the budgeting process. A discussion of the external and internal factors associated with budgeting is then applied to the setting found at state public institutions of higher education. An

analysis of formulas is then presented that sets forth the general concepts, characteristics, and expectations associated with the formula process. From here the discussion moves to the impact of formula funding upon public state institutions of higher education.

Chapter Three provides an overview of the budgeting process in the state of Texas. Formula funding for institutions of higher education is reviewed; a historical perspective is given, along with a discussion of the current formula funding methodology. Formula funding for Texas' thirty-five general academic institutions is compared to special item funding for universities; the context for both is presented. Some of the general problems associated with higher education funding in the state are reviewed and discussed. Much of the information presented in the chapter is taken from first-hand experience with the subject. Interviews with individuals associated with the subject matter are conducted so that first-hand experiences can be confirmed.

The methodology used in this study is presented in Chapter Four. A discussion of the advantages and disadvantages of survey methodology is reviewed. The operationalization of the conceptual framework used to structure the project is also presented.

In Chapter Five the results gathered by the survey tool are used to analyze the attitudes and perceptions of Texas' public university presidents and chief financial officers regarding budgeting and formula funding. Tables are used to summarize the responses; percentages and simple mean are used to measure the results gathered by the survey instrument.

Findings of the research are summarized in Chapter Six. Strengths and weaknesses of the research are also presented, along with possible areas of future research based on the study.

CHAPTER TWO LITERATURE REVIEW

This chapter examines the subject of **formula funding** in the state budgeting process. An overview of budgeting in general is first discussed, with a particular focus placed on general and political characteristics of the budgeting process. The budgeting literature is then focused on public state institutions of higher education; the **impact that** budgeting has upon higher education is then examined. Discussion next centers upon general concepts, characteristics, and expectations of formulas and their impact upon the budgeting process. Last of all, a discussion of the particular impacts that formulas have upon higher education funding is examined. Strengths and weaknesses of applying formulas to public higher education funding are discussed, along with the way that formulas are reviewed and fine-tuned in order to assure that the funding mechanism is properly structured.

THE "POLITICAL" BUDGETARY PROCESS

In 1960, Aaron Wildavsky authored an article entitled "Political Implications of Budgetary Reform" stating that:

the overriding concern of the literature on budgeting with normative theory and reform has tended to obscure the fact that we know very little about it.....there is virtually nothing of substance about how and why budgetary decisions are made...the general literature provides some valuable propositions, but it is not keyed-in to the budgetary process (187). ...until we develop more adequate descriptive theory about budgeting, until we know something about the 'existential situation' in which the participants find themselves under our

political system, proposals for major reform must be based on woefully inadequate understanding.....Perhaps the 'study of budgeting' is just another expression for the 'study of politics' (189-190).

This article preceded Wildavsky's most cited work *The Politics of the Budgetary Process* which is considered the standard for understanding the budgetary process and the politics often associated with it¹. It is the 1960 article that set the foundation for what would be explored later in Wildavsky's in-depth study of the budgetary process.

Jesse Burkehead²(1956: 2) notes that the word "budget" originally referred to the money bag / public purse, which served as the receptacle for the revenue and expenditure of the state as time evolved. As time passed, the definition incorporated the documents that were contained in the bag – *the plans for government finances submitted for the approval of the legislature*. A budget can be defined as a document containing works and figures, which proposes expenditures for specific items and purposes. The budget is concerned with the translation of financial resources into human purposes. Individuals deciding budgetary matters intend that there will be a direct connection between what is written in the budget and future events; hence a budget may dictate certain

¹ This work is considered the norm and standard on describing the impact of politics upon the budgetary process. Wildavsky's original *The Politics of the Budgetary Process* was written in 1964. The *Second Edition* was re-published in 1974; it provided new chapters on program budgeting and Congressional control. In 1988 an updated version entitled *The New Politics of the Budgetary Process* was released; it was new text that included many of the facets of the federal budget, but it still included original portions of the 1964 text. The discussion necessary for this paper involves the basic principles that Wildavsky originally discussed; it is for this reason that the original book is cited throughout the text.

² Burkehead's *Governmental Budgeting* is considered one of the standards on the subject of budgeting. His text provides historical context, budgetary data classification, budgetary process information, and budgeting problems.

behavior. The budget document becomes a link between financial resources and human behavior that accomplishes certain policy objectives (Wildavsky, 1964:1).

The budget process has been described as a network of communication in which information is continuously being generated and fed back to the participants (Wildavsky, 1964: 3) so that a budget can be arrived at. Politics plays a key role in this compromise:

the process we have developed for dealing with interpersonal comparisons in Government is not economical but political. Conflicts are resolved by translating different preferences through the political system into units called votes..... Congressmen directly threaten, compromise, and trade favors in regard to policies in which values are implicitly weighted (Wildavsky, 1960: 184).

It is this "political" influence that is the subject of numerous books and articles by Wildavsky³.

Throughout the budgeting process, governmental agencies compete head to head with one another as they seek financial support for their respective agency. Multiple agencies compete for a limited amount of funds so that they can properly operate and serve their designated constituencies. One side of the budget process is composed of many hopefuls seeking support for their real or imagined needs. The other side is composed of the legislative brokers who must decide first how much money to require of the taxpayers by force of law; the legislators must then dictate how to most efficiently spend it in the public interest (Berdahl, 1971:100). These competing relationships mold the size and shape of the budget. The many hopefuls vie with one another to have their wants and

preferences recorded in the budget. Each decision, be it a victory or defeat for a particular side, appears as a decision in the budget. It is this competition that forces the budget to lie at the heart of the political process (Wildavsky, 1964: 5).

Elected officials and political leaders regard budgeting as central to policy-making (Floyd, 1982: 2). With such emphasis placed upon the budgetary process by both the elected officials and the public, it is no surprise that the budget and the budget-making process are at the heart of the political process. Leslie (1980: 3) asserts that other economical, social, and cultural variables are important influences upon the budget process, but “politics is the all-encompassing framework and the one that normally will take precedence when conflict in government appropriating and legislating processes occur” (1980: 3). When the political winds change, so does some of the dynamics of the budgetary process.

The literature points to the fact that a budget is a very complex document that incorporates past decisions. Wildavsky states that “once enacted, a budget becomes a precedent; the fact that something has been done once vastly increases the chances that it will be done again” (1964: 3). Only substantial changes from the previous year’s budget are given intensive scrutiny. Floyd supports Wildavsky claim by stating that an item that remains unchanged will probably be carried along in the following year as a matter of course. Floyd asserts that a main drawback of this “building upon the foundation of a previous budget is that it does not assess whether budget decisions that were made

³ Also see Wildavsky’s *Budgeting: A Comparative Theory of Budgetary Processes*. Boston: Little, Brown, and Company, 1975.

appropriately support the state and institutional goals" of the agency or institution (1982: 18-19).

This incremental budgetary structure leads to current budget dynamics to focus on the small increases/decreases that are incorporated into the base budget. Wildavsky (1975: 222-223) uses the analogy of base is to the budgetary system as habits are to organisms. For an agency to get new funding, getting the new project or initiative rolled into the base is vital. It means "establishing the expectation that the expenditure will continue, that it is accepted as part of what will be done and therefore, that it will not normally be subjected to intensive scrutiny" (Wildavsky, 1964: 17).

Since the current budget is the base and little change among the existing funded items occurs, the base minimizes political conflict because individuals can assume that they will get roughly what was received last year (Floyd, 1982: 19). As Wildavsky quotes one key budget official, "It is a waste of time to go back to the beginning as if every year was a blank slate....no need to build the car over again" (1964: 15). Leslie also refers to this building-block budgetary process; he claims that the budget and appropriations process leads to a kind of "political inertia" (Leslie, 1982: 3). However, this political inertia of clinging to last year's agreement is enormously economical of critical resources, particularly time and good interpersonal relations, which would be seriously impaired if all or most of past agreements were reexamined yearly (Wildavsky, 1975: 222-223).

Lee and Johnson (1973: 100) declare that the two general types of information relevant to budgeting are program and resource information. The

former refers to data about what government does and the accomplishments of those activities, the latter refers to the inputs necessary to perform those activities. The input side, which includes dollars, facilities, infrastructure, and human capital has long been an established feature of the budgetary system. The use of program information, however, has been slow in developing as an integral part of budgeting. The relationship between these two types of information is that they must be considered in combination if budgeting is to exist as a rational process for allocating resources. Analyzing what resources are utilized in conjunction with what products and services are provided is fundamental to the systems approach. Since the establishment of budgetary systems, the history of budgetary reform can be viewed as a struggle to develop program data and to link it with resource data (100-101).

BUDGETARY REFORM

In 1966, Allen Schick authored one of the most cited works in budget reform, entitled "The Road to PPB (Planning-Programming-Budgeting): The Stages of Budget Reform." Schick identified three key stages that budgeting comprises: planning, management, and control (245). Budget reform alters the planning-management-control balance, sometimes inadvertently, but usually deliberately. It is these three items that lie at the heart of all budgetary reform.⁴

⁴ The literature on budgetary reform is numerous. General concepts were gathered from a variety of sources for this research. For further information please consult the following Allen Schick book and his bibliographies for literature in regard to budgetary reform:

- Schick, Allen. *Budget Innovation in the States*. Washington, D.C.: The Brookings Institute, 1971.
- Schick, Allen. *The Capacity to Budget*. Washington, D.C.: The Urban Institute Press, 1990.
- Schick, Allen. *Perspectives on Budgeting*. Washington, D.C.: American Society of Public Administration, 1980.

Schick's three stages of budgeting are the foundation of budgetary reform as politics is to the budgetary process. Reform progressed from PPB budgeting to the Zero Base Budgeting concept of the 1970s and early 1980s. Zero-based budgeting originates from the bottom and works upward and examines the comparison of different levels of spending. Current budget reform focuses on performance-based budgeting. Accountability and performance of agencies are emphasized in the performance-based budgeting system.

Politics and its relationship and influence upon budgeting has brought with it varying reform ideologies and movements. President Johnson formally inaugurated PPB into the federal system in 1965, while Jimmy Carter adopted the Zero-based Budgeting system while he was the governor of the state of Georgia (Lynden and Miller, 1982: 2-3). The politics of budgeting is always under constant change, so it is not surprising that the budget reform process has and will continue to change.

THE POLITICAL DYNAMIC OF STATE PUBLIC INSTITUTIONS OF HIGHER EDUCATION

Higher education's impact upon modern society cannot, in all actuality, be quantified. Without higher education, society would not be where it is today. The technology that provides mankind with so many modern advances is intimately linked to higher education. Over forty-five years ago Timasheff⁵ noted that the "existence and smooth running of higher education is almost indispensable for the very survival of a culture having attained a high level. This necessity is closely connected with the very structure of culture in an advanced society" (1955: 77-78). Higher education is necessary for survival and development of society, including the campus culture that leads to more creative minds. Law schools promote jurisprudence, doctors find new treatments, engineers create new technologies that advance society as a whole; without higher education, society would not be where it is today. Higher education contributes to the survival of society by "continuously supplying new and adequately trained human material to the active centers of the particular fields of culture. It achieves, in a unique way, an objective value in which, in an advanced society, is beyond doubt, and cannot be adequately replaced by any other known instrumentality" (Timasheff, 1955: 77-79).

The role that higher education plays in society sometimes leads universities and their administrators to believe that they are different than other governmental functions that compete for funding. Government officials

⁵ A pioneer in the study of higher education and society; one of the few authors that has written on this subject.

acknowledge the fact that higher education has a vital role in the society, but at the same time the legislators who control the purse-strings must balance higher education's role with those of other competing governmental functions.

Transportation advocates want more funding in order to build more roads for the existing, overburdened transportation system, while welfare advocates claim that current budgeted staff cannot meet all the demand of the already heavy caseloads. A proper balance must be achieved so that higher education is not limited in what it can achieve, but at the same time other facets of government must not suffer at the expense of higher education.

Besides facing competition for funds from other governmental functions, higher education must also deal with internal competition among other state public institutions of higher learning. State public higher education institutions have varying economic situations based on specific university classification. Research universities are usually the largest of the public state institutions. These "flagship" universities, as they are often referred to, receive federal research grants and contracts that constitute on average one-fifth of all revenues for the institutions. Research institutions must find an appropriate balance between teaching, research and service (Layzell, 1997: 30-31).

Comprehensive universities constitute the second tier of university classification. Often this division of universities is forced to accommodate the growing numbers of students who are seeking baccalaureate degrees, due to the fact that enrollment is limited and selective at the research institutions. Institutions classified as comprehensive also face a problem of faculty turnover;

oftentimes the more established faculty are recruited to teach at research institutions. Comprehensive universities also face pressure to become research universities (Layzell, 1997: 31).

Layzell and Lyddon (1990: 16) maintain that funding decisions for higher education are made on the basis of policy judgments that can be categorized in four distinctive ways: (1) the link between efficiency and enrollment, (2) diversity of mission, (3) equity and fair share and (4) quality, outcomes and effectiveness. Budgetary policy is created that address the role, mission, and strategic plan set forth by each institution. A flagship institution benefits from funding based on diversity of mission, while a regional comprehensive institution argues that funding should be based on a link between efficiency so that it is treated in the same manner as the flagship university.

In order to fully understand the changes in funding for state institutions of higher education, specific conditions that impact policy decisions in both state government and higher education must be must be closely examined. There has been much study in this specific area, all with varying results. Nevertheless, there are four main factors generally included in the literature about the budgetary process and public institutions of higher education. They are: (1) demographic factors, (2) historical factors, (3) political factors, and (4) economic factors (Layzell and Lyddon, 1990: 6).

Of the four factors, demographics is the group that has been the least studied and analyzed. Oftentimes this category is the most difficult to uniformly quantify. Demographic variables have been used to modify an economic

variable, usually to permit comparisons among states. This has taken the form of enrollment, appropriation, or spending patterns, while other times demographic variables have been used as individual variables with one of the other four “key” factors (Layzell and Lyddon, 1990: 10).

The historical factor includes past state budgeting practices and higher education's historical share of the budget. This factor is premised on much of the public budgeting discussion, such as Wildvasky's discussion of incremental budget increases. Ira Sharkansky (1968) demonstrates an analysis of historical factors by correlating the relationships between agency budget requests and overall budgetary success in state legislatures. One of the key items that is also addressed is the allocation of the budget among higher education and other competing functions of government.

Public state institutions of higher education, like all governmental agencies, are impacted by the role of politics. Moos and Rouke state that no state college or university is free of politics; “A school may have constitutional or statutory immunity, it may be independent of administrative restraints, but as a public institution, it must share in the problems and benefits of a democratic community” (1959: 227). As long as higher education is an official member of the state system, it retains the benefits of access to the key officials of government, such as the governor and members of the legislature (Moos and Rouke, 1959: 231). Changes in party strength can often influence how much is spent on budgetary categories (Layzell and Lyddon, 1990: 8). When a state public institution finds itself in a “favorable” political situation, the situation can greatly

benefit the institution. An alumnus of an institution can usually be viewed as a friend of that particular institution; when that legislative alumnus sits on the Finance or Appropriations Committee and is a champion and advocate for the university, it is an added bonus.

FINANCIAL STATE SUPPORT

Funding for public state-supported institutions of higher education is greatly influenced by economic factors. State revenue, which is generated by taxes levied by each individual state, is the largest source of funding for state public institution of higher education. In FY 1995, state funds accounted for approximately 40 percent of total revenues for public colleges and universities (Layzell and Caruthers, 1999: 112). In the mid-1990's, states provided roughly \$45 billion annually for higher education in general support of the institutions, student financial aid, and other categorical programs. For most of the past half century, overall state funding for higher education has grown faster than inflation. Since the mid-1970's, however, corrections, health care, welfare, and K-12 education all have eroded higher education's share of the budget. Although the state share of institutional budgets has fallen, state funds represent the primary source of support for public institution of higher education. In the mid-1990s, state funding constituted 35 percent of current fund revenues for public institutions, down from 45 percent a decade earlier (Layzell, 1997: 22). McGuinness states that it is unlikely that higher education will see significant

improvements in state funding, at least on a per student basis, within this decade (1999:184).

The variation in state support for public institutions of higher education is influenced by the availability of revenue from the state, which varies from year to year since it is related directly to the tax base and the economy of the state (Hines, 1988: 52). The doubling of state support for higher education between 1975 and 1984 reflected a price of inflation rather than a substantial increase for improved or expanded operations. State government support during this time tended to be more responsive to the economic circumstances of each state than to the needs of the particular institutions (Millett, 1981: 188).

FUNDING SOURCES FOR HIGHER EDUCATION

Funding for higher education is a very complicated subject area. There are multiple sources of revenue and multiple outputs, which are loosely connected to these different revenue sources (Johnson, 1999: 347). OECD (1990: 59) asserts that public higher education support can be disaggregated into two main types of funding: "the core or basic funding" and research and other supplementary funds.

Basic funding is linked more or less directly to the traditional main activities of providing the formal degree-level courses, which are generally financed by the state. State appropriations constitute the majority of this category, but also included is tuition. Oftentimes a decrease in state support can lead to an increase in tuition. Increases in tuition and fees, however, must be

politically contemplated. What the public is charged must be closely related to what constituents were previously charged—the increases must usually be gradual and incremental (Leslie, 1982: 13). If not, there is a danger that a significant portion of legislators' constituents will be priced out of higher education and voice dissent against the increases; this in turn will bring a negative political aura to the institution.

Research and supplementary funds for other activities that universities undertake constitute the second groups of funds. Institutions receive federal funds for a wide variety of student aid programs, consisting of grants, loans, and work-study programs. The federal government, as previously discussed, funds much of the research at the university level, and also provides a wide variety of categorical grants (Layzell, 1997: 24).

Public state institutions also rely on another source of funds called auxiliary revenue. Auxiliary funds are generated by functions of the university that are self-supporting, such as food services, dormitories, bookstores, and parking garages. Auxiliary services such as dormitories and parking garages often catch the attention of state legislators because of pricing that is placed on these services; prices often seem higher than they should be. State funding, however, cannot be used whatsoever in auxiliary services, so in order to continue the services, auxiliary programs are dependent upon self-generated revenue (Millet, 1981: 189).

FORMULA FUNDING: GENERAL CONCEPTS

Miller defines a budget formula as "an objective procedure whereby quantitative data dealing with the relationship between programs and cost are manipulated in such a manner as to arrive at an estimation of future budgetary requirements" (Miller 1964: 6). Formulas are attempts to estimate the future fiscal needs of an agency on the basis of certain assumptions; for higher education these assumptions relate to enrollment, faculty/student ratios, or utilization of teaching space in buildings (Berdahl, 1971: 123).

Jesse Burkhead's description of the process of budgetary decision-making is divided into three parts: the expertise function (collection and analysis of information), the communications function, and the responsibility function (choosing a course of action and accepting responsibility for it). The use of formulas contributes to all three, although its effect upon responsibility is indirect (Miller, 1964: 161). Competition for state dollars has increased the scrutiny of how these dollars are spent and formula budgeting is viewed as an accountable distribution methodology (Moss and Gaither, 1976: 543).

Halstead suggests that the following criteria, which are listed in order of importance, are necessary in order for a formula to serve a useful purpose:

1. validity (measures what it purports to measure);
2. quantitative definability (expressed in measurable terms);
3. sensitivity to change (responsiveness);
4. adaptability (flexibility);
5. comparability (standardized on a wide basis); and
6. understandability (simple and straight-forward) (1974: 663-664).

Moss and Gaither claim that the four most important reasons for the development and implementation of modern budget formulas are:

1. Political complexities;
2. Need for a more equitable distribution of resources;
3. Inadequate resources;
4. Increased demands for accountability.

Miller expands upon Moss and Gaither's observations; Miller states that the following are necessary criteria for an effective formula:

1. The new procedure should show promise of providing meaningful benefit to most of the participants.
2. All parties should understand that the procedure is to be used for budget preparation and for budgetary control.
3. There should be sufficient flexibility either in the formula itself or in its administration to provide recognition not only for differences in existing programs, but for differences in institutions' educational philosophy and administrative style and for the differences which inevitably will develop after the formula is adopted.
4. Formulas should be capable of describing in quantitative terms the types of programs and institutions in the area for which it was designed to govern.
5. Data should be collected, analyzed, and presented in such a way as to permit and even facilitate comparisons among institutions and programs within the state.
6. The data should reflect national trends as well as present standards at the local institutions for where the budget is being prepared.
7. For functional activities for the institutions, the methodology which is employed should be chosen on the basis of its appropriateness to the specific activity in question (1965: 163-164).

Budget formulas and cost analysis have been used for three distinct budgetary purposes: (1) to assist in the analysis of budgetary needs, (2) to help in the presentation of budgetary information, and (3) in a few select cases, to provide the basis for distributing additional funds among agencies when faced with specific policy issues (Miller, 1965: 153).

Formulas offer assurance that the financial need of agencies and institutions have been considered as a total package and that this has been done in a way that maintains some overall balance among the several parts of the

budget. Instead of funding a previous budget base with an incremental increase, formulas allow for an overall analysis of an institution's budget (Miller, 1965: 154).

The utilization of formulas in the budget process does have limitations. "If they (formulas) are to be used effectively, it is important to know and appreciate not only what they are, but what they are not---not only what they can do, but what they cannot do," states Miller (1965: 155). Formulas solely cannot be used to set forth public policy; formulas can only facilitate the analysis that proceeds policy. States have a tendency to view formulas as operational plans for expenditures rather than as measures for fund acquisitions. Formulas, however, are ill-suited to function as operational plans. Formulas relate to fund acquisition and explain relationships among projects. Expenditure plans deal with the real circumstances that exist more than a year after the projections are made (Floyd, 1982: 19-20).

Formulas are limited because they involve the projection rather than a precise prediction of budgetary requirements. That is, formulas measure in some fashion a set relationship (an existing relationship or a proposed one that is considered valid). That relationship then is used to project what a new budget would be if the same relationship were maintained even though some of the individual factors were changed. It must be noted, however, that the accuracy of any projection is dependent upon the accuracy of the assumptions, which underlie the decision to use the projection (that the relationships that existed initially will continue to exist even after some of the basic factors have changed).

Oftentimes formulas have built-in corrections for situations in which a static projection would be inadequate. The budget formula must be used with an understanding that it is for budget preparation purposes only and that individual institutions will not be required to follow it in detail when they prepare and execute their actual operating budget. Formulas are a series of generalizations that do not attempt to take into account every exception/difference among institutions (Miller, 1965: 155-158). Formulas need only be utilized to formulate asking budget, not spending budgets (Berdahl, 1971: 123). The formula-derived requests are only the starting point for funding after which a number of non-formula adjustments are made (Floyd, 1982: 19-20).

FORMULA FUNDING AND HIGHER EDUCATION

Modern formulas and their applicability to higher education date back to the early 1950's with the development of the California faculty-staff formula. Prior to this, in 1922, Trevor Arnett published the first major independent work on college business administration. He asserted that the major challenge to budgeting in higher education was to "create, implement, and utilize a fiscal system that would enhance the viability and effectiveness of scholars and students, rather than focus excessively on the relationships between activities and costs" (Moss and Gaither; 1976: 544). Formulas are tools to meet Arnett's challenge.

Moss and Gaither list the following as advantages of using formulas in higher education budgeting:

ADVANTAGES OF FORMULAS

- *Provide uniformity and ease in budget preparation and presentation;*
- *Provide an objective cost productivity measure for comparison between institutions and between activities with institutions;*
- *Provide equal distribution of funds and also minimizes institutional rivalry and conflict between state officials and institutions;*
- *Result in more adequate levels of support for all institutions, not merely who has the political clout;*
- *Prevent the rich from getting disproportionately richer and the erosion of funds from less powerful institutions; and*
- *Tend to generate funds, thereby providing a means to ensure that higher education receives its share of total state resources (1976: 553).*

Miller's position support Moss and Gaither's viewpoints regarding budget preparation and presentation. Prior to the adoption of the formulas, institutions were often at odds with members of the Legislature. This broken relationship threatened to impair institutions' ability to secure adequate state funding. Upon

the adoption of formula funding in certain states, institutions' relationships with elected members have improved. The improved relationship has often led to a higher level of funding. Some states claim that the recently secured funding has increased so greatly that the institutions and their officials credit formulas new fiscal environment, which can be described as an environment where budget requests are simpler and more systematic in an irrefutable way (Miller, 1965: 153).

Berdahl cites increased fiscal flexibility, more adequate support by the state, and more equitable treatment of institutions once the formula funding process is implemented (1971: 123). Glenny (1959: 145) supports the findings of Berdahl and Miller: "When the president, using information collected by the central agency, can compute the major part of the budget for any institutions in the system by employing formulas which he has approved and clearly understood, there is at least some assurance of fairness."

Equity as a result of formulas is reaffirmed by Miller. Formulas have provided a methodology for comparing institutions, identifying and correcting obvious inequities, and then treating all institutions in a comparable manner in projecting financial requirements (Miller, 1965: 152). Formulas, since they are created to be systematic and orderly, should provide greater assurances that higher education will operate economically and efficiently (Miller, 1965: 154). Floyd, in his writings, states that formulas support the equitable treatment of various public universities so long as proper attention is paid to differences between disciplines and levels of instruction (1982:19).

Moss and Gaither (1976) list the following as disadvantages of higher education formula implementation:

DISADVANTAGES TO FORMULAS

- Formulas provide a linear approach to funding—if enrollment declines, should generate less dollars. This prevents the development of new programs because formulas focus on meeting current fiscal needs with little regard for long-range efforts;
- Formulas are inherently detrimental to quality-particularly under steady-state conditions (553);
- Formulas and the leveling effect (the averaging of statewide costs produce expenditure rates for all institutions, but actual expenditure rates may vary per institution) (553);
- Formulas fail to recognize economies of scale (556);
- Formulas fail to react quickly to rapid fluctuations in the national market (558);
- Formulas fail to recognize and fund nontraditional learning, continuing educational activities, and other such innovative efforts that attract older students.

Floyd also cites certain disadvantages with the use of formulas. He claims the following:

- Formulas reduce an institution's incentives to implement innovative practices;
- Formulas discourage nontraditional and noncredit instruction;
- Formulas provide no start-up cost funding for new programs;
- Formulas place too much emphasis on "fundable" units without regard to quality(Floyd, 1982: 19-20).

The formula "structure" is one of the inherent problems associated with formula funding. People responsible for funding decisions often become preoccupied with numbers and disregard considerations of quality and personalism. Even within similar categories of studies, "to treat each student credit hour and each square foot of classroom space like any other is to ignore that some of these units of measure contribute to supreme achievements in education and others to practically nothing" (Berdahl, 1971: 126).

This in turn leads to pseudo-objectivity as a weakness. The neutrality of formulas is exaggerated because they contain implicit values. Glenny asserts

that formulas contain hidden subjectivity and arbitrariness. Value judgments (measurements) such as the “right” class size, the “right” teaching load, and the “right” per-unit cost are implicit in all formulas.” These set objectives are hard to measure and quantify. On the other hand, proponents of formulas argue that everything does not lend itself to being measured. It is, for example, possible to compare liberal arts programs to other liberal arts programs (Glenny, 1959: 144).

Another problem associated with formulas is a dependency upon enrollment measures (estimates) at each institution. Enrollment (however measured, and however sensitive to fields of study), levels of education, or methods of instruction, are still merely a proxy for the hard-to-measure real output, which is student learning (Johnson, 1999: 353). At institutions with declining student bodies, enrollment is a poor proxy for costs because costs do not decline proportionally to enrollment. Formulas revised to reflect declines will only work if all institutions are experiencing similar declines (Floyd, 1982: 19-20).

Leslie, in a study done in 1986, focused upon the enrollment/appropriation relationship. He found that formula-funded states (unless the states change their particular formulas or fund them at lower rates) experience an increase in appropriations when their enrollment grows. Reducing or slowing appropriations was more difficult politically in formula states, although some states altered formulas to this end. Such changes in formulas explain the declining relationship between appropriations and enrollments in these states (Leslie, 1986: 18).

The relationship between state appropriations and enrollment, however, is beginning to change, as discussed by Hines. The traditional relationship

(increase in enrollment, increase in dollars especially if formula driven) has weakened in recent years, more because of political factors than economics. For example, many formula states that are experiencing growing enrollments are not being provided a proportional funding increment for the increases in enrollment. On the other hand, states without formulas generally are not penalizing campuses when enrollment drops. *"Given the political winds of the day, the institution that reduces enrollments in a well-publicized quest for quality will probably gain a superior financial position over the college that continues to pursue quantity, unless substantial tuition increases can be sustained or new enrollment-driven revenue sources can be found (Leslie and Ramey, 1986: p 18-19)"* (Hines, 1988: 52).

As the budgetary process has undergone reform, states are fine-tuning their adopted formula-funding methodologies so that the quality of the budget process is improved. Adjustments are being made to formulas that measure different instructional programs. Formulas are also being refined to create new funding categories for programs such as remedial education, faculty development, teacher retraining, student access or acquisition of research equipment. Another method that fine-tunes the formula divides costs into fixed and variable. This technique attempts to identify the "core" institution processes as the area of fixed costs that must be maintained (Hines, 1988: 52).

The adoption of different funding formulas for various levels and types of instruction is another formula-reform approach that is being adopted by states to fine-tune the formula process. Upper division and graduate instruction carry

larger costs than lower division instruction; teaching in a lab setting is more expensive than a large lecture auditorium. Differentials in instruction can reduce the likelihood for institutions to eliminate programs that have high average costs as an immediate response to budget cuts---that decision should be based on educational and not purely financial ground (Kerr,1981: 144)

Leslie notes that formulas are being developed to cushion public institutions of higher education against budgetary cutbacks associated with small variations in enrollment. The University of California System has implemented a funding mechanism in which only enrollment variances greater than two percent of the previous year's enrollment trigger a budgetary increase or decrease. Some states have adopted measures of workload that take into account headcount, square feet of building space, and projected rates of inflation. Other states have adopted a formula incorporating average and marginal costs, so that some fixed percentage of average cost, rather than the full amount, is deducted for enrollment losses (Kerr, 1981: 143-44).

Miller states that "a degree of rigidity is present when any formal organization or systematic procedure is imposed upon any human activity....Rigidity is a threat which accompanies all types of systematization and increases in organizational complexity" (1965: 165-166). This can readily be seen in state higher education policy. The extent of the threat in fiscal terms depends upon the type of budget formulas used, to whom they are applied, and the way that they are administered. These fiscal impacts vary among the states. Acceptance of new programs is strongly affected by the amount of control that

the new procedure seems to impose. Will the formulas increase appropriated dollars when enrollment goes up or faculty salaries rise? If not, institutional rigidity may occur. Miller contends that if formulas are utilized effectively, key officials from state public higher education institutions and state legislative budget offices must work closely together to agree upon the key elements of the formulas (1965: 159).

Berdahl and Miller maintain that to achieve flexibility in formula funding for higher education, formulas must be periodically reviewed and revised (Berdahl, 1976: 128 and Miller, 1965: 166). The formulas utilized must incorporate normative factors that permit flexibility and adaptation. Formulas that are broadly defined may allow for yearly variation, differing from institution. Periodic and frequent review of factors must occur for formulas that possess intricate and precise relationships or that are dependent on variables that constantly change from year to year (Miller, 1965:167). Different formulas may need to be developed for periods of extended contraction and for times of extended expansion (Kerr, 1981: 145).

CONCEPTUAL FRAMEWORK

Funding for public state institution of higher education is influenced by a myriad of factors. The two primary factors discussed in the literature relate to the political influence upon the budgeting process and the role of funding formulas in the budgeting process. If an institution is to achieve their "desired" level of funding, specific budgeting characteristics must be properly recognized so that a

proper budgeting strategy can be formulated and implemented that acknowledges the key budgeting variables associated with formula funding.

State public higher education funding is one area where formulas are being utilized in order to create an equitable and comprehensible funding methodology. There are many factors, however, that need to be considered when designing a formula structure. The factors and variables of funding formulas need to be reviewed and revised frequently in order to assure that the funding mechanism is equitable. The literature provides a sound framework for evaluating the effectiveness of formula funding and thoroughly discusses the factors that impact the formula process.

The literature provides a solid foundation for an academic discussion of the nuances of formula funding. Throughout the review of the formula funding literature, surveys on the subject were often used to assess the results from the funding mechanism. This project links the formula funding literature to “real-world” implementation of formula funding for higher education in Texas by examining the attitudes and opinions of Texas’ university presidents and chief financial officers. The framework used to learn about the dynamics of higher education budgeting (from the university president and chief financial officer) is developed from the literature. Table 2.1 summarizes the conceptual framework used in this study. In addition, the main categories are linked to the larger scholarly literature.

Table 2.1
Conceptual Framework: Exploratory Categories

CATEGORY	SOURCE
BUDGETING – General Characteristics <ul style="list-style-type: none"> Budgeting is a political phenomenon. Budgeting involves past decision-making. Small decreases/increases in each budget – “political inertia.” Different forms of budgeting 	<ul style="list-style-type: none"> Wildvasky (1964, 1975), Leslie (1980), Floyd (1982), Berdahl (1971) Wildvasky (1964), Floyd (1982) Floyd (1982), Leslie (1980), Wildvasky (1964) Miller (1965), Schick (1962)
BUDGETING – Impact upon Higher Education <ul style="list-style-type: none"> Higher Education funding is political Institutional Competition Higher Ed viewed differently when compared to other state agencies because of role in society. 	<ul style="list-style-type: none"> Leslie (1982), McGuiness (1999), Moos and Rouke (1959), Layzell/Lyddon (1990) Berdahl (1971), Wildvasky (1975), Layzell (1997), Layzell/Lyddon (1990) Timasheff (1955)
FORMULA FUNDING – General Concepts <ul style="list-style-type: none"> Necessary characteristics of a formula structure in order for it to function properly. The proper use and relationship of formulas and their use to craft policy vs. budget preparation. Areas of application 	<ul style="list-style-type: none"> Moss/Gaither (1976), Miller (1975) Berdahl (1971), Floyd (1982), Miller (1965) Miller, other sources forthcoming
FORMULA FUNDING – Impact and use in higher education <ul style="list-style-type: none"> Equitable Relationship with the legislature during the budgeting process has been made more clear because of formulas. Structured to meet the proper objective; defining the proper relationships and not measuring subjective/arbitrary items. Enrollment impact upon formulas Impact of certain academic characteristics (weights, new programs) Review of formulas 	<p>Berdahl (1971), Floyd (1982), Miller (1965)</p> <p>Berdahl (1971), Floyd (1982), Miller (1965)</p> <p>Berdahl (1971), Floyd (1982)</p> <p>Leslie (1986), Johnson (1981), Miller (1965)</p> <p>Hines (1988), Kerr (1981), Miller (1965)</p> <p>Berdahl (1971), Kerr (1981), Miller (1965)</p>

CONCLUSION

This chapter addresses the literature on budgeting and formula funding for state public institutions of higher education. The literature addressed each of the

following exploratory categories:

1. the political environment that impacts the budgeting process;
2. the political relationship between the legislature and public state institutions of higher education; and
3. the general characteristics of formula funding and its impact upon state public institutions of higher education.

Each of these exploratory categories serves as building blocks for the conceptual framework structure for this applied research project.

CHAPTER THREE

ORGANIZATIONAL SETTING⁵

The previous chapter reviewed literature on the budgeting process and its impact upon state public institutions of higher education. General concepts describing the advantages and disadvantages of formula funding were discussed, along with their specific impact when used to fund higher education.

This chapter incorporates the organizational setting. The budgeting process in the state of Texas is addressed, along with a brief overview of the formula funding mechanism used to fund public state institutions of higher education. The relationship between budgeting, the formula process, and the impact upon both of these complicated matters upon higher education will be presented.

THE BIENNIAL STATE BUDGETING PROCESS: KEY PLAYERS

In Texas, the Legislature meets in regular session for 140 days every two years. Texas is one of only eight states that relies upon a pure biennial budget cycle (Wiggins and Hamm, 1991: 65) with appropriation decisions made simultaneously for each fiscal year of the two year budget period. The state Constitution permits the Legislature to meet once every two years, on the second Tuesday in January of every odd-numbered year. Like the national budget, budgeting in Texas is the state's single-most important decision making function. The budget sets the goals, objectives, and priorities for the state as well as

⁵ Much of the information presented in this chapter is taken from the author's first-hand experience gained by six years of experience working for the Office of Governmental Relations for the Texas A&M University System. The bulk of the uncited material was confirmed by higher education colleagues of the author. Some of individuals who need to be acknowledged for their invaluable input include Dr. Stanton Calvert, Vice Chancellor for Governmental Relations for the Texas A&M University System; Mr. Michael G. O'Quinn, Vice President for Governmental Relations for the Texas A&M University System Health Science Center; Ms. Cathy Reiley,

determines the means for achieving the set goals. Considering the size of the state budget, along with other numerous issues that are considered and debated during a legislative session, the length of the session seems rather a short time period for discussion of such a wide range of important issues facing the state. If a budget cannot be decided upon during the 140 day legislative session, the Governor calls a 30 day special session of the Legislature so that a budget can be crafted and approved; this process is repeated until a budget is passed.

Khan describes a budget as a collective undertaking and that a successful budget is the result of successful interaction among many individuals, their ideas, and efforts (Khan, 1991:1). In Texas, five groups of individuals are most responsible for drafting the state budget. They include:

1. The Governor and his Budget and Planning Office;
2. The Legislative Budget Board (director and analysts);
3. The Comptroller;
4. Key legislative committees and offices; these include the Lieutenant Governor's Office, Senate Finance Committee, The Speaker of the House of Representatives Office, and the House Appropriations Committee; and
5. The various state agencies/institutions and their chief executive officer.

The Governor in the state of Texas has the power to accept or veto any item in a budget bill without vetoing the entire bill (the veto can be overridden by a two-thirds majority of the Legislature). This is the only significant budgeting power available to the Governor. The Governor does set forth a proposed budget (based upon the goals and objectives of the Governor) but in all actuality it is secondary to the base bill that is set forth by the Legislative Budget Board. The Governor's Office of Budget and Planning (GOBP) is one of the departments that is involved in creating and setting the priorities of the Governor; this is done

former Higher Education Team Manager for the Legislative Budget Board; and Ms. Martha Brown, Associate Vice Chancellor for Governmental Relations for Texas Tech University.

by defining what needs to be addressed in statewide agency strategic plans. These plans define the roles and missions of state agencies/institutions and incorporate the philosophy set forth by the Governor. The Governor's Office of Budget and Planning is also involved in defining the accountability measures that are used to measure if an agency is accomplishing its mission and is serving its constituency in an efficient and effective manner.

The Texas Legislature created the Legislative Budget Board (LBB) in 1949 (Oliver, 1991: 55). Prior to this, the State Board of Control, had the authority of collecting and compiling state agency budget requests. The Governor was designated as the "Chief Financial Officer" of the state by a statute passed in 1931, but served as little more than a conduit in the transfer of information compiled by the Board of Control and the Legislature. The development of a state budget was in all reality conducted by committees of the Legislature, which had little or no support staff. The lack of a central agency in where budgetary policy could be crafted and analyzed did not exist. The inadequacy of the system, combined with a growing state and an ever-increasing demand for state services, fostered an environment that led to the creation of the Legislative Budget Board (Oliver, 1991: 55).

Texas became one of the first states to establish a budget system where the legislative branch of government was given a more significant role in the state budgeting process when compared to other states. The Legislature had always had the power to "influence" and approve the state budget, but with the creation of the LBB, the Legislature was granted a significant role in shaping

budget recommendations and policy. The political power of the members of the Legislature that served on the LBB was another political “bonus” for the members that found themselves on the Board. The Board is composed of ten key members: the Lieutenant Governor (Chair), Speaker of the House of Representatives (Vice Chair), the chairmen of the Senate Finance Committee, Senate State Affairs Committee, House Appropriations Committee, and the House Ways and Means Committee. The Chair and the Vice Chair also appoint two members from each legislative chamber that they preside in. The Board appoints a director who in turn hires the support staff for the board.

By statute, the LBB is delegated the responsibility of developing budget recommendations, inspecting property, equipment, and facilities of state agencies, conducting hearings related to agency budget requests, and preparing the initial budget recommendations set forth at the beginning of each legislative session. The LBB staff also works closely with the Governor’s Office of Budget and Planning in setting forth the strategic plans and performance/accountability measures (Oliver, 1991: 55-56).

The Comptroller of Public Accounts role in the budget process is to provide a revenue estimate that sets the tone for the upcoming biennial budget process. There are constitutional appropriation limitations that must be followed, and it is the Comptroller’s duty to inform the LBB and the Legislature of how much can be spent. Once a bill is passed, the Comptroller must certify the Appropriations Bill, thus validating the certainty of the agreed upon budget. The

Comptroller collects all revenue for the state (taxes, fees, etc.) and places the revenue in state accounts for distribution.

The key legislative offices' (Lieutenant Governor's Office, Senate Finance Committee, the Speaker of the House of Representatives Office, and the House Appropriations Committee) role in the budget process are instrumental; these offices set the tone for the legislative dialogue and debate. Once the budget is passed, these key legislative offices are charged with monitoring the activity and programs of the agencies that are funded.

THE BUDGETING PROCESS: PRE-SESSION ACTIVITY⁶

The budget process begins with the drafting of budget instructions for use by agencies in preparing their legislative appropriation requests, otherwise known as LARs. The drafting of these instructions is a joint effort by the Governor's Office of Budget and Planning and the LBB. The instructions establish the format and informational context for the budget requests. The instructions are usually mailed to the agencies and institutions sometime in April or May and the LARs are usually due back in July/August.

Once the LARs have been received, the staff from the GOBP and the LBB hold public hearings with each agency. Staff from the key legislative budget offices are also invited to these hearings to participate in the discussions. The purpose of the hearings is to provide the budget staff and agency administrators

⁶ The budgeting information presented is derived from the author's experiences, along from working documents from the Office of Governmental Relations for the Texas A&M University System. For more information on the Texas budgeting process, please go to the Legislative Budget Board website (www.lbb.state.tx.us/). Two reports are available: "Budget 101: A Guide to the Budget Process in Texas" and "Writing the State Budget" written by the House Research Organization.

with an opportunity for in-depth discussion of the programs, activities and funding levels that are requested by the agency/institution.

After the public hearings, each Legislative Budget Board examiner develops budget recommendations for each agency for which the examiner is responsible. These recommendations are reviewed and finalized by an internal Board of Review, composed of the director of the LBB, LBB staff, and the key budget legislative staff. The purpose of the review is to examine justifications, ensure consistency with overall guidelines by the LBB, and to check for uniformity in the pattern and the format of the material prepared by the LBB.

Once the Boards of Review are conducted, the staff recommendations are presented to the Legislative Budget Board; these presentations are intended to inform the Board of the program highlights and the budget requests and recommendations. The LBB staff are prepared to propose alternative recommendations for the Board's consideration if the staff recommendations are not totally acceptable. Usually by mid-December the final decisions have been made. The LBB staff then prepares a budget document along with a draft appropriations bill. The budget document and the bill draft are presented to the Legislature and the Governor usually during the first week of January.

THE BUDGETING PROCESS: SESSION ACTIVITY

Once the General Appropriations Bill is filed in each respective chamber, the bill is referred by the Speaker and the Lt. Governor to committee. In the Senate, the appropriations bill is referred to the Finance Committee, and in the House of Representatives the bill is referred to the Appropriations Committee.

The committees may begin hearings on the appropriations bill filed by the LBB without waiting for submission of the bill prepared by the governor. During these hearings, the committees hear testimony from the institutions and agencies regarding the agencies' requested appropriation. The agencies also answer questions from the legislators regarding their agencies. These questions may be about the agency's performance in relation to the institution's/agency's performance targets, problems within the institution/agency, or programs for which the institution/agency is seeking funding. Additionally, as with all legislative committee hearings, the public is entitled to appear before the committees to offer testimony on an appropriations request.

After the agencies have testified before the Senate Finance Committee and the House Appropriations Committee, the committees begin a process known as "mark-up." The committee members come to agreements on their recommended funding for each institution/agency and the wording to be contained in the appropriations bill. The filed appropriations bill is then changed to reflect these agreements.

After mark-up has been completed and each committee has made changes to the general appropriations bill, the committee issues the amended bill as the committee report. This version of the general appropriations bill then goes to each floor for a vote. The members in each house may amend the bill. Eventually, each house passes its version of the general appropriations bill. However, since there are almost always differences between the Senate and the House passed version of the general appropriations bill, and neither chamber is

willing to accept the other's 'en bloc', a conference committee is appointed to work out the differences.

The lieutenant governor, or the president pro tempore of the Senate when presiding, appoints the Senate members of the committee. The senator sponsoring or authoring the bill must be appointed chair of the Senate conferees; two of the conferees must be from the Senate Finance Committee. In the House of Representatives, the Speaker of the House appoints all members and names the chair of the House conferees. The Senate and House Rules limit the discussions and actions of the conference committee solely to the matters in disagreement between the two Houses. Both the House and Senate Rules list rules for the conference committee on the general appropriations bill as follows:

- If an item of appropriation appears in both House and Senate versions of the bill, such items must be included in the conference report;
- If an item of appropriation appears in both House and Senate versions of the bill and in identical amounts, no change can be made in such item or the amount thereof;
- If an item of appropriation appears in both House and Senate versions of the bill but in different amounts, no change can be made in the item, but the amount thereof shall be at the discretion of the conference committee, provided that such amount shall not exceed the larger version and shall not be less than the smaller version;
- If an item of appropriation appears in one version of the bill and not in the other, such item can be included or omitted at the discretion of the conference committee. If the item is included, the amount thereof shall not exceed the sum specified in the version containing such item.

Following these rules, the conference committee works out a general appropriations bill acceptable to the members of the conference. After the members of the conference committee have adopted the conference committee report, the bill is sent back to each chamber for approval. Each chamber must then vote on the bill. If each chamber approves the conference committee report without change, the bill goes to the Comptroller for certification and, if certified,

then to the Governor. If either chamber makes a change in the conference committee report, the bill must be returned back to the conference committee to work out the differences. Also, at this time, each chamber usually adopts a resolution stating that if the conference committee deviated in any manner from the rules regarding creation of the appropriations bill, the bill is not killed by these deviations.

After the general appropriations bill has been approved by both chambers of the Legislature, it must be certified by the Comptroller of Public Accounts. The Comptroller certifies that the total appropriation for the budget is within the limits of the Comptroller's estimate of anticipated revenue. If the general appropriations bill exceeds this limit, the Comptroller returns the bill to the chamber in which it originated. The Legislature must either cut the level of appropriations or generate additional revenue, usually by passing a tax bill or other revenue measures. If the general appropriations bill is within the level of anticipated revenue, the Comptroller endorses the bill and sends it to the Governor for approval. It should be noted that in the case of an emergency and "imperative public necessity" and by a four-fifths vote of each chamber, the Legislature may make appropriations in excess of the anticipated revenue.

After the Comptroller has certified the general appropriations bill, it goes to the Governor for approval. The Governor has line item veto power, which allows the Governor to veto specific appropriations rather than vetoing the entire bill. If the Governor vetoes items in the appropriations bill, the veto may be overridden by a two-thirds vote in each chamber of the Legislature. Once the Governor has

signed the general appropriations bill, it becomes the General Appropriations Act and becomes law (though it is not published in Vernon's Texas Statutes).

FORMULA FUNDING HIGHER EDUCATION IN TEXAS

The formula system is an appropriation tool and is not designed for use as an institution's internal operating budget (Berdahl, 1971:123). The Legislature appropriates operating funds directly to the universities, and the institutions are responsible for developing their own operating budgets based on their priorities within the guidelines of the appropriations act from each legislative session.

HISTORY OF FORMULA FUNDING⁷

Texas was a pioneer in the development of formula funding for colleges and universities. When the Texas Commission on Higher Education was created in 1955, one of its statutory responsibilities was to establish formulas to be used in determining financial requirements of institutions of higher education to aid the legislature in making appropriations.

In 1959, the 56th Legislature used formulas developed by the Commission on Higher Education for the first time in determining appropriations to public institutions for Fiscal Years 1960 and 1961. Since then, each session of the Legislature has relied upon the application of the designated formulas to develop appropriations for higher education institutions.

⁷ Some of the historical context was taken from documents provided by the Coordinating Board, some of which are working papers. One document that contains much of the same information is entitled "Funding Formulas and Elements of Institutional Cost: FY 1998-1999." This document can be found at <http://www.theccb.state.tx.us/divisions/finance/formula/foremele.html>.

In 1965, the 59th Legislature replaced the Commission on Higher Education with the Coordinating Board, Texas College and University System. The Legislature gave the Coordinating Board broader powers, increased its responsibilities, and appropriated more money for its programs.

The necessary statutory power to continue the formula system was also authorized by the Higher Education Coordinating Act of 1965. Under Section 61.059 and 61.065 of the Texas Education Code, the Coordinating Board is charged with the responsibility to "...devise, establish, periodically review and may revise formulas for the use of the Governor and the Legislative Budget Board in making appropriations recommendations to the Legislature." The Coordinating Board has interpreted its mandate regarding formulas to encompass two broad objectives: (1) the formulas should provide an equitable distribution of available funds among institutions, and (2) the formulas should indicate the funding needed to provide a first-class system of higher education for Texas.

The Coordinating Board during each interim (time period between legislative sessions) reviews the current formulas. The Coordinating Board appoints individuals from state public higher education institutions, along with staff from the Coordinating Board, to serve on the formula advisory committees. Once recommendations are agreed upon and drafted, they are presented to the Commissioner of Higher Education; he/she can then forward the advisory boards recommendations onto the full Coordinating Board. If the Commissioner has other policy initiatives differing from the advisory committee, he or she can also

choose to make his/her own recommendations and forward these on to the Coordinating Board. The Coordinating Board members then vote upon the recommendations brought by the Commissioner; the recommendations are then forwarded to the Legislature for their review.

Since the implementation of formula funding, the composition of the formula process itself has evolved. In 1960, five formulas were utilized in the appropriation process for universities; in 1968, there were seven; in 1979, there were 11; and in 1982, there were 13.

During this period of growth and development, the formula system was modified to accommodate 14 newly established institutions of higher education. Today the formula system is used to allocate funds to 35 public universities, two lower-division institutions, 50 community college districts, and the Texas State Technical Colleges.

In 1997, the Legislature replaced the 14 formulas that had evolved over the years and in their place adopted a dramatically simplified university formula system containing only two formulas with three supplements.

CURRENT UNIVERSITY FUNDING FORMULAS (RATLIFF FORMULAS)⁸

The new funding formulas adopted by the Legislature in 1997 are radically changed from their predecessors. They consist of two formulas and three supplements. Appendix B is a copy of the formula language as it appears in the General Appropriations Act from the 76th Legislative Session. Section 34 entitled

⁸ Much of the information provided in this section is taken from working documents from the Office of Governmental Relations for the Texas A&M University System.

“General Academic Funding” is the formula language. The formula language addresses the four main components: Instruction and Operation, Teaching Experience Supplement, Growth Supplement, and Infrastructure Support. Included in Section 34 is the funding weight matrix. Appendix C provides an example of university appropriation (Southwest Texas State) as it appears in the General Appropriations Bill. Specific formula funded items appear on the second page of the copied material, specifically Strategies A.1.1. Operations Support, A.1.2. Teaching Experience, A.1.3. Growth Supplement, and B.1.1. E&G Space Support.

The formula for **Instruction and Operations** (I&O) allocates approximately 80 percent of the dollars contained in the formula recommendations. The I&O formula provides funding for faculty salaries, research enhancement, student services, and institutional support. A matrix is constructed that measures the estimated cost of instruction for each discipline considering the average salary by rank of faculty, the student to faculty ratio, and the level of instruction. The raw semester credit hours driven by enrollment in each discipline is multiplied by the weighted discipline semester credit hour and then funded at a uniform weight.

It is the weights assigned to the academic disciplines of the matrix that dictate how much an institution will receive. The degrees (master and doctoral) that an institution offers greatly impacts the revenue that is brought in via the Instruction and Operation formula. The matrix funds disciplines by four levels: lower division, upper division, masters, and doctoral. Weights range from 1.00

for lower division liberal arts to 21.40 for doctoral engineering. Institutions that have engineering degrees or graduate and doctoral programs bring in a much higher level of formula funding via the Instruction and Operation formula based on the weights that are assigned for the program instruction.

Two supplements to the Instruction and Operations Formula reward **teaching experience** and **enrollment growth**. The teaching experience supplement rewards institutions that place tenure or tenure track faculty into undergraduate classroom instruction. The weighted semester credit hour is increased by 5% as a bonus or incentive for the institution to assign more tenure/tenure track faculty to teach undergraduate students. The growth supplement utilizes the Coordinating Board's projected headcount enrollment and funds each student at \$1,435.

The **Infrastructure Support Formula** funds approximately 19% of the formula funding for the general academic institutions. There are two main funding elements: 1) Maintenance and Operations, and 2) Utilities. Maintenance and Operations is comprised of physical plant support, building maintenance, custodial service, and grounds maintenance. It is funded at \$3.00 per net predicted current square feet. The formula utilizes the Space Projection Model developed by the Texas Higher Education Coordinating Board that was implemented in 1992. The model predicts net assignable square feet for educational and general space an institution needs in five different categories: teaching, library, research, office, and support space. The utility factor is funded at \$4.26 based on an in-depth statewide survey in 1997 of actual utility costs and

are adjusted based on local costs of utilities including gas, electricity, water, and sewage. The Infrastructure Support Formula also provides funding for institutions with less than 5,000 students; \$750,000 a year is provided to nine state academic institutions.

FORMULA FUNDING INCENTIVES

More significant than the change in structure of the formulas is the change in philosophy. While the predecessor formulas were intended to be incentive-neutral and to reflect costs, the new formulas are intended to promote specific behaviors; these new formulas can be described as incentive-driven performance funding mechanisms. The formulas provide infrastructure funding based on the amount of space that an institution should have rather than the space that it actually has, thereby promoting good utilization of space. A supplement is provided for teaching with tenure-track faculty, thereby promoting quality undergraduate teaching. Higher rates were established for upper-division undergraduate instruction relative to lower-division undergraduate instruction, thereby providing an incentive for institutions to accept community college transfers and retain lower-division students.

FORMULA FUNDING IN THE TEXAS BUDGETING PROCESS

Formula funding higher education in the state of Texas brings with it many uncertainties as budgetary issues are debated during the legislative session. Asking for a certain amount of funding is difficult enough based on the politics

aspect of the pursuit; mix with it the uncertainty of asking for funding based on formulas and it becomes even more unclear.

Higher education institutions prepare their LAR based on instructions that state that no new funding will be available. What the institutions submit is a request that holds constant all formula-driven dollars. The institutions then usually ask for new dollars in the form of special item projects, either an increase to an existing one or the establishment of a new project.

Once the legislative session begins, a general consensus of funding priorities has been developed, both by higher education officials and by members of the Legislature. Often by the time institutions appear in front of the budgeting mark-up committees, funding priorities for the state have not been fully developed. If higher education as a whole is going to get a specific increase, the budget committee chairs may allocate a set amount of new dollars to be run through the formula. If they increase the I&O formula dollar amount by \$50 million, that money is then run through the I&O formula, thus bringing the weighted funding amount to a higher level. This is what is referred to as "increasing base funding." If no set dollar amount is yet clear, special items for institutions are placed on a "wish list" for further discussion. In most instances, both legislative chambers have varying funding proposals.

As the session continues and other public policy issues that impact the state fiscal environment are decided, the members of the conference committee iron out the funding priorities. It is here that higher education as a whole is often faced with a dilemma. Does an institution advocate a formula funding increase,

which benefits all of higher education (though those institutions that have more of the heavily-weighted disciplines gain more), or does an institution advocate an institution-specific project? Situations similar to these can often create tension between institutions that possess different missions. This is, however, the political complexities that state public higher education institutions are faced with.

SPECIAL ITEM FUNDING⁹

The Texas formula process drives the majority of funding for higher education, which funds the core educational and infrastructure functions of state institutions. There is also another source of funding for institutions of higher education - **special item funding**. These are items that appear in the bill pattern and are appropriations for special needs/projects that institutions have.

Appendix C provides a listing of the special items for Southwest Texas State University. University-specific special items are found at the top of the third page of the SWT appropriations, under Goal C titled "Special Item Support."

In the past, there has been some discussion of what would or would not be classified as a special item in the General Appropriations Act. There is general agreement that special items are appropriations made by the Legislature to selected institutions, but not all institutions. In addition, special items are identified by a separate line in the General Appropriations Act. Special items are not intended to supplant formula-driven appropriations made to other institutions for the same purpose. Even with these characteristics, there is considerable room for different interpretations.

To some extent, special items are a Texas phenomenon. All state legislatures earmark or designate some appropriations for specific institutions, but the Texas Legislature does so far more than most other state legislatures. Special items are a somewhat controversial aspect of higher education appropriations. Some legislators and some higher education administrators believe that special items are the way the legislature can most effectively convey its priorities to institutions. Other legislators and higher education administrators believe that funding for special items is provided at the expense of support for the core educational mission of the institutions.

Special items have been the subject of much discussion and debate, with discussion occurring both during the budget-making process and throughout the interim. However, even though special items have been examined, the funding for the items has still increased. The following shows appropriation amounts allocated towards special item funding for the general academic institutions¹⁰:

- FY 1992-1993 Special Item dollar total for the general academics was \$208,593,294 (8% of funding);
- FY 1994-1995 Special Item dollar total for the general academics was \$471,906,217 (13% of funding);
- FY 1996-1997 Special Item dollar total for the general academics was \$368,634,273 (10.45% of funding);
- The General Appropriations Act included for FY 1998-1999 included 306 special item appropriations for general academic institutions totaling approximately \$259,225,712. Using the same data source, an analysis of special items that were funded prior to 1981 found that 72 of the current items were being funded at approximately \$40 million for the biennium.

⁹ Some information is taken from a Texas Higher Education Coordinating Board report entitled "Special Item Support For Texas Public Institutions of Higher Education: Fiscal Years 1998 and 1999" which was published in October 1997.

¹⁰ Data taken from Special Item Funding reports published by the Coordinating Board for each of the fiscal year periods cited.

ANALYSIS

The information discussed up to this point has been limited to 1) the budgetary process in Texas; 2) formula funding in Texas (both historical context and the current methodology used; and 3) a brief overview of special item funding for the state public institutions of higher education. The following addresses some of the key issues related to these three subjects.

- **Why Formula Funding?**

Theoretically, formula funding distributes resources in an equitable manner and minimizes the role of politics (Moss and Gaither, 1965: 163). Based on discussions with Dr. Ken Ashworth¹¹, who served as the Commissioner of the Texas Higher Education Coordinating Board for twenty-one years, this is exactly the reasoning why formulas were implemented in Texas. Dr. Ashworth cited four key reasons for formula implementation and their continuation of use in the state of Texas: **stability, equity, predictability, and comparability to other states**. It is these key characteristics that are the reason formula funding was implemented and why it continues to serve as the funding mechanism for higher education in the state of Texas.

Dr. Ashworth also mentioned that formulas were adopted by the Legislature because formulas served as a “whole message.” When the Coordinating Board and higher education officials come to the Legislature to ask for funding increases for higher education based on funding-formula increases,

¹¹ One and a half hour interview with Dr. Ken Ashworth on February 3, 2000; general discussion of formula funding was the focus of the interview.

they arrive with a unified message based on their advocacy for the formulas. This greatly increases the likelihood of a funding increase, vis a vis individual representatives asking for funding increases based solely on an institutional argument.

- **The Role and Mission of Higher Education Institutions**

The size of Texas makes funding for higher education a more difficult process compared to other states. The state has colleges located throughout its vast area; campuses are located in every corner of the state, from West Texas (Sul Ross State University) to East Texas (TAMU-Texarkana) to South Texas (UT-Brownsville). Each of these universities vary by role and mission. Urban institutions are primarily research and doctoral/graduate institutions, while the regional institutions tend to focus on the needs of the surrounding community. Based on the funding matrix, the urban research institution that offers doctoral degrees generates more formula dollars than does a regional institution that only offers one or two graduate degrees.

The higher weights placed upon graduate and doctoral degree programs oftentimes create an incentive for institutions to offer these heavily-weighted programs. Oftentimes these heavily-weighted programs have expensive start up costs. Institutions may siphon away money from less-weighted disciplines to start a graduate or engineering program. Institutions may put a focus on developing a doctoral program where in all actuality the student enrollment will not provide an adequate base for such a program. Institutions must be able to

recognize and acknowledge such factors when pursuing new degrees and programs. The institution must be able to answer "yes" to the question of "If we build a program, will the students come?"

- **Enrollment – "Base Year"**

The use of the "base year" is a point of discussion in the Texas formula process. Two-year budget requests are based on current year enrollments; Institutions that are experiencing rapid growth argue that they are penalized for their unforeseen growth due to the fact that their budgets must support these students but the lagged enrollment estimates used in the formula process do not provide the resources to support the growth in enrollment. Institutions that are experiencing rapid growth sometimes turn to the Legislature for additional funding. The growth supplement in the current formula structure was created to address this specific situation, but only if the Coordinating Board projects the enrollment growth. Dr Ashworth noted that he often faced this problem. He was once called into a meeting where he was "forced" to play devil's advocate. His comments were that "institutions are always saying that they are experiencing a cycle of growth. They (institutions) need more money. However, what did that institution do with the additional money that it received when it did not grow? The institution had additional revenue in the first two years of enrollment decrease." Institutional representatives found themselves at a loss for words.

- **Politics in Higher Education Funding**

As has been noted in the literature, one reason for the implementation of formulas has been to negate the political aspect of funding. Currently, formulas drive almost 80% of the state funding for higher education in Texas. Decisions made by legislators that change the funding methodology can be politically driven, but seldom can the formula be changed based on a political “favor” to an individual institution.

Funding, based on politics, currently occurs in two ways. One is by granting an institution authorization to issue tuition-revenue bonds, which are used to finance capital construction. These tuition revenue bonds are relatively new.

Special item funding is the other funding mechanism used to distribute funds “politically”. Each institution has at least one representative in each legislative chamber. Institutions that are located in urban areas often have multiple representation. Representatives are re-elected when they please their constituency. This in turn leads members to get all they can for their districts; when this includes a public university, the simplest way to get additional funding is either through the formula or through special item funding.

Legislators have various “levels of political muscle.” The longer that a member is in office, the more legislative power he/she gains. Seniority is a key concept in the Texas Legislature; it is one of the factors that drives committee make-up.

The committees that legislators are appointed to also influence the political power of individual members. Certain committees are deemed “more powerful” than others. The members who sit on the budget-writing committees are much more important, in the eyes of those asking for funding, than are the members who sit on a committee that deals with local economic development. Committee chairs have the highest rank and most power; it is no wonder why chairmanships are so coveted.

Special item funding for state public institutions of higher education is greatly influenced by the institution’s member’s legislative power. Those institutions that find themselves represented by a powerful member, or who may sit on the budget writing committee, have often received special item appropriations that they would not have received under other circumstances.

Institutions who find themselves represented by a powerful member often are faced with a dilemma. Does the institution advocate an increase in formula dollars, in which all institutions benefit, or do they ask their local elected official for special item funding, which solely benefits them. Situations such as these often cause division among higher education officials.

SUMMARY

The crafting of the biennial budget in Texas is a political decision-making process that the Legislature must endure every other year. Oftentimes funding is based on political agendas; it is this reason that formula funding for higher education was implemented. Formulas are intended to create stability for an

institution so that institutions do not have to worry about base funding. Formula funding is “ideally” executed in an equitable way that is understood by the participants of the formula process. As has been discussed, however, many variables associated with the budgeting process often impact the results of the “idealistic model” of formula funding.

CHAPTER FOUR: METHODOLOGY

The research for this project is exploratory in nature. The three primary exploratory categories that are developed in the literature review create a framework so that an assessment of the Texas perspective of budgeting and its impact of state public institutions can be explored. A particular focus on the formula funding aspect associated with Texas higher education funding is the focal point of the exploration.

This chapter discusses the methodology chosen to address and answer the empirical research question and provides a brief synopsis of the strengths and weaknesses associated with the methodology of research. The conceptual framework is linked to the survey tool that is used to carry out the applied research project. A discussion of the survey population and survey distribution is also addressed; the calculations associated with the survey results are the final issue addressed by the chapter.

SURVEY RESEARCH

Exploratory studies are typically done for three purposes:

1. To satisfy the researcher's curiosity and desire for better understanding;
2. To test the feasibility of undertaking a more careful study; and
3. To develop the methods to be employed in a more careful study (Babbie, 1995: 84).

The primary focus of this applied research project addresses Babbie's first purpose. By examining the three exploratory categories structured by the

conceptual framework, a better understanding of the methods utilized in Texas will be gathered.

Survey research is the methodology chosen for this applied research project. Babbie (1995: 257) states that surveys “may be used for descriptive, explanatory, and exploratory purposes. They are chiefly used in studies that have individual people as the units of analysis....they are excellent vehicles for measuring attitudes.” Surveys are flexible; many questions may be asked on a given topic, giving one considerable more flexibility in the analysis. The standardized questionnaire provides the researcher a foundation of uniform information. The researcher is bound by having to ask the same question of all subjects and having to impute the same intent to all respondents giving a particular response (Babbie, 1995: 273).

Survey research is also plagued with certain weaknesses. The standardized questionnaire often represents the least common denominator in assessing individuals' attitudes, perceptions, and experiences. By designing questions or statements that will be minimally appropriate to all respondents, one may miss what is most appropriate to respondents (Babbie, 1995:273-274). Survey research has difficulty in gaining a full sense of social processes in their natural settings (Babbie, 1995:277). Individuals' responses on issues seldom take the form of strong agreeing, agreeing, neutral, disagree, or strongly disagree with a specific statement. Their survey responses must be regarded as approximate indicators of what one has in mind initially in framing the questions (Babbie,1995:274).

Based on the three primary exploratory categories developed by the conceptual framework, a survey questionnaire is developed. The survey tool serves as the means for exploring the topic of budgeting and formula funding discussed in the literature review. The survey tool also addresses Texas' budgeting perspectives addressed in the setting chapter. Table 4.1 links the conceptual framework to the survey questionnaire. Once results were received, responses were coded utilizing a Likert scale corresponding to the following: -2 (Strongly Disagree), -1 (Disagree), 0 (Neutral), +1 (Agree), and +2 (Strongly Agree).

The survey instrument was drafted with the assistance of Glenn Dowling, Assistant Vice Chancellor for Institutional Research for the Texas A&M University System. Along with Mr. Dowling, Mr. Michael O'Quinn, Vice President for Governmental Relations for the Texas A&M University System Health Science Center also assisted in providing a critique of the survey instrument. Both individuals provided assistance in the composition of the questions to ensure that the questions were simply stated, easily understood, and not biased.

TABLE 4.1

LINKING THE QUESTIONNAIRE* TO THE CONCEPTUAL FRAMEWORK

EXPLORATORY CATEGORIES	QUESTIONNAIRE ITEM
BUDGETING – General Characteristics <ul style="list-style-type: none"> Budgeting is a “political phenomenon.” Budgeting involves past decision-making. “Political Inertia” – small decreases/increases in each budget. 	<p>ITEM 1.1</p> <p>ITEMS 1.2, 1.3, 1.6</p> <p>ITEMS 1.4, 1.5</p>
BUDGETING-IMPACT UPON HIGHER EDUCATION– General Characteristics <ul style="list-style-type: none"> Higher education funding is political. Higher education is viewed in a different manner when compared to other state agencies. Budget requests for higher education are viewed in a different manner compared to other state agencies. 	<p>ITEMS 2.5, 2.6</p> <p>ITEMS 2.1, 2.3,</p> <p>ITEMS 2.2, 2.4</p>
FORMULA FUNDING – General Characteristics <ul style="list-style-type: none"> Required characteristics of formulas (in order for it to function properly). <ul style="list-style-type: none"> Quantitative definability Sensitivity to change Adaptability (flexibility) Comparability Comprehension of structure The proper use of formulas and their impact upon defining public policy. <ul style="list-style-type: none"> Equity Stability Cannot be used to craft public policy Formulas should be used to formulate appropriation requests Should not be used to formulate spending budgets Fail to recognize economies of scale Formulas place an emphasis on “fundable” units that can be measured Formulas encourage nontraditional and non-credit instruction 	<p>ITEM 3.1</p> <p>ITEM 3.2</p> <p>ITEM 3.3</p> <p>ITEM 3.4</p> <p>ITEM 3.5</p> <p>ITEMS 3.6</p> <p>ITEM 3.7</p> <p>ITEM 3.8</p> <p>ITEM 3.9</p> <p>ITEM 3.10</p> <p>ITEM 3.11</p> <p>ITEM 3.12</p> <p>ITEM 3.13</p>

*Please see Appendix D for the complete questionnaire, along with the cover letter that was sent.

OPERATIONALIZATION OF THE CONCEPTUAL FRAMEWORK (cont.)

EXPLORATORY CATEGORIES	QUESTIONNAIRE ITEM
FORMULA FUNDING IN TEXAS – General Characteristics <ul style="list-style-type: none"> • Relationship with the Legislature during the budget process has been made easier because of formulas. • Equitable • Enrollment impact upon formulas • Impact of academic characteristics • Formula funding vs. special item appropriations 	<p>ITEMS 4.1, 4.2, 4.5</p> <p>ITEMS 4.3, 4.4, 4.6, 4.7</p> <p>ITEMS 4.8</p> <p>ITEMS 4.9</p> <p>ITEMS 4.10, 4.11, 4.12, 4.13, 4.14, 4.15, 4.16, 4.17</p>

SURVEY POPULATION

Once the survey tool was constructed, the survey was sent to all thirty-five university presidents of Texas' state general academic institutions and each respective university's chief financial officer, with the total sample population equaling seventy respondents. Appendix A provides a listing of the state universities that were sent copies of the survey instrument.

University presidents and their chief financial officer are the two administrative positions that are most involved in the Texas budgetary process. The university president is typically the spokesman for each respective university; he or she, along with the respective CFO, are the champions and advocates for their respective university during the appropriations process (they

may also employ the assistance of a individual who deals with the governmental relations aspect). It is these two administrators that are most often held accountable when examined through the eyes of the Legislature. Most university presidents are thoroughly familiar with the formula funding process, but the president may not possess as much working knowledge on the inner mechanics of formula funding as compared to the chief financial officer; it is this reason why the input from chief financial officers is also being solicited. The two administrators' viewpoints combined should provide a thorough perspective of the budgeting process and the impact of formula funding for public state universities in Texas.

SURVEY ANONYMITY AND DISTRIBUTION

A cover letter (Appendix D) was sent along with the survey, informing the recipients of the survey that the information being solicited was for use in an applied research project in fulfillment of completion for the requirements of a master's of public administration degree. The cover letter assured the recipients that their responses would remain confidential, and that the survey analysis would in no way mention individual university responses. This was to ensure that respondents answer honestly without fear of repercussions from those that govern and administer policies associated with higher education funding.

Surveys were to be returned in pre-stamped, addressed envelopes by March 6th; the due date, however, was extended to allow for late responses. Three weeks after the cover letter and survey were distributed, an e-mail

notification was sent out to all original recipients of the survey tool (or their respective assistants). The e-mail (see Appendix D) served as a reminder to the CEOs and CFOs of the universities of the response deadline for the survey. However, the follow-up e-mail also included the survey questionnaire that was originally sent. This provided respondents the opportunity to fill out the survey and return it electronically.

SURVEY CALCULATIONS

Once the surveys were received, the responses were separated and divided into “university president” and “university fiscal officer” responses (denoted by a footer on each survey or by the respondent name on e-mail). A coding sheet was then used to categorize the data. Each respective group’s responses were categorized and totaled. Utilizing the Likert Scale coding, an overall mean was calculated for each questionnaire items.

The open-ended questionnaire items were not utilized in this project due to the fact that many respondents did not reply to the open-ended questions, or respondents chose to only answer particular ones. A listing of the open-ended responses that were submitted can be found in Appendix E.

In Chapter Five findings of the research are discussed. This includes a summary of the responses broken out by the survey group, along with their respective responses to the survey instrument.

CHAPTER FIVE RESULTS

This chapter presents the findings of survey conducted for the applied research product. The survey instrument was structured utilizing the conceptual framework as the skeleton, which addressed the four main exploratory categories set forth by the framework.

The following tables summarize the responses of those who returned the survey instrument and provides an analysis of each groups perceptions and attitudes on budgeting and formula funding, both general concepts and applications in their relation to the Texas appropriations process.

RESPONSE RATE

The survey instrument was mailed to the thirty-five public state higher education institutions in Texas; each university president and their respective chief financial officer received copies of the survey instrument. Eighteen university presidents responded to the questionnaire, compared to twenty-one responses from chief financial officers. Table 5.1 provides a breakdown of the respondents.

TABLE 5.1 FREQUENCY OF RESPONDENTS PARTICIPATING IN SURVEY			
GROUP	# of SURVEYS MAILED	# of SURVEY RESPONSES (FREQUENCY)	% of RESPONDENTS
University Presidents (CEOs)	35	18	51%
University Chief Fiscal Officers (CFOs)	35	21	60%

Babbie (1995: 261-262) states that a response rate of 50% is considered adequate for analysis and reporting of survey questionnaire responses; a response rate of at least 60% is considered good. Based on this, the response rate for both groups of respondents' (CEOs and CFOs) is considered "valid" as defined by Babbie.

BUDGETING – General Characteristics

The initial exploratory category explored the viewpoints of the university presidents and chief fiscal officers in regard to general budgeting characteristics. Table 5.2 summarizes the results.

TABLE 5.2¹
BUDGETING - GENERAL CHARACTERISTICS
 (* denote statements where the frequency is N-1; respondent inadvertently skipped a statement)

Characteristics	Respondent	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
1.1 Budget as a "political phenomena"	University President	17% (3)	61% (11)	6% (1)	11% (2)	6% (1)	.722
	University Fiscal Officer	10% (2)	57% (12)	14% (3)	5% (1)	14% (3)	.429
1.2 Current budget includes previous decision	University President	33% (6)	61% (11)	6% (1)	0% (0)	0% (0)	1.278
	University Fiscal Officer	14% (3)	76% (16)	5% (1)	5% (1)	0% (1)	1.000
1.3 Being funded once increases chances of funding again	University President	28% (5)	67% (12)	6% (1)	0% (0)	0% (0)	1.222
	University Fiscal Officer	24% (5)	76% (16)	0% (0)	0% (0)	0% (0)	1.375
1.6 Institutions can expect to receive roughly the same amount	University President	22% (4)	28% (5)	11% (2)	39% (7)	0% (0)	.333
	University Fiscal Officer	0% (0)	76% (16)	0% (0)	24% (5)	0% (0)	.524
1.4 To get a new item funded, incorporate into base bill	University President	28% (5)	50% (9)	17% (3)	6% (1)	0% (0)	1.000
	University Fiscal Officer*	10% (2)	65% (13)	10% (2)	15% (3)	0% (0)	.700
1.5 Base bill scrutinized.	University President*	6% (1)	53% (9)	18% (3)	24% (4)	0% (0)	.412
	University Fiscal Officer	14% (3)	24% (5)	52% (11)	10% (2)	0% (0)	.429

Means are computed on values: Strongly Agree (2); Agree (1); Neutral (0); Disagree (-1); Strongly Disagree (-2)

¹ Each results table has in parenthesis the number of respondents that marked a particular response; It is from these frequencies per categories that percentages are taken.

The majority of the respondents indicated that they agreed with Wildvasky's description of the budgeting process as a "political phenomena"; 78% of the CEO's agreed with the statement, with a mean of .72. The CFO mean was almost half of the CEO mean (.43), even though 67% of the respondents still agreed with the concept of budgeting being political.

The respondent generally agreed with the premise that the budget is based on previously made budgeting decisions; 94% of the university presidents showed agreement with the statement; 90% of the fiscal officers sided with the university presidents. Both groups of respondents strongly agreed with the premise that once a budgetary item is funded, the chances that it will continue to receive funding is much more likely. Means for these responses ranged from 1.222 (95% strongly agreed/agreed) for the CEOs and 1.375 (100% strongly agreed/agreed) for the CFOs. Responses to the statement that institutions can expect to receive roughly the same amount as what was received the previous time showed a deviation from the previous responses. Fifty percent of the CEOs strongly agreed/agreed with the premise, but at the same time almost 40% of the CEOs disagreed with the statement. CFOs showed a more unified answer with 76% agreeing, but at the same time nearly a quarter voiced disagreement.

Regarding base bill concepts, two questionnaire items were used to measure the premises set forth by the literature. Seventy-eight percent of the CEO's acknowledge that the most effective way to get a newly funded item is to have the item incorporated into the initial base bill. Three-quarters of the CFOs that responded also sided with the CEOs, but the CFO mean was less than that

of the CEO's, .7 compared to 1.00, respectively. Responses assessing base bill scrutiny showed a lesser degree of agreement; 60% of university presidents showed agreement that the base bill is subject to intense scrutiny with an overall mean of .412. The CFO overall mean was a close .429, but over half of the CFOs took no position on the issue.

BUDGETING - IMPACT UPON HIGHER EDUCATION – General Characteristics

Building on the fact that budgeting in general has been described as a “political phenomenon”, an assessment of higher education was the next area of inquiry. Table 5.3 presents the statements that were set forth to the targeted population that assess both the external and internal funding sources for public state institutions of higher education.

The respondents once again reaffirmed the concept that budgeting is political; 83% of the CEOs strongly agreed/agreed that higher education funding is political while 90% of the CFOs showed the same sentiment. The tuition revenue raised by state higher education institutions can also be described as “political.” Seventy-eight percent of university CEOs and 90% of the CFOs showed some form of agreement that increases in tuition must be justly thought out before implementation, due to the political ramifications that an increase in tuition can bring.

An assessment of the Legislature's view of higher education was addressed by two survey questionnaire statements. When asked to respond to the statement that “higher education is viewed in a different manner than are

other state agencies", the mean responses showed agreement (.944 for CEOs and 1.19 for CFOs) with 78% of the CEOs strongly agreeing/agreeing and 85% of the CFOs strongly agreeing/agreeing. When asked, however, if higher

TABLE 5.3
BUDGETING – IMPACT UPON HIGHER EDUCATION

Characteristics	Respondent	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
2.5 Higher ed funding is political.	University President	11% (2)	72% (13)	17% (3)	0% (0)	0% (0)	.944
	University Fiscal Officer	33% (7)	57% (12)	0% (0)	10% (2)	0% (0)	1.143
2.6 Tuition and fees must be politically contemplated.	University President	6% (1)	72% (13)	11% (2)	11% (2)	0% (0)	.722
	University Fiscal Officer	14% (3)	76% (16)	5% (1)	5% (1)	0% (0)	1.000
2.1 Higher ed viewed in a different manner than other state agencies.	University President	28% (5)	50% (9)	17% (3)	0% (0)	6% (1)	.944
	University Fiscal Officer	33% (7)	52% (11)	14% (3)	0% (0)	0% (0)	1.190
2.3 Legislature holds higher ed to a different standard than other agencies.	University President	11% (2)	44% (8)	22% (4)	22% (4)	0% (0)	.444
	University Fiscal Officer	14% (3)	38% (8)	43% (9)	5% (1)	0% (0)	.619
2.2 Budget request for higher ed are more scrutinized.	University President	6% (1)	6% (1)	56% (10)	33% (6)	0% (0)	-.167
	University Fiscal Officer	10% (2)	38% (8)	33% (7)	19% (4)	0% (0)	.381
2.4 Budgetary increase for higher ed because of role in society.	University President	0% (0)	39% (7)	11% (2)	44% (8)	6% (1)	-.056
	University Fiscal Officer	5% (1)	10% (2)	52% (11)	33% (7)	0% (0)	-.143

Means are computed on values: Strongly Agree (2); Agree (1); Neutral (0); Disagree (-1); Strongly Disagree (-2)

education is held to a different standard than are other state agencies, the responses showed less inclination towards agreement. The mean response dropped by almost one-half. University presidents' agreement dropped to 55%, while 22% disagreed and another 22% responded neutrally. Forty-three percent of the fiscal officers marked "neutral", but the fiscal officers had a more resonant 52% strongly agree/agree measurement.

The next set of statements dealt with budgetary analysis and budgetary increases for higher education. Both statements' means shows almost "neutral" responses for both group respondents. CFOs responded in a more positive manner than the CEOs (48% compared to 12% agree/ strongly agree) that the budget requests for higher education are examined more closely than are other state agencies' request. More than half of the university presidents had no feeling on the matter and a third of the presidents disagreed. University fiscal officers showed the same neutrality when asked if budgetary increases for higher education were based on the role that higher education plays in society; more than half took no side, while a third of them disagreed. University presidents tended to disagree with the concept (50%), but at the same time 39% of the CEOs took the opposing view.

FORMULA FUNDING: GENERAL CHARACTERISTICS

As cited by Moss/Gaither (1976) and Miller (1975), there are certain necessary characteristics that formulas must possess in order for a formula to function properly. Table 5.4 presents the statements that were posed to the university presidents and the fiscal officers relating to these "necessary" characteristics set forth by the literature.

The defined characteristics of quantitative definability, sensitivity to change, flexibility, comparability, and comprehension of structure, as measured by both groups of the respondents, all show means centering around 1.00, equaling agreement with the said statements. Almost all of the responses

showed a 70%+ agreement measurement, thus showing that the CEOs and CFOs have an overall understanding of certain characteristics that are required if an effective formula is to be structured.

TABLE 5.4
FORMULA FUNDING: NECESSARY CHARACTERISTICS

Characteristics	Respondent	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
3.1 Quantitative definability	University President	39% (7)	28% (5)	17% (3)	11% (2)	6% (1)	.833
	University Fiscal Officer	5% (1)	86% (18)	5% (1)	5% (1)	0% (0)	.905
3.2 Sensitivity to change (responsiveness)	University President	33% (6)	61% (11)	0% (0)	0% (0)	6% (1)	1.167
	University Fiscal Officer	10% (2)	76% (16)	5% (1)	10% (2)	0% (0)	.857
3.3 Adaptability (flexibility)	University President	33% (6)	50% (9)	17% (3)	0% (0)	0% (0)	1.167
	University Fiscal Officer	10% (2)	71% (15)	14% (3)	5% (1)	0% (0)	.857
3.4 Comparability	University President	35% (6)	35% (6)	24% (4)	6% (1)	0% (0)	.944
	University Fiscal Officer	14% (3)	76% (16)	5% (1)	5% (1)	0% (0)	1.000
3.5 Understanding the "structure" and "origin" of the formula	University President	28% (5)	50% (9)	6% (1)	11% (2)	6% (1)	.833
	University Fiscal Officer	19% (4)	71% (15)	5% (1)	5% (1)	0% (0)	1.048

Means are computed on values: Strongly Agree (2); Agree (1); Neutral (0); Disagree (-1); Strongly Disagree (-2)

General concepts associated with formula funding was the next subject area to be posed to the survey recipients. Table 5.5 presents the statements that were given to the respondents. Overall responses to this set of statements showed more variation than the "necessary characteristics" that were presented in Table 5.4.

Regarding the statement that "equity" is a necessary outcome of formula funding, the overall mean for the university presidents equaled -.167, with 50% of the respondents showing some form of disagreement. There was, however, an

almost equal percentage (45%) of CEO respondents agreeing that equity should be a necessary outcome of formulas. The university fiscal officers showed a better comprehension of the equity necessity for formulas, with a gathered mean of .67. Seventy-two percent of the fiscal officers showed agreement with the “equity” outcome, but a quarter of the respondents also sided with the negative mean of the university presidents.

TABLE 5.5
FORMULA FUNDING: GENERAL CHARACTERISTICS
(* denote questions in which there was one less respondent)

Characteristics	Respondent	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
3.6 Equity is a necessary outcome.	University President	6% (1)	39% (7)	6% (1)	33% (6)	17% (3)	-.167
	University Fiscal Officer	24% (5)	48% (10)	5% (1)	19% (4)	5% (1)	.667
3.7 Stability is a necessary outcome.	University President*	12% (2)	53% (9)	12% (2)	18% (3)	6% (1)	.471
	University Fiscal Officer	14% (3)	52% (11)	29% (6)	5% (1)	0% (0)	.533
3.8 Should be used to craft public policy.	University President	11% (2)	28% (5)	33% (6)	22% (4)	6% (1)	.166
	University Fiscal Officer	0% (0)	29% (6)	24% (5)	38% (8)	10% (2)	-.190
3.9 Should be used to formulate appropriations request.	University President	17% (3)	56% (10)	22% (4)	6% (1)	0% (0)	.833
	University Fiscal Officer	14% (3)	52% (11)	14% (3)	19% (4)	0% (0)	.619
3.10 Used to formulate spending budgets.	University President	6% (1)	28% (5)	22% (4)	22% (4)	22% (4)	-.278
	University Fiscal Officer	0% (2)	29% (6)	24% (5)	48% (10)	0% (0)	-.190
3.11 Recognize economies of scale.	University President	6% (1)	22% (4)	11% (2)	33% (6)	28% (5)	-.556
	University Fiscal Officer	0% (0)	14% (3)	24% (5)	57% (12)	5% (1)	-.524
3.12 Place too much emphasis on funding units without looking at quality.	University President	17% (3)	56% (10)	17% (3)	11% (2)	0% (0)	.778
	University Fiscal Officer	19% (4)	43% (9)	29% (6)	10% (2)	0% (0)	.714
3.13 Encourage non-traditional and non-credit instruction.	University President	0% (0)	0% (0)	11% (2)	67% (12)	22% (4)	-1.111
	University Fiscal Officer	0% (0)	14% (3)	19% (4)	43% (9)	24% (5)	-.762

Means are computed on values: Strongly Agree (2); Agree (1); Neutral (0); Disagree (-1); Strongly Disagree (-2)

Stability as a necessary outcome of formulas showed an almost equal agreement response rate, 65% for CEOs and 66% for CFOs. Almost a quarter of the CEOs, though, showed disagreement with the concept, and 29% of the CFOs responded neutrally.

With respect to the proper use of formulas and acknowledging what formulas can and cannot do, the respondents' answers showed support for the literature that was discussed in Chapter Three; the overall means for each of the respective populations showed a correlation to the material presented. Forty-eight percent of the fiscal officers show disagreement with the idea that formulas should be used to craft public policy. Twenty-nine percent of the CFOs, however, agreed with the statement, while almost a quarter of the respondents took no position. The responses from the university presidents showed almost an equal distribution among the possible responses, with 28% strongly disagreeing/disagreeing and 39% agreeing/strongly agreeing that formulas should be used to craft public policy.

Regarding the use of formulas for creating appropriations request in the budgeting process, both groups had an overall mean near one, which shows positive agreement. There was a lesser degree of opinion on the issue of formulas being used to formulate spending budgets. Response means showed a negative correlation to the "spending budget" statement, but the mean was more near the "neutral" coding.

Three other statements were presented to the respondents that address general concepts for what formulas recognize. These comments are directly tied

to the literature and the respondents, based on the mean, showed support for what was presented in the literature. Sixty-one percent of the university presidents and 62% of the fiscal officers showed disagreement with the statement that formulas recognize economies of scale; respondents also disagreed with the premise that formulas encourage nontraditional and noncredit instruction, 89% and 67% respectively. Both groups strongly agreed with fact that formulas place too much emphasis on particular units without regard to the quality of the chosen unit.

FORMULA FUNDING IN TEXAS – General Characteristics

An assessment of the formula funding process in Texas was the next focus of the survey statements that were presented to the recipients of the survey tool. Table 5.6 addresses specific formula concepts in the statements presented.

The first statement addresses the impact of formulas upon the relationship with the Texas Legislature. Sixty-two percent of university presidents and 81% of the fiscal officers showed agreement that formulas have assisted the Legislature analyzing higher education's budgetary needs. It must be noted, though, that 34% of the presidents responded that formula funding had been of no assistance.

In regard to formulas making budget requests more easily understood and comprehended by the Legislature, there were varying viewpoints held by the two surveyed groups. Sixty-two percent of the university presidents felt that formulas

TABLE 5.6
FORMULA FUNDING IN TEXAS

Characteristics	Respondent	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
4.1 Have assisted the Leg. in the analysis of higher ed needs.	University President	6% (1)	56% (10)	6% (1)	28% (5)	6% (1)	.278
	University Fiscal Officer	5% (1)	76% (16)	14% (3)	5% (1)	0% (0)	.810
4.2 Budget request more easily understood because of formulas.	University President	0% (0)	33% (6)	6% (1)	56% (10)	6% (1)	-.337
	University Fiscal Officer	5% (1)	52% (11)	14% (3)	29% (6)	0% (0)	.333
4.5 Have brought a better relationship with the Leg. / easily understood	University President	6% (1)	39% (7)	17% (3)	33% (6)	6% (1)	.056
	University Fiscal Officer	0% (0)	43% (9)	24% (5)	29% (6)	5% (1)	.048
4.3 Have helped bring equity in funding.	University President	6% (1)	28% (5)	17% (3)	33% (6)	17% (3)	-.278
	University Fiscal Officer	5% (1)	48% (10)	5% (1)	43% (9)	0% (0)	.143
4.4 Have helped higher ed operate more economically and efficiently.	University President	0% (0)	17% (3)	22% (4)	56% (10)	6% (1)	-.500
	University Fiscal Officer	0% (0)	14% (3)	33% (7)	48% (10)	5% (1)	-.429
4.6 Result in more adequate levels of support.	University President	17% (3)	61% (11)	0% (0)	17% (3)	6% (1)	.667
	University Fiscal Officer	5% (1)	48% (10)	14% (3)	29% (6)	5% (1)	.190
4.7 Help minimize institutional rivalry.	University President	11% (2)	39% (7)	11% (2)	33% (6)	6% (1)	.167
	University Fiscal Officer	24% (5)	43% (9)	10% (2)	24% (5)	0% (0)	.667
4.8 Utilize and measure enrollment as best can be.	University President	11% (2)	28% (5)	11% (2)	44% (8)	6% (1)	-.056
	University Fiscal Officer	10% (2)	71% (15)	5% (1)	10% (2)	5% (1)	.714
4.9 Funding matrix properly measures differences.	University President	6% (1)	17% (3)	11% (2)	50% (9)	17% (3)	-.556
	University Fiscal Officer	10% (2)	19% (4)	24% (5)	38% (8)	10% (2)	-.190

Means are computed on values: Strongly Agree (2); Agree (1); Neutral (0); Disagree (-1); Strongly Disagree (-2)

had provided no assistance in analysis of budget requests, compared to 57% of the CFOs agreeing that assistance had been provided. In both groups there was approximately one-third of the group whose opinions differed.

Both groups had near the same response rates in regards to formulas bettering the relationship with the Legislature because of formulas; 45% of the

presidents and 43% of the fiscal officers agreed, while an almost equal part of the groups disagreed, 39% and 34%, respectively.

An assessment of formula funding bringing “equity” to state public higher education institutions in Texas was addressed by four survey statements. Respondents had varying viewpoints that formula funding had helped bring equity to funding; the survey population differed in their responses when asked if formulas had resulted in more adequate levels of support. Both groups did generally disagree with the statement that formulas had helped higher education operate in a more economically and efficient manner. When asked if formulas had helped to minimize institutional rivalry over allocation of funding, both groups’ mean showed a positive correlation for the groups; the university presidents, however, showed a greater hesitancy not to agree when compared to the fiscal officers’ responses.

Focusing on specifics used in the Texas formula-funding process, the two groups were presented statements that assessed current formula structure. Eighty-one percent of the fiscal officers responded that they were generally pleased with the measurement of enrollment that is used in the Texas formula process, while only 39% of the university presidents agreed. Fifty percent of the university presidents responded that they did not agree with how enrollment was being measured and utilized in the formula process. The CEOs also voiced displeasure with the programmatic funding matrix that is currently used; 67% showed disagreement with the statement that the funding formula matrix is properly structured to measuring differences in the levels and types of instruction.

Fiscal officers had a 48% negative response rate on the matrix issue, while almost a quarter of the CFOs replied “neutrally.”

Table 5.7 addresses specific funding scenarios for the state’s public universities; also presented are political dynamics associated with funding higher education in Texas.

TABLE 5.7
FORMULA FUNDING / SPECIAL ITEM APPROPRIATION
TEXAS SETTING

Characteristics	Respondent	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
4.10 Increase in funding should be via the formula.	University President	22% (4)	50% (9)	22% (4)	0% (0)	6% (1)	.833
	University Fiscal Officer	29% (6)	29% (6)	19% (4)	19% (4)	5% (1)	.571
4.11 Increase in funding should be via lump sum appropriation.	University President	6% (1)	22% (4)	6% (1)	56% (10)	11% (2)	-.444
	University Fiscal Officer	5% (1)	24% (5)	38% (8)	33% (7)	0% (0)	.000
4.12 Special item appropriations distributed via “political clout.”	University President	39% (7)	61% (11)	0% (0)	0% (0)	0% (0)	1.389
	University Fiscal Officer	29% (6)	57% (12)	14% (3)	0% (0)	0% (0)	1.143
4.14 Seniority of member has impact upon special item dollars received.	University President	67% (12)	28% (5)	6% (1)	0% (0)	0% (0)	1.611
	University Fiscal Officer	43% (9)	48% (10)	10% (2)	0% (0)	0% (0)	1.333
4.13 Seniority of member has impact upon formula dollars received.	University President	17% (3)	11% (2)	0% (0)	61% (11)	11% (2)	-.389
	University Fiscal Officer	14% (3)	29% (6)	19% (4)	38% (8)	0% (0)	.190
4.15 Higher ed has received an equitable budget increase/20 years.	University President	0% (0)	11% (2)	28% (5)	37% (3)	22% (4)	-.722
	University Fiscal Officer	0% (0)	10% (2)	38% (8)	29% (6)	24% (5)	-.667
4.16 Formula funding has increased over past 20 years.	University President	0% (0)	61% (11)	22% (4)	17% (3)	0% (0)	.444
	University Fiscal Officer	5% (1)	57% (12)	10% (2)	29% (6)	0% (0)	.381
4.17 Special item appropriations have increased over past 20 years.	University President	22% (4)	56% (10)	17% (3)	0% (0)	6% (1)	.889
	University Fiscal Officer	10% (2)	67% (14)	19% (4)	5% (1)	0% (0)	.810

Means are computed on values: Strongly Agree (2); Agree (1); Neutral (0); Disagree (-1); Strongly Disagree (-2)

In regards to budgeting increases for higher education, the two groups had varying responses. Seventy-two percent of the university presidents agreed that an increase in funding for higher education should be through the formula, while only 28% of the CEOs believe an increase should be via a lump-sum amount to a specific institution. Fifty-eight percent of fiscal officers showed agreement that an increase in funding should be through the formula process. CFOs were almost evenly divided on the issue of increasing funding via a lump sum.

The seniority of an institution's legislative representative was the next item presented to the population. Both groups' answers reflect the fact that special items are highly political and dependent upon how much political power an institution's member wields. The political power, though, is restricted when it comes to formula dollars, especially in the eyes of the university presidents (72%). The fiscal officers' responses again equally vary amongst the group themselves.

One of the final issues presented to the participants of the study addressed general state support for higher education, both overall support and higher education specific. Both the university presidents' and fiscal officers' (61% and 53%) overall impression is that higher education has not received an equitable budgetary increase over the past twenty years when compared to other state agencies. It must be noted, though, that a rather large group of participants responded "neutrally", 28% and 38%, respectively. Both groups acknowledge

that formula funding and special item funding has increased over the past twenty years, more significantly for the ladder than for the first.

Assessing the change from the old Coordinating Board formulas used prior to the 75th Legislative Session (1997) to the current funding formulas created by Senator Ratliff, the following presents the formula-funding preference of the two groups:

Formula structure: Current formulas (Ratliff) or old Coordinating Board formulas?

RESPONDENT	RESPONSE RATE	Current (Ratliff) Formulas	Old CB Formulas	Neutral/ Same	Unsure
CEO	11 out of 18 (61%)	82% (9)	9% (1)	9% (1)	-----
CFO	18 out of 21 (86%)	67% (12)	17% (3)	11% (2)	6% (1)

Of the 61% of the CEOs that responded to the question, 82% prefer the new formulas to the previous ones. The CFOs had a much higher response rate to the question (86%); the majority (67%) of the CFOs prefer the newer funding methodology.

CHAPTER SIX CONCLUSION

This chapter reviews the results that were presented in Chapter Five. An overall assessment of the view of from state public university presidents and their respective chief financial officer is summarized using the exploratory categories set forth by the conceptual framework.

Based on varying responses rates for the different groups, only those responses that had a mean of .4 or higher were grouped as "agreeing;" those that had an overall mean of less than .4 were classified as not in agreement. A response rate had to include a unified response rate (both from the CEO and the CFO) from both groups for it to be considered "in agreement."

BUDGETING – General Characteristics

Both groups of respondents showed an agreement with the finding of the budgeting literature. Responses supported the overall statement that budgeting is a "political phenomenon" and is based on past decision-making. University presidents and fiscal officers feel that getting an item into the base bill is the most effective way of getting a new item funded, but the group also agreed that the base bill is scrutinized.

BUDGETING: ITS IMPACT UPON HIGHER EDUCATION – General Characteristics

Higher education funding can be described as political, based on the responses gathered. University presidents and fiscal officers feel that the role of

higher education in society impacts the way that higher education is perceived by members of the Legislature; higher education is held to a different standard than are other state agencies because of the perceived role. Budget requests for higher education, however, are not treated any differently than those of other state agencies.

FORMULA FUNDING – General Characteristics

Based on the responses submitted, it seems that Texas' university presidents and fiscal officers are well versed in the theoretical aspect of what formula funding is supposed to encompass. Both groups showed familiarity with the required characteristics of formulas, and seemed well versed on the proper use of formulas. Responses did show a lack of general knowledge for the fact that formulas should not be used to craft public policy or spending budgets. Responses varied on the issue of equity; university fiscal officers realized that equity was a necessary outcome for formula funding, while the university presidents tended to be more neutral on the issue.

FORMULA FUNDING IN TEXAS – General Characteristics

The inquiry into this specific category showed different viewpoints between the two survey groups. Based on these varying viewpoints, the responses that were collected showed that formula funding has not brought with it a better working relationship with the Legislature. Equity among the general academic institutions has not been a result of formula funding, and it has also not ensured that higher education operates in an economic and efficient way.

Enrollment and the funding matrix used in formula funding in higher education are viewed differently in each of the administrators' eyes.

Regarding funding issues for higher education in the state, both CEOs and CFOs agreed that an increase in funding should be via an increase in the dollar amount that is run through the formula. Both groups agreed that based on the seniority or position of an institution's individual district Representative/Senator, the political influence that those members wield has a direct impact upon the special item dollar amount that an institution may receive. Both groups of respondents acknowledged that they prefer the current "Ratliff" formulas to the old Coordinating Board formulas.

STRENGTHS AND WEAKNESSES OF THE STUDY

The research gathered by this study analyzed the viewpoints and perceptions of university presidents and university chief financial officers of Texas' general academic institutions. Based on the response rate for both populations, the study is considered a "valid" statewide assessment as defined by Babbie. There is, however, one factor that worries the author. Institutional classification was not taken into account in the research. Based on varying roles and missions of universities in Texas, "regional" institutions could skew the results if all the regional institutions submitted a response, while the doctoral/research universities did not have time to respond to the survey. Based on this premise, survey results could possibly reflect bias if a group of institutions responded with a higher frequency. By choosing to keep the survey anonymous,

though, the results have a higher probability of reflecting the held viewpoints of the survey group. It was this trade-off that set the methodology for this project

Another possible flaw in the results could possibly lie in the fact that when the mean response rate was compared for agreement/disagreement for the CEO and CFO, the comparison of the mean could again be biased based on institutional classification. An increased frequency in responses from CFOs of comprehensive universities could affect the comparison of the means if the response rate of CEOs of comprehensive universities was lower than that of respective CFOs. If this situation did occur, the results would show a variance in the responses from both groups.

In order to properly compare the anonymous results from both the CEO and CFO group, a second survey could be sent out. This secondary survey would not be anonymous, thus a bias based on institutional classification could be detected. The results could then be compared to those of an anonymous survey.

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APPENDIX A

Texas Public State Higher Education Institutions General Academics

Texas A&M University
Prairie View A&M University
Tarleton State University
TAMU-Corpus Christi
TAMU-Kingsville
Texas A&M International University
West Texas A&M University
TAMU-Commerce
TAMU-Texarkana

UT-Arlington
UT-Austin
UT-Dallas
UT-El Paso
UT-Pan American
UT-Brownsville
UT-Permian Basin
UT-San Antonio
UT-Tyler

University of Houston
UH-Clear Lake
UH-Downtown
UH-Victoria
Midwestern State University
University of North Texas
Stephen F Austin
Texas Southern University

Texas Tech University
Texas Women's University

Angelo State University
Lamar University-Beaumont
Lamar University-Orange
Lamar University-Port Arthur
Sam Houston State University
Southwest Texas State University
Sul Ross State University

APPENDIX B

**General Academic Funding for Public State Institutions
of Higher Education
as Appears in
HB 1, 76th Legislative Session**

**SPECIAL PROVISIONS RELATING ONLY TO STATE AGENCIES
OF HIGHER EDUCATION**
(Continued)

2000-01 biennium for the purpose of defeasing and making debt service payments on the outstanding General Obligation bonds described herein.

Sec. 30. Ethics Policy.

1. None of the funds appropriated by this Act may be expended by an institution of higher education until its governing board has filed with the Texas Higher Education Coordinating Board an ethics policy which has been adopted by the board of regents. The ethics policy shall apply to the board of regents and its staff, the administration, staff, and faculty of the institutions under the board's governance.
2. The ethics policy adopted by each board of regents shall include specific provisions regarding sexual harassment.

Sec. 31. Driscoll Children's Hospital. No funds appropriated to a health-related institution of higher education shall be used to replace or duplicate the Driscoll Children's Hospital in caring for children with special health-care needs, including pediatric cardiovascular diseases or in assuming the direct care of those children. It is legislative intent that this rider language not restrict the traditional referral patterns, utilized by physicians to refer patients to health-related institutions.

Sec. 32. Participation in Drug Development Research Projects. A public university may not expend funds appropriated by this Act, including appropriations of grants or gifts, to conduct a drug development research protocol involving a person who is receiving mental health services under a protective custody order, pursuant to Chapter 574, Health and Safety Code. This rider is not intended to limit or prohibit provisions for treatment established under Section 576.022, Health and Safety Code.

Sec. 33. Post Tenure Review. None of the funds appropriated by this Act may be expended by an institution of higher education until its governing board has filed with the Texas Higher Education Coordinating Board policies and procedures regarding post tenure review which have been adopted by the board of regents. Post tenure policies shall include review procedures to determine that a tenured faculty member is performing consistently at an acceptable, professional level and a mechanism whereby a faculty member is informed of any deficiencies and provided opportunities to effectively improve his or her performance.

Sec. 34. General Academic Funding. Funding for general academic institutions will consist of four formulas and supplemental items.

1. **Instruction and Operations Formula.** The Instruction and Operations Formula shall provide funding for faculty salaries, including nursing, departmental operating expense, library, instructional administration, research enhancement, student services, and institutional support. These funds are distributed on a weighted semester credit hour basis. The rate per weighted semester credit hour for the 2000-01 biennium is \$54.44.

Weighting is determined by the following matrix:

**SPECIAL PROVISIONS RELATING ONLY TO STATE AGENCIES
OF HIGHER EDUCATION
(Continued)**

	Lower Division	Upper Division	Masters	Doctoral	Special Professional
Liberal Arts	1.00	1.96	3.94	12.04	
Science	1.53	3.00	7.17	19.29	
Fine Arts	1.85	3.11	6.51	17.47	
Teacher Ed	1.28	1.96	3.23	9.95	
Agriculture	2.05	2.54	6.64	16.37	
Engineering	3.01	3.46	8.20	21.40	
Home Economics	1.58	2.12	4.34	10.79	
Law					3.22
Social Services	1.64	1.84	5.80	11.92	
Library Science	1.45	1.52	4.22	12.26	
Vocational Training	1.45	2.59			
Physical Training	1.36	1.36			
Health Services	2.87	3.46	6.47	15.98	
Pharmacy	4.00	4.64	7.55	19.11	13.43
Business Admin	1.41	1.59	4.59	13.91	
Optometry			5.46	19.12	7.00
Teacher Ed Practice	2.43	2.57			
Technology	1.99	2.56	6.61		
Nursing	4.91	5.32	6.49	16.32	

2. **Teaching Experience Supplement.** For the 2000-2001 biennium, an additional weight of five percent is added to lower division and upper division semester credit hours taught by tenured and tenure-track faculty. Furthermore, it is the intent of the Legislature that the weight shall increase by ten percent per biennium, up to 50 percent.

**SPECIAL PROVISIONS RELATING ONLY TO STATE AGENCIES
OF HIGHER EDUCATION**
(Continued)

3. **Growth Supplement.** Universities projected by the Coordinating Board to experience growth in headcount enrollment from Fall 1998 to Fall 2000 will receive a \$1,435 supplement for each additional student forecasted to enroll during that time period. The supplement is based on the amount of general revenue funding per student generated by the instruction and operations formula.
4. **Infrastructure Support.** Funding associated with plant-related formulas and utilities shall be distributed by the infrastructure support formula which is driven by the predicted square feet for universities' educational and general activities produced by the Space Projection Model developed by the Coordinating Board. The portion of the formula related to utilities is adjusted to reflect differences in unit costs for purchased utilities, including electricity, natural gas, water and wastewater and thermal energy. The average rate per square foot is \$7.26.
5. **Supplemental Non-formula Items.** Institutions shall receive a direct reimbursement as applicable for staff group insurance (other educational and general income portion), workers' compensation insurance, unemployment compensation insurance, public education grants, 50 percent of indirect research costs recovered on grants, organized activities, scholarships, tuition revenue bond payments, Skiles Act bond payments, and facility lease charges. Institutions may receive an appropriation for special items. Revenue derived from board authorized tuition would still be appropriated to the institutions levying the additional charges.

These formulas and supplemental items shall be reviewed and updated by study committees appointed by the Higher Education Coordinating Board and recommended changes forwarded to the Legislature, Legislative Budget Board, and Governor's Office of Budget and Planning by June 1, 2000.

Sec. 35. Health Related Institutions Funding. Funding for health related institutions shall consist of three formulas plus supplemental non-formula items.

1. **Instruction and Operations Support Formula.** The Instruction and Operations Support Formula shall provide funding on a per student or full time equivalent basis. Funding for each instructional program is based on the following funding weights per student, with a base value per weighted student of \$11,383:

<u>Program</u>	<u>Weight Per Student</u>
Allied Health	1.000
Biomedical Science	1.018
Nursing	1.138
Pharmacy	1.670
Public Health	1.721
Dental	4.601
Medical	4.753

Instructional programs with enrollments of less than 200 students at individual campuses shall receive additional funding to compensate for the diseconomies of scale. The minimum formula shall generate additional funding per student, on a sliding scale, with programs with small enrollments receiving more additional funding per student.

2. **Infrastructure Support Formula.** Funding to the health-related institutions for plant support and utilities shall be distributed by the infrastructure support formula which is driven by the predicted square feet for the health related institutions produced by the Space Projection Model developed by the Texas Higher Education Coordinating Board. The rate per square foot is \$11.18 for all health related institutions, excluding The University of Texas M. D. Anderson

APPENDIX C

**Bill Pattern for Southwest Texas State University
as Appears in
HB 1, 76th Legislative Session**

SAM HOUSTON STATE UNIVERSITY
(Continued)

Law Enforcement Management Institute Account No. 581, estimated	<u>3,708,000</u>	<u>3,819,000</u>
Subtotal, General Revenue Fund - Dedicated	<u>\$ 16,237,607</u>	<u>\$ 16,938,146</u>
Total, Method of Financing	<u>\$ 53,169,607</u>	<u>\$ 52,401,168</u>

2. **Criminal Justice Center.** From the funds appropriated above, the University is directed to continue the Criminal Justice Center operations at a minimum level of \$800,000 per year.
3. **Criminal Justice Center Faculty Salaries.** It is the intent of the Legislature that Sam Houston State University may augment the base salaries of faculty members at the Criminal Justice Center from a grant or consulting contract, as provided by law. Sam Houston State University must include a report of any salaries that have been augmented and the amount of the augmentation in the request for legislative appropriations submitted to the Legislative Budget Board and Governor's Office of Budget and Planning for the biennium ending August 31, 2001.
4. **Center for Business and Economic Development.** Included in the appropriation above to Sam Houston State University is \$160,125 in each year of the biennium for the Center for Business and Economic Development, or its equivalent due to special and general provisions of this Act, contingent upon certification by the Comptroller of Public Accounts that increased activity by the Center for Business and Economic Development will generate at least \$320,250 for the biennium in additional revenue to the General Revenue Fund. It is the intent of the Legislature that state funds provided to the Center for Business and Economic Development be used by the center to attract federal funds on a dollar-for-dollar basis.

SOUTHWEST TEXAS STATE UNIVERSITY

	For the Years Ending August 31, 2000	August 31, 2001
1. Educational and General State Support	<u>\$ 86,534,361</u>	<u>\$ 87,489,565</u>
Grand Total, SOUTHWEST TEXAS STATE UNIVERSITY	<u>\$ 86,534,361</u>	<u>\$ 87,489,565</u>
Method of Financing:		
General Revenue Fund	\$ 62,971,051	\$ 62,858,784
<u>General Revenue Fund - Dedicated</u>		
Estimated Statutory Tuition Increases Account No. 708	1,244,893	2,489,786
Estimated Other Educational and General Income Account No. 770	<u>22,318,417</u>	<u>22,140,995</u>
Subtotal, General Revenue - Dedicated	<u>\$ 23,563,310</u>	<u>\$ 24,630,781</u>
Total, Method of Financing	<u>\$ 86,534,361</u>	<u>\$ 87,489,565</u>

SOUTHWEST TEXAS STATE UNIVERSITY
(Continued)

Number of Full-time Equivalent Positions (FTE) - Appropriated Funds	1,652.0	1,652.0
Number of Full-time Equivalent Positions (FTE) - Total	2,547.0	2,553.0

1. **Informational Listing of Appropriated Funds.** The appropriations made above for Educational and General State Support are subject to the special and general provisions of this Act and include the following amounts for the purposes indicated.

A. Goal: INSTRUCTION/OPERATIONS

Provide Instructional and Operations Support

Outcome (Results/Impact):

State Pass Rate of Education EXCET Exam	95%	95%
Percent of First-time, Full-time, Degree-seeking Freshmen Who Earn a Baccalaureate Degree Within Six Academic Years	36%	36%
Retention Rate of First-time, Full-time, Degree-seeking Freshmen Students After One Academic Year	71%	71%
Dollar Value of External or Sponsored Research Funds (in millions)	7.1	7.3
Percent of Lower Division Courses Taught by Tenured Faculty	45%	47%
Percent of Baccalaureate Graduates Who Are First Generation College Graduates	49.5%	49.5%
Administrative Cost As a Percent of Total Expenditures	10%	10%

A.1.1. Strategy: OPERATIONS SUPPORT	\$ 57,075,847	\$ 58,052,048
A.1.2. Strategy: TEACHING EXPERIENCE SUPPLEMENT	\$ 1,431,982	\$ 1,456,474
A.1.3. Strategy: GROWTH SUPPLEMENT	\$ 981,100	\$ 997,881
A.1.4. Strategy: STAFF GROUP INSURANCE PREMIUMS	\$ 1,162,657	\$ 1,249,856
A.1.5. Strategy: TEXAS PUBLIC EDUCATION GRANTS	\$ 4,040,968	\$ 4,237,324
A.1.6. Strategy: INDIRECT COST RECOVERY	\$ 220,000	\$ 220,000
Indirect Cost Recovery for Research Related Activities		
A.1.7. Strategy: ORGANIZED ACTIVITIES	\$ 856,277	\$ 856,277
A.1.8. Strategy: CAPITAL EQUITY & EXCELLENCE FUNDING	<u>\$ 1,513,467</u>	<u>\$ 1,513,467</u>
Capital Equity and Excellence Funding		
Total, Goal A: INSTRUCTION/OPERATIONS	<u>\$ 67,282,298</u>	<u>\$ 68,583,327</u>

B. Goal: INFRASTRUCTURE SUPPORT

Provide Infrastructure Support

B.1.1. Strategy: E & G SPACE SUPPORT	\$ 13,296,576	\$ 13,523,995
Educational and General Space Support		
B.1.2. Strategy: TUITION REVENUE BOND RETIREMENT	\$ 2,110,235	\$ 2,105,141
B.1.3. Strategy: SKILES ACT REVENUE BOND RETIREMENT	<u>\$ 268,360</u>	<u>\$ 268,360</u>
Retirement		
Total, Goal B: INFRASTRUCTURE SUPPORT	<u>\$ 15,675,171</u>	<u>\$ 15,897,496</u>

SOUTHWEST TEXAS STATE UNIVERSITY
(Continued)

C. Goal: SPECIAL ITEM SUPPORT

Provide Special Item Support

C.1.1. Strategy: GEOGRAPHY EDUCATION Improvement of Geography Education	\$ 50,000	\$ 50,000
C.1.2. Strategy: TECHNOLOGY INITIATIVE North Austin Technology Initiative	\$ 500,000	\$ 500,000
C.2.1. Strategy: EDWARDS AQUIFER RESEARCH Edwards Aquifer Research and Data Center	\$ 247,161	\$ 247,161
C.2.2. Strategy: LONG-TERM HEALTH CARE Institute for Quality Improvement in Long-Term Health Care	\$ 167,808	\$ 167,808
C.3.1. Strategy: TEXAS RIVERS CENTER Develop Texas Rivers Center - Educational/ Interpretive Center	\$ 500,000	\$ 500,000
C.4.1. Strategy: INSTITUTIONAL ENHANCEMENT	\$ 1,543,773	\$ 1,543,773
C.4.2. Strategy: FLOOD DAMAGE REPAIR REIMBURSEMENT	\$ 568,150	\$ 0

Total, Goal C: SPECIAL ITEM SUPPORT	<u>\$ 3,576,892</u>	<u>\$ 3,008,742</u>
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Grand Total, SOUTHWEST TEXAS STATE UNIVERSITY	<u>\$ 86,534,361</u>	<u>\$ 87,489,565</u>
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Method of Financing:

General Revenue Fund	\$ 62,971,051	\$ 62,858,784
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General Revenue Fund - Dedicated

Estimated Statutory Tuition Increases Account No. 708	1,244,893	2,489,786
Estimated Other Educational and General Income Account No. 770	<u>22,318,417</u>	<u>22,140,995</u>

Subtotal, General Revenue - Dedicated	<u>\$ 23,563,310</u>	<u>\$ 24,630,781</u>
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Total, Method of Financing	<u>\$ 86,534,361</u>	<u>\$ 87,489,565</u>
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2. **Freeman Ranch.** Out of the amounts appropriated above in informational item A.1.7. Organized Activities, \$131,531 in each year of the biennium shall be used for the Freeman Ranch.

SUL ROSS STATE UNIVERSITY

	For the Years Ending	
	August 31, 2000	August 31, 2001
1. Educational and General State Support	\$ 18,039,304	\$ 15,347,954
Grand Total, SUL ROSS STATE UNIVERSITY	<u>\$ 18,039,304</u>	<u>\$ 15,347,954</u>

APPENDIX D

COPIES OF THE FOLLOWING:

- **Cover letter sent to all university presidents and chief financial officers;**
- **Copy of survey; and**
- **Copy of follow-up e-mail and survey**

February 11, 2000

Mr. Juan Sandoval
Vice President for Finance and Administration
UT El Paso
500 West University Administration Building, Room 303
El Paso, TX 79968-0502

Mr. Sandoval;

You have been selected to participate in a study that is being conducted for an Applied Research Project at Southwest Texas State University in fulfillment of completion for the requirements of a master's of public administration. ***Your assistance is needed to complete this important study.*** The purpose of the study is to describe the attitudes and perceptions of higher education officials (specifically, university presidents and their respective chief financial officer) in regards to budgeting and formula funding in the state of Texas.

Every public university president and their respective CFO have been sent a copy of the attached survey. I respect your time and have attempted to make this questionnaire as SHORT AS POSSIBLE. The survey consists of several check-the-box questions, along with two open-ended questions. The survey should take no longer than 15 minutes to complete. Please review the instructions and complete the items thoroughly. Once completed, simply place the survey in the provided envelope and place it in "outgoing mail."

I will be sending out a reminder notice in two weeks via email. If you would prefer to answer the survey electronically, a copy of this survey will be sent in the email at that time. Your response will require only the selection of the "REPLY" button. Please choose the method of response that is more convenient for you.

This questionnaire serves as a scholastic inquiry designed to evaluate the attitudes and perceptions of university administrators; the survey responses will be kept strictly anonymous. The results, when measured, will in no way reflect specific institutions' or individuals' responses. If you would like a summary of the results upon completion, please fill out the information that is found at the end of the survey.

Thank you for taking the time to be a part of this academic study.

Sincerely,



David Rejino
MPA Student, Southwest Texas State University

Beside each of the statements below,
please mark the box that best reflects
your opinion of the said statement.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

THE BUDGETING PROCESS

*Please judge the following statements that relate to
general concepts of budgeting.*

1. The budgeting process can be described as a "political phenomena."
2. The current biennial budget incorporates many of the decisions previously made in the budgetary process.
3. An item that is funded once vastly increases the chances that it will be funded again.
4. The most effective way to get a newly funded item is to get it incorporated into the base bill.
5. The base bill is subject to intense scrutiny.
6. Agencies/institutions can expect to receive roughly the same appropriation as what was received in the previous biennium (depending on availability of funding).

HIGHER EDUCATION IN THE BUDGETING PROCESS (TEXAS PERSPECTIVE)

1. Higher education is viewed in a different manner (due to the role and benefit to society) by members of the Legislature than are other state agencies.
2. Budget requests for higher education are scrutinized more by the Legislature when compared to other state agencies' budget request.
3. The Legislature holds higher education to a different standard than other state agencies because of the role and mission that higher education has.
4. The Legislature is more open to budgetary increases for higher education because of the role that higher education plays in society.
5. Higher education funding is political.
6. Tuition and fee increases must be politically thought out (contemplated) before implementation.

**Beside each of the statements below,
please mark the box that best reflects
your opinion of the said statement.**

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
GENERAL CHARACTERISTICS OF FORMULA FUNDING					
1. Quantitative definability is necessary if a formula is to serve a useful purpose.					
2. Sensitivity to change (responsiveness) is necessary if a formula is to serve a useful purpose.					
3. Adaptability (flexibility) is necessary if a formula is to serve a useful purpose.					
4. Comparability is necessary if a formula is to serve a useful purpose.					
5. Understanding the "structure" and creation of the formula is necessary if a formula is to be serve a useful purpose.					
6. Equity is a necessary outcome of formulas.					
7. Stability (among what is being funded) is a necessary outcome of formulas.					
8. Formulas should be used to craft public policy.					
9. Formulas should be utilized to formulate appropriation requests.					
10. Formulas should be utilized to formulate spending budgets.					
11. Formulas recognize economies of scale.					
12. Formulas place too much emphasis on "fundable" units without regard to quality.					
13. Formulas encourage nontraditional and noncredit instruction.					
FORMULA FUNDING CHARACTERISTICS IN THE STATE OF TEXAS					
1. Formulas have assisted the Legislature in the analysis of higher education's budgetary needs.					
2. Budget requests for higher education are now more easily understood and comprehended by the Legislature due to the use of formula funding.					
3. Formulas have helped bring equity in funding for state public institutions of higher education in the state of Texas.					
4. Formulas have helped to provide a greater assurance that higher education operates more economically and efficiently.					

**Beside each of the statements below,
please mark the box that best reflects
your opinion of the said statement.**

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5. Formulas have brought with them a better relationship with the Legislature due to the fact that the funding is more easily understood.					
6. Formulas result in more adequate levels of support for all institutions, not merely those with political clout.					
7. Formulas help minimize institutional rivalry and conflict between state officials and institutions for competition of funds.					
8. The formula process in Texas utilizes and measures enrollment as best can be in the formula process.					
9. The funding matrix (weighted) properly measures differences in the levels and type of instruction.					
10. An increase in funding for higher education should be via an increase in the amount of money that is run through the formula.					
11. An increase in funding for higher education should be via a lump sum appropriation to specific institutions.					
12. Special item appropriations are distributed via the "political clout" that a specific institution has.					
13. The seniority or position of institutions' Representatives/Senators has a direct implication upon the amount of formula dollars received.					
14. The seniority or positions of institutions' Representatives/Senators has a direct implication upon the amount of special item dollars received.					
15. Higher education has received an equitable budgetary increase over the past twenty years when compared to other state agencies.					
16. Formula funding for higher education has increased over the past twenty years.					
17. Special item appropriations have increased over the past twenty years.					

Please list the top three reasons why formula funding (the general characteristics) has benefited the state of Texas.

1. _____

2. _____

3. _____

If you could change three things about the current formula structure, what would you recommend be addressed?

1. _____

2. _____

3. _____

If one could decide upon a formula funding methodology based solely on FORMULA STRUCTURE to be utilized in the state of Texas for higher education, which would one select: the formulas used prior to the FY 98-99 biennium (old Coordinating Board formulas) or the current formulas (Ratliff formulas)?

THANK YOU for taking the time to complete this questionnaire. Your comments and input are valuable to this project and your effort is GREATLY appreciated.

Please return the survey by March 6, 2000 within the self-addressed, stamped envelope. Since this is an anonymous instrument, your name and return address are not necessary.

If you would like to receive a copy of the results of this study, please send an e-mail message to d-rejino@tamu.edu or write to the address printed on the return envelope.

Subject: FORMULA FUNDING SURVEY

Date: Mon, 06 Mar 2000 17:07:01 -0600

From: David Rejino <d-rejino@tamu.edu>

Organization: TAMUS, Office of Governmental Relations

To: r-bowen@tamu.edu, castillo@dt.uh.edu, ms-dunn@tamuk.edu, President@po.utexas.edu, Robert-Furgason@tamucc.edu, GVGARCIA@UTB1.UTB.EDU, Don.Haragan@TTU.EDU, HAYNESK@JADE.VIC.UH.EDU, stephen.hensley@tamut.edu, President@Angelo.edu, juanita_turner@pvamu.edu, Hurley@abn.unt.edu, fjenifer@utdallas.edu, Jennett@tamiu.edu, KrienkerRD@hal.lamar.edu, DWOODARD@WTAMU.EDU, rmabry@mail.uttyl.edu, Mark@shsu.edu, McCabe@Tarleton.edu, Keith_McFarland@tamu-commerce.edu, womma_cl@lupa02.lamar.edu, rvmorgan@sulross.edu, dnatalicio@utep.edu, MN38F1@PANAM.EDU, President@nexus.mwsu.edu, president@utsa.edu, SHAHANJM@LUB002.LAMAR.EDU, simmojmLUB002.LAMAR.EDU@tamu.edu, evans_ct@tsu.edu, aksmith@uhl.edu, rksmith@sfasu.edu, sorber_c@utpb.edu, STAPLES@UHCL4.CL.UH.EDU, astuart@twu.edu, JS01@al.swt.edu, witt@uta.edu

This past February, each one of you individually received a letter from myself, explaining that you had been selected to participate in a study that is being conducted for an Applied Research Project at Southwest Texas State University in fulfillment of completion for the requirements of a master's of public administration. The purpose of the study is to describe the attitudes and perceptions of higher education officials (specifically, university presidents and their respective chief financial officer) in regards to budgeting and formula funding in the state of Texas. I would like to thank everyone who has taken the time to complete the survey; your participation in this study is greatly appreciated.

In the solicitation letter, I stated that I would be following up the hard copy with an electronic copy of the survey via e-mail; please find below a copy of the survey. If you have already completed the survey, please disregard this message. For those who have yet to submit your answers, this e-mail should provide an easy means of response—just select the "REPLY" button and mark your responses. The survey consists of several check-the-box questions, along with two open-ended questions. The survey should take no longer than 15 minutes to complete.

This questionnaire serves as a scholastic inquiry designed to evaluate the attitudes and perceptions of university administrators; the survey responses will be kept strictly anonymous. The results, when measured, will in no way reflect specific institutions' or individuals' responses.

Thank you again for taking the time to be a part of this academic study. Your responses are greatly appreciated.

Sincerely,

David Rejino
MPA Student, Southwest Texas State University
e-mail: d-rejino@tamu.edu

Below each of the statements, please mark the line that best reflects your opinion of the said statement.

FORMULA FUNDING SURVEY

THE BUDGETING PROCESS

Please judge the following statements that relate to general concepts of budgeting.

1. The budgeting process can be described as a "political phenomena."
STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____
2. The current biennial budget incorporates many of the decisions previously made in the budgetary process.
STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____
3. An item that is funded once vastly increases the chances that it will be funded again.
STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____
4. The most effective way to get a newly funded item is to get it incorporated into the base bill.
STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____
5. The base bill is subject to intense scrutiny.
STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____
6. Agencies/institutions can expect to receive roughly the same appropriation as what was received in the previous biennium (depending on availability of funding).
STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____

HIGHER EDUCATION IN THE BUDGETING PROCESS (TEXAS PERSPECTIVE)

1. Higher education is viewed in a different manner (due to the role and benefit to society) by members of the Legislature than are other state agencies.
STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____
2. Budget requests for higher education are scrutinized more by the Legislature when compared to other state agencies' budget request.
STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____
3. The Legislature holds higher education to a different standard than other state agencies because of the role and mission that higher education has.
STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____
4. The Legislature is more open to budgetary increases for higher education because of the role that higher education plays in society.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

5. Higher education funding is political.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

6. Tuition and fee increases must be politically thought out (contemplated) before implementation.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

GENERAL CHARACTERISTICS OF FORMULA FUNDING

1. Quantitative definability is necessary if a formula is to serve a useful purpose.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

2. Sensitivity to change (responsiveness) is necessary if a formula is to serve a useful purpose.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

3. Adaptability (flexibility) is necessary if a formula is to serve a useful purpose.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

4. Comparability is necessary if a formula is to serve a useful purpose.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

5. Understanding the "structure" and creation of the formula is necessary if a formula is to serve a useful purpose.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

6. Equity is a necessary outcome of formulas.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

7. Stability (among what is being funded) is a necessary outcome of formulas.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

8. Formulas should be used to craft public policy.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

9. Formulas should be utilized to formulate appropriation requests.

FORMULA FUNDING SURVEY

STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____

10. Formulas should be utilized to formulate spending budgets.

STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____

11. Formulas recognize economies of scale.

STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____

12. Formulas place too much emphasis on "fundable" units without regard to quality.

STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____

13. Formulas encourage nontraditional and noncredit instruction.

STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____

FORMULA FUNDING CHARACTERISTICS IN THE STATE OF TEXAS

1. Formulas have assisted the Legislature in the analysis of higher education's budgetary needs.

STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____

2. Budget requests for higher education are now more easily understood and comprehended by the Legislature due to the use of formula funding.

STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____

3. Formulas have helped bring equity in funding for state public institutions of higher education in the state of Texas.

STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____

4. Formulas have helped to provide a greater assurance that higher education operates more economically and efficiently.

STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____

5. Formulas have brought with them a better relationship with the Legislature due to the fact that the funding is more easily understood.

STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____

6. Formulas result in more adequate levels of support for all institutions, not merely those with political clout.

STRONGLY AGREE _____ AGREE _____
NEUTRAL _____
DISAGREE _____ STRONGLY DISAGREE _____

7. Formulas help minimize institutional rivalry and conflict between

state officials and institutions for competition of funds.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

8. The formula process in Texas utilizes and measures enrollment as best can be in the formula process.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

9. The funding matrix (weighted) properly measures differences in the levels and type of instruction.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

10. An increase in funding for higher education should be via an increase in the amount of money that is run through the formula.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

11. An increase in funding for higher education should be via a lump sum appropriation to specific institutions.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

12. Special item appropriations are distributed via the "political clout" that a specific institution has.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

13. The seniority or position of institutions' Representatives/Senators has a direct implication upon the amount of formula dollars received.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

14. The seniority or positions of institutions' Representatives/Senators has a direct implication upon the amount of special item dollars received.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

15. Higher education has received an equitable budgetary increase over the past twenty years when compared to other state agencies.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

16. Formula funding for higher education has increased over the past twenty years.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

17. Special item appropriations have increased over the past twenty years.

STRONGLY AGREE _____ AGREE _____
 NEUTRAL _____
 DISAGREE _____ STRONGLY DISAGREE _____

FORMULA FUNDING SURVEY

Please list the top three reasons why formula funding (the general characteristics) has benefited the state of Texas.

1. _____
2. _____
3. _____

If you could change three things about the current formula structure, what would you recommend be addressed?

1. _____
2. _____
3. _____

If one could decide upon a formula funding methodology based solely on FORMULA STRUCTURE to be utilized in the state of Texas for higher education, which would one select: the formulas used prior to the FY 98-99 biennium (old Coordinating Board formulas) or the current formulas (Ratliff formulas)? _____

THANK YOU for taking the time to complete this questionnaire. Your comments and input are valuable to this project and your effort is GREATLY appreciated.

If you would like to receive a copy of the results of this study, please send me a message and I will be more than happy to share with you a copy of the completed study.

David Rejino <d-rejino@tamu.edu>
Special Assistant for Governmental Relations
The Texas A&M University System
Office of Governmental Relations

APPENDIX E

- **Results from open ended survey responses (not used in analysis)**
- **EXCEL spreadsheet used to code survey questionnaire statements.**

UNIVERSITY PRESIDENTS

#1

PROS

Uniform distribution

Planning/budgeting can be projected provided enrollments are stable or growing

Equity in distribution

CHANGE

Emphasis on undergrad education

weigh factors that represent current salaries in various disciplines

base funding on actual facilities rather than projected needs

#2

PROS

More Rational

More Understandable

Allows Institutional planning

CHANGE

revise matrix to increase funding for undergrad education

continue to increase teaching experience supplement

#4

PROS

Negates political influence and seniority

CHANGE

Increase weights for undergrad education

teacher ed should be increased

formulas should provide a "floor guarantee" for smaller and mid-size schools.

#6

Pros

No one really understands the theoretical underpinnings of the formula, therefore no response

Change

Individualize each university based on mission and resources

fund areas of critical importance to state.

#7

PROS

Reduce role of Political power, can be measured, rewards production

Change

Increase matrix for undergrad ed, reduce matrix for doctoral level work, reduce impact of sudden declines in enrollment

#8

PROS

Distributes formula dollars via a common denominator - SCHs
Recognizes the relative difference in school size and funding levels

Change

increase funding for those with significant remedial educational responsibilities
fund formulas at 100%
reduce the impact of an institution's program mix relative to the funding dollars recommended by the formula.

#9

Change

study matrix - fewer categories and different weights
additional formula supplement to encourage "importing" degree programs from other universities

#10

PROS

diminish competition among institutions, reduce political process

CHANGE

More equitable

#11

Pros

increase likelihood that funding is based on quantifiable criteria instead of political clout
institution knows what the majority of the \$\$\$ will be prior to session
institution can make plans which will impact their funding

Cons

Use something beyond SCHs
funds be generated each enrollment period rather than base period

#12

Pros

rational - directly tied to cost
easily understood - road map
narrowed gap between "rich and poor"

Change

fund at full rate, provide mechanism for growth funding, aid "start-up" factor and encourage innovation

#13

Pros

sets a standard of funding for each program, enrollment and SCH are major components,
sets a standard of funding facilities

CHANGE

set a baseline of funding for opening and operating an institutions regardless of enrollment
increase funding for teacher ed, in particular, field-based teacher ed
permanent hold harmless clause to prevent institutions from receiving less than they did in a biennium

#14

PROS

methodical and consistent distribution

become the base for next allocation

Change

based on past activities, do not address public interest and policy, formulas place too much emphasis on growth

RESPONDENTS

RESPONDENTS																			
Questions	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9	No. 10	No. 11	No. 12	No. 13	No. 14	NEW #18	NEW #17	No. 15	TOTALS	
The Budget Process																			
1.1	1	1	1	2	1	1	2	-2	0	-1	1	1	1	1	2	1	-1	1	0.72222
1.2	1	2	1	2	2	1	2	2	1	1	1	1	1	1	2	1	0	1	1.27778
1.3	1	1	1	1	2	1	2	0	1	1	2	1	1	2	1	1	1	1	1.22222
1.4	-1	2	0	1	2	0	1	2	0	1	1	1	1	1	2	1	1	1	1
1.5	-1	2	-1	1	1	1	0	1	1	-1	none	1	0	1	1	1	1	-1	0.411765
1.6	-1	0	2	-1	1	2	-1	-1	-1	-1	1	1	1	2	0	2	-1	-1	0.333333
Higher Education in the Budgeting Process																			
2.1	1	1	2	2	2	-2	2	2	0	1	1	0	2	2	1	1	1	0	0.944444
2.2	1	0	2	0	-1	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	-0.16667
2.3	1	0	2	1	-1	0	2	-1	-1	-1	1	0	1	1	1	0	-1	-1	0.444444
2.4	-1	1	-1	-1	-1	-2	-1	-1	1	1	1	0	1	1	1	0	-1	-1	-0.05556
2.5	1	1	2	1	1	2	0	0	0	0	1	1	1	1	1	1	1	1	0.944444
2.6	1	1	1	1	1	1	2	0	1	1	-1	1	1	1	1	1	0	-1	0.72222
General Characteristics of Formula Funding																			
3.1	1	1	2	2	1	-2	-2	2	2	1	0	1	2	2	-1	2	0	2	0.833333
3.2	1	1	2	2	1	-2	1	2	1	1	1	1	1	2	1	2	1	1	1.16667
3.3	1	1	0	2	2	2	1	2	1	0	0	1	1	2	1	2	1	0	1.16667
3.4	-1	0	2	2	2	2	2	1	2	0	1	1	1	2	1	1	0	1	0.944444
3.5	-1	1	1	1	0	2	2	2	2	1	2	1	2	2	1	1	1	1	0.833333
3.6	-1	-1	1	2	1	2	2	2	2	1	2	1	0	2	1	-1	-1	-1	-0.16667
3.7	-1	1	1	2	1	-2	-2	1	1	-2	1	0	1	1	1	-1	-1	1	0.470588
3.8	-1	0	0	2	1	-2	-1	1	0	1	1	1	1	2	0	0	0	-2	0.16667
3.9	1	1	1	2	1	0	2	2	0	-1	-1	-1	1	1	2	0	1	1	0.833333
Formula Funding in the State of Texas																			
4.1	1	1	0	-1	-1	-2	1	1	1	1	2	1	1	1	-1	-1	1	1	0.27778
4.2	-1	0	0	1	1	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-0.33333
4.3	-1	1	0	1	1	-2	1	1	-1	-2	1	1	1	1	-1	-2	-1	-1	-0.27778
4.4	-1	1	1	0	1	-2	1	-1	-1	-1	2	0	0	0	-1	0	-1	-1	-0.5
4.5	-1	1	1	1	2	1	0	2	-1	-1	0	0	-1	-1	-1	-1	-1	-1	0.055556
4.6	-1	1	0	2	2	1	-2	1	-1	-1	2	1	1	1	1	1	1	1	0.055556
4.7	-1	-1	-1	-1	2	-2	1	1	-1	-1	2	1	1	1	-1	-1	-1	-1	0.16667
4.8	-1	-1	-1	1	2	-2	-2	-2	-1	-1	1	0	0	-1	1	-1	1	1	-0.055556
4.9	1	1	1	1	2	1	-2	1	2	1	2	1	0	-1	0	-1	-2	1	0.833333
4.11	-1	1	1	-1	2	2	-1	2	-1	-2	2	-1	-1	0	0	1	0	-1	-0.44444
4.12	1	1	2	2	-1	2	2	2	1	1	-1	-1	-1	1	1	2	2	1	1.38889
4.13	-1	-1	1	2	-2	1	-1	-1	1	-1	-1	-1	-1	-2	1	-1	-1	-1	-0.38889
4.14	2	1	2	2	1	2	2	2	1	0	2	2	2	1	2	2	2	1	1.61111
4.15	-1	0	-1	-1	-2	1	-2	-2	0	-1	2	0	-1	1	2	-1	-1	0	-0.72222
4.16	1	0	1	1	1	1	1	1	1	1	-1	1	1	-1	0	1	1	1	0.44444
4.17	1	1	0	1	-1	-2	1	1	1	1	1	1	1	2	1	2	0	2	0.88889
Formula Preference 1=Rating 1=Old CB																			

Formula Preference
1=Rating
-1=Old CB

SA	A	N	D	SD	SA	A	N	D	SD
3	11	1	2	1	18	17%	61%	6%	6%
6	11	1	0	0	18	33%	61%	0%	0%
5	12	1	0	0	18	28%	67%	0%	0%
5	9	3	1	0	18	28%	50%	17%	0%
1	9	3	4	0	17	6%	53%	18%	0%
4	5	2	7	0	18	22%	28%	11%	0%
5	9	3	0	1	18	28%	50%	17%	6%
1	1	10	6	0	18	6%	6%	56%	0%
2	8	4	4	0	18	11%	44%	22%	0%
0	7	2	8	1	18	0%	39%	11%	6%
2	13	3	0	0	18	11%	72%	17%	0%
1	13	2	2	0	18	6%	72%	11%	0%
7	5	3	2	1	18	39%	28%	17%	6%
6	11	0	0	1	18	33%	61%	0%	6%
6	9	3	0	0	18	33%	50%	17%	0%
8	6	4	1	0	17	35%	35%	24%	0%
5	9	1	2	1	18	28%	50%	6%	11%
1	7	1	6	3	18	6%	39%	6%	17%
2	9	2	3	1	17	12%	53%	12%	6%
2	5	6	4	1	18	11%	28%	33%	6%
3	10	4	1	0	18	17%	56%	22%	0%
1	5	4	4	4	18	6%	28%	22%	22%
1	4	2	6	5	18	6%	22%	11%	28%
3	10	3	2	0	18	17%	56%	17%	0%
0	0	2	12	4	18	0%	0%	11%	22%
1	10	1	5	1	18	6%	56%	6%	6%
0	6	1	10	1	18	0%	33%	56%	6%
1	5	3	6	3	18	6%	28%	33%	17%
0	3	4	10	1	18	0%	17%	22%	6%
1	7	3	6	1	18	6%	39%	17%	6%
3	11	0	3	1	18	17%	61%	0%	6%
2	7	2	6	1	18	11%	39%	11%	6%
2	5	2	8	1	18	11%	28%	44%	6%
1	3	2	9	3	18	6%	17%	50%	17%
4	9	4	0	1	18	22%	50%	22%	6%
1	4	1	10	2	18	6%	22%	6%	11%
7	11	0	0	0	18	39%	61%	0%	0%
3	2	0	11	2	18	17%	11%	61%	11%
12	5	1	0	0	18	67%	28%	0%	0%
0	2	5	7	4	18	0%	11%	39%	22%
0	11	4	3	0	18	0%	61%	17%	0%
4	10	3	0	1	18	22%	56%	0%	6%

Radliff 9 Old CB No Response Neutral 1
0.318182 0.090909 0.090909

SA	A	N	D	SD
17%	61%	6%	11%	6%
33%	61%	6%	0%	0%
28%	67%	6%	0%	0%
28%	50%	17%	6%	0%
6%	53%	18%	24%	0%
22%	28%	11%	39%	0%
28%	50%	17%	0%	6%
6%	6%	56%	33%	0%
11%	44%	22%	22%	0%
0%	39%	11%	44%	6%
11%	72%	17%	0%	0%
6%	72%	11%	11%	0%
39%	28%	17%	11%	6%
33%	61%	0%	0%	6%
33%	50%	17%	0%	0%
35%	35%	24%	6%	0%
28%	50%	6%	11%	6%
6%	39%	6%	33%	17%
12%	53%	12%	18%	6%
11%	28%	33%	22%	6%
17%	56%	22%	6%	0%
6%	28%	22%	22%	22%
6%	22%	11%	33%	28%
17%	56%	17%	11%	0%
0%	0%	11%	67%	22%

Formula Funding
In the State of Texas

0.277778
-0.33333
-0.27778
-0.5
0.055556
0.666667
0.166667
-0.05556
0.833333
-0.44444
1.388889
-0.38889
1.611111
-0.72222
0.444444
0.888889

100%
100%
100%
100%
100%
100%
100%
100%
100%
100%
100%
100%
100%
100%
100%

4.1
4.2
4.3
4.4
4.5
4.6
4.7
4.8
4.9
4.1
4.11
4.12
4.13
4.14
4.15
4.16
4.17

Higher Education In
the Budgeting Process

0.944444
-0.16667
0.444444
-0.05556
0.944444
0.722222

100%
100%
100%
100%
100%
100%

2.1
2.2
2.3
2.4
2.5
2.6

General Characteristics
of Formula Funding

0.833333
1.16667
1.16667
0.944444
0.833333
-0.16667
0.470588
0.166667
0.833333
-0.27778
-0.55556
0.777778
-1.11111

100%
100%
100%
100%
100%
100%
100%
100%
100%
100%
100%
100%
100%

3.1
3.2
3.3
3.4
3.5
3.6
3.7
3.8
3.9
3.1
3.11
3.12
3.13

[illegible]

[illegible]

Higher Education in the Budgeting Process

[illegible][illegible][illegible]

CHIEF FISCAL OFFICERS

#1

PROS

Equitable, minimizes political influence, recognizes (to an extent) level of instruction, student population, and physical plant.

CHANGE

recommend performance funding in rewarding goals, salary and benefit funding for increases in cost of living
new formula for technology

#2

PROS

does not involve individual decision for institution (made by Legislature), institutions outside the big four have reliable base funding, increase in formula has a better chance of getting funded than does increase for one institution

CHANGE

Increase lower division weights and close the gap between undergrad and masters
increase master's weights to doctoral) closer
take utilities out of infrastructure formula and fund based per institution

#3

PROS

Perception of fairness, non-political

CHANGE

Keep doctoral level at current rate and increase funding level of lower, upper, and master's level funding
allow universities to be unique - with justification and follow-up

#4

PROS

ability to project and plan for the future, ability to measure progress towards goals

CHANGE

more performance funding, separate formula from statewide goals, simplify matrix

#5

PROS

Some predictability

#6

CHANGE

formulas should track public policy

#7

PROS

Equitable, minimizes political clout, allows CB to "tweak" formulas for new factors

CHANGE

greater incentives for research, introduce IT incentives/or support without hurting the total pool of funds, fully fund formulas.

#8

PROS

easier to administer, attempts to promote equity (fairness), easier for legislature to understand

CHANGE

recognize quality, measure enrollment of 2 years instead of 1, lump-sum appropriations should be wired transferred to local banks, more flexibility.

#9

Pros

Other than the structure itself, the political dependence of formulas is neutral
has allowed funding to have a balance of structure

CHANGE

increase weight of undergrad instruction, space projection model needs to be revised to take into account the needs of smaller institutions

#10

PROS

Removed political bias, fairness

CHANGE

should incorporate way to fund new program development
change the way higher ed employees insurance (medical) is funded

#11

PROS

Understandability

CHANGE

Currently based on quantity...need to incorporate a measurement for quality.
Mediocrity rewarded same as quality.

#12

PROS

generally grant funding based on "non-political" reasons
stable revenue stream, readily understood

CHANGE

need to fund information resource in both administration and student computers
need to address "service" space in the plant formulas - not just E&G
need to continue to make "access" a non-issue in higher ed....

#13

No narrative response

#14

PROS

consistency of expectations, conservative expenditure by state (not necessarily a benefit to HE)

CHANGE

increase teacher ed weight, increase scholarship funding allowing criteria beyond "base need"
provide an element directed at new academic program development with short range formula response

#15

PROS

Equity

#16

PROS

Equitable distribution, base funding assured, benefits more established universities

CHANGE

size sensitive by level of development
fund at higher levels.

#17

PROS

reduces political involvement, stable, equity

CHANGE

increase rate of undergrad SCHs

#18

CHANGE

recognize new and growing institutions, invest where population is expected to grow in next 10-20 yrs.

#19

PROS

more equitable, easier to understand, makes comparisons between institutions easier

CHANGE

Increase funding for lower division courses, increase funding for growth supplement

#20

PROS

equity, provides a general understanding of budget needs of the institution, stability in funding

CHANGE

formulas should fund only the GR portion of funding, spread major enrollment decreases over a 3-6 yr. Period, more flexibility to meet individual institution's situation/needs

#21

PROS

Provide some stabilization

Reduce, to a degree, "political" allocation of funds

Incorporates some difference related to different missions of institutions

CHANGE

not as sensitive to unique institutional differences

more input, discussion of formula changes and impact

maintains status quo, need enhancement of upfront investment in new programs

APPENDIX F

Copy of material presented to the **Special Commission on 21st Century Colleges and Universities** by Kent Caruthers

STATE PRACTICES FOR FUNDING HIGHER EDUCATION

*Presentation by
Kent Caruthers*

*for the
Texas Special Commission on
21st Century
Colleges and Universities*



April 11, 2000

STATE ROLE IN HIGHER EDUCATION FINANCE

- Rationale for state investment in higher education
- Three typical funding targets
 - Public colleges and universities
 - Independent colleges and universities
 - Student Financial Aid

MGT

1

TYPICAL STATE STRATEGIES FOR FUNDING PUBLIC COLLEGES AND UNIVERSITIES

- Formulas/Guidelines
- Incremental Adjustments
- Targeted Approaches

MGT

2

DEFINITION OF FUNDING FORMULA

- Mathematical relationship between levels of activity and resources required, i.e., a funding rate
 - Example of level of activity measure is number of students
 - Example of funding rate is dollars per square foot
- No single "correct" mathematical relationship, but rather best judgment

WHY FORMULAS ARE USED

- To justify needs based on educational standards and best practices
- To ensure equity in allocations and minimize political influence
- To document policy decisions and avoid need for annual debate

WHO USES FORMULAS

- States
 - nearly all of the SREB states use budget formulas
 - approximately 30 states rely on formulas for at least part of their budget planning
- Budget Participants
 - governors
 - legislatures
 - state higher education coordinating boards
 - state higher education governing boards

MGT
5

DIFFERENT USES OF FORMULAS ACROSS THE STATES

- Justification of requests and/or allocation of appropriation
- State tax appropriation only versus sum of appropriations and fees
- Zero-base versus incremental
- Percent of budget covered by formulas
- Applicability to different sectors
- Use of other budget rules for budget stability

MGT
6

TYPICAL STRUCTURE OF A FUNDING FORMULA

- Most formulas are really a collection of different formulas
- Often different formulas for institutions with different missions
 - universities
 - community colleges
- Different formulas are based on expenditure functions or combinations

TYPICAL STRUCTURE OF A FUNDING FORMULA (Cont'd)

- Instruction: usually different rates by discipline and level on a credit hour basis
- Organized research: either % of instruction or incentive matching
- Public Service: either % of instruction, \$/CEU or incentive matching
- Libraries and other academic support: % of instruction, range of program offerings
- Student services: number of headcount students
- Institutional support: % of all other
- Operation and maintenance of plant: \$ per GSF, \$ per acre, utilities may be separate

INFORMATION NEEDED TO BUILD AND IMPLEMENT A FORMULA

- Best practice: student/faculty ratios
- Accreditation standards: student/faculty ratios
- Professional standards: maintenance staffing, library collections
- Competitive salary rates
- Industry standards for relationships among functions
- Current experience within the state
- Data base of level of activity measures that is subject to audit

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REASONS WHY STATES ABANDON OR CHANGE FORMULAS

- No new money
- Changes in mission
- Changes in structure
- Changes in delivery systems
- Political shifts

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TYPICAL CONCERNS ABOUT FORMULAS

- Emphasis on quantity or quality
- Inability to recognize different missions / least common denominator
- May perpetuate past inequities
- Inflexible handling of sudden changes
- Data validity
- Not always linked to public policy

TRENDS IN FUNDING PRACTICE

- Simplification of formulas
- Incorporation of performance components
- Modifications for new educational delivery models
- Reliance on peer comparisons
- Categorical funding for new initiatives

PERFORMANCE-BASED MODELS

- Distinction between performance budgeting and performance funding
- Use of performance approaches
- Typical structure
- Common performance indicators
- Problems encountered

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PERFORMANCE-BASED MODELS (Cont'd)

■ Common performance indicators

- | | |
|---------------------------------------|---|
| 1. Retention/Graduation Rates | 8. Sponsored Research |
| 2. Professional Licensure Test Scores | 9. New Student Preparation |
| 3. Time-to-Degrees | 10. Administrative Size/Costs |
| 4. Faculty Work Loads | 11. Class/Size |
| 5. Alumni Satisfaction surveys | 12. Student/Faculty Ratios |
| 6. Job Placements | 13. Standardized test scores |
| 7. Program Accreditation | 14. Student, Faculty, and Staff Diversity |

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PERFORMANCE-BASED MODELS (Cont'd)

- Problems Encountered
 - Design Difficulties
 - * choosing performance indicators,
 - * assessing higher education results, and
 - * protecting campus diversity.
 - Implementation problems
 - * timing of program initiation,
 - * costs of data collection and analysis
 - * changing state priorities and leaders.

MODIFICATIONS FOR NEW EDUCATIONAL DELIVERY MODELS

- Branch campuses
- Multi-university centers
- Distance learning