

DOCUMENT RESUME

ED 138 171

HE 008 834

AUTHOR Schmidtlein, Frank A.; Glenny, Lyman A.
 TITLE State Budgeting for Higher Education: The Political Economy of the Process.
 INSTITUTION California Univ., Berkeley. Center for Research and Development in Higher Education.
 SPONS AGENCY Department of Health, Education, and Welfare, Washington, D.C.; Ford Foundation, New York, N.Y.
 PUB DATE 77
 GRANT 730-0552; NE-G-00-3-0210
 NOTE 290p.
 AVAILABLE FROM Center for Research and Development in Higher Education, University of California, Berkeley, California

EDRS PRICE MF-\$0.83 HC-\$15.39 Plus Postage.
 DESCRIPTORS *Budgeting; Budgets; *Educational Finance; *Educational Planning; Financial Support; Guidelines; Higher Education; Public Education; *State Agencies; *State Aid; State Colleges; State Departments of Education; State Universities

ABSTRACT

The sixth in a series of nine publications on state budgeting for higher education, this report focuses on the dilemmas involved in the design of budget processes, along with a step-by-step analysis of budget progress through the maze of state agencies and processes. Separate chapters in this volume deal with: theoretical perspectives on processes of higher education budgeting; the analysis of budget process effectiveness; the organizational context of the budget process; an assessment of state-level budget structures; state-level budget agency staffs; the context and character of institutional budget submissions; state-level review of institutional budgets; and future trends in state higher education budgeting. Appended are a taxonomy of budget process dimensions and a report of the extent of budgetary authority of state higher education agencies. It is emphasized that the process of budgeting is affected by a complex web of social, economic, and organizational factors. During the next few years, it is suggested, higher education appears likely to continue to lose its high social priority, making it more vulnerable to criticism. (LBH)

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The Center for Research and Development in Higher Education is engaged in research designed to assist individuals and organizations responsible for American higher education to improve the quality, efficiency, and availability of education beyond the high school. In the pursuit of these objectives, the Center conducts studies which: 1) use the theories and methodologies of the behavioral sciences; 2) seek to discover and to disseminate new perspectives on educational issues and new solutions to educational problems; 3) seek to add substantially to the descriptive and analytical literature on colleges and universities; 4) contribute to the systematic knowledge of several of the behavioral sciences, notably psychology, sociology, economics, and political science; and 5) provide models of research and development activities for colleges and universities planning and pursuing their own programs in institutional research.

The research reported herein was supported by Grant No. NE-G-00-3-0210 from the U. S. Department of Health, Education, and Welfare, and Grant No. 730-0552 from the Ford Foundation. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgement in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent the official position or policy of the National Institute of Education or the Ford Foundation.

State Budgeting for Higher Education: The Political Economy of the Process

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CENTER FOR RESEARCH AND DEVELOPMENT IN HIGHER EDUCATION
UNIVERSITY OF CALIFORNIA, BERKELEY, 1977

Under the general title *State Budgeting for Higher Education* the Center is issuing nine publications, each with its own subtitle and authors. The volumes report three separate but interrelated projects carried on from July 1973 to August 1976, funded as follows: one on state fiscal stringency by the Fund for the Improvement of Postsecondary Education (FIPSE), another on state general revenue trends by the Lilly Endowment and the American Council on Education, and the third on selected aspects of state budgetary theory and practice by a joint grant from the National Institute for Education and the Ford Foundation. The principal investigator for all the projects was Lyman A. Glenny; the principal author or authors of each volume carried the major responsibility for it. To varying degrees, all members of the research team contributed to most of the volumes, and their contributions are mentioned in the acknowledgments. This report is the sixth to be issued in the series.

Library of Congress Cataloging in Publication Data

Schmidtlein, Frank A 1932-
State budgeting for higher education, the political
economy of the process.

Bibliography: p.

1. Universities and colleges--United States--
Finance. 2. State aid to higher education--United
States. I. Glenny, Lyman A., joint author. II. Title.
III. Title: The political economy of the process.
LB2342.S37 379'.1214'0973 77-730

Acknowledgments

We are especially grateful for the financial support provided jointly by the National Institute of Education and The Ford Foundation. This cooperative venture of public and private funding agencies has provided a very hospitable environment for research.

An exceptionally high degree of cooperation and assistance was provided by state and institutional officials, often at considerable time and expense and, in many instances, during particularly busy periods. Needless to say, the study was entirely dependent on such help and we are grateful for their generous contributions. Answering questionnaires, providing documents, arranging interviews, and responding to letters and telephone inquiries are not the most rewarding activities for some of the busiest officials in state government. Yet all were most helpful.

The representatives of the national organizations who comprised our National Advisory Panel and the individuals who comprised the Technical Advisory Panel made significant contributions to this report through their critical comments and useful suggestions in response to project plans and report drafts. Their assistance broadened our perspectives and provided many useful insights. We are most appreciative. The members of both panels are listed below.

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Finally, we wish to thank Margaret Elliott and
Deborah Lloyd for preparation of the manuscript and
Linda Ragueh for her editorial assistance.

Preface

From July 1973 to August 1976 three studies of state budgeting and financing of higher education were conducted by the Center for Research and Development in Higher Education at the University of California, Berkeley.

The present study began in July 1973 when the Center undertook a three-year, 50-state study of the processes used by state agencies to formulate the budgets of colleges and universities. Seventeen states were studied intensively.*

Financial support was furnished jointly by the National Institute of Education (60%) and The Ford Foundation (40%). The study was endorsed by the following organizations:

- American Association of Community and Junior Colleges
- American Association of State Colleges and Universities
- American Council on Education
- Education Commission of the States

* The 17 states were: California, Colorado, Connecticut, Florida, Hawaii, Illinois, Kansas, Michigan, Mississippi, Nebraska, New York, Pennsylvania, Tennessee, Texas, Virginia, Washington, and Wisconsin.

National Association of State Budget Officers
National Association of State Universities and
Land-Grant Colleges
National Center for Higher Education Management
Systems
State Higher Education Executive Officers

Its twofold purpose is to advance budgetary theory and to give state and institutional budget professionals a broader understanding of: 1) the interrelationships, roles, functions, and objectives of the several state agencies in the budgetary process; 2) the congruence or incongruence of such objectives among the several agencies; and 3) the practices and procedures that build confidence in the fairness of the budgetary process.

Reports based on the study describe and analyze the organizational structures and staffing of state-level agencies and the progress of institutional budget requests through these agencies from the time that pre-budget submission instructions are first issued by a state agency until appropriations are enacted. The primary emphasis is on the budget review and analysis process and the procedures used by the state agencies; the study concentrates on the administrative interfaces among the several state agencies that review and analyze budgets and between these agencies and the institutions, or systems of institutions, of higher education.

Intensive interviews, document review, and questionnaires in the 17 states selected formed the basis for a narrative and tabular description and comparison issued in 1975. Less detailed data were collected from 50 states by questionnaire only; these are examined and presented in a second descriptive report.

The other volumes resulting from the three-year study are analytic in nature. This volume focuses on the dilemmas involved in the design of budget processes, along with a step-by-step analysis of budget progress through the labyrinth of state agencies and processes. Others concentrate on the creation and use of budgetary formulas, the cooperation, redundancy, and duplication

of effort among the several state agencies that review budgets, and the development and use of information systems and analytic techniques.

The second study, sponsored by the Fund for the Improvement of Postsecondary Education (FIPSE), examines how state colleges and universities respond when states make substantial reductions in their appropriations. This one-year study encompasses experience with fiscal stringency in about a dozen states, primarily in the five states presented in the case studies. The latter have been brought up-to-date as of late spring 1976.

The third study, sponsored by the Lilly Endowment and the American Council on Education, analyzes the trends in state general revenue appropriations for higher education from 1968 to 1975. Refining earlier work at the Center, the study compares trends among the states for the several types of institutions in both appropriated and constant dollars, comparing dollar increases with enrollment trends in each case and also comparing dollars appropriated for higher education with those for elementary and secondary education.

Each volume resulting from the three studies draws on significant findings of the other studies yet stands alone as a complete book. However, awareness of the full panoply of social, political, and economic variables that we found in state budgeting for higher education can be gained by review of all the volumes. We earnestly hope the readers learn as much from our research as we did in conducting it. A complete list of the volumes is found on the back cover of this book.

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1.

Introduction

REASONS FOR THE STUDY

The impetus for this study came from state agency staffs engaged in the complex task of allocating resources for higher education. New approaches to budgeting being advocated promised to complicate an already inherently difficult task. In addition, changing birth-rates, enrollment patterns, sources of revenues, economic trends, and social preferences added to these difficulties.

Furthermore, little literature, either of a practical or theoretical nature was available to guide practitioners and scholars. In the midst of these trying circumstances, state and federal officials were placing ever greater demands on budget staffs for information and carefully developed analyses of higher education's performance. In response to these demands, new budget and program evaluation staffs were being created and existing staffs augmented, leading to concern over duplication of functions and shifts of agency influence.

The following were among the factors exerting considerable impact on the budgetary process and requiring accommodation:

- New approaches to budgeting such as program planning and budgeting systems (PPBS), zero-based budgeting, and management by objectives were

advocated as replacements for earlier "line-item" and performance budget techniques. Formula budgeting techniques were becoming more complex and increasingly controversial.

- Sophisticated guidelines and models for improving planning, budgeting and management of post-secondary institutions were developed by the National Center for Higher Education Management Systems (NCHEMS). However, the state-level agency context in which these innovations were being introduced had not been adequately assessed.

- The rate of births was rapidly declining, leading to a leveling of the vast enrollment growth experienced by most public and private institutions in the 1960s. This leveling had a direct impact on funding since institutions primarily are funded on the basis of enrolled students.

- Rapid shifts were taking place in enrollments among academic programs, and new methods of providing postsecondary education were being adopted. These new methods often were difficult to classify using standard data-gathering practices.

- Increasing proportions of state general revenue funds devoted to funding other social services created pressures on higher education to increase institutional productivity and accountability.

- The growing pressure on states to fund private institutions resulted in aid programs specifically designed for this purpose. These programs, felt by many to be funded from monies which normally would have gone to the public institutions, created political tensions in the legislature and among the different types of institutions.

- The controversy over the proportion of educational costs to be borne by the student and his family as against a subsidy by the government

required budget officers to consider tuition levels, student aid programs, and grants to institutions in a context which permits them considerable influence on ultimate state policy.

- The federal policy shifted from categorical grants which aided institutions to programs which aided students, encouraging "free market" conditions among institutions, including proprietary schools. Consequently, state budget reviewers were forced to take a position on this issue and on the extent to which the state should fund programs formerly supported by federal grants.

- Because the federal government sought to reduce or eliminate many categorical programs for states and municipalities in favor of revenue sharing (block grants), states were forced to set priorities through their own budget machinery. However, this shift in policy was advocated without foreknowledge of the effectiveness of state budgeting processes or of the attitudes of professional staffs toward services previously supported by the categorical programs.

- The increasingly critical role played by state-level budget staffs, particularly by the new coordinating boards and legislative budget staffs created overlap among the functions, domains, and roles of the agencies and professional staffs.

- The apparent lack of intercommunication and cooperation among the state agencies appeared to promote divergent or even conflicting objectives.

- Budget agencies, because of their crucial roles, were the focal points of demands for information and analyses.

- Statewide master plans for higher education had not been assessed as to whether they assisted in overcoming these difficulties. Nor had there been adequate investigation of the barriers to a

rational structure for state budget review raised by conflicting personal and political goals.

Because many state budget agencies were under heavy pressure to improve higher education budget practices, despite the uncertainties surrounding the effectiveness of various policy formulation and budgeting techniques, the National Association of State Budget Officers actively promoted this study. They recognized that institutions were caught in the swirl of debate on technology and in the conflicts among state agencies, with little practical guidance in the purposes and consequences of particular budget processes. Increasing competition for state revenues, lack of increases in productivity, redistribution of enrollments among institutions, demands for cost and productivity information, and incongruity between educational expectations and available resources--all placed strains on the budgeting process.

In acknowledgment of these problems, major higher education associations encouraged the study to obtain some guidance on these matters and clarification of institutional budgetary relationships with state government.

STATUS OF RESEARCH AND LITERATURE ON STATE HIGHER EDUCATION BUDGETING

Information regarding state budgeting processes is scattered and not readily available. Documentation of the budget process is in fragmentary form in agency files, and seems to be exchanged between states on a person-to-person basis. There is a lack of analyses, classification, and description of the procedures, practices, and technologies employed by the states in establishing priorities, setting educational policy, and allocating funds for the myriad purposes served by institutions of higher education. Existing literature is scarce and deals only with limited aspects of the total process.

Financing of Higher Education

Numerous studies have been made of financing higher education from an economic point of view. Millett (1952), Harris (1962, 1964), Chambers (1963), and Mushkin and McLoone (1965), among others, have explored this approach. Hartman (1972) prepared a paper for the U. S. Office of Education on "The Rationale for Federal Support of Higher Education," which examines market imperfections, the relationships of federal to state roles, justifications for federal support, and the case against public support of higher education. The formula bases for fund allocation have been reviewed by Glenny (1959), Martorana and Hollis (1960), Miller (1964), and Berdahl (1971). Only Miller, however, has conducted thorough analyses of formula elements, and the factual content of his work is now dated.

Institutional Relationships to State Government

The history of resource allocation among institutions of higher education from 1930-1967, reviewed by O'Neill (1971), found little change in productivity patterns, confirming the speculations of others. The relationship between academic institutions and state government has been examined by Brumbaugh (1956), Glenny (1959), Moos and Rourke (1959), Henderson (1960), McConnell (1962), Wilson (1965), Palola and Padgett (1971), and others. Most of these authors were concerned about state interference with the autonomy of colleges and universities rather than with effective allocation procedures.

State Budgeting

Some state budget techniques have been examined by Shadoan (1963), Doubleday (1967), and Schick (1971). Sharkansky (1965, 1968, 1970), and Sharkansky and Hofferbert (1969) have researched the relationship of certain political and agency variables to the amount of appropriation received by several different kinds of state service agencies. Howard (1973) has looked broadly at state budgeting. None of these studies have examined state

budgeting in terms of its structure, strategies, tactics, and tools, especially in relation to postsecondary education. Interagency relationships have not been systematically analyzed.

Theory

Little general theory is available on interorganizational relationships, although Evan (1966), Blair (1967), Warren (1967), and Baldrige (1971) have developed conceptual models which may, in part, be applied to budgeting. Thompson (1967) provides a theoretical framework for interorganizational cooperation useful for this study. Theoretical critiques of the assumptions underlying such techniques as PPBS have been made by Lindblom (1959), Wildavsky (1964), and Landau (1969). Schultze (1968) has sought to spell out the limitations and contributions of both the analytical and political approaches to policy formulation. Such techniques of modern management as PPBS, management by objectives, policy analysis, and computerized information systems have been criticized by Wildavsky (1966), Kelleher (1970), Hoos (1972), and Heim (1972). Balderston and Weathersby (1972) described the University of California's experience in attempting to implement PPBS.

METHODOLOGY

This study is primarily based on a review of documents used for budgeting for higher education in 17 states and on intensive interviews with nearly all officials concerned with state-level higher education budgeting in those states. A total of 363 individuals were interviewed. The officials interviewed are classified by agency in Table 1. The criteria used to select the states are described in Glenny et al. (1975).

One of the major methodological dilemmas that confronted the study was the need to develop, in advance, assumptions to guide the selection of data while at the same time not foreclosing completely acceptance of new assumptions and collecting additional data in order to

Table 1

NUMBER OF INTERVIEWS WITH STATE AND INSTITUTIONAL BUDGET OFFICIALS

States	Executive branch				Legislative branch				State higher education agency		Other state-level higher education staff	Institutions		Total
	State budget director	Budget office staff	Performance audit staff	Other staff	Director budget et staff	Performance audit staff	Other officials	Executive officer	Staff	President or chancellor		Other staff		
California	1	9	9	2	1	4	0	0	0	1	1	0	0	28
Colorado	0	1	0	0	1	0	0	1	0?	7	3	0	4	17
Connecticut	1	7	0	1	1	1	1	0	1	5	5	2	6	31
Florida	1	4	0	0	1	2	0	3	1	10	3	2	5	32
Hawaii	0	2	0	0	0	0	3	0	0	0	0	1	10	16
Illinois	1	1	0	1	2	4	0	0	1	7	0	1	8	26
Kansas	1	1	0	0	1	0	1	0	1	1	2	2	3	13
Michigan	1	3	0	0	2	0	0	0	1	1	2	2	6	18
Mississippi	0	0	0	0	1	1	0	0	1	2	1	0	1	7
Nebraska	1	5	0	0	0	2	0	0	0	0	0	3	6	17
New York	1	6	1	2	2	2	0	0	1	2	2	2	8	29
Pennsylvania	1	4	1	0	0	0	0	5	1	3	0	3	6	24
Tennessee	1	2	0	0	1	1	0	0	1	7	0	0	6	29
Texas	1	0	0	0	1	1	0	1	1	5	0	0	7	17
Virginia	1	3	0	3	1	0	1	0	1	3	0	1	5	19
Washington	1	4	0	1	1	5	0	4	0	2	3	1	6	28
Wisconsin	1	2	0	0	1	3	0	0	0	11	1	2	1	22
Total	14	54	11	10	17	26	6	14	11	67	23	22	88	363

exploit emerging insights. A study that attempts to affect policy cannot be limited, for the sake of methodological purity, only to those assumptions held before any facts have been gathered. On the other hand, our inquiry had to have some well-defined focus to provide coherent results and to keep its scope within feasible bounds. The strategy adopted was to use a semistructured interview guide to assure obtaining data on a basic set of budgetary processes and issues. This technique allowed open-ended discussions that provided many new insights and permitted revising the priority of areas for examination during the course of the study.

As a further safeguard, to assure the pertinence of data collected, interviews were held first in six states. After a preliminary analysis of this data, the interview guides were redesigned. These revisions required obtaining some additional data from the initial six states but these telephone calls and letters were well worth the extra effort.

Before proceeding with the interviews in each state, many specific documents were solicited and read. In addition, a short questionnaire was sent to agencies in each state to provide us with more knowledge, to permit more sophisticated interview questions, and to reduce the need for ascertaining facts. These questionnaires additionally provided much of the data on staff characteristics employed in subsequent analyses.

An early determination was made that the major emphasis in the research would be on thorough interviewing rather than on a broader questionnaire survey. Although the latter would permit quantitative analysis of selected relationships, it did not appear well suited for the highly complex social phenomenon with which the study dealt. Although a questionnaire was sent to all 50 states subsequent to the collection of interview data, most of the findings of this volume rest on interpretations of interview data. The results of the questionnaire survey are reported elsewhere (Bowen, Ruyle, & Glenn, 1977).

Nearly all state agency budget staff members concerned with higher education were interviewed in the 17 states, as well as three or more officials in two public higher education institutions in most states. Comments were cross-checked and differences explored to discover different staff perspectives and interests. To guard against interviewer bias, two researchers participated, in almost all cases, in each interview. This had the added benefit of letting one researcher formulate questions and take notes while the other pursued a line of inquiry.

In practically every case, the comments of those interviewed were exceptionally frank and they cooperated fully with the study. This tremendous cooperation and openness on often publically or personally sensitive issues no doubt reflected some confidence in the integrity and sensitivity of the research staff in presenting findings. We earnestly hope that we have merited this confidence.

Finally, this study drew on the limited literature available on state higher education budgeting, and the more extensive literature on budgeting in general. Writings on organizational theory and political science were examined for theory that would help interpret findings, corroborate data, and for examples of practices. The broad theoretical perspective guiding this volume is based on social open systems theory. The application of this body of theory to state higher education budgeting is described in Chapters 2 and 3.

Chapters 4 through 6 describe and analyze the organization and staffing of the budget process. The remaining chapters deal with the stages of budget formulation and review and include state guidance of the development of institutional budgets, the character of these budgets, and the review of budgets by state-level agencies. The final chapter speculates on trends affecting the future of state budgeting for higher education.

2.

Theoretical Perspectives on the Processes of Higher Education Budgeting

Whether the work of fifty to a hundred years offers evidence enough or not, there is a growing conviction among scholars, philosophers, and educators that pure empiricism will have a limited success, if any, outside the study of physical reality, and that it may have reached the end of its great usefulness there. There is evidence that specialization, where not guided by a strategic concept, amounts to little more than "puttering around"--a kind of industrious dilettantism. (Hofstadter & Hardy, 1952, p. 192)

THE IMPORTANCE OF EXPLICIT THEORETICAL ASSUMPTIONS

All attempts to describe social phenomena are based on assumptions about the forces that impel social action and the resulting relationships that take place in specific contexts to create the forms and substance of observed behavior. Weber (1949) noted that:

A chaos of "existential judgments" about countless individual events would be the only result of a serious attempt to analyze reality without presupposition. (p. 78)

Presuppositions, or assumptions, provide a framework and criteria for the selection and interpretation of empirical data. Thus it is important to examine the assumptions about organizational behavior that lie behind studies of phenomena to realize the full implications of the conclusions that are drawn.

The assumptions that underlie research on social phenomena vary in comprehensiveness. Some are based on broad philosophical considerations, others on what Kuhn (1962) calls "paradigms," or a general framework for viewing a broad range of phenomena in a particular field. Less comprehensive assumptions are based on particular theories, hypotheses, or propositions. Assumptions also vary in elaborateness, logical consistency, and explicitness. These variations are often a consequence of the stages of development of social science theory.

Authors are frequently not aware of the basic assumptions on which their analyses rest, or they do not make them explicit for fear that their unverified conclusions and the inevitable omissions and inconsistencies will be exposed to experts and critics. Yet little of practical importance could be written if an author had to have unambiguous empirical support for all his assertions.

It is difficult to recognize fully the logic and import of most research efforts in the social sciences without an explicit statement of the basic underlying assumptions: Difficulty is experienced in distinguishing whether differing conclusions are derived from conflicting assumptions, from differing data, or from lapses in logic.

For example, in higher education a great deal of attention is currently focused on the concept of accountability. One set of assumptions holds that tax-supported institutions of higher education perform a public service and should therefore be accountable to the elected officials who represent the taxpayers. A second set holds that these institutions perform an intellectual and

critical role in society that transcends popular and often transitory interests and fads; therefore, they need to be insulated from an overly rigorous accountability to the public that might stifle their longer-term, less immediately practical interests and their function as havens for social critics. From this perspective, accountability to the public must be balanced by accountability to the members of the institution, particularly the researchers and scholars, to protect their freedom of inquiry.

Thus, depending on the basic assumptions about the primary purposes of higher education, an analysis of accountability could proceed in very divergent directions. Furthermore, even when agreement exists on the purposes of higher education, major differences can occur over the means employed to achieve accountability. One set of assumptions can emphasize bureaucratic control by means of planning and coordination, while another set can emphasize negotiation and bargaining between interested parties within a structure of checks and balances.

Certain assumptions about human behavior rule out social science research as an effective means for analysis and prediction of events. For example, if human events are believed to take place in random or unpredictable ways, it is impossible to discover and generalize about relationships. Similarly, if the world is thought to be governed by metaphysical forces, analysis may be viewed as less useful than attempts to influence these forces by means such as prayer and offerings. If one believes that the true values in life come from impressionistic feelings, such as enjoying a sunset or a concert, then analysis, by focusing on the parts rather than the totality, may destroy the very thing that is important. While we do not discount the factors that give rise to such beliefs, this study proceeded on the assumptions of cause and effect and a budget process that will not lose its fundamental utility and appeal if it is subjected to analysis.

We attempt to state explicitly the fundamental assumptions that guided the selection of data and the analyses. These assumptions are based as much as possible on research findings and emerging theoretical points of view, and are as internally consistent as time and ability permitted. We do not pretend that they reflect verified fact or the best thinking on these topics, since no person's knowledge can span all the disciplines that are relevant to understanding state budgeting for higher education. We present our assumptions because, in fairness, critics should be helped to distinguish between quarrels over the validity of assumptions and quarrels over empirical accuracy and interpretation of data within the parameters of basic assumptions.

THEORETICAL ASSUMPTIONS GUIDING THIS STUDY

The primary assumptions behind this study are drawn from organizational open systems theory, which appears at present to be the most comprehensive and analytically useful paradigm available for the analysis of organizational behavior. It provides a framework for explaining a broader range of behavior than do other available paradigms (Georgiou, 1973). Its usefulness, however, has only recently been explored in the social sciences outside the discipline of economics.

Throughout the study we state our conclusions and explicitly or implicitly make recommendations; for example, we believe that many proposed budget reforms involving comprehensive analysis of higher education are unrealistic. To a large extent, our conclusions and recommendations are based on the extensive data that has been collected and is presented in this and other studies in our State Budgeting for Higher Education series. They are also based, in part, on assumptions that not only caused us to look for certain facts but also provided an overall framework for understanding the enormously complex relationships involved in state budgeting after the facts were ascertained.

These assumptions are critical, but they are somewhat too complex and abstract to detail in a volume intended for practical use. Consequently, they are interwoven into the discussion in subsequent chapters. Briefly, these assumptions are:

- Open systems theory conceives of an organization as a system obtaining inputs, which are transformed through a process into outputs, which are exchanged for additional inputs, thus maintaining a dynamic state of equilibrium.
- The primary force that shapes organizational behavior is the need to maintain satisfactory exchange relationships.
- Systems contain subsystems, some systems cut across a number of other systems, and there are levels of systems (physical, biological, psychological, social, and cultural), with higher-level systems mediating the behavior of lower-level systems.
- An examination of the socioeconomic system level of organizations is likely to provide more useful policy guidance than studies of the psychological or cultural levels.
- The boundaries of systems are defined by the volume and nature of exchange relationships among members.

An almost infinite variety of other possible assumptions could be used in an analysis of organizational phenomena. Sets of assumptions could be developed that give primacy to interpersonal relationships among staff members, to the view of organizations as goal seeking, or to the view of organizations as bodies of routines, procedures, and common expectations (Allison, 1971). Each of these approaches would illuminate different aspects of the budget process, but we do not know whether they would lead to different conclusions than the ones we found. Indeed, the complexity of the topic is such

that it is possible that the same conclusions would have resulted from judicious astrological observations--an alternative not considered, we hasten to add.

AN OPEN SYSTEMS VIEW OF STATE BUDGETING FOR HIGHER EDUCATION

The organizations and individuals involved in higher education budgeting can be viewed as a subsystem within larger statewide higher education and governmental systems. This subsystem performs the primary function of procurement: the acquisition of the resources needed to operate institutions of higher education. The subsystem is composed of up to four major organizational participants: 1) the executive budget office, 2) the legislative budget staffs and committees, 3) the state higher education agency, and 4) the institutions of higher education. Some states do not have one of these organizations. For example, Mississippi does not have an executive budget office, Delaware does not have a state higher education agency, and until recently Kansas did not have a legislative budget staff. In a number of states, for example, Michigan and New York, the state higher education agency does not play a significant role in the budget process.

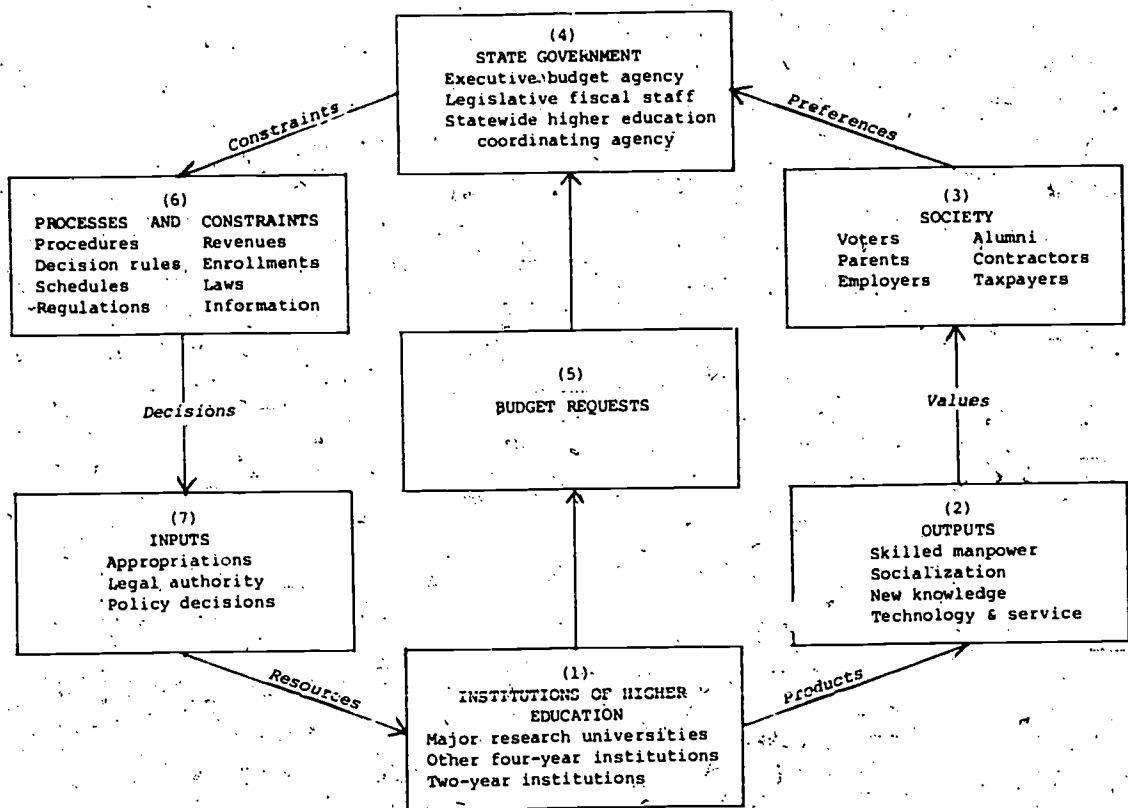
THE SYSTEMS CONTEXT OF STATE HIGHER EDUCATION BUDGETING

Figure 1 illustrates the relationship of the state budgeting subsystem to the larger state higher education and governmental systems, depicting the exchange processes that take place between institutions of higher education and their environment, together with the role of state government in the exchange cycle.

Institutions of various types (box 1) produce a variety of outputs (box 2) that are of value to society. Society at large (box 3) makes its preferences for outputs known to state-level agencies (box 4). At the same time, institutions make their preferences known through budget requests (box 5) to state-level agencies. The

Figure 1

THE STATE HIGHER EDUCATION BUDGETING SYSTEM



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state-level agencies conduct a budget review process and make decisions subject to constraints, such as available revenues, student demand, time for analysis, availability of information, and provisions of laws (box 6). As a result of these decisions, institutions are provided with resources by means of appropriations, substantive legislation, and policy decisions (box 7).

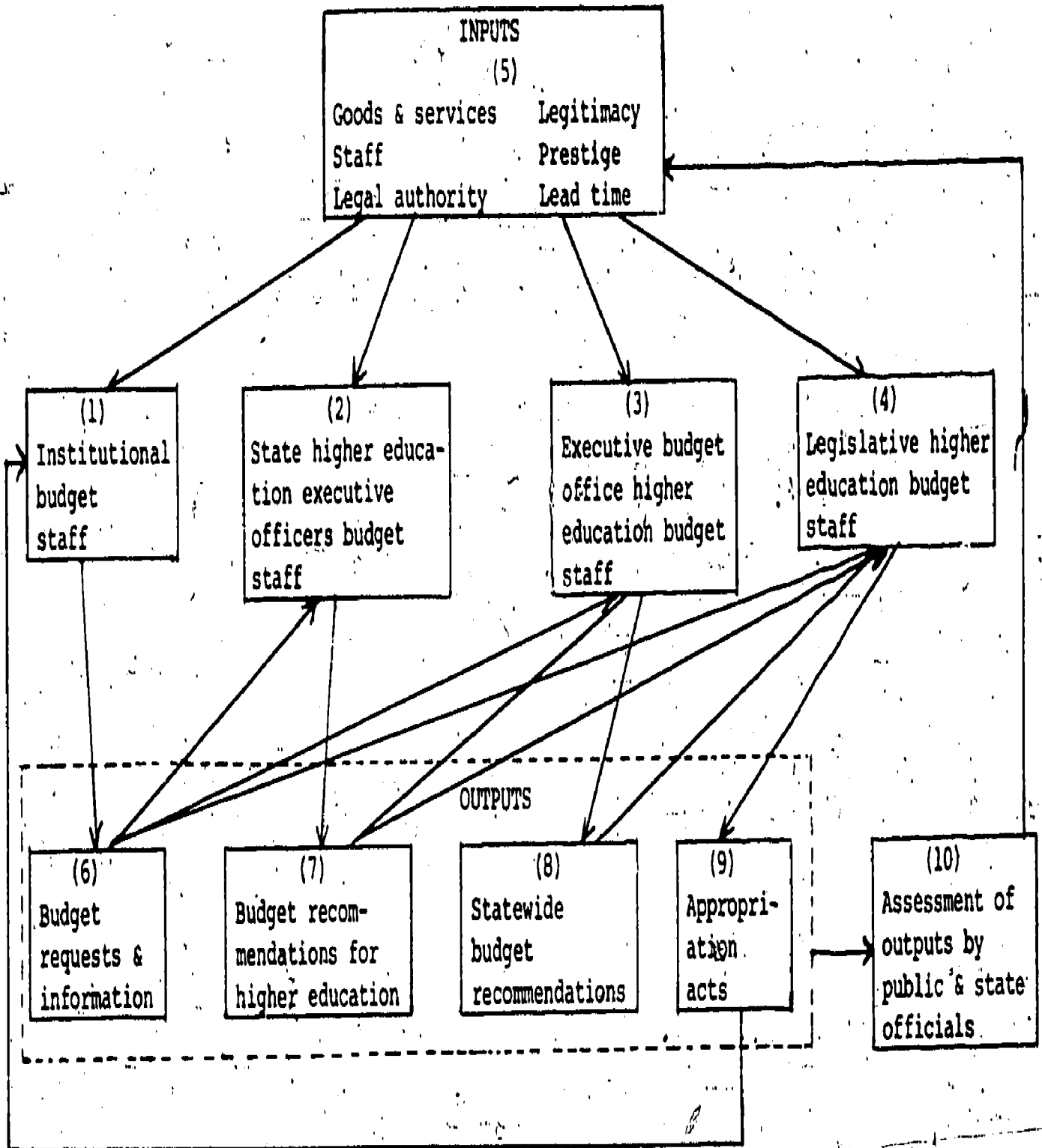
THE STATEWIDE HIGHER EDUCATION BUDGETING SUBSYSTEM

The state agencies engaged in budgeting assess and articulate social preferences, implementing these through budget recommendations and appropriation acts. The staffs engaged in state budgeting for higher education are usually a unit within a larger agency of state government or institution. While their primary function is to provide resources for institutions of higher education, they also produce their own outputs, such as policy decisions and information, and they must exchange these with other systems to obtain the inputs they require to effectively perform their functions. Figure 2 on the next page illustrates the exchange cycle of these agencies.

Budget staffs concerned with higher education (boxes 1, 2, 3, and 4) are provided resources (box 5) so that they may prepare requests for, and recommendations on, funds. Institutional budget requests (box 6) go to one or more state-level budget staffs (boxes 2, 3, and 4). In some states the state higher education agency budget staff (box 2) receives the institutional request and prepares recommendations (box 7), which then go to the executive budget office higher education staff (box 3) and sometimes to the legislative higher education budget staff (box 4). The executive budget office staff's recommendations are incorporated into a state budget recommendation (box 8). This state budget is frequently referred to as the governor's budget or the executive budget. The governor's budget is transmitted to the legislative budget staff members responsible for higher education (box 4), who help develop recommendations that lead to appropriations (box 9). The appropriations

Figure 2

THE STATE HIGHER EDUCATION BUDGET SUBSYSTEM



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are transmitted to institutions (Box 1), authorizing them to expend state funds. Assessments of the outputs of the various budget staffs are made by public and state and institutional officials (box 10). Political bargaining takes place over these assessments, culminating in new resource inputs (box 5) to the budget staffs, thus completing the cycle.

The state-level budget agencies vie with each other for needed resources to give them maximum influence during the budget formulation process. The performance of each agency is evaluated and it is granted the resources needed to maintain and improve its role. Occasionally resources are withdrawn to signal displeasure with an agency's performance, even though its value may in theory be recognized. However, this strategy for influencing an agency's behavior can go only so far before the act of withholding resources itself becomes the reason for the failure. Similarly, units are sometimes given additional funds to correct perceived weaknesses. Again, this can proceed only so far before concerns over marginal returns and equity among organizations emerge to limit increases. Changes in allocations of resources to units can result from imbalance among the perspectives brought to bear on budgets as well as from assessments of the effectiveness with which units carry out current functions. New authority may be given to a unit together with additional financial resources.

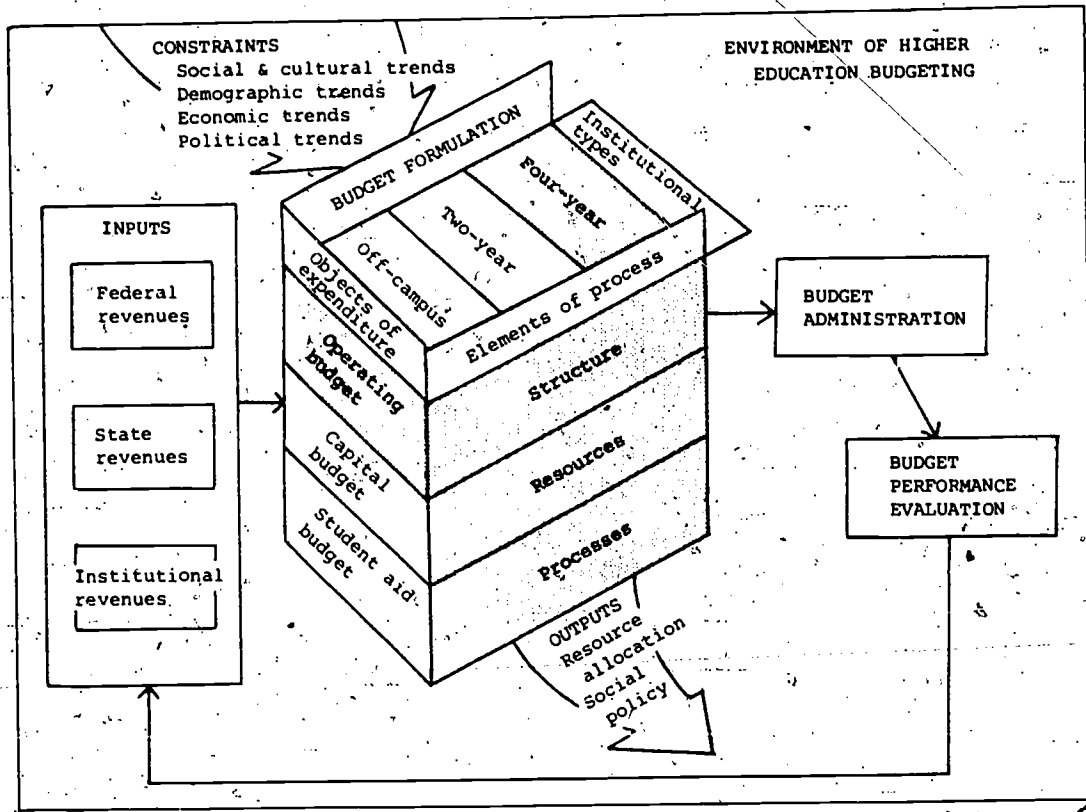
DIMENSIONS OF THE STATE BUDGETING FOR HIGHER EDUCATION SUBSYSTEM

There are a number of major dimensions of state budgeting for higher education that a study could focus on. Figure 3 depicts some of these, including:

- the environmental trends that affect the demand for higher education and act as constraints on the budget process;
- The sources of inputs into the budget process;

Figure 3

DIMENSIONS OF STATE BUDGETING FOR HIGHER EDUCATION



Note: Primary focus of study shaded.

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- the structure, resources, and processes that are involved in the act of budgeting;
- the sequential phases of the budget process from formulation through administration to retrospective performance evaluation; and
- the resource allocation and policy outputs of the budget process.

This study is concerned with the formulation phase of budgeting and, within that phase, the structures, resources, and processes of budgeting. The study examines the state agency review of operating budgets for public four-year institutions. This focus may seem somewhat limited, but in terms of the range of topics covered and the time available, even these areas cannot be fully explored.

A brief description of these major dimensions of the budget process will help clarify the process of formulating operating budgets for four-year public institutions.

Environmental Trends. A number of shifts in historic trends are likely to have profound implications for higher education budgeting. Cartter (1971) and others have pointed out the changing demographic factors that appear likely to reduce the demands for higher education. March (1974) described some potential consequences of these changes. Bowen (1974) and Millett (1975) described the changing composition of the labor force and the implications of these trends for the demand for higher education. The Joint Economic Committee (1975) and *The Second War Between the States* (1976) noted regional differences in demographic and economic trends. Bailey (1974) and others noted the changing social valuations of higher education as measured by opinion polls, and the costs imposed on higher education through implementation of national social initiatives, such as equal opportunity and occupational safety programs. The impact of long-range economic trends (Forrester, 1976)

and inflation on institutional budgets (American Council on Education, 1974) are currently receiving major attention; the rising costs of basic commodities, such as oil, metals, and food, appear likely to absorb a growing proportion of our national income, reducing the monies available for the service sector of the economy, including higher education. There is considerable concern, undoubtedly justified, that institutional budgets will not keep pace with inflation. Student demand for particular fields of study has shifted considerably over the past few years. For example, enrollments in the physical sciences, languages, and history have declined while they have grown rapidly in professional fields such as medicine, law, and business. The drop in demand for teachers is also reducing enrollment in education.

The stability of these trends is open to debate but the prospects they pose are having a significant effect on higher education budgeting. An examination of these trends and their long-term implications for state budgeting for higher education would make an important and fascinating area for research.

Inputs Into the Budget Process. Another dimension is the inputs into the budget process, or the revenues that are available for allocation to higher education. An assessment could be made of whether the costs of higher education are properly allocated among its beneficiaries. Some studies of financing higher education examine the distribution of its costs among income levels and ethnic groups (Hansen & Weisbrod, 1969). Economists are concerned with the measurement of individual as well as social benefits of higher education. The questions raised lead to issues of tax and tuition policy.

A second input area is the adequacy of the quantity and quality of the resources devoted to higher education, in terms of social objectives. Studies deal with such topics as higher education seen as an investment in economic productivity, and the cultural values obtained from higher education, including social mobility, preserva-

tion of knowledge, and transmission of culture. These questions in essence concern whether the funds and manpower devoted to higher education are in proper balance with those devoted to other social objectives.

A third area, related to inputs, is whether the mix of resources devoted to higher education is efficient in terms of achieving desired purposes, given existing teaching, research, and service technologies. For example, the relationships among facilities, equipment, and staffs are explored, including such problems as whether the use of existing community facilities can be expanded, whether more use could be made of televised lectures, whether campuses can share library facilities, and whether more use can be made of teaching assistants.

Outputs of the Budget Process. Analyses of the outputs of the budget process could examine the distribution of higher education's benefits in terms of social equity, probing the distribution of benefits among various socioeconomic segments of the population and between individual and public objectives. This dimension of outputs is closely related to the input issue of who pays the costs of higher education. In theory, distribution of the costs of higher education should have some relationship to the distribution of its benefits. In practice, standards of social equity lead to income redistribution and it is hard to determine precisely who pays and who benefits.

A second output-related issue concerns whether the mix of higher education's outputs is appropriate in terms of social preferences. Is too much research conducted on defense requirements in contrast with competing social objectives such as health, energy, or welfare? Does the curriculum give too much emphasis to liberal rather than vocational subjects? Questions can also be asked about the factors that influence recommendations and the size of appropriations for institutions; the amounts appropriated each year could be examined and the factors associated with any variations analyzed.

Budget Processes. Studies in the area of the process of budgeting for higher education could examine the degree to which the organization of the budget process, the resources available to budget agencies, and the concepts and techniques employed efficiently provide the resources needed by higher education. One process issue is whether the distribution of functions among state agencies, their organizational structures, and their relationships with one another contribute to effective budget decisions. A second issue is whether their resources are sufficient for them to accomplish their purposes and are distributed equitably in terms of their functions. A third issue deals with whether the concepts and techniques employed by state budgeting agencies are appropriate and efficient in terms of their objectives. This issue is of primary interest in our study.

Phases of the Budget Process. There are three primary phases in the budget cycle for institutions of higher education: 1) formulation of the budget and its enactment by the legislature; 2) administration of the budget during the one- or two-year period in which it is expended; and 3) evaluation of the results after the budget is expended. Evaluation often occurs over a period of years following expenditure and takes the form of special studies, examinations of statistical data, and audits. The results of evaluation provide information for use in current and future budget formulation and administration processes.

The Council of State Governments (1952) has examined state budgeting for higher education. The state role in the administration of higher education budgets has been examined by Moos and Rourke (1959) and by Harclerod (1975). The Carnegie Commission on Higher Education (1971), the Education Commission of the States (1973), and others have specified appropriate roles for state-level agencies and institutions. Little attention has been given to the evaluation phase of the budget process, but recently there has been a growing interest in state-level performance auditing in higher education (Brown & Pethal, 1974).

Structure, Resources, and Procedures Associated With Budget Formulation. The structure of the budget process is related to the organization of the agencies and institutions involved: the allocation of functions to these organizations, their legal authority, where decisions are made within them, and the relationships among them. Resources are the dollars, staff, information, legal authority, prestige, and other inputs that enable the organizations to perform their roles more or less effectively. Procedures include technologies, routines, regulations, timing, decision rules, and decision criteria applied in making resource allocations.

FOCUS OF THE STUDY

The shaded areas in Figure 3 (p. 20) denote the areas of concentration of our study. A single investigation of a phenomenon as complex as higher education budgeting obviously cannot do justice to all dimensions of the budget process. The present study, therefore, concentrates primarily on the state-level structure, staffing, and processes involved in formulating operating budgets for four-year institutions. The study examines only the budgeting of state revenues for higher education. Because of the unique ways in which states budget two-year institutions (Wattenburger & Cage, 1974) and private institutions (Millard, 1975), budgeting for these organizations was not examined except where the process was similar to that of the public senior institutions. Even so, differences between practices for major research universities and other four-year institutions make analysis and generalizations difficult. Other dimensions of the budget process not touched are budgeting for capital projects, for student financial aid, and for specialized units, such as hospitals and experiment stations when they are budgeted separately.

3.

The Analysis of Budget Process Effectiveness

Watergate was a reminder that we must judge public organizations not only by what they do, but by how they do it--and the reminder was particularly timely after some years during which concern for outputs had almost totally eclipsed concern over the standards governing the production of those outputs. (Heclo, 1975, pp. 80-81)

ENDS VERSUS MEANS

Discussions of effective higher education budgeting have tended to focus on the relationship between inputs into higher education and its outputs. There also has been considerable discussion of models for "rational" decisionmaking. Political values such as "due process," "access to decisionmaking," and "checks and balances" tend to have gotten lost in discussions of economic effectiveness. This concern with economic effectiveness and rationality has led to neglect of the intrinsic values of processes. Yet both organizational and political theorists point out that process design affects the substance of decisions, and that the quality of decisions can be maintained through procedural safeguards even when ends are controversial or obscure. In this study we focus on the *process* of budgeting for higher education, not on the resources that go into higher education or the consequences of higher education's use of those resources.

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THE CONCEPT OF BUDGET PROCESS EFFECTIVENESS

The difficulties of dealing with the concept of organizational effectiveness are described by Katz and Kahn (1966):

Organizational effectiveness has become one of those handy but treacherous pseudo concepts, connoting a sort of totality of organizational goodness--a sum of such elements as productivity, cost performance, turnover, quality of output, and the like. This rudimentary model, as Seashore (1962) states, "is false to most of the data we have examined so far, and more complex models need to be involved." (p. 150)

These problems are readily apparent when it comes to developing criteria for judging the effectiveness of the process of state budget formulation for higher education. A primary reason for confusion in defining "effectiveness" has been, as suggested by Katz and Kahn, the lack of a coherent model for describing organizational behavior. The open systems model of organizational behavior alleviates somewhat the lack of a conceptual framework for defining the components of effectiveness. From a systems perspective, economists have identified some of the dimensions of effectiveness. These concepts are described briefly below.

TECHNICAL EFFICIENCY

Technical efficiency denotes the degree to which an organization produces a set of outputs of specified quality and quantity using the least cost set of inputs and processes, either

- by holding outputs constant and decreasing the costs of inputs and processes, or
- by holding input costs constant and increasing the quality or quantity of outputs through use of the least costly mix of inputs and processes.

In theory, to obtain the desired number and quality of the graduates of institutions of higher education, technical efficiency consists in finding the least costly set of resources and processes needed to meet that objective. Conversely, if one identifies the amount of resources available to an institution of higher education, technical efficiency consists in finding the mix of these resources and the set of processes that will produce the most outputs of a given quality.

ALLOCATIVE EFFICIENCY

Allocative efficiency denotes the degree to which an organization produces and distributes a mix of outputs that best satisfies social preference functions by

- identification and reconciliation of collective and individual preferences for different outputs, and
- identification and reconciliation of collective and individual preferences for the allocation of the costs of inputs and the benefits of outputs among populations.

Allocative efficiency thus is concerned with determining the relative preferences of society for the various outputs of higher education: teaching, research, and service. In teaching, choices must be made between subject matter areas, such as political science and English, and between liberal and vocational studies. The identification of both individual and social preferences for the outputs of higher education is very difficult (Johnson, 1974). The reconciliation of individual and collective preferences also presents a difficult problem (Friedland, 1974; Hardin, 1968; Olson, 1971).

Another facet of allocative efficiency is concerned with determining the distribution of the benefits and costs of higher education among various segments of the population. Since higher education is in part a public good, a direct relationship does not exist between con-

sumers and producers. Consumers can only partially indicate their demand for higher education by paying institutions for the benefits they receive through tuition and user's fees. Preferences for benefits of higher education, the distribution of these benefits, and the distribution of costs largely are determined through political and governmental processes and are enacted by substantive and appropriation legislation.

The analysis and determination of technical efficiency is dependent first on specifying the outputs desired from higher education, and second on the constraints in obtaining resources--both allocative efficiency issues. These issues are settled politically rather than through empirical analysis and are subject to constant revision (Meisinger, Purves, & Schmidtlein, 1975). Policymakers rarely have unambiguous guidance, and this creates the major impediment to using a direct, analytical approach to increase organizational effectiveness.

RATIONALITY

Philosophers, political scientists, and mathematicians have been concerned with rationality, a concept closely related to effectiveness. Pepper (1961) identifies two dimensions of rationality: decisions that are congruent with evidence, and those that are internally logically consistent. The problems of applying concepts of rationality to decisionmaking were explored in considerable depth by Friedland (1974), and the major problem was summed up by Llewellyn (1960):

The Method of Reason does not require that men shall do what they lack time to do, or lack experience to do, or, for that matter, lack brains to do. I get impatient with the scholarly critic who sets up as the first step of the Method of Reason a clean and searching analysis of the problem; I get impatient not because that is not a good first step (after the information has been gathered) but because it is not part

of the Method of Reason to demand such analysis of men to whom the problem is stubbornly refusing to open for analysis.
(p. 460)

The constraints and dilemmas that confront decision-makers in achieving rationality have been listed by Schmidtlein (1974). Lindblom (1968) suggests that when outputs are obscure or controversial, attention is focused on the process. A process is designed that permits affected parties to evaluate the consequences of decisions and to bargain for favorable outcomes. Outcomes result from this multilateral bargaining process and not from comprehensive analysis and decisions by a central decision-maker.

THE PROCESS FOCUS OF THIS STUDY

This study focuses on the process of state budgeting for higher education, not its inputs and outputs. Despite this restriction there remain many dimensions of the budget formulation process and many evaluative approaches. This study has not exclusively adhered to the evaluation of a particular aspect of process or of a particular approach; comments are made on issues as they are illuminated by the data. However, primary attention has been given to a number of dilemmas that beset the design and conduct of the budget formulation process. An attempt has been made to identify and comment on these dilemmas, to increase awareness of their existence, and to sensitize policy-makers to the trade-offs involved. Hopefully, as a result of this analysis, these trade-offs will be recognized more clearly and resolved more satisfactorily in the future.

The trade-offs involved in the design and conduct of budget formulation processes can be classified under five broad headings: 1) consensus versus conflict, 2) efficiency versus redundancy, 3) flexibility versus control, 4) stability versus change, and 5) simplicity versus complexity.

CONSENSUS/CONFLICT

- The consensus among state-level agencies is sufficient to produce timely and consistent decisions but is not so pervasive that it frustrates new ideas and weakens checks and balances.
- The level of trust and confidence among agencies and institutions provides for an efficient coordinated cooperative review of budgets while it maintains the criticism and challenges that identify and illuminate important issues.
- There is a balanced concern for the time devoted to efficiency issues that are subject to technical solutions, and to allocative issues that are settled primarily by political bargaining.
- There is a balanced concern for assuring that state agency staff remain unco-opted, and for assuring that they are familiar with institutional programs, processes, and problems.
- There is a balanced concern for the expeditious resolution of substantive issues and the maintenance of procedural standards of due process.
- There is a balanced concern for making information available to all interested parties on deliberations and decisions and the need for candid discussion of alternative actions and their consequences on a confidential basis.
- The deliberations in the agencies engaged in budgeting for higher education are easily accessible to those who wish to influence decisions, but this access is structured in ways that avoid a paralysis of the decision process.
- The location of authority for making different classes of budget decisions facilitates a balance between the need for a broad perspective and the need for detailed knowledge of local conditions.

EFFICIENCY/REDUNDANCY

- The allocation of budget functions among state agencies and institutions results in a satisfactory trade-off between agency specialization and the duplications and overlap needed for access, due process, and an effective system of checks and balances.
- The resources available to state-level budget agencies are sufficient for each to carry out their functions but not so great that any one agency can dominate decision processes.
- The budget agencies perform all functions essential to maintain their roles but do not perform inappropriate or inessential functions.
- The review of budgets exhibits a balanced concern for conflicting policy objectives such as cost reduction and equal access, maintenance of program quality and program diversity, or employment opportunity and liberal education.
- The level of resources devoted to analysis and planning is compared with the benefits provided by these endeavors.

FLEXIBILITY/CONTROL

- State-level agencies employ sufficient controls to ensure program coordination among institutions but do not exercise these controls so extensively and rigidly that institutions are unable to respond efficiently to local conditions.
- An appropriate balance is maintained between formal bureaucratic accountability and preserving sufficient institutional flexibility to accommodate the demands of their diverse clientele.

- The legal and procedural environment of the budget process permits sufficient flexibility in the allocation of funds to meet revenue fluctuations and changing educational demands while avoiding such an unstructured process that issues are obscured and arbitrary shifts in fund allocations take place from year to year.
- There is a balance between the use of legal and administrative controls on the one hand and persuasion and bargaining on the other as a means by which policy objectives are achieved.
- There is balance between the use of interinstitutional cooperative mechanisms and direct state-level agency coordination in resolving policy issues.

STABILITY/CHANGE

- There is a balance between attention to longer-term, strategic budget issues, and shorter-term tactical issues.
- There is a balance between the need for analysis prior to making decisions and the necessity to make prompt decisions.
- There is a balance between making changes to meet new conditions and limiting the size of these changes so that they do not overwhelm the decision process and destroy the consensus necessary for action.
- Statewide plans and analyses provide a context for making budget decisions, but are not implemented so rigidly that changing conditions--or new insights and evidence--are ignored.
- Budget processes are sufficiently routinized to avoid spending unnecessary time and resources on repetitive functions but not so routinized

that difficulty is experienced in adapting to unique or changing circumstances.

- The concepts and procedures followed during the process of budget review have sufficient continuity to avoid excessive costs of staff retraining and redesign of procedures, but are subject to sufficient experimentation and revision to meet changing circumstances and new demands.

SIMPLICITY/COMPLEXITY

- Agencies obtain data that are sufficiently detailed and specific to permit them to carry out their functions effectively but are not too complex to be understood.
- Standard and comparable definitions are used to classify educational activities to ensure equitable treatment but these standards and definitions are not employed so rigidly that important and subtle program differences are obscured.
- There is a balance between broad consideration of the entire budget and the detailed analysis of the most critical issues.
- There is a balance between identifying the costs of programs and avoiding so complex a set of costing procedures that they are inordinately expensive and hard to understand.
- Budget processes and documents cover sufficient aspects of higher education so that important concerns are dealt with but are not so inclusive that important issues are lost in the details, trivial issues invite undue attention, or data is not used because of lack of time.
- Budgetary decisions are sufficiently specific to provide clear policy guidance to institutions

while avoiding so much detail that they constrain effective institutional responses to local conditions.

- State-level staffs are sensitive to the ways in which decisions are made in institutions of higher education and take these circumstances into consideration in establishing state policies, but nevertheless pursue broad state executive and legislative policy objectives.

There are many dimensions to the process of budget formulation. For example, evaluations might concern the instructions for submission of budgets, budget requests, their review, or appropriation bills. A taxonomy of some of these dimensions is provided in Appendix A; each dimension listed can be further subdivided, depending on the desired depth of analysis. For each dimension of the budget process, a set of process dilemmas, such as those listed, can be generated to evaluate the effectiveness of practices. One criterion may sometimes be used to evaluate several dimensions of the budget process, but in most instances different criteria are needed to evaluate different areas.

The total number of evaluative statements that can be made about the budget process is equal to the number of process dimensions multiplied by the number of design dilemmas. Too great an elaboration of process dimensions and design dilemmas can lead quickly to more analysis than can be conveniently covered in one volume. Consequently, this volume lacks the detail and specificity some practitioners may wish, and the theoretical depth desired by some academics. The analysis itself represents a solution to a trade-off dilemma.

4.

The Organizational Context of the Budget Process

If men are to remain civilized, or to become so, the art of associating together must grow and improve in the same ratio in which the equality of conditions is increased. (de Tocqueville, 1945, p. 118)

THE GOVERNMENTAL CONTEXT OF STATE HIGHER EDUCATION BUDGETING

The budgetary process for higher education can be understood only in the broader context of the state government, whose primary function is to provide goods and services that cannot be provided efficiently, effectively, or at all through less formal voluntary arrangements or private enterprises (Hofferbert, 1966):

The complexities of existence, the massiveness of mutual needs, and the difficulties of communicating these needs through small, private organizations creates a set of claims which are reflected in governmental activity. (p. 82)

Some goods and services, including education, benefit everyone whether or not particular individuals pay their share; an educated citizenry and academic research lead to economic and social progress. Such services, therefore, are to a large extent supported through taxes and administered by governments.

Government also provides a means to regulate the adverse effects of individual actions on society as a whole, a problem illustrated by Hardin (1968) in his description of the "tragedy of the commons": the uncoordinated self-interests of individuals who grazed sheep on a common pasture caused overgrazing, with consequent losses to all. Governmental organizations can provide common services and protect people from decisions based only on immediate and narrowly perceived individual and organizational self-interests. In higher education, state coordination of academic programs and consumer protection from unscrupulous institutions exemplify such concerns.

PUBLIC AND PRIVATE DETERMINATION OF SUPPLY AND DEMAND

In the private marketplace citizens purchase goods and services directly from firms and individuals. The aggregate impact of these private transactions determines the amount, quality, and quantity of goods and services offered. In contrast, the need for public services is assessed indirectly, through political processes, and is translated into specific goods and services by public agencies; government acts as an intermediary. Public demand for higher education is determined through the interaction of institutions, state higher education agencies, executive budget offices, and legislative budget committees. The amount and kind of higher education to be provided is settled primarily during the budgetary process. The agencies receive clues to the public's preferences from such indicators as consensus on plans, assessments of unmet needs, election results, the media, and applications for enrollment. This information is balanced against other indicators, such as demands for other state services and limits on available revenues. Public demand may shift faster than governmental agencies are able or willing to modify programs. For example, during the early 1970s schools of education produced more teachers than the market could absorb.

The indirect assessment of preferences and the political issues of whose preferences are to prevail

leads to the conflicts that accompany the formulation and approval of budgets. Public preferences are constantly shifting and the balance among opposing values is often nearly equal, further complicating the search for sufficient consensus to take action.

The state budget agencies, caught in the conflict over preferences, perform technical analyses in an attempt to determine objectively the appropriate amount of money for higher education. However, in democratic theory, the only standards or criteria for judging the value of educational services are those held by citizens. Since there is no empirical basis for maintaining that one group's preferences for a particular set of outputs are "better" than those of another, conflicts over preferences are settled by bargaining in the political arena. This bargaining is influenced by technical analyses which settle questions of fact, identify the constraints on producing services, and assess the consequences of providing them. However, such analyses are often used by public officials to gain political objectives rather than to resolve technical issues.

AMBIVALENCE TOWARD GOVERNMENT

Conflicts over preferences and the indirect way in which government assesses demand lead to some public ambivalence toward government. Services must be provided for all who are eligible and paid for by all, despite differences in preferences and in ability to pay. Decisions on providing new services or discontinuing old services are made slowly and may lag behind growth or lessening of demand. Relevant information is necessarily oversimplified because of the need to reduce its volume and complexity for use by busy officials. Simplification and categorization of information tends to blur differences and create false impressions. General rules are created to deal with situations that are to some extent unique, and are often enforced without an understanding of their limitations; thus regulations can impede responses to changing circumstances. Consequently, conflict arises over the relative costs and benefits of government (Cleveland, undated):

First, we the people expect public agencies to take on many new or expanded functions all the time, to provide more and more initiative in the economy as a whole. But second, we the people all agree that the government should not become a bloated bureaucracy. (p. 32)

This ambivalence toward government is readily apparent in the attitudes of those involved in state budgeting for higher education, who wish to increase the role of state government in coordinating and regulating higher education while at the same time preserving the benefits of institutional autonomy.

GROWTH OF GOVERNMENT

The dilemmas posed by governmental growth have been resolved, particularly during the past 40 years, in favor of expanded governmental functions. Growing affluence has permitted greatly expanded public services, such as education, and this in turn has created a demand for more governmental coordination and regulation.

The origins and rapid growth of the two-year colleges are described by Medsker and Tillery (1971). The growth in the size, complexity, and functions of the university campuses are described by Kerr (1963), and the development of multicampus systems by Lee and Bowen (1971). State government has had a parallel growth. The formation and expansion of agencies involved in budgeting are described by Burkhead (1956), and their increasing role in the coordination and regulation of higher education by Moos and Rourke (1959), Harclerod (1975), and the Carnegie Foundation for the Advancement of Teaching (1976). The increase in the number of legislative fiscal staffs is noted in the *Book of the States* (Council of State Governments, 1974). Glenny (1959), Berdahl (1971), and Millard (1976) described the growth of statewide coordinating and governing agencies for higher education. The increasing number, size, and programs of educational institutions, and their growing interdependency, have

led state policymakers to conclude that the benefits of state coordination and regulation outweigh the costs of governmental growth.

FUNCTIONS OF THE BUDGET PROCESS

The system of organizations and process for budgeting of higher education is the structure in which state government: 1) assesses the demand for the amount, quality, and kinds of higher education; 2) balances the constraints and trade-offs required to provide resources; and 3) allocates available resources. The preferences of citizens for higher education--as expressed by institutional requests for funds, elected officials, and interest groups--are translated during the budget process into specific policies, programs, and fund allocations. Conflicting public preferences are identified, constraints on meeting demands are evaluated, and degrees of consensus are tested; decisions are made on requests for new activities, continuation of existing ones, and the distribution of resources among them. The major topics of this study are the problems of state budget and higher education agencies in reaching these decisions.

The organizational framework and budgeting procedures structure decisionmaking by creating methods and channels for organizing and disseminating crucial information among interdependent activities, and also by specifying authority and accountability for particular decisions. Prescribed standards of behavior increase the predictability of the actions of a single agency and reduce the uncertainty of relationships among agencies. Various stages of the budget process provide access to those making claims on government and due process for adjudicating these claims. The budget process also offers a regular means by which the efficiency and effectiveness of governmental programs are assessed.

ASSIGNMENT OF ORGANIZATIONAL FUNCTIONS

Organizational structure and functions in budgeting are assigned through law, political and administrative decisions, and custom, and reflect agreement among a host of contending political forces. Participants may disagree over ideological values, such as the effect on "due process" of various alternatives, or over the economic impact of staff size and duplication of function. Consequently, the formal provisions of constitutions and laws do not adequately describe the diversity of the structures, assignments of responsibilities, and the extent to which these responsibilities are carried out in the 50 states. (For an extensive description and analysis of the impact of constitutional and statutory authority on the relationships between state agencies and institutions see Glenny and Dalglish, 1973.) The political forces that shape constitutions and laws are constantly in a state of flux; relationships among agencies and the relationship between an organization's legal authority and its actual functions vary with current political support, available resources, and leadership skills. Political tension that cannot be accommodated by existing organizational patterns eventually requires new structures, and as a consequence, laws and even constitutions, are changed.

AGENCIES RESPONSIBLE FOR STATE BUDGETING FOR HIGHER EDUCATION

The primary agencies engaged in state budgeting for higher education are: 1) an executive budget office; 2) one or more legislative budget staffs; and 3) a state higher education agency. Only one state lacks an executive budget office, four have no legislative staff for budget review (Council of State Governments, 1974), and two lack a state higher education agency. However, not all of the 48 state higher education agencies reviewed budgets. Other state-level agencies may play an important role in particular phases of the budget process, for example, performance, management, and fiscal audits; personnel management; property management; collective

bargaining; revenue estimation and demographic forecasting; information gathering; and planning. Below the state level, institutions may be organized as multicampus systems, separately governed campuses, or both. Both formal and informal associations of institutional presidents and other administrators may engage in what Glenn (1959) termed "voluntary coordination" of higher education. These associations often play a role in budget formulation.

STATE-LEVEL BUDGET AGENCIES

THE EXECUTIVE BUDGET OFFICE

Origin and Number. Executive budget offices have their origins in reform movements that began early in this century, for instance, in 1909, the People's Power League of Oregon proposed centering executive power in the governor (Moos & Rourke, 1959). One primary effect of this "good government" movement was to centralize fiscal control under governors by means of an executive budget office. The first law authorizing the governor to draft a budget for submission to the legislature was enacted in Ohio in 1910 and, by 1920, 23 states had provided for an executive budget (Burkhead, 1956). Thus the executive branch gained a much larger role in budgeting--in many states the most significant role. Currently, formal authority for budget preparation is vested in the governor in 46 states, and the state budget is prepared by staff located in the executive branch in 49 states.

Growth. Executive budget offices have grown in size as well as number. Table 2 compares the relative sizes of the professional staffs of 17 budget offices in 1965 and in 1974. Changes ranged from an increase of 590 percent in Illinois to a decrease of 19 percent in Connecticut; the average increase in staff size during this period was 48 percent, and six states registered gains of 100 percent or more.

Table 2

CHANGES IN SIZE OF EXECUTIVE BUDGET OFFICES
IN THE 17 STATES, 1965-1974

State	1965 ^a	1974 ^b	Staff increase or decrease 1965-74	
			Number	Percent
California	75	101	26	35
Colorado	16	15	-1	-6
Connecticut	44	35.5	-8.5	-19
Florida	13	29	16	123
Hawaii	18	36	18	100
Illinois	9	62	53	590
Kansas	10	15	5	50
Michigan	22	30	8	36
Mississippi				
Nebraska	3	9	6	200
New York	122	160	38	31
Pennsylvania	21	45	24	114
Tennessee	6	10	4	67
Texas	8	10	2	25
Virginia	6	12	6	100
Washington	27	22	-5	-18
Wisconsin	18	28	10	56
Total	418	619.5	201.5	48

^aThe Council of State Governments, 1967.

^bGlenny et al., 1975.

Location. Forty-nine states have an executive agency that prepares or participates in the preparation of the state budget. Only Mississippi does not have an executive budget office; responsibility for state budget preparation lies with the Commission of Budget and Accounting, which is primarily a legislative agency. Its members are the governor as ex officio chairman, lieutenant governor, and nine legislators. In South Carolina, budget responsibility is with the State Budget and Control Board, of which the governor is chairman. Other members are the treasurer, comptroller general; chairman, Senate Finance Committee; and chairman, House Ways and Means Committee (Council of State Governments, 1974). However, the comptroller general supervises an executive staff that reviews budgets.

In Arkansas and Texas, although the budget is prepared by an executive agency, the governor lacks formal budgetary authority. In Arkansas the budgetmaking authority lies with a legislative council although the state budget is actually prepared by the Office of the Budget in the Department of Finance and Administration. In Texas the state budget is prepared jointly by the Governor's Budget Office and the Legislative Budget Board.

Responsible Official. In the 46 states that vest formal authority for budget preparation in the governor, this power is generally exercised through the director of the department, agency, or bureau that actually prepares the budget. The organizational locations of the officials that prepare the state budget are shown in Table 3. Figure 4 diagrams the six locations of these officials. The director of the shaded agency in each diagram is the official responsible for budgeting in at least one state.

Table 4 lists the locations of officials responsible for budgetmaking in the 17 states in our study. All 17 governors in this study were personally involved, to varying degrees, with budgetary decisions. The number of officials in the "chain of command" between the analysts and the governor in the 17 states varied from a high of five in Connecticut to a low of one in Texas (Glenny et al., 1975, p. 100). The average number of officials

Table 3

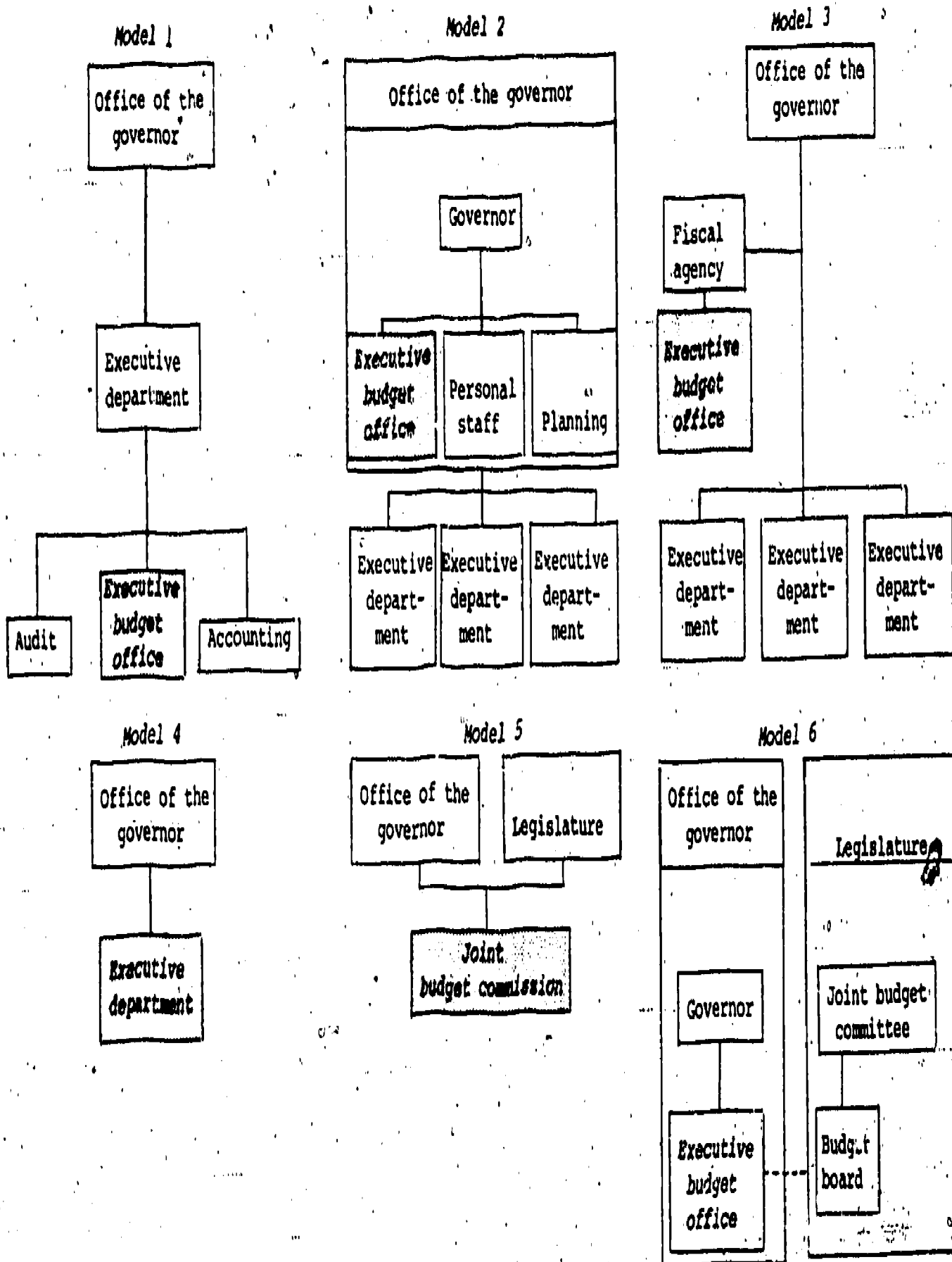
LOCATION OF STATE OFFICIALS RESPONSIBLE FOR
BUDGET FORMULATION IN THE 50 STATES

Responsible official	Number of states
Director of a unit within an executive department	27
Director of an agency reporting to the governor	11
Director of a unit within an agency reporting to the governor	5
Director of an executive department	4
Director of a commission or board	2
Director of an agency reporting to the governor in cooperation with director of a legislative board	1

Source: The Council of State Governments, 1974.

Figure 4

DIFFERING LOCATIONS OF EXECUTIVE BUDGET OFFICES AMONG THE 50 STATES



46

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Table 4

LOCATION OF STATE OFFICIALS RESPONSIBLE FOR
BUDGET FORMULATION IN THE 17 STATES

Location of state officials	States	Number of states
Director of unit within an executive department	California Colorado Connecticut Florida Hawaii Kansas Michigan Nebraska Tennessee Wisconsin	10
Director of unit within an agency reporting to the governor	Virginia	1
Director of agency reporting to the governor	Illinois New York Pennsylvania Washington	4
Director of board or commission	Mississippi	1
Director of executive agency and director of legislative board	Texas	1

Source: Glenny et al., 1975.

through which an analyst reported to the governor was 3.0 for the states in which the budget unit was part of a larger department; for the states in which the budget unit was the principal component of an agency reporting directly to the governor, the number was 3.25. The average organizational distance between the governor and higher education budget analysis in the eight states whose total higher education appropriation ranked them in the top quintile of the states, was about the same as for the eight states ranked in the bottom four quintiles (Chambers, October 21, 1974). Connecticut, in the third quintile nationally, had as noted the largest number of officials in the hierarchy among the 17 states.

One might assume that fewer intervening officials means that more importance is given to higher education budgeting by the governor. In fact, however, the opposite appears more likely to be true. In the six states judged, on the basis of interviews, to have comparatively less influential executive budget offices--Colorado, Florida, Illinois, Pennsylvania, Tennessee, and Texas--the average distance was only 2.33, compared with an average of 3.33 for the other states. Not surprisingly, there is a stronger positive correlation between the size of the total professional staff of the budget offices and the number of levels in the hierarchy above the higher education budget analysts. In the seven states with 30 or more budget professionals, the average number of officials between the budget examiners and the governor was 3.29, while for those with fewer than 30 the comparable number was 2.67.

The governors of all 17 states reportedly attached great importance to higher education budgeting, whether they were attempting to control budget growth, as in Connecticut, or to expand the budget, as in New York. The variations in the importance of the executive budget function appeared to result more from provisions of state constitutions and contextual factors than from particular organizational arrangements. For example, in the state of Washington the executive budget office

reported directly to the governor, but there were four officials in the hierarchy between the governor and the higher education analysts. Despite this "chain of command," during formulation of the 1973-1975 biennial budget the governor personally met with individual analysts on specific issues. In most of the 17 states, while it would not be extraordinary for the governor to hold such meetings, these would not be routine, scheduled sessions as in Washington.

States whose appropriations to higher education were among the bottom fifth nationally were not included in the study. Had these smaller states been included, more frequent examples of scheduled analyst interaction with governors might have been found.

Staff Organization. Executive budget offices are comparatively small compared with most state agencies. Only three of the 16 executive budget offices in our study had more than 100 professional staff members, while six had 15 or less. The larger offices are divided into subunits, usually according to particular sectors of state government such as education or health, and staff members generally have specific assignments: One analyst may review budgets of doctoral-granting universities, another those of other four-year institutions. In smaller agencies the analyst may cover all of higher education and perhaps other areas as well, such as elementary and secondary education.

The primary assignments of budget analysts are usually quite explicit, but even the largest agencies regularly encounter special tasks and peak workloads that result in many task forces and *ad hoc* staff assignments. The relatively small size of all executive budget offices appears to facilitate the flexible use of staff and internal communication.

Responsibilities. The primary responsibility of executive budget offices is to formulate the state budget. In general, higher education and other agency requests

are submitted to the executive budget office for review. Its recommendations, as approved or modified by the governor, are then incorporated into the state budget. Before they receive budget requests, executive budget offices develop policy assumptions and procedural guidelines for use by institutions in preparing their budget requests. Staff members delineate policy issues that require resolution during the budget process and review and estimate the costs of new legislative proposals.

During review of budget requests, figures are audited, and costs are established for continuing programs and estimated for expanded or new programs. Numerous requests for information are made to institutions and state higher education agencies. Sometimes staff members visit institutions and often hold hearings. Preliminary recommendations are prepared and presented to top officials, frequently including the governor; these estimates are reviewed for conformity to policy and the relationship of the totals to state revenue estimates. Often changes are made and estimates revised before inclusion in the executive budget. The staff then engages in the sizeable task of preparing the executive budget. In Mississippi, which has no executive budget office, such tasks are performed by the staff of the legislative budget agency.

Following preparation of the executive budget, in most cases the executive budget office staff monitors the appropriation process, presents the budget to the legislature, represents the views of the governor, and assists appropriations committees. Once the budget is enacted, the executive budget office analysts often participate in decisions on gubernatorial vetoes and in drafting veto messages.

After the governor signs an appropriations act, the executive budget office staff participates, to varying degrees, in the administration of the budget. This ranges from very detailed preaudits of purchases and personnel actions, as in Connecticut, to very little formal oversight, as in Michigan. Administration of the budgets of doctoral-granting institutions, because of both tradition and constitutional and statutory grants

of autonomy, is typically less extensive than that for other four-year institutions. Executive budget offices also evaluate state expenditures, typically studying particular programs or issues during the period between the submission of the executive budget and the receipt of the institutional requests for the next year. These studies may be undertaken cooperatively with audit, legislative, or state higher education agency staffs. Studies conducted by other state agencies are also evaluated by executive budget office staff.

Staffs of executive budget offices often have responsibilities that go beyond budget formulation, administration, and evaluation, including fiscal research, organizational and management analysis, accounting, data processing, and review of legislation (Council of State Governments, 1967).

THE LEGISLATIVE BUDGET STAFF

Far less has been written on the nature and role of legislative staff agencies in general, and their budget agencies in particular, than on executive branch agencies (Worthley, 1975). The number of legislative budget agencies and the size of their staffs have grown rapidly in recent years, and this seems likely to continue for some time to come, if only by the laggard states catching up with those leading the trend.

Origin and Number. Before the development of executive budget offices, the legislature was generally predominant in state budgeting. Legislatures directly examined agency requests, compared totals with revenue estimates, made changes, and enacted appropriations bills. State governmental functions were limited, and the pressures to increase expenditures were easier to contain within available revenues.

Initially, the legislative budget committees did not have staff assistance. Temporary help was occasionally employed, but the responsibility for analyzing budgets,

providing continuity, and educating new members fell to the legislative leadership (Rosenthal, 1970).

California established the first permanent legislative budget staff in 1941. By 1951, only 15 legislatures had budget offices or staffs; by 1964, there were budget staffs in 27 states; and in 1974, all but four legislatures had such staffs. For this purpose, 34 states now have one or more specialized legislative budget staffs, while in 12 others budget analysis is provided by a general agency like the legislative council (Council of State Governments, 1974).

In 1965, all the states that lacked full-time legislative budget staffs relied on executive budget office analysts, with the exception of Connecticut, which employed temporary staff. Among the 17 states in the study, new legislative budget staffs have been created in three states (Connecticut, Tennessee, and Virginia) between 1965 and 1974. Kansas could be added to these three, since its legislature relied primarily on the governor's budget staff for analysis in 1965 and the one person listed in Table 5 had numerous nonbudgetary responsibilities.

Growth. The number of legislative staff budget agencies has increased and their staffs have grown larger. For the 14 states for which comparative data is available, the total number of professional staff members increased from 69 to 196 between 1965 and 1974, or 184 percent. The total size of such staffs for the 17 states is 251. Only Hawaii had a decrease in the number of staff, losing two members.

Location. There has been very little examination of the organization of the staff agencies that serve state legislatures. The Council of State Governments (1974) first attempted to specify the major organizational patterns found among the states, identifying five:

Table 5

CHANGES IN SIZE OF LEGISLATIVE BUDGET STAFFS IN THE 47 STATES, 1967-1974

States	Number of staff			Staff increase or decrease 1965 to 1974	
	1965 ^a	1968 ^b	1974 ^c	Number	Percent
	California*	30	40	54	24
Colorado*	3	4	6	3	100
Connecticut*	Temporary	No data	2	2	New staff
Florida*	2	4	20	18	900
Hawaii*	13	15	11	-2	-15
Illinois*	2	2	31	29	1450
Kansas*	1	1	2	1	100
Michigan	Some	No data	24	?	?
Mississippi*	2	No data	6	4	200
Nebraska*	2	No data	12	10	500
New York	Some	No data	23	?	?
Pennsylvania	Some	No data	8	?	?
Tennessee*	None	3	4	4	New staff
Texas*	7	9	18	11	157
Virginia*	None	No data	4	4	New staff
Washington*	4	5	16	12	300
Wisconsin*	3	8	10	7	233
Total	-	-	251	-	-
*Total for 14 states	69	-	196	127	184

^aThe Council of State Governments, 1967.

^bThe Council of State Governments, 1968.

^cGlenny et al., 1975.

1. Nonpartisan, centrally managed, one or two staff agency legislatures.
 2. Nonpartisan, centrally managed, multiple staff agency legislatures (Connecticut and Florida are examples).
 3. Nonpartisan, decentralized, multiple staff agency legislatures (Michigan and Wisconsin are examples).
-
4. Partisan, centrally managed, multiple staff agency legislatures (the New York Senate is the only example).
 5. Partisan, decentralized, multiple staff agency legislatures (Illinois and Pennsylvania are the best examples).

In the 17 states we studied the staffs that review higher education budgets followed one of these general staffing patterns. Nine of the 17 had a joint legislative budget review staff, seven had separate staffs in each house, and two states, California and Tennessee, had both a joint staff and staff in one of the two houses. Joint fiscal staff (as in Washington) that do not routinely review budgets have not been included in these tabulations.

Staff Organization. In the states with joint budget committees the staff was appointed to a joint legislative "housekeeping" committee and then detailed to work for the joint budget committee, as in Connecticut and Wisconsin. In other cases, as in Colorado and Texas, the staff was assigned directly to the joint budget committee.

In the states where budgets were reviewed by separate appropriations committees in each house, staff for these committees may be:

- Appointed and supervised by a joint legislative committee and also serve as staff, or sup-

plementary staff, for the separate appropriations committees (as in California and Kansas).

- Assigned for administrative purposes to an upper or lower house "housekeeping" committee and detailed to, and supervised by, the separate appropriations committees.

- Appointed and supervised by the separate house appropriations committees.

~~These general patterns of organization do not serve to~~ classify states because all three patterns may exist in the same state. In Illinois, Pennsylvania, and Washington the separate house staffs were further divided into majority and minority party staffs. In Illinois, in one house the staff of one party served the party members of its committee directly while the staff serving the other party were responsible to that house's party leadership. In the other house, they were assigned from a central staff agency.

All of the 17 states had staffs serving the appropriations committees, although in 1974 such staffs were just being formed in Kansas and Virginia and were comparatively new in Tennessee. Hawaii, Tennessee, and Virginia employed temporary staff during legislative sessions; the Hawaii Senate borrowed staff from the University of Hawaii, Tennessee employed the state auditor and some of his staff, and Virginia employed a retired federal budget examiner.

Classification of staff organization is complicated by legislative sessions. Staff may be assigned to an appropriations committee during the sessions and to some other committee during the interim. For example, in Wisconsin, when the legislature was not in session, the analysts served an interim emergency finance committee, called the Board of Governmental Operations.

Responsibilities. The professional staff members that serve legislative budget committees play many roles and have varied responsibilities, both among states and

between houses within a state. For purposes of analysis, however, there are two primary roles. One is that of a partisan, political adviser who serves as a personal aide to a particular legislator and whose term of office normally coincides with that of his sponsor. The other is that of a nonpartisan, technical specialist who serves the legislature or a committee, and whose term of office normally extends beyond changes in committee chairmen and one party's control of the legislature.

In practice, of course, any staff member has personal partisan preferences that cannot but help color his contributions, and staff members who are the most nonpartisan in theory may be called on to perform partisan tasks. Furthermore, it is difficult to separate service to a strong committee chairman from service to the committee as a whole. Also, partisan staff members often outlast their sponsors, sometimes in other assignments, while nonpartisan staff may be employed for short periods of time, or a committee may have a partisan technical specialist serve for a short term or have a nonpartisan personal aide. Although most debates on legislative staffing tend to focus on the two "pure" role models, particular staffs may either be quite independent in defining their priorities and work schedules, or they may be closely supervised by their respective committees.

The inherent difficulties in formulating a useful classification of legislative staff roles are apparent. The possible combinations of role variables are too great to capture in a simple, comprehensible chart, and even if we were to specify staff roles in detail, they would be inaccurate in many instances because of the rapid rate at which staffs are growing and being reorganized across the nation. For these reasons we provide selected examples of legislative staff roles to illustrate typical patterns.

The office of legislative analyst in California appeared to be the best example of a staff composed of nonpartisan program specialists, with a high degree of staff continuity, serving the entire legislature. No

legislative staff exhibited all the characteristics of the partisan political adviser serving as a personal aide. Again, the nearest example was perhaps in California, where the chairman of the lower house appropriations committee had a partisan aide.

In Illinois and Pennsylvania, the budget committees of each house had two separate partisan staffs headed by separate staff directors, but these four staffs served primarily as professionals rather than as political aides. In Hawaii, budget committee staff who were present during our visit in August 1974 had all departed by January 1975, following an election. This lack of continuity was accentuated because the Hawaii upper house employed part-time staff from the University of Hawaii during their legislative sessions.

Partisanship combined with a professional orientation and longevity was illustrated by New York, where staff were assigned directly to the appropriations committees of the two houses. The staff viewed themselves as nonpartisan professionals, but were closely associated with the partisan concerns of the legislators. The director of the New York lower house staff felt that an arrangement such as the office of legislative analyst in California would divorce staff from the legislative process, in effect creating a fourth branch of government.

Even when staffs are assigned directly to an appropriations committee their relationships with the committee can differ. For several years in Florida the House Appropriations Committee staff analyzed the Regents' budget request, developed its recommendations, and showed the resulting changes to the committee which focused on the staff's recommendations in its deliberations. The staff was seen as a professional resource and its members tended to survive the committee chairpersons who appointed them. The staff of the Florida Senate Ways and Means Committee, on the other hand, analyzed only the governor's budget request and made no explicit recommendations to the committee in an open meeting as did the House staff. Its review was less detailed than that of the House staff, focusing on major decisions and their dollar implications.

The Senate approach had the advantage of maintaining the primacy of the legislators in the process and making them appear the authorities on issues.

The great variations in staffing arrangements among the states illustrate the lack of agreement on the advantages of particular arrangements. The particular traditions, conditions, and values in each state have resulted in unique solutions. In some states, the belief predominates that since legislators and the process of legislation are partisan, staff should serve as extensions of the legislators and expedite the partisan process of lawmaking. In other states, staff are selected explicitly and used primarily in a nonpartisan fashion; while they serve lawmakers who have partisan interests, their assistance is intended to be technical, professional, and impartial, bridging differences by applying facts and objective standards to the solution of problems. To state the extremes, one staff might serve as narrow political operatives to a particular legislator, and another as a somewhat independent fourth branch of government obscuring the political role of the legislators.

When a staff is viewed as facilitating the traditional partisan functions of a lawmaker, differences exist over the extent to which the staff's assistance should be primarily political or mainly confined to technical issues. The two areas are difficult to separate and to varying degrees staffs concern themselves with both. Legislators also disagree about the value of staff continuity. A staff with tenure, whether from design or tradition, has historical perspective and depth of experience, but this very capacity is of concern to some legislators who feel that long-term incumbents might dominate inexperienced or weak legislators. Where budget committees are dominated by powerful, long-standing chairpersons, as is often the case, this consideration does not seem compelling. However, longevity in office is an accident of politics, and the very real concerns over staff domination of legislators was reflected in a comment by Wildavsky (1973): "Better a lousy legislator than a beautiful bureaucrat" (p. 100).

The perception of staff roles influences organizational patterns. Staff that are directly responsible to appropriations committees are likely to be under more pressure to serve the committee members' partisan points of view. The selection of areas for analysis and interpretation will be subject to more partisan perspectives, but presumably partisan analyses will be balanced by a need for accommodation among the legislators. Staff appointed by legislative service agencies, or the committees to which these agencies are responsible, are more likely to begin their analyses from a technical and professional perspective, which must also eventually be reconciled with the political interests of the members of the various committees. This does not imply that centrally assigned staff have purer motives than those appointed by committees, for they have their own ideological leanings and personal aspirations, but only that the incentives and constraints of their position do not obligate them to support as faithfully the viewpoints of individual committee members. Central assignment of staff also helps maintain continuity, since the tenure of staff appointed by committee chairpersons or members is often only as long as their sponsors'.

For all budget staffs there is the common problem of joint allegiance. For example, in Wisconsin, the Legislative Fiscal Bureau served as staff to the Joint Finance Committee, to the Conference Committee, and to an interim Emergency Finance Committee; for administrative and personnel matters it was accountable to the Joint Committee on Legislative Organization (Hartmark, 1975), and it also often had to work with legislators from both parties. Information supplied by staff to one legislator may be viewed by another legislator as evidence of partiality. Similarly, information given in confidence to a staff member by a legislator may make it difficult for the staff member to deal openly and fairly with other legislators. (For more extended discussions of the role and responsibilities of legislative staff, see Balutis and Butler, 1975.)

In performing their major roles, staffs undertake a variety of specific tasks. Few staffs perform all of these tasks, but all perform some of them. In addition to interviews with legislative staff, the following examples of staff tasks are also drawn from Balutis and Butler (1975), Manley (1968), Meller (1967), Porter (1974), and Rosenthal (1970):

- maintaining liaison with constituencies, with executive branch agencies, and with other legislative committees;
- reviewing budget estimates prepared by the institutions, the state higher education agencies, and the governor;
- participating in legislative policy formulation;
- assisting committee members to formulate questions and define issues;
- monitoring legislative actions; and
- monitoring expenditures and the performance of executive agencies and institutions.

Staff members often meet with constituent groups, lobbyists, and members of the public during legislative consideration of the budget, or with individuals and groups who have specific complaints, and then present the points of view of these groups and individuals to legislators. They also provide liaison with staffs in the executive budget office and the executive departments and agencies, sometimes holding informal meetings with agency heads and staffs prior to legislative sessions to exchange views and information. In some cases there is substantial informal interaction, in others virtually none. The staff also represents the "legislative point of view"--the interest, perspectives, and intent of legislators--to the executive branch; when the legislature has enacted an appropriations bill, the

staff interprets the intent of the budget actions for executive agencies. In some cases, they act as brokers when there is executive-legislative conflict.

Legislative budget staff members are often recruited from executive agencies, which background enables them to understand the executive perspective and provides them with valuable contacts and friendships. Interagency transfers seem to help maintain productive relationships in the face of the conflicts inherent in the separation of powers.

Political scientists have noted that staff-to-staff contacts tend to promote communication and cohesion among the committees of the legislature (Manley, 1968), strengthening party unity and increasing positive legislative response to executive initiatives (Rosenthal, 1970). The growth of legislative staff can promote both the quantity and quality of legislation; at least staff increases have been accompanied by large increases in the number of bills introduced (Rosenthal, 1970).

The concept of legislative staffs as mere technicians implementing the policies of elected officials has been demonstrated to be grossly inaccurate in practice (Appleby, 1949). The extent of staff involvement in policymaking varies greatly, but typical activities include active participation in high-level meetings, briefing sessions, and appropriation bill "mark up" sessions; development of policy papers and recommendations; and making comprehensive recommendations on budgets and policies. One observer has suggested that in some cases legislators serve only to legitimate staff decisions; this overstates the power of legislative budget staffs, but they nevertheless do typically have substantial impact on policy.

Before receipt of budget requests, staff members visit campuses, make studies that help them formulate issues, and often establish the procedures and agendas for the budget review. Meetings are held before the beginning of the legislative sessions to brief committee members on emerging issues. They may receive and review budget recommendations from campuses, multicampus

offices, the state higher education agency, the governor, or more than one of these organizations; these come in a variety of formats, ranging from a memorandum outlining broad recommendations to highly detailed budgets with extensive justifications.

Budget review begins by each house simultaneously or sequentially considering one or more of the budget recommendations, or ignoring them and developing their own budget recommendations. Sometimes budget staffs do not receive copies of higher education budgets until the governor releases his own budget recommendations. Once the staff begins consideration of a budget recommendation, they may prepare estimates and projections, check data for accuracy, code computer input cards, prepare summaries of the major provisions of budget recommendations, and list issues that require consideration. They may analyze all or a limited number of areas in recommendations, and may act as a clearinghouse for information requested by the legislators; they often act as a buffer between the legislators and institutions, helping legislators restate questions to make them answerable and sometimes less pejorative. For example, legislators have sometimes been persuaded not to collect data that might be misconstrued and used to penalize institutions unfairly or to raise divisive political issues. Because legislative staff are very close to powerful politicians they can use their influence negatively as well as positively; inexperienced or unwise staff members can require unnecessary data and persuade legislators, who are generalists, to make decisions or to promote causes that harm higher education. Similarly, they can use their influence to pursue their own special interests.

During the appropriations process, staffs often submit notes and questions to committee members, prepare issue papers and briefs on particular topics, and respond to requests for specific analyses and information. They may prepare daily and weekly summaries of legislative actions on the budget, draft budget bills, and incorporate statements of legislative intent into committee reports and memoranda. They frequently make cost analyses of legislation developed by substantive

committees, and maintain liaison among appropriations committees, substantive committees, and the leadership of the houses. Liaison is also maintained between the two houses. After the budget is enacted, in some states staffs monitor agency and institutional expenditures and sometimes conduct studies of the performance of institutions, or of their organization, policies, and procedures.

THE STATE HIGHER EDUCATION AGENCY

Many states have more than one specialized higher education agency. There are commissions for planning and administering federal funds from the Higher Education Facilities Act of 1963, agencies for administering state and federal student aid programs, and, in some states, planning agencies created as a result of section 1202 of the Education Amendments of 1972. The state higher education agencies of primary interest in this study are those identified by Berdahl (1971), which coordinate all of a state's public, and sometimes its independent, institutions of higher education. These agencies may administer construction or student aid programs and may be section 1202 agencies, but in many states two or more higher education agencies perform these functions. We use the generic term "state higher education agency" for these state-level organizations with some misgivings, since they are extraordinarily diverse in the ways in which they are organized, their legal authority, and their formal and informal functions. They are unlike other state agencies both in their organization and in the way they are treated by state officials. In many ways they are, as Berdahl (1971) suggests, a fourth branch of government. Some, located in state departments of education, are state agencies; others that govern campuses are higher education institutions; and still others are regulatory or advisory coordinating boards that are neither state agencies nor institutions. Some states, for example, Oregon, have both a statewide governing board and an advisory coordinating agency. To use a single term to describe all these agencies obscures important differences among them, and between them and other state-

level governmental agencies. What they have in common for the purposes of this study is responsibility, or a potential for statewide oversight of many or all of the functions and sectors of higher education. For the sake of simplicity, a single term must suffice.

Origin and Number. The first state higher education agency in this country was the New York Board of Regents, established by statute in 1784. The second was the Nevada Board of Regents, authorized by the new state constitution in 1864. Between 1864 and 1941, 16 states created a statewide governing board for higher education. The first coordinating board to begin operations was authorized by a constitutional amendment in Oklahoma in 1941. From 1941 to 1968 only four more states created statewide governing boards for higher education; 27 states authorized coordinating boards. Michigan and Pennsylvania joined New York in creating a single governing-supervising board for all of public education, from kindergarten through college (Glenny, Berdahl, Palola, & Paltridge, 1971). In 1939, only 17 states had a state higher education agency; by 1959 the number was 26, and by 1974, 47 states had such an agency. These numbers do not include formal statewide voluntary coordinating arrangements, which did not exist in 1939 but by 1959 numbered seven, only one of which-- Nebraska--remained in 1974 (Berdahl, 1971).

Growth. There is no readily available data on the growth of state higher education agency staffs. Obviously, as agencies were newly formed they acquired employees, and since many have been created recently (Carnegie Commission on Higher Education, 1971), there have been considerable increases in total staff. For the four states included in both the 1959 Glenny study and this study, all but one--California--showed impressive staff increases, as indicated in Table 6.

Location. Berdahl (1975) has made the most recent attempt to classify state higher education agencies using

Table 6

CHANGES IN SIZE OF PROFESSIONAL STAFF
IN FOUR STATE HIGHER EDUCATION
AGENCIES, 1958-1974

States	Number of staff		Staff change	
	1958 ^a	1974 ^b	Num- ber	Per- cent
California	20.5	19	-1.5	-7
New York	22.0	146	22	563
Texas	6.0	60	54	900
Wisconsin	5.0	134	5	2580

^aGlenny, 1959.

^bGlenny et al., 1975.

the recent examination of the states and higher education by The Carnegie Foundation for the Advancement of Teaching (1976). Berdahl identifies six basic patterns of organization; these patterns and the states associated with them are listed in Table 7. In 29 states the state higher education agencies have their legal basis in statutes, while in 18 states they are established by the state constitution. In six states the agency is a cabinet department either by constitution or statute, and in 33 states it is designated as the statewide section 1202 commission (Education Commission of the States, 1975). The organization of state higher education agencies has been extensively explored by Berdahl (1971), The Carnegie Commission on Higher Education (1971), Glenny (1959), Glenny et al. (1971), Millard (1976), and Palola, Lehmann, and Blischke (1970). An extensive bibliography on the topic has been prepared by Barak (1974).

Responsible Officials. All 47 state higher education agencies are administered by a board. In 23 states all board members are appointed by the governor. In 15

Table 7

CLASSIFICATION OF STATES BY PATTERN OF STATE-LEVEL CO-
ORDINATION AND GOVERNANCE OF HIGHER EDUCATION,
1974 (pre-1202 commissions)

Pattern	Number	States		
No board	2	Delaware	Vermont	
Voluntary association	1	Nebraska ^a		
Advisory coordinating agency	11	Alabama Arkansas California Maryland ^b	Michigan Minnesota N.Hampshire Oregon	Pennsylvania Washington Wyoming
Regulatory coordinating agency	17	Colorado Connecticut Illinois Indiana Kentucky Louisiana ^c	Massachusetts Missouri New Jersey N.Mexico New York Ohio	Oklahoma S.Carolina Tennessee Texas Virginia
Statewide governing board with executive secretary	5	Arizona Idaho	Iowa Kansas	Mississippi
Statewide governing board with chancellor/president	14	Alaska Florida Georgia Hawaii Maine	Montana Nevada N.Carolina N.Dakota Rhode Island	S.Dakota Utah W.Virginia Wisconsin
	<u>50</u>			

Source: Berdahl, 1975.

^a Nebraska established an advisory coordinating agency in 1976.

^b The Maryland Council for Higher Education became a regulatory coordinating agency on 1 July 1976.

^c In January 1975, under a new state constitution, the Board of Regents replaced the Coordinating Council.

states the governor appoints the majority of the members. In New Jersey the governor appoints half of the members. In California, New Hampshire, and Washington the governor appoints less than a majority of the members. In Michigan, Nevada, and New York all board members are popularly elected. In North Carolina and Oklahoma board members are appointed and elected by other state officials. The executive officer of these agencies is appointed by the board in all the states except Pennsylvania, where he is appointed by the governor.

Responsibilities. The major functions performed by state higher education agencies vary considerably. Even within one of Berdahl's six classes, different legislation and historic development have led to functional differences. In general, however, the primary responsibilities of the agencies include 1) planning and coordination, 2) budget review and recommendations, 3) program review and approval, 4) information collection and analyses, and 5) program administration. Not all agencies are responsible for all of these functions, and even within a single area of responsibility the particular tasks performed vary greatly. Table 8 shows their statutory responsibilities for six common functions for the 17 states in this study.

To focus on their formal legal authority can be misleading, for, through their studies and recommendations, many of these agencies have influence when formal authority is lacking. A good example of such authority is information collection. One of the statewide governing boards and two of the state departments of education do not have explicit statutory authority to collect information, but this authority is implicit in other functions, such as program review. There are means by which an agency may surmount lack of authority for a specific purpose. In one state, for example, the coordinating agency regularly persuaded the legislature to pass resolutions requiring the collection of desired information.

Table 8

STATUTORY RESPONSIBILITIES OF STATE HIGHER
EDUCATION AGENCIES IN THE 17 STATES

Characteristic	Type of agency				Total
	State- wide gov- erning board	Coordi- nating agency	State depart- ment of educa- tion	Volun- tary	
Number in sample	5	8	3	1	17
Statewide long-range or master planning	3	8	3	a	14
Review and/or approval of institutional role or scope	5	6	1	a	12
Review and/or approval of new academic programs at public campuses	5	7	2	a	14
Information collection	4	8	1	a	13
Review and/or approval of tuition levels	5	4	1	a	10
Review and/or approval of budgetary formulas	3	5	0	a	8

Source: Glenny et al., 1975.

^aNot applicable.

Differences in responsibilities exist among types of state higher education agencies as well as within those of a similar type. A statewide governing board, as in Wisconsin, expends much more effort on program administration than does an advisory coordinating agency. On the other hand, earlier studies (Berdahl, 1971; Glenny, 1959) indicate that such governing boards spend less time on statewide planning; only three of the five studied have formal authority for planning. A coordinating agency like that in California will have few if any responsibilities for program administration. Tennessee and Illinois have coordinating agencies with strong budgetary authority, which the New York Regents lack. In the past, Washington and California agencies have had limited budgetary authority; however, in Washington the agency has been influential in budgetary matters, while in California the agency has been limited mainly to making faculty salary recommendations.

Budgeting was the tenth most frequently listed issue of concern to the state higher education agencies, as reported in a survey by Paltridge (1975, pp. 8-12). The extent of the budgetary role of the agencies and the legal basis for it are shown in Appendix B. Of the 47 agencies, 43 make budgetary recommendations to the governor, the legislature, or both, either under statutes or as a matter of state policy. Among the remaining four states, the New Hampshire, New York, and Oregon agencies do not review higher education budgets. In Texas, higher education budgets are reviewed in the process of designating formulas, but no recommendations are made to state agencies. In a sense, however, the Texas agency's designation of formulas does serve as a recommendation because the formulas generate 80-90 percent of state support for higher education (Glenny et al., 1975), and are developed with an eye on an amount that will be politically acceptable (Meisinger, 1975).

Differences in the budgetary roles of the 16 state higher education agencies in our sample can be described

in terms of four dimensions: 1) the number of states in which the higher education agency reviews the budget, 2) the extent to which the reviews cover all sectors of higher education, 3) the primary areas that are covered by the review, and 4) the breadth of the review. As Table 9 indicates, 15 of the 16 agencies reviewed budgets to some extent; the New York Board of Regents reviews new program costs but not institutional budgets. Of the 15 agencies, 11 examine the budgets of both four- and two-year institutions. However, among these 11 states, in Michigan the review of all institutions appeared superficial and the agency's recommendations were not seriously considered by other state-level agencies. Statewide governing boards, as in Wisconsin, reviewed only the two-year institutions that were governed by them. In the states possessing one or more statewide two-year college boards in addition to a state higher education agency (as in Connecticut, Virginia, and Washington), the respective budgetary roles of the agencies sometimes appeared ambiguous and have occasionally produced interagency tension.

Fourteen state agencies had statutory authority to review new program costs, including that of New York, which lacked general budgetary review authority. The only agencies without specific authority to review programs were in California and Michigan, but the California agencies recently gained such authority when a new post-secondary education commission was created.

Of the 16 higher education agencies, ten had formal authority to develop budgetary formulas, but such authority appears implicit in the responsibilities of all the statewide governing boards, should they wish to exercise it. Illinois, a state whose coordinating agency lacks explicit statutory authority to develop formulas, has developed and used formulas for a number of years.

In terms of breadth of budgetary review, do state higher education agencies review the entire higher education budget or only specific areas or specific items within the budget? Among the 15 agencies review-

Table 9

SELECTED CHARACTERISTICS OF STATE HIGHER
EDUCATION AGENCIES IN THE 17 STATES

Characteristic	Type of agency				Total
	State- wide gov- erning board	Coordi- nating agency	State depart- ment of educa- tion	Volun- tary	
Number in sample	5	8	3	1	17
Review higher educa- tion budgets	5	8	2		15
Review budgets of both 4- & 2-year institutions	2	7	2		11
Review new programs and/or their costs	5	7	2		14
Develop and/or approve formulas	4	5	1		10
Conduct a compre- hensive review of budgets	5	4	1		10
Review only special areas or issues in the budget	0	4	1		5
Make detailed, compre- hensive budget recommendations	4	4	1		9
Make detailed, specific budget recommenda- tions	0	4	0		4
Limit recommendations to general levels of support	1	0	1		2

Source: Glenny et al., 1975.

ing budgets, we found that all but five reviewed the entire budget; California, Michigan, Texas, Virginia, and Washington tended to review only specific items. For example, in California, review focused on faculty salary costs; in Michigan the agency's budget recommendations were transmitted as a draft appropriations act; in Texas, review consisted of developing formulas; and in both Virginia and Washington, review was limited to selected items or areas of policy concern to the agency and other state-level agencies.

The determination that budget review was comprehensive did not indicate either the depth of that review or its influence on the final appropriation. But as one would expect, statewide governing board review was both comprehensive and went into considerable depth, though even among these similar agencies the depth varied considerably. In Florida, the staff of the Board of Regents developed the entire budget centrally, using data submitted by the institutions. The board then submitted a consolidated budget for all four-year institutions in which individual campus totals could not be identified. At the other extreme, Mississippi's Board of Trustees initially made a general review of campus requests and arrived at a total before submitting the budget to the state Commission of Budget and Accounting. Only after the commission had acted and the legislature had appropriated the monies did the trustees review in detail institutional requests to develop campus operating budgets. Depth of review in Hawaii, Kansas, and Wisconsin fell between these extremes. Among the states with coordinating agencies, the depth of review also varied widely; agencies in Colorado, Illinois, and Tennessee engaged in very detailed reviews, while Michigan's agency made only a general review.

The significance of review in terms of the overall state budgeting process also varied considerably. Historically, recommendations of the Board of Higher Education in Illinois have had great significance in determining the final higher education appropriations. During the latter '60s its recommendations were rarely

changed. In contrast, agency reviews in California and Michigan have had practically no effect. In Washington, the agency lacks authority to recommend a budget and reviews only specific issues and topics, yet its recommendations have had considerable impact on appropriations. Incidentally, in both California and New York the presence of two or three strong multicampus systems in each state was associated with little or no exercise of budget authority by the state higher education agency. However, it would be unwise to assume a cause-and-effect relationship.

OTHER STATE-LEVEL AGENCIES

In most states, in addition to the executive budget office, the legislative budget staff, and state higher education agency, other agencies had at least a limited influence on higher education budgeting. The most significant of these were: 1) performance and management audit staffs, 2) fiscal audit staffs, 3) personnel staffs, 4) collective bargaining staffs, and 5) revenue and demographic projections staffs. A few states had planning and analytic staffs, some left over from abortive attempts to institute program planning and budgeting systems, but these staffs appeared to have little impact on higher education budgets since most higher education planning took place in state higher education agencies. Occasionally, as in California, special legislative studies created broad higher education plans (Joint Committee on the Master Plan for Higher Education, 1973), and governors sometimes instituted large-scale studies that included higher education, usually when they first took office; these studies are a form of planning, as they establish policies and create expectations that influence institutional actions. Whatever the source of the planning, the effect on budgeting was usually indirect and subtle.

A description of the roles of these other agencies completes the organizational mosaic of state-level budgeting for higher education.

Statewide Performance Audit Staffs. Many performance audit staffs with responsibilities across state government have been created in recent years and have a significant impact on budgeting. A performance audit is defined by Brown and Pethtel (1974) as

An evaluation of the effectiveness of governmental operations, programs, and organizations to determine accomplishment of goals and objectives. (p. 319)

Such an audit is distinguished from a *financial audit*, which is

A review of financial records and controls to determine whether funds have been legally spent and properly controlled. (p. 319)

And a *management audit* consists of

An evaluation of the efficiency of governmental operations, programs, and organizations, with special attention to administrative policies and practices. (p. 319)

Performance auditing is fairly new, although some of its elements have always been part of traditional audits and budget reviews. Performance audit staffs today can be found in many state governments, including 14 out of the 17 states in this study. Their formation and growth is one of the most distinctive trends in state government. (State legislative performance auditing has been described by Brown & Pethtel, 1974.)

Performance audit staffs can be located in the executive or legislative branches of government or under an independent audit agency, but most are located in the legislative branch. (The organizational location of the performance audit staffs in the 17 states

are shown in Table 10.) The legislative staffs have recently formed their own association and publish a newsletter titled *LPES Report*. Legislators rate their oversight function as the one they most neglect (Rosenthal, 1970), and a desire to correct this situation may be behind the growing number and size of legislative audit staffs. The staffs in the executive branch were often formed originally to implement program planning and budgeting systems, and had their functions narrowed after the demise of this broader concept of program review and analysis.

Table 10

LOCATION AND NUMBER OF PERFORMANCE AUDIT STAFFS IN THE 17 STATES

Location	Number
No staffs	3
A staff in both the executive and legislative branches	3
A staff only in the executive branch	1
A staff only in the legislative branch	9
A staff only in an independent agency	1

Source: Glenny et al., 1975.

The states vary greatly in the size of their state-wide performance audit staffs. These staffs are generally part of audit agencies that also carry out management and fiscal audits, so the actual man-years devoted to performance audits are hard to determine. In California, two legislative staffs and an executive staff do performance audits. The auditor general has a total professional

staff of 50, the Legislative Budget Committee 42, and the Audit Division in the Department of Finance, 40. This total of 132 professionals, many of whom engage in performance audits, compares with 44 in Wisconsin, the state with the next largest staff. Five states have professional audit staffs, ranging from 15 to 30 members. The remaining seven states have staffs of from four in Connecticut to 13 in Washington.

Of the 18 audit staffs present among the 14 states studied, all but five have conducted performance audits of higher education. The subjects were nearly as numerous as the audits, but a few areas seemed to get slightly more attention than others: review of programs, analysis of the budget process, faculty salary setting, costs of instruction, and enrollment projections (Glenny et al., 1975, pp. 369-376).

The effect of these audits is difficult to assess. We found no instances in which specific audit recommendations were fully adopted either as a budgetary policy or as a basis for budget actions. While these reports often received considerable attention from budget staffs, and occasionally strongly influenced their perspectives and actions, budget analysts must fit specific audit recommendations into the broader context of state budget policy and accommodate political realities, dealing only with those issues that require budgetary action while they remain sensitive to equity issues.

Audit reports usually present a single perspective on particular issues and do not lend themselves to comprehensive implementation. California performance audit staffs were primarily concerned with cost reductions, not improvements in the delivery and quality of services. But to be effective, policies must reconcile cost and quality considerations. The budget process is one arena for the interplay of contending forces, and this is no doubt one reason why audit recommendations, while influential, are normally much modified before implementation.

Schick (1969) contends that the focus of the budget process changes as new problems confront governmental officials. Seen in this light, performance auditing may be a response to the increasingly complex and numerous activities supported by state government. As statutory commitments and continuing activities grow, policymakers have less discretion to deal with expanding demands or declining revenues. Program planning and budgeting systems, zero-based budgeting, and comprehensive information systems are approaches that attempt to examine comprehensively the effectiveness and priority of continuing, as well as new, activities; they have generally failed because the resources, time, and knowledge to meet their comprehensive objectives are not available. Performance audits take a selective rather than a comprehensive approach, choosing priorities and realistic levels of detail. This approach is a far more feasible basis for examining established programs, perhaps accounting for its increasing use. Since performance audits study ongoing institutional programs, not requests for new programs, they may become more important if substantial budget retrenchment becomes necessary.

Performance auditing has two major weaknesses:

- 1) a single perspective is applied to analysis; the problem can be compounded when audits are performed by inexperienced staff or staff whose concepts of governance differ from those traditional in higher education; and
- 2) there is a possibility that state-level officials may delve into the details of institutional administration, losing sight of their own policy roles while they are inevitably insensitive to complex institutional environments. The first problem can be overcome by obtaining agreement in advance between state and institutional officials on the concepts and purposes of the audit and by a full debate on reports before executive and legislative action on their recommendations. In this way formal as well as informal rebuttals can be obtained. The second problem is not easily resolved. State officials find it difficult to avoid taking direct action on important issues; after all, their purpose in obtaining the information is to induce reform. They are

very likely to discount the value of the consensus-building management techniques used in institutions. State officials focusing on a single issue will not perceive the complex relationships between programs and functions, and institutional deliberation will seem to be orchestrated obstructionism or incompetence. To institutions, the concerns felt by state officials are interpreted as political intrusion and a lack of appreciation for academic norms and values.

Management Audits. There were no separate management audit staffs in the 17 states in our study. Often, however, performance and fiscal audits both dealt with management considerations, frequently reaching conclusions based on specific theories about the characteristics of an effective management process. Often these theories conflicted with the management concepts traditional in higher education (Schmidtlein, 1974; University of Wisconsin, 1976). The California Department of Finance audit staff conducted a study of the Board of Governors of the community college system that exemplifies a management audit (State of California, 1973).

Fiscal Audits Staffs. Fiscal audits directly affect the budget process in two ways. First, auditors often uncover "loose" fiscal and management practices. Budget analysts use these findings both to justify reducing the budget of an offending institution and to justify increases. If the audit report suggests that monies are spent in unauthorized ways, budget cuts eliminate funds for such activities, and in effect "send a message" to the offender. However, if audit concerns can be traced to inadequate resources for proper managerial oversight, a budget increase may be seen as the remedy. The question of whether to cut or increase seems to depend largely on analysts' evaluations.

The second use of fiscal audits is to check enrollment data, credit hours, and other variables used in funding formulas and budget justifications. Florida and Texas, for example, reported this use of fiscal

audits. Other states expressed concern over the accuracy of institutional submissions and were considering using audits in this way.

Personnel Staffs. State personnel agencies are involved in budget formulation through their authority to classify and control positions and to set salary scales, as in Connecticut and Virginia. In recent years some states, such as California and Pennsylvania, have delegated these responsibilities to their state colleges.

Virginia's personnel agency was the most deeply involved in the budget process of any among the 17 states. Reportedly, central review of personnel actions was established in Virginia as a result of the transgressions of an institution over fifty years ago. During the late 1940s the state agency established salary scales for all public institutions, but this was abandoned when it caused problems in recruiting faculty. The current system, which bases faculty salary scales on those of peer institutions, is considered rather unsatisfactory by all interviewed, despite increasing technical assistance from the Council of Higher Education. The agency develops average salary figures and delegates authority to institutions to set actual salaries, but the salaries in the aggregate cannot exceed the state-mandated average. The average salary of academic administrators cannot exceed 135 percent of that for faculty.

The Virginia personnel agency is also the central repository for all state employee records. Each institution files a comprehensive personnel plan yearly as the basis for state approval of its actions. This plan, and reports of personnel actions taken in relation to it, provides the executive budget office with "a window into what the institutions are doing." Money for all salary increases is appropriated through the state personnel agency to institutions as personnel actions are approved. Salaries used to calculate the amounts in appropriations acts cannot be changed without the governor's approval. The executive budget office

reported that this system provided data on institutional operations that they could get in no other way and occasionally led to the discovery of nonbudgeted programs. However, those in higher education expressed a great deal of irritation with the procedural costs, delays, and roadblocks affecting recruitment and flexible use of staff.

Collective Bargaining Staffs. In New York an executive branch staff affects budget formulation through its role in collective bargaining. The state collective bargaining unit serves as the university's agent in negotiations with both classified and academic employees. The process operates through a negotiating panel supported by technical committees made up primarily of university administrative staff. The executive budget office has a representative on the panel who plays a critical role in deciding technical financial issues. The governor's office maintains liaison with the panel on policy issues. The participants are sensitive to the mood of the legislature but there is no formal legislative representation on the panel. Agreement on a salary increase through the collective bargaining process is only the first step. The money must still be appropriated. Should this fail to happen, negotiations can be reopened. However, an observer commented that adjournment creates pressures for legislative concurrence. If an impasse is reached in negotiations, further panel hearings are held and a report is made to the governor. If this does not result in a solution, a special legislative committee is then appointed to make a final determination.

In New York the counties set the salaries for the community colleges. State officials there, and in Washington where salaries for two-year colleges are determined locally, are concerned that the local bargaining units compete against one another, raising salaries. The state provides the funds but has no real influence over the amounts.

Observers in New York felt that the state had maintained differences in salary scales between the different

types of institutions, but that the unions were pressing hard for equality. Governor Rockefeller had a policy of national leadership for New York's support of higher education so the effect of union pressures on salary levels was hard to assess.

Collective bargaining is a supplementary channel for budgetary decisions. As such, it may represent a failure, in part, of the traditional bureaucratic channels to satisfy the demands of public employees, an increasingly powerful political bloc. Through collective bargaining, state officials are exposed to issues and people that they would not encounter in the traditional budgetary process. Issues are exposed in greater depth in a shorter time than would otherwise be the case.

The recent growth of collective bargaining raises the question whether traditional budget processes can deal effectively with salary issues. Is collective bargaining, with its new participants and decision channels, a long-term corrective or merely a temporary solution for a more fundamental shortcoming? Is it a result of bureaucratic insensitivity and rigidities or an outgrowth of the growing political power of public employees? This study did not deal with these issues. However, collective bargaining does affect the extent to which state governments can alter higher education budgets. Any reduction of discretionary dollars (in Connecticut, for example, personal services expenses of institutions for fiscal year 1972-1973 amounted to 85.4 percent of total current expenses) will cause considerable irritation to state officials in a time of increasing costs and leveling enrollments. Negotiated salaries are likely to have an adverse effect on the resources available for new programs and nonsalary items.

Revenue and Demographic Projections Units. All the states have one or more staffs that project revenues, and a number have staffs that develop demographic projections! Both activities have an important effect on higher education budgeting. Revenue estimates determine essentially the outer limits of funds available for

Tak

LOCATION OF MAJOR STATE
BUDGET

States	Agenci		
California			E
Colorado	LBS		
Connecticut	EBO		
Florida		SHEA	
Hawaii			
Illinois		SHEA	
Kansas		SHEA	
Michigan			E
Mississippi			
Nebraska			E
New York			E
Pennsylvania	LBS		
Tennessee		SHEA	
Texas	LBS		
Virginia	EBO		
Washington			E
Wisconsin			
Total	2	3	4

Note: EBO indicates executive
LBS indicates legislative
SHEA indicates state high

Source: Staff interviews and r

Table 11

STATE-LEVEL HIGHER EDUCATION
BUDGET REVIEWS

agencies performing major review

EBO & LBS

A

EBO, LBS & SHEA

A

A

EBO & LBS

LBS & SHEA

EBO & LBS

EBO & LBS

A

EBO & LBS

EBO, LBS & SHEA

5

1

2

Executive budget office
Executive budget staff
Higher education agency
and review of state documents

legislative budget staff was relatively new but was beginning to perform in-depth analyses of selected budgetary issues.

The main virtue of this pattern of budget review is that it avoids duplicate reviews. The state higher education agencies and legislative budget staffs in these two states limit their role to recommending general levels of support or performing selected budgetary analyses. The weaknesses are two-fold: First, statewide higher education issues may fail to receive sufficient attention since the executive budget office must be concerned with all of state government; and second, the legislature, by not thoroughly reviewing the budget, may fail to perform its checks and balance function. In Connecticut, the state higher education agency presented the general budgetary needs of higher education but its general recommendations appeared to have limited impact on the executive and legislature.

State higher education agency reviews with a primary emphasis on detailed analyses of particular issues, such as in Washington, seemed to have greater impact than did comprehensive recommendations that lacked in-depth analysis. When such an agency makes a general recommendation that is supported by less detailed analyses than those of the executive budget office, it is in a sense substituting its political judgments on budget levels for those of the executive and legislature. In such circumstances state higher education agency judgments seemed to carry little weight.

In Virginia, the state higher education agency produced a great deal of information on issues relevant to budgeting, but was only beginning to review institutional budgets and analyze them for budgetary purposes. No agency at the state level represented higher education's interests during the budget process. The executive budget office and legislative budget staffs were concerned primarily with reducing budget requests and lacked time,

and often the specialized talent, to examine thoroughly higher education issues. The institutions were able to make their case directly to the executive budget office, eliminating problems of translation, but there was no specialized overall assessment of higher education. The interests of higher education conceivably could suffer in contention with other programs that had state-level advocates.

The legislative budget staff in Connecticut was relatively new and analyzed selected budgetary decisions. As one executive budget official, concerned about the growing legislative role, put it, "they are skimming the cream off of our analyses." Yet this appears to be precisely the way a legislative budget staff can avoid the costs of a comprehensive, in-depth budget review and still perform its function of questioning the assumptions, values, and facts in executive recommendations. Virginia was just beginning to develop a legislative budget staff. For years it had been a "one-party" state and relied on executive budget office staff for analyses. This lack of legislative budget staff undoubtedly limited effective legislature questioning of executive proposals.

These observations suggest that in states with coordinating state higher education agencies, and with executive budget offices that perform comprehensive in-depth reviews of budgets, an effective statewide review of higher education budgets can be achieved best through assessing budgetary conformance with plans and selective reviews of important budgetary issues. Where state higher education agencies have no role in budgeting a specialized state-level perspective on higher education issues is missing. Such an agency that engages in a comprehensive but general budget review is not taken seriously. If state higher education agency reviews are comprehensive and in-depth, they are costly in terms of staff requirements and the workload placed on institutions. These costs are unjustifiable to the extent that they duplicate rather than expand the executive budget office review.

*Comprehensive, In-Depth Review Performed Only by
the Legislative Budget Staff*

In three states, Colorado, Pennsylvania, and Texas, the legislative budget staffs performed the major comprehensive, in-depth reviews of higher education budgets. There were significant differences among these states: Colorado had a joint legislative budget committee with joint staff; Pennsylvania had both a majority and minority party staff assigned to the appropriations committee of each house; and Texas had a joint legislative budget board.

The nature of the state higher education agencies and their budgetary role also varied greatly. In Colorado the agency attempted to make a comprehensive, in-depth review of institutional budgets, but its review lacked the influence of that of the legislature. The Pennsylvania agency was a division of the State Department of Education, with direct budgetary responsibility for the "state-owned" colleges but a more advisory role with respect to the "state-related" universities. Its departmental status appeared to restrict its role somewhat because of inflexibilities in the state's civil service system. A state higher education agency requires highly competent professional staff and to obtain them has to compete in the national academic marketplace, not the state public administration marketplace. Top academic salaries typically exceed those in state government. Also state rules on appointment, transfers, and dismissals sometimes are more inflexible than those in academia.

A further factor affecting the Pennsylvania agency was the timing of its budget recommendations. At the time of our interviews, the agency's recommendations reached the executive budget office after it was well into its decision process. This situation was being remedied but illustrates a general issue. To produce comprehensive, in-depth budget analyses state higher education agencies have to begin their reviews very early, as much as a year prior to the beginning of the fiscal year or

for lead time creates problems because revenue and enrollment projections, among other things, change over time and early recommendations require updating, tending to confuse budget reviews as comparisons and analyses must then also be updated and earlier conclusions modified.

In Texas, the state higher education agency was involved in budgeting primarily through its role in designating formulas. Formula factors were checked and the agency worked closely with the legislative budget board. The formulas were established with an eye both on how much money they would generate and on revenue prospects. The agency also made analyses of issues bearing on budgetary decisions. The executive budget offices in Colorado and Pennsylvania both attempted to make fairly comprehensive, in-depth reviews of budgets but were hampered by traditions of legislative dominance and by lack of staff.

There are several potential weaknesses in a legislatively dominated budget process. First, even with a well-staffed, nonpartisan legislative budget agency, as in Texas, legislatures are not likely to base their deliberations on as comprehensive and coherent a state budget plan as one developed by the executive. Legislatures reflect an amalgam of conflicting regional interests, which are apt to bias the development of initial staff budget recommendations because staff are directly responsible to powerful legislators. The role of a legislature, of course, is to introduce regional and partisan concerns into the budgetary debate. The central issue is not whether legislatures should vigorously engage in partisan analyses of budgets, but rather whether they can perform this function more effectively with a comprehensive plan for state expenditures before them developed by an executive with a state-wide constituency.

A second potential weakness in a legislatively dominated budget process is the possibility that technical issues will be neglected in favor of political

considered during the budgetary process. Technical issues have to do with the feasibility of courses of actions, their costs, and their consequences. Political decisions concern the desirability of particular courses of actions in terms of benefits and the appropriate distribution of these benefits. Theoretically at least, the capacity of institutions to accommodate students, the consequences of faculty-student ratios, and the demand for various programs are technical issues and can be determined on the basis of empirical evidence. However, once the technical issues are defined, questions are decided on the basis of political values such as trade-offs between educational quality and levels of participation, the emphasis on liberal arts in contrast to vocational programs, and the distribution of student aid among various populations. Political and technical decisions are not always made in the same arenas. The sources of information and patterns of contacts differ among the participants in the budget process. Normally political officials listen more closely to their constituents and influential individuals when making political judgments than the advice of their technical budget staffs. Often, however, technical considerations determine political decisions just as political considerations are implied in many ostensibly technical decisions.

The distinction between questions of fact, resting on technical analysis, and questions of values, requiring political judgment, was unclear to many participants in the budget process. Part of the search for new systems of budget formulation and new analytic techniques appeared predicated on an assumption that a means could be found to make "objective" decisions on budgetary issues, thus removing or reducing conflict. However, the accumulation of factual knowledge, through sophisticated analysis, often increases the clarity of basic conflicts over values and self-interests. The result may be more agreement on facts but greater conflict because of a clearer perception of fundamental value differences.

One of the major objectives of budget reform has

ing technical issues in legislatures without weakening their essential political role. In Colorado, Pennsylvania, and Texas, there was evidence that political decisionmaking should be augmented by greater development and dissemination of data on the feasibility and consequences of actions.

A third potential problem with the organizational patterns in these states results from the institution's lack of opportunity to appeal legislative budgetary decisions--a problem of "due process." When the state higher education agency or the executive budget office makes the most comprehensive, in-depth analysis of budgets, the legislature can act freely as a court of appeal for institutions; it has no pride of authorship. However, when legislative staff perform the single major higher education budget review, the only remaining means for redress is to persuade the governor to exercise his veto--a politically costly and indiscriminate way to deal with what may be a limited concern.

*Comprehensive, In-Depth Review Performed Only by
the State Higher Education Agency*

In four states, Florida, Illinois, Kansas, and Tennessee, the state higher education agencies performed the primary comprehensive, in-depth review of higher education budgets. Florida's agency was a powerful statewide governing board that prepared a consolidated budget based on data supplied by the institutions. Campus totals were not presented for the four-year institutions. The Kansas agency was also a statewide governing board but did not possess as much influence over institutions as Florida's. The Kansas agency recommended an aggregated budget for the four-year institutions, showing the amount recommended for each campus and statewide totals. The Illinois and Tennessee agencies were coordinating boards that prepare aggregated statewide higher education budgets.

portion of the review function to preserve traditional values of academic autonomy. Executive budget office reviews in these states were primarily concerned with checking the validity of formula factors, exploring issues of interest to the governors, and ensuring that higher education recommendations did not exceed allocated revenues.

The legislative budget staffs varied considerably among the four states. In Florida and Illinois both houses had budget staffs assigned to the appropriations committees. However, in Illinois these staffs were further divided by party. Kansas and Tennessee lacked legislative budget staffs. In the past they relied on executive budget office staff to assist the legislature or, in the case of Tennessee, on temporary staff appointments.

The primary virtue of this pattern of budgetary organization is its potential for a more sensitive and substantive review of higher education budgets by a specialized agency. Higher education budgets are also somewhat removed from partisan political considerations, thus preserving autonomy. Also, by providing a state higher education agency with strong budgetary authority, its ability is increased to reconcile state-level higher education concerns with those of institutions. State higher education agency planning can be linked to operational decisions, making plans more realistic and aiding in their implementation.

A major weakness is the difficulty this organizational pattern poses for reconciling higher education's partisan interests with broader statewide concerns for resource allocation. The executive budget offices and legislative budget staffs must reconcile the amounts requested by higher education with their political judgments on the priority of higher education and

tive budget staffs. To maintain this pattern, therefore, requires agency leadership that is unusually sensitive to executive and legislative political considerations and state revenue prospects. Also, particularly in the case of coordinating agency states, agency leadership must take care to ensure that institutional expectations and state budgetary prospects are congruent. Otherwise, as Meisinger (1976) notes, the resulting tension is likely to result in a lessening of the agencies' budgetary influence. Consequently, this pattern of budgetary review has an inherent instability.

Another problem associated with locating the primary budgetary review in a state higher education agency is the possibility that budgeting will interfere with planning. Linking budgetary authority and planning may lend realism and impact to the planning, but heavy involvement in daily, high-pressure budget tasks also may divert agency attention from longer-range and more deliberative planning efforts. Furthermore, budgeting for public institutions may lead to agency partisanship for the public sector, decreasing its ability to maintain the confidence of independent institutions and to engage them in cooperative planning. Of course, when the agency is a statewide governing board, its purview is limited to public institutions and to that extent its ability to plan comprehensively for postsecondary education is further reduced (Glenny et al., 1971).

*Comprehensive, In-Depth Reviews Performed Both by
the Executive Budget Office and the Legislative
Budget Staffs*

In five states, California, Michigan, Nebraska, New York, and Washington, both the executive budget office and the legislative budget staff performed relatively comprehensive and in-depth reviews of higher education

in each house. These staffs all had the governor's budget recommendations as a basis for their reviews and thus did not perform a comprehensive, in-depth analysis of budgets in quite the same manner as the executive budget offices. They were freer to focus on particular issues, but tended to deal thoroughly with a broader range of issues than legislative budget staffs in states where the executive budget office or state higher education agency was classified predominant. Among the five states, only in Michigan did the legislative budget staffs request a separate budget submission from the institutions on which to base their reviews, thus duplicating, to a greater extent, the character of the executive budget office role.

With one exception, the state higher education agencies played no role--or a very minor one--in the review of higher education budgets in these states. In California, the agency until recently had no role in budgeting beyond providing data on faculty salary considerations and commenting on general levels of support sought by institutions. The agency is currently defining a larger budgetary role for itself. The Michigan agency made a broad review of budget levels without going into great depth, and its recommendations were virtually ignored by the other state-level agencies. Nebraska had no state higher education agency and in New York the agency had no direct role in budget review. Of the five, only the Washington agency had a substantial budgetary role. This, however, consisted of analyzing issues that had budgetary implications, not of making formal recommendations. The quality and importance of this agency's studies were the source of its influence, not its formal authority.

The strength of this pattern of budget review results from the thorough analyses that budgets receive from both an executive and legislative perspective and the balancing of both perspectives. However, unless close

Unless compromised, differing executive and legislative analytic requirements can lead to extensive, uncoordinated requests for institutional data, or even separate budget submissions, as in Michigan. The time and resource costs of such duplication for both institutions and state agencies can be heavy. A similar problem, of course, may occur between the two houses of the legislature when both houses have strong legislative budget staffs and committee chairmen with differing views, as happened in Washington at the time of our review. A relatively new chairman of the house appropriations committee differed with the senate chairman over both budget review processes and substantive policies. The traditional conference committee mechanism for resolving the differences between the two houses proved inadequate to solve the conflict.

A further weakness is the possibility that a specialized state-level higher education perspective will not be brought to bear on budget issues. Only Washington's higher education agency performed a very substantial review of issues related to higher education budgeting. In California the director of the State Department of Finance served as the higher education spokesman in the governor's cabinet; as noted earlier, this situation placed him in a conflict of interest.

When state higher education agencies do not thoroughly review budget submissions and make comprehensive, detailed recommendations or competent studies of important issues, these tasks are left to other state agencies, which do not have the time or resources to engage in regular statewide higher education planning, nor can they carefully relate these plans to budgetary issues. Moreover, often they do not have the professionally trained staff to deal satisfactorily with substantive higher education issues. In these circumstances, decisions on budgetary allocations have to be based more on the general value of higher ed-

Consequently, staffs of performance auditors have been established in 14 of the 17 states and in nine states are carrying out substantive studies of higher education. The appropriations committees of the legislature also are adding staff or plan to do so shortly. Given these trends, institutions are unlikely to receive lump-sum allocations based only on a general consideration of the merits of higher education and funds available. The choice facing institutions is whether their budgets will be reviewed by an agency knowledgeable and sensitive to the values they hold and the complexities they face, or only by state agencies with many other responsibilities, including a primary concern for reducing budget requests to fit them within revenues. The growth of performance audit staffs may partly be in response to the past inadequacy of policy issue reviews by state higher education agencies. Most programs, such as health and welfare, have a state-level agency serving as their proponents in the capitol. Higher education may be well advised to have its own representative, with a statewide perspective, at the governor's and legislature's bargaining tables.

To be effective, state higher education agencies do not have to make comprehensive in-depth reviews that duplicate, to some extent, those of other state-level agencies. The Washington agency is instructive in this regard. Agencies can be influential when they limit their role to studies and analyses of budgetary issues, and in fact they are highly unlikely to be given authority for comprehensive, in-depth reviews of budgets when other state agencies are already performing this task. In these five states, all with coordinating agencies, restricting the state higher education agency role to an in-depth analysis of issues avoids costly duplication. States that currently have coordinating boards should weigh carefully the costs of budget review duplication

*Comprehensive, In-Depth Reviews Performed Both by
the Legislative Budget Staffs and the State
Higher Education Agency*

In Mississippi, the state higher education agency and the legislative budget staff conducted comprehensive, in-depth reviews of higher education budgets. (There is no executive budget office in Mississippi.) The state higher education agency reviewed and recommended budgets that were further reviewed by the legislative budget staff and enacted by the legislature. Institutional operating budgets, based on appropriations, were then reviewed further in detail by the state higher education agency in order to allocate funds among the institutions. To some extent the budget process in Mississippi was the reverse of that in the other 16 states: The state-level reviews leading to appropriations were somewhat less detailed than in the other states, and the major in-depth review occurred after legislative enactment of the budget bill.

From the viewpoint of the institutions, this pattern eliminated the costs and uncertainty of an executive budget office review. The lump-sum appropriation by the legislature provided the state higher education agency with considerable flexibility to allocate budgets among the institutions on the basis of current operating requirements.

The major potential shortcoming of this pattern was the same as that for pattern two: the absence of a statewide executive perspective, necessary to offset the tendency of legislative bodies toward fragmented policy-making. The durability of the Mississippi pattern is probably a result of a history of single party control

*Comprehensive, In-Depth Reviews Performed by the
Executive Budget Office, the Legislative Budget
Staffs, and the State Higher Education Agency*

In two states, Hawaii and Wisconsin, all three agencies were involved in state-level reviews of higher education budgets of considerable depth and comprehensiveness. Both states have strong executive budget offices and legislative budget staffs, although Hawaii's legislative staff is more transitory. The state higher education agencies in both states were statewide governing boards engaged in very detailed analyses of budgets and highly influential in their dealings with campuses.

The major advantage was the balance achieved among the perspectives and interests of the three agencies. The major shortcoming was the cost of maintaining this extensive review process together with the possibilities for agency duplication and overlapping efforts. The costs of a review process have to be balanced against its benefits. In these states a legitimate question can be raised as to whether the essential checks and balances functions of the agencies could be maintained without all having such an extensive role in budget review.

concern over the effectiveness of these agencies or over the growing duplication in state-level reviews of higher education budgets.

The trend toward strong executive budget staffs does not appear likely to end before all states have such an agency. A phenomenal increase is also taking place in the number of budget review staff employed by legislatures and in the number of performance audit staff, which are engaged in special studies and increasingly comprehensive reviews of budgets. The overlap in functions is growing among these four types of agencies, placing an increasingly heavy and expensive burden of reporting on institutions. There is some question as to whether the benefits of these many levels of comprehensive, in-depth review outweigh the costs, and a study is needed to examine both.

PATTERNS OF HIERARCHICAL ORGANIZATION OF THE BUDGET PROCESS

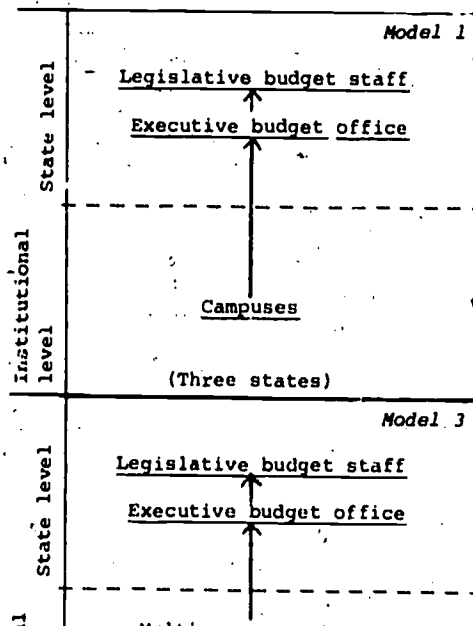
Another dimension of the organization of the budget process is the number of organizational levels between the campuses, which initiate requests for funds, and

receive campus budgets and often begin their reviews at the same time that budgets are submitted to the other agencies.

The organization of higher education above the campus level provides only a clue to the location of budgetary decision, for a multicampus system or state higher education agency may not review campus requests or may not make a recommendation. The depth and breadth of reviews at each level can vary greatly. Additionally, recommendations from the multicampus system and the state higher education agency to executive budget offices and legislative budget staffs may or may not be influential. Figure 5 shows the hierarchical patterns of budget review in the 17 states. The diagrams are somewhat misleading, since they do not indicate the degree to which state-level agency reviews may take place simultaneously.

Some indicators of where budgetary decisions are made are the number and location of budget reviews and the location of major budget reviews. An assessment of these indicators is complicated by the numbers of campuses in different states. The problems of budgetary coordination in Texas, with 40 four-year and upper division campuses, are different than in Hawaii, where there are only

Figure
 PATTERNS OF HIERARCHICAL ORGANIZATION



tuation is even more complex in the legisla-
staff reviews and committee reviews can be
r jointly or by either house. Occasionally,
ees concerned with substantive educational
also become involved in reviews of budgetary
in Tennessee.

study only staff were interviewed--not
figures such as board members, governors, or
. Therefore, only staff budget reviews by
primary state-level budget agencies, together
campus reviews, are listed in assessing de-
tion and review process redundancy. Table 12
number of staff reviews of budgets in each of
es. This table includes all reviews that
formal budget recommendations, whether the
e comprehensive or not. The one exception
ew of the Michigan state higher education
very minor review that was virtually ignored
ies and was for that reason not included.

umber of staff budget reviews varied from one
to five in Illinois, Pennsylvania, and
These numbers are somewhat misleading however

Table 12

LOCATION AND NUMBER OF STAFF REVIEWS OF CAM

States	Multicampus system		State higher education agency	Execu- tive budget office
	Reviews all campuses	Reviews some campuses		
California	x			x
Colorado		x	x	x
Connecticut	x		x	x
Florida			x	x
Hawaii			x	x
Illinois	x		x	x
Kansas			x	x
Michigan				x
Mississippi			x	
Nebraska	x			x
New York	x			x
Pennsylvania	x		x	x
Tennessee	x		x	x
Texas		x		x
Virginia				x
Washington				x
Wisconsin			x	x

We observed six hierarchical patterns of budget review among the 17 states:

- Budgets are reviewed by executive budget office and legislative budget staffs (three states).
- Some budgets are reviewed only by executive budget offices and legislative budget staff, others are reviewed, in addition, by a multicampus systems headquarters (one state).
- Budgets are reviewed by a multicampus systems headquarters and by executive budget office and legislative budget staffs (three states).
- Budgets are reviewed by a state higher education agency and by executive budget office and legislative budget staffs (five states).
- Some budgets are reviewed only by a state higher education agency and by an executive budget office and legislative budget staff, while others

Table 13

NUMBER AND LOCATION OF REVIEWS OF CAMPUS BUDGETS
 PRIOR TO EXECUTIVE BUDGET OFFICE AND
 LEGISLATIVE BUDGET STAFF REVIEWS

Number and location of reviews	States	Total number of states
None for all campuses	Michigan Virginia Washington	3
One by multicampus system for some campuses, none for others	Texas	1
One by multicampus system for all campuses	California Nebraska New York	3

In Texas some campuses were par systems (e.g., the University of Tex other campuses submitted their budge executive budget office and legislat Thus, some campus budgets received a view while others did not.

In three states (California, Ne all campus budgets were reviewed by headquarters prior to their review b budget office and the legislative bu did not have a state higher educatic other states these agencies did not reviews.

Five states (Florida, Hawaii, K and Wisconsin) had statewide governi viewed all campus budgets. These bc a single multicampus system for the boards may have grouped the campuses

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(Texas campuses), while
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Another problem associated with locating the primary budgetary review in a state higher education agency is the possibility that budgeting will interfere with planning. Linking budgetary authority and planning may lend realism and impact to the planning, but heavy involvement in daily, high-pressure budget tasks also may divert agency attention from longer-range and more deliberative planning efforts. Furthermore, budgeting for public institutions may lead to agency partisanship for the public sector, decreasing its ability to maintain the confidence of independent institutions and to engage them in cooperative planning. Of course, when the agency is a statewide governing board, its purview is limited to public institutions and to that extent its ability to plan comprehensively for postsecondary education is further reduced (Glenny et al., 1971).

*Comprehensive, In-Depth Reviews Performed Both by
the Executive Budget Office and the Legislative
Budget Staffs*

In five states, California, Michigan, Nebraska, New York, and Washington, both the executive budget office and the legislative budget staff performed relatively comprehensive and in-depth reviews of higher education budgets. California and Nebraska had one legislative budget staff: a joint staff serving both houses in California and one staff serving the unicameral legislature in Nebraska. The remaining three states had a strong staff assigned to the appropriations committees

legislative budget staffs in states where the executive budget office or state higher education agency was classified predominant. Among the five states, only in Michigan did the legislative budget staffs request a separate budget submission from the institutions on which to base their reviews, thus duplicating, to a greater extent, the character of the executive budget office role.

With one exception, the state higher education agencies played no role--or a very minor one--in the review of higher education budgets in these states. In California, the agency until recently had no role in budgeting beyond providing data on faculty salary considerations and commenting on general levels of support sought by institutions. The agency is currently defining a larger budgetary role for itself. The Michigan agency made a broad review of budget levels without going into great depth, and its recommendations were virtually ignored by the other state-level agencies. Nebraska had no state higher education agency and in New York the agency had no direct role in budget review. Of the five, only the Washington agency had a substantial budgetary role. This, however, consisted of analyzing issues that had budgetary implications, not of making formal recommendations. The quality and importance of this agency's studies were the source of its influence, not its formal authority.

The strength of this pattern of budget review results from the thorough analyses that budgets receive from both an executive and legislative perspective and the balancing of both perspectives. However, unless close cooperation exists between the executive and legislative branches there is potential for unnecessary duplication. Legislative efforts may serve not to review executive recommendations but merely to duplicate executive analyses.

cles can be heavy. A similar problem, of course, may occur between the two houses of the legislature when both houses have strong legislative budget staffs and committee chairmen with differing views, as happened in Washington at the time of our review. A relatively new chairman of the house appropriations committee differed with the senate chairman over both budget review processes and substantive policies. The traditional conference committee mechanism for resolving the differences between the two houses proved inadequate to solve the conflict.

A further weakness is the possibility that a specialized state-level higher education perspective will not be brought to bear on budget issues. Only Washington's higher education agency performed a very substantial review of issues related to higher education budgeting. In California the director of the State Department of Finance served as the higher education spokesman in the governor's cabinet; as noted earlier, this situation placed him in a conflict of interest.

When state higher education agencies do not thoroughly review budget submissions and make comprehensive, detailed recommendations or competent studies of important issues, these tasks are left to other state agencies, which do not have the time or resources to engage in regular statewide higher education planning, nor can they carefully relate these plans to budgetary issues. Moreover, often they do not have the professionally trained staff to deal satisfactorily with substantive higher education issues. In these circumstances, decisions on budgetary allocations have to be based more on the general value of higher education to society and levels of support feasible within revenue constraints, and less on detailed knowledge of the efficiency and quality of educational programs. The executive and legislative branches, however, are not willing to accept on faith unexamined budget requests.

are adding staff or plan to do so shortly. Given these trends, institutions are unlikely to receive lump-sum allocations based only on a general consideration of the merits of higher education and funds available. The choice facing institutions is whether their budgets will be reviewed by an agency knowledgeable and sensitive to the values they hold and the complexities they face, or only by state agencies with many other responsibilities, including a primary concern for reducing budget requests to fit them within revenues. The growth of performance audit staffs may partly be in response to the past inadequacy of policy issue reviews by state higher education agencies. Most programs, such as health and welfare, have a state-level agency serving as their proponents in the capitol. Higher education may be well advised to have its own representative, with a statewide perspective, at the governor's and legislature's bargaining tables.

To be effective, state higher education agencies do not have to make comprehensive in-depth reviews that duplicate, to some extent, those of other state-level agencies. The Washington agency is instructive in this regard. Agencies can be influential when they limit their role to studies and analyses of budgetary issues, and in fact they are highly unlikely to be given authority for comprehensive, in-depth reviews of budgets when other state agencies are already performing this task. In these five states, all with coordinating agencies, restricting the state higher education agency role to an in-depth analysis of issues avoids costly duplication. States that currently have coordinating boards should weigh carefully the costs of budget review duplication when considering the value of establishing a statewide governing board for public higher education.

In Mississippi, the state higher education agency and the legislative budget staff conducted comprehensive, in-depth reviews of higher education budgets. (There is no executive budget office in Mississippi.) The state higher education agency reviewed and recommended budgets that were further reviewed by the legislative budget staff and enacted by the legislature. Institutional operating budgets, based on appropriations, were then reviewed further in detail by the state higher education agency in order to allocate funds among the institutions. To some extent the budget process in Mississippi was the reverse of that in the other 16 states: The state-level reviews leading to appropriations were somewhat less detailed than in the other states, and the major in-depth review occurred after legislative enactment of the budget bill.

From the viewpoint of the institutions, this pattern eliminated the costs and uncertainty of an executive budget office review. The lump-sum appropriation by the legislature provided the state higher education agency with considerable flexibility to allocate budgets among the institutions on the basis of current operating requirements.

The major potential shortcoming of this pattern was the same as that for pattern two: the absence of a statewide executive perspective, necessary to offset the tendency of legislative bodies toward fragmented policy-making. The durability of the Mississippi pattern is probably a result of a history of single party control in which the governor and the legislature generally worked in greater harmony than is typical in states where party control shifts frequently.

*Comprehensive, In-Depth Reviews Performed by the
Executive Budget Office, the Legislative Budget
Staffs, and the State Higher Education Agency*

In two states, Hawaii and Wisconsin, all three agencies were involved in state-level reviews of higher education budgets of considerable depth and comprehensiveness. Both states have strong executive budget offices and legislative budget staffs, although Hawaii's legislative staff is more transitory. The state higher education agencies in both states were statewide governing boards engaged in very detailed analyses of budgets and highly influential in their dealings with campuses.

The major advantage was the balance achieved among the perspectives and interests of the three agencies. The major shortcoming was the cost of maintaining this extensive review process together with the possibilities for agency duplication and overlapping efforts. The costs of a review process have to be balanced against its benefits. In these states a legitimate question can be raised as to whether the essential checks and balances functions of the agencies could be maintained without all having such an extensive role in budget review.

There appears to be a growing trend toward this pattern of organization. In addition to Wisconsin, statewide higher education governing boards recently have been established in North Carolina (1972), Louisiana (1975), Rhode Island (1969), and Utah (1969) (Millard, 1976). A number of other states have had proposals before them to establish such boards. While Millard does not see the recent formation of statewide governing boards as a future trend, he notes that of the 20 states who have taken legislative or constitutional action to modify their existing structures, all actions except one--South Carolina--have strengthened rather than weakened state higher education agencies (Millard, 1976, p. 18). Since he made this observation, budget actions were taken by Alabama and Colorado to weaken their state higher education agencies. This may be the result of

concern over the effectiveness of these agencies or over the growing duplication in state-level reviews of higher education budgets.

The trend toward strong executive budget staffs does not appear likely to end before all states have such an agency. A phenomenal increase is also taking place in the number of budget review staff employed by legislatures and in the number of performance audit staff, which are engaged in special studies and increasingly comprehensive reviews of budgets. The overlap in functions is growing among these four types of agencies, placing an increasingly heavy and expensive burden of reporting on institutions. There is some question as to whether the benefits of these many levels of comprehensive, in-depth review outweigh the costs, and a study is needed to examine both.

PATTERNS OF HIERARCHICAL ORGANIZATION OF THE BUDGET PROCESS

Another dimension of the organization of the budget process is the number of organizational levels between the campuses, which initiate requests for funds, and the legislature, which makes final budgetary decisions. The number of such intermediate levels (multicampus system headquarters, statewide higher education agencies, and executive budget offices) determines the potential for locating or reviewing decisions at various levels above that of the campus. The number also determines the redundancy, or layering, of the review process. In some states campuses deal directly with executive budget offices and legislative budget staffs on budgetary matters. In others, budget requests may be reviewed by multicampus systems or state higher education agencies, or both, before they are presented to state government. State higher education agencies and executive budget offices may review campus budgets simultaneously, usually with the higher education agency making a recommendation before completion of the executive review. Legislative budget staffs increasingly

receive campus budgets and often begin their reviews at the same time that budgets are submitted to the other agencies.

The organization of higher education above the campus level provides only a clue to the location of budgetary decision, for a multicampus system or state higher education agency may not review campus requests or may not make a recommendation. The depth and breadth of reviews at each level can vary greatly. Additionally, recommendations from the multicampus system and the state higher education agency to executive budget offices and legislative budget staffs may or may not be influential. Figure 5 shows the hierarchical patterns of budget review in the 17 states. The diagrams are somewhat misleading, since they do not indicate the degree to which state-level agency reviews may take place simultaneously.

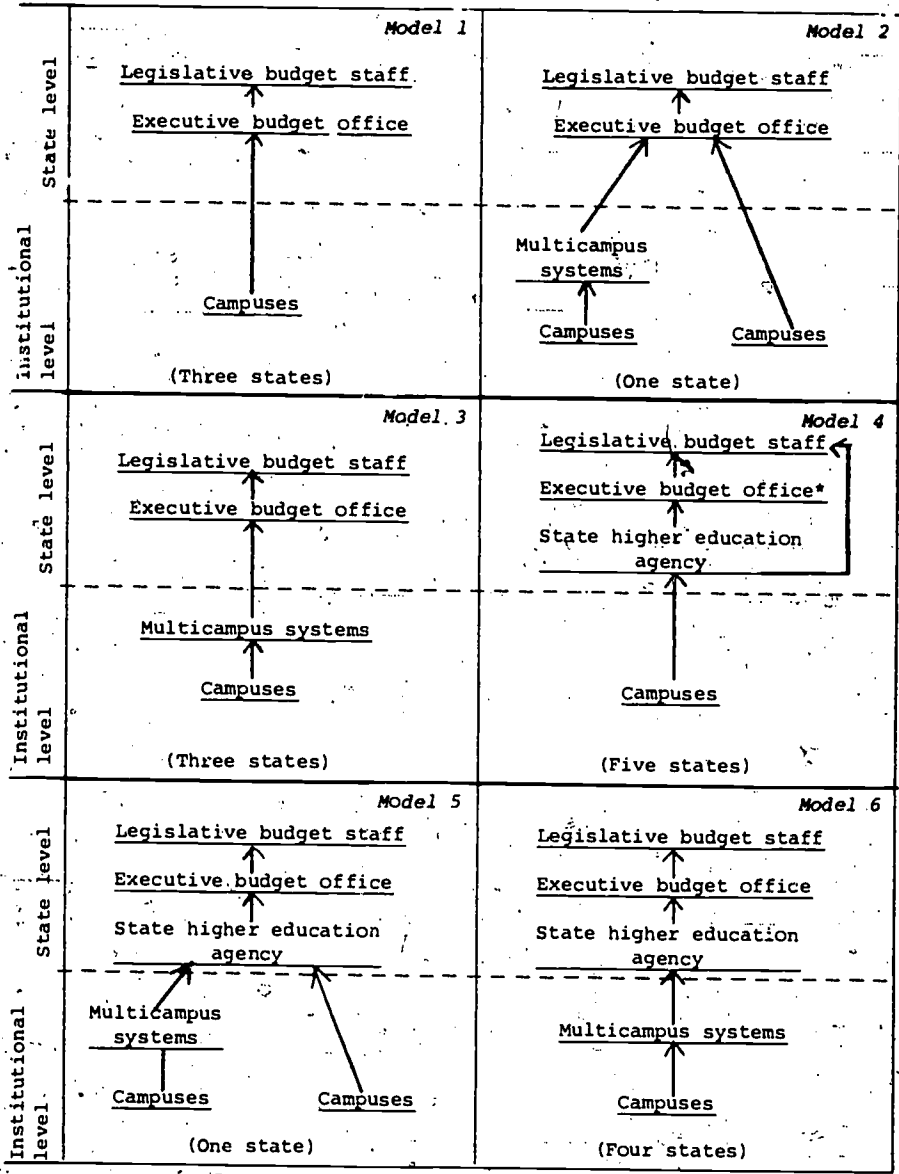
Some indicators of where budgetary decisions are made are the number and location of budget reviews and the location of major budget reviews. An assessment of these indicators is complicated by the numbers of campuses in different states. The problems of budgetary coordination in Texas, with 40 four-year and upper division campuses, are different than in Hawaii, where there are only two. There are also many types of decisions, and particular kinds of decisions may be located at different levels for different segments of higher education in a single state. Decisions are made in ways that create difficulties in pinpointing their origin.

Number and Location of Staff Budget Reviews

Budget reviews can take place at more than one location at a particular level. In state higher education agencies both the staff and the board can examine budgets and make recommendations that go into varying degrees of detail, each generating work for the campuses by their inquiries and hearings. Similarly, the staff of the executive budget office, the governor, and his immediate staff all can make inquiries and hold meetings and hearings on budgets.

Figure 5

PATTERNS OF HIERARCHICAL ORGANIZATION OF THE BUDGET PROCESS



* Mississippi does not have an executive budget office.



The situation is even more complex in the legislature. Both staff reviews and committee reviews can be held, either jointly or by either house. Occasionally, the committees concerned with substantive educational legislation also become involved in reviews of budgetary issues, as in Tennessee.

In our study only staff were interviewed--not political figures such as board members, governors, or legislators. Therefore, only staff budget reviews by the three primary state-level budget agencies, together with multicampus reviews, are listed in assessing decision location and review process redundancy. Table 12 lists the number of staff reviews of budgets in each of the 17 states. This table includes all reviews that result in formal budget recommendations, whether the reviews were comprehensive or not. The one exception is the review of the Michigan state higher education agency, a very minor review that was virtually ignored by all parties and was for that reason not included.

The number of staff budget reviews varied from one in Virginia to five in Illinois, Pennsylvania, and Tennessee. These numbers are somewhat misleading however because state higher education agencies in some states, e.g., Texas and Washington, examined budgetary issues and had a substantial impact on budgets even though they did not make formal recommendations. Also, the extent of staff reviews in some agencies varied considerably. For example, the executive budget office review in Illinois was quite limited in scope and depth compared to that in most states. In Tennessee the education committees in each house of the legislature examined higher education budgets in addition to the appropriations committees. In other states the education committees sometimes informally reviewed budgetary issues and legislators often served on both education and appropriation committees. The practice of substantive committee budget review is being promoted by some who are studying the legislative process (Citizens Conference on State Legislatures, 1975) and may spread in the future.

Table 12

LOCATION AND NUMBER OF STAFF REVIEWS OF CAMPUS BUDGETS

States	Multicampus system		State higher education agency	Execu- tive budget office	Legislative budget staffs			Number of reviews
	Reviews all campuses	Reviews some campuses			Joint	Upper	Lower	
California	x			x	x			3
Colorado		x	x	x	x			4
Connecticut	x		x	x	x			4
Florida			x	x		x	x	4
Hawaii			x	x		x	x	4
Illinois	x		x	x		x	x	5
Kansas			x	x				2
Michigan				x		x	x	3
Mississippi			x		x			2
Nebraska	x			x	x			3
New York	x			x		x	x	4
Pennsylvania	x		x	x		x	x	5
Tennessee	x		x	x	x	x		5*
Texas		x		x	x			3
Virginia				x				1
Washington				x		x	x	3
Wisconsin			x	x	x			3
Total	7	2	10	16	8	8	7	

*Tennessee: The education committees of both houses also review higher education budgets. Had these reviews been considered "major staff reviews" there would have been seven reviews in Tennessee.

We observed six hierarchical patterns of budget review among the 17 states:

- Budgets are reviewed by executive budget office and legislative budget staffs (three states).
- Some budgets are reviewed only by executive budget offices and legislative budget staff, while others are reviewed, in addition, by a multicampus systems headquarters (one state).
- Budgets are reviewed by a multicampus system headquarters and by executive budget office and legislative budget staffs (three states).
- Budgets are reviewed by a state higher education agency and by executive budget office and legislative budget staffs (five states).
- Some budgets are reviewed only by a state higher education agency and by an executive budget office and legislative budget staff, while others are reviewed, in addition, by a multicampus headquarters (one state).
- Budgets are reviewed by a multicampus headquarters, a state higher education agency, and by an executive budget office and legislative budget staff (four states).

Table 13 presents the number of staff reviews made of campus budgets in each of the 17 states, before they are reviewed by executive budget office or legislative budget staff.

In three states (Michigan, Virginia, and Washington) campus budgets were submitted directly to the executive budget office and legislative budget staffs for major reviews. These states did not have multicampus systems, as defined by Lee and Bowen (1971), and the state higher education agencies did not engage in formal reviews.

Table 13

NUMBER AND LOCATION OF REVIEWS OF CAMPUS BUDGETS
PRIOR TO EXECUTIVE BUDGET OFFICE AND
LEGISLATIVE BUDGET STAFF REVIEWS

Number and location of reviews	States	Total number of states
None for all campuses	Michigan Virginia Washington	3
One by multicampus system for some campuses, none for others	Texas	1
One by multicampus system for all campuses	California Nebraska New York	3
One by state higher educa- tion agency for all campuses	Florida Hawaii Kansas Mississippi Wisconsin	5
Two by the multicampus system and state higher education agency for some campuses, but only one by the state higher education agency for other campuses	Colorado	1
Two by the multicampus system and the state higher education agency for all campuses	Connecticut Illinois Pennsylvania Tennessee	4

Source: Glenny et al., 1975.

In Texas some campuses were part of multicampus systems (e.g., the University of Texas campuses), while other campuses submitted their budgets directly to the executive budget office and legislative budget staff. Thus, some campus budgets received an intermediate review while others did not.

In three states (California, Nebraska, and New York) all campus budgets were reviewed by multicampus systems headquarters prior to their review by the executive budget office and the legislative budget staff. Nebraska did not have a state higher education agency and in the other states these agencies did not conduct major budget reviews.

Five states (Florida, Hawaii, Kansas, Mississippi, and Wisconsin) had statewide governing boards that reviewed all campus budgets. These boards were, in effect, a single multicampus system for the entire state. These boards may have grouped the campuses into functional divisions for internal purposes but there were no intermediate governing or budget review organizations.

In Colorado some campuses were part of a multicampus system that reviewed budgets prior to submission to the state higher education agency. Other campuses submitted their budgets directly to the agency for review.

In four states (Connecticut, Illinois, Pennsylvania, and Tennessee) campus budgets were reviewed both by multicampus headquarters and by the state higher education agency prior to review by the executive budget office and legislative budget staffs. Three of these states had regulatory coordinating boards (in contrast to advisory) and one, Pennsylvania, had a state department of education with regulatory powers, applicable particularly to the state colleges. The influence of multicampus systems reviews varied somewhat. On the whole, they tended to be more influential in states without a major state higher education agency review. Whether this represented the political ability of the multicampus systems to curtail state higher education agency budget involvement or a decision to minimize

redundancy was difficult to determine. California and New York, with their powerful multicampus systems, were the only two states in which state higher education agencies exercised no budgetary authority; although in Michigan and Virginia a number of factors have succeeded in the past in minimizing the role of the state higher education agencies. Factors that affect the influence of multicampus systems are discussed by Lee and Bowen (1971).

Patterns of Budgetary Influence

The 17 states contained several patterns of staff budgetary influence. These patterns of influence were not identical with allocations of statutory authority or any other single identified factor. A complex composite of variables, difficult to identify and weigh, appear to be responsible for the variety. Some potential factors are explored in Chapter 6 and in another volume by Glenn (1976) resulting from this study. Several interesting observations are reported below.

In none of the states where the state higher education agencies were components of departments of education were they one of the most influential agencies. In Pennsylvania the state higher education agency, in the state's Department of Education, had considerable budgetary authority, particularly for the state colleges, but its recommendations were not especially influential in terms of either executive or legislative decisions. The Michigan and New York education agencies lacked significant budgetary authority.

In California influence was shared by the executive budget office and legislative budget staff. The state higher education agency had a minor budgetary role and at the time of our visit the director of the Department of Finance represented higher education in the governor's cabinet, which put him in the position of being responsible for maintaining the fiscal integrity of the state while also serving as the proponent of higher education in top

policy councils. The budget for higher education grew substantially during the period that this arrangement was in effect so it cannot be proved that the interests of higher education were poorly represented.

Nevertheless, such an arrangement potentially could disadvantage higher education in relation to other state programs whose spokespersons are more highly placed. The chief budget officer of state government should not be placed in the conflicting roles of spending critic and program advocate. Having the director of the state higher education agency represent higher education in the state would have eliminated this conflict of interest and strengthened the agency's role in state-level coordination of higher education, but such a realignment of roles was not feasible with an impotent state higher education agency and politically powerful institutions that preferred to deal directly with top state officials. Recognizing this situation, the legislature has recently sought to strengthen the role of the agency. The success of this legislation will depend on whether the new statutory authority and leadership is sufficiently powerful to overcome political factors that crippled previous efforts at state-level representation and coordination of higher education.

In Colorado, Pennsylvania, and Texas the legislative budget agencies were the most influential state-level budget staffs. The executive budget offices had relatively small staffs and the institutions were highly influential compared with the state higher education agency. There was some evidence that legislators made less use of the analyses and recommendations of the various state-level staffs in comparison to other states. Regional economic and political judgments appeared more frequently to outweigh technical educational judgments. The legislatures in these states, with their sensitivity to institutional concerns, reduced the ability of the state higher education agencies to ensure state-level coordination of higher education. The dominance of a single legislative staff also permitted their assumptions and perspectives to dominate the design of the budget process. In Colorado it appeared that budgetary process

assumptions held by legislative staff were not challenged effectively by those in the other agencies who disagreed.

In Michigan the executive budget office and the legislative budget staffs were both highly influential. When two (or all three) state-level agencies are powerful the potential exists for a stalemate between them on budget process issues, which occurred in Michigan over the design of budget guidelines to institutions. The executive budget office and legislative budget staffs, unable to agree on the contents of the guidelines for submitting campus budgets to the state agencies, designed their own, again increasing significantly the workload of the institutions. Typically such impasses are resolved by negotiations and compromises. Compromises are facilitated by a high level of trust and confidence among the staffs of the three agencies, a quality not observed in Michigan. On the other hand, in Texas the state higher education agency, executive budget office, and legislative budget staff appeared to work together so closely that it was not clear that they acted as effective checks and balances to each other.

In Florida, Illinois, and Tennessee the state higher education agency was the most influential budget agency. The other agencies all had smaller staffs. The higher education agency engaged in highly technical and sophisticated processes of budget formulation and review. The domination of the state-level budget process by influential state higher education agencies made it possible for them to overwhelm other agencies with the detail and complexity of their budget submissions, forestalling effective review and forcing sole reliance on broad political judgments to bring budgets within available revenues. The technical judgments made in the state higher education agencies are potentially insensitive to broad political considerations, while the political judgments made by the governor and legislature could at the same time lack understanding of the complex technical details in budget recommendations. Governors and legislators are, of course, aware of this kind of imbalance and have the means to correct it. The persistence of a state higher education agency as the most influential

budget agency requires a politically sensitive director, highly competent staff, and cooperation among the three agencies.

In Connecticut and Virginia, the executive budget offices were the most influential agencies. Both of these states tended to treat higher education similarly to other state programs. State personnel, preaudit, accounting, and procurement policies were applied to institutions in ways that appeared to hamper effective institutional management. The desire to standardize and manage practices of the state bureaucracy is an understandable interest of executive budget offices. Higher education, however, presumably gains its strength from independence, experimentation, and diversity. It operates in a national as well as a state marketplace. The staff of institutions in these states were highly critical of state "intervention" into their administrative processes. The growing influence of the state higher education agencies in these states could, in the future, give governors and legislators confidence that higher education will be properly managed without the need for such extensive state administrative controls.

ANALYSIS OF THE LOCATION OF BUDGETARY DECISIONS

The analysis of the location of budgetary decisions is highly complex, since an organizational level in the state budget structure provides only the potential for locating decisions. One multicampus system headquarters in Colorado did not exercise budgetary authority and in other states the multicampus systems did not exercise extensive budgetary authority. The same was true among state higher education agencies. The executive budget offices and legislative budget staffs also varied in the kinds and breadth of their budgetary decisions. Additionally, one location may influence budgetary totals while another has more impact on allocations within totals. Therefore, one cannot assume a priori that a budget review at a certain organizational level indicates the extent of

centralization or decentralization of the budgetary decision process.

A further problem results from the different kinds of decisions made and the practice of locating different kinds of decisions at different organizational levels. A brief discussion of types of decisions will clarify this problem.

Types of Decisions

Budgetary decisions can deal with a number of dimensions of the state's higher education system, including:

- different systems elements (inputs, processes, and outputs),
- different bases of judgment (values and facts), and
- different phases of the budget process (formulation, administration, and evaluation).

Input Decisions

Input decisions involve the source, amount, and mix of resources allocated to higher education. The states determine how much of their own revenues they will devote to higher education. They also make some decisions on institutional revenues that do not come from state general revenues. For example, in some states, such as Florida, a state-level agency may set tuition and fees for all institutions. In other states, such as Virginia, institutions can set their own tuition levels after receiving state appropriations. Governmental controls over the use of revenue from grant overhead, endowment income, and proceeds from campus enterprises vary among the states. In California, institutional income from research grant overhead was shared equally by the state and the institutions. In nearly all states, state funds were viewed as providing the difference between other

moving state funds from institutions when institutional revenues exceeded budgeted estimates. This process did not work both ways: The states generally did not provide more appropriations when the institutions experienced a shortfall.

Concern about the mix of resources is reflected in the traditional objects-of-expenditure budgets used by most states, showing allocations of resources for items such as salaries, supplies, equipment, contractual services, and physical plant. Comments by those interviewed in some states indicated that, despite a sense on the campus that additional staff were of higher priority, it was sometimes easier to obtain an expensive computer or television complex than staff positions. States also seek a balance between physical plant and educational and general outlays. Rarely do they permit institutions to shift funds between physical plant and other objects of expenditure.

Process Decisions

Process decisions include the educational and management processes within institutions. Decisions on educational processes can be moved upward from campuses to state-level agencies by providing incentives to use new technology through purchases of equipment. Grants can be made for innovations, or indirect changes can be made by limiting monies for faculty, thereby increasing faculty-student ratios.

Decisions on institutional management processes can be made above the institutional level in various ways. Functional budget categories separate monies for administration and program direction from those for instruction, student services, research, and other functions; resources for management can easily be restricted by limiting the number of administrative positions. Additionally, funds for information systems and management technology can change the administrative processes at institutions.

practices at institutions is often exercised by those at higher levels. Commonly state-level budgetary decisions are based on an implicit assumption that campuses are, or should be, governed by a bureaucratically structured system. This belief in "tidy" decision processes sometimes ignores traditional academic values and practices. Some state actions appear to be explicitly designed to strengthen the hierarchical bureaucratic decisionmaking by providing presidents with management information systems, planning staffs, and processes possessing potential for strengthening their control over the institutions. The institutions frequently do not challenge the organizational assumptions underlying such actions; perhaps because the myth of presidential power serves the presidents in their external relations. The bureaucratic concept of organizing decisionmaking may also be so universally accepted that direct challenge is impolitic. Contrasting assumptions about the role of the presidents of institutions have been examined by Cohen and March (1974).

Output Decisions

Decisions on outputs concern the substance and range of academic programs, the numbers and attainments of graduates, and the research and public service provided. Program budget categories attempt to focus attention on such issues. Decisions must be made on what programs will produce the desired kinds of graduates, research, and public service. These decisions also contain choices, such as the need for liberal arts compared with professional programs, the number of graduate degrees versus undergraduate, and the need for more teachers or doctors as against enrollments in teacher education and premedicine. In such decisions difficult balances must be made between the social demand for higher education and forecasts of the employment situation. They also represent differing social preferences. The states showed some restraint in making such decisions except when major new programs were launched or old programs terminated.

Fact and Value Decisions

The decisions made in higher education also can be classified as to whether they are primarily technical and professional, involving questions of fact, or primarily political, involving questions of who benefits and who pays and which benefits are most desirable. An example of a technical question is how many students are likely to enroll in a given program or institution, or whether the physical plan can accommodate additional students, while a political decision concerns the proportion and mix of students that should attend a program or institution, and consequently the need for additions to existing physical plant. These two types of decisions are rarely distinct in practice: technical analyses of constraints lead to different weightings of political values, and political considerations lead to the selection of areas for analysis.

Political decisions on how funds are to be obtained and allocated must be tempered by technical judgments on constraints such as the availability of time, resources, and manpower, and on the consequences of alternative courses of action. These fact-and-value decisions are made at many levels and by different parties within levels. In every state, politicians decided some technical questions and staff made some political decisions, but the balance varied. For example, in Pennsylvania political bargaining within the legislature and between the legislature and the governor had a particularly significant influence on budgetary decisions; the technical recommendations of the staff agencies were relatively less important. However, with the increase in the technology and complexity of budgeting, in most states the staff agencies were highly influential and are becoming more so.

Budget Phase Decisions

Location of decisions on formulating and reviewing campus budgets must be distinguished from location of decisions on the subsequent administration and evaluation.

of budgets. In Virginia, a state with a highly decentralized budget formulation process, the state had considerable authority over institutional personnel management during administration of the budget. In California, state-level agencies were restrained in making decisions on internal institutional management and programs during budget formulation and played a minor role in the administration of enacted budgets. However, growing use was being made of performance audit staffs to evaluate institutional practices and their past use of resources, and to exert pressure for changes. This pressure, of course, consists largely of a threat to take actions during the budget formulation process.

Problems in Locating Decision Authority

Even when the types of decisions can be identified, their location may be difficult to determine. Similar decisions are made at different levels in the different segments of higher education. Decisions can be proposed at one level but acted on at another. And many decisions are made outside formal organizational channels.

In Pennsylvania the state colleges were designated as "state owned" and were treated in many respects as state agencies. In contrast, the four universities were termed "state-related" institutions and were subjected to fewer state budgetary controls. In many states the two-year colleges were governed by local boards and were funded on the basis of statutory formulas, giving them a high degree of autonomy.

Often institutions make their own decisions and these are routinely approved by state-level agencies. In other cases, institutional decisions are carefully reviewed and sometimes overturned. Similarly, state higher education agency decisions and executive budget office decisions are subject to legislative review. In such circumstances the problem of identifying where decisions were actually made is further compounded because issues are typically decided in sessions involving

staff from several organizational levels, making it difficult to assess whose influence on the outcome is most significant.

Many important decisions are reached in informal channels outside the formal organizational structure. Such decisions are usually then legitimized by formal organizational or interorganizational action.

Furthermore, contending campuses may arrive at a consensus on a budgetary issue and present their agreement to state-level agencies who accept it as the most feasible political accommodation.

Trends in the Location of Decisions

An attempt to determine the location of types of decisions must include an extensive examination of institutional practices, which goes beyond the boundaries of this study. However, some generalizations can be made. The states generally have attempted to insulate higher education by not treating institutions and state higher education agencies as departments of state government. They have recognized the value of a decentralized system of higher education. This is reflected in the provisions for constitutional autonomy for universities, the frequent exemption of institutions from the administrative requirements applied to state agencies, the use of boards to govern institutions, and by permitting institutions publicly to appeal budgetary actions of the governor more freely than was often the case for state agencies.

At the same time, the states have recognized the need for coordination and regulation by creating multi-campus systems and state higher education agencies that, in many respects, serve the interests of state government. (These institutions and agencies, however, often do not come under state civil service, procurement, and accounting regulations.) The provisions for institutional autonomy from state government, of course, vary greatly among the states and within a state for particular kinds of institutions.

Since the turn of the century, however, there has been a steady trend toward more state involvement in higher education decisionmaking that has resulted in greater centralization of budgetary decisionmaking and a substantial increase in the numbers and levels of budget reviews.

Layering of the Decision Process

Most scholars in the field agree that there is a trend toward increasingly centralized higher education budgetary processes in the states. Mooney (1963), however, argues persuasively that there is not a clear shift of decision power upward but rather a fragmentation of authority among all organizations, with no one paramount. On this process within the university, he comments:

Yet the reality is that cultural changes have produced a progressive division of power and responsibility within the university which culminates in a condition in which no one can take positive leadership. (p. 51)

Practically, it makes little difference which one of the various parts of the power structure one touches first; in the end, the full complement is necessary. Any one part can deny and negate the rest. Parts of the whole continually do so. (p. 50)

This analysis fits quite well the circumstances we observed. In many instances the reality is not that a higher level increasingly makes the important decisions but rather that successive levels review decisions, each level having some authority to veto the decisions of lower levels. Massive efforts at coordination are required to obtain the agreement of all parties on an issue. It is debatable whether this layering of review improves decisions or merely increases the time needed to take action. The impression we gained was that the

value of such layering should be treated with greater skepticism than has been the case. The presumed benefits of successive reviews may, in many instances, be exceeded by the costs.

Changes in Location of Decisions

A number of trends were noted in the location and review of decisions. Decisions on financing higher education are increasingly made or reviewed at the state level. State funds generally are viewed as making up the difference between total institutional needs and the funds available from nonstate sources. To minimize this need, the states require information on institutionally generated revenues; they are becoming involved in approving federal grants and contracts, tuition levels, and other sources of income. For example, the state of Washington withheld state funds through its allotment process when other sources of income exceeded budgeted estimates.

Decisions on the processes of education and institutional management also are frequently influenced by state-level agencies. More and more the states encourage development of campus management systems, and occasionally actively attempt to change educational processes. For example, in California a special fund was appropriated to improve teaching in the university.

State involvement in determining the outputs of higher education has been traditionally at the broad level of establishing campuses and major programs, such as law schools. We found considerable evidence of growing state concern with program outcomes but little evidence that attempts at assessment have succeeded. Program budgeting was one attempt to focus greater attention on educational outputs, and recently performance auditing has involved state staffs in the substance of educational programs. These involvements tended to deal primarily with technical factors affecting outcomes or whether presumably desirable outcomes were being realized. State-level budget agencies appar-

ently did not mandate the content of programs or the specific outputs implied by particular programs. State-level concerns over outputs, however, were evident to institutional officials and to some degree must influence their thinking.

The growth of state-level staffs has increased the attention given to technical and factual issues during the budget process. In some instances this emphasis appeared to lead to some neglect of political issues and process considerations, and a misplaced faith in the efficacy of facts and analysis to resolve questions of social preferences.

There appears to have been some decentralization of decisions on budget administration. A number of states, among them California and Pennsylvania, have relaxed their detailed review of college procurement and personnel management activities.

Reasons for Decision Centralization

Four arguments can be advanced to explain the increasing review of decisions and layering of state higher education budget structures. Each appears to be valid and reinforces the others.

1. The twentieth century has seen a phenomenal increase in number and size of institutions of higher education. Higher education has clearly become a larger and more socially significant activity, with greater political influence. The relationships within higher education, and between higher education and other social institutions, have created a need for greater statewide coordination of campus programs and activities. Furthermore, the implications of socioeconomic trends such as birth rates and energy source depletion have increased the need for long-range planning to avoid expensive and socially disruptive errors of judgment. Citizens are making ever-greater demands on state government to solve problems, and governors and legislators must appear to be taking action. One way to ensure coordination and

action is to have staff responsible for making and following up decisions. The popular terminology for this phenomenon is "accountability," but the primary effect is decision centralization and layering. One can argue, therefore, that the growth of state-level influence was a response to the growing influence of institutions. It was also a response to the need to maintain a balance between state-level and institutional perspectives.

2. Modern means for collecting, storing, transmitting, and analyzing data permit decisions to be made at greater distances from the scene of action. The telephone and the computer in particular give centrally located officials the ability to get facts and make prompt judgments, formerly possible only for those at the scene.

3. The logic of organizational control favors increased centralization of budgetary decisions. Those who review budgets cannot establish reliable budgetary requirements without analyzing the detailed composition of campus plans and arriving at totals through summing up the component requirements. A budget examiner typically determines the strength of the case for each component of the budget as well as examining overall ratios and making comparisons. Once a total is arrived at, it is hard for state staff to refrain from promoting the internal allocation of funds thought desirable when recommendations were made. In most states, institutions still have considerable flexibility to allocate monies for local priorities. However, legislatures increasingly view allocative judgments made during budget review as plans for expenditure, and are holding institutions accountable for following them.

Staff at each level of the budget process tend to view those at lower levels as less competent, less well informed, and less responsible. The actions taken by those at the campus level in response to complex constraints or incentives, both internal and external, are too often viewed as irrational. If campuses cannot comply with the desires of higher levels this frequently is interpreted as conservatism or perversity, a basic bias of educators against change, or an arrogant pursuit

of self-interest. The common response is to move decisions to higher levels, to ensure their propriety. Legislators, who make basic structural decisions that affect decision location, are generally sympathetic to charges of campus irresponsibility. After all, they can better respond to the demands of their constituents when they more closely control the uses of public monies. However, sometimes they are pleased to be able to delegate unpopular decisions.

This skeptical view of others' motives and competencies is reinforced by another phenomenon, already noted, termed "uncertainty shifting." Upper levels believe they can more assuredly achieve their objectives and reduce criticism from others if they increase their review of lower-level decisions or make the decisions themselves. For staff at lower levels, certainty is increased by having the freedom to make their own decisions. However, the state level has greater power to structure the decision process, leading to reviews of lower-level decisions.

The insensitivity of higher-level officials to complex campus circumstances is usually irritating to campus administrators, but there are circumstances when this characteristic is useful. For example, unpleasant decisions that affect personnel can be pushed up to the state level, removing the onus from institutional administrators. However, moving too much authority to the state-level has hidden costs as well as the more obvious ones of differing perspectives and the inability to assimilate fully the complexities of local circumstances.

The interposition of an organization between campuses and the state tends to cut the campuses off from clues to the disposition of state agencies and prevailing political issues. Campuses need not be as responsive to statewide concerns when they are not interacting directly with the executive budget office of the legislature; the state higher education agency takes the final responsibility for the reasonableness of the higher education budget. Noting this growing insensitivity of institutions to statewide concerns, certain states have

reacted by increasing the authority of state-level agencies, which simply aggravates the problem. Special efforts to maintain a flow of state-level information to the institutions can partly offset this, but most designers of information systems neglect the downward flow of information in favor of the upward flow, from campus to the state. This oversight becomes more critical when campuses are cut off from awareness of their political environment that can be gained from direct interaction with executive and legislative branch staffs.

4. Another factor leading to decision centralization is the growing acceptance of decision processes involving comprehensive central data collection, analysis, and planning (Schmidtlein, 1974). Techniques such as program planning and budgeting systems, management by objectives, and zero-based budgeting, all presume a centralized process of analysis and decisionmaking. These approaches to budgeting are being promoted at the same time that concerns over governmental accountability have increased. A hierarchical bureaucratic organization design, with functional specialization and central policy development and control, appears to many to be the logical structure for implementing the new decision techniques and locating accountability.

Unfortunately, these approaches to decisionmaking and government structure neglect the principles of separation of power and checks and balances. A concern for efficiency in government has superseded concerns over centralization, concentration of power, and the imposition of governmental orthodoxy.

PROBLEMS IN THE DESIGN OF STATE HIGHER EDUCATION BUDGET STRUCTURES

Ostrom (1973) identifies two concepts that deal with the problems of governmental organization in a democratic society. These concepts are in conflict with each other, and this conflict leads to what Ostrom believes is an intellectual crisis in American public

administration. They can be described as the *checks-and-balances* and *bureaucratic* paradigms of governmental organization. An examination of these two paradigms provides a basis for evaluating some aspects of the organization of state budgeting for higher education.

The Checks-and-Balances Paradigm

The checks-and-balances principle of governmental organization is best represented by the constitutions of the United States and the states. The central concern is the avoidance of a concentration of governmental power in any one location. The design of government is based on the belief that a major governmental objective is to protect individuals from state as well as from private encroachment. This concept is stated well by Ostrom (1973):

Fragmentation of authority among diverse decision centers with multiple veto capabilities within any one jurisdiction and the development of multiple, overlapping jurisdictions of widely different scales are necessary conditions for maintaining a stable political order which can advance human welfare under rapidly changing conditions. (p. 112)

To accomplish these objectives, governmental powers are separated among the executive, legislative, and judicial branches. Various officials of the executive are often independently elected. Boards and commissions are made responsible for politically sensitive areas, such as education, and varying degrees of autonomy are given to educational institutions that have the critical function of shaping the minds of young people.

This coordinate and hierarchical sharing of power provides multiple points of access to decisionmaking, forces decisions to be made as a result of bargaining and compromise rather than by fiat, and provides for

detection of error and reliability through multiple review of policies. The antisocial pursuit of agency self-interest is controlled by the diffusion of power and the need for multilateral bargaining and compromise before action can be taken.

Historically, a major motivation for the separation of powers was to check the excesses of unlimited executive power. Strong central direction expedites decisions, increases the consistency and predictability of actions, and avoids chaos and drift; concentration of power in the executive branch of government promotes prompt decisions, greater control over governmental actions, and policies that are more consistent with objectives. However, too great a concentration of power in the executive branch of government leads to neglecting interests of individuals in favor of the collective concerns of government. It may also lead to a pursuit of policy consistency that neglects the need to compromise conflicting interests, and to potential domination of policy by special interests close to the executive.

Faced with the conflicting values of a multifaceted society, people often prefer the economy, order, and decisiveness of strong central direction to the disarray and deliberateness of a checks-and-balances system of decisionmaking. However, centralization of authority can become a one-way road unless there are means for checking its progress. The division of powers among the executive, legislative, and judicial branches of government provides such a check on the accumulation of power, at some costs in efficiency, in order that over the long run individual interests are better served.

The Bureaucratic Paradigm

The bureaucratic organizational paradigm is described in some detail by Weber (Gerth & Mills, 1946, pp. 196-244). Its precepts have been elaborated by modern public administration theorists. Its central concern is coordination and organizational efficiency, and the principles of orga-

nization it emphasizes are: 1) functional specialization, 2) statutory authority for functions, 3) hierarchical relationships, 4) selection of staff on the basis of expertise, and 5) use of written rules and procedures.

The bureaucratic paradigm assumes that the public interest is defined by legislatures and that the task of the executive is to achieve legislatively mandated objectives. Governors require power to control and coordinate the actions of public agencies and institutions. Otherwise, agencies will pursue their narrow self-interests rather than the broader, statewide interests of the legislature and governor. Functional specialization and the elimination of overlap and duplication, together with exercise of expertise, will reduce the costs of decision-making and increase the quality of the process. Specifying who has authority for what decisions locates accountability and clarifies responsibility for those who seek access to decisionmaking. The specification of rules and procedures, together with legal and budgetary powers, ensures a coordinated and reliable enterprise.

Conflict Between the Two Paradigms

The central objectives of the checks-and-balances paradigm are to:

- reduce the accumulation of power,
- protect minority interests,
- ensure due process,
- resolve conflicts by negotiation and compromise,
- detect errors in facts and assumptions, and
- provide reliability through redundancy.

- increase productivity through specialization and central coordination,
- avoid ambiguity in the location of responsibility and accountability for actions through statutory and administrative specification of roles,
- maintain accountability and control through the establishment of hierarchical relationships,
- reduce delays and stalemates over decisions establishing levels of review and locations for final judgments,
- increase the consistency of decisions in terms of governmental objectives by reducing the need for compromise, and
- clarify decision patterns through written rules and procedures.

These two organizational paradigms represent values that often conflict with each other; separation of powers is not always compatible with specialization of function. A democratic governmental structure attempts to balance between them. In most states, two or three agencies review institutional budgets, each from its own perspective and in terms of its own interests. Multiple reviews permit more access to the budget process and opportunities to appeal earlier decisions, but they also increase costs and the time required to reach decisions. Some advantages and disadvantages of the different structures for locating decisions are described in the next section.

*Multicampus System and State Higher Education
Agency Review of Budgets*

The number of multicampus systems and state higher education agencies that have budgetary authority has increased. Originally, campuses in most states dealt directly with the executive and legislative branches of state government. The advantages of direct campus access to state government are:

1. Campus needs, interests, and constraints are directly represented to the executive and legislative branches of government. State decisions may therefore be more sensitive to the complex problems confronting campuses than when campus interests are translated by multicampus systems or state higher education agency staffs.
2. Campuses have to be more sensitive to state governmental concerns and constraints and take more "responsible" actions. There are no intermediate agencies to correct their errors or to revise unacceptable requests. Conflicting governmental and campus interests must be faced and resolved by campus officials. The special budgetary interests of faculty, students, and alumni cannot be the sole concern of campuses, leaving to a multicampus system or state higher education agency the unpopular tasks of making needed budget reductions in response to state priorities and revenue constraints.
3. The elimination of intermediate reviews, or layering of the budget process, reduces costs since there are no multicampus system or state higher education agency budget staffs. Campus expenses are lowered because there are fewer parties making demands on their staffs for information. The time required to review campus budgets is reduced. Campuses can develop their budgets later, using more recent data.

to budgetary opportunities or constraints than when such decisions must be approved at multicampus system or state higher education agency levels.

5. Competition among institutions can be resolved through political negotiation rather than through administrative action, giving greater consideration to the complexities and concerns of individual campuses.

6. Power is dispersed among competing campuses, avoiding imposition of orthodoxies or standardization of practices for administrative convenience.

7. Campuses can compete on the basis of initiative and the merit of their ideas, leading to experimentation and efficiency, with less risk of external imposition of rigid functional specialization or coordination, which increase the difficulty of effecting change.

The disadvantages of this pattern of organization stem primarily from the freedom with which the campuses can pursue their own interests. The interests of individual campuses may not add up to the best educational program for the state as a whole. Executive budget offices and legislative budget staffs have many responsibilities and little time to analyze competing demands from institutions. It is difficult for them to construct a coherent statewide higher education program from individual, partisan campus submissions.

To offset this problem, multicampus systems and state higher education agencies staffs can:

1. Temper unregulated competition among campuses by developing divisions of responsibility, coordinating their efforts, and reducing redundant programs; they can also counterbalance executive and legislative decisions made on the basis of regional and special rather than educational interests, and lessen distortions of educational priorities caused by campuses with strong legislative influence.

2. Develop segmental and statewide plans for higher education that anticipate future trends, increasing the sophistication of policy debates and structuring and delimiting the discussion of issues.

3. Detect errors and inconsistencies in facts and assumptions in campus submissions, increasing the quality of information provided to the executive and legislative branches.

4. Make more extensive reviews of complex issues precluding hasty, ill-advised decisions, and breakdowns of the budget process because of redundant staffs. (For an exceptionally insightful discussion of the values of organizational redundancy, see Landau, 1969.)

5. Provide, through the review process, an additional location for interested parties to gain access to decisionmakers, thus bringing a greater number of perspectives and values to bear on issues.

State-Level Review of Higher Education Budgets

The increase in number and size of state higher education agencies, executive budget offices, and legislative budget staffs has increased their effect on the budget process. These staffs now examine institutional budgets in greater detail, review decisions, and make decisions in areas formerly left to the campuses. The advantages of decisionmaking at the institutional level are:

1. State-level officials have limited time and resources to become knowledgeable about institutional issues, and their decisions are apt to be in error in proportion to the complexity, idiosyncratic nature, and their basic understanding of issues. The state agency, if it insists on making too many decisions may, like the brain of the dinosaur, be too small to effectively adapt the huge body of higher education to emerging challenges.

2. Decisions on complex technical matters are best made relying on professional expertise, which cannot be found at the state level in sufficient numbers and varieties to encompass all critical decisions. Hierarchical bureaucratic principles of organization conflict with the concept of professional discretion, as noted by Etzioni (1964): *

Administration assumes a power hierarchy. Without a clear ordering of higher and lower in rank, in which the higher in rank have more power than the lower ones and hence can control and coordinate the latter's activities, the basic principle of administration is violated; the organization ceases to be a coordinated tool. However, knowledge is largely an individual property; unlike other organization means, it cannot be transferred from one person to another by decree. . . . It is this highly individualized principle which is diametrically opposed to the very essence of the organizational principle of control and coordination by superiors--i.e., the principle of administrative authority. In other words, the ultimate justification for a professional act is that it is, to the best of the professional's knowledge, the right act. . . . The ultimate justification of an administrative act, however, is that it is in line with the organization's rules and regulations, and that it has been approved--directly or by implication--by a superior rank. (pp. 76-77)

3. State-level coordination may not discern local incentives and constraints and thus ignore important considerations that are dealt with in multilateral negotiations between institutions. Real alternatives are more apt to be discovered and tested through the interaction of those whose interests are at stake than through analysis by technical experts.

4. State-level analysis may perceive redundancy but fail to recognize small but important differences, undercutting the experimentation necessary for progress as well as the political compromises that maintain stability.

5. The state tends to enact regulations in reaction to localized incidents, establishing standards and procedures with which all must comply. The costs are rarely calculated of complying with proliferating regulations and procedures, either in terms of dollars or the loss of ability to act quickly and flexibly.

6. Accountability is not a simple process of acting in accordance with the "mandate" of voters. To be effective, decisions must continuously reconcile competing demands of many groups--both within and outside the institutions. Many of these demands are more apparent at the institutional level.

7. Decentralized decisionmaking minimizes the possibility that a bad decision can seriously affect higher education throughout the state.

The advantages of having decisions made at the state level are:

1. State-level agencies have a broader view of the relationship of one institution's programs to those of other institutions. Through the review of budgets and use of central authority they can ensure that programs serve statewide interests, are complementary, and are not duplicative.

2. It is possible at the state level to develop the consistent, standardized definitions and practices needed to analyze institutions, compare their activities, and regulate their behavior in the public interest.

3. State-level agencies can perceive and resolve difficult interinstitutional conflicts that compuses find inexpedient, or difficult, to deal with and that might be costly if continued. Conflicts are more likely

to be resolved in favor of the broad public interest at the state level than when compromised at the local level.

4. The officials who head state agencies are usually directly elected or are appointed by elected officials, and are visibly accountable to the electorate for their actions. A decentralized and fragmented decision process makes it hard to locate responsibility and accountability for particular decisions and actions, and access to decision processes is more difficult.

5. State-level agencies are further removed from the complex interpersonal relationships that affect institutional decisions, and are thus better able to decide on the basis of broad public interests rather than on the basis of narrower institutional and personal interests.

6. The collection and analysis of data at the state level directs attention to longer-range concerns and technical issues that are less easily perceived in a highly decentralized decision structure.

Resolution of Organizational Dilemmas

The design of an organizational structure for state government involves weighting the relative values of distributing budgetary influence among the state higher education agencies, executive budget offices, and legislative budget staffs, in contrast to concentrating influence in one or two of these agencies. (This topic is addressed more extensively by Glenny, 1976, in his volume resulting from this study.) The value of direct campus access to state government must be weighed against the value of multiple reviews of budgets and lower-level coordination of campus activities. Furthermore, values associated with state-level decisionmaking must be balanced against those of institutional decisionmaking.

The solution to these trade-offs is apt to be different for each kind of decision and vary with the unique

circumstances in each state. There is no universal solution to these conflicts, as was noted by Alexander (1972):

If the survival of a policy-maker depends, to a large extent, on the conformity of his image (Boulding, 1956) with his real environment, and if this isomorphism is reinforced by the success of his policies, one may expect some correlation between decision modes and the environments in which they flourish. (p. 329)

Dividing influence among the three state-level agencies ensures that their differing perspectives will be brought to bear on budgets. If their influence is relatively equal, issues must be resolved by bargaining rather than by fiat. Compromises accommodate the interests of those who do not command the support of a majority of the voters or the favor of a particular agency, but near-equal shares of influence can result in stalemate. The implicit question is always present, how important are the political values of shared power and checks and balances in contrast to the economic values of bureaucratic organization, functional specialization, and hierarchical accountability?

Additional levels of budget review provide checks and balances and create manageable areas for organizational oversight. However, they increase the costs of budget review and workloads on campuses, delay decisions, and indirectly encourage sloppy work and unrealistic campus requests, since campuses know that their submissions will be reviewed at higher levels. Coordination can be obtained by a central overview that relates the parts to the whole, but also can take place through independent local discoveries of common interests. Again, there remains the question: How important are economy, and speedier decisions, to fuller participation and a more thorough consideration of appropriation requests.

Decision authority at the state level permits decisions to be made in terms of a broader set of considerations. However, at the campus level decisions can reflect

a greater appreciation of factors that constrain local initiatives. Sometimes the person at the bottom of the hierarchy, in close contact with his constituency, has a clearer view of the collective interest than the person at the top whose views are obscured by numerous intermediaries. The quality of central decisions is often eroded by another factor: There is a reluctance to tell top executives "bad news" and to confront them with conflicting points of view (Reedy, 1970). Here again the question arises: How important is a coherent, logically consistent program in contrast to one that accommodates the diverse and conflicting goals of many sectors of the public, and what is the most effective structure for bringing about coordination?

Central standards of performance can be applied and evaluations made of well-understood operations. However, local discretion and professional judgment are required when operations are complex and poorly understood. State-level examination of intrainstitutional allocations can sometimes act as a spur for needed reforms. There are, however, times when state-level knowledge of subcampus or campus totals can result in allocating funds in compliance with prevailing patterns of power in the legislature, rather than on the basis of what best serves the states' total educational needs. Once more the question arises: How important is an overview of the system in contrast to knowledge of local circumstances?

6.

State-Level Budget Agency Staffs

Young men are fitter to invent than to judge, fitter for execution than for counsel, and fitter for new projects than for settled business; for the experience of age in things that fall within the compass of it, directeth them; but in new things abuseth them. . . . Young men, in the conduct and management of actions, embrace more than they can hold, stir more than they can quiet; fly to the end without consideration of the means and degrees; pursue absurdly some few principles which they have chanced upon; care not [how they] innovate, which draws unknown inconveniences. . . . Men of age object too much, consult too long, adventure too little, repent too soon, and seldom drive business home to the full period, but content themselves with a mediocrity of success. Certainly it is good to compel employments of both . . . because the virtues of either may correct the defects of both. --The Essays of Francis Bacon: Of Youth and Age.

An organization's influence results from complex interactions with its environment. If society perceives the services the organization provides as useful, the organization is reimbursed, and supplied the resources

needed to continue providing that service. Most commonly these resources are measured in terms of money. However, this is a restrictive view of resources that leads to naive views of organizational behavior, as noted by Jacob, Flink, and Shuchman (1962):

If, in fact, monetary return were the universal criterion by which persons judged human action, the economist's definition of value would be adequate. But we surmise that many other factors (varying from society to society) do in fact operate as vital normative criteria. The economic concept of value, by confusing the measure of worth with what is itself considered worthy by specific people, does not succeed in providing an operationally valid definition for a general theory of human action. (p. 23)

Budgets only become significant as they are transferred into staff, information, technology, and other factors. Many resources, such as legal authority, staff quality, organizational prestige, and monopoly of supply, cannot be measured in money terms. The extent to which the agencies involved in budgeting for higher education accrue resources is dependent on the public values and traditions that shape the governmental structure in each state and on the outcome of political contention among agencies.

Staff is perhaps the most significant resource an agency possesses. Overall measures of agency influence have been explored in the previous chapter and more extensively by Glenný (1976). The legal authority of state-level budget agencies is too complex and extensive to deal with in this volume. Other resources available to state higher education agencies, executive budget offices, and legislative budget staffs will be examined in subsequent chapters and in other reports resulting from this study.

STAFF SIZE

The size of staffs varies considerably among the three types of agencies and within each type. Table 14 shows the size of the professional staffs of each agency in each state and the number who have a primary responsibility for reviewing higher education budgets. Table 15 shows the number of states that have each type of budget review agency, the number of professional staff by type of agency, and the average size of the professional staff by type of agency, and the average size of the professional staff by type of agency; the number of professional staff includes only those whose primary assignment is higher education. These headcount figures are somewhat misleading, as higher education budget staff typically are assigned many responsibilities that go beyond the review of budgets. Furthermore, in some agencies, such as the Pennsylvania legislative budget staffs, no one person is assigned a primary responsibility for higher education budgets and thus the efforts of these agencies are not reflected in these numbers; higher education budget review is only one of a variety of tasks staff perform and is not the dominant task. In state higher education agencies, program review, facilities, and planning staffs often assist in reviewing budgets.

Comparison of State Higher Education Agency Staffs

The largest state higher education agency staffs were those located in state departments of education. The four state departments of education in our study averaged over 72 professional staff members each. However, the actual number of staff ranged from six in Michigan to 146 in New York.

The largest staffs engaged in the review of higher education budgets were found in statewide governing boards. Budget review staffs averaged over ten professionals each. Again, however, these averages are misleading because the numbers in the five statewide govern-

Table 14

SIZE OF TOTAL PROFESSIONAL STAFF AND NUMBER ALLOCATED TO HIGHER EDUCATION OPERATING
BUDGET IN 1974, BY TYPE OF AGENCY

States	Executive budget office		Legislative budget staff		State higher educa- tion agency*		Total state	
	Total	Assigned to higher educa- tion budget	Total	Assigned to higher educa- tion budget	Total	Assigned to higher educa- tion budget	Total	Assigned to higher educa- tion budget
California	101	9.5	54	5	19	0	174	14.5
Colorado	15	3	6	2	13	2	34	7
Connecticut	35.5	6	2	1	15	1	52.5	8
Florida	29	4	20	2	110	26	159	32
Hawaii	36	4	11	3	80	6	127	13
Illinois	62	3	31	4	27	5	120	12
Kansas	15	1	2	1	5	1	22	3
Michigan	30	4	24	3	6	1	60	8
Mississippi	0	0	6	2	4	2	10	4
Nebraska	9	4	12	4	0	0	21	8
New York	160	9	23	3	146	0	329	12
Pennsylvania	45	2	8	0	70	4	123	6
Tennessee	10	1	4	0	25	7	39	8
Texas	10	3	18	4	60	3	88	10
Virginia	12	4	4	1	15	2.5	31	7.5
Washington	22	2	16	4	11	1.5	49	7.5
Wisconsin	28	4	10	3	134	31	172	38
Total	619.5	63.5	251	42	740	93	1610.5	198.5

* Includes professional staffs of statewide governing board, coordinating agency, and state department of education

Source: Glenny et al., 1975.

Table 15

AVERAGE SIZE OF AGENCY STAFFS IN 1974

Type of agency	Number of states with staffs	Total agency staff	Average size of total agency staff	Total higher education budget staff	Average size of higher education budget staff
State higher education agency:	16 ^a	740.0	46.2	93.0	5.8
Statewide governing board	5	265.0	53.2	51.0	10.2
Coordinating agency	8	185.0	23.1	22.0	2.8
State department of education	4	289.0	72.2	20.0	5.0
Executive budget office	16	619.5	38.7	63.5	4.0
Legislative budget staff:	17 ^b	251.0	14.8	42.0	2.5
Joint budget staff	9	111.0	12.3	21.0	2.3
Upper-house budget staff	9	58.0	5.3	11.0	1.2
Lower-house budget staff	9	82.0	9.1	10.0	1.1

^a Nebraska did not have a state higher education agency. Florida had both a statewide governing board and state department of education staff that reviewed higher education budgets.

^b California and Tennessee had both joint and separate house committee staffs. However, Tennessee and Virginia had staff for only one of the committees of the two houses.

Source: Glenny et al., 1975.

... budgets.

Coordinating agencies had both the smallest professional staffs and the smallest number of personnel assigned to review higher education budgets. The total number ranged from 11 in Washington to 60 in Texas. The number assigned to review higher education budgets ranged from none in California (a staff person for budget review has been added since this data was collected) to seven in Tennessee.

The form of organization has some influence on staff that review higher education budgets. All statewide governing boards have a budget review staff while some coordinating agencies did not, and coordinating staffs tended to be smaller. However, staff size varies for many reasons besides location in the governmental structure and assigned functions.

Comparison of Legislative Budget Staffs

The largest legislative budget staffs were the joint staffs serving both houses of the legislature, or a unicameral legislature as in Nebraska. These staffs ranged in size from two in Connecticut and Kansas to 52 in California; the average was 12.3. The number of persons primarily assigned to review higher education budgets ranged from none in Tennessee to four in California, Nebraska, and Texas. Nebraska devoted one-third of its staff to higher education budget review, California devoted only one-thirteenth.

Lower house appropriation committees had the next largest staffs, ranging from California with one (it also had a joint staff) to Illinois with 23. The average size was 9.1. The average number of persons assigned to review higher education budgets was 1.1.

size was 0.3. The average number assigned to review higher education budgets ranged from zero to two, the same as for the lower house, and their average size of 1.2 was not significantly different.

Joint staffs averaged about one-third larger than the combined upper and lower house budget staffs of other states. The number of analysts assigned to the review of higher education budgets on joint staffs was about the same as the number assigned by the combined upper and lower house staffs. Doubling the number of committees did not result in a comparable increase in staff members. These small legislative staffs shifted personnel frequently to deal with changing priorities and crises so the number primarily assigned to higher education was probably a poor measure of relative effort, especially for the smaller upper and lower house committees. The larger joint budget staffs appeared to have an advantage in being able to assign staff more permanently to particular areas where they could specialize.

Comparisons Between Types of Agencies

The average state higher education agency staff was nearly 20 percent larger than the average executive budget office staff and more than twice as large as the average combined legislative budget staffs. State higher education agency staffs devoted to higher education budget review were 47 percent larger than those of executive budget offices and over one and one-third the size of those of combined legislative budget staffs. This was true although two states, California and New York, had no state higher education agency staff primarily assigned to budget review. Were these states not included, the average size of state higher education agency budget review staffs would increase from 5.8 to 6.6 professionals.

result of the extensive budget formulation role of statewide governing boards. In Illinois and Tennessee primary responsibility for formulation of the executive budget was delegated to the coordinating agencies; there were very small executive budget office staffs in these two states. The larger size of the statewide governing board budget staffs was not matched by a corresponding reduction of executive budget office higher education analysts where the statewide system was headed by a chancellor or president, as in Florida, Hawaii, and Wisconsin. Each of these states had four executive budget office staff members assigned to higher education budget review, about the average for all states. In Kansas and Mississippi, where the statewide system was directed by an executive secretary reporting to the regents, there were respectively a small executive budget office with one analyst assigned to higher education and no executive budget office. The statewide governing board's role in budget formulation did substitute to some degree for the executive budget office role in these two states and also in Illinois and Tennessee which are coordinating agency states.

The average size of the legislative staffs primarily assigned to review of higher education budgets in the five statewide governing board states was 2.2, which was very close to the average of 2.5 for all states.

From these observations it does not appear likely that increasing the authority and staff of state higher education agencies is likely to reduce the executive budget offices and legislative budget staffs. The more likely result is a net increase in total staff devoted to the review of higher education budgets.

The differences noted between the staffing of different types of state higher education agencies and different locations of legislative budget staffs should

types.

*Comparison of Budget Review Staffs Sizes with
State Revenues*

Institutions obtain funds from many sources besides state general revenues, but state revenues are the largest source of institutional funds (Harris, 1972, p. 590) and are the major concern of state-level budget staffs. Table 16 compares the amount of state revenues with the combined numbers of executive budget office and legislative budget review staffs. Each state is ranked by the amount of its revenues, the size of its budget staff, and the amount of revenue per staff member. For example, New York ranks first in revenues and in size of staff, while Hawaii is ranked first in the number of staff per revenue dollar. The ranking by revenue and staff size shows the two variables are closely linked. Generally, the more revenues, the larger are the staffs. Only in four states--Hawaii, Nebraska, Tennessee, and Virginia--are there major differences in rank order. The discrepancies for these states range from the four to six places separating the two rankings.

An examination of state revenue dollars per professional staff member reveals, however, that generally the size of staffs does not increase proportionately with revenues. The six states with the largest state revenues are all below the median in terms of number of staff per dollar. The larger a state's revenues, the fewer staff members are employed per revenue dollar. Apparently there are economies of scale and specialization in the richer states, or political factors restrain staffs from increasing at the same rate as revenues. Both are probably factors.

Table 17 compares state revenues devoted to higher education with the size of professional staffs of execu-

tive budget offices, legislative budget staffs, and state higher education agencies whose primary assignment was the review of higher education budgets. The correspondence between revenues and number of higher education budget review staff was not as close as for revenues and total executive budget office and legislative budget review staff.

Major differences in rankings occurred in five states: Connecticut, Hawaii, Nebraska, Pennsylvania, and Wisconsin. Five to 12 places separated the two rankings, so the size of staffs assigned primary responsibility for higher education bears little relationship to total state revenues. The sizes of the staffs reviewing higher education are so small, however, that minor changes could have a substantial impact on rankings. Furthermore, the contributions of occasional staff are not included.

The revenues per staff member range from \$83 million in California to \$4.4 million in Hawaii. Although the statewide governing board states of Florida, Hawaii, and Wisconsin have a relatively small number of dollars per staff member, their staffs perform many functions carried out by campuses in other states. Colorado, Connecticut, Nebraska, and Tennessee also have smaller amounts per staff member but they rank lower in amounts of state revenues, which is associated with more staff per dollar. Hawaii, which has the least revenues and a statewide governing board, has, as expected, the least funds per staff member of any state.

Factors That Influence Staff Size

Two factors appear to have some bearing on the size of staffs that review higher education budgets. The first is the presence of a statewide governing board with a staff directed by a president or chancellor. These staffs perform a number of tasks otherwise carried out at the campus level, which explains in part their contributions to state-level staff totals. Whether these tasks fully account for the size of their staffs in relation to revenues awaits further research. Campuses

are likely to ask whether these statewide governing board staffs relieve them of tasks or merely add an additional layer of budget reviews. The second factor is the amount of state revenues. States with smaller revenues generally tend to have more staff per revenue dollar.

Interviews indicated that political factors also play a role in determining the size of the staffs that review higher education budgets. In one state the opposition of the capitol's newspaper to increases in the joint legislative budget committee's staff was instrumental in slowing its growth. In California, Maryland, and Virginia concern over the need for a stronger budgetary role for the state higher education agencies led to adding budget staff after data was collected for this study. In Colorado, however, the agency was recently stripped of its budget staff by a legislative cut in its appropriations. Competitive maneuvering by the executive budget offices and the legislative budget staffs affect the size of their staffs, and together they act to contain or reduce the size of state higher education agency staffs.

A major factor leading to a general growth of state-level staffs may be the changing philosophy of governmental organization. Greater emphasis is now being placed on planning and control than on competition as a means to ensure efficiency and social accountability. What was once considered administrative overhead and governmental extravagance today is considered analytic capacity that furthers planning and assures achievement of social objectives. Concerns for coordination are most noticeably reflected in the growth of legislative committee staffs, performance audit staffs, and increasing establishment of statewide governing boards.

Compensation of the Executive Officers of State-Level Budget Agencies

The pay of executive officers of the three state-level budget agencies differed markedly among the 17 states. This was in part accounted for by population (Glenny et al., 1975, p. 21). Executive budget office

and legislative budget staff directors in the most populous states, California and New York, were the highest paid. The directors of their state higher education agencies ranked sixth and fifth, respectively, among the 17 states, although neither governed institutions or could make budgetary recommendations. Executive officers of the western plains states of Kansas and Nebraska were among the lowest paid, along with the southern states of Mississippi and Virginia (Glenny et al., 1975). Table 18 provides an analysis of the salaries of these officials for each type of agency.

Highest paid were directors of the state higher education agencies; of these agencies, the presidents and chancellors of statewide governing boards were paid most. Lowest paid were the higher education directors in state departments of education. This may be because of the effect of state civil service salary scales in these agencies, although in the three states the directors were exempt. Only in three of the coordinating agencies, and in one of the statewide governing board states, were state higher education agency staff covered by the civil service (Glenny et al., 1975). These differences by types of state higher education agencies were not nearly as significant as the variations within each type, as can be seen by examining the salary ranges in Table 18 for each type of agency. The highest executive budget office salary exceeded the lowest by 154 percent. For legislative budget staffs the difference was 117 percent. Among legislative budget staffs, however, the directors of joint staffs were paid only slightly more than those of separate upper and lower house staffs.

The higher average pay for directors of state higher education agencies undoubtedly reflects the market in which these officials are recruited. The academic world is the source of most candidates for directorships of state higher education agencies, and top officials of colleges and universities have traditionally been paid more than state civil servants. The market also is nationwide and state-level higher education staff are more often recruited nationally than are state civil servants. Furthermore, since higher education executive

Table 18

COMPENSATION OF EXECUTIVE OFFICERS OF STATE-LEVEL BUDGET AGENCIES

Type of agency.	Number of officials	Salary range	Median salary	Average salary
State higher education agency:	16	\$30,000-49,310	\$39,500	\$38,744
Statewide governing board	5	30,000-49,310	40,000	39,092
Coordinating agency	8	32,500-47,000	39,500	39,693
State department of education	3	30,540-41,064	35,287	35,630
Executive budget office:	16	19,343-49,100	32,000	32,226
Legislative budget staff:	23	20,000-43,324	28,000	28,313
Joint staff	9	22,500-40,100	29,463	28,388
Upper house staff	7	20,000-40,000	28,000	28,170
Lower house staff	7	22,000-43,324	26,000	28,361

Source: Glenny, et al., 1975.

officers occupy a position organizationally above that of presidents and chancellors, their quality and influence is likely to be greater if their pay is comparable. (Barak, 1974, has made a more extensive analysis of salaries of state higher education agency staffs.)

The salaries of executive budget office directors are somewhat higher than those of legislative budget offices. This difference is probably a result of the greater executive responsibilities of the state's chief budget officers.

Again it is important to note that differences in the median and average salaries of directors among the three agencies are not nearly as great as the salary ranges within one type of agency across the states.

Staff Characteristics

The perspectives of staff are affected by their academic backgrounds, the breadth of their experience, and the field in which they gained most of their experience. Their perceptions in turn affect how the three agencies relate to one another. In this section we examine the recruitment preferences of the agencies for their professional staffs.

Academic Background. The preferences of the three state-level agencies for the academic backgrounds of their professional staff are shown in Table 19. The first choice of executive budget offices both for staff in general and for higher education budget staff is public administration (15 states), followed by political science (14 states), economics (12 states), and business administration (11 states). Not surprisingly, six states preferred higher education administration as a background for their higher education analysts while only two preferred this experience for staff in general.

Most executive budget offices view budget analysts as policy generalists. Only six states listed accounting

Table 19

ACADEMIC BACKGROUND OF PROFESSIONAL STAFF PREFERRED BY STATE-LEVEL AGENCY DIRECTORS
(Number of states)

Academic degree of professional staff preferred	Execu- tive budget office	Legis- lative budget committee	State higher education agency total	State higher education agency		
				Govern- ing board	Coordi- nating agencies	State depart- ment of education
Public administration						
Staff in general	15	9	9	4	4	1
Higher education budget staff	15	7	8	3	4	1
Business administration						
Staff in general	11	12	5	2	2	1
Higher education budget staff	8	8	12	5	5	2
Education administration						
Staff in general	2	2	16	5	7	4
Higher education budget staff	6	4	11	4	4	3
Accounting						
Staff in general	6	11	5	2	1	2
Higher education budget staff	4	7	11	4	4	3
Computer sciences						
Staff in general	2	5	9	1	6	2
Higher education budget staff	2	2	10	4	3	3
Political Science						
Staff in general	14	11	10	4	4	2
Higher education budget staff	10	5	5	3	2	0
Economics						
Staff in general	12	11	7	3	2	2
Higher education budget staff	8	8	8	5	3	0

Source: Glenny et al., 1975.

and two computer sciences, technical fields, as their preferences for staff. Executive budget offices preferred both public administration and political science backgrounds to business administration, which also is often more technically oriented.

The most frequent choice of academic background by legislative budget staffs for staff in general was business administration (12 states), followed by political science, accounting, and economics (11 states each). Their first choice for higher education staff was business administration and economics (8 states), then public administration and accounting (7 states). Legislative budget staffs apparently preferred technically trained staff somewhat more than do executive budget offices. The legislators may feel the need for technical assistance to complement their political roles or they may place more value on the technical aspects of decisionmaking. Legislative budget staffs are newer than executive budget office staffs, and they may hope to ensure their success by emphasizing the more visible technical aspects of issues. Technically trained staff are also more available recently because of the increase in graduate degrees awarded. The legislative oversight role may also be a factor; MBAs, accountants, and economists may be employed to examine the intricacies of fiscal practices and to trace the uses of funds.

For staff in general, state higher education agencies most frequently preferred educational administration, a preference of all 16 states with these agencies. The next most frequent choice was political science (10 states), followed by public administration and computer science (9 states each). However, state higher education agency budget staffs most frequently chose business administration (12 states), then educational administration and accounting (11 states each), and last, computer science (10 states). The state higher education agencies sought more technically trained staffs for budget review than did executive budget offices. This confirms impressions gained in interviews. State higher education agency budget staff work somewhat more as technical

adjuncts to top agency officials than is true of executive budget office staff, who are typically the agency's top substantive experts on the programs they review. A state higher education agency analyst is more clearly subordinate, in terms of program expertise, to the academic specialists on the staff. His or her contribution is more technical fiscal and analytic skills than broad expertise on higher education programs.

There are considerable dangers in ascribing a technical perspective to a staff member, as opposed to a broader political perspective, on the basis of their academic background. Individuals have broad or narrow perspectives despite their academic training. State-level higher education budget agencies recognize this fact and generally look for the brightest, most competent persons. The preferences listed above are those exercised when other factors are more or less equal. Like other organizations, state-level budget agencies tend to recruit staff similar to those already employed. Only rarely did we find that a major change had taken place in the character of a staff, and then it was usually the result of new legislation and a massive reorganization.

Occasionally some tension appeared to exist between staffs where one agency analyzed decisions from a technical perspective and the other from a political perspective. The technical staffs saw generalists as introducing irrational elements into decisions while the generalists thought the technical staff ignored complex political issues that could not be decided on the basis of data and analysis.

Sources of Recruitment. The source of recruitment of staff determines the amount and range of their experience. A recent college graduate is obviously less experienced than someone who has worked for several years. Staff recruited from within a state are more likely to be familiar with the context of issues and know the principals with whom they will deal, at least by reputation. Out-of-state recruitment brings in staff who have seen

other ways of dealing with problems and are less likely to be confined by local assumptions and tradition. Staff recruited from other state budget review agencies or institutions are more likely to appreciate the differing perspectives and problems of these agencies and institutions and to maintain easier, more intimate relationships. In Washington the chief financial officers of the two major universities were both former state directors of finance. Those interviewed generally agreed that this background improved state-institutional relationships. Staff recruited from within an organization or sector such as a particular agency, the education profession, or the state civil service, are sometimes viewed as more independent and less likely to be coopted since they will not be dealing with former colleagues. One state higher education agency director felt that the incumbent in a key position should not come from an administrative position in one of the three segments of higher education in the state. Occasionally, particular value is ascribed to people coming from certain professions, for example, academics with skills in research and analysis or businessmen with training in managerial efficiency.

Table 20 presents the policies or tendencies of state-level agencies in recruiting staff. In a few cases recruitment reflects the actual composition of the staff rather than the preferences of the current agency director. As the table reveals, frequently agencies have no policy on sources of recruitment; they simply attempt to find the best person available.

The executive budget offices prefer to recruit among college graduates for staff in general (12 states) and for higher education staff (7 states). They also prefer to recruit from within the state for both staff in general (10 states) and higher education staff (9 states). Only one executive budget office indicated a preference for recruiting staff in general from the staffs of institutions of higher education and only two preferred this source for their higher education staff. Usually, academic staff experience is not considered appropriate even for positions that review academic programs. This

Table 20

SOURCES FOR RECRUITMENT OF PROFESSIONAL STAFF PREFERRED BY STATE-LEVEL AGENCY DIRECTORS

Source for recruitment	Executive budget office			Legislative budget staff			State higher education agency		
	Staff in general	Higher education budget staff	No policy	Staff in general	Higher education budget staff	No policy	Staff in general	Higher education budget staff	No policy
Directly from college	12	7	2	6	6	7	2	2	5
Within state	10	9	2	9	6	5	3	3	5
Other state agencies	4	4	7	7	6	9	3	3	8
Institutions of higher education	1	2	3	3	3	10	9	8	5
Business or industry	3	3	10	4	4	10	1	1	9

Source: Glenny et al., 1975.

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may reflect in part the desire to have highly independent staffs, without special loyalties to particular professions or agencies. Executive budget offices in only four states preferred staff from other state agencies and only three preferred staff from business or industry.

In one state the executive budget office rotates staff within the agency to maintain their independence and to broaden their experience and knowledge of state government. These objectives, however, must be balanced against the values of staff gaining an in-depth knowledge of a particular area and increasing their informal access to information. Staff turnover rates in executive budget offices appear to be very high even in the absence of rotation policies. Analysts generally are young and bright with unusually broad, high-level experience. Consequently, they are a prime source of recruitment for top-level state positions. Because analysts' tenure is so short, institutions frequently complain of "having to continually train" new ones. When they become knowledgeable about the complexity of institutional programs and budgets they are apt to take a new job. Executive budget office concerns over staff development, and their cooptation by institutions, must be balanced by the need for staff familiarity with complex issues gained through long exposure.

The legislative budget staffs preferred to recruit from within the state for staff in general (9 states) and for higher education staff (6 states). They were more inclined to recruit for staff in general from other state agencies than were executive budget offices (7 states to 4 states) and also for higher education staffs (6 states to 4 states). The executive budget office appears to be the primary state agency from which the legislative budget staffs recruit. In one state a legislative budget staffer noted that when a particularly good person turned up on the executive budget office staff they attempted to hire him away. Quoting the Ohio State football coach, he remarked that they preferred a good player on their bench to having him play for the other team.

The state higher education agencies most frequently prefer to recruit their staffs from institutions of higher education and do not limit their search to within the state. They rarely prefer staff from other state agencies (3 states), directly from college (2 states), or from business or industry (1 state). One director deliberately hired his chief budget man from academe rather than employing a well-qualified executive budget office analyst. He wanted to assure the academic legitimacy of his agency, justify its higher salaries, and to present fresh views on budgetary issues. However, top state higher education agency budget officials in Pennsylvania and Tennessee both came from executive budget offices.

RELATIONSHIP OF STAFF CHARACTERISTICS TO PROCESS EFFECTIVENESS

In most states the major agencies share the responsibility for budget review. No one agency can act effectively in disregard of the others; consequently, they should maintain good working relationships with one another. Among the 17 states these relationships ranged from close personal friendships, to "professionally correct," to outright conflict. Overly close relationships can be conducive to an uncritical consensus among the three agencies, weakening their role of checking and balancing each other. Open conflict is likely to impede the free flow of information among the agencies, result in unnecessary duplication of effort, and delay critical decisions. The latter problem appeared to be much more common in the 17 states.

Many factors can cause lack of cooperation among the three agencies (Glenny, 1976), among them staff recruitment and reassignment policies. Some suspected effects of staffing practices include:

- Age. A relatively young and inexperienced staff can misinterpret information and make inappropriate comparisons. With a lack of experience comes a tendency to make compari-

sons with unrealistic ideal situations rather than with similar circumstances, leading to unfair criticism.

- *Perceptiveness.* Individuals who lack the perception and ability to interpret information are likely to make unexpected and inconsistent decisions. A less competent staff may be defensive, hoarding information and discouraging open discussion of issues.

- *Staff turnover.* Frequent rotation of staff through different positions within the same agency or among different agencies results in more superficial knowledge of areas of responsibility and inconsistent actions because of lack of familiarity with the perspectives and abilities of other individuals. Close relationships based on personal trust take time to form. On the other hand, broad experience gained from serving in a number of positions helps staff appreciate the problems and perspectives of those in other agencies, and occasional changes of assignments prevent too cozy a relationship.

- *Adversary point of view.* Some staff members view their role as that of adversary rather than of working to solve a mutual problem. This undermines communication and creates an atmosphere that frustrates resolving problems. Similarly, a staff member who is dogmatic and finds it difficult to compromise can strain relationships between agencies.

- *Role conflict.* Those who review higher education budgets must wear two hats. In their review of agency budgets they serve as critic. However, when they defend their recommendations to their supervisors or to another agency, they act as advocates. Often the conflict inherent in performing these two roles creates an appearance of inconsistency or partisanship, straining rela-

tionships. These roles are impossible to separate, however, and staff members must know which "hat" to wear in which circumstance and attempt to maintain a balance between the two roles.

- *Information distortion.* Large organizations, with several intermediaries through which staffs report to top officials, create distortions and filter information. Relationships with other agencies can be strained when those who deal with staff find their information misinterpreted or interpreted differently by top policymakers.

Executive budget office and legislative budget staff try to contain the size of higher education's share of the state budget while the state higher education agency wants it increased; the state emphasizes costs and institutions emphasize quality. This conflict can be kept in perspective by staff who understand the role demands of each agency and do not personalize this conflict.

- *Divergent educational values.* The staff of agencies may value higher education differently as a result of basic ideological predilections. Some stress the economic benefits of education, others its liberalizing influence. The sharing of information is apt to be restricted if staff fear it will be used to pursue ends they do not favor.

- *Conflicting expectations.* Generally, state-level agencies are exposed to data on economic, social, and demographic trends that influence the extent to which they think education should be supported. Because the import of this data takes a great deal of time to reach institutional staff, budgetary expectations at institutions and at the state level frequently differ, creating communication problems and lessening trust and confidence. Expectations also frequently diverge regarding the appropriate roles of governmental agencies and institutions.

- *Political uses of information.* Information is a political resource and is used for political ends by officials. When such uses go beyond bounds of fairness, as perceived by institutional staffs, trust and confidence are likely to deteriorate.

CONCLUSIONS

In every case, solutions to these problems include a balancing of concerns and costs. For example, age has the advantages and disabilities noted by Francis Bacon at the beginning of this chapter, and experienced staff command higher salaries. Bacon also noted the liabilities of youth; training a young staff can be expensive. In many states better relationships among agency staffs appeared well worth the additional cost. The following are some suggestions toward this end:

- Staffs of many executive and some legislative budget agencies consist largely of young, relatively inexperienced analysts, and promotion is often from within. Such agencies should recruit a larger proportion of their middle-level staff from other agencies and institutions. Highly qualified, experienced staff with broad perspectives generally command high salaries; this may require upgrading salaries in some agencies.

Some executive budget offices attempt to broaden the abilities of their staffs by periodically assigning them to other sectors of state government. Often comparable attention is not given to increasing the depth of their experience in one sector of state government. Periodic assignments and details among executive budget offices, legislative budget staffs, state higher education agencies, and institutions might increase mutual understanding and improve the flow of information among the agencies. Other, less difficult, measures include: greater use of joint agency task forces, occasional jointly attended seminars on common problems such as those

promoted at the federal level by the Institute for Educational Leadership which sponsors meetings between the staffs of federal and state agencies and educators to explore common issues and to become acquainted with one another's perspectives, more staff visits to educational association meetings and to campuses, and holding budget hearings and related meetings at campuses with time for staff to visit with campus officials.

- Some institutional staffs are poorly informed about the concerns and perspectives of state-level officials. The suggestions listed in the preceding paragraph would help alleviate this problem. In addition, however, campus and departmental staffs, not just top institutional administrators, should meet periodically with state-level staffs to discuss mutual concerns. Much attention needs to be devoted to keeping institutional staffs informed about the economic, demographic, and political trends influencing state-level decisions. Institutional plans and staffing based on one set of trend assumptions require a great deal of reorientation and reorganization when new conditions emerge. For example, unless great care is taken to acquaint institutional staffs and faculties with new fiscal circumstances, serious conflict is sure to arise, especially during periods of acute fiscal stringency (Bowen & Glenny, 1976).

- In a number of states contacts are discouraged, by policy or tradition, between the staff of executive budget offices and legislative budget staffs. In part, there is a concern for the separation of powers and in part a concern that lower-level staffs inadvertently or purposefully might sabotage delicate higher-level political accommodations and agreements. Obviously staff contacts require a great deal of tact and a keen appreciation of the often obscure boundaries between technical and political issues. Despite such problems, in many states, these two staffs

do cooperate closely and generally this appeared to reduce duplication, improve analyses, and alleviate unnecessary friction over technical issues during budget review, smoothing the process of political accommodation.

- Often the staffs of all three agencies are unfamiliar with practices in other states. Recent seminars conducted by the Education Commission of the States, and those sponsored by the Kellogg Foundation, have addressed this problem. The extensive workshops, meetings, and seminars sponsored by the National Center for Higher Education Management Systems at the Western Interstate Commission for Higher Education have also been extremely valuable. Staff should be encouraged to attend such meetings and programs and travel out of state to sister agencies on a selective basis. Such efforts save considerable money over the longer run by spreading new practices and decreasing the chances of "reinventing the wheel."

7.

The Context and Character of Institutional Budget Submissions

The first step toward budgetary realism is to recognize that each fiscal year does not begin with a blank sheet of paper on which can be written figures giving expression to the "ideal" budget--even if we could make the heroic assumption that a workable consensus could be achieved on what those "ideal" figures would be.
(McCracken, 1976)

An institutional budget is created in a broad social, political, and economic context that defines the bounds of a legitimate request. Circumstances peculiar to a specific budget year help to further define the request. The budget request represents an attempt to place a price on a complex set of activities; to determine a feasible level of effort given a state's expectations for higher education. The budget document provides a simplified model of the dimensions of higher education, with dollars ascribed to each dimension. This information helps budget review agencies determine the effectiveness of marginal changes in resource allocations and the amount of resources needed to maintain various levels of activity. In this chapter we examine the context in which budgets are formulated and the budget request document itself.

THE ENVIRONMENT IN WHICH INSTITUTIONAL BUDGETS ARE FORMULATED

In each state, institutions formulate their budgets in a somewhat different social, political, and economic context. In each, a different value is placed on higher education, and institutional cooperation and competition vary. Demographic and economic trends also differ by state and region. These differences shape the nature of past commitments, understandings, agreements, and expectations that form the basis for higher education budget requests.

During a budget review cycle there is never enough time, knowledge, or resources to reexamine all past agreements or to reshape expectations sufficiently to make major departures from old policies. A budget represents a dynamic equilibrium among contending political forces, and budget changes represent agreements produced by shifts in the political equilibrium, shifts that are rarely dramatic, except in times of severe fiscal stringency or major political upheavals. Budgets are not some official's concept of a rational state plan of action but are an accommodation of the conflicting values of many parties. Budgetary changes occur slowly, as emerging socioeconomic trends and as new knowledge and understanding are developed about the character and implications of current allocations. The political equilibrium that shaped past allocations alters slowly, giving the status quo a considerable degree of legitimacy; changes are marginal (Wildavsky, 1964).

The process of budget formulation becomes fraught with conflict and uncertainty when trends change rapidly and there is a lack of consensus on facts, values, and courses of action, as is true today in many states. Since the budget process is relatively brief, with limited resources for analysis and little time for building consensus, the more that can be done to increase agreement before formal development of a budget request, the less strain there will be during review. There are many techniques for increasing areas of agree-

ment prior to formulation of budget requests. Formal planning is perhaps the most organized approach to this problem.

Statewide Planning

Statewide plans create a common set of expectations, focus discussion of issues, and limit areas for consideration during budget review. Trends and values are reassessed during planning and expectations are reshaped in light of new knowledge of opportunities and constraints. Criteria are established to guide desired changes.

Among the 17 states, 13 have statewide plans for higher education. Four of the plans were over five years old, and all except one were in the process of being revised. In fact, ten of the 13 statewide plans were undergoing revisions. The number of revisions taking place, even of fairly recent plans, is an indication of the impact of contemporary demographic and economic trends on higher education. Among the four states that lacked statewide plans, two are now preparing them. Only Mississippi and Nebraska lacked plans and were not preparing them.

The period covered by plans--the planning horizon--varied greatly among the 17 states; it was five or fewer years in four states and six to ten years in six states. Four of the plans did not have a specific planning horizon. Some states are required by law to revise their plans periodically. In four states revisions are required biennially and in one state, New York, less frequently. The other nine states with statewide plans had no requirements for their updating; in California, a 1960 plan was comprehensively updated in 1974 for the first time. A joint committee of the legislature spearheaded the revisions, making California the only state where the primary planning effort was not conducted by the state higher education agency.

The contents of the plans varied across a host of dimensions. One approach to classification, although imprecise, is by the primary emphasis of the plan. Plans can stress: 1) the assignment of roles and missions to institutional units (structural functional); 2) the planning process itself as an ongoing vehicle for program and policy review (phased process); or 3) the relationship between academic programs and institutions on one hand, and costs and fiscal factors on the other (budgetary). Among the 14 states with plans or drafts available for analysis, ten were primarily structural functional, two phased process, and two budgetary. The two plans that linked programs to budgets were those of Hawaii and Wisconsin; both statewide-governing-board states having a strong interest in program budgeting. However, the plans of eight states included some kind of fiscal projections. Other major topics covered by the plans were:

- Enrollment projections (ten plans)
- Role and scope statements (nine plans)
- Location or approval of new programs (eight plans)
- Location or approval of new campuses or schools (seven plans)
- Manpower projections (five plans)
- Location or phase-out of programs or campuses (two plans)
- Campus enrollment ceilings (one plan)

Except in New York, executive budget offices and legislative budget staffs gave little explicit attention to statewide plans during budget review, though most thought such plans were useful. The contradiction is more apparent than real. Plans involve long-term social aspirations and political compromises that give way to short-term financial constraints, political priorities, and newly perceived trends. They cannot comprehend and

anticipate all of the details and constraints that affect resource allocations in a particular year.

Many plans still in use were formulated during a period of increasing enrollments and more plentiful resources. Their character was shaped by the problems and expectations associated with growth. In most states, plans for the future will of necessity be concerned with leveling and contractions resulting from decreasing enrollments and the lower priority currently given higher education by the public. One official noted that no politicians are running for state office on a platform calling for expansion of higher education, as was true in the early 1960s. State officials anticipate that the relative priority of expenditures for higher education will decrease further during the next five years (Bowen & Glenn, 1976).

Another factor that can lessen the usefulness of plans is overreliance on the "rationality" of the document, setting goals and seeking consistency through analysis when there is no fundamental agreement on basic objectives and processes. Plans without underlying public support and a realistic appraisal of state resources are not taken seriously.

Most state plans we examined were quite general and provided limited operational guidance to policymakers. Planning that probes too deeply, however, can raise too many divisive issues and create more conflict than there is time or resources to resolve. Planning, when the purposes of higher education are being publicly disputed or when funds must be reallocated to provide for change, as is often the case now, necessarily involves divisive issues. Phased process planning, which reexamines state assumptions and objectives on a scheduled topic-by-topic basis, in many cases may be more feasible in today's environment than attempts to reexamine comprehensively an entire state plan, even though some broader strategic perspectives are needed to guide more selective endeavors.

In any period, plans usually remain optimistic and thus have an expansionist bias. Higher education has no

desire to plan for fewer resources and decreasing public support; such predictions may become self-fulfilling prophecies. As Vermilye (1976) observed, "the tragedy of those who constantly prepare for the worst is that they are seldom disappointed" (p. 1). But unrealistic plans destroy confidence and bring discredit to higher education.

Revenue and Enrollment Projections

A recent study by the Joint Economic Committee (1975) and an article, *The Second War Between the States* (1976) discuss economic and demographic trends in the states. Both population and industry seem to be shifting southward to the "sunbelt." This movement is decreasing state revenues and enrollments in the north and midwest while it causes increases in the south. In addition, short-term economic fluctuations and enrollment changes affect the budget process. The budget submissions of institutions are shaped by their analyses of general trends and the circumstances in a particular budget year.

The states generally project revenues, estimate enrollments, establish political priorities, and arrive at general allocations of funds among state programs before they receive the budgets. These estimates often are revised as the budget review process proceeds. However, even when the general parameters of the state's allocation to higher education are set, they are often not communicated directly to institutions. To do so reduces the bargaining power of the executive budget office when more current revenue and enrollment projections become available, and also tends to prejudice the persuasiveness of institutional budget justifications. The institutions attempt to get a feel for how "tough" a budget year it is likely to be, and what concerns and priorities the state has, through informal contacts with state staff and by analyzing the implications of state-level questions. However, in some instances lower-level staff did go beyond the letter of their instructions to provide institutions with a feel for the revenue situation.

In many cases institutions make their own projections of state revenues and judge what proportion of the increase they can safely ask for. One president said he had a pool among faculty economists to see who came closest to the state's projections. A statewide chancellor reported that he prorates anticipated annual revenue increases among the various state programs and then asks for somewhat more than his "share." If he has a good case, he out competes other programs for state dollars.

Institutions lose credibility and the confidence of state officials when they ask for what is perceived as an unreasonably large budget increase, and open themselves to very close state scrutiny. Yet if they ask for too little they lose the support of their internal and external constituencies. In these circumstances, usually with little formal guidance from the state, institutions have to perform a difficult balancing act.

Other Environmental Factors

Many other factors affect budget submissions, among them union activity and the timing of contract negotiations; the impact of inflation, the demand for a major new program such as a medical school, the effects of audits and special studies, news articles, scandals, and scientific achievements. These are primarily short-run factors that affect one, or a few, budget cycles and represent fluctuations that may run counter to longer-term economic and demographic trends and social priorities.

THE PROCESS CONTEXT IN WHICH BUDGETS ARE FORMULATED

The process for formulating and reviewing budgets is constantly under examination and changes are made regularly. Many features of the process, however, are very durable and some changes are more cosmetic than real. Twelve of the 17 states prepared annual budgets

and five, biennial budgets. These budgets seldom seriously addressed requirements for years beyond those for which funds were being appropriated.

The Time Frame of Budgets

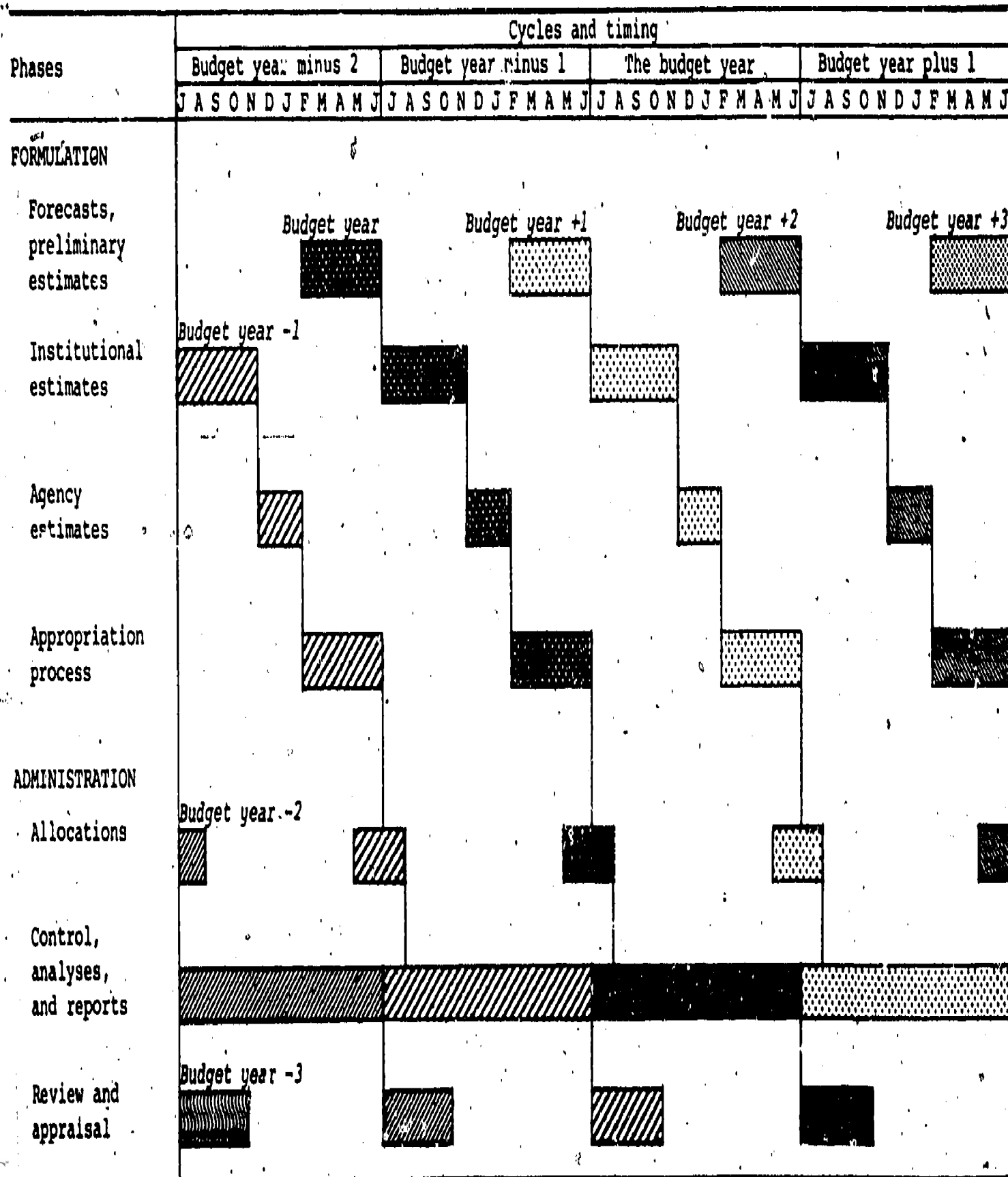
An institution of higher education is simultaneously concerned with at least three budget years: 1) the approaching year for which a budget is being formulated--the *budget year*; 2) the current fiscal year in which a last year's budget is being expended--the *current year*; and 3) the most recent year for which a budget has been fully expended and for which the original budget can be compared with actual expenditures--the *past year*. The relationship among these three budget years is illustrated by Figure 6.

Among the 17 states, Hawaii, Texas, Virginia, Washington, and Wisconsin have biennial budgets. For these states the *current* and *budget* periods each cover two years. In Nebraska and Wisconsin higher education budgets contain estimates for one budget period beyond the *immediate budget year(s)*. Such future estimates typically are referred to as the *budget year plus one*, the *budget year plus two*, and so on. In Nebraska the practice of making estimates for the *budget year plus one* was a carry-over from previous biennial budgeting; the estimated amounts were the same for the *budget year* and the *budget year plus one*, so the latter estimate obviously had little significance. Wisconsin was making a serious attempt to provide estimates for two bienniums to increase awareness of the longer-term implications of the *immediate biennial estimate* and to create policy commitments, thus stabilizing the environment for longer-range planning.

The trend in the states in recent years has been to move from biennial to annual budgets. Annual budgeting avoids the need to make long-term commitments under conditions of shifting enrollments and revenues, changes can be made annually in response to new developments,

Figure 6

ANNUAL BUDGET CYCLES
ILLUSTRATION OF STAGES AND PRINCIPAL STEPS OF SUCCEEDING BUDGET CYCLES



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and undesirable situations can be identified and corrected more quickly.

However, in all of the states we visited where biennial budgets had been abandoned recently, agency and institutional budget staffs almost unanimously said they preferred the biennial system. From a state-level staff perspective, the procedural demands of annually formulating budget instructions, holding hearings, and reviewing institutional budgets eliminated the time allowed under a biennial system for a more thorough and deliberate analysis of substantive issues and studies of areas of interest. Annual budgets also greatly increased the institutional staffs' workload and halved the period for which they could plan with considerable certainty. The states with biennial budgets typically had some state-level reexamination of budgets before the beginning of the second year, primarily in light of new enrollment projections and state revenue estimates, but this review normally was not nearly as extensive as the initial biennial review.

Lead Time for Preparation of Institutional Budgets

A typical budget cycle starts in January, 18 months prior to legislative enactment, as institutions begin to prepare requests and discuss their format and contents. Between March and July the institutions receive state budget guidelines, and they submit their budgets to a state-level agency between June and September. The governor usually transmits the state budget to the legislature in January and it is enacted between May and July. The actual timing and events during budget cycles are depicted for the 17 states in flow charts in Glenny et al. (1975, pp. 261-362).

These charts, one must remember, are for a specific budget cycle; the actual times of events differ from year to year. Also, events can alter timing and participation, such as legislation providing budgetary authority to a state higher education agency or the initiation of

a new program or formula budget format. The dates when institutions begin formal preparation are difficult to specify precisely and vary among campuses. Informal activities certainly take place more than 18 months before enactment. The initiation of new budget procedures and formats and efforts at revisions may take place far in advance of formal institutional budget submission.

The institutions often receive state-level budget instructions after their budgets have substantially taken shape. Rarely are instructions issued as early as specified in the formal state schedule, but institutions have usually participated to some extent in shaping the instructions. In any case, they typically receive advance informal notice of their contents. Late instructions can result from significant revisions in past issuances and/or considerable disagreement over their contents; in these situations the institutions sometimes find it very difficult to comply with their provisions in time to meet submission deadlines.

The revision of budget formats to incorporate a new concept of budgeting creates a particularly difficult lead-time problem. New data and data structures often require the design of new data collection and accounting systems; such changes are very expensive, take time to implement, and prevent making comparative analyses until a new history has been compiled. An institution can seldom afford to revise historical records to make year-to-year comparisons. One president noted that it took his campus three years to regain the full usefulness of its routine accounting and information services after a state-mandated change in budgetary data requirements. In most of the states that were attempting to implement formal program planning and budgeting systems (PPBS), little advance effort had been made to revise accounting and information systems. Data on program categories were often based on estimated or prorated costs that were not useful for management purposes once the budget was enacted. A budget format that is not based on currently available data has little chance of being used for important decisions. Also, program boundaries

usually were different from formal organizational boundaries and assignments of authority to make decisions.

There are formal deadlines for the submission of institutional budgets to state-level agencies. Some states complied scrupulously with these deadlines; others did not. Sometimes an institution submitted a "skeleton budget" to comply technically with a deadline, supplying the additional detail and justifications later.

The deadlines for budget submissions appear to be set by agencies working backward from the legal deadline for submission of the executive budget to the legislature. Each agency attempts to secure sufficient time for its review but also wants the most recent data; compromising between these needs, a date is established by executive budget offices and state higher education agencies for receipt of institutional budgets. Budget instructions incorporate these deadlines and are issued in advance of due dates to give institutions time to incorporate state requirements into their requests. Table 21 indicates, for the budget year(s) examined, the interval between institutional receipt of state budget instructions and the time requests are due at higher education agencies and executive budget offices:

The period between institutional receipt of budget instructions and their deadline for submitting requests to a state-level agency varied widely. The type of higher education agency had little influence on the period although statewide governing board states gave institutions slightly less time to prepare requests than did coordinating agency and state department of education states (11.8 compared to 14 weeks).

There was a major difference in the time from issuance of instructions to executive budget office receipt of requests between states where budgets were reviewed by statewide governing boards and by coordinating agencies (23.8 compared to 16.8 weeks). In three coordinating agency states campus budgets were submitted concurrently to the coordinating agency and executive budget office, providing more time for executive budget office analysis.

Table 21

TIME INTERVALS BETWEEN INSTITUTIONAL RECEIPT
OF STATE-LEVEL BUDGET INSTRUCTIONS
AND DUE DATE OF REQUESTS AT
A STATE-LEVEL AGENCY

Type of state higher education agency	Number of states	Time for preparation (in weeks)	
		Range	Mean
Statewide governing board	5		
Receipt by statewide governing board	5	6-20	11.8
Receipt by executive budget office ¹	5	18-32	23.8
Coordinating agencies or state departments of education with budget review authority	5		
Receipt by coordinating agency or state department of education	5	10-24	14.0
Receipt by executive budget office	5	12-24	16.8
Coordinating agencies not exercising budget review authority	7		
Receipt by executive budget office	7	4-21	11.2

¹In these states the executive budget office receives the statewide governing board request. In Mississippi the statewide governing board request is received by the legislative budget staff.

Source: Glenny et al., 1975.

In the other two states, campus budgets were incorporated into higher education agency recommendations, that reached executive budget offices an average of 18 weeks after issuance of instructions.

Executive budget offices received higher education agency recommendations an average of 20.3 weeks after issuing instructions. Where higher education agencies did not review budgets, executive budget offices received institutional requests only 11.2 weeks after issuing instructions. Apparently institutions do not receive instructions further in advance of submission dates when fewer agencies review budgets. When higher education agencies become involved, executive budget offices issue their instructions further in advance of the date they wish to receive requests to allow time for additional review.

The time lapse between the issuance of budget instructions and the enactment of appropriations for the 17 states is presented in Table 22. Again, the difference among kinds of state higher education agencies is not as significant as the difference within one kind. The state-wide governing board states took an average of about ten weeks more than did the states where other types of state higher education agencies reviewed budgets. The process in states with coordinating agencies averaged about the same amount of time whether or not the state higher education agencies reviewed budgets. The process was somewhat shorter in the two states whose departments of education did not review budgets. (Since there were only two such states and they differed so greatly, this observation is not very meaningful.) For the ten states whose state higher education agencies reviewed budgets, the average elapsed time was nearly 56 weeks; for the seven states whose state higher education agencies did not review budgets, the average time was about 46 weeks.

While it would not be wise to draw too firm a set of conclusions from these figures, it does seem that the interval between instructions and enactment tends to be

- Table 22

INTERVAL BETWEEN ISSUING BUDGET INSTRUCTIONS
AND ENACTMENT OF APPROPRIATIONS

Type of state higher education agency	Number of states	Number of weeks	
		Range	Average
Statewide governing boards	5	44-72	60.4
Coordinating agencies			
Reviewing budgets	4	38-66	50.8
Not reviewing budgets	5	36-64	49.6
State departments of education			
Reviewing budgets	1	52	52.0
Not reviewing budgets	2	28-40	34.0

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shorter in states where state higher education agencies do not review budgets. Institutions do not gain additional lead time by elimination of state higher education agency review nor do executive budget offices gain additional time for review; the whole process is shortened. The introduction of a new agency, particularly a statewide governing board, into the budget process tends to prolong it. The executive budget offices have an inflexible deadline for submitting a budget to the legislature, so when a new review is introduced, time usually is added at the beginning of the budget process. However, in Illinois, where the executive budget office does not extensively analyze higher education budgets, the office receives the state higher education agency recommendation in December and is not required to submit a governor's budget until March. In some cases, the state higher education agency has insufficient advance time for analysis. In Pennsylvania the state department of education submitted its recommendations to the executive budget office after that agency's analysis had largely been completed, seriously undercutting the potential influence of the department's recommendations. Consequently, the timing of the budget process was being revised for the next year.

The legislatures in the 17 states studied have about six months to enact budgets, usually beginning in January. In Illinois the legislature does not receive the state budget until March; this is also true of Tennessee in election years. In Kansas appropriations are usually enacted by May, two months before the fiscal year begins. In Pennsylvania in recent years appropriation bills have been enacted as late as November, or five months after the start of the year in which they are to be spent. Late appropriations cause problems for institutional program planning; part of the fiscal year is gone before the total amount available for recruiting staff, negotiating contracts, and other commitments is known. Furthermore, the amounts to be requested often depend on the amounts previously appropriated. Budgets typically contain at least data for three years: the actual expenditures of the past year, the appropriation for the current year, and the request for the budget year. Much analysis

is based on comparisons among the three years. When the current year budget is uncertain, last-minute revisions must be made without proper review and consultation after appropriations are enacted, increasing the possibility of error. In such circumstances, the efficiency of both budget formulation and budget execution is greatly reduced. When budget submissions must be submitted long before enactment of appropriations, a major problem is how to integrate new data into a review process already well under way. Estimates in institutional budgets submitted before the end of the academic year can be updated in July and August. Thus enrollment estimates become progressively more accurate for the current year through the spring and summer; by October actual figures are often available and are used in reviews by executive budget offices and legislative budget staffs. Incorporating new data into budget requests requires much work, not only by institutions. State-level agencies must redo or update analyses, increasing the chances for error, and a great deal of confusion often results. The value of the new data, the extent to which old submissions must be revised or supplemented, and the extent to which earlier decisions will be reopened, must all be weighed. Better data is constantly becoming available, and the point in time when the cost of further data collection and use outweigh its value should be recognized.

*Budgeting for Different Segments of
Higher Education*

In most states the major research universities, the other four-year institutions, and the two-year institutions have differing statutory bases that affect both how they are financed and the budget process. Frequently there are differences in the degree of state control over the budget submissions of the major research universities and those of other four-year institutions. In some states, state accounting and personnel laws apply to the four-year colleges but not to the major universities. A good example is Pennsylvania, where the four major universities are termed "state-related" institutions and have considerable

autonomy, while the state colleges are termed "state owned" and are considered state agencies, subject to most of the regulations and procedures of state government. These legal distinctions have some effect on state access to data and control over institutional uses of funds but they do not substantially alter the basic approaches to analysis by state budget agencies. Analysis is more difficult when data is lacking or is not comparable, but state agencies still have discretion in arriving at totals based on their judgments. This is not always true, however, for two-year institutions.

There are three kinds of two-year institutions in the 17 states: comprehensive community colleges (16 states), vocational/technical colleges (five states), and two-year branches of universities (five states) (Glenny et al., 1975, pp. 240-245). The community and vocational/technical colleges were coordinated at the state level as shown in Table 23.

Table 23

TYPE OF STATE-LEVEL COORDINATION
FOR TWO-YEAR COLLEGES

Two-year colleges by type of state-level coordination	Number of states
Community colleges	
Statewide governing board	1
State department of education	4
Separate community college board	8
Combined two- & four-year board	<u>2</u>
Total	15
Vocational/technical colleges	
State department of education	2
Separate vocational/technical board	2
Combined two & four-year board	<u>1</u>
Total	5

When the two-year institutions were coordinated by state departments of education and separate two-year institution boards, these agencies were involved in developing state budget instructions, some using and supplementing those issued by state higher education agencies and others developing their own supplements to executive budget office instructions.

In all 17 states, two-year colleges received some state general revenue funds. In the 16 states with community colleges, six states provided no local revenues and nine provided both state and local revenues. In Colorado, one set of institutions was entirely state supported while another received both state and local support. In the five states with vocational/technical colleges, four did not provide local revenues and one provided both state and local funds. In the five states with university two-year branches, four had no local support and one had mixed support (Glenny et al., 1975).

Table 24 summarizes the sources of revenues and differences in budgeting for the two-year institutions. In some states they are budgeted in the same, or nearly the same, manner as the four-year institutions. In other states they are budgeted differently, usually according to a legislated formula based on attendance (Glenny et al., 1975). Wattenberger and Cage (1974) describe the various methods of financing two-year institutions.

Generally two-year institutions that receive no local revenues are budgeted similarly to four-year institutions, with more flexible nonstatutory formulas or general indices of financial need and performance. However, when local revenues are available the states commonly do not have this flexibility, providing funds on the basis of a statutory formula. Then the total state contribution is determined by factors over which the state has little control, such as attendance or enrollments.

Of the 17 states only Florida, Michigan, and Texas provided no local revenues for the two-year institutions but budgeted for them differently than for the four-year

Table 24

SOURCE OF REVENUES AND DIFFERENCES IN
BUDGETING FOR TWO-YEAR COLLEGES

Method of budgeting	Number of states	
	State revenues only	State & local revenues
Community colleges (16 states):		
Similar to four-year institutions	6 ^a	0
Different from four-year institutions	2 ^a	9 ^a
Vocational/technical colleges (5 states):		
Similar to four-year institutions	3	0
Different from four-year institutions	1	1
University two-year branches (4 states):		
Similar to four-year institutions	3	1

^a These numbers add to 17 for the 16 states because Colorado is counted twice. The state system of community colleges is supported by state revenues and budgeted like the four-year institutions, while local community colleges have both state and local revenues and are budgeted on an "average daily attendance" basis.

Source: Glenny et al., 1975, pp. 242-245.

institutions. Florida fully funds its 28 community colleges on the basis of a cost-per-student formula that differs from the formula used for four-year institutions. In Texas only the vocational/technical institutions are fully state funded; the community colleges received local revenues and were funded differently than the four-year institutions. In Wisconsin the two-year branches of the university receive county funds for physical plant construction but are budgeted for operating costs as part of their parent university.

State-level budget agency staffs were dissatisfied with the lack of state control over the amounts budgeted for two-year colleges under statutory formulas. They disliked the "open-endedness" of the formulas and their inability to use budgetary incentives to influence institutional priorities. The New York executive budget office attempted to gain some control over statutory allocations by building incentives into the formula designed to encourage achievement of state educational objectives. The president of one institution, however, felt that the incentives didn't work well because they contained conflicting objectives and were expensive to administer.

Four-year institutions appear unlikely to obtain statutory funding formulas as long as the states provide most of their support. State budget agencies will not want to give up the flexibility they now have in determining the amounts to be allocated. And it is probable that two-year institutions with statutory budget formulas may well lose them if they no longer receive local revenues.

Statutory formulas help institutions estimate their receipts, create a more stable environment for planning, reduce competition among institutions before state-level agencies, and link workload factors to funds in a predictable way. However, they may be too stringent or too generous; adequate funds may be provided during growth but not during enrollment declines, and the state's ability to match revenues to appropriations is reduced. Thus uncertainty is increased for state-level agencies as well as for institutions.

In a time of enrollment growth, statutory formulas tend to protect budgets from year-to-year economic and political vicissitudes and from competition from other nonstatutory formula-funded state programs. However, when enrollments decline, statutory formulas cause budget attrition because they use average rather than marginal costs, penalizing institutions because of their fixed costs and reducing their ability to compete with nonstatutory formula-funded activities. This finding corroborates Meisinger's (1975) assertion that states attempt to preserve flexibility when designing and employing nonstatutory formulas. Nonstatutory formulas do not mathematically generate an amount of money that is then appropriated for higher education. A great deal of negotiation over the design of the formula takes place to ensure that allocations do not exceed available revenues and that proportionate amounts among institutions are not greatly altered. The amounts generated by nonstatutory formulas are also manipulated by changing coefficients or by funding at a percent of the formula-generated amount.

A further problem is the impact of formulas on the high-quality major research universities. These "great" institutions require more money per student than do other institutions, and the application of formulas to them tends to "average down" their budgets. The major universities are much concerned about the effects of formulas and resist their use, and data on state revenues devoted to the different segments of higher education seems to justify their misgivings (Ruyle & Glenny, in preparation).

STATE-LEVEL ACTIVITIES PRIOR TO SUBMISSION

There are a number of ways in which states attempt to determine the character of the budget being prepared by institutions and to shape institutional requests. The institutions, for their part, employ various means to determine the intentions of state officials.

Agreement on Budget Formats

Agreement must be reached on the contents and format of institutional budget requests to balance state and institutional interests. State-level desires for data must be reconciled with the time available and costs involved in supplying it. The legitimacy of the data requested is also a matter for debate. If from an institution's perspective a state agency has no legitimate role in decisionmaking in a particular area, it is likely to resist providing relevant data.

The extent of changes in the format of budget submissions varies from year to year but a primary distinction can be made between major changes, occurring infrequently, and annual or biennial technical adjustments.

Major Changes in Budget Formats. Major changes take place when a new concept of budgeting is introduced, such as a new formula or a program budgeting system. Because such changes mark a sharp departure from past practices they are adopted generally only after considerable debate and controversy. The adoption and use of new formats require a substantial degree of consensus among state-level agencies and institutions on both the desirability and the feasibility of the changes.

A primary concern of institutions is the distributive effects that a new format, or particularly a new formula, might have--whether it will improve budgetary prospects or decrease them relative to other institutions. One president commented that he first examines who benefits when a change in formulas is proposed. A second institutional concern is over the possible impact on decision location. This concern was most evident when program budget formats were proposed. A program budget format seeks to focus state attention on programs and their results rather than on administrative processes and the uses of resources. Data on programs gives state agencies an opportunity to make decisions, or to second-guess decisions, that formerly were in the domain

of institutions. Institutions generally resisted this potential for shifting decisions to the state level (or at least enabling a state-level review). On the other hand, several institutions thought the provision of this kind of data might enable state-level agencies to understand their programs, leading to greater trust and confidence and discouraging their desire to intervene, and perhaps justify larger appropriations.

A third concern of institutions was the lead time required to make major changes in budget formats. The data summarized in a budget is derived from accounting and information systems that aggregate the results of huge numbers of separate transactions. Each transaction contains a set of data that is coded for subsequent aggregation. Certain procedures and programs are employed to summarize this data, and the summaries are then classified in different ways. Each of these data summaries supports the decisions of a mix of institutional and external users. Staff have been trained in the coding of data and the procedures for generating reports. Users have become accustomed to the availability of certain kinds of data in certain formats.

A major change in the format of budgets disrupts the whole system. Usually new kinds of data must be collected and aggregated in different ways. Users must adjust to the loss of old data and learn to use the new data. Priorities in what data is to be collected generally reflect management philosophies and pragmatic concerns of decisionmakers. Therefore, changes often alter styles of management. Frequently, state-initiated changes fail to consider institutional needs for management data. State assumptions about the management data needs of institutions were often unsophisticated. These issues are discussed in much greater detail by Furves and Glenny (1976).

A fourth concern is the need for lead time to alter data collection systems and to gain agreement on whether

the effects of the changes are really desirable. There must be sufficient time to install new data systems and to train staff to operate and use them, an expensive process that generally requires parallel systems for at least a year until problems are ironed out. The costs of recoding and reprocessing old records are so great that this is rarely done, and when it is done still results in loss of continuity of data. Comparisons cannot be made of year-to-year changes, which is the most common technique of budget analysis. One reason program, planning, and budgeting systems (PPBS) have not succeeded is that basic changes were not made in the data systems supporting the new budget formats. Doing so would have postponed implementation of the new system for at least three years. In many cases, the changes required would have added to the costs of data collection since little of the current data could have been eliminated, as it was needed for internal management. The National Center for Higher Education Management Systems has tried to remedy this problem through its extensive work on institutional data bases and structures.

Minor Changes in Budget Formats. Minor changes are those made to improve the current concept of state budgeting. The changes are often technical. The definition of data elements may be clarified, more complex classification or new classification systems may be prescribed, or new analyses of existing data required. The changes also may involve adding or deleting data from budget requests.

Just because these changes are described as minor does not mean they have little effect or are easily agreed on. Changing the classification of a program can move it from one formula category to another, affecting appropriated amounts. Particular data definitions may reflect the nature of some programs more accurately than others. New data or deleted data can extend or contract the potential areas for state-level decisionmaking.

Definition of Budgetary Issues

The issues that receive major state-level attention during the review of higher education budgets are often perennial matters; for example, salary comparability with some set of institutions or another state, support for a long-desired program, or phase-out of a long-disputed program. Many of these issues are surprisingly durable. New issues continually arise from many sources, including specific legislative plans, conclusions of policy studies or audits, and from systematic inventories of areas for periodic examination. In California, for example, the executive budget office staff identified over 100 higher education issues for the FY 1975 budget. After discussion with political leaders this was narrowed down to around 20 that actually received systematic attention.

Issues shape the requests for information by state-level staff and the kinds of analyses prepared by institutions. Early intelligence on state-level issues can greatly help institutions respond effectively to inquiries. They are less apt to appear inept and poorly managed if they have time to produce analyses responsive to state questions that also defend their practices. These two purposes, of course, sometimes are in conflict. In some states, institutions submit preliminary budget estimates to state-level agencies, giving both parties a better feel for the size and contents of the forthcoming budget request and a chance for revisions.

The issues that arise before budget review are substantive as well as procedural. Substantive issues generally are communicated by visits, phone calls, memoranda, etc. They are not commonly the topic of the budgetary instructions that all 17 states send to institutions, which deal primarily with procedural matters.

Instructions for the Preparation of Operating Budgets

State-level budgetary instructions to institutions generally set forth technical considerations, for example,

formulas for budgetary calculation, assumptions on inflation, salary increases, and formats for presenting data. Budget instructions can be issued by all three state-level agencies independently or jointly (Glenny et al., 1975)--see Table 25.

Table 25

AGENCIES ISSUING BUDGET INSTRUCTIONS

Issuing agencies	Number of states
Executive budget office only	6
Legislative budget staff only	1
State higher education agency only	1
Executive budget office and legislative budget staff jointly	2
Executive budget office and state higher education agency jointly	6
Executive budget office, legislative budget staff, and state higher education agency jointly	1
Total	17

In 12 states the instructions go to the individual campuses, in eight states to the multicampus systems, and in three states to the statewide governing boards.

State-level agencies generally do not provide target figures or ceilings except in times of fiscal stringency. For the year examined, seven of the 17 states issued budgetary targets. In only three was the target a specific dollar amount, in another three it was a percentage-increase limitation over the previous year's budget. In the other state--Florida--the target was not specific but was implied by data on state revenue prospects and by guidelines for price increases furnished

by the executive budget office. The target amounts applied to all higher education in five states but in two states were broken down by individual campuses. None of the states attempted to set internal institutional priorities through use of targets.

The value of budget targets is that they lower institutional expectations, eliminate the costs of including unrealistic requests in budget submissions, and force institutions to make priority choices internally. The disadvantage, from a state-level viewpoint, is that institutions may not present new programs that could have a higher priority than their ongoing efforts; at least, state agencies cannot make comparisons and ask questions about priorities. Institutions and some times state higher education agencies resist ceilings that prevent them from making their best case before the state. The Connecticut higher education agency, for example, did not comply with a percentage increase ceiling imposed by the governor, contending that it violated their legal obligation to fully present the needs of higher education to state government.

The budget instructions of most states require requests to be divided into the amounts needed: 1) to support current levels of operation--what is commonly called the *budget base*; 2) to support workload and cost increases in current activities; and 3) to support new activities. The second category is frequently combined with the first or third to make two categories: the *base* and the *increment*. Sometimes institutions are asked to rank items in the budget increment according to their priority. They may also be asked to indicate the lowest-priority items in the base.

Priority ranking would seem on the surface to be a sensible way for the states to get data to help them make choices on budget allocations. Presumably, with this knowledge they could compare the lowest-priority items of the campuses and base their recommendations on a better appreciation of institutional priorities. The logic of state recommendations would be clearer and the

institutions would receive funds for what they, themselves, considered their most important items. A state theoretically could go even further; the lower-priority items in higher education could be compared with those in other sectors and political judgments made as to the best use of revenues.

In practice, however, there was little evidence of success in getting institutions to list their priorities. This resistance did not appear to be the result of capriciousness or a shortsighted view of budgetary strategies. Classifying the priority of budget items can adversely affect institutions in several ways:

- A program can be classified as low priority because of its quality rather than because of its intrinsic importance. Such a program may be susceptible to strengthening. However, once a program is reputed to be of lower priority the designation tends to become self-fulfilling. Good people who are in demand leave and morale sags. Even if the activity is funded, as most tend to be, it will suffer as a result of the priority designation.
- When any program is threatened its constituency is aroused, creating work and problems for the leadership of an institution. Institutional officials have little desire to create such problems prematurely or unnecessarily.
- Priorities are established within institutions through complex discussions and bargaining between administrators and faculty, usually in light of immediate, not projected, revenue constraints. The actual priority of various activities is hard to establish in advance of this time-consuming process. Institutions therefore are reluctant to establish positions on issues before they have been fully explored internally. The process of setting priorities at an early date weakens the bargaining position of the administration and arouses unnecessary opposition.

- Priorities shift over time and institutions are reluctant to terminate activities currently not thought important when they may some day prove more significant. The president of Pennsylvania State University described the trouble he had for many years maintaining support for the university's coal research programs. Today these programs have become a part of the effort to find alternatives to the use of petroleum.

- Institutions seek to enlarge their budgets and do not want to give state agencies easy targets and rationales for cuts made as a result of revenue constraints. Consequently, they often rank popular items such as athletics as low in priority knowing they will not be eliminated by state budget agencies.

It is far more common to rank new programs or activities by priority than to rank those already in existence. Painful decisions on staff reductions and shifts, along with consequent morale problems, are not commonly involved in their ranking.

There was no evidence that states compare the priorities of individual programs or activities across sectors such as higher education and public health; targets for the totals in each area are established and are changed when actual reviews indicate a greater or lesser demand. Competition among sectors takes place at this level, not on the basis of comparisons among specific components of sector budgets.

CONCLUSIONS

Institutions clearly need to be more aware of the economic, demographic, political, and social context in which they are pursuing their budget objectives; insensitivity to emerging trends will certainly create problems when formulating and defending budgets. The institutions we studied often did not appear to be sufficiently cognizant of contextual realities. This

may only partly be the result of a belated recognition of the political imperatives following the rapid growth and increasing social importance of higher education. Another cause may be the institutions' insulation from state-level concerns as a result of the organizational hierarchical layering, noted in Chapter 5.

Statewide master planning is clearly of high importance in gaining agreement on issues and creating common expectations before formulation and review of higher education budgets. Effective planning appears to be the best method for reducing the scope of reviews and limiting areas of contention during the budget formulation process.

Institutions typically have to make considerable progress in formulating their budgets before they receive budget instructions; the states should make a conscientious attempt to issue instructions promptly each year. Changes in instructions should be limited and periodic, balancing their benefits against the substantial costs they impose on institutions, and should be made only after careful consideration by all state-level budget agencies and by institutions.

Annual, rather than biennial, budgeting generally appears to create more problems as a result of losing a longer time frame for institutional operational planning and a heavier procedural workload for state budget agencies, than it solves in increasing attentiveness to emerging problems. States may well want to reconsider the trend away from biennial budgeting for higher education. The University Grants Council in England is budgeted for five-year periods, with a schedule of program reviews during this period. Five years is undoubtedly too long for today's conditions of rapid change and economic uncertainty. However, the stability and redirection of staff effort from procedural to substantive issues afforded by a biennial system seems attractive.

All state-level budget agencies and the institutions must be considered in the design of budgetary formulas and budget submission instructions if these are to be.

fully acceptable and effective in reducing ad hoc requests for information and in resolving conflicts over philosophies of budgeting. Too often the requisite cooperation was not found in the 17 states.

Higher education's competitive position for state funds may be impaired because of statutory formulas that allocate a high proportion of state funds to other sectors. In times of enrollment declines statutory formulas can force reductions that exceed decreases in costs.

States should approach carefully the problem of requiring institutions to set forth their budgetary priorities. In many cases this issue can be handled with less damaging effects through confidential channels of communication between institutional and state officials. A better balance needs to be struck between public knowledge of institutional assumptions, expectations, and desires, and the need to preserve an atmosphere in which productive intrainstitutional deliberations and negotiations can take place, avoiding unsought damage to programs.

8.

State-Level Review of Institutional Budgets

It is, of course, no more possible in university than national government to guarantee, by any procedure or by any system of information gathering and analysis, that the "best" decisions will be taken on the use of resources, let alone on long-term objectives. The very reasons why it is impossible to secure agreement on the nature of "best" are also the reasons why no procedures or techniques can solve all problems. Some improvements may nevertheless be obtained through an attempt to bring the most complete available information, in what seems to be the most usable and relevant form, to bear upon problems at the point in the decisionmaking process where the most sensible deliberations can occur. The aim is to substitute informed judgement for mere guess-work and, where appropriate, reasoned argument and public debate for mere power struggles--not that hunch and struggle can ever be entirely eliminated from any process of government. (Moodie & Eustace, 1974, p. 194)

A great deal has been written on the need to improve the review of budgets in general, and specifically those of higher education institutions. Much also has been written about techniques to improve the review of budgets.

However, few of these prescriptions have been based on actual description and analysis of the budget process, exceptions being those of Schick (1971), Sharkansky (1968), Wildavsky (1964), and a few others. Most suggestions for improvement of the budget process have been based on normative models of decisionmaking, the validity of which is currently being questioned by a number of theorists. The gap between theory and practice has been noted by Wildavsky and Hamann (1968).

One of the difficulties faced by reflective people engaged in budgeting is that they hold implicit beliefs about desirable methods of calculations--comprehensive and simultaneous evaluation of means and ends being considered as synonymous with rationality--while they practice quite different--incremental and sequential--methods. (p. 153)

This chapter examines the review process in the three primary state-level agencies that examine higher education budgets: executive budget offices, legislative budget staffs, and state higher education agencies. We will deal with the sequence of the review process, the information that is reviewed, the time available for reviews, some constraints affecting the review process, some functions of the review process, categories of budgetary decisions, and some limitations on the adequacy of reviews.

THE CONTEXT OF STATE-LEVEL BUDGET REVIEWS

The Sequence of State-Level Budget Reviews

Usually a state-level budget agency reviews the budget recommendations of the agency or institution whose review preceded its own. Campuses submit budgets to multicampus systems or state higher education agencies, whose recommendations are then reviewed by an executive budget office whose recommendations are in turn reviewed by legislative budget staffs. In practice this order is not always observed. An executive budget office may

examine campus budgets, virtually ignoring multicampus or state higher education agency recommendations. In Florida the staff of one of the legislative budget committees reviewed the state higher education agency's budget request rather than the governor's.

Agencies who make recommendations later in the budget process frequently do not wait for the recommendations of the immediately preceding agency before beginning their analysis. More and more often executive budget offices receive campus requests at the same time that they are submitted to multicampus systems or to state higher education agencies. The legislatures also are more commonly obtaining campus, multicampus system, and state higher education agency recommendations at the same time they go to the executive budget office. In the legislature one house generally receives and considers the executive budget first, but often staff of both houses begin their analyses as soon as budgets are available to them, without waiting for the recommendations of the "lead" house. In some states, one house traditionally first reviews the governor's budget while in other states the two houses may alternate. These differences and similarities can be seen in the flow charts of the process in the 17 states included in the first volume of this study (Glenny et al., 1975).

Despite these differences in the sequence of reviews, the process within the three agencies had many similarities. When budget recommendations were received by an agency they were generally checked for accuracy and consistency with technical guidelines and policy. In some states, such as Washington, a separate staff in the executive budget office receives the estimates and spends a week or so checking the accuracy of the calculations before they are sent on to the budget analysts, but in most states the budget analysts first perform this checking. Once the accuracy of the estimates is settled the analysts review them to determine what the issues are, to seek answers, and to arrive at recommendations. The analysts' recommendations are then reviewed by their superiors and the political policymakers, and altered to conform with revenue constraints and political and

policy considerations. The analysts may present their recommendations as written evaluations or orally and less formally, particularly in smaller agencies. Once the recommendations of an agency are agreed on by top policy officials, including the boards of state higher education agencies, a written agency recommendation is prepared incorporating these decisions. For state higher education agencies this might range from a simple memorandum on institutional budget requests, addressed to the executive budget office, to an extensive formal budget document with both quantitative and narrative justifications. The recommendations of the executive budget office are presented as the governor's budget or the state budget. The recommendations of legislative budget staffs, following reviews and revisions by appropriations committee members and committee "mark-up" sessions, are incorporated into appropriations acts.

The differences in the political leadership of the three agencies have some effect on the internal review of budgets. The state higher education agencies have to prepare a document for review by their boards. The boards, to evaluate the staffs' recommendations effectively, need time to review reports, question staff, and arrive at positions they want to take at the board meeting where the budget is adopted formally. They must receive papers before meetings, cutting down on staff time needed to review budgets thoroughly. Staff must incorporate board changes into the budget recommendations, and these amended recommendations are then approved either by the board or an executive committee delegated power to perform this function. Boards often had a subcommittee specifically for financial matters that worked closely with staff on budget issues during the review process.

The staff of the executive budget office also prepares recommendations to present to the leadership of their agency. Top officials suggest reductions to meet budgetary ceilings and for substantive policy reasons. Occasionally increases are made. During this period the top officials generally are in close contact with the governor or his immediate staff, adding up emerging state agency requests and comparing them with available

revenues as well as getting policy reaction to emerging issues. In New York, the governor's office was given executive budget office recommendations some days before the deadline for printing the state budget. He reportedly made significant changes. In other states the governor was heavily involved in the review as it went forward, sometimes having formal sessions with the budget analysts to go over their recommendations.

The typically fixed legal deadline for submitting a state budget to the legislature necessitates setting a time for completing material to be included in the executive budget, generally a large and complex document, well in advance of the date it must go to the legislature. Many difficult and controversial decisions that have been postponed are finally made as the necessity to meet the printing deadline forces action.

The review in legislative agencies is particularly difficult to generalize about because, as noted earlier, staffs can play many different roles as they assist committees, blurring the distinction between the staffs' and legislators' roles. The existence in many states of both upper- and lower-house appropriations committees creates special problems in reconciling their typically differing recommendations. Staffs often have to complete their reviews before hearings with institutions begin. However, these hearings are sometimes viewed as contributing to the analysis rather than as testing conclusions, in which case staff recommendations are presented to the legislators after hearings but before "mark-up" sessions. In California the joint legislative budget staff publish a formidable document near the beginning of the legislative session, rivaling in size and complexity the governor's budget. Preparation of this document necessitates a great deal of close cooperation between the legislative and executive budget staffs during formulation of the governor's budget, to permit the identification of executive recommendations and issues in time for their analysis and reaction in the legislative staff recommendations. This volume, together with the California governor's budget, forms the basis for legislative consideration of the budget.

The Time Available for State-Level Budget Review

The amount of time available to agencies to review higher education budgets is very limited. Most review takes place during the interval between the time the agency receives the budgets and the deadline for submission of their recommendations to the next agency or, in the case of the legislature, the beginning of the new fiscal year. Table 26 indicates the length of the budget review interval for each of the three primary state-level higher education budget agencies.

For the year examined, in the 17 states the ten state higher education agencies that reviewed budgets had an average of 10.8 weeks in which to review and make recommendations; the range was from four to 18 weeks. As would be expected, the statewide governing boards had more time available than did coordinating agencies. For executive budget offices the review period averaged 15.1 weeks, and the range was from eight to 28 weeks. The legislative budget staffs had an average period of 19.5 weeks with a range of from eight to 26 weeks. The joint legislative budget staffs had nearly three weeks more than did the separate legislative budget staffs of each house. The least time any agency had for review was one month, the most was seven months. The total time devoted to budget review in the 17 states averaged 40.1 weeks, ranging from 24 to 56 weeks. The five states with biennial budget cycles devoted about 50 weeks to budget review on the average, somewhat more than the states with an annual review cycle.

The actual time available to each agency for substantive analysis and consideration of issues is much less than the total amount of time between receipt of requests and submission of a recommendation. Actual review takes place after initial checks on data accuracy are completed and before the analyst's initial recommendations are reviewed by political officials and printed as formal documents. This period, in which a budget analyst reads documents, defines issues, seeks data, reaches conclusions, and makes preliminary recommendations, probably ranges from one to four weeks in

Table 26

INTERVALS BETWEEN RECEIPT OF FORMAL BUDGET
SUBMISSIONS AND ISSUANCE OF AGENCY
RECOMMENDATIONS

Type of agency	Number of states	Budget review period (in weeks)	
		Range	Mean
State higher education agency	10	4-18	10.8
Statewide governing board	5	4-18	12.0
Coordinating agency	4	6-14	10.0
State department of education	1	--	8.0
Executive budget office	16	8-28	15.1
Legislative budget staff	17	8-26	19.5
Joint legislative budget staff	9	12-26	20.8
Separate legislative budget staffs	8	8-24	18.1
Total time devoted to budget review	17	24-56	40.1

Source: Glenny et al., 1975.

in the three agencies. Of course, the analyst's recommendations are reviewed by his superiors, but in most cases the total number of changes was small and tended to deal with major political and policy issues. On routine matters the analyst's judgments were rarely challenged; if they were challenged too frequently, that individual would likely be fired or transferred. Busy superiors would have to spend an inordinate amount of time on one area of responsibility, something they could not afford.

Some institutional officials did not appear to comprehend fully the significant role of the analysts in setting budget policy and totals. Their attention was too often directed to top officials, and frequently too late in the review process to affect recommendations. Top state agency officials will intervene when necessary to change an analyst's recommendations, but they are reluctant to do so often. They run a risk challenging the expertise of the analysts and dislike giving a "vote of no confidence" to one of their staff members unless they feel there is an important reason to do so. State budget agency officials universally tended to trust the judgments of their analysts and to distrust those of staff in other agencies, particularly those in institutions.

There was a general tendency, illustrated in Table 26 for the review period to be longer for each successive agency, the state higher education agency having the least amount of time and the legislative budget staff having the most. Table 21 showed that institutions had from six to 24 weeks to prepare their budgets after receipt of instructions, averaging less time than executive budget offices and legislative budget staffs had for their reviews. Consequently, there were frequent staff complaints that hasty submissions had to be put together, with each succeeding agency having a greater amount of time for review and criticism. Of course, all institutions and agencies know that a budget document has to be submitted at an established time every year or two years, so campuses can expect to develop their budgets without a great deal of state-level guidance. The state-

level agencies also have considerable knowledge of issues before they receive budgets. However, changes in budget formats that restructure data also change the nature of analyses and lead to redefinitions of policy issues. Additionally, little actual analysis can be done without current data, and most such data is contained in budget documents. Most issues raised during the budget process have to do with proposed increases. These increases, and their rationale, are rarely known with sufficient certainty to permit satisfactory analysis prior to the receipt of budget documents.

One way in which state-level budget agencies attempt to overcome the problem of limited time is to carry out policy studies and performance audits before formal budget review. These studies define areas for attention during reviews and help identify data needed in budget submissions. In most of the 17 states the budget analysts complained that each new year they have less time than before to undertake such studies. The procedural demands of new systems of program budgeting in the states where they were being adopted have taken so much staff time that less was available for substantive analysis. The switch to annual from biennial budgets has also reduced time available for in-depth studies. The amount of time devoted to procedural tasks versus substantive analysis has generally increased.

On the surface, the demand for analysis of issues suggests a natural compatibility between the units doing performance audits and those engaged in budget analysis. Budget analysts historically have conducted studies of particular facets of state government, similar in intent to performance audits. As noted above, the growing complexity of the procedural aspects of the budget review process uses up time formerly available for such studies. In California an audit staff of 40 professionals was created and located, physically and organizationally, close to those engaged in budget analysis. The result was confusion over the roles of the two staffs. During budget review, top officials wished to consult with the most knowledgeable persons on particular issues. In the areas they studied, the performance auditors naturally had the most detailed knowledge, and they were consulted.

They did not, however, have the contextual knowledge of the budget analysts, whose responsibility it was to place issues in the broader context of statewide budgetary concerns. The confusion over roles and responsibilities led to a separation of the two staffs.

Sources of Information for State-Level Budget Review

The information available to state-level higher education budget agencies has been extensively examined by Purves and Glenny (1976). The primary information available is institutional budget request documents. Budget decisions require the most current data, and the data contained in formal information systems--when these exist--are usually too outdated to be of much use when examining changes in budgets. The data for state planning, for reports to federal statistical agencies, and for management control is not necessarily the same as those needed to make budgetary decisions. Furthermore, the extensive collection of useful data is a complex and time consuming process. Yet budget analysts want priority and need the most current data on a wide variety of topics to make their decisions. Thus, they commonly complained that information systems were not producing the right data in sufficient time to support their needs. However, an information system that could anticipate a substantial number of budgetary decisions would have to meet impossible standards of currency and comprehensiveness.

There has been too little appreciation of the importance of the less structured and more elusive data obtained from conversations, correspondence, and visits to campuses. From this information budget analysts gain many of the insights that form state agency perspectives and conclusions on budgetary issues. Unfortunately, too often budget analysts have short tenure and therefore frequently lack the knowledge that is accrued through longer exposure to higher education's characteristics and circumstances.

Formal information comes organized in many ways. Earlier chapters described how budgets reviewed by state-level agencies might be those of campuses, multicampus systems, state higher education agencies or, in the case of the legislature, the governor's budget. These budgets may present data aggregated at the level of campus departments, the campus as a whole, a multicampus system, or statewide for all higher education. The level of aggregation of data can permit comparisons across departments, for example, among education or political science schools on various campuses, or among campuses or multicampus systems as a whole. In some states, such as Florida, budgets for campuses cannot be identified within statewide totals that are presented to the executive budget office and legislative budget staffs. In others, even though a state-level agency reviews a budget aggregated at the multicampus level, they may also have available campus budgets for their information.

When a multicampus system or a state higher education agency reviews higher education budgets, it may retain the separate identities of campus budgets, either altering the amounts requested and submitting new totals or retaining the campus requests intact, but adding separate recommendations for changes. Such a practice is termed an *aggregated budget recommendation*. In other cases the budgets of individual campuses or multicampus systems may be merged so that the identities of specific campuses or systems are lost in the figures included in the statewide budget recommendation. This is termed a *consolidated budget request*. An executive or legislative budget agency reviewing a consolidated statewide budget for higher education generally cannot determine the impact its decisions will have on a particular campus; therefore decisionmaking on specific campus allocations is done at the state higher education agency, multicampus system, or campus levels. This decreases executive and legislative agencies' opportunities for making decisions on the basis of political interests, but it also lessens their sensitivity to the effects of their decisions since they have less grasp of the details of campus activities.

Budget reviews by state-level agencies vary widely in their depth and breadth of analysis. A review might concentrate on specific detailed issues and examine a few or several of these issues in great depth. Or a review might focus primarily on the total amounts to be appropriated and conformance of requests to statewide plans and policies. In the latter instance the depth of review of specific issues is likely to be rather superficial.

Data comparability was a major concern of most state-level budget agencies. Campuses within the same state frequently used different accounting and information systems. Some progress can be made by installing common systems, but a number of cautions must be observed when doing so. Accounting and information systems must serve the needs of campus management, and these needs to some extent are always unique. Achieving comparability by depriving campus management of vital data will increase costs rather than efficiency. In accounting systems as in architecture, form should follow function. Forcing campuses to place data in inappropriate categories will not improve the formulation of policy.

Data systems based on common definitions and aggregations can obscure the fact that, at some level of detail, no two programs are exactly alike and therefore their costs to some extent are different. Too great a preoccupation with data-based comparisons leads to neglect of the actual circumstances, imperfectly portrayed by the data. In many cases subtle differences are more important than obvious similarities.

Some state policymakers feel that state-level data needs are the same as those for institutional management, the only difference being that state-level data is more aggregated than that at the campus level. Purves and Glenny (1976) discuss the fallacy of this notion. Different decisions generally require different kinds of data, structured in different ways. State officials who presume that the data they need will be equally beneficial to campus officials are more frequently wrong than right.

State data collection can rarely be justified on the basis of any benefits it brings to campus decisionmaking. Too often centralized management information systems are installed that eliminate local systems, and the discovery comes too late that the needs served by the local systems cannot be accommodated by the central system. The amount of diversified detail required by campuses is too great to encompass in one central system. In addition, the costs of modifying a large complex system tend to restrain desirable changes in data collection and analysis. Efforts to improve data comparability should continue, but with cognizance of the problems discussed above.

State agencies seeking information can go either to the state higher education agency, a multicampus system headquarters, or directly to campuses. Many problems can be caused when an executive, legislative, or state higher education agency official calls directly on campuses for data, bypassing intermediate units. There is a great temptation to speed up the process of collecting data by going directly to the most knowledgeable source, but this is done at the expense of the intermediate organization. Going around an organization because it cannot promptly supply accurate data undermines its authority, and eventually it ceases to develop the reservoir of data needed to respond to requests since it is rarely asked.

Formal Budget Hearings

Most budget agencies use formal or informal hearings or conferences with institutions, the character of which are described below, as an important source of information.

Number and location of hearings. All three types of state-level agencies use hearings to make budget decisions. Ten of the 16 state higher education agencies, 14 of the 16 executive budget offices, and all 17 of the legislative budget committees held hearings. The total number of hearings held at the state level on higher education budgets ranged from two in Mississippi, Nebraska, and New York to six in Florida. Table 27 summarizes their sponsors and the number of hearings completed immediately

Table 27

BUDGET HEARINGS IN THE 17 STATES: SPONSORS AND NUMBER

States	State higher education agency		Executive budget office		Legislative budget staff			Total for all agencies
	Staff	Board	Staff	Governor	Joint committee	Upper house	Lower house	
California			x			x	x	3
Colorado	J	x	J		x			3
Connecticut	x	x			x			3
Florida	x	x	x	x		x	x	6
Hawaii		x	x			x	x	4
Illinois	x	x				x	x	4
Kansas		x		x		x	x	4
Michigan			x	x		x	x	4
Mississippi					x			2
Nebraska			x		x			2
New York			x			J	J	2
Pennsylvania		x	x			x	x	4
Tennessee	x	x		x	J	J	J	4
Texas			J		J	x	x	3
Virginia				x		J	Jx	3
Washington				x		x	x	3
Wisconsin	x	x		x	x			4
Total	6	10	9	7	7	12	12	58

x Sponsored solely by agency checked

J Sponsored jointly by one or more state-level agencies (for example, in Virginia the governor held a hearing, the upper and lower houses held joint hearings, and the lower house held another independent set of hearings).

Source: Glenny et al., 1975.

prior to the collection of data. These hearings vary a great deal among the states as to: 1) the sponsoring official, 2) the instigator of the hearing, 3) the formality of the session(s), 4) the principal witnesses, 5) who attends, 6) the recommendations under consideration, 7) the level of data aggregation to which questions are addressed (department, campus, multicampus or statewide), 8) the campuses whose budgets are considered in the hearings, 9) the site of the hearings, 10) the length of the hearings, and 11) the total number of hearings.

As shown in Table 27, a staff member of the state higher education agency or the executive budget office, or political officials, the state higher education agency board, the governor, or legislative committees can sponsor hearings. Hearings were sometimes jointly sponsored, for example, by the state higher education agency with the executive budget office staffs in Colorado, or the joint upper- and lower-house appropriations committees in New York. Jointly sponsored hearings were held in five of the 17 states. In at least one instance the instigator of hearings was not the sponsoring official; in Wisconsin the state higher education agency staff hearings were held in response to campus requests.

Formality of hearings. Hearings may range from an informal meeting intended to gauge reactions to proposed actions, to a highly formal, structured session where designated witnesses testify. In Illinois hearings of the state higher education agency consisted largely of negotiations that took place over several months. In Florida, the state higher education agency hearings were more formal, with staff making presentations before the chancellor and the university presidents. There appears to be a trend toward making hearings less formal. In two states, because of "sunshine laws," hearings were replaced by informal meetings. One official commented that in open meetings board members were less effective in their questioning because they were afraid to appear ignorant in public. Agencies also, apparently, are apprehensive about publicly revealing their priorities

and budget strategies in advance of their presentations and negotiations with other state-level agencies. Their ability to compromise and negotiate is reduced once a public position is taken.

Witnesses at hearings. The principal witnesses at hearings, those who make the major presentations and respond to questions, are institutional officials or staff members of state-level agencies. Institutional officials typically provide the rationale for their requests along with evidence supporting the request. They also use hearings as an opportunity to appeal earlier decisions made by other state-level agencies. The staffs of state-level agencies generally present and defend their recommendations.

Attendance at hearings is affected by such factors as whether the hearings are public, the number of witnesses that can be accommodated within time constraints, and the size of the hearing room. In Tennessee the legislature preferred to have only the director of the state higher education agency and presidents of the multicampus systems present. Of the six states where the state higher education agency staff held hearings, three were open to the public. Of the ten where state higher education agency boards held hearings, six were open to the public. Of the 14 states that held executive budget office staff and/or governor-sponsored hearings, five were open to the public. Data was not obtained on whether legislative hearings were open or closed to the general public. In Connecticut, the legislature held a large public hearing near the end of its budget deliberations to solicit public reaction, rather like a New England town meeting.

Attendance at hearings is shown in Table 28. In almost one-third of the states where the state higher education agencies held hearings, they were attended by the executive budget office or legislative budget office staff. In fewer than half of the states that held executive budget office hearings, these were attended by the

Table 28

NUMBER OF STATES HOLDING HEARINGS AND TYPES OF OFFICIALS ATTENDING

Sponsors of hearings	Number of state agencies	Number holding hearings	Types of officials attending hearings				
			Campus	Multi-campus	State higher education agency	Executive budget office	Legislative budget staff
State higher education agency staff	16	6	4	6	b	2	1
State higher education agency board	16	10	9	7	b	3	3
Executive budget office or governor	16	14	10	6	11	b	6
Joint legislative budget committee	9	7	5	4	6	6	b
Upper house budget committee	13 ^a	13	8	5	9	10	b
Lower house budget committee	13 ^a	13	8	5	10	10	b

^aData on attendance at hearings for two states--Mississippi and Tennessee--was not obtained and is not included in the tabulations. In Mississippi the two houses hold separate hearings and in Tennessee they hold joint hearings.

^bNot applicable

Source: Glenny et al., 1975.

legislative budget office staff. However, the state higher education agency staff attended the executive budget office hearings in all but three of the 14 states having such hearings. In the seven states with joint legislative budget committee hearings, institutional, state higher education agency, and executive budget office staffs generally all attended. The same was true of the hearings held in 12 states by upper- and lower-house budget committees. However, in some states where the executive budget office and the legislative budget office staffs were invited to the state higher education agency hearings, they sometimes failed to attend.

Recommendations considered at hearings. The hearings held by the state higher education agencies can focus on the budget recommendations of either the campuses or of multicampus systems. The executive budget office and governor can also examine the recommendations of the state higher education agency. At appropriations committee hearings the governor's recommendations are available and, in some cases, so are formal recommendations of legislative budget staff including those of the other house.

Table 29 shows that the executive budget offices gave primary consideration to the state higher education agency recommendations in only five of the 16 states that have an executive budget office. The legislative budget staffs used the recommendations of the state higher education agency as a basis for their hearings in only three of the nine states with joint legislative budget staffs and in three of the 13 states with separate upper- and lower-house legislative budget staffs. More startling, only four of the nine states with joint legislative budget staffs used the governor's budget recommendations as the basis for their hearings. These joint staffs might have more time for independent analysis than do the somewhat smaller staffs in each house, but this practice of not basing reviews on the governor's recommendations seems likely to increase duplication in the budget review process. In the 17 states, joint staffs had an average of 12.3 professional employees each compared to 9.1 in lower-house committees and 6.5 for those of upper houses.

Table 29

FOCUS OF HEARINGS

Hearings	Number of state agencies	Campus	Multi- campus	Recommendations considered ^a		
				State higher educa- tion agency	Gover- nor's	Joint legisla- tive budget staff
Education agency staff	16	6	3	c	c	c
Education agency board	16	7	7	c	c	c
et office of	16	6	6	5	c	c
committee ^b	9	4	3	3	4	c
udget committee ^b	13	6	3	3	10	1
udget committee ^b	13	6	3	3	10	1

recommendations considered is more than the number of agencies holding cause one hearing can deal with the budget recommendations of two or more ns.

ented does not include that of two states--Mississippi and Tennessee.

e.

ny et al., 1975.

These figures, of course, do not reveal the extent to which cooperation exists between upper- and lower-house staffs or how much time these staffs devote to higher education budgets.

The budgets of all campuses were not necessarily reviewed. For example, the executive budget office in Pennsylvania held hearings attended by the major universities but not for the state colleges. In Michigan the governor or the executive budget office staff held separate hearings for the three major universities, but held hearings for groups of three to five presidents for the other institutions. Hearings most commonly took place in state capitols, but in some cases they were held at campuses, as in the executive budget office hearings in New York.

The aggregation of data used at hearings. The degree to which data is aggregated into campus, multicampus, and statewide totals has an impact on the kinds of issues identified and the kinds of decisions that can be made by state-level agencies. Examination of multicampus system and state higher education agency requests focuses attention on issues raised by those organizations in contrast to those of campuses.

Data used in hearings may be totaled by subcampus units such as departments and research centers, or by functional categories such as student services. Totals also may be aggregated for the campus as a whole, for the multicampus system, or statewide. Data aggregated at the multicampus system and the state higher education agency level is likely to preclude, or at least discourage, decisions made on the basis of idiosyncratic campus interests. Attention is focused on the requirements of the total system rather than on those of separate campuses.

A focus on subcampus or campus data at hearings provides a means for these units to make their cases before state-level agencies on the merits of their individual circumstances. However, it also provides state agencies with data that can allow substitution of their judgments

for those of campus officials. Politicians can use disaggregated data to award funds on the basis of noneducational and regional benefits or personal self-interest rather than on the basis of educational merit. A focus on campus data can also have the effect of substituting governmental and local campus judgments for those of the multicampus systems and the state higher education agencies. A campus can use executive and legislative possession of its data to "go around" multicampus systems and the state higher education agency officials. Similarly, these branches with detailed data can bypass intermediate levels and go directly to the campuses.

Length of hearings. The length of hearings varied greatly between states and over time within the same state. Generally, a hearing took up to a half-day. The legislative hearings were generally the most detailed and time-consuming. The total time spent on all of higher education legislative budget hearings exceeded six days in six of the 17 states (Glenny et al., 1975). More significant, perhaps, is the total number of hearings that the institutions have to attend. As shown in Table 27, the number of hearings in the states ranged from two to six.

The Impact of Revenue Constraints on Review of Budgets

The limitation that revenue estimates place on budget allocations is the most significant factor affecting the state higher education budget review process. At least 35 states have specific constitutional provisions prohibiting deficit spending. In five other states constitutional provisions limit the size of deficits. One state constitution requires a budget surplus in any year that follows a deficit budget, and four have statutory provisions requiring the presentation and enactment of a balanced budget. Only four states can legally enact budgets that project a significant deficit (Joint Economic Committee, 1975). As a result of these limits, the overriding concern of the budget review process is reduction of amounts requested by agencies to produce a balanced budget.

The states are under a great deal of pressure to appropriate all of their revenues. State treasuries' balances are the target of various interest groups; and there is virtually an unlimited demand for worthy uses of state revenues. New problems are always demanding attention and qualitative improvements can be made in existing programs that will marginally increase the public welfare. Given these circumstances, the major control on state appropriations is not state plans and policy objectives but the amount of revenue that can be raised. Operational priorities are largely set during the budget process, not the planning process. Public preferences for allocations between private and public purposes and among public programs over the longer term establish major priorities. Plans establish common assumptions, evaluative criteria, and common expectations, but short-term operational decisions get made in a context of revenue constraints. Consequently, a distinction can be drawn between budgeting and planning that too frequently has eluded those seeking to marry the two processes. Budgeting is program-contraction driven, seeking reasons to justify reducing demands to fit revenue limitations. During budgeting, specific detailed decisions have to be made about funds needed to carry out a multitude of purposes. Planning, in contrast, is program-expansion driven, seeking a rationale for providing more and better services, requiring more resources. Too much detail in plans is unrealistic; powers to predict are limited and consensus frequently cannot be achieved when dealing with specifics without revenue and time constraints to force choices.

This divergence between the requirements of budgeting and those of planning adversely affects efforts to coordinate these activities at the state level. The relationships between planning and budget review staffs are often uneasy. A good deal has been written about integrating planning and budgeting but no ideal solutions seem to have evolved. Wildavsky (1973) notes:

Thus planners are the natural allies of large spending departments, whose projects they believe desirable to promote economic

growth. For this same reason, planners are also the natural enemies of financial controllers, who wish to place limits on expenditure and to preserve their authority to do so by maintaining their right to approve allocations within the total.

(p. 94)

The essence of planning is establishing stable commitments of resources to accomplish specific ends. However, changing revenue prospects and shifting political priorities create the need for flexibility in allocation of resources. The long-term, coherent program objectives of the planners conflict with the short-term constraints and political demands placed on budgeters. In this conflict planners are accused of utopianism and budgeters with making decisions that lack coherence and consistency.

The effect of revenue ceilings can be seen in enrollment estimating. Enrollment projections are the most significant factor influencing the amount requested for higher education. During the budget process agreement is reached, or a legislative decision is made, on how much will be appropriated based on enrollment estimates. Should these estimates prove too high after appropriations have been enacted, the state frequently does not permit the "excess" funds to be spent, or funds are withheld the following year to compensate for the previous year's lower enrollment. However, when enrollments turn out to be larger than anticipated, states rarely provide the funds required to support the added students. The principles that supported the original budget allocations typically are breached to avoid exceeding spending limitations. Revenue limits triumph over the principles a planner would promote: maintenance of policy consistency.

Small changes in either revenue or enrollment projections can have a significant impact on the size of the higher education budget. Since both revenue and enrollment projections are at best informed estimates, there is normally some conflict between the agencies producing the projections and those whose interests are affected. A governor who wants to increase higher education budgets

is likely to prefer an optimistic interpretation of revenue and enrollment prospects. A governor who wishes to contain higher education is more likely to want a conservative interpretation of these projections. Consequently, budget officials are likely to be critical of projections that conflict with executive aspirations. Legislators have similar interests. In many states both revenue and enrollment projections are prepared by two or more state agencies. This leads to problems in achieving interagency consensus, particularly when the legislature is controlled by one party and the executive by another. In states that had single professional state-level staffs producing each of these estimates, whose competence was generally accepted, less time seemed to be wasted in fruitless debates sometimes concerned more with political interests than accuracy.

State Agency Discretion to Allocate Funds for Higher Education

A large portion of state revenues are allocated on the basis of formulas established by law. For example, typically elementary and secondary schools receive state monies on the basis of average daily attendance at each school or school system. Welfare recipients are entitled to amounts established by law for all who qualify. Other state funds are allocated to meet federal matching requirements. Of the money that remains after the states have met all of these "uncontrollable" budgetary requirements, the largest amount is devoted to higher education. With the exception of two-year colleges in some states and statutory formulas providing funds to independent institutions in others, the monies provided to higher education can be allocated, at least in theory, at the discretion of those reviewing institutional budgets.

In some states formulas have been developed and adopted by legislative mandate or by policy decisions that allocate funds among institutions. However, in none of the 17 states did these formulas guarantee higher education a particular sum. The formulas were either developed with a realistic eye on the amount of funds

available, as in Texas, or the states appropriated some percentage of the formula-generated amount, as in Washington. Given the requirement that states must balance their budgets, they are not likely to give up their ability to control higher education budgets by enacting inflexible statutory formulas.

This discretionary nature of the funds allocated to higher education results in its budgets being among the last considered during reviews. The higher education budget often takes up the slack between state revenues and competing demands. States generally try to prorate budget reductions across various programs, for the concept of equity is very powerful; but discretionary higher education appropriations are particularly susceptible to budget cuts.

When cuts are required to meet revenue constraints the resulting decisions can be justified on technical or political grounds, or both. Technical justifications contain such assertions as: Institutions could not spend a bigger increase efficiently; there are not enough facilities to house projected enrollments; or enrollment estimates are likely to be lower than originally expected because new assumptions appear more realistic. Political justifications contain statements such as: The program does not meet state priorities; educational quality will not unacceptably deteriorate with a small increase in student-faculty ratios; or enrollment ceilings are justified because those potentially excluded are not likely to do well enough in higher education to profit from the experience. An important distinction between such decisions made during budget review and similar decisions made during planning is that budget ceiling decisions create a need for plausible rationales to guide or, frequently, to explain cuts made to meet constraints; the activities are not eliminated because they are intrinsically undesirable.

Institutions attempt to reduce uncertainty resulting from the discretionary nature of state budgetary allocations in a number of ways. Wisconsin was attempting to

produce multiyear projections of budgetary needs to gain some measure of commitment to policies, if not the specific amounts contained in the projections. Given the political environment, however, governors and legislators are understandably reluctant to make advance commitments or decisions before they are absolutely necessary.

Another approach to reducing uncertainty is gaining acceptance of the concept of "fair shares." This approach, advocated by The Carnegie Commission on Higher Education (1971), involves getting a state to accept a ratio among the percentages of higher education costs borne by the various parties: the students, private donors, the federal government, local governments, and the state. Most states view their appropriations as the amount needed to make up the difference between an acceptable definition of institutional need and the amount institutions can obtain from other sources. This does not motivate institutions to increase their nonstate revenues and in times of fiscal stringency may lead to a declining state share of total institutional revenues since no standard of fair shares is accepted. In recent years there has been a trend in some states--Maryland, for example--to increase tuition to compensate for a lower state proportion of their revenues. Establishing a "fair share" principle helps solve this problem but in difficult times states will probably be strongly tempted to violate such agreements. Formulas are another way to establish standards of state support based on a consensus that one hopes will prove strong enough to withstand temptations resulting from shifting revenue prospects.

THE PROCESS OF STATE-LEVEL AGENCY REVIEW OF BUDGETS

Budget review performs a number of tasks. Consensus must be reached on how to allocate resources in accordance with political realities and technical constraints. These must be identified to determine the feasibility of decisions. Knowledge must be gained of current allocations of resources to determine their legitimacy. Knowledge about the consequences of proposed allocations must be

developed to minimize unintended effects of decisions. How decisions to carry out these functions are made is examined below.

Decision Areas

Budgetary decisions can be made across a number of areas, including the following:

- Budgetary decisions explicitly or implicitly determine the sources of revenues for higher education--the share of the costs borne by students, private donors, institutional enterprises, and different levels of government.
- Budget decisions explicitly or implicitly affect the *distribution of the benefits* of higher education among persons with particular social, economic, ethnic, or geographic backgrounds.
- Budget decisions influence whether the primary recipients of funds are *institutions*, through direct appropriations, or *students*, through grants, loans, and tax reductions for themselves or their parents. A cutback in direct appropriations to institutions forces greater reliance on student tuitions and fees; these sources then bear an increasing proportion of the costs, creating pressure for direct grants, loans, and tax breaks.
- Budget decisions affect the distribution of funds among *missions* (instruction, research, and service), *levels of education* (undergraduate, graduate, and continuing), and *programs* (professional preparation, disciplinary fields, areas of research, and public service enterprises).
- Budget decisions distribute funds among various *functions* performed by institutions by supporting programs such as libraries, student services, health services, central administration, plant maintenance, and many others.

- Budget decisions allocate funds among various objects of expenditure, for example, staff salaries and benefits, travel expenses, supplies and equipment.

- Budget decisions are made on the availability of inputs to higher education such as students, faculty, and goods and services.

- Budget decisions are made on the capacity of institutions to accommodate students and programs.

- Budget decisions are made on the basis of society's demand for graduates, research, and services, and for various fields of study.

This listing is by no means complete and there are complex interrelationships among these classes of decisions in specific situations. The list merely illustrates the complexities of the budget process, and shows why all possible budget decisions in all possible areas are not examined each year. The futility of totally comprehensive or "zero-based" budget reviews is apparent. Aside from the impossibility of total comprehension and analysis of an area as large and complex as higher education, there is little reason to reexamine areas where a high level of consensus exists, where possibilities for making changes are small, or where costs of analysis exceed potential benefits.

Techniques of Analysis

The uses of information and the kinds of analyses employed in the review of budgets were examined thoroughly by Purves and Glenny (1976). One of the most common techniques is the use of comparisons. The comparisons used most frequently were those relating proposed expenditures to expenditures of previous years. Previous expenditures have met tests of equity and legitimacy sufficient for their acceptance; they have the stability of the status quo. The status quo generally had a measure of acceptance even when there were cases of seeming inequity.

Changes proposed to correct inequities rarely were made if one of the parties would lose funds in the process. For a change to be adopted each party generally had to gain something.

Another type of comparison was examination of cost differences among programs, functions, and objects of expenditure in departments, campuses, systems, or states, with the objectives of ascertaining whether other institutions or activities performed comparable tasks at a lower cost and whether there was comparable funding for comparable activities. State higher education agencies had an interest in interstate comparisons but executive budget offices and legislative budget staffs focused more frequently on within-state comparisons. Unit-cost comparisons rarely provided a basis for decisions on specific issues: programs are never completely comparable, accounting systems and information systems employ different definitions and conventions for aggregation of data, and considerable discretion always exists in assigning codes to individual transactions. The primary usefulness of such studies was that they identified areas where costs appeared to be out of line, permitting more selective, detailed examinations. Unit costs were, however, being used as a basis for budget formulas in Tennessee and Florida. Their usefulness rests on whether they more accurately represent costs than formulas based on factors such as level of courses, types of instruction, and student-faculty ratios.

A third type of budget comparison was relating institutional practices to normative standards, which may or may not have a basis in actual experience. A common example noted was state comparisons of institutional management against a theoretical model of an efficient management decisions process. Compared with these ideals, of course, institutions were usually found wanting. It appeared that younger, less experienced budget analysts unfamiliar with higher education and its practices were most likely to use inappropriate normative standards. Many misunderstandings and interagency hostility could be traced to unfair comparisons.

Another analytic technique was the use of ratios such as the number of students per faculty member, the number of maintenance personnel per square foot of building space, and the number of administrators per faculty member. Less direct attempts were made to discover the priority of and real need for items in the budget. On-site examinations sometimes were made of the state of repair of buildings; if the quality of maintenance appeared to be declining that was sometimes taken as evidence that the budget for such activities had been reduced too much. Another technique was to propose cuts in an area and then try to gauge the strength of institutional appeals, which presumably gave analysts a better sense of institutional priorities. As noted in Chapter 7, some states required institutions to list their priorities in budget submissions, but state-level budget analysts generally found these rankings insufficient for their analytical needs.

Budget analysts engaged in workload measurements to some extent, such as requesting breakdowns of the workload of faculty and performance measurements such as the time-to-degree of graduate students or the transfer rate of two-year college students to four-year institutions. No entirely successful attempts were made to relate costs to the outputs of higher education. The problems of output measurement and the related problem of measuring educational productivity have been explored in detail by Wallhaus (1975). The article in his volume by Meisinger, Purves, and Schmidtlein (1975) examined this problem in the light of information gained during the course of this study of state higher education budgeting.

The Bases of Allocations

The different methods of structuring budget decisions provide different bases for making allocative judgments. The incremental approach to budgeting places a great deal of weight on historical costs. The formula approach emphasizes allocation of funds on the

basis of statewide averages. Program budgeting emphasizes the judgments of policymakers. Each of these bases for allocation has strengths and weaknesses. Historical costs may not reflect changes in priorities that have taken place. Using statewide averages leads to ignoring unique characteristics of programs and campuses, and also leads to an "averaging down" effect, since state policymakers tend to think of the least expensive program as the most efficient. Because the program is surviving, it has demonstrated the feasibility of operating at a lower cost. This leads to pressure to reduce the costs of other programs to match those of the least-cost example, and subtle quality factors easily can be ignored. Major universities were particularly apprehensive about state formulas for fear that their higher-cost programs would suffer by comparison. Since neither historical costs or systemwide averages can accurately reflect the actual costs of diverse programs and institutions, a good argument can be made for using some discretion when allocating funds. However, a good deal of dissension occurred in states where institutions did not clearly understand the basis for making allocative decisions. Favoritism was frequently charged and interinstitutional cooperation was hindered by suspicions of unfair practices. It is obvious that a fine balance must be established among historical costs, comparative costs, and informed judgment. An effective allocative process must allow for all three to accurately match budgets with legitimate costs.

Structuring Budgetary Decisions

The lengthy list of decision areas, the intricate interrelationships among them, and the limited amount of time and staff available for reviews means that decisionmaking must be structured to simplify the process of choice. One attempt to do so is the *incremental* method of budgeting. Another is the *formula* method.

The incremental approach separates the budget request into:

- the "base" amount received by the institution the previous year adjusted for annualized program costs and other factors such as salary longevity increments;
- increases needed to maintain the program levels of the previous year given workload increases, inflation, and technological changes; and
- increases for new programs.

This approach leads to focusing analytic attention on budget "increments," the validity of workload data, "uncontrollable" cost increases, and the value of new programs. The virtue of this approach is that it limits areas of analysis to those requiring immediate attention. Institutions are presumed to have reshaped priorities within the base and new programs are presumed to be of lower state priority than those supported in the base-- though this may not always be true because programs develop constituencies that support them after their initial priority has diminished.

Issues in the base, however, frequently do get attention during reviews focused on the increment. The difference is that the examination of the base is less extensive and the likelihood of missing a potential issue is greater. But given time constraints, no system of review can thoroughly identify and analyze all issues. Priorities have to be set as to what areas most need examination and what issues are most important to pursue once they are identified. A further facet of incremental review is its frequent lack of attention to equitable allocations of funds among institutions. Amounts in institutions' budget bases are often not comparable for similar activities.

Formula budgeting, the second approach to budget review, also accommodates time and resource constraints and, in addition, deals more satisfactorily with inter-institutional equity. This approach was explored in depth in this study by Meisinger (1976). A formula

relates some measure--unit costs, workload (student-faculty ratio), or productivity (faculty-credit hours)--to the amounts requested in a budget. Such a funding model structures and simplifies budgetary calculation and creates a common funding policy for all institutions, leading to equity in allocations (Meisinger, 1976). A formula is useful in proportion to its accuracy in reflecting actual costs of institutions. A simple formula does not deal adequately with subtle cost differences among institutions, while too complex a formula is difficult to understand and frustrates review of budgets by those who lack technical familiarity.

All budget review processes focus primarily on a series of policy issues or problems that structure and delimit the scope of reviews. Analysis does not begin with a comprehensive analysis of data that illuminates a set of issues. More commonly, problems or issues are apparent and define the information needed to support solutions that often are already agreed upon. The "garbage can" model of decisionmaking (Cohen, March, & Olsen, 1972) accurately describes the pragmatic approach used when budget examiners grapple with multimillion-dollar budgets in very limited time.

Much has been written in recent years about program budgeting. One weakness in program budget approaches to structuring budget review is their failure to comprehend the constraints of complexity, time, resources, and revenues. Attempts to focus budget reviews on the ends served by programs and to modify outdated programs is admirable. However, such efforts are unproductive when they envision more analysis than is possible because of lack of resources or incapacity to comprehend complexity. The most feasible attempts at program budgeting appeared to be those that structured budget review around relatively few issues, which were analyzed at varying degrees of depth depending on their priority and the constraints on analysis. The results were then used as a partial basis for decisions on amounts to be allocated among various purposes. This approach to structuring the budget process was still largely incremental; most issues

tended to deal with proposed budget increases but these incremental issues received more thorough analysis. However, this method of review resulted in relatively more decisions on issues affecting the base as a result of special studies that usually went beyond the data contained in budget requests.

A number of states, including Washington and Connecticut, were experimenting with highly formalized program budgeting systems aimed at more comprehensive reviews of budgets. These attempts seemed destined to fail because they created an elaborate set of procedures for budget review that cut down on the time available for substantive analysis. Moreover, they did not contain an inherent logic for distinguishing among priority areas. The less procedurally bound process used by Wisconsin showed more promise for expanding and redirecting the review of budgets without time-consuming procedural requirements. The Wisconsin System relied on much analysis taking place prior to submission of formal budget documents.

A final problem was a frequent assumption that more decisions on program ends and priorities could and should be made at the state level. Professionalism assumes that some decisions must be made by those most expert on and familiar with a subject. For example, to a large extent lawyers and doctors regulate their professions. This practice is congruent with the tradition of academic autonomy. Not only are faculties most expert in their fields, but historically an assumption has been made that the state should not interfere in institutional conduct of the pursuit of knowledge and teaching.

Concepts of program budgeting typically assume that central decisionmakers have comprehensive knowledge, disregarding the tenets of professionalism and institutional autonomy. These concepts, furthermore, run contrary to the realities that confront decisionmakers, as described by Hunt (1968). More thinking must be done about appropriate organizational levels for making various

decisions before elaborate program budgeting systems can be accepted by higher education. More understanding is also needed of the constraints on comprehensive, centralized decision systems before most state policymakers can design workable program budgeting concepts.

CONCLUSIONS

The concepts of comprehensiveness and end-oriented budget review do not appear to be feasible in the forms often advocated and promoted by budget process reformers. There are obvious benefits to be gained from reviewing higher education budgets more thoroughly and being more concerned about the ends of higher education. These values, however, have to be worked out in the context of the need to set priorities for review of areas and issues, the lack of social consensus on the ends of higher education, and the need to define the proper levels for making detailed programmatic decisions. On the whole, the formula approach appears to have the most promise for budgeting for higher education if supplemented by in-depth studies of specific issues and if cost assumptions contained in the formulas are tested from time to time. Formulas should not be applied so rigidly that unusual costs are not recognized.

Furthermore, a distinction should be drawn between the pricing function of a formula and the need for costing higher education as a basis for the formula. No formula that is simple enough to permit effective budgetary review reflects actual costs closely enough for it to be used to measure institutional compliance with the intentions of legislatures. Averaging of costs cannot allow for the many cases that deviate from the norm, nor does it reflect the many changes that take place during the time--often more than a year and a half--between budget formulation and budget administration. Periodic cost studies and performance evaluations, preferably by state higher education agencies, appear to be more productive and less costly ways for legislatures to discover deviations from their budgetary intent.

The budget review process of agencies should be timed so that recommendations of the state higher education agency are available to the executive budget office before it has begun to firm up its own recommendations. Similarly, the legislature should have the recommendations of the governor before reaching firm conclusions. The two houses of the legislature should use the same set of budget recommendations on which to base their analyses, to lessen problems of reconciliation when they finally have to agree on specific amounts. Institutional officials should know who makes what kinds of decisions in the state agencies and when appeals can be effectively made.

A balance must be obtained between the size of the core of data that is regularly available to budget analysts and the ad hoc data that will be collected in response to particular issues. Data collected regularly is expensive to obtain and store and must be used regularly to justify its costs. Ad hoc data, on the other hand, does not permit longitudinal analyses of trends. A stable structure for making budget reviews, with established rules, helps define data needs and decreases expensive changes in collection systems. (The lack of a structure for budgeting, such as a formula, was likened to "playing tennis without a net" by one state higher education executive officer.) There was some indication in the 17 states that too much data was collected on a regular basis that was not used by budget analysts.

In many states the burden on higher education officials could be reduced by holding joint rather than individual agency hearings. Joint hearings would also have the virtue that all officials would hear the same comments. There would be less opportunity for institutions to play one agency off against another by placing different emphases on different aspects of their budgets.

The conflicts between planning and budgeting need to be more widely recognized and understood. Planning is a valuable means to crystalize decisions on program goals and help build consensus on policies. However, it is not immediately constrained by resource limitations.

Therefore, plans are always modified to some degree by budget staffs as they seek consensus on specific fund allocations. Policies that in theory appear attractive often run aground when confronted with technical and political constraints.

A mix of allocative techniques are required during reviews of budgets that reconcile analyses of historical costs, comparative costs, and normative costs. Some discretion is needed in tailoring budget allocations to new programs that lack historical or comparative cost data. Care should be taken to avoid using standards for judging fund allocations that are unrealistic in terms of the experience of comparable programs or organizations.

State budget agencies, caught up in conflict over preferences, frequently use technical analyses to resolve budgetary differences in an attempt to determine objectively appropriate amounts of money for higher education. The search continues for the ultimate budget analysis system. However, if one accepts a democratic theory of choice, there are no standards or criteria for judging the value of educational services beyond those held by individuals. There is no empirical basis for maintaining that one person's preferences are better than another's. In a democratic society, conflicts are settled by bargaining in the political arena. This bargaining is influenced by analyses of the constraints on producing services and the anticipated outputs of a given service. However, even technical considerations are often misused to gain political objectives. Greater awareness of the limits of technical analysis as a means to reduce the controversy in budget decisions will not make the life of a budget analyst any easier, but he will at least appreciate better the circumstances affecting his function and be spared unrealistic expectations.

9.

Future Trends in State Higher Education Budgeting

To complain of the age we live in, to murmur at the present possessors of power, to lament the past, to conceive extravagant hopes of the future are the common dispositions of the greatest part of mankind.
(Burke, 1953, p. 101)

Yet is one good forwit worth two afterwits.
(Heywood, 1942, p. 416)

The process of budgeting for higher education is affected by a complex web of social, economic, and organizational factors. These factors will affect amounts budgeted as well as processes of budgeting in the future. During the next few years, higher education appears likely to continue to lose its recent high social priority, making it more vulnerable to criticism. This will result both from its success in educating a large portion of the population and from its current inability to define a clear role and mission serving a central national concern.

SOCIAL AND ECONOMIC TRENDS AFFECTING BUDGET PROSPECTS

The proportion of people attending institutions of higher education increased dramatically until recently. As a result, more persons are familiar with colleges,

causing institutions to lose some of their mystique and become more vulnerable to the type of criticism that has been leveled at elementary and secondary schools. Furthermore, a degree no longer assures the same possibilities for upward social mobility as in the past. The gap between the salaries of college graduates and those without a degree is rapidly narrowing. The growing familiarity of the public--including legislators--with higher education, together with its diminished role as a conveyor of social status, will no doubt adversely affect its competition with other state programs for public dollars.

Historically, higher education not only conferred status, but also was viewed as the primary agent promoting social mobility; it was a significant component of the American "melting pot" and a major means for achieving the goals of a democratic society. The successes of the 1960's civil rights initiatives have focused attention on ethnic differences. Concerns about the preservation of ethnic customs and traditions have weakened earlier notions of an ethnically blind American society. Consequently, higher education's role in blurring "old world" distinctions has given way to the promotion of cultural diversity and consequent confusion over its purposes.

During the war years and "cold war" period, higher education, both in providing highly trained manpower and in providing research, had a clear mission that helped it attract public monies. Public disenchantment with the military resulting from the Viet Nam war--the failure of a large technically advanced nation to defeat a small nation of peasants--has called the supremacy of technology into question. Reductions have been made in the federal commitment to research, and this fiscal restraint is likely to continue until a new threat or a major political initiative, like the space program, develops.

During the 1960s, higher education was seen as a means to solve problems such as poverty, crime, and structural unemployment. Money was channeled into social research and innovative projects, much of it going to institutions of higher education and professors. These

programs did not achieve the high hopes of their proponents, and their failure reduced confidence in higher education.

Finally, the rapid decline in birth rates and a leveling in recent years in the percentage of high school students going directly on to college undoubtedly will have a major effect on institutions and programs that traditionally have relied on this age group for enrollments. The decline in the number of full-time residential students will simultaneously reduce state appropriations and leave some institutions with expensive, excess facilities.

The changing social functions of higher education, its failure to be seen as a major instrument for progress in a highly visible major national mission, and declining birthrates seem likely to continue to erode budget prospects in the foreseeable future.

The rising costs of energy and other natural resources are limiting the percent of national income available for the service sector of our economy which includes higher education. The rising cost of resources has been accompanied by economic stagnation and inflation, further restraining revenues for higher education. Tax increase measures have been more difficult to pass as the growth of disposable income has slowed.

This situation is certain to have a depressing effect on a legislature's willingness to maintain and increase current levels of support for higher education. Higher education, in fact, will be particularly susceptible to reductions because it is not funded by statutory formulas except for two year institutions in some states. Many other state programs are funded by formulas established by law; elementary/secondary education and welfare are two major examples. Additionally, other mandatory state costs are increasing rapidly, such as public employee retirement programs. In this increasingly competitive atmosphere, higher education appropriations comprise the largest single block of "discretionary funds" in most state budgets, and governmental budget agencies are

tempted to use them to adjust differences between revenue levels and budget demands. Thus, even with a higher degree of state commitment to higher education, its funds will remain highly vulnerable.

The recent shifts toward supporting students directly through loans and scholarships will further reduce monies otherwise available for direct support of institutions' operating costs. This shift will require institutions to raise tuition to offset losses of direct operating state aid. These tuition increases are likely to reduce enrollments, further eroding direct aid; tuition income may be more than offset by subsequent decreases in enrollment-generated state appropriations for operating expenses.

The foregoing social and economic factors paint a rather bleak prospect for higher education's future expansion. There are, however, other factors that may mitigate the effects of these trends.

The demand for highly qualified persons will likely increase as our society grows more complex and automation and technology advance. There will be a greater need for persons with the broad understanding, knowledge, and skills obtainable through higher education. The employment opportunities available may not match the expectations of college graduates, but the qualifications required for positions will continue to increase as more highly trained people become available. More and more jobs will require a college degree because of the expansion of technical fields and increasing qualifications required for existing positions. The costs of providing higher education for a larger proportion of the population will be controversial, but students will continue to seek more education to increase their competitive position in the job market as long as education is affordable. Furthermore, a major national commitment to a goal such as developing new sources of energy would provide a stimulus to higher education. Interest in the benefits of a liberal education could increase in reaction to current emphasis on vocational specialization with a growth in enrollments in the humanities. The increasing participation of adults in postsecondary programs and

the growing number of adults as a result of the postwar baby boom will provide new sources of students. The increasing demand for in-service and midcareer training will stimulate adult enrollments. However, these adults will not go to the same institutions and take the same courses as those taken by recent high school graduates. Therefore, their growing participation will have different consequences for various kinds of institutions. Furthermore, the basic economic situation is always subject to change.

ORGANIZATIONAL TRENDS

In recent years concepts of bureaucratic organization have gained acceptance in state government in comparison to earlier notions of governmental checks and balances and traditions of local autonomy. A greater interest in concepts of functional specialization, planning, and program coordination has resulted in strengthening state higher education agencies and increasing executive and legislative oversight of higher education. The basic factors that influenced this move toward more detailed state-level review of higher education budgets seem likely to continue (Meisinger, Purves, & Schmidlein, 1975). However, this trend is likely to be moderated by increasing appreciation of the political implications of bureaucratic organizational designs and the limitations and effects of centralizing and compartmentalizing budget decision processes.

TRENDS IN THE DESIGN OF BUDGET STRUCTURES AND PROCESSES

The process of budgeting will continue to evolve in response to changing conditions affecting higher education. However, theories of budgeting will remain weak because of the complex interplay between countless variables. Generalizations about budget practices will remain dangerous because the processes of decisionmaking have to be tailored to the unique circumstances found in

each state. Politicians should remain wary of new fads and nostrums promoted to improve the budget process; there are no easy ways to simplify and improve such a complex process. Effective changes occur only as a result of well thought out incremental variations that are tested in practice, not because of major departures from past practice. A great deal of wisdom is incorporated in existing practices even though some of it is based on historical factors that no longer hold true; current practices should not be dismissed too lightly.

Some changes in budgeting, however, do seem to be indicated by current trends. Concepts of budgeting are becoming more sophisticated, state studies of higher education policies and practices are likely to expand, and justifications for budget increases will no longer rely as heavily on enrollment increases and will incorporate concepts of marginal costs.

Budget Process Design

Budget processes must be designed to provide consistent data on areas of policy concern in a format that permits easy comprehension. Data that are too complex, or that pertain to areas not meriting priority attention, impede effective decisionmaking. Recent concepts such as Program Planning and Budgeting Systems (PPBS), and Zero-Based Budgeting have ignored limitations on time and comprehension affecting budget reviews. A process that attempts to deal with the near infinite number of potential budget issues, failing to distinguish between their priorities, is bound to be ineffective.

Traditional incremental budget processes solve the problems of priority and complexity by focusing primarily on budget increases. In contrast, formula budgeting focuses analyses on areas where costs diverge from formula-calculated expectations. Both of these approaches to budgeting can be supplemented by specific studies of priority areas, recently termed performance audits in many states.

Of these two approaches, the formula concept appears most likely to gain in popularity. The primary advantage of formula budgeting is its potential for identifying areas in the budget "base" for attention at a time when budget increases in one area may be linked to decreases in other areas. A second advantage of formula budgeting is its more "objective," or at least visible, method for allocation of funds at a time when institutions will have to compete harder to maintain enrollments and will be increasingly sensitive to presumed budgetary injustices.

Productivity Improvement

The impact of state-level budgetary actions on institutional productivity is much more limited than is popularly supposed. Budgetary actions can increase student/faculty ratios and similar cost/output ratios. However, there is no way of knowing whether these changes are more than offset by losses in quality. Budgetary actions can more demonstratively decrease productivity. Restrictions placed on use of institutional resources can result in inefficient allocations. However, the major "inefficiencies" in higher education result from political pressures to maintain institutions and programs that, from a professional perspective, are of low priority or dubious quality or from pressures to create unnecessary new programs, facilities, or institutions. Such decisions are typically beyond the influence of budget staffs.

There is likely to be a growing sensitivity toward problems of productivity improvement and a recognition that major increases will have to result primarily from difficult political decisions. Other avenues for improvement will be unscheduled breakthroughs in new knowledge and new products from research, development, and innovation.

Cost Analysis for Budgeting

Budgets are rarely able to reflect the real costs of activities and detailed plans of operation. Real costs are difficult and expensive to determine. The complexities of separating marginal costs from average costs and allocating the costs of activities that have joint products result in the use of conventions to simplify budget estimating. These conventions make it difficult to trace a clear, simple link to costs.

Plans of operation can rarely be specified far enough in advance to serve as precise guides for budgeting. Such detailed planning is very expensive for activities that often are not funded. Furthermore, circumstances change rapidly because of unforeseen problems and opportunities. These costing problems are becoming clearer to budget staffs, and a more sophisticated distinction is developing between the "pricing" role of a budget in contrast to the "costing" needed for internal management control and for developing a basis for budgetary "prices."

Use of Output Measures

There is considerable hope that the outputs of higher education can be identified and measured, thus giving greater precision to debates over the virtues of various patterns of budgetary allocations.

The benefits of higher education have been debated for as long as formal educational programs have existed with little visible growth in agreement. They are many and subtle, and often they can be identified only in retrospect. Individuals differ in how they value various educational achievements. For example, the liberalizing effects of higher education most prized by many academics are often detested by parents who see their children questioning and abandoning traditional family values.

Too much emphasis on output measurement leads to the selection of performance indicators that are easily measured rather than those that are more important.

Furthermore, it can lead to polarizing attitudes and to conflict that might be avoided if outputs, which are uncertain in any case, are left more ambiguous. People obviously wish to know what they can expect from higher education, but spurious attempts at precision will only lead to overexpectations about higher education's ability to specify results in areas where it cannot gain agreement nor measure achievements.

Current research on the use of output measures in higher education budgeting is likely to increase the sensitivity of policymakers to limitations affecting their use. These studies may also encourage institutions and the higher education community to be more modest in their assertions to avoid generating expectations for accomplishments that cannot be fulfilled.

State-Level Studies of Higher Education

The rapid increase in state agency studies of higher education programs and processes is likely to continue. These studies permit an in-depth examination of a limited area of policy and budgetary interest. Specific, in-depth analyses are a far more feasible approach to the policy objectives of state government than are comprehensive PPBS and Zero-Based Budget systems. Policy studies can be conducted most effectively by competent state higher education agencies. If these agencies do not initiate such studies, legislatures and executive agencies are certain to fill the void to satisfy their concerns. The staffs established to conduct policy studies may become a significant source of employment for highly trained researchers who, in earlier times, might have obtained faculty positions.

The growing sophistication of state-level analytic staffs and political officials will slowly dispel the prevalent misconception that more and better data, by itself, will improve decisionmaking. This misconception has led to attempts to create overly complex "comprehensive" information systems that are not cost effective and have led to a misunderstanding of the value-laden,

political nature of most budget decisions. Increased information, in some cases, can make decisions more difficult because a broader range of values and effects are apparent and more variables are visible to contend with. Because of the complexity of data related to budgetary decisions, major decisions will continue to have to be made to some degree on the basis of philosophical dispositions, degrees of confidence in lower-level decision-makers, and personal relationships.

Justification of Budget Increases

Enrollment growth will no longer serve as a basis for budget increases for many institutions beginning in the 1980s. Increased funding will depend on development of programs to meet urgent new priorities and on careful justification of qualitative improvements. Furthermore, new initiatives often will depend on evidence of reallocations of funds from areas of lesser priority. Institutions will more and more need to indicate the nature and extent of their internal reallocations in order to build the confidence in their stewardship that will be necessary to obtain additional funds.

Currently, when enrollment declines take place, institutions often lose state support on the basis of average, rather than marginal costs. Decreases in marginal costs as a result of enrollment declines generally are less than decreases in average costs. Fixed plant and operating expenses do not decline in concert with lower enrollments, and there are unavoidable time lags in making faculty and staff reductions. Institutions, to avoid injurious reductions in appropriations, will have to develop budget justifications based on marginal cost analysis. New budget formulas based on marginal changes in budget requirements will need to be developed.

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Appendix A
Taxonomy of Budget Process Dimensions

A. Structural/Functional Dimensions

1. State agency structure
 - a. Statewide structure
 - b. Internal agency structure
2. Institutional structure
 - a. Statewide structure
 - b. Internal campus structure
3. State agency functions
 - a. Authority for functions
 - b. Intra-agency functions
 - c. Interagency functions
4. Institutional functions
 - a. Systems functions
 - b. Campus functions
5. Interorganizational relationships

B. Budget Unit Resource Dimensions

1. Staff characteristics

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2. Agency budget
3. Information available
4. Authority, prestige, legitimacy, and influence
5. Technology employed in accomplishing tasks

C. Budget Process Environment Dimensions

1. State, economic, demographic, political, and social trends
 - a. Enrollment forecasting
 - b. Revenue forecasting
2. State traditions
3. Statewide plans
4. Budget process concept
 - a. Formula budgeting
 - (1) Formula generated amounts are indicative
 - (2) Formula generated amounts are mandatory
 - b. Program budgeting
 - c. Zero-based budgeting
 - d. Base/increment or decrement budgeting
 - e. Performance budgeting
 - f. Object class budgeting
 - g. Functional budgeting
5. Time available for budget review
6. Information available
 - a. Trend data
 - b. Comparative data
 - c. Norm referenced data
 - d. Output data
 - e. Input data
 - f. Process data
7. Contingency and supplemental budgets

D. Pre-submission Phase Dimensions

1. Interagency contacts
 - a. Budget instructions
 - b. Staff visits
 - c. Meetings and hearings
 - d. Studies and audits
 - e. Exchange of internal communications
 - f. Budget preview documents
2. The institutional request
 - a. Annual or biennial
 - b. Content
 - c. Format

E. State-Level Agency Budget Review Dimensions

1. Agencies and their structure and staffs
 - a. State higher education agencies
 - b. Executive budget offices
 - c. Legislative budget staffs
 - d. Other state-level agencies
2. Sources of data
3. Areas of review
 - a. Accuracy
 - b. Compliance with instructions and intent
 - c. Type of activity
 - (1) Continuing programs
 - (2) Workload changes
 - (3) New programs
 - (4) Cost estimates
 - d. Efficiency considerations
 - (1) Input mix appropriateness
 - (2) Process and technology effectiveness
 - (3) Relation of inputs to outputs
 - e. Allocations of funds among:
 - (1) Objects of expenditure
 - (2) Programs
 - (3) Functions
 - (4) Organizations
 - (5) Student populations
 - f. Sources of revenues and uses of each source

4. Review techniques
 - a. Use of performance criteria
 - (1) Norms set for activities
 - (2) Comparative standards
 - (3) Reputation
 - (4) Ad hoc examples
 - b. Measures of performance
 - (1) Unit costs
 - (2) Ratios
 - (3) Productivity indices
 - c. Computational tools
 - (1) Tabulation
 - (2) Statistical analyses
 - (3) Simulation models
 - d. Definition of issues
 - (1) Compilation of issues, lists
 - (2) Establishment of priorities
 - (3) Discrepancies between revenues and requests
 - (4) Analysis of external criticisms
5. Types of Decisions
 - a. Political judgments
 - b. Professional/technical judgments
6. Uses of budgets as tools for change and political purposes
 - a. Symbolic uses
 - (1) Signal policy changes
 - (2) Express political philosophy
 - (3) Enhance organizational self interests
 - b. Cuts and increases as signals of state policy priorities
 - c. Alteration of budgetary incentives to change policies and practices
7. Sources of information
 - a. Budget requests
 - b. Hearings
 - c. Reports
 - d. Studies
 - e. Friends
 - f. Press
 - g. Information systems

8. Staff budget recommendations
 9. Political officials' action on staff recommendations
 10. Reports and language for budget bill
- F. Governor's Budget Dimensions
1. Annual or biennial request
 - a. Content
 - b. Format
 - c. Concept
 2. Supplemental requests
- G. Appropriation Process Dimensions
1. Committee structure
 2. Sources of data
 3. Areas of review
 4. Review techniques
 5. Types of decisions
 6. Uses of budgets for policy and political purposes
 7. Sources of information
 8. Staff recommendations
 9. Committee actions
 10. Bills and reports
- H. Appropriation-Act and Veto Dimensions
1. Annual or biennial
 - a. Content
 - b. Format
 - c. Concept
 2. Supplemental
 3. Veto
 - a. Line-item deletion
 - b. Reduction of amounts
 - c. Void entire bill

Appendix B

Extent of Budgetary Authority of State Higher Education Agencies

State and agency	No re-view of budg-ets	Agency has statutory responsibility for budget review & recommendations					Agency has responsibility for budget review & recommendations as policy					
		Review indiv. instit. budgets	Review & rec-ommend	Recom-mend consol. budget	If yes for:		Review indiv. instit. budgets	Review & rec-ommend	Recom-mend consol. budget	If yes for:		
					Pub. sen.	Pub. jun.				Pub. sen.	Pub. jun.	
Alabama												
Commission on Higher Education		x		x	x	x						
Alaska												
Board of Regents, University of Alaska				x	x	x						
Commission on Postsecondary Education			x		x	x						
Arizona												
Board of Regents				x	x							
Arkansas												
Department of Higher Education		x		x	x	x						
California												
Postsecondary Education Commission		x	x		x	x						
Colorado												
Commission on Higher Education		x	x	x	x	x						
Connecticut												
Commission for Higher Education		x	x	x	x	x						
Delaware												
Postsecondary Education Commission	No SHEA											
Florida												
State Board of Education		x	x	x	x	x						
Board of Regents		x		x	x							
Community Colleges		x		x		x						
Georgia												
Board of Regents, University System		x		x	x	x						

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APPENDIX B (continued)

State and agency	No review of budgets	Agency has statutory responsibility for budget review & recommendations					Agency has responsibility for budget review & recommendations as policy					
		Review indiv. instit. budgets	Review & recommend	Recommend consol. budget	If yes for:		Review indiv. instit. budgets	Review & recommend	Recommend consol. budget	If yes for:		
					Pub. sen.	Pub. jun.				Pub. sen.	Pub. jun.	
Hawaii Board of Regents, University of Hawaii		x		x	x	x						
Idaho Board of Education		x		x	x		x	x				x
Illinois Board of Higher Education		x		x	x	x						
Indiana Commission for Higher Education		x	x		x	x						
Iowa State Board of Regents		x	(a)	x	x	(a)						
Kansas State Board of Regents		x		x	x							
Kentucky Council on Public Higher Education		x		x	x	x						
Louisiana Board of Regents		x		x	x	x						
Maine Board of Trustees, University of Maine		(b)		(b)	x	x	x		x	x	x	x
Maryland Council for Higher Education			x		x	x						
Massachusetts Board of Higher Education		x		x	x	x						
Michigan State Board of Education							x			x	x	x

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APPENDIX B (continued)

State and agency	No review of budgets	Agency has statutory responsibility for budget review & recommendations					Agency has responsibility for budget review & recommendations as policy					
		Review indiv. instit. budgets	Review & recommend	Recommend consol. budget	If yes, for:		Review indiv. instit. budgets	Review & recommend	Recommend consol. budget	If yes for:		
					Pub. sen.	Pub. jun.				Pub. sen.	Pub. jun.	
Minnesota Higher Education Coordinating Commission			X			X	X					
Mississippi Board of Trustees, Institutions of Higher Learning		X		X		X						
Missouri Department of Higher Education		X	X			X	X					
Montana Board of Regents of Higher Education		X	X	X		X	X					
Nebraska Coordinating Council for Postsecondary Education	No SHEA											
Nevada Board of Regents, University of Nevada System		X		X		X	X					
New Hampshire Postsecondary Education Commission	X											
New Jersey Board of Higher Education		X		X		X	X					
New Mexico Board of Educational Finance		X	X			X	X					
New York Board of Regents, University of the State of New York	X											

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APPENDIX B (continued)

State and agency	No review of budgets	Agency has statutory responsibility for budget review & recommendations					Agency has responsibility for budget review & recommendations as policy					
		Review indiv. instit. budgets	Review & recommend	Recommend consol. budget	If yes for:		Review indiv. instit. budgets	Review & recommend	Recommend consol. budget	If yes for:		
					Pub. sen.	Pub. jun.				Pub. sen.	Pub. jun.	
North Carolina Board of Governors, University of North Carolina				x		x						
North Dakota Board of Higher Education		x		x		x	x					
Ohio Board of Regents		x		x		x	(c)					
Oklahoma State Regents for Higher Education		x		x		x	x					
Oregon Educational Coordinating Council	x											
Pennsylvania State Department of Education		x	x			x	x					
Rhode Island Board of Regents for Education				x		x	x					
South Carolina Commission on Higher Education		x	x	x		x						
South Dakota Board of Regents		x		x		x	(d)					
Tennessee Higher Education Commission		x	x			x	x	x	x		x	x
Texas Coordinating Board, Texas College & University System		(e)				x	x					

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APPENDIX B (continued)

State and agency	No review of budgets	Agency has statutory responsibility for budget review & recommendations					Agency has responsibility for budget review & recommendations as policy				
		Review indiv. instit. budgets	Review & recommend	Recommend consol. budget	If yes for:		Review indiv. instit. budgets	Review & recommend	Recommend consol. budget	If yes for:	
					Pub. sen.	Pub. jun.				Pub. sen.	Pub. jun.
Utah State Board of Regents		x	x	x	x	x					
Vermont Higher Education Planning Commission	No SHEA										
Virginia State Council of Higher Education		x	x			x					
Washington Council on Higher Education		x	x			x	x				
West Virginia Board of Regents		x		x		x	x				
Wisconsin Board of Regents, University of Wisconsin System		x		x		x	(f)				
Wyoming Higher Education Council							x	x		x	x
District of Columbia Commission on Postsecondary Education	x										
Total	7	38	17	37	44	35	4	4	1	4	5

Source: Education Commission of the States, 1975, 308-316.

- a) The Regents, jointly with the State Board of Public Instruction, approve the area schools and community colleges for them to receive state aid; the Board also plays a small role in reviewing and recommending their budgets.
- b) This responsibility is inherent in the statute, but is not so stated.
- c) State junior colleges.
- d) No public junior colleges in South Dakota.
- e) Devises and designates formulas for governor and legislative budget board to make appropriation recommendations.
- f) University centers.

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