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Program Budgeting and Its Application to Higher Education

Jay D. Myster

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PROGRAM BUDGETING AND ITS APPLICATION
TO HIGHER EDUCATION

An Independent Study

Presented to

Mr. C. J. Whalen

University of North Dakota

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

by

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CHAPTER ONE

INTRODUCTION

PROGRAM BUDGETING AND ITS APPLICATION TO HIGHER EDUCATION

The budget rises to meet many demands and expectations. It is the core of any administration and the foundation for many decisions. It is important, then, that the budget be designed in such a way as to make optimal use of the planning and decision making information that it contains. The characteristics of a useful budget structure are outlined as follows:¹

Characteristics of a Useful Budget Structure

1. The budget design should facilitate meaningful measurement of the total money costs of accomplishing defined objectives.
2. The budget structure should facilitate the comparison of alternative ways to accomplish a given objective.
3. The budget presentation should clearly identify the future cost implications inherent in near-term financial commitments.
4. The budget design should facilitate comparison of cost inputs and achievement outputs when related segments of a single program are administered by different management units.
5. The budget design should delineate the objectives of discrete spending commitments in such terms that significant cost-effectiveness (cost-utility) analysis can be carried out.

6. The budget design should make it possible to aggregate related expenditures wherever they occur in the government's sprawling administrative structure.
7. A budget that effectively meets the foregoing criteria should go far toward serving another important need--that of generating economic data on governmental inputs to the national and local economy by meaningful activity segments.

The Traditional Line Item Budget

Traditionally, most institutions, governmental agencies, industry, and business have employed a method of budgeting that can be described as a line-item budget. This object of expenditure budget, is composed of classes of all the possible cost items which are grouped according to major character or type of article of expenditure.

Today, however, as with most institutions, change has infiltrated this traditional approach to budgeting. The programmed budget is rapidly replacing the line-item or object of expenditure budget. This new concept in budgeting is being adopted by most agencies throughout the country. Whether on a level of the Federal Government or the level of an academic department at a state university, the program budget is rapidly becoming a fact of life and it is important that it be understood.

Historically the development of program budgeting was recognized and applied as early as 1924 by industry. It was utilized as a part of the wartime control system in 1942, and is used today by a rapidly growing percentage of budget-makers.

Reasons For Change From The Line-Item Budget

There are many reasons for the change from the traditional line-item budget to the programmed budget. One of the reasons is the need for reconsideration or revision of previous practices in budgeting. The fact that programs and activities will transcend many departments will pull existing money and energy (manpower) together and force departments into a practice of conducting activities that are essentially complementary or competitive. At present, even if two or more bureaus or departments are conducting activities which are essentially the same or in competition with one another, these activities are still considered mainly within the limits of the existing bureaus or departments in which they occur and are not considered together as a unit with a unitary source and purpose. This is further complicated by the fact that the name of a department or bureau usually is never sufficient to describe what it actually does. Similarly, the number or type of personnel employed by the department or bureau is not indicative nor an adequate measure of the functions that they perform.

Perhaps what may be considered a second defect of the present budget system is that the traditional budget period of a single year, or even a biennium, is not adequate to show the significance of expenditures whose effects may be spread over many years far into the future. Currently, the present line-item budget, is still mainly concerned with appropriations and expenditures for the succeeding year, and it contains figures only for the year

just completed and estimates for the current year and for the year to which it relates. For these reasons, such a budget is thoroughly inadequate for the assessment of long-term projects or activities contemplated or currently in operation.

Even at its best, a line-item budget falls short of guaranteeing any planning or programming for the accomplishment of concrete objectives in the ensuing fiscal year. Line-item budgets do not offer any clues as to which expenditures are most essential in achieving administrative or legislative objectives when hard choices must be made as to allocation of limited funds. It is no wonder then that legislative bodies sometimes take a "meat ax approach" in curtailing funds across the board. They can scarcely be expected to take any other approach, so unintelligible are the line-item budgets.² Program budgeting, on the other hand, would require top executives and decision-makers to make decisions covering major programs in light of long-range considerations. This program budget process differs considerably from the conventional incremental budget-making process, as the conventional method is generally concerned only with how closely the allowable expenditures for the next year can be held to those of the previous year.

Functions of The Program Budget

Primarily the purpose of the program budget would be to alleviate or ease some of the problems encountered with the use of a line-item budget. A program budget would redesign this basic administrative tool so that the quality and grasp of decision-making

at all levels could be improved (and better understood). Perhaps the single greatest impact of the program budget in operation, and almost certainly the greatest contribution, might be considered as its "...encouragement and support of more rational assessment of ends and means, goals and resources, outputs and inputs."¹

Finally, a programmed budget would facilitate the making of necessary compromises among various objectives. It would make possible a rational choice among alternative courses of action. This is especially true wherein any state government and consequently state institutions of higher education which are limited by availability of resources, a full knowledge of the implications involved in alternative choice would be highly desirable.

Definition of the Program Budget

There appear to be many advantages in the implementation and application of a program budget, however, generally the concept of program budgeting is still misunderstood. Apprehension and rejection usually arise in reaction to an unknown or little understood idea. Part of the purpose of this paper is to attempt to define the concept of program budgeting. By developing an understandable definition of this new budgeting concept, it may have more meaning and consequently more value to those who have only a general idea of what program budgeting entails and the possible benefits that can accrue with its implementation.

The emphasis in a program budget system is a classification of the activities and their costs into meaningful categories. This would suggest a budget organized in terms of categories that are much closer to being true categories than the older categories utilized in the line-item budget. The initial conceptual problem of a program budget, then, is the classification and identification of the major programs and/or group of activities that provide services directed to attainment of the same policy objectives. This problem must be resolved before even a preliminary blueprint of the grand design of a program budget can be achieved. The idea of program budgeting refers to a plan whereby the emphasis is on the performance of an isolated and specified function. Program budgeting is not a new system of budgeting. It can better be defined as a new approach to the same problems of budgeting, an approach that broadens the scope and increases the utility of a budget system.

Probably the most quoted definition of program budgeting is stated in the report of the Hoover Commission. This agency did much to popularize and promote the acceptance of this type of budget to all levels of government as early as 1949. A program budget would analyze the work of institutions, departments, and agencies "...according to their major functions, activities, or projects. It would thus concentrate attention on the work to be done or service to be rendered rather than on things to be acquired such as personal services, contractual services, supplies, materials, and equipment. A performance budget moreover would facilitate

legislative and executive control by clearly showing the scope and magnitude of each governmental activity. It could also show the relationships between the value of work to be done and the cost of the work, a measurement which cannot be made under the present system."³

Another definition states quite concisely that a "...program budget is a proposal of things to be done and their costs, not of things to be bought and their costs."⁴ This definition captures the real meaning of program budgeting. The emphasis is on function and productivity rather than concentrating on percentages of increase in budget requests. It truly places the one requesting on the defensive, for he must not only justify his budget request, but his very existence.

The most comprehensive definition embraces three major elements: structural, analytical, and informational.¹

A. STRUCTURE--The structure of a program budget has several important features. (1) Generally, a program budget is end-product oriented; (2) The program budget is functional rather than a mixture of component programs, installations, equipment, maintenance and operation, research and development, etc.; (3) Meaningful programs should be concerned with specific objectives covering and approximately long period of time; and (4) Programs differ according to levels. Generally, the higher the level at which the budget is examined, the broader the scope of a program unit.

At lower levels in the administrative hierarchy, less comprehensive subprograms are required. The program which concerns the legislator may be one that encompasses all the activities of a single agency. An agency head would normally be thinking in terms of separate programs within his organization; a division head is concerned with smaller units.

B. ANALYTICAL PROCESS.-- The analytical process places emphasis on a systematic examination of alternative courses of action and their implications. Some of the elements of the analytical process are as follows. (1) It examines costs required to pursue a program and to achieve the objectives sought; (2) The analytical process also seeks to measure the benefits, gains or advantages for achieving the objectives by each alternative means chosen for examination; (3) It also employs the concept that requires calculation of all major costs and benefits that make comparisons relevant; (4) The process makes comparisons of alternatives from measurements of a common denominator, which is usually money; (5) It also seeks to explore the important long range implications of alternative decisions. The cost-utility analysis is only one major tool in helping managers choose among alternatives.

C. INFORMATIONAL PROCESS.-- The third principle element is the data system to provide the information needed to accomplish the above two functions. (1) The informational process provides information that will aid in the specification of possible objectives. (2) It also provides data required for choosing among alternatives. This means collection of all pertinent costs to be incurred over a time period spanning the achievement of an

objective; (3) The benefits to be derived from the expenditure can be calculated through this process; and (4) The informational, or data system also provides appropriate progress reporting and control of actual expenditures.

CHAPTER TWO

PROBLEMS WITH IMPLEMENTATION

OF THE PROGRAM BUDGET

The transfer from the presentation of an object of expenditures budget to a program budget raises some unique problems.⁴ The adoption of a program budget will definitely not eliminate the necessity of formulating a parallel set of estimates both by object of expenditure detail and by each program or activity.

The translation from the object of expenditure, or line-item budget into the actual program budget becomes the necessary responsibility of the fiscal staff and line administration of each department. This is essential and must be done before the central budget staff at the institutional and at the state level can perform an adequate review of the presented budget. To facilitate intelligent review, the program budget should be accompanied by projections of programs with approximations of costs for at least the two years following the budget year. Cost estimates for all years should be shown in terms both of obligations and expenditures. Revenue information in the plan would be shown in terms of the total net impact of the proposed programs on the institutions revenue requirements. This information may be shown through a limited number of lump-sum appropriations which are based upon groupings of major programs.⁴ Each of these programs, in turn,

should be sub-classified into their most meaningful elements.

The evolution of the concept of rational decision-making processes will prompt the development of the principle guidelines for a workable program system. In developing these guidelines for a workable system several operational problems will promptly become visible.¹

First, certain broad activity categories that might appear to be rationally grouped for program budgeting purposes may be carried on in more than one governmental or institutional department. Since there may be valid reasons for not disturbing the existing patterns of administrative responsibility in the departments and agencies concerned, it will be necessary to develop a transition format, pinpointing administrative patterns, that will facilitate the delegation of spending authority back to the responsible administrative units. This may not be as simple as it sounds. One should anticipate certain bureaucratic resistance to change. The question of whether a new program budget would be assisted in its operation through a changed bureaucratic structure is an interesting but entirely separate issue, which is not necessarily part of the present discussion.

A second operational problem arises in connection with the program budget's requirement that cost estimates be projected forward for a number of years. In the case of most large new activities the common practice has been to estimate and request funding for only first year costs, with little more than guesses

or vague projections for later time periods. This has been done, of course, not only in the interests of avoiding difficult analysis of future requirements, but also to gain acceptance of proposals with relatively modest entrance expenses. Full exposure of such matters is a significant part of the case for the program budget. Rational choice in allocating scarce resources demands knowledge of more than going-in costs. But the implementation of this requirement will have to cope with the existing lack of experience in the development of such cost projections in addition to the bureaucratic opposition from those who prefer to avoid showing high long-term price tags for their recommended projects.

A third operational problem can be anticipated in the need to bring meaning and reason to the aggregation of program components presently implemented in different organization units.

There are many other limitations, risks, and problems involved in the formulation, implementation and the operation of a program budget. The foregoing recitation was merely illustrative of the problems that may be encountered during the process of changing from a line-item budget to a programmed budget and its implementation and operation. Although the problems are incomplete, they are cited here to give the reader a proper balance of the potential gain, potential effort, and the potential problems.

CHAPTER THREE

HOW TO ALLEVIATE THE PROBLEMS OF THE PROGRAM BUDGET

Thus far the potential difficulties of program budgeting combined with central controls and the different kinds of planning that are appropriate in different situations have been reviewed and briefly discussed. What might be done to avoid or reduce the difficulties and to facilitate the right kind of planning? Several helpful suggestions that might be used in an effort to alleviate the difficulties encountered with the implementation of a program budget are:⁵

A. Accept diversity of arrangements.-- First, we should be well advised to accept a diversity of program budgeting procedures and not aim for a single arrangement that applies uniformly to all governmental program or all components of programs.

B. Link program budgeting with the annual cycle.-- Program budgeting needs to be linked with this cycle, so that decisions in terms of program elements do not conflict with decisions in terms of the appropriations categories, and so that decisions can be, to some extent, decentralized. If program reviews are handled in this way and linked with the annual cycle, then (a) some of the work can be decentralized more effectively, and (b) cuts in terms of the appropriations categories near the end of the cycle will not have to be deep slashes.

C. Try to maintain future flexibility.-- Whenever commitments should be postponed, it would be better not to record tentative decisions in the official programs.

D. Keep 'considerable' decision-making authority in the hands of lower levels.-- The intention would be partly to keep top levels from being overburdened with minor ones, particularly major planning decisions involving interdependencies among departments or bureaus. The intention would be partly to maintain flexibility by making it more simple to reach certain decisions, make substitutions, and implement resources shifts. But the aim would also be to maintain level incentives to seek alternatives, to worry about uncertainties, and to criticize competing proposals.

Successful installation of the program budgeting format is dependent upon completion of three kinds of research activities: (1) Program classification, structural design, and planning matrices; (2) Programming, systems analysis, and budgeting; and (3) Information support, evaluation, and program revision.⁶ The key to resolving recent educational disputes has been largely financial. Focus upon programs would allow teachers, boards of education, administrators, and the general public to seek resources for needed programs, rather than for selfish ends.

CHAPTER FOUR

ADVANTAGES AND MERITS OF THE PROGRAM BUDGET

A great number of merits and advantages can be claimed for program budgeting. Generally speaking, planning-programming-budgeting-systems (PPBS) are intended to facilitate the kinds of information and data analysis which furnish administrators with a more complete basis for rational choice. Neutral on the issues of cost reduction, PPBS is designed to foster economic efficiency. Advantages which it offers over traditional practices include: (1) Program-oriented information; (2) Analysis of possible alternative programs and objectives; (3) Long-range plans and evaluative criteria; (4) Use of contemporary management science concepts to improve utilization of teacher competence; (5) Structural flexibility and participatory planning; and (6) Report of school programs in the school budget document.⁶

Just as the line-budget was an improvement over the 'blanket' or 'lump-sum' appropriation budget, so the program budget is considered to be an improvement over the line-item budget. The justification for changing to a program budget is the expectation of improving performance and encouraging more realistic program planning. Often budgets are constructed with the reasoning that certain cuts can be anticipated. This cut is often then estimated and padded into the budget in anticipation. Planning with a line-item budget is illusory to a great degree.

Estimates in minute detail are made which only give the appearance of careful budgeting and require a minimum of program planning. It would certainly be unrealistic to expect that a billion dollar budget could be estimated to the exact mill.³

It is really playing a guessing game with the citizen-financier so long as they continue merely to show objects of expenditure. In effect, they are saying, "Just guess what we are doing with our new... teachers, lab equipment, research allowances, etc."² Program budgeting, which involves the activity classification of proposed expenditures is designed to remedy this defect by showing the public what services and benefits it (the public) is purchasing. The primary emphasis is on the doing of certain tasks rather than on the buying of certain items with which to do the tasks. Citizens are paying not for so many employees at particular classification grades, so many typewriters, or reams of paper as ends in themselves, but merely as means to achieve certain services or material benefits.² The public, therefore, can be better informed on what its public servants are actually doing or failing to do with the public money. State institutions of higher learning are made more accountable, understandable, and justifiable. Failure to put together budget items to show what they are to produce for the public in material facilities and services can only lead to frustration, misunderstanding, and lack of support by the public for the programs obscured from it (the public) by a forest of meaningless figures.²

Utilizing the program budget method, legislators and other state officials can see how much a certain service, such as a health and welfare program, higher education, and other state responsibilities cost, and then determine whether there is a relationship between the amount of the appropriation and the services rendered by the particular spending units or the programs.

Not only does the legislature hold a department or agency responsible financially, but also for more internal control in allocating and spending money on the various objects of expenditures. In other words, the legislature becomes interested chiefly in what the agency has done and purposes to do, and passes judgment on the scope and over-all performance of activities, leaving more discretion to the agency administrator as to the details. A legislative body is necessarily very limited as to the time and attention that it can give to details. Thus, it is easy for legislative finance committees to spend too much time considering separate items in a budget when there is almost no orderly thought given to the actual performance of the programs for which they appropriate money. The practice of passing on each item in the budget gives the appearance of much closer control than actually exists. Expenditures can be restricted in this manner, but this type of control provides little understanding of how efficiently the money is spent. Generally, the line-item budget appropriation method offers no meaningful measure of efficiency. As far as legislative appropriations are concerned, the most obvious change required by the program

budget system is that the legislature would appropriate for the separate program units rather than for such categories as personal services, or current expenses.³

A program budget is one that employs a longer time horizon than is commonly found in the present budget with its forward projection limited to one year, and at the most two. Projecting institutional expenditures five years or more into the future within defined program channels would materially assist analytical exploration of economic prospects by helping to quantify some dynamic interactions that have hitherto been handled through gross estimates. Within the line-item budget, with its one year horizon, public officials commit themselves to purchase on the installment plan while examining only the size of the down payment.⁵

Another important advantage of the program budget is that it seeks to focus hard, pertinent, factual information at the appropriate points in the decision making process where alternative choices are made. The sophisticated planning afforded by this budgeting process permits more rational decisions and fosters better analysis of alternative courses of action. By focusing attention on better ways to utilize available resources and by effecting real money economies through cost analysis of activities, the system will place more funds at the disposal of other activities for which public demands are growing at an ever-increasing rate.

Ideally, a work program ought to be administered by a single organizational unit. But suppose that whenever certain related activities are drawn together into an intelligible program it is discovered that two or more distinct organizational units are involved in the administration of the program. Whenever a condition like this appears in such proportions as to cause undue complications in the budget process, it is very likely to indicate a need for reorganization of some kind. Herein lies one of the advantages of the program budget. It is more effective than the traditional line-item budget in revealing weaknesses in organization and management.³

From the standpoint of agency budgeting, a great potential advantage of a program budget lies in the time factor. The development of the program and the program budget, by one central office, could be a very speedy process, especially since it would be neither necessary nor desirable at this stage (the agency) to carry the program down to detailed listings and units.⁴

The term 'performance' as applied to budgets implies an effort to execute the budget with maximum efficiency. Obviously, performance standards must be established if there is to be any evaluation of performance. The lack of any standards would be considered a severe weakness in most budget systems.³ Efficiency in government and education depends fundamentally upon constant critical examination of performance by the agencies themselves, by the budget authorities, and by the legislatures.³

Efficiency may include institutional reorganization to bring relevant administrative functions under the jurisdiction of the authority making the final program decision. Certainly one of the prime objectives of any agency or institution would be to increase internal control and consequently reduce the necessity for external control. Control from above would be a poor substitute for the motivation from those below. Within the educational setting, effective control over the business affairs of the university should be instituted at the university level and the primary responsibility for efficient operation and maintenance would subsequently rest at this same level (where it can be best handled).

Perhaps to factor out several statements concerning the advantages of the program budget which were listed above, one might arrive at two possible prime advantages. First, it provides a framework for more clearly defining the alternatives among which choices must be made. Second, it is instrumental in creating and maintaining an information system that will assist in measuring costs in relation to accomplishments.

CHAPTER FIVE

DISADVANTAGES OF THE PROGRAM BUDGET

A number of conceptual, organizational, and administrative problems should be anticipated. After the first introduction of a program budget, perhaps even on a limited, easing-in scale, it will be essential to anticipate an extended period of evolutionary modification and improvement in the structure of the program budget and the budgeting process. Problems will have to be resolved and initial concepts will have to be amended and adapted on the basis of operating experience prior to an following the introduction of a program budgeting system. ("In this connection it is useful to observe that private business organizations have become familiar with comparable problems and have typically made provision for periodic review and flexible adaptation of information systems in response to the changing needs of a dynamic decision process. Firms that have introduced computers in their decision processes, for example, have found it desirable to make substantial changes in the information systems that feed and support the new decision potential opened up by the computers.")¹

In addition, perhaps the most obvious limitation of performance budgeting is that it involves costs in itself. It requires the use of complex accounting procedures, development of significant statistical indicators, and installation of data processing equipment if accurate cost analyses are to be carried

on and ept current.²

Probably a much broader range of difficulties should be anticipated as a result of the simple fact that things are not likely to work out neatly and promptly after the introduction of program budgeting.⁵ A realistic view suggests that the advantages cited earlier in this paper are not going to be achieved in the first years of an operating program budget. It is likely to take several consecutive budget planning experiences to remove errors or statistical softness in future cost data. It will take additional years to bring supporting information in consonance with program budgeting concepts. At the same time one should anticipate progressive evolution in the definition of programs. After the initial period of testing, validating, and acquiring expertise, however, the contributions of the program budget to economic research and analysis may well turn out to be among the most important positive results that the innovation helps to accomplish.¹

The uncritical lauding of performance budgeting and the overlooking of its limitations may lead citizens and legislators into a pseudo-scientific attitude dangerous to government itself. They may be led to believe that they have found a yardstick which is truly objective and scientific in its nature. Because so many educational and governmental activities cannot be measured in units of work products or costs, the over valuation of the uses of this tool may be quite dangerous as the refusal to effect the kinds of economies possible through its valid application.²

One final comment is in order about the relation of the program budget proposal to the quality and efficiency of management performance. As a tool for analysis, the program budget represents a considerable advance over the existing budget structure. It should be recognized, however, that its virtues are those of a tool. It will broaden the reach of those charged with decision making responsibilities. It will sharpen their grasp of the critical elements in the resource-allocation problems that confront them. It will illuminate questions of choice among alternatives. It will facilitate measures of performance. However, it will not in itself provide answers to problems or make decisions for managers. It will not displace management judgment, wisdom or experience. It will not determine objectives. It will not judge performance. In short, it will enlighten major decisions issues and help managers to manage better. In doing this, the program budget will also contribute to management performance and to economic and social analysis, in the private sector of the economy. But, again, its assistance will be in the form of providing more and better information for administrative and analytical applications. The size of the positive contribution will be determined, not by the information array made available through the program budget, but by the imagination and skill of those who discover how the information can be used to enlarge and illuminate the problems that they already face and to define new problems that the present information flow has failed to identify.¹

CHAPTER SIX

APPLICATION OF THE PROGRAM BUDGET TO HIGHER EDUCATION

The concern and purpose of this section of the paper is to explore the application of the budgetary technique of program budgeting to colleges and universities with particular reference to state institutions of higher education. Instead of dollar budgets and accounting reports, the first step in a planning-minded academic management should be the analysis of mission and the determination of the best use of scarce resources, especially human resources, in fulfilling the appropriate elements of determined mission.⁷

Three points must be kept in mind and referred to at all times. First, program budgeting is an approach, not a formula. Budgeting, therefore, must be conceived as an art as well as a science, a product of imaginative thinking as well as sound research. Second, program budgeting must deal with the future, because only by projecting figures can their true magnitude be appreciated. A decision on \$10,000 a year becomes over a period of five years a decision of \$50,000. Third, the satisfied budget creator may be a man whose inspiration has ceased or whose unwillingness to search for alternatives marks him a timid decision maker.⁷

There are many ways in which money can be spent in an educational system. A program budget would attempt to draw attention to the decision points within a college or university for spending such money. These decision points could then be regarded as major

programs, programs and program elements. A major program could be defined as a school or college, such as 'Arts and Sciences', 'Medicine', 'Education' and 'Law'. A program, on the other hand, would be a major collection of integrated resources that function as an entity to promote in rather specific directions the long-range purposes and objectives of the institution.⁷

Program budgeting can facilitate the making of decisions on three different levels.⁵ In education this means that on the highest level, program budgeting can be employed to help select the proper budget size on the basis of information about the preferred mix between education and other state responsibilities such as agriculture and welfare. On the second level, program budgeting can help in the determination of the best mix of different education programs, often involving judgments about vaguely defined objectives of those programs. However, for valuable and effective judgments it is essential that the decision maker has strong leadership and the proper authority accorded him. Finally, there is the relatively low level decision, which relies on factors for cost and output to determine the most effective way of obtaining a given program objective.

A. Presentation of a University Budget.-- A university budget should exhibit the flow of funds between income and expenditure, and should demonstrate the extent to which present programs within the teaching, research, and public-service categories contribute to the long-range objectives of the institution. The important

questions are: Why is a particular budget unit established? Why does that budget unit require particular combinations of resources? What purpose is served by that budgetary unit? Which portions of it serve the major purposes of the university? To what extent does that budgetary unit draw on the fixed resources of the university? What resources are required to support this budgetary unit through some span of time? The tabulation below compares fiduciary budgeting and resource (or program) budgeting with respect to the questions they raise.⁷

THE FOCUS OF PROGRAM AND FIDUCIARY BUDGETS

<u>Program Budgeting</u>	<u>Fiduciary Budgeting</u>
Alternative ways to achieve university goals and objectives.	Sources of funds.
Major programs in teaching and research.	Constraints on receipt and expenditure of funds.
Resource requirements explicitly related to each program and sub-program.	Aggregates of expenditures on: Administration Teaching and Research Maintenance Student Services
"True" costs of major programs and program elements.	Legal and administrative accounting for funds.
Marginal and opportunity costs.	Average cost ratios.
Long time periods.	Short time periods.
Level of activities "produced".	Purely fiscal matters.

The basic principle of program budgeting is to derive and structure an annual budget in such a way that it reflects the annual portion of all the major programs in the university which, in turn, promote the over-all purposes and objectives of that institution.⁷

B. Implementation of a Program Budget in A University.-- Program budgeting, if gradually implemented while continuing the legal or fiduciary budgeting practices, would not appear to be a 'tearing of the fabric'

of university organization structures. No one establishing a program budget would want to engage in detailed suggestions for changing a university's organization structure. Through use of a program budget over time, it would become more and more obvious where changes should be made in departmental or college or structure. Therefore, it is essential that a basic need in a college or university is flexibility. There should always exist possibilities for changing the organizational structure when desirable and consonant with the objectives of the institution.⁷ It should not be inferred that the destruction of existing accounting, fiscal and budgetary processes be employed. Rather, some measures that will complement those activities with useful concepts involving more planning and analysis, longer time frames, and greater concern for the economic implications of a budget should be considered.⁷

There are three major phases of program budgeting: Planning, programming, and budgeting.⁷ Planning is the process whereby the college or university establishes its long-run purposes and objectives. Planning in a university is a process that establishes the university's objectives as a member of the academic and democratic communities. Planning is often construed as an extremely long-range and somewhat esoteric and abstract conceptualization process. A proper planning process will induce virtually every member of the faculty and administration and perhaps even the students of a university to ask some basic questions along the following lines: Why does this college or university exist and for what purpose was it established? Were those purposes meaningful? To what extent have these purposes been achieved?

Where does the college or university currently stand with reference to its long-range objectives and purposes? To what extent does this college or university contain the necessary flexibility to meet certain and uncertain future requirements? What is my role in the college or university at present and my role in the future in furthering its long-range purposes and objectives? One of the difficulties with long-range planning in a university is that the participants may not be induced to take such activity seriously unless visible and purposeful 'payoffs' are omnipresent.

Programming

Programming is the process by which the university can specify more immediate shorter-range goals for each of its operating units, these goals reflecting rather directly the results of planning. Long-range plans may not be articulated in great detail in the planning process. The purpose of programming is to articulate them as explicitly as possible. Whereas long-range plans may extend ten to thirty years into the future, the programming phase would probably not look further ahead than five years, although some quantitative parameters might be extended eight or ten years.

The planning and programming process will focus attention on the problem of tradeoffs; at all times, and at all levels of decision, having more of one resource means having less of another. The attempt to rationalize all levels of the decision making process is not an end in itself; it is a means to induce the participants to ask

meaningful and rational questions concerning the allocation of resources rather than to present themselves as ad hoc users of resources. The planning and programming phases of the university management process lead to the establishment of an annual budget.

Budgeting

Budgeting is simply the formulation of an annual or biennial plan, making explicit the composition and extent of all the program elements dealt with in the programming phase. Only by proceeding through the planning and programming can the resulting budget reflect program requirements. Only through this process of derivation can an annual budget accurately reflect the economic consequences of decisions made at all points in the university with regard to the use of resources.

Thus, it has been seen that planning involves long-range purposes and objectives, while programming is the intermediate-range step in the process. Major programs, on the other hand, are derived from the long-range purposes and objectives. The budgeting process is the shortest in terms of span of time. The annual program budgets are derived from intermediate-range objectives of the major programs.

The efficient use of the university's limited financial resources involves administrative decisions that spread across the spectrum of choice. One of the purposes of this paper is to identify basic concepts involving the allocation of resources. In other words, once the university has received an approved budget, what steps are taken in

its disbursement? Each segment of the university on every level will be faced with tremendous decision making responsibilities. The budget is emphasized as a tool with which the decision maker can focus and sharpen his grasp of the alternatives available to him. After the first two steps in budgeting, preparation and adoption, are concluded, the execution and control of that budget will necessarily follow. Program budgeting with its systematic approach may be very useful in expanding and identifying in more specific terms the spectrum of choice. (It goes without saying that the computer is a vital and efficient method in improving the allocation of resources in institutions of higher education.)

7

C. Review and Decision Within a Program Budgeting Framework.--

The role of a single department in the long-range objectives of a university may be somewhat obscure. That is, the decisions affecting the role of this department may be taken higher up in the decision making hierarchy. The dean of a school or college may be less concerned with the annual budget for a single department than with the aggregate budget for all the departments which constitute the major programs (schools or colleges) in question. The dean's interest may focus mainly on the extended-year program structure. He will, of course, have to review carefully, and annually, each element in his program; but this review should focus mainly on whether or not resources applied to a particular element promote subpurposes within the context of the integrated extended-year program objectives. Further up the hierarchy,

the chief academic officer of the institution will be concerned with both the intermediate objectives of the program plans and the extent to which the aggregate of those program plans reflects a pursuit of the university's longer run purposes and objectives. Thus, as decisions are made higher and higher in the university administration, the decision maker is likely to be oriented toward longer and longer time spans, and to be concerned with increasingly dissimilar activities. Moreover, the higher the decision process, the more dependent it becomes on information generated below.⁷

D. Requirements of Program Budgeting in Universities.-- The design of a program budget structure for a college or university requires that all the major resource concentrations within the total resources of the institution be defined. The objectives of the program budget are to serve as a policy and planning document rather than an accounting data document.⁷

The application of cost effectiveness analysis to program budgeting may be advantageous in that it permits analytical justification to be constructed for the level and composition of resources used in program elements. However, there may also be some difficulties encountered when cost-benefit analyses are applied to education. There are problems in the attempt to define an educational goal, in the analysis of educational processes, and the measurement of costs. Despite these problems, it is possible to develop a comprehensive quantitative model of the educational system at all levels.⁸

Better control of finances and resources can also be effected by the use of the program budget. The word 'control' may be alarming to the academic sectors of a university. Control is used here to mean the comparison and reporting of actual performance against approved plans or programs. Program elements are actually not a very good basis for conventional financial control. The intricacy of program-element costing often makes it difficult to trace responsibility for small cost deviations. The program budget should be a means of control in that it should enable a university administration to ascertain the extent to which established objectives are being met by each major program and program element.⁷

E. Problems Involved in Establishing a Program Budgeting System in a University.-- There are three major areas of concern in implementing programming systems for a university. These are the conceptual, operational, and institutional problem sectors.⁷

Conceptual

Conceptual problems are those encountered in the design of the programming system and in relating that system to existing administrative requirements which are likely to be inherent in the income-expenditure analysis at colleges and universities. A university ought to explore how it might define its program elements, how it should establish its major programs, which programs constitute a meaningful and efficient combination for its purposes, how the program elements relate to the logic of its decision points, what violence the programs might do to its present institutional structure, and similar questions. The programming process should, when supported by careful analysis, permit

all levels of the university's administration to evaluate the meaningfulness and validity of particular requests for resources in the light of the total resources available. Once the university has established its major programs, there should be intermediate collection of elements within these programs that have closely combined for decision making or display purposes. These elements may be related characteristics or purposes and which can be composed of such indicators of activity such as class hours of student enrollment, research hours, library units, and maintenance units to name a few.

Once program budgeting has been defined, the university administration, and in fact, all participants in the decision-making process, should ask themselves a series of questions similar to these: How shall we define a major program? What is the present content of these major programs? Should we restructure these major programs? What should the content of these major programs be? What are the proper subelements or program elements which should be contained in these major programs? How do present program elements and major programs relate to the decision process in the university? How well do these major programs fit into the university's long-range purposes and objectives? Is the logic of the decision process in the university such that the decision makers ask themselves questions about efficiency in the use of resources?

A program budget should provide answers to two types of questions. First, are resources in any particular budgetary or decision making

unit efficiently allocated? Second, and more significant, does the budget justify the need for the existence of a given budgetary unit. Currently, officials of universities may be very well equipped to answer the first type of question, but very few can cope with the second type of question.

Operational

Operational problems are those encountered in implementing a program system in the environment of some specific university. These problems are likely to be much more comprehensive in the initial phases of implementation, but they will endure to some extent because a programming system by definition is not a static and final set of techniques.

The operational phase leads to specific questions. One of these will emerge with regard to what portion of a particular activity should be charged to a particular program element; but support, administrative, and auxiliary costs should not be so minutely divided that the system becomes unduly complicated. Some staff organization problems will also develop. The fact that university administrations have failed to develop these staff functions may very well have been a major reason for establishing state commissions on higher education. One important argument for program budgeting is that if colleges and universities do not engage in this type of self-examination, then trustees, regents, and state legislatures may be expected to undertake their own studies. It should be noted that when a state

commission exists, there can be a logical division of labor between the college or university and the commission. The commission may in fact compel each institution to engage in more planning and programming activity. Critical review has a role at the campus, system, and state levels. Commission control may be greater when it does not have good institutional programming to review.

Institutional

Institutional problems are those defenses thrown up by bureaucratic organizations when any change threatens the citadel of established decision making procedure. One of the problems on the institutional level is the acceptance by the university staff. Program budgeting will be better understood and more readily accepted by the university staff if certain problems are anticipated and discussed. Program budgets are neither easily designed, simple to install, nor immediately effective in all the dimensions of conception, analysis, and control. The answer to the problem of orienting the university staff to the implementation of program budgeting is not an easy one. On the one hand, any substantive concern with the logic of decision making in an existing organization will always tend to generate defensive attitudes at the operating levels. On the other hand, a very positive approach which omits the shortcomings and limitations of a program budget may be received with over-enthusiasm and false expectations.

Another problem that may be generated at the institutional level is the concern that program budgeting will provide opportunities for centralized control by a strong administration. However, the

programming process itself does not appear to promote either centralization or decentralization in the control of an organization.

Perhaps program budgeting will encourage the decision maker to exhibit his own shortcomings for review at a higher level more often than would a conventional budget. The conventional budget is designed to preclude him from abrogating his fiduciary responsibilities; the program budget is designed to prevent him from possibly misusing resources in an economic rather than a legal sense.

Helpful Suggestions

These problems of a conceptual, operational, and institutional nature, while representative of those that have arisen in other organizations when a program budget system was conceived and implemented, certainly do not cover all the contingencies which may arise at a university. Whatever problems emerge during the implementation of a program budget system at a university, none appear to be insuperable as long as the following ground rules are kept in mind.⁷

- a. Establish clear-cut definitions for all those new techniques in a program budget system which might otherwise cause confusion.
- b. Associate the new program budget structure with present budgetary cycles.
- c. Begin with rather loosely configured definitions of major program and program elements so that no initial rigidities are established.

- d. Guard against too much centralization in the decision process.
- e. Be careful not to overload the whole decision making process with redundant paper work and reporting schemes.
- f. Establish a professional staff reporting to the chief academic officer or the president of the university to develop the conceptual formats, establish the data system, and provide the analytical studies for the review process--all of which are necessary to a program budgeting system.

CHAPTER SEVEN

A UNIVERSITY PROGRAM BUDGET

In drawing up a set of plans for future university or college operations there appears to be at least two ways of viewing the program budgeting problem. One is in terms of managements' over all program and its effect on the university as a whole. This type of program budget is drawn in terms of revenue and cost objectives, the means of attaining them, and the effect that attaining these objectives will have on the properties and obligations of the university at the end of the budget period. University plans should be set forth in a series of forecasts of future revenues and balance sheets, backed up by schedules containing the detailed estimates on which the forecast is based.

The second way to view the planning process is in terms of responsibility centers. A responsibility center is some simple part of a university that is headed by a college dean or department head charged with responsibility for certain revenues or costs or both. In a university, responsibility may be centered at several levels. Ultimately the president is charged with the over-all successful operation of the university. Deans and department heads are responsible for the segments of operations under their supervision. For control purposes the program budget should be rearranged into a series of individual budgets prepared for each responsibility center.

A complete budgetary system involves both program and individual budgets. Since they represent merely two different ways of looking at total university operations, budgeted appropriations should be the same with either type of budget. Presumably every part of the total program is the responsibility of someone; departmental budgets should be merely subdivisions of the program budget into parts that can be traced to some responsible department.

The starting point in the preparation of a program budget for a college or university is the operating budget, a forecast of the revenues and expenses that makeup net income for the budget period. The specific method for budget preparation should be left to the discretion of the institution. The following proposal is one suggested method and does not necessarily represent the best or only method in implementing a program budget system for a university. However, before beginning this discussion some basic principles must be established for the final preparation of any operating budget for a university. These principles are:

1. The budget must encompass all current funds.
2. The budget must provide sufficient detail to enable adequate review and implementation.
3. The final budget should be uniform. Auxiliary enterprises and student aid should be summarized separately from operating funds.

4. The budget must be flexible enough to provide adjustments as required at the local level for control of "local" funds and at the state level for control of "state" funds.
5. The final approved budget must become the president's document since he is the one who must implement on behalf of the Board of Higher Education and defend on behalf of the institution.

Keeping these principles in mind all data for an operating budget for a university should originate with the academic or administrative units into which each institution is subdivided. In other words, the budget should follow the same chart of accounts as is used in the general ledger for current funds of each institution. The recommendation should follow the regular established administrative channel such as department chairman, dean and then to either the budget committee or the president's office. Income projections should be provided along with expenditure projections for those departments or functions within the budget which will contribute income. The university business office should furnish the income projection for departments or functions that operate from the institutions general fund. Suggested forms for this purpose are found in the Appendix. These forms show the projections for salaries and for non-salary items. A three column form is included in an attempt to relate information to the total current funds operation as well as to that portion of the operation which comes only from state sources. This information should facilitate the preparation of

biennial or legislative budgets. However, good budget control demands that all current funds be included in any valid budget document. Nevertheless, many current funds projections will necessarily be more flexible than other funds. An example of this flexibility can be seen where an anticipated federal grant may or may not have materialized. If the grant does materialize, the budget will be increased accordingly. If it does not materialize, of course, it implies that a reduction in the budget will be necessary. This then limits the budget flexibility when compared to a departmental allocation from state funds where the amount available has been predetermined and is ready for use.

Once the initial budget form has been prepared, it should be submitted to the college dean or other administrative officer for his review and adjustment. The final form, as approved by the dean or administrative officer is then forwarded to the president's office for summation and reconciliation. It should then be reviewed by either the financial vice president or a committee appointed by him should review the budget further to equate needs and determine necessary reductions and additions. This review is necessary to insure the final document when prepared is within funds available and within approved formula or restrictions provided by the Board of Higher Education. After these several reviews the budget should be put in form for presentation to the Board of Higher Education.

Once approval has been given by the Board of Higher Education, or necessary adjustments made by them, the budget should be formalized on the accounting records of the university. The form necessary for such a recording function should include an entry for expenditures, outstanding encumbrances, and unexpended balances. The form should also provide for estimated income, realized income and unrealized income in detailing income projections. This budget record should be made an integral part of the general ledger system and summary postings should be made from the budget to the corresponding general ledger control accounts on at least a monthly basis. Of course, the budget ledger will be the original source for income and expense information.

Monthly statements should be provided each department for which a responsibility budget has been established. These statements should be in such form as to provide adequate information to the department head so that he may determine his current status within the budget projection. Summary budgets for each college should be furnished each dean, and an overall summary of the total budget should be submitted to the president no less than once a month.

Since the purpose of any accounting record is to provide historical information, it is important that this information be submitted as promptly as possible in order to enable the administrator to make necessary decisions for either staying within the funds available or taking necessary steps to adjust the budget to meet unforeseen situations. The form to be submitted to the Board of Higher Education monthly is shown in the Appendix. This form currently provides for

information submitted on a functional basis as well as an object basis.

It will be necessary to estimate income as well as expense for those particular functions in the current funds which have not previously been budgeted. Incidentally, self-balancing subdivisions for such items as sales and services of educational departments, organized activities relating to educational departments, student aid and auxiliary enterprises should be included. This does not imply that planned income from a cafeteria may not be budgeted for expenses in operating the physical plant through a reserve allocation but only specifies the sources or disposition of income more clearly.

In preparing the multi-year, biennial or legislative budget the same processes should be used in building the budget as was used in creating the operating budget, i.e. it should originate with each account or department following the institutional chart of accounts. Again, a three column form showing state funds, local funds and total funds may be used. It may be necessary in preparing the first biennial budget that a comparison will not be possible with a previous biennium other than for the "state" funds portion of the projected budget. The amount of substantiating detail will also be less in the final budget document. A listing of salaries should also be provided, again showing the salary by source of funds, and that the balance of the expenditures be in the "object" classification outlined by the department of Accounts and Purchases. A listing of capital expenditures by item should also be provided.

Upon preparation the multi-year budget is submitted to the president's office for summation and review. At this point the necessary adjustments would then be made to bring the overall budget within any formula or guideline that may be established by the Board of Higher Education. The budget would in turn be submitted to the Board in the form determined by them or the State Budget Analyst. The Appendix shows a proposed budget form which would enable each institution to put their budget information together in such a manner as to meet any requirements which might be forthcoming from the Board and/or the Budget Analyst's Office.

As a further illustration of how a university might begin to implement the display of its annual budget within a program system format, hypothetical University Gross Requirements Matrix is included in the appendix. This example is merely illustrative of what a summary of a university made up of only three major programs might look like.

Format 1 is a conventional format for college and university budgets. The dean of a college might present his budget in terms of a minimum number of line-items: faculty salaries, support salaries, equipment, and supplies. He would have omitted departments, failed to note the percentage for research and teaching, ignored space requirements, and failed to justify addition or deletions of courses. In such a presentation, the person in charge of academic affairs (or other university officers would find it extremely difficult to discern the rationale of his total allocation to that college. To avoid this difficulty, certain prior steps might be taken by a college or university to exhibit more clearly and explicitly the bases for the allocation of its annual budget. Format 2 shows that, at least hypothetically, a more analytical and a more program-oriented budget is both desirable and possible.

CONCLUSIONS

Even the limited discussion in this paper should indicate that to implement a Planning-Programming-Budgeting system completely is not an easy task. There will be problems in defining government objectives and deriving meaningful program structures. A very difficult task will be to find means for making comparisons between programs that are competing for resources, but whose objectives, and therefore measures of effectiveness, apparently are not measurable.

Though the first attempts at developing a program structure may not be fully satisfactory, it is important to initiate a process that includes raising substantive questions, thinking through the operation of the university or college in terms of objectives, and evaluating alternative ways of meeting the objectives. Even the first attempts will assist the decision makers in grasping the relation of individual problems to university objectives. Further, the explicit long-term projections of activities in the multi-year financial plans is a valuable aid in itself in clarifying the total cost implications of current decisions.

Discussion of a budget, decision matrices in the budgeting process, program budgeting applied to an institution of higher education, review and decision in a program budgeting framework, its advantages and shortcomings, requirements of program budgeting in higher education, and the problems of establishing and maintaining a program budgeting system in universities lead to eight major conclusions.⁷

1. The application of program budget methods would not preclude the use of most existing university organizational structures. Programming can be oriented around major schools, colleges, and more departments which produce teaching, research, and community services. It is, of course, necessary to include other colleges or university functions which indirectly support but cannot be obviously allocated to particular major programs or program elements.
2. The resources used by a university and the university output in teaching, research, and public services can be related in a way that is meaningful to university administrators.
3. Annual budgets should be derived in the context of an extended-year program, which in turn should be developed and evolved within the context of a university-wide, long-range plan.
4. In addition to procedures for planning, programming, and budgeting, procedures are needed for periodically appraising each element in the planning and programming process.
5. A university operating under a program budgeting system must have the analytical staff necessary to study the establishment and definition of program elements and major programs, and to appraise their operations.
6. The annual budget derived from a program system should permit intra-university comparison and possible, in time, inter-university comparisons between program elements in major programs.

7. There are likely to be nonhomogenous activities occurring in the university which are inherently difficult either to collect into major programs or to allocate to defined program elements. (Such activities should not be allocated to particular elements; they might initially remain in their present accounting data format.)
8. The present university budget serves very well the necessary task of meeting the requirements for legal and fiduciary accounting for funds received and expended by the university. However, the budget format is so structured as to permit only a minimum of analytically based decision making.

Although these conclusions support the application of program budgeting in a university, it should be stressed that no programming system is likely to fit all university organizations in the early stages of application. In the initial experiments and applications of program budgets, a great deal of flexibility in the structuring of those systems will undoubtedly be necessary. The conception, design and implementation of a program budget should evolve in such a manner that the use of program budgeting overlays the use of present legal and fiduciary budgets during a transition period. This will enable the university staff to transfer gradually to a more decision-oriented program budget without undergoing sudden organizational changes. This will permit the university to experiment with the logic of its decision making processes and to simulate alternative organizational structures, and at the same time to minimize the difficulties in introducing such a system.

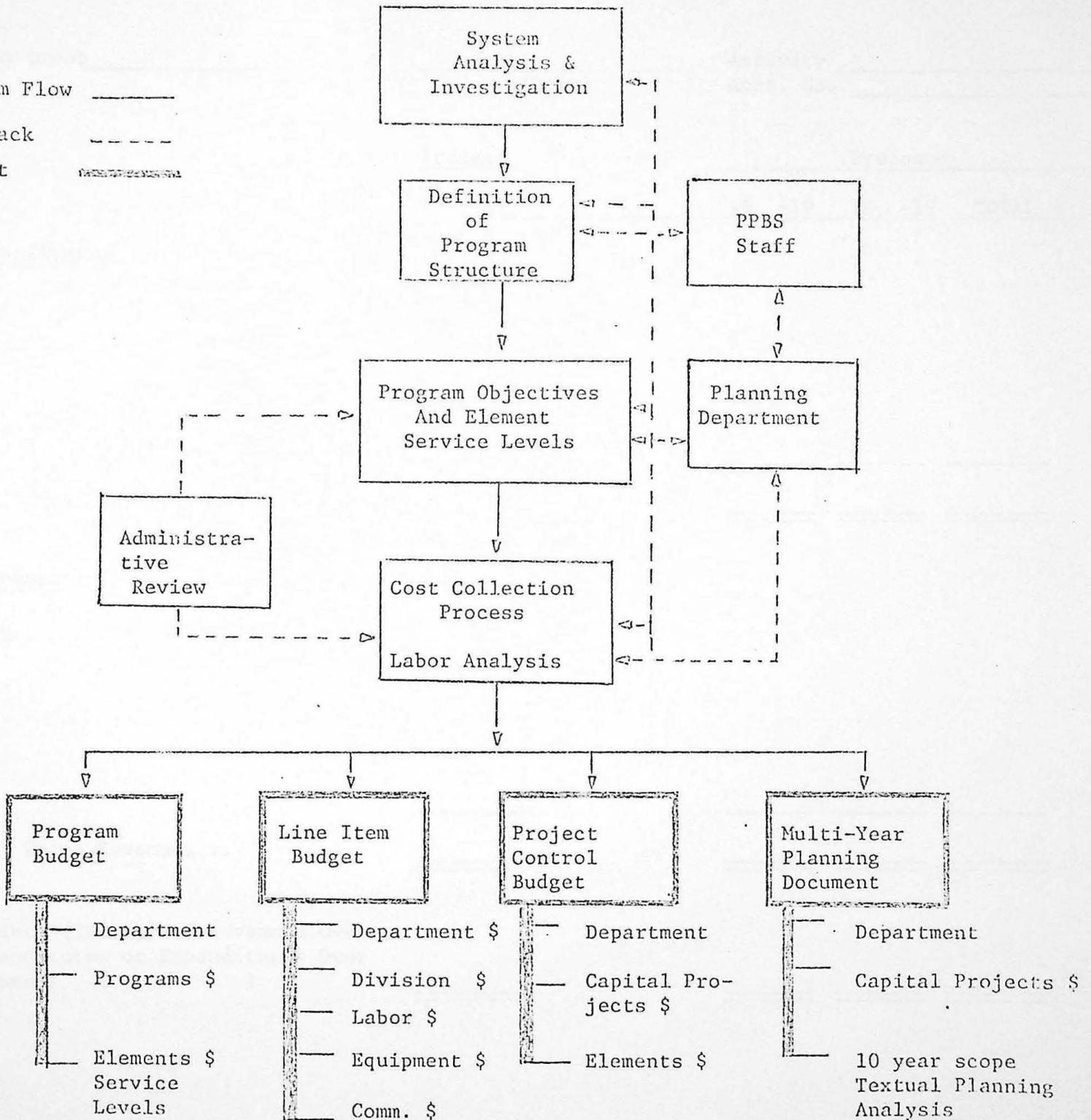
A program budget can potentially help university and college administrators to deal with institutional problems ahead of time instead of as day-by-day crises arise and can place in much improved perspective the principal issues on resource allocation. University administrators will find themselves less in the position of budget cutters and more in the active role of considering important program options in terms of real university needs.

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BUDGET SYSTEM FLOW CHART

System Flow ————
 Feedback - - - - -
 Output ~~~~~~



UNIVERSITY OF NORTH DAKOTA

19 -19 Biennial Budget Estimate Summary

Department _____ (Date) _____ Activity Acct. No. _____

Present Proposed
19 -19 19 -19 TOTAL

Expenditures

Code Item

Est. Total Expenditures...

Revenues *

Code Source

Est. Total Revenues...

Balance (if any) of Revenues Over Expenditures or Expenditures Over Revenues ()

*To be completed only if department or activity takes in funds directly.

CONVENTIONAL BUDGET FORMAT

Budgetary Unit _____

<u>Item</u>	<u>1969/1970</u> <u>Appropriations</u>	<u>1970/1971</u> <u>Increase or</u> <u>Decrease</u>	<u>1970/1971</u> <u>Estimated</u> <u>Total Budget</u>
1. Salary & Wages			
A. Academic			
B. Nonacademic			
2. Nonsalary Items			
A. Supplies & Expenses			
B. Equipment			

UNIVERSITY OF NORTH DAKOTA

19 -19 Biennial Salary Budget Request

_____ (Date)

Institution _____

<u>Employee Name</u>	<u>Title</u>	<u>Department</u>	<u>Monthly Basis</u>	<u>Present Salary</u>	<u>Local Funds</u>	<u>FROM (Source)*</u>	<u>State Funds</u>
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* Identify specific source, i.e., Federal grant, cafeteria income, etc.

UNIVERSITY OF NORTH DAKOTA

19 -19 Salary Budget Request

Department _____

Budgetary Head _____

<u>Employee Name</u>	<u>Title</u>	<u>Monthly Basis</u>	<u>Present Salary</u>	<u>Local Funds</u>	<u>Proposed Salary (Source)*</u>	<u>State Funds</u>	<u>Total</u>
----------------------	--------------	----------------------	-----------------------	--------------------	----------------------------------	--------------------	--------------

*List specific source, i.e., Federal grant, cafeteria income, etc.

UNIVERSITY OF NORTH DAKOTA

19 -19 Budget Estimate Summary

Department _____ (Date) _____ Activity Acct. No. _____

It
Fa
T/
T/
SC
Sc
Sc
Sc
CO

Present Proposed

Expenditures

Code Item

Est. Total Expenditures...

=====

ul' Revenues *

SU Code Source

Est. Total Revenues...

=====

Balance (if any) of Revenues Over Expenditures or Expenditures Over Revenues ()

=====

* To be completed only if department or activity receives funds directly.

Sp
Sp
T/
T/
SC
SC
Sc
SC

PROGRAM BUDGET FORMAT

Budgetary Unit _____
(Core Department)

Change over Program

<u>Item</u>	<u>66/67</u>	<u>67/68</u>	<u>68/69</u>	<u>69/70</u>	<u>70/71</u>	<u>Period</u>
-------------	--------------	--------------	--------------	--------------	--------------	---------------

Faculty
 T/R Ratio
 T/S Ratio
 SCH-Int
 Sch-Ext
 Sch-Ug
 Sch-G

COSTS-Oper.

Faculty
 Sch-Ug
 Sch-G

STS-Invest.

Faculty
 Student

SUPPORT

Staff
 Supplies
 Equipment

Space--Faculty
 Space--Support Staff

T/R -- Teaching/Research ratio in faculty.
 T/S -- Faculty/Student ratio in program element.
 SCH-Int Student Class Hours--students internal to this element.
 SCH-Ext Student Class Hours--students external to this element.
 Sch-Ug Student Class Hours--undergraduate.
 SCH-G Student Class Hours--Graduate.

CONVENTIONAL BUDGET FORMAT

Budgetary Unit _____

<u>Item</u>	<u>1969/1970</u> <u>Appropriations</u>	<u>1970/1971</u> <u>Increase or</u> <u>Decrease</u>	<u>1970/1971</u> <u>Estimated</u> <u>Total Budget</u>
1. Salary & Wages			
A. Academic			
B. Nonacademic			
2. Nonsalary Items			
A. Supplies & Expenses			
B. Equipment			

PROGRAM BUDGET UNIVERSITY CROSS REQUIREMENTS MATRIX

Resource Category	Program		College & School					Total Cross Requirements (and of them)
	College & School	College of Law	School of Business	1966	1967	1968	1969	
PROFS	Fall							
	Assoc.							
INSTRUCTORS	Assoc.							
	Asst.							
TEACHING FELLOW								
RES. OR LAB. ASSTS								
SECRETARIES								
OFFICE SPACE - No. of sq. ft.	Books							
	Tables							
SUPPLIES	Books							
	Tables							
EQUIPMENT	Books							
	Tables							
LIBRARY SUPPLIES	Books							
	Tables							
M-UNIT	Prof.							
	Asst.							
ROOM LOADS	Day							
	Even.							
COURSE	Day							
	Even.							
CLASS SIZE	Day							
	Even.							
TGS CLASS ROOM SPACE	Day							
	Even.							