

**BUDGET REVIEW AND ANALYSIS
OF THE
HIGHER EDUCATION PROGRAM
(UNIVERSITY OF HAWAII)**

A Report to the Legislature of the State of Hawaii

**Submitted by the
Legislative Auditor of the State of Hawaii**

**Report No. 83-8
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FOREWORD

Pursuant to provisos contained in the legislative appropriations acts of 1981 and 1982, the Office of the Legislative Auditor has undertaken a budget review and analysis program aimed at providing the Legislature with additional assistance and perspectives in its consideration of program and budget requests coming before it for action.

In this initial effort, attention was focused on selective aspects of the two components of the major program of formal education—namely, lower education (encompassing primarily the Department of Education), and higher education (which is virtually synonymous with the University of Hawaii).

The results of our examination of the higher education program are presented in this report. Our review and analysis of the lower education program will be presented in a separate report.

We wish to acknowledge the cooperation and assistance extended to our staff by officials and staff members of both the University of Hawaii and the Department of Budget and Finance.

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Chapter 1

INTRODUCTION AND BACKGROUND

Purpose and Focus of Budget

Review and Analysis

Through provisions contained in the legislative appropriations acts of 1981 and 1982, the Hawaii State Legislature directed the Legislative Auditor to initiate a program of budget review and analysis. The overall purpose of this effort is to assist the Legislature in gaining a better understanding of the program and budget requests coming before it for consideration.

More specifically, the objectives of budget review and analysis are:

1. To assess the processes by which budgets are developed and executed, with emphasis on quality of review and analysis at key decision points.
2. To identify and assess significant internal and external factors which influence or constrain budget preparation and execution.
3. To identify areas where the Legislature has expressed specific interest or concern and determine and assess the adequacy of the executive's responses.
4. To identify significant budget changes and evaluate the justifications or explanations provided to support those changes.
5. To examine and evaluate the content and presentation of existing budget information, provide additional or supplemental information, or suggest alternative means of presentation.

Program size and prior legislative interest and concern were the main criteria used in selecting the first programs for examination. On this basis, the major program area of formal education was the likeliest area for review, consuming as it does almost 40 percent of all general fund operating budget requests and being the subject of continuing interest and concern of the Legislature as well as the public. Consisting of two programs—higher education and lower education—both of which are extremely large and important, it was decided to focus initial attention on these two programs.

The higher education program is reviewed and analyzed in this particular report; the lower education program is reviewed and analyzed in a separate report.

Background on Higher Education Program (University of Hawaii)

The higher education program consists of 51 programs for which budgetary information is developed and presented and for which legislative appropriations are made. The operating budget for the 1981–83 biennium totaled approximately \$364 million. All of these programs are under the direct control of the Board of Regents (BOR) of the University of Hawaii. Hence, the State's higher education program is virtually synonymous with the University of Hawaii.

Most of the 51 programs for the higher education program are related to the nine campus units which make up the statewide university system. For each of the nine campuses (with one exception), appropriations are made to the following programs: (1) instruction, (2) public service, (3) academic support, (4) student services, and (5) institutional support. In the 1981–83 biennium, there was no appropriation for public service for the West Oahu College. In addition to the foregoing, five programs which are common to all campuses except West Oahu College, the Manoa campus receives an appropriation for its subprogram of organized research. Besides the 45 programs assigned to the nine campus units, there are six programs listed under the broad program of statewide support.

The university derives its financial support from several sources: the state general fund, federal funds, special funds, and gifts, grants, and contracts from various public and private parties. Of these, the state general fund makes up the bulk of the university's operating budget. In fiscal year 1981–82, the state general fund comprised 78 percent of the university's operating budget, federal funds provided four percent, special and revolving funds amounted to 16 percent, and all other funds made up the remaining two percent.

Although the university is heavily dependent upon the state general fund, it is also the generator of significant revenues. Most of these revenues come from the operation of auxiliary enterprises (dormitories, bookstores, etc.) and from research and training grants and contracts. These revenues generally go into special funds or restricted accounts

controlled by the university. In addition, the university turns over to the state general fund sizeable amounts in the form of (a) tuition and fees which it collects from students, and (b) reimbursements for indirect costs of extramurally financed grants and contracts. For fiscal year 1981–82, these payments amounted to \$9.8 million and \$4.5 million, respectively, or approximately six percent and three percent of the university's general fund appropriation for that year.

There are several versions of the university's operating budget request for the 1983–85 biennium. The most important of these are: (1) the original request approved by the Board of Regents in June 1982—the so-called “BOR budget;” and (2) the executive budget request for higher education submitted by the Governor to the Legislature, which is substantially less than the BOR budget.

This budget review and analysis effort is concerned almost entirely with the general fund operating budget of the university. This is the portion of the budget which is most directly subject to influence by the Legislature and thus the portion which is most closely scrutinized by the Legislature. In this sense, the university is treated in much the same manner as all other executive departments and agencies.

Special Considerations Affecting Budgeting for the University of Hawaii

Strongly feeling that it is “different,” the University of Hawaii is uncomfortable in the role where for budgetary purposes, it is subjected to the same laws, rules, and procedures as other executive departments.

There is, indeed, a difference that should be recognized, but it is one of degree, not kind. Thus, while special consideration may be appropriate in some areas, the principles of good budgeting should apply to the university as to all other state agencies.

Areas where special consideration may be appropriate in budgeting for the university include the following:

1. *Special constitutional position.* The university does enjoy a special position under the state constitution, such as corporate status and the right to hold title to its own properties. By a 1978 amendment, it has also been given “exclusive jurisdiction over [its own] internal management.” However, the same amendment further provides

that “[t]his section shall not limit the power of the legislature to enact laws of statewide concern.”

Such juxtaposition of language creates fertile ground for controversy, doubt, and misunderstanding if not further clarified. Thus, uniform application of budgetary requirements can cast the university in an undesirable adversary role *vis-a-vis* the rest of the state government. To date, however, there has not been statutory clarification of the university’s role within the overall administrative structure.

2. *Collegial tradition of decisionmaking.* Like most higher education institutions, the University of Hawaii operates under a collegial tradition of decisionmaking. At variance with the “business-like” management found in so many large organizations, this approach is often viewed as inefficient because it is time consuming and does not always produce clearcut decisions. Nevertheless, it is widely felt to contribute to the general quality of higher education and is likely to persist at the university. Hence, some accommodation seems to be needed between collegiality and the “efficiency” of normal budgetary procedures.

3. *Problems of measuring performance.* A fundamental feature of program budgeting is the measurement of performance to determine effectiveness. However, devising useable measures of effectiveness is difficult for many governmental programs, and becomes exceedingly difficult in many areas within the field of higher education. Consequently, the university has more difficulty in quantifying its results than most other agencies. Again, however, this is a difference in degree, not kind.

4. *Variant budget procedures.* Along with the budget procedures imposed on all executive agencies, the university has developed collateral procedures to meet its special needs—particularly those associated with a semi-autonomous governing board and a collegial tradition of decisionmaking. As a result, budget making at the university tends to be more formal, more participatory, and more drawn out than for most other agencies. It also produces a formal budget document (the “BOR budget”) which is usually at significant variance with the budget approved by the Department of Budget and Finance (B&F) and proposed to the Legislature by the Governor. The university—along with the Department of Education—is more advanced than most agencies in computerization of the budget preparation process. The university in recent years has also used a different

and consistently higher inflation factor than the one imposed by B&F on all other agencies.

Honest differences of opinion can and do exist regarding the above points, but the important fact is that the university is inescapably part of the State's overall budgeting system. Thus, regardless of budget management details, good budgeting is in the best interests of both the university and the rest of the state government.

Organization of This Report

This report consists of three chapters. Chapter 1 is this introductory and background chapter. Chapter 2 focuses upon the university's internal budget cycle and reviews and analyzes the three phases which make up this cycle: budget preparation, budget presentation, and budget execution. In these sections, the main concern is with the general budgetary procedures followed by the university. In Chapter 3, we broadly consider some of the substantive issues involved in budgeting for the university, particularly for the instruction program at the Manoa campus which constitutes the single largest part—27 percent—of the university's total budget. We review such aspects as how the university's planning efforts relate to budgeting for the institution and how the Manoa campus deals with problems involving small class sizes, high cost programs, and the allocation of resources within the institution. A number of recommendations are offered in Chapters 2 and 3.

Chapter 2

THE BUDGET PROCESS OF THE UNIVERSITY

Although budgeting is a continuous and closely interrelated process, for practical as well as analytical purposes, it can be divided into three phases: (1) budget preparation (where budget requests for the forthcoming period are formulated), (2) budget presentation (where budget requests are submitted to the Legislature for its review and action), and (3) budget execution (where appropriations are actually allocated and expenditure controls are exercised). These three phases as they relate to the operating budget for higher education were examined as part of our budget review and analysis effort. The results of this examination are covered in this chapter.

Summary of Findings

We find that:

With respect to budget preparation—

1. In the budget preparation cycle for fiscal biennium 1983–85, the budget for the university was completed and approved by the Board of Regents (BOR) prior to the receipt of statewide budget policies from the Department of Budget and Finance (B&F) which established budgetary ceilings for all executive departments. As a consequence of developing a budget without regard to statewide financial constraints, the BOR budget proposed expenditures significantly higher than those ultimately recommended by the Governor in the executive budget submitted to the Legislature. This situation opens the university to potential and serious conflict with B&F and the Governor.

2. Despite the fact that the current services portion of the budget represents approximately 98 percent of the university's total operating budget for the fiscal biennium, present procedures neither allow for proper program review and analysis of this major segment of the budget nor permit broad participation by members of the university community in the shaping of what is by far the largest part of the budget. On the other hand, a highly disproportionate amount of time and attention is devoted to the review of workload and program change requests, which constitute a minuscule portion of the total university budget.

With respect to budget presentation--

3. The existing budget presentations--the BOR budget as well as the executive budget--are seriously unbalanced in terms of giving attention to programs in proportion to their size and importance. Major parts of the higher education budget, particularly as they pertain to the Manoa campus, are not broken down sufficiently so that they can be meaningfully analyzed and understood by decisionmakers and the affected public.

4. In the university's budget presentations, undue emphasis is placed upon workload increases and program change requests, and there are virtually no information and details which would allow the current services portion of the budget to be reviewed and analyzed.

With respect to budget execution--

5. The practice of distributing funds to colleges based almost entirely on prior year allocations tends to keep activities at static levels and to prevent proper consideration to be given to changing needs in the resource distribution process. Thus, in the instruction program at the Manoa campus, fund allocations among the different colleges have risen at a fairly uniform rate over the past five years despite quite markedly different enrollment trends.

6. Justification requirements and procedures imposed by B&F for transfers of funds within programs are excessively detailed and burdensome. The requirement to secure B&F's approval for such transfers amounts to needless overcontrol by the State's central budget agency.

Budget Preparation

BOR budget versus executive budget. In preparing their budgets for the 1983--85 biennium, executive departments for the first time were given budget ceilings under which their program budgets were to be developed. In his budget message accompanying the submission of the executive budget to the Legislature, the Governor observed:

“Under the Program and Financial Plan and Executive Budget Guidelines and Instructions issued to all State agencies in June 1982, each department was given a budget ceiling which established the funding limit for each agencies’ budget. This ceiling was based and developed on the revenue estimating committee’s June 1982 revenue projections. It should be noted that the development and application of a ceiling to establish budgeting parameters was never done in the past. This concept was adopted for the fiscal biennium based on the condition of the economy, the uncertainty of federal funding and the revenue projections for the biennium

“Based on this funding ceiling, each agency developed a budget proposal which essentially maintained the current level of services with program adjustments based on trade offs in funding.”¹

However, the BOR budget for the university was not developed under discipline of an imposed budgetary ceiling. B&F’s policies and ceilings were announced to the executive department in late June 1982, but earlier that month, the Board of Regents had already adopted its budget. In an apparent effort to complete action on the BOR budget prior to the summer break when many university personnel are not available on campus, the university chose to “lock-up” the budget months in advance of its required submission to B&F. The result of this action was to leave the BOR budget at wide variance with what was ultimately recommended in the executive budget. The differences in the BOR budget and the executive budget are summarized in Table 2.1.

Table 2.1
Comparison of the 1983–85 Executive Budget
and the Board of Regents Budget
Proposed General Fund Expenditure

	<i>Fiscal Year 1983–84</i>		<i>Fiscal Year 1984–85</i>	
	<i>Executive Budget</i>	<i>BOR Budget</i>	<i>Executive Budget</i>	<i>BOR Budget</i>
UH—Manoa	\$109,167,502	\$119,146,738	\$110,811,243	\$123,210,039
UH—Hilo	11,376,664	12,669,273	11,561,293	13,411,914
Community Colleges				
Honolulu	7,578,557	8,590,364	7,682,714	8,949,493
Kapiolani	6,555,677	7,415,257	6,578,755	7,869,008
Leeward	8,307,556	9,088,440	8,413,505	9,400,416
Windward	2,667,537	3,081,006	2,692,695	3,273,908
Maui	3,687,715	4,103,018	3,738,136	4,204,495
Kauai	3,538,866	3,801,523	3,616,144	4,124,674
West Oahu College	864,367	908,284	879,683	954,149
Statewide Support	12,782,397	14,074,970	13,139,801	15,189,165
TOTAL	\$166,526,838	\$182,878,873	\$169,113,969	\$190,587,261

Sources: State of Hawaii, *The Multi-Year Program and Financial Plan and Executive Budget for the Period 1983–1989 (Budget Period: 1983–85)*, Vol. III, December 30, 1982; University of Hawaii, *The Regents’ Operating Budget for the Fiscal Biennium 1983–85*, June 18, 1982.

1. State of Hawaii, *The Multi-Year Program and Financial Plan and Executive Budget for the Period 1983–89 (Budget Period: 1983–85)*, Vol. I, Governor’s Message.

In the aggregate, executive budget recommendations, which reflected the ceilings imposed by B&F, were over \$16 million less than the BOR budget for FY 1983–84 and over \$21 million less for FY 1984–85.

Essentially, the BOR budget exceeded the executive budget by the full amount of all the workload and program change requests which had been included in the BOR budget. Yet, due to the university's method of preparing the current services portion of its budget, it was not in a position where it could adjust existing requirements to accommodate strongly desired new requirements.

Following the return of the BOR budget by B&F to the university in August, the president informed the chancellors and the vice-presidents that reductions to the BOR budget would have to be made. Under directives from the president, the chancellors were made responsible for the specific program retrenchments or program eliminations for their respective campus units. In late September, the university submitted another operating budget plan for the 1983–85 biennium, but the budget did not meet the ceiling established by B&F, although the university, from its standpoint, believed it did.

In submitting the revised September budget, the president indicated that “. . . While we are transmitting an operating budget plan within the imposed ceiling that is consistent with the policies and guidelines in your budget instructions, I must inform you that the original University budget approved by the Board of Regents on June 18, 1982, represents the official budget of the University”²

In all this, the fault is not that B&F found it necessary to impose ceilings under which the departments, including the university, were to budget their programs. For years, the Legislature had advocated the very procedure which B&F put into practice for the 1983–85 budget preparation cycle. In 1971, with specific reference to the university and the Department of Education (as well as the judiciary, which has since been excluded from executive branch budget controls by constitutional and statutory provisions), the conference committee report on the budget observed:

“ . . . In the case of the DOE and the UOH, these are agencies which have, as governing bodies, boards which are formally charged by the State Constitution with responsibility for the formulation of policy . . .

2. Memorandum, President of the University of Hawaii to the Director of Finance, September 27, 1982.

“Under such a political framework, the appropriate course is for the department of budget and finance to inform the two agencies . . . of the aggregate financial ceilings under which programs may be budgeted, and conduct its budget review to determine that the ceilings and program objectives are adhered to. The establishment of aggregate financial controls would be sufficient to retain the integrity of the governor’s financial plan, while permitting the respective governing boards of the department of education and the university of Hawaii . . . to formulate program and budgetary recommendations within the limitations of overall financial policy and in consonance with State goals and objectives.”³

And again, in 1972, through a special joint Senate-House Committee, the Legislature stated:

“ . . . The problem of unrealistic planning, programming and budgeting on the part of the agencies will continue unless the administration process provides for informing the agencies of the tentative dollar allocations to major program areas . . . Only under realistic financial constraints will there be induced in the agencies, as part of the budget development process, the necessity to rank priorities and to analyze the tradeoff possibilities between programs”⁴

The budget ceiling procedures advocated by the Legislature for budget preparation were designed to: (1) reduce the potential for conflict between B&F and the other executive departments; (2) under the discipline of financial constraints, influence the agencies to examine tradeoff possibilities between programs, including tradeoffs involving workload increases and program changes vs. current service levels; and (3) especially in the case of the Department of Education and the University of Hawaii, enhance the policy making authority of the respective governing boards.

It should be noted that in the case of the Department of Education, the Board of Education was fully cognizant of the budgetary ceiling imposed by B&F, believed that the ceiling was what was needed in order for the department to budget realistically, and ultimately approved a budget which by and large is contained in the executive budget. Not so the university’s budget.

The president can insist, as he has, that the BOR budget continues to be the “official” university budget, but with the aggregate amounts at such wide variance,

3. Conference Committee Report No. 1, Regular Session of 1971.

4. Special Committee Report Nos. 9 and 10, Regular Session of 1972.

it is difficult to see how the BOR budget can be used as the appropriations base for the Legislature. The university could proceed, as we understand that it has, to review how some of its current service levels can be traded off for desired workload increases and program change requests, but with the completion of this review expected at one time to be April 1983, it is speculative whether the review will be timely enough to assist in making legislative appropriation decisions.

Thus, it remains for the next budget cycle for the Board of Regents to assert policy making influence through the budget.

Lack of analysis of current services. Budgeting for next year's current services amounts to little more than determining this year's appropriations and making adjustments for price increases. To all intents and purposes, the university's central budget office prepares the current services portion of the university's operating budget, which encompasses approximately 98 percent of the total budget. Central preparation of the current services portion of the budget is facilitated by heavy use of computerization in the form of a "Budget Allocation Projection Information System."

Essentially, the future costs of the university doing what it is currently doing is ground out by computer with precious little analysis whether it should, in fact and with respect to specific programs, continue to maintain what it is doing. The result is almost all of the university's budget is fixed, becomes sacrosanct as this year's workload increases and program changes become next year's current services, and goes unexamined in university budget preparation and executive budget review.

On the other hand, systematic procedures were in force to review proposed budgetary adjustments stemming from: (1) workload increases, where the existing relationship between personnel and other expenditures to workload is found to require funding adjustments, and (2) program change proposals, which request additional funds to improve the quality of a program, increase its scope, or initiate a new program.

At the Manoa campus, requests for workload increases and program changes were initiated at departmental and comparable unit levels, reviewed by deans and directors, and consolidated into college lists which were submitted to the Manoa chancellor's office. Final recommendations to the chancellor devolved to a 15-member budget, allocation and planning committee selected by the chancellor.

In all, the committee considered more than 350 requests, conducted some 60 hours of hearings with deans and directors, followed by 14 hours of committee deliberations and decisionmaking. The committee recommended to the chancellor that 62 of the 350 requests be funded, amounting to \$8.4 million of the \$17.6 million which had been requested for the biennium. Subsequently, the committee's recommendations were reviewed at the university systems level, which recommended to the president that 30 requests, or a little over \$5 million, be included in the budget. The campus chancellors were given the opportunity to rebut the recommendations. Manoa availed itself of the opportunity and following a hearing involving the president, systems staff, and the chancellors, the president arrived at his recommendation to recommend some 50 items or a little over \$6 million of Manoa's workload increase and program change requests. The recommendations were incorporated into the BOR budget.

All this is not to criticize the process, and certainly not the work of the Manoa budget committee. It is a good example of full participation of the university community in budgeting. What we do question is the focus of the process and the relative amount of time and effort expended on reviewing workload and program change requests when compared with the other 98 percent of the BOR budget.

While the budget review process focused on workload increases and program change requests, the relationship between them and current service levels is difficult to discern. Thus, the result of the considerable budget review effort that was expended, especially by the budget committee, was budgeting "at the margins," i.e., adding items around the fringe of the current services budget. The remedy is to develop budget review and analysis within the current service component of the budget, thus permitting a clearer view of what a given workload or program change proposal has on a current program or activity.

Recommendations

We recommend that:

- 1. In the expectation that with the 1984 supplemental budget and subsequent budget preparation cycles B&F will continue to establish budget ceiling for executive departments, the Board of Regents adopt budgets which adhere to the university's ceiling. Further, that the regents insist that university officials be prepared to make timely recommendations for program adjustments and tradeoffs should the ceiling change any time during the budget preparation cycle.*

2. *University community participation in the review of workload and program change requests be expanded to include review of the current services portion of the budget. To avoid spending a highly disproportionate amount of time and effort on a very small portion of the budget, the focus of review should be in the area of current services with decisions on workload and program change requests being consistent with and being built upon what is brought to light be in review of specific current services.*

Budget Presentation

In the executive budget for the 1983–85 biennium, there are 51 programs covering higher education for which appropriations are being requested. For fiscal year 1983–84, these programs range in size from a general fund request of over \$50 million and 1500 positions for the Manoa instruction program to some \$17,000 and half a position for the Kauai Community College public service program. In terms of budget presentation, these two extremes in program size receive basically equal treatment.

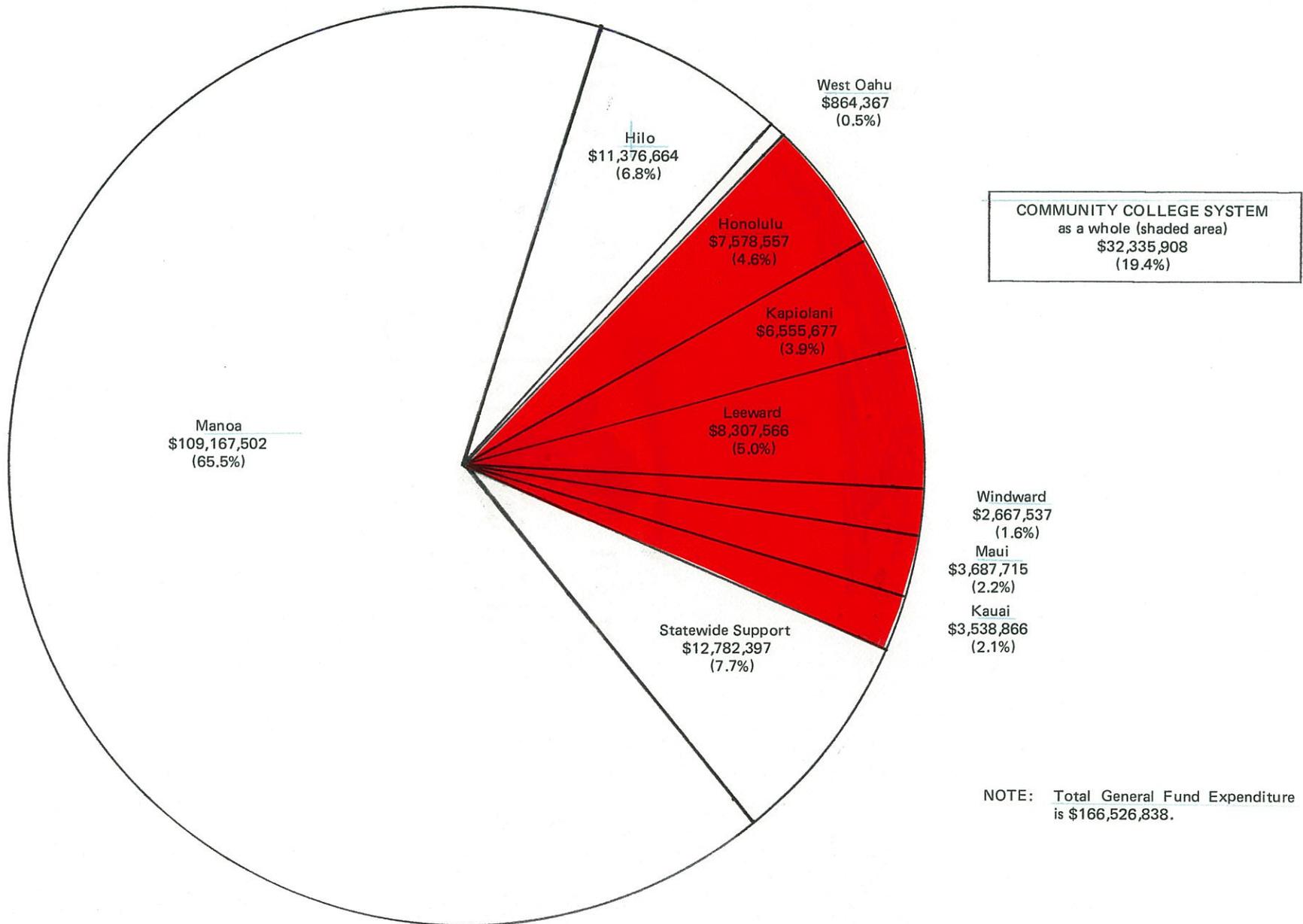
Even when the focus is on campus units, i.e., when the program appropriation requests are aggregated by campuses, wide disparity exists among the various units. This is illustrated by Figure 2.1 which displays the executive budget's general fund request for the 1983–84 fiscal year. As this figure shows, the Manoa campus accounts for almost \$167 million, or 65 percent of the university's fiscal year budget, while West Oahu College's share is less than \$1 million, or about one half of one percent of the total budget. Yet, the budget presentation presents little more information about the programs of the Manoa campus than it does about the programs of West Oahu College.

Need for more detailed budgetary display for Manoa campus programs. In the absence of supporting details, the budget presentation for the Manoa campus, particularly the budget category of the Manoa instruction program, is too huge for meaningful decisionmaking, either by the Board of Regents or the Legislature.

The Manoa campus instruction program, even when summarized in a limited way, consists of: (1) the college of arts and sciences with four faculties (divisions) containing some 50 departments; (2) 12 other colleges and professional schools; (3) the college of continuing education and community services; and (4) many other diverse units and programs such as summer session, center for Korean studies, the law of the sea institute,

Figure 2.1

Executive Budget for Higher Education, by Organizational Units, for Fiscal Year 1983-84
Proposed General Fund Expenditures



NOTE: Total General Fund Expenditure is \$166,526,838.

aerospace studies, military science, etc. Nothing in the present Manoa instruction budget reveals how it affects any of these entities and programs.

Because the instructional budget for the Manoa campus is so large and complex and does not yield itself readily to review and analysis, our assessment is that the budget should be broken down to reflect program and budgetary information on each of the major units at the Manoa campus. This would mean basically: (1) displaying the budget of the College of Arts and Sciences according to the organizational divisions within the college; and (2) presenting separately the budgets of the various professional colleges and schools.

Suggesting that the decisions to be made would be more meaningful if the Manoa instructional budget were to be disaggregated does not necessarily require restructuring of the formal format for executive budget submission. What can be done is to amplify the present executive budget submission, and prior to that, to support the formulation of the BOR budget, through the preparation of supplemental budgetary displays and supporting narratives, which show and discuss how Manoa's proposed instructional budget affects the specific instructional programs to be conducted by the various colleges and schools of the campus.

This does not mean that appropriations need to be made at more detailed levels. How the Legislature decides to appropriate funds, including the levels at which it wishes to appropriate funds, is a legislative prerogative, and it could continue to appropriate funds through the present instructional category. But at least, the Legislature would have, through the supplemental budgetary displays, a better grasp as to what it is appropriating funds for, and if it chooses to modify the proposed instructional budget, it would be in a better position to express its intent as to what specific programs are to be modified and in what way. And so it would also be with respect to the Board of Regents and the budget it reviews and recommends.

Budget presentation emphasis. Since, as discussed in the section on budget preparation, virtually all efforts in budget development at the university focuses upon the preparation and review of workload increases and program change requests, the inevitable consequence is that the presentation of the budget focuses upon these two categories of adjustments to current services. Almost all data and narrative support serve only to justify specific line items to be tacked onto current services. This is historically true

of the BOR budget; it is true of the executive budget, although in the case of the latter with respect to the 1983–85 biennium, emphasis on workload and program change requests is a moot issue since the executive budget does not contain any workload and program change requests.

The inevitable result of the university's approach to budget presentation is that it directs BOR and legislative attention to a relatively minor portion of the budget, highlighting the need for these additional funds or that new position even as virtually the entire rest of the budget representing current services continues on its self-perpetuating way.

Should the university propose to trade off aspects of the current services budget for what it believes to be more urgent workload and program change requests, there is nothing in either the BOR or executive budget presentations which would indicate how such adjustments could be made or what the effects might be. Most of the colleges and schools on the Manoa campus had heretofore performed little program review in relation to the current services budget. While imposition of the budget ceiling subsequently stimulated such review, it is unclear whether, when, and to what extent the results of this review will help the Legislature to conduct a meaningful review of the budget. Nonetheless, any results of such review should be presented to the Legislature, particularly if trade offs involving current services vs. workload and program change requests are to be proposed by the university and considered by the Legislature.

Recommendations

We recommend that:

- 1. The Manoa instruction program be disaggregated to reflect program and budgetary information of each of the major units of the Manoa campus. Rather than incorporating all of the information into the executive budget, the material should be presented in the form of supplemental displays which would show the desired details of program and budgetary information and provide the regents and the Legislature with some perspective as to how the budget affects the programs of specific colleges and schools.*

2. *In an initial step to bring the current services portion of the university's budget into proper focus, the university move forthwith to provide the Legislature with available information that may have implications for the current services budget for the 1983–85 biennium. Further, that on an ongoing basis, program reviews at the university be geared to the current services portion of the budget and the results of these reviews be summarized in future budget presentations to the Board of Regents and the Legislature.*

Budget Execution

The third phase in the budgetary cycle is budget execution, the phase when funds are made available in accordance with appropriations and when funds are expended by operating units. Among other aspects, our assessment of budget execution involved reviewing the system for allocation of funds and procedures for transfer of funds which we discuss in this section.

Allocation of funds. With the exception of funds appropriated for special projects and/or staffing changes, colleges on the Manoa campus are allotted funds essentially based on prior year's expenditures. The effect of this is to allocate resources without regard for changing student enrollment patterns. The end result is to maintain the status quo and effectively freeze activities at levels maintained in the past.

There is very little change in position counts over time, and the payroll costs (faculty and civil service staff) represent over 80 percent of instructional costs. Because the position counts remain, for most purposes, static at the college level there is very little movement in the budget for changes in demand for instruction.

In the past some flexibility for shifting positions in a college had been granted by moving money and authorizations budgeted for a vacant position to other departments within the college. This is now done on a campus-wide basis at the chancellor's office. It should be noted that these movements, known as reallocations, occur on a case-by-case basis and are not done as the result of program reviews or analyses, but only as the immediate situation warrants. Reallocations are not included in the budget, as all that does appear there are workload or program change requests. Movements of positions within a department, college, or between colleges are not reported in the budget so long as the position remains in the same program (e.g., Instruction—Manoa).

The allocation of funds based on prior expenditures to maintain the status quo ignores the changing demands for resources, particularly by the student body. As a result, disparities exist between colleges as to the resources available *vis-a-vis* the number of students enrolled in the colleges. Table 2.2 presents the Manoa budget office allocation of the general fund appropriation for instruction to four different colleges for five fiscal years. Table 2.3 presents total enrollment in the same colleges each fall semester for the same fiscal years. The basic conclusion that can be derived from the tables on allocations and enrollment is that fund allocations among the different colleges have risen at a fairly uniform rate over the past five years despite quite markedly different enrollment trends.

Table 2.2

**Allocation of Funds by Manoa Budget Office
(Program ID UOH 101, Instruction Manoa Only)**

<i>College</i>	<i>FY 1977-78</i>	<i>FY 1978-79</i>	<i>FY 1979-80</i>	<i>FY 1980-81</i>	<i>FY 1981-82</i>	<i>Four Year Net Change</i>
Arts and Sciences	\$19,725,785	\$20,017,232	\$21,631,288	\$23,166,590	\$25,174,112	+28%
Education	2,432,872	2,510,110	2,705,268	2,920,346	3,141,319	+29%
Business Administration*	2,098,703	2,177,495	2,393,784	2,506,772	2,813,225	+34%
Engineering	1,756,436	1,868,259	2,035,378	2,117,000	2,279,961	+30%

*Includes the School of Travel Industry Management.

Source: Data provided by the University of Hawaii Manoa Budget Office.

Table 2.3

**Total Enrollment
Fall Semesters Only)**

<i>College</i>	<i>1977</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>	<i>Four Year Net Change</i>
Arts and Sciences	11,512	11,488	11,291	10,986	11,009	- 4%
Education	1,597	1,449	1,348	1,321	1,248	-22%
Business Administration*	1,937	2,138	2,145	2,119	2,238	+16%
Engineering	1,175	1,207	1,213	1,152	1,261	+ 7%

*Includes the School of Travel Industry Management.

Source: Data provided by the University of Hawaii Institutional Research and Analysis Office.

For example, the College of Education received a 29 percent increase in funds between 1977–78 and 1981–82 in the face of a 22 percent decline in student enrollment while the College of Business Administration received only a 34 percent increase in funds to accompany a 16 percent increase in student enrollment for the same period. While the former has excess capacity, the latter cannot meet student demand and must impose enrollment restrictions.

The present allocation also tends to create serious disparities in unit costs, as shown in Table 2.4. Thus, for the College of Education, the cost per student credit hour has increased from \$127.07 in 1977 to \$200.22 in 1981, or 58 percent; while the comparable increase for the College of Business Administration was from \$83.14 to \$115.75, or only 39 percent.

Table 2.4
Dollar Cost Per Credit Hour

<i>College</i>	<i>1977</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>	<i>Four Year Net Change</i>
Arts and Sciences	\$ 93.92	\$102.41	\$111.14	\$128.35	\$146.54	+56%
Education	127.07	135.18	163.36	186.44	200.22	+58%
Business Administration*	83.14	82.27	89.43	101.70	115.75	+39%
Engineering	136.97	142.50	151.21	168.12	194.69	+42%

*Includes the School of Travel Industry Management.

Sources: University of Hawaii Instructional Unit Cost Studies, Manoa Campus, Fiscal Years Ended June 30, 1978, 1979, and 1981.

There are, of course, many factors which must also be taken into consideration in resource allocation and the tables presented are only indicators of the inflexible nature of the resource allocation procedures. In the Colleges of Arts and Sciences and Education, enrollment has declined, the College of Engineering has had a small increase, and the College of Business Administration must actively enforce a policy of limited enrollment due to the resources available to it.

These are merely symptoms of the problem inherent in the current resource allocation process. Resources should be allocated based upon criteria other than prior years expenditures. Even considering the inflexibility inherent in a low turnover faculty,

further criteria need to be developed based upon different factors, including the important factor of student demand.

Transfers of funds within programs. Funds not needed for the purpose for which they were originally budgeted can either be used for other costs within the same program or they may be transferred to another program. Over the years, the appropriation acts authorize only the Governor, with the approval of the Speaker of the House of Representatives and the President of the Senate, to transfer funds between programs within an expending agency. These types of transfers between programs are less common than transfers of funds within programs which under current procedures require the approval of B&F.

Transfers of funds within a program typically result from expected salary savings. At the beginning of each year colleges project known savings of salary costs due to vacant positions, leaves of absences, etc. The savings are then transferred from designated personal services allotments to other cost elements, such as for supplies and equipment. Conversely, when salary requirements exceed budgeted amounts, transfers are made in the opposite direction.

In the past these transfers were approved after a limited review by B&F. However, B&F recently imposed stringent justification requirements for these transfers.

Current procedures now require that:

“For any program requesting transfers between ‘Payroll’ and ‘Others,’ the justification must address:

- “1) How are the “savings” being generated (e.g., vacant positions, lecturers, etc.)?
- “2) If the “savings” are generated from vacant positions, what positions are vacant? How long were they vacant and are they planned to be filled? What effects do the vacancies have upon program operations?
- “3) What are the funds required for and where is the money to be utilized?
- “4) If the “savings” are to be used to fund purchases of equipment, what types of items are being bought? Also, if equipment is required, why wasn’t it budgeted for?

“5) If the savings are to be used to fund personnel, why weren’t funds originally budgeted for?

“6) What effects will the loss of these funds have upon program operations?”⁵

Program managers need a certain amount of flexibility in adjusting their budgets during the budget execution period, and these requirements seem excessive in light of the fact that these types of transfers represent about one percent of the general fund appropriation. The apparent reason for the stringent controls being exercised by B&F over transfers within programs is to influence savings. However, the net effect is to impose extremely burdensome procedures over a relatively minor portion of proposed budgetary adjustments. It amounts to over control by the State’s central budget agency.

Our assessment is that university should be allowed to make transfers within programs following its own approval procedures within the university and without having to secure approval by B&F. If the Governor at any time believes that savings should be mandated in the executive departments, the more direct way to effect such savings is to prescribe an aggregate amount of savings for each individual department, and if the university is affected by such a mandate, it should be allowed to determine how such savings should be achieved, whether through a reduction or curtailment of intra-program transfers or through whatever means it determines to be best for university programs and operations.

Recommendations

We recommend that:

1. *The university develop a more analytical and need-related approach to the allocation of its resources and equip itself to react more quickly and effectively to changes which occur prior to and during the budget execution period. Budget allocation should be a matter that receives the top level attention of the president and the Board of Regents, and at this level, university officials should present how planned expenditures relate to changing demands for services and the fulfillment of current objectives.*

2. *The university, following its own approval procedures, be allowed to effect transfers of funds within programs and without having to secure the approval of B&F.*

5. University of Hawaii Budget and Organizational Management Office Memorandum dated September 29, 1982.

Chapter 3

ANALYSES OF SOME SELECTED ASPECTS OF BUDGETING AT THE UNIVERSITY

In the preceding chapter, we examine and discuss the overall budgeting process at the University of Hawaii. In this chapter, we focus on some selected aspects of budgeting at the university. *First*, in recognition of the fact that most budgeting action is initiated at the academic department level at the university, we look at how budgeting has been handled relative to three academic departments at the Manoa campus. Our emphasis is on the degree to which attention is given to the current services portion of the budget in the budgeting process at this level. *Second*, taking into account the role of internal review processes within the university, we examine three of these processes which have important budget implications: (1) program reviews; (2) position reallocation reviews; and (3) reviews of small classes. *Third*, accepting the assumption that planning and enrollment trends should have an impact on the budget, we consider these two matters from a budgetary perspective—especially as they relate to the Manoa campus.

Summary of Findings

We find that:

With respect to budgeting at the departmental level—

1. The current budgeting process neither requires nor facilitates review of current operations, and the process is devoid of analysis as to whether changing and increasing demands for services can be met within available resources.

With respect to the university's internal review processes—

2. The program review process has been inadequate, and up to now, has not been of any utility in determining program priorities and budgetary decisions.

3. The resource reallocation review process, i.e., the shifting of resources from one area or activity to another as changes take place, has not been used to maximum advantage in meeting changing needs.

4. The small class review process is ineffectual. Many extremely small classes continue to be offered indefinitely, and small classes are even allowed to increase in number without any apparent regard to high cost or lack of student demand.

With respect to the role of academic planning in budgeting—

5. Academic planning has limited, but real, usefulness in budgeting—especially for the smaller campuses. Given the size and complexity of the Manoa budget, it is probably unrealistic to expect that Manoa's academic plan can do anything more for budgeting than to present generalized fiscal-related concepts which could serve as guides for future budgetary policy.

With respect to the role of enrollment and enrollment trends in budgeting—

6. Enrollment is one of the most important variables in budgeting, but enrollment can be approached from many different statistical perspectives. Enrollment needs to be precisely defined for specific program planning and budgeting situations if it is to be helpful, rather than misleading, to decisionmakers.

Neglect of the Current Services

Portion of the Budget: Three Examples

Academic departments at the university have limited formal responsibility for preparing the current services portion of the university's budget, but they are the prime originators of budget requests for workload increases and program change requests. If budgeting for workload and program changes is to be truly meaningful, however, it must be done in relationship to current operations. Indeed, even in the absence of budget adjustment requests, the current services budget should be closely scrutinized to determine if present resources are being adequately utilized or if there are available resources which might be more beneficially utilized in another way.

Therefore, analysis and consideration of current operations should be an integral part of budgeting at the academic department level. To assess whether or not this is actually occurring at the university, we examined how the budgeting function has been carried out at the departmental level at the Manoa campus.

The three departments chosen for study include the Department of English and the Department of Indo-Pacific Languages of the College of Arts and Sciences and the Department of Nursing of the College of Nursing. The first of these is the largest instructional department on the Manoa campus. The second is one of the smallest. The third is moderate in size and represents a department in one of the professional fields.

Based upon our examination of budget preparation in the three selected departments, our general finding is that the budgeting process at the departmental level as presently carried out at the university neither requires nor facilitates scrutiny of current operations, including the examination of such factors as enrollment trends, cost trends, class size, faculty workload, and market demand. As a consequence, budget requests are not based on adequate review of current resources and other relevant factors. Instead, departments tend to rely upon broad conceptual justifications, such as: (1) enlarging the role of regular faculty, (2) enhancing the role of a particular discipline in Hawaii's society, and (3) achieving some preconceived student-faculty ratio.

The Manoa campus' present system of setting priorities for workload and program change requests does not provide an adequate means of eliminating weak budget requests or of detecting underutilized resources which might be more beneficially utilized in other ways. Although the budget increases requested by these three departments were not included in the BOR budget, they lost out simply because they did not rate high enough up on the priority list. Left unexamined were ways adjustments might be made within existing resources to deal with problems affecting the departments.

The experience with the budget requests from these three departments points up quite graphically the need to include a regular evaluation of the current services portion of the budget as part of the university's overall budget review process. If these departments are at all typical of the Manoa campus as a whole, there may be considerable flexibility within available resources to meet changing and increasing demands for services.

As to the three specific departments and their respective requests for budget increases, the following summarizes our assessment:

Department of English. The department's repeated requests to add more regular faculty positions to relieve or eliminate the existing heavy use of lecturers are difficult, if not impossible, to justify in the face of the following facts:

- (1) Excess class capacity—under present scheduling practices, many classes fall far below the class size limits set by the department thereby creating considerable excess class capacity.
- (2) Excessive diversion of regular faculty resources away from teaching duties—from 15 to 20 percent of the total time of the regular full-time faculty is now devoted to non-teaching activities. This equates to 10 or 15 full-time faculty positions.
- (3) Declining enrollment—over the past five years, the regular full-time faculty has remained almost the same while student enrollment in the department has declined almost 11 percent.

The above facts suggest that a simpler and perhaps sounder alternative for the department would be: (a) to alter course offerings so that fewer and larger classes would be taught, and (b) to reduce the amount of release time granted to regular faculty members. Under these steps, the present regular faculty could replace lecturers, thereby improving instruction while reducing, rather than increasing, costs.

Department of Indo-Pacific Languages. Even under the university's current policy of according high priority status to the Indo-Pacific language program, the department's request for additional faculty positions for three specific language areas (Samoan, Tagalog, and Hawaiian) is exceedingly difficult to justify in the light of the following considerations:

- (1) The department is an extremely low demand, high cost operation—most of its classes have ten or fewer students, and about half of them have five or fewer students.
- (2) Student interest in the areas covered, as reflected in enrollments, has been declining in recent years—especially in classes above the beginning level.

While the choice is not an easy one to make, the university must constantly weigh the trade offs between costs on the one hand and its aspirations to be a center of Indo-Pacific learning on the other hand. In weighing such decisions, student demand as indicated in actual enrollments should be given prime consideration.

Department of Nursing. In requesting five additional teaching positions (based on a student-faculty ratio of 12 to 1) to meet a projected market demand for nursing graduates, the department has taken an overly simplistic approach to the matter and has failed to analyze in any meaningful fashion its possible need for additional faculty resources relative to its existing utilization of resources. Under this approach, many qualified applicants seeking to enter the nursing program have been rejected during a period when: (1) faculty size has remained almost constant, (2) enrollments have been dropping and (3) excess capacity has been available in the program. Indeed, in Fall 1982, the department under new leadership was able to absorb a substantial increase in enrollment without any increase in faculty size and without any apparent ill effects on the program.

The recent action to accept more students into the program is commendable, but it is unfortunate it did not happen sooner when many qualified students were being turned away. It is hoped that future budget, staffing, and admission decisions will be based upon an adequate analysis of actual needs and available resources rather than upon poorly analyzed assumptions.

Recommendations

We recommend that:

1. *With respect to budgeting at the departmental level at the university, generally, we recommend that the budget process at the departmental level require and facilitate scrutiny and analysis of current operations as well as any conceptual justifications that may be developed to support workload increases and program change requests. Such scrutiny and analysis should include examination of key factors like enrollment trends, cost trends, class size, faculty workload, and market demand. To the extent data on these matters are centrally developed, they should be provided to the departments and to reviewing authorities.*

2. *With respect to our specific findings relating to the three departments we examined, we recommend that:*

a. *The Department of English review and assess more realistically its current use of resources and consider the use of such alternatives as scheduling fewer and larger classes and reducing the amount of release time from teaching.*

- b. *The Department of Indo-Pacific Languages review and assess more realistically its current use of resources, particularly in terms of relating resources to observed needs as well as to conceptual desirability; and guard against unjustifiable proliferation of courses by conducting careful needs assessments before planning any new language programs or course offerings.*
- c. *The Department of Nursing analyze in a more careful and realistic manner its actual and prospective needs for faculty to meet the market demand for nursing graduates, and maximize the utilization of existing capacity to accommodate as many qualified applicants as possible.*

Budget-Related Internal Review

Processes of the University

With most budget modifications at the university originating at the departmental level, higher levels within the administrative structure exert their influence over budgetary affairs primarily through the exercise of their authority to review and decide on budget-related actions. Hence, internal review processes take on considerable budgetary significance within the university.

The program review process. As far back as early 1972, the university adopted a policy and procedure calling for the regular internal review of programs within the university. The stated purpose of such reviews was to provide a sound basis for allocating personnel and financial resources by enabling the university to react to changing conditions through a careful assessment of such factors as program objectives, priorities, target groups, costs, funding, faculty facilities, measures of effectiveness, and continuing need and demand.

Over the years, a great deal of effort was expended and a mountain of paperwork was generated in an attempt to carry out this policy and procedure. Nevertheless, in our management audit of the university on which we reported in 1981, we found that this process suffered from many serious deficiencies and was largely fruitless in its results. Accordingly, we recommended that the whole process be replaced by a more meaningful approach.¹

1. Legislative Auditor, *Management Audit of the University of Hawaii: Organization, Planning and Personnel Management*, Report No. 81-9, March 1981, pp. 64-72.

The university's action on our recommendation is unclear. However, in Fall 1982, the university administration issued a new set of instructions pertaining to this subject after the Department of Budget and Finance imposed a ceiling on the university's budget request for 1983–85. As previously noted, this ceiling was substantially below the total of the already approved BOR budget and provided no room for any workload increases and program change requests unless current services were reduced.

The purpose of the new instructions was to establish a rational process whereby budget reductions might be made and yet preserve essential programs in the face of financial stringencies confronting the State and the university. In effect, a new procedure was set up to carry out program reviews, beginning with program self-reviews at the departmental level and then moving up through the university's administrative hierarchy. At the Manoa campus, the stated intent is to include its Budget, Allocation and Planning Committee in the review process.

The university's reaction to the ceiling imposed on its budget request for 1983–85 confirms and demonstrates the severe inadequacy of the previous program review process and the university's resultant inability to make budget adjustments in a timely and meaningful manner.

It is too soon to know whether the new process will overcome the deficiencies of the previous process or will be of material assistance in determining program priorities and resource allocations for the coming biennium, but various weaknesses and shortcomings are already evident. Notably absent are: clear statements of the missions, goals, and objectives of the university and of its component parts by which all programs can guide their efforts; identification of the programs and program activities which will be the subjects of review or guidelines for their selection for review; specification of the types and format of backup information to be collected and presented for review; clear and definite criteria by which priorities are to be determined within programs and among programs; a timetable under which information can be supplied in time to be used by the Legislature in its budget making decisions.

Recommendation. We recommend that the new process incorporate features which will overcome the deficiencies which completely undermined the previous program review process. To the extent possible, these changes should be made while modifications in the 1983–85 budget request are being considered. All of them should be developed

fully in the ensuing months so that a sound, ongoing program review process will be in place before the start of the next budget cycle. These features include the following:

- 1. Providing clear statements of the missions, goals, and objectives of the university and its component parts.*
- 2. Specifying precisely the programs and program activities subject to review.*
- 3. Specifying the type and format of information to be used for review, including data already available on a centralized basis within the university.*
- 4. Specifying the criteria by which decisions are expected to be made including the measurable as well as the purely qualitative.*

The resource (position) reallocation review process. Due to the extreme diversity of university programs and other academic and personnel constraints placed upon the institution, the university cannot quickly and easily shift resources from one area or activity to another as changes take place and the demands for service shift from one place or field to another. When we refer to resources in this sense, we mean primarily personnel because personnel costs are predominant in the university's total operating budget.

However, there is one way in which the university enjoys a degree of flexibility in deploying its personnel resources. This is provided by the position vacancies which occur as a result of deaths, retirements, resignations, and other separations. As large as the university is, there may be a hundred or more of these occurring every year just among academic and professional personnel. As these positions become vacant, the university has an opportunity to decide how they might be filled to the best advantage of the university and its various programs.

Both the university and the Legislature have recognized the significance of this resource flexibility. On the university's part, it has established policies and procedures governing these resource reallocation decisions. As positions have become vacant at the program level, they have reverted to position pools under the control of deans, chancellors, or other administrative officials. Then decisions have been made either to refill the positions as such or to shift them to another area where a greater need is felt. As for the Legislature, it is interested in knowing where these shifts occur; therefore, it has requested the university to report to it concerning such reallocations of resources.

University policies, procedures, and practices relating to resource reallocations have not been clear and definite enough in terms of available information to provide a firm basis for evaluating performance in this area. However, several factors suggest that this tool for achieving program flexibility to meet changing needs has not been used to maximum advantage. These factors include: a previous wide dispersion of decisionmaking authority over position reallocations which inevitably has limited the scope of individual decisionmakers in weighing needs against resources; a lack of definite and consistent criteria for weighing competing needs; a case by case approach which tends to narrow perspectives and make it more difficult to maintain consistency.

The report which the university has given to the Legislature on position reallocations has not been particularly useful or meaningful. While it provides a historical listing of shifts that have been made, it does not provide a complete and understandable picture of what has been occurring. For example, it does not reflect the occurrence of vacancies where the vacancies have been refilled and no shifts were made. Moreover, it does not explain why shifts have or have not been made in a context where competing needs are weighed and resources are allocated to the areas of greatest need.

Recommendations

We recommend that:

- 1. The university develop a comprehensive and systematic approach to position reallocations which will emphasize advance planning (projecting likely turnover as well as areas of increasing and decreasing need), clearly established criteria, a careful weighing of resources against needs, and increased participation in establishing the bases for decisionmaking, both at the BOR level and among faculty, other staff, and students.*

- 2. The university provide the Legislature on a regular basis with fuller and more meaningful information on resource reallocations within the university. Such information should include data on all vacancies that occur and all actions taken with respect to such vacancies. There should also be included an analysis of the bases upon which the personnel deployment and redeployment decisions are made.*

The small class review process. Class size is another important variable affecting the utilization of faculty resources. It can also be a significant indicator of student interest and demand for instructional services. Small classes inevitably result in high unit costs because the total costs of the classes have to be spread among very limited numbers of students or student credit hours. While some types of instruction may by their nature have to be highly individualized (e.g., applied music), many small classes may occur simply because student interest does not exist or course offerings have proliferated beyond the point of reasonableness.

Therefore, from the viewpoint of resource management, it is important to keep track of and control the occurrence of small classes. In areas where small classes are deemed necessary or acceptable, there should be periodic reviews to ensure that such justifications do indeed continue to be valid. In other areas, clear restrictions on small classes should be established and performance should be closely monitored to ensure compliance with such restrictions and to prevent the recurrence of classes where inadequate utilization is made of faculty resources.

The university has given some recognition to the problems of small classes. Generally, there is a minimum limit of ten students to a class, but exceptions and exemptions from this limit are allowed. In the last couple of years, information on classes of ten or fewer students has been compiled for the Manoa campus and reviews have been conducted of these small classes.

However, policy formulation and policy review in this area are weak. Whereas this would appear to be a matter of prime concern at the BOR level, most of the attention given occurs at the Council of Deans level on the Manoa campus. There is no one place where all policies and procedures on the subject may be found. No completely regularized system has been established for continued monitoring and evaluation of small class policies, procedures, and practices, and inconsistent reporting formats make year to year comparisons extremely difficult.

In addition, the present review process does not include regular and vigorous reevaluations of the justifications for exemption from the small class minimum limit of ten students. Thus, once a high priority status is given to an area of study, many extremely small classes may continue to be offered indefinitely or even allowed to increase in number without any apparent regard to their high cost or their lack of student interest

and demand. A very large number of small classes are concentrated in a few departments which have gained blanket exemptions from the small class limit on the basis of being high priority programs. As a consequence, unit costs in these departments are extremely high. For example, in some instances the average unit costs in these departments may be as much as three to six times greater than the overall average cost for the College of Arts and Sciences.

Recommendations

We recommend that:

1. Policy formulation and execution concerning small classes be strengthened by:

- a. Making it an area of BOR concern in terms of policy adoption and policy review.*
- b. Establishing a clear and comprehensive set of policies and procedures on the subject.*
- c. Ensuring continued monitoring of compliance with the established policies and procedures, including a consistent form of reporting.*
- d. Creating standards for remedial actions that could maximize class size in programs with low total demand but high educational priority.*

2. Close and continuing attention be given to the justifications for and ongoing validity of exemptions from the small class minimum limit. Particular scrutiny should be directed to the so-called high priority areas where student interest and the demand for educational services appear to be negligible or declining while costs are extremely high and increasing.

The Role of Academic Planning in Budgeting

Academic planning is but a variant of the general process of program planning. As a formal process at the University of Hawaii, it has been in existence since at least 1965 when the first academic development plan (now known as ADP I) was published. Since then, the plan for the Manoa campus has undergone several metamorphoses (ADP

III is reportedly in its final stages of completion), the Hilo campus has issued its own ADP, and educational development plans have been adopted for the various community colleges.

Under the State's system of planning, programming, and budgeting, planning is made an integral part of the budgeting process. It is unfeasible, however, to incorporate all planning details and justifications in the regular budget documents. On the other hand, it is possible to reverse the process in effect and to produce planning documents which include budgetary estimates and make clear how the estimates have proceeded from the plans.

Basically, this is what has been done for all the plans at the university except the ADPs for the Manoa campus and the plan for Kapiolani Community College. Even in the latter case, however, the plan lends itself fairly readily to the budgeting process because all programs and activities are specifically described and both short- and long-term changes are set forth in detail (although not in dollar amounts or position counts like the other plans).

A quite different situation obtains with regard to the plans for the Manoa campus—including the still unofficial ADP III. Lacking the specificity of the other plans, these plans have limited usefulness for purposes of detailed budgeting. Moreover, considering the complexity and size of the Manoa campus budget, it is probably unrealistic to expect that the same thing can be done for this campus in a document which would still be in a manageable and understandable form. However, the draft ADP III does contain some generalized fiscal-related concepts which could serve as guides for future financial policy.

Our general assessment is that academic planning as practiced at the University of Hawaii has limited, but real, usefulness in budgeting—especially for the smaller campuses. To the extent these units can define program changes and time them over the years, the changes could be converted to costs and position requirements. Thus, the academic plans for the smaller campuses can guide budgeting in a fairly direct and meaningful way.

The ADP III for the Manoa campus, however, is—and probably must be—quite different in scope and thrust. Its usefulness lies in its enunciation of actions which might be taken to enable the campus to accomplish a changing mission within a stable financial framework. Such actions include:

1. Maximizing faculty utilization through retraining, reassignment, and—probably the most important—reallocation of positions.
2. Restructuring programs based on selected priorities.
3. Maximizing the utilization of programs through such steps as: (a) repackaging coursework into new curricula; (b) revising degree programs, both by additions and deletions; and (c) changing course offerings from one level to another.
4. Building budgetary support through good justifications and full accountability for funds received.

We consider these guidelines sound, but they are no better, of course, than the degree to which they are followed in actual practice. At present, ADP III is still unofficial, but it is our hope that these guidelines will become part of the bases for future university financial policy and serve as a starting point for forward budgeting.

Recommendations

We recommend that:

1. *The smaller campuses continue to define program changes and set the timing of such changes in a format which can be converted to projected costs and position requirements. Ongoing planning should also include, of course, rigorous review of existing operations.*

2. *With respect to the Manoa campus, guidelines set forth in the draft ADP III be adopted and used for purposes of establishing future university financial policy and of performing forward budgeting for the campus.*

The Role of Enrollments and Enrollment Trends in Budgeting

There are many variables which affect the university's budget. However, one of the most important of these is enrollment. For this reason, careful attention needs to be given to enrollment by all those who must prepare, defend, analyze, review, or approve budgets for the university.

Yet, this is much easier said than done because enrollment is a complex subject and can be quite misleading if not adequately understood. This complexity arises out of the fact that students are not all the same; they cannot be treated as identical and interchangeable units. For instance, a part-time beginning undergraduate cannot be equated with an advanced graduate student in terms of their demand on resources. As a consequence, there are numerous ways of defining enrollment for purposes of measurement, and each definition varies in its usefulness and applicability as a form of measurement.

Thus, when one looks at enrollment statistics, one is confronted with such terms as "headcount" enrollment; "full time equivalent (FTE)" enrollment; "lower division," "upper division," and "graduate" enrollments; "crossovers;" "full-time" and "part-time" students; "classified" and "unclassified" students; "semester hours;" and "student credit hours."

Then, as one looks at enrollment trends, various facts begin to emerge depending upon how one looks at the data. For example, if one compares overall headcount enrollment for the university as a whole for the fall semesters of 1976 and 1981, one finds that there has been an increase of 3.1 percent. However, if one delves further, it will be found that virtually all of this increase is accounted for by a surge in unclassified undergraduates. Concurrently, there has been a decrease in upper division undergraduate students while all other categories have increased very moderately. Among the separate campuses, there are considerable variations from these overall trends.

If analysis is carried another step further, it will be found that part-time students are making up a larger proportion of the university's enrollment. In other words, the university as a whole is giving less instruction to more students. For example, at Manoa, total semester credit hours between Fall 1976 and Fall 1981 decreased 10.1 percent while total headcount enrollment decreased only 3.5 percent.

Thus, while enrollment is an important determinant of costs, it can be seriously misleading if only the grossest measurements are used or if the wrong measurements are used for a particular activity. The differential effect of enrollment trends on costs is well illustrated by the somewhat surprising result we obtained when we made a comparison of unit costs for the years of 1976 and 1981 at the Manoa campus. We found,

for example, that the cost per student credit hour at the graduate level increased much less than the increase at the lower division level—that is, 37.7 percent compared to 78.9 percent.

While no sweeping inferences can be drawn from our limited analysis of enrollment and cost data, this analysis does indicate that enrollment data should be carefully scrutinized when presented in support of budgets. When enrollment data are used, it is important for all participants in the budget process to be clear regarding such matters as the kind of enrollment referred to, the level involved, and known information on relative costs. Enrollment information is essential to sound budgeting; but if a numbers game is to be played with it, the game should be fair and played with full knowledge of its details.

In looking ahead at the university budget, it will not be enough just to project enrollments in fairly gross terms. It will be necessary to provide additional information concerning what the enrollment “mix” is likely to be, what events are occurring or what actions are being taken that will affect this “mix,” and what differential cost effects are likely to result from changes in the “mix.”

Recommendations

We recommend that:

1. *All participants in the budgeting process for the university work together in developing a common set of definitions, data categories, data sources, and other similar analytical tools for looking at enrollments and costs.*

2. *In future planning and budgeting for the university, much more attention be given to detailed examination of enrollment trends as a factor having planning and budgeting implications.*