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**STATE CAPITAL IMPROVEMENTS
PLANNING PROCESS**

**A Report to the Governor
And the Legislature of the State of Hawaii**

**Office of the Legislative Auditor
State of Hawaii**

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Foreword

In August 1967, at the request of the joint House-Senate interim committee on capital improvements, we undertook an examination of the State's capital improvements system. Our purpose was to document and assess the existing system of planning for, constructing and financing the State's capital facilities and to propose changes in that system which would render it more effective.

This is the first of three reports resulting from this study. In this report we present our findings and recommendations with respect to the State's capital improvements planning process, i.e., that phase of the capital improvements system having to do with deciding what capital facilities are needed in the future and programming, budgeting and authorizing their acquisition. Succeeding reports will deal with the capital improvements implementation process (that phase of the system in which the facilities which have been authorized are designed and constructed) and the capital improvements financing process (all of those matters having to do with the problem of how to pay for the capital facilities).

This report was initially submitted to the joint House-Senate interim committee on capital improvements on March 15, 1968. On March 20, 1968 the joint committee filed a report with the legislature indicating its approval of the contents of the auditor's report and support of his recommendations. (See appendix, page 49.) The joint committee further recommended that the auditor's report be transmitted to the governor and all affected agencies for their consideration and evaluation and that the administration be requested to submit its comments on the report to the legislature through the office of the legislative auditor by May 3, 1968. As of June 28, 1968, the date this report was sent to the printer, no response from the administration was received by this office.

During the course of our study, we solicited the assistance of a great number of persons from both the legislative and executive branches of the State and county governments and from community and business organizations. In every instance we could not have hoped for better cooperation. To these people we express our deepest appreciation.

Clinton T. Tanimura
Legislative Auditor

PART I
AN INTRODUCTION TO THE STUDY OF THE STATE'S CAPITAL IMPROVEMENTS SYSTEM

Chapter 1

INTRODUCTION

This is the first of three reports prepared by the office of the legislative auditor as a result of its study of the State's *total* capital improvements system and process. This report focuses on the *planning* aspect of the total system. Subsequent reports will focus on the system's implementation and financing aspects.

The reasons which prompted our study and the scope of the study of the total system are set forth in this introduction.

Background

During the 1967 session, the Hawaii State legislature expressed a general concern for the continuing adequacy of the existing system of planning for and implementing the State capital improvements program. This concern generally went to the question of whether or not that system represents the most efficient, effective and prudent way by which appropriations now nearing \$100 million per year are made.

More particularly, the legislature was aware that among other things, long delays were being experienced in getting projects started after monies had been made available, actual costs often differed widely from estimates, confusion existed over the respective authority and responsibility of staff and line departments, and statewide standards for assessing and identifying project needs were unavailable. Because of the

time limitations of the session, however, it was able to do little more than note the problems involved. A consideration of changes which would render the system more effective was not possible.

In order to follow up on its work of the session, the legislature established an interim committee¹ to conduct an in-depth study of the problems associated with authorizing, funding, and implementing capital improvement projects. The committee is composed of the joint select committee of the senate and a committee appointed by the Speaker of the house of representatives. Specifically, the committee was asked to examine the following:

1. The respective roles of the legislature and the executive branch in programming, authorizing and implementing capital improvement projects.
2. The manner in which capital improvements are selected, planned and constructed by the executive branch. Particular attention would be given to the roles of the staff agencies and user agencies.
3. The funding of capital improvement projects.
4. The effect of new, proposed approaches to authorizing, funding and implementing capital improvement projects on those projects which had been previously authorized but for which bonds had not been issued.² In order to provide

¹See S.B. 1, S.D. 2, C.D. 1, Conference Committee Report No. 24.

²Ibid.

the committee with the staff support necessary to a study of this nature, assistance was requested of and received from the office of the legislative auditor. The findings made by the office are the subjects of the three reports issued by the office on the State's capital improvements system.

Purpose of the Study

The purpose of our study was to document and assess the existing system of planning for, constructing and financing the State's capital facilities and to propose changes in that system which would render it more effective.

Scope of the Study

Generally, the department of accounting and general services is the expending agency of all monies appropriated for capital improvements. There are, however, certain exceptions. For example, the department of land and natural resources is the expending agency of all monies appropriated for the construction of State parks and the development of public lands; and the department of transportation is the expending agency of all monies appropriated for the construction of harbors, airports and highways. The system we examined is primarily that one in which the department of accounting and general services is the expending agency.

Approach

For convenience, the study of the total system was divided into three phases, although it was recognized that each phase is interrelated with the others. These three phases are, briefly:

1. **Planning.** That phase of the system having to do with deciding what capital facilities are needed in the future and programming, budgeting and

authorizing their acquisition, development or construction.

2. **Implementation.** That phase of the system in which the facilities which have been authorized are designed and constructed.

3. **Financing.** All of those matters having to do with the problem of how to pay for the facilities.

In general, the initial step was one of factfinding—ascertaining and documenting information with respect to the present system. An analysis of this data was then conducted to assess the system's adequacy, problems and areas of possible improvement. This information was gathered through interviews with departmental personnel (line and staff), staff members in the county jurisdictions, legislative leaders and community organizations. Reviews were also made of pertinent documents, journals, reports and library references detailing capital planning, implementation and funding systems, principles and problems.

Definition of Terms

Many terms are used in the three reports to convey rather specific ideas. Most of these terms are defined as they are introduced in the reports. There are other terms, however, which are used generally throughout the three reports. These terms are defined as follows.

Capital improvements means land, physical facilities (such as buildings) and initial equipment and furnishings for newly constructed physical facilities.

Capital improvements expenditure means the expenditure of funds for the acquisition, development, landscaping and beautification of land, the construction of new physical facilities (including architectural and other technical fees, built-in equipment and fixtures); major renovations or conversions of and additions to existing

physical facilities; and initial equipment and furnishings for new physical facilities.

Process means a series of actions leading to a particular end. (Where the context permits, the use of the word *process* includes *system*.)

Staff agencies means State agencies which service other State agencies and serve as the principal advisers to the governor in his decision-making functions.

System means a structure or formalized assembly of parts within which activities occur. (Where the context permits, the use of the word *system* includes *process*.)

User agencies means State agencies which are the principal users of a capital improvement.

Organization of the Report on Capital Improvements Planning

This first report on the planning aspect of the State's capital improvements system is organized into four parts. Part I consists of this introductory chapter. Part II (chapters 2 and 3) provides a framework against which the State's present capital improvements planning process is examined. Part III (chapters 4 and 5) contains our analysis of the State's capital improvements planning process. Part IV (chapter 6) contains our summary and recommendations.

PART II
A FRAMEWORK FOR ANALYSIS OF HAWAII'S
CAPITAL IMPROVEMENTS PLANNING PROCESS

Chapter 2

THE PLANNING CONTEXT

One of the difficulties we encountered in analyzing Hawaii's capital improvements planning process is the varying uses of the word, *planning*. *Planning* implies the *formulation of some design, scheme, course or method to guide future action*. It is thus susceptible to use, and has been used, in phrases and terms to describe almost *any* activity which predetermines future course of action. *Capital improvements planning* is one of these terms.

Capital improvements planning is distinguished from *operating program planning*. This distinction is more than simply in kind; it is a distinction in scope and emphasis. (This distinction is explained later in this chapter.) In both capital improvements planning and operating program planning, other *planning terms* are used, such as *master planning*, *program planning*, *physical planning*, and *project planning*. These planning terms are intended to describe the various activities which take place in capital improvements planning and operating program planning. A source of confusion is that no single planning term necessarily means the same thing to all persons. The same term is used by government agencies to describe differing activities. For example, *master planning* may mean one thing

to one government agency; quite another to a second agency. It may also mean one thing when used to describe an activity in capital improvements planning, and it may mean something entirely different when used to describe an activity in operating program planning.

It will be helpful to the reader of this report, if at the outset we (1) outline the context in which capital improvements planning takes place and (2) provide a framework within which we may examine the varying activities (no matter how they are labeled) which are now occurring in capital improvements planning. This chapter outlines that context; the next chapter provides the framework.

Capital Improvements Planning as Part of a Total Planning Process

Capital improvements—land, buildings and equipment—have no end purposes to serve in and of themselves. Government's responsibility is not simply to acquire, develop and construct capital improvements. Capital improvements are acquired, developed and constructed so that they, together with other resources—personnel, money, supplies, etc.—may permit government to perform its more fundamental and major missions in areas of direct public concern—i.e., in health, safety, education and welfare of its citizens.

A program for the acquisition, development and construction of capital improvements is

derived, then, not from a separate and independent process, but rather from that process by which government decides on its missions, on the things it must do to accomplish those missions, on the resources necessary for the government to do the jobs through which its missions may be accomplished, and on the policies prescribing the manner in which the resources are to be acquired, used and disposed of. Such a process is a total process.¹ Determinations respecting government's missions and the things which government must do to accomplish those missions lead to the development of *operating programs*. Determinations respecting the capital improvements required to do the things government needs to undertake in the accomplishment of its missions and the policies to govern the acquisition, use and disposition of capital improvements lead to the development of *capital improvements programs*. The development of both operating and capital improvements programs (as well as the development of other resource acquisition programs) are parts of the total process. It follows, then, that no meaningful analysis of the State's capital improvements planning can be

¹Melville C. Branch, in his book entitled, *Planning Aspects and Applications*, John Wiley & Sons, Inc., New York, 1966, describes this total process as "comprehensive planning." Robert N. Anthony, the author of *Planning and Control Systems: A Framework for Analysis*, Graduate School of Business Administration, Harvard University, Boston, 1965, refers to the total planning process as "strategic planning." He defines "strategic planning" as "the process of deciding on objectives of the organization, on changes in these objectives, on the resources used to attain these objectives, and on the policies that are to govern the acquisition, use, and disposition of these resources" (pp. 16, 24). Professor Anthony distinguishes "strategic planning" from "management control" and "operational control." He defines "management control" as "the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives" (pp. 17, 27), and "operational control" as "the process of assuring that specific tasks are carried out effectively and efficiently" (pp. 18, 69).

made unless the process by which the capital improvements plans are formulated is examined within the context of the total planning process.

A Description of the Total Planning Process

The total planning process and the part that capital improvements planning plays may be described by dividing the total process into its three principal phases: (1) planning; (2) programming; and (3) budgeting. This division, of course, is not a rigid one, since in actual practice, each phase blends into the others. It is, however, a convenient division for the purposes of describing the total planning process and of identifying the role which capital improvements planning plays in the total process.

The following is a brief description of each phase. Only a brief and general explanation of what each phase is all about is necessary at this point. A fuller, more detailed description of what actually occurs in each of the phases in planning for capital improvements is contained in the next chapter where we develop our framework.

1. Planning. The primary focus in the planning phase of the total planning process is upon the major missions of government. The major missions of government are those which are of direct service or benefit to the public—for example, the promotion of education, health, safety and welfare of the people.²

²Not all government activities are intended to result directly in the accomplishment of a public-oriented mission. Some activities are internally-oriented. For example, the program of in-service training of State employees is directed toward the attainment of increasing the capabilities of State employees; only indirectly is it intended to increase knowledge in Hawaii's children or to provide welfare assistance to the poor. These internally-oriented activities are designed to increase the internal capabilities of government so that it can better perform its public-oriented missions. Internally-oriented activities are thus

The planning phase consists of a series of sequential steps. They are as follows.

- **Identification of public needs.** The needs of the public in all areas of government endeavor are identified in this step. The needs describe the difference between what does exist and what should exist in our society.
- **Establishment of broad goals of government.** Goals are statements of the overall ends government will seek to achieve; they point out the direction in which government intends to move. Goals are broadly stated, and reflect generally a consensus of current regional, social, economic and political needs and interests of society.
- **Development of objectives.** To be workable, broad goals must be translated into objectives. Objectives are statements of the specific results government ought to be striving for. The attainment of the objectives promotes the broad, general goals of government. Statements of objectives have the following characteristics: (a) they are end or output oriented—that is, they describe the specific result, condition or product which should be brought about; (b) they prescribe a time period, which

supportive in nature. Internally-oriented activities, like public-oriented activities, should be properly planned and programmed, and the sequential steps noted in the planning and programming phases of the total planning process are applicable in the planning and programming of internally-oriented activities. The acquisition, development and construction of capital improvements are internally-oriented, supportive activities. The application of the sequential steps in the planning and programming phases of the total planning process to capital improvements planning is explained in this and the next chapter.

looks several years into the future, for the attainment of the objectives; and (c) they are stated in quantitative form or in such manner that it is possible to identify or develop criteria by which to measure the degree of success or failure in attaining the end-result, condition or product. Thus, statements as “to provide our children with the best education possible,” are insufficient. Rather an objective states, for example, what skills of what competency our children are expected to possess by the end of what time period.

- **Formulation of standards or criteria by which to judge progress in the attainment of the objectives.** Criteria are needed to permit measurement of the degree to which what government is doing is leading to the attainment of the objectives. By the criteria established, government can determine, at the end of the prescribed time period, whether or not it has in fact attained what it initially set out to achieve.
- **Identification of alternative ways to attain objectives.** All statements of objectives, if properly formulated, permit consideration of several alternative ways of attaining the objectives. The alternative ways are sometimes called *programs*, and a program may consist of a number of specific activities.
- **Comparison of alternatives.** The alternatives are compared in terms of the costs and benefits of each—that is, they are compared to determine which one (or which combination of alternatives) offers the greatest gain at a given cost or is the cheapest in attaining a

given level of gain. In the analysis, the risks, uncertainties and assumptions are identified and the effects of the alternatives upon the community and other governmental programs are considered.

- **Selection of the preferred alternative.** The selection, of course, follows and is based upon the analysis conducted in comparing the various alternatives.
- **Allocation of resources.** The State's total resources (in terms of dollars) are limited. Thus, it is necessary that a decision be made as to the allocation of the State's total resources among the major missions of government and among the programs designed to attain the various objectives of government. How much is allocated influences program selection, program size and resource mixes.

Since the focus of the planning phase is upon the development of operating programs, it is quite clear that the sequential steps outlined above are applicable in the development of these operating programs. What is not so evident, however, is that these steps are equally applicable in the development of capital improvements programs. The following illustrates this.

Since alternative operating programs must be compared in terms of their costs and benefits, as the alternatives are proposed, the need for capital improvements to implement the operating programs must be determined, the kind of capital improvements needed must be identified, and their costs estimated. At this stage, that determination, identification and estimation are necessarily somewhat gross, but nevertheless they do

occur. Thus, capital improvements planning begins in the planning phase of the total process as operating programs are developed.

The sequential steps outlined above are applicable to capital improvements planning at this stage, because (1) capital improvement acquisition is based on need—need to implement operating programs; (2) capital improvements have objectives—for example, to assure the availability of the needed capital improvements in the implementation of the operating programs, and to assure their availability economically, efficiently and effectively; (3) standards and criteria require formulation to determine the economy, efficiency and effectiveness with which the capital improvements are acquired; (4) there is more than one way to assure the availability of capital improvements; (5) the alternative ways of assuring the availability of capital improvements need to be compared in terms of their respective costs and advantages; and (6) the amount of money allocated determines which alternative is selected, how much is acquired at any given time and when they are acquired.

There is one principal difference in the application of the sequential steps to operating program planning and to capital improvements planning. This is in terms of the time-span for which planning is had. Some operating programs have objectives, the attainment of which is not expected for many years. For example, a timber growing and harvesting program is likely to have objectives the attainment of which is not expected until many years later—50 or more years. In this program, the benefits do not begin to show until sometime in that distant future. Other operating programs, however, may be developed for objectives, the attainment of which

is expected in five or six years. For example, in education, objectives may be stated in terms of the attainment of a certain level of skill by students in five or six years. A shorter time-span is generally considered if the operating program is expected to terminate relatively soon or if it would be highly speculative and unrealistic to project desired objectives, calculate progress and estimate cost much beyond five or six years.

Although operating programs may be limited to a time-span of five or six years, capital improvements programs take into account a future of 20 or more years. The reason is that capital improvements are costly, and they are generally of a permanent nature with an expected life of 10, 20 or more years. Thus in capital improvements planning, the possible expansion or contraction of the operating programs they are intended to serve, the possible substitution of other operating programs in the future, and the projected increase or decrease in the size of the target groups the operating programs are intended to benefit, are taken into account.

One other difference between operating program planning and capital improvements planning should be mentioned. Not every operating program requires capital improvement of its own. Several operating programs may share in one capital improvement—for example, educational operating programs are able to share a single room or a single building. In addition, the operating programs of several government agencies may share the use of a single capital improvement—for example, all State staff agencies may be housed in one building, or the specific operating programs of the department of health and the department of social services may share a building where the operating programs have a

common aim or common clientele. Capital improvements planning, therefore, may require the consideration of more than one operating program, and the identification of the need for capital improvements in one operating program may require consideration of the need for capital improvements in other operating programs.

2. Programming. The planning phase of the total planning process is followed by *programming* the selected alternatives. *Programming* means to lay out the selected programs in some orderly fashion and to specify (a) which operating programs are to be implemented when; (b) what resources (including capital improvements) are required at what point in time for each operating program, (c) the sequence in which, and when and how, each resource that is required is to be acquired, developed or constructed; and (d) the cost of acquiring, developing, constructing and maintaining each resource.

The focus in the programming phase is upon the resources required to carry out the operating programs decided upon in the planning phase. The emphasis is upon how and when to acquire and upon estimation of the costs to acquire the needed capital improvements. Although in the planning phase the needed capital improvements are identified, the alternatives of assuring their availability are considered and compared and the costs of the alternatives are estimated, it is in the programming phase that the capital improvements (and other resources) needed to implement the selected operating programs are determined and cost estimates made with greater precision.

The operating programs and the capital improvements programs are programmed over a time-span of five or six years. This is so, even

if in the planning phase, the future as long as 20 years may have been taken into account. Only that portion of the total plans which encompass the next five or six years is required to be *programmed*. The reason for this is that *programming*, upon its completion, is then translated into a budget, and the time-span of a budget is the next five or six years.

3. **Budgeting.** *Budget* has been defined as the monetary expression of a plan. It is a document which contains a list of the selected operating programs. It reflects what operating programs are to be implemented over the next five or six years; it displays what resources, at what costs, in what sequence and in what increments, are to be acquired over the five or six-year period. The document is then the final product of the planning and programming phases of the total planning process.

It is initially approved by the governor and then subsequently submitted to the legislature as the governor's proposal. What is sought from the legislature is a decision as to the direction the State should be moving in meeting the needs of the general public, the objectives the State should be pursuing, the operating programs it should undertake in pursuit of the objectives, how much money should be spent for the resources required by the operating programs and when, in what sequence and increments the money should be spent over a period of five or six years. The legislature makes this decision on the basis of the governor's proposed budget and upon such analytical documents which may be submitted, reflecting the alternatives considered and the analysis performed by the executive branch in making the proposed budget.

The decision of the legislature is expressed through appropriations bills. In practice, the legislature approves only the first of the five or six-year budget. It approves the first year's operating programs and the first year's resource costs. However, the legislature approves the first year's operating program and the first year's expenditure of funds with knowledge and understanding of what is in store in terms of operating programs and resource costs in the following four or five years.

Implementation and Evaluation

The total planning process does not end with the budget and legislative authorization. Planning-programming-budgeting is a cyclical phenomenon and is constantly recurring. Not long after budgeting and legislative authorization, planning begins anew. Each time planning begins, the old plans and programs are reviewed and revised, if necessary, in the light of (1) changing conditions which require changes in goals and objectives and identification of new alternatives, and (2) experience gained in implementing what the legislature previously authorized. The second item requires a few words of comment.

Upon passage of the appropriations bills by the legislature, those operating programs authorized are implemented and those capital improvements or those phases of capital improvements for which money was appropriated are acquired. Thus, with money appropriated, the site is acquired, working drawings are completed, specifications drafted, contracts for the purchase, development or construction let, the site developed, and the acquisition, development or construction of the capital improvements completed. Implementation is accompanied by data gather-

ing. Data are acquired to permit evaluation of the success or failure with which the planned operating programs are meeting desired results and the acquisition, development or construction of capital improvements are serving the purposes for which intended, efficiently and effectively.

Evaluation traces the causes of failure, if any, and leads to a re-assessment of the plans, programs and resource requirements which were determined in the earlier planning, programming and budgeting efforts. The results of such re-assessment are then reflected in the new cycle of planning, programming and budgeting.

Scope and Limits of Capital Improvements Planning

Since the word, *planning*, can be used to describe any activity which predetermines future course of action, the term, *capital improvements planning*, is susceptible of being used to cover almost any activity which has something to do with the future of capital improvements. As we use it in our report, *capital improvements planning* is not that all-encompassing. For example, it does not cover the acts of drawing schematics and blue-prints of a building. These are *implementation acts*, although schematics and blue-prints do chart future courses of action.

Generally, *capital improvements planning* covers all *essential* activities which are required in the planning, programming and budgeting phases of the total planning process. What is essential, and what is not, are subject to differences of opinion. In the next chapter, we note what we think are some of the essential activities in the planning, programming and budgeting phases for capital improvements planning. We might sum-

marize the activities we include in *capital improvements planning* in this fashion: all activities which must be performed to enable the legislature to make rational decisions in appropriating funds for capital improvements. This is not entirely satisfactory, but it at least permits the *legislature* to prescribe what is and what is not essential for their decision-making.

The term, *long-range planning*, is often used to refer to capital improvements planning which looks as far as 20 years or more into the future. The term, *short-range planning*, is used to refer to capital improvements planning which looks to a future of one to six years. In our usage of the term, *capital improvements planning*, we include both long-range and short-range planning.

Chapter 3

THE FRAMEWORK

Since capital improvements planning is a part of the total planning process, our framework is built around the three major phases of the total planning process: planning, programming, and budgeting. We establish in this framework the major activities which take place for capital improvements planning in each of the three phases.

Planning

Although the primary focus in the planning phase of the total planning process is upon operational programs, this does not mean that resources, including capital improvements, receive no attention during the planning phase. They do.

The following steps in the planning phase are applicable to capital improvements: (1) identification of the need for capital improvements; (2) formulation of objectives; (3) establishment of standards; (4) identification of alternative ways to insure the availability of capital improvements; (5) comparison of the alternatives; (6) selection of the preferred alternative; and (7) allocation of resources for the acquisition of capital improvements.

1. **Identification of the need for capital improvements.** As alternative operating programs are identified, the capital improvements needed to implement the operating programs must also be identified. Initially, this identification of the needed capital improvements is tentative. However, as the operating programs are finally selected, the identification of the needed capital improvements becomes more precise.

The following factors, among others, are taken into account in determining the need for capital improvements:

- **The content and nature of the operating program.** Is it a new program or one intended to substitute for one that is already in existence; can it utilize existing physical facilities or are new ones required; does it require physical facilities of its own or can it share physical facilities with other operating programs; is the operating program a temporary one or is it likely to last for some time?
- **The operating program size.** What target group of people is the operating program intended to benefit; how large is that group now and how much larger is it likely to be five, 10 and 20 years from now; what percentage of that target group is the program intended to care for now and in five, 10 and 20 years?

- **The implementation of the operating program.** Is the operating program to be implemented from a central location, or is the implementation to occur from stations scattered throughout the State; how many State employees will be involved now and in five, 10 and 20 years from now in implementing the operating program?
 - **Laws and policies.** Are there, and if so, what laws and policies affect the operating program size and the acquisition, construction and utilization of physical facilities needed for this operating program? (For example, in education, the State statute which mandates school attendance until age 18 affects the size of the operating program, and the department of education's policies regarding centralization and decentralization, school year, school day, etc., affect operating program implementation.)
 - **Risks and uncertainties.** How good are the projections on the future size of the target group the operating program is intended to benefit; what technological changes may affect the operating program's continued existence or its implementation method; what economic and social changes will affect the need for physical facilities for the operating program; what technological and scientific changes will affect acquisition and construction methods for capital improvements?
2. **Objective.** The objective of any capital improvements program is to insure that the capital improvements required for an operating program are available at the time they are needed and that they are acquired efficiently and effectively. Implied in the words, *efficiency* and *effectiveness*, are the concepts of economy, comfort, utility and aesthetics.

3. **Standards.** To insure that capital improvements are available at the time they are needed and that they are acquired, used and disposed of efficiently and effectively, some standards must be established to guide such acquisition, use and disposition. The standards, of course, should be those which promote *efficiency* and *effectiveness* and the concepts implied therein—economy, comfort, utility and aesthetics. Standards are of two kinds: (a) those which are broad and govern the acquisition, use and disposition of all capital improvements generally; and (b) those which are specific and govern the acquisition, use and disposition of particular kinds of capital improvements, such as State office buildings (which house the administrative units of one or more departments), schools, hospitals, parks, roads, etc.

Among the standards which should be established are the following:

. **Site selection standards.** Standards which apply generally to all capital improvements describe the State's social, economic and political goals and other factors which must be taken into account in selecting sites; they prescribe the timing and manner in which sites are to be selected and acquired.

Specific standards for particular kinds of capital improvements describe the State and departmental policies respecting centralization and decentralization in administration and implementation of operating programs; they prescribe the maximum and minimum site sizes for an optimum implementation of the operation programs; and they spell out the policies respecting distances of physical facilities from centers of population.

. **Standards governing physical facilities' sizes, placement.** These standards prescribe the maximum and minimum number of people a building or a complex of buildings should be able to accommodate, what constitutes the most efficient placement of buildings in a complex, the minimum supportive facilities which should be included in any building or complex of buildings (such as an administrative office or building, a cafetorium, etc.), when and under what circumstances one story and two or more storied buildings should be constructed, when structures should be of wood and when of concrete, when and under what circumstances temporary structures should be used and permanent structures built.

. **Standards governing space utilization.** These standards prescribe the maximum and minimum sizes of rooms for different purposes (such as for an office, a classroom, a laboratory, etc.), the maximum number of people a room should be able to accommodate, the optimum placement of fixtures in relation to one another, rules relating to utilization of a room.

. **Standards governing construction.** These standards specify what kind of materials should be used for what kinds of physical facility, the minimum requirements which must be adhered to in the design and structure of the physical facility, the minimum expectations in terms of workmanship, and the State and departmental policies respecting the hiring of consultants.

. **Standards for cost estimation.** These standards specify what costs are to be included in esti-

mating the costs of acquiring, developing and constructing capital improvements of particular kinds; they provide information and guidelines regarding average cost, based on experience and research, including the average cost of maintenance of physical facilities.

- . Standards by which priorities are determined. Statewide standards spell out how priorities for the State as a whole are established; departmental standards spell out how priorities within the department are established; and both, statewide and departmental standards, spell out the factors to be taken into account in determining priorities.

4. Alternatives. Just as there is more than one way to attain operating program objectives, there is more than one way of assuring the availability of capital improvements needed for a given operating program. Thus, for each operating program alternative which is proposed and selected, the different possible ways of securing the needed capital improvements must be identified. Among the alternative ways of assuring the availability of the capital improvements are:

- . better utilization of existing facilities;
- . renovation of existing facilities;
- . additions to existing facilities;
- . renting or leasing facilities;
- . constructing new facilities.

5. Comparison of alternatives. In comparing the various ways of assuring the availability of the needed capital improvements, the following, among other, activities are performed.

- . Estimate the costs, benefits, advantages, disadvantages of each alternative.

- . Analyze the costs and benefits of the various ways of fulfilling the need for capital improvements.
- . Identify the risks and uncertainties inherent in or attendant each alternative.
- . Determine the effect of each alternative upon other operating and capital improvements programs.
- . Determine the impact which each alternative may have upon the community.

6. Selection of the preferred alternative. Upon analysis and comparison of the various ways of assuring the availability of the needed capital improvements, a decision is made as to how they are to be acquired. At this stage, except perhaps in some rough fashion, no decision is made as to the precise stages in which the capital improvements are to be secured. Such decision cannot be made unless it is known how much money is being allocated for what operating programs and how much for physical facilities in the next fiscal year (and the succeeding four or five fiscal years).

7. Allocation of resources. The resources available to government are limited, and not all desirable operating programs can be undertaken, nor can the needed capital improvements be secured all at once. Thus, there is need for an allocation of the total available resources among the various operating programs and the different kinds of resources needed to carry out the operating programs.

Allocation decisions are made at two levels of government. Initially, the State's total available

resources are allocated at the State level among the major missions of government and to capital improvements. Each department, then, within the total allocation, determines what it considers to be the best combination of operating programs and *programs* the acquisition of the needed capital improvements. (*Programming* the acquisition of capital improvements is the subject of the next section of this chapter.)

How much money should be made available for capital improvements in the next fiscal year (and in each of the succeeding four or five years) depends on a number of considerations, among which are:

• **The fiscal strategy of the State.** While planning for operating and capital improvements are taking place, fiscal strategies are also being formulated at the top level of government. The fiscal strategy of the State is formulated on the following, among other, factors: (a) the State's cash position; (b) the State's revenue projection; (c) constitutional bonded indebtedness limitations; (d) the size of the backlog of past authorized, but unimplemented capital improvements projects; (e) the trends in the money market, in terms of cash availability and interest rates; and (f) the estimated impact on the State's future fiscal status if cash is used or bonds are floated in certain specified amounts during the next fiscal year and during the four or five succeeding fiscal years for capital improvements.

• **The economic conditions of the community.** The economic conditions existing or predicted for the next five or six years, such as the trends in costs of construction, the level of construction activity, the presence or absence

of competition in the construction industry, and the trends in land values, influence the cost of acquiring capital improvements, and the anticipated cost in turn influences how much capital improvements should be acquired in any given year.

• **The standards of priority established.** Whether or not capital improvements for a given operating program will be acquired at any time during the next five or six years depends on the relative importance of the operating program itself and upon the relative urgency for the need of that particular capital improvement.

Programming

Programming in the capital improvements planning process results in a timetable of action for the next five or six years. The timetable spells out *what action* is to be taken *when*, at *what cost*, to insure the availability of *what capital improvements* for which *operating programs*.

1. **Time-span.** Although in the planning phase of the total planning process the capital improvements requirements are projected many years into the future, only those capital improvements on which some action is anticipated within the next five or six years are programmed. Programming capital improvements much beyond five or six years runs the risk of detracting from the precision desired in programming; both timing and cost estimates become less precise as the time-span is extended.

2. **Constraints.** Programming entails decisions as to which capital improvements should be included in the five or six-year program plan, and what portion of each such capital improve-

ments should be undertaken in what year. Several factors influence those decisions. Among them are those which were discussed earlier, as follows:

- . **Policies, standards.** Programming must be accomplished within the policies and guidelines established in the planning phase of the planning process—e.g., priorities and fiscal strategies of the State.
- . **Economic conditions of the community.** Those economic conditions which influenced the allocation of the State's resources to capital improvements generally are applicable in determining which capital improvements should be undertaken during the five or six years.
- . **Content, nature and size of operating programs.** The content, nature and size of the operating programs for which capital improvements are to be acquired and which were initially considered when the need for the capital improvements were identified in the planning phase, must now be more precisely determined.

3. Incremental development of a complex. Where capital improvements include a complex of buildings, decisions must be made as to whether or not the entire complex is to be acquired, developed or constructed all at once, or whether it is to be acquired, developed or constructed in increments, and if the complex is to be acquired in increments, what those increments should consist of. In determining the increments, if that is the choice, the following, among other, factors are taken into account:

- . the rate of the annual increase expected in the number of people to be accommodated at the complex;
- . the priority in which the various operating programs which are ultimately to be offered at the complex is to be implemented at the site;
- . the support facilities (such as an administration building, cafeteria, etc.) which are required to be included in the first increment.

4. Time-phasing the steps to be taken to acquire capital improvements. For each capital improvement for which some action toward its acquisition is contemplated within the five or six-year period, the capital improvements program should indicate what step is to be taken in what year. Generally, the following are the steps which need to be taken to complete the acquisition of a capital improvement: (a) site selection; (b) site acquisition; (c) formulation of a development scheme; (d) design preparation; (e) contract letting for the purchase, development or construction of the capital improvement; and (f) completion of the development or construction.

The activities which take place in each of the steps may be briefly described as follows.

- . **Site selection.** Generally, site selection requires the identification of several alternative locations, and a comparison of the alternative sites in terms of their estimated costs of acquisition and the advantages each offers.
- . **Site acquisition.** This involves the actual purchase by agreement or condemnation, or if it

is land owned by the State, a transfer by executive order.

Formulation of a development scheme. For each project (a project may consist of two or more buildings, if they are to be designed and constructed together), a development scheme is formulated. The development scheme is in narrative form and describes, among other things, the following:

(a) the placement and functional relationship among the buildings included in the project, and the placement and relationship of new buildings to those already existing on the site (in this connection, it should be noted that even if a multi-building complex is to be constructed incrementally, the development scheme takes into account the ultimate size of the entire complex, the ultimate operating programs to be offered at the site, and the general relationship among the buildings in the total complex); (b) the development work required to put the site into a state suited to the needs of the operating programs; (c) the space and use requirements of each room; (d) the fixtures required in each room, and their functional arrangement; (e) the initial equipment needs for each room. In short, the description should be such as to provide explicit guidance to the architect assigned or hired to design the project with respect to size, use and functional arrangements of the buildings and the rooms within them.

In addition to the foregoing description, the cost of designing and constructing the project is estimated as accurately as is possible at this stage of the project. The estimate here is much more precise than the estimate made during

the planning phase. This is necessarily so since, in this stage, the exact size, shape, fixtures, etc., are identified.

Design preparation. In this stage, the buildings in the project are designed by an architect. The architect prepares his design in three stages: (a) schematics; (b) preliminary drawings (plans); and (c) final drawings (plans).

Schematics are the development scheme laid out in diagram form. The buildings in the project are shown by single-line drawings to indicate the placement of the buildings on the site, the room sizes and the functional relationship between and among the buildings and the rooms therein, and between and among the paraphernalia within each room (doors, shelves, sink, etc.).

Preliminary drawings are the first attempt at translating the development scheme and the schematics into a multi-dimension layout for the guidance of the contractor in constructing the building. The elevation of the buildings, the excavations required on the site, the kind of materials required, accurate dimensions of rooms, shelves, etc., are shown in detail.

Preliminary drawings may require several revisions, until a final set of drawings is prepared. Together with the drawings, a set of detailed specifications regarding the building is prepared.

During the course of drawing the schematics and the preliminary drawings, and certainly upon completion of the final drawings, the cost of constructing the buildings and com-

pleting the project is estimated with great care and with as much precision as circumstances permit.

Any deviation in the cost estimated at this time from the cost estimated prior to the preparation of the schematics is determined and the reasons therefor noted.

Contract letting and construction. Upon completion of the final drawings, the project is ready to be let out on contract for construction. The project is announced, bids solicited, and contract awarded. Thereafter the site is developed and the buildings constructed.

During the construction, and certainly upon completion, an inspection is made of the project to determine conformance by the contractor with the terms of the specifications, the final drawings and the conditions of the contract award.

Budgeting

The budget is a monetary expression of the plan decided upon in the previous two phases: planning and programming. It contains the following parts:

1. **Summary of the steps to be taken and their costs.** The budget summarizes in tabular form what steps of the various capital improvements projects are to be undertaken in what year and at what cost. Only those steps which require financing for their accomplishment are noted in the table—i.e., site acquisition, design preparation and construction. With respect to those steps which are not shown in the budget, it is expected that they have been or will have been completed at the time funds for the succeeding steps are

requested. Thus, for example, if funds are requested in the first year of the six-year budget for site acquisition, it is assumed that the desired site has already been selected; and if funds are requested for design preparation, that the development scheme has already been completed.

2. **Identify the source of funding.** The tabular display of the six-year financial requirement should specify for each project included therein, the source of financing for the project—general fund, revenue fund, federal fund, cash.

3. **Supportive analytic documents.** The budget request should be accompanied by analytic documents which explain the selection of the projects for inclusion in the six-year plan; the economic, financial and other factors considered in the preparation of the budget; the reasons for the particular manner in which the projects are time-phased; the alternative methods considered to satisfy the operating program requirements and the reasons for the selection of a particular method (new buildings rather than adding to existing facility, for example); the basis for the cost estimates; and an explanation of the work performed which is required to be completed prior to the undertaking of the step in a project for which funds are being requested in the first year of the six-year plan.

The budget is initially submitted to the governor for his approval. Upon approval or revision, the budget is then transmitted to the legislature as the governor's program. Legislative decision is made upon the plans and programs and the resource allocation noted in the budget. In actual practice, as in the operating budget, the legislature decides only with respect to the first year's portion of the five or six-year program. The decision, however, is made with an explicit understanding of what is coming ahead

and the costs that are likely to be entailed in the subsequent four or five years.

The legislature's action results in the capital improvements appropriations bill.

Evaluation

The plans and programs for capital improvements are subject to continuous review and re-assessment and to modifications and changes as a result of experience and changes in conditions. For example, implementation of a part of the capital improvements program may reveal that the project, upon construction, fails to serve effectively, or at all, the operating programs it was intended to accommodate—rooms may be too small, the functional arrangements within a room may prove to be inefficient, the construction may be faulty due to inadequate building standards, etc. Also, new technology relating to performance of operating programs or to construction of capital improvements may develop, the target group the operating programs are intended to serve may turn out to be larger or smaller than initially anticipated, and economic conditions may alter. As experience is gained, and as economic, scientific, societal and environmental changes occur, it is expected that the plans and programs will be modified.

Agencies' Roles in Planning, Programming, Budgeting

Our framework for analysis is not complete without some comment regarding the roles of the various government agencies in the planning, programming, and budgeting of capital improvements and without some observations about the kind of staff capabilities required by the various agencies to perform their respective roles effectively.

Generally, two branches of government—the legislative and the executive—are deeply involved in the total planning process.¹ The role of the legislature may be briefly explained as follows.

1. **The legislative role.** The role of the legislature is substantial in the total planning process. It is a high level decision-making body. It makes its decisions through the enactment of:

- . *Substantive laws*, which express the general purpose and set forth the goals of administrative action and authority to be exercised.
- . *Structural laws*, which set forth the organizational framework of administrative agencies.
- . *Procedural laws*, which specify how administrative agencies shall conduct their business, including the preparation of budgets, the maintenance of accounts, the appointment of personnel, etc.
- . *Appropriation laws*, which specify what administrative agencies may spend in the performance of their legal duties.²

Of the four classes of laws by which the legislature makes its decisions, the appropriation law is by far the most common instrument through which the legislature makes its policy decisions on the State's operating and capital improvements programs. In enacting appropriation laws,

¹In the case of operating and capital improvements programs for the judiciary, the judicial branch is also involved. Its role, however, is akin to that of a user agency in our framework.

²This classification is from Millett, John D., *Government and Public Administration*, McGraw-Hill, New York, 1959.

the legislature acts upon the budget prepared and submitted by the executive branch.

Theoretically, upon receipt of the budget, the legislature may scrutinize and review all planning and programming activities which occurred in the preparation of the executive budget. It is well known, however, that the limitations imposed by time, the legislative process, staffing and the availability of information seriously affect the ability of the legislature to examine each and every program included in the budget.

This being the case, legislative involvement in the total planning process is then restricted generally to a review of (1) the statewide goals and objectives, the allocation of the State's total resources (including capital improvements) among the major missions of government, the statewide standards and criteria which were used by the executive branch to determine how, when and what capital improvements are to be acquired, to establish priorities and to estimate costs, and the fiscal strategies, economic conditions and other factors which were taken into account in programming; and (2) *on a selective basis*, the alternatives considered and the analysis performed in deciding upon the specific operating and capital improvements programs included in the executive's budget, the factors considered in determining the manner in which capital improvements are time-phased, the adequacy and reasonableness of the cost estimates, project size, site selection and design preparation, and the departmental standards used to determine capital improvements priorities, design and construction. Which programs are selected for this second type of review depends largely upon the interests and concerns of the members of the legislature at the time the executive budget is under consideration. The review by the legisla-

ture may result in modifications, revisions, rejections or additions to the plans submitted by the executive branch.

2. **The executive role.** The role of the *executive branch* in the total planning process is more extensive than the role of the legislature. This is necessarily so, since it is the executive's responsibility to formulate the proposed budget for consideration by the legislature, and, unlike the legislature, the executive branch has the time, staff and information to accomplish this task.

Ultimately, of course, the governor is responsible for the proposed budget. But, like the legislature, the governor personally has neither the time nor the expertise necessary for the task. He thus is aided by his staff agencies. In addition, the user agencies (line departments) are also involved in the total planning process within the executive branch.

Among the staff agencies, there are three principal kinds³ which are involved in capital improvements planning: (a) a central staff agency concerned with the State's goals and objectives and with assuring that the various operating programs are in consonance with the State's goals and objectives and with one another; (b) a central staff agency responsible for the State's fiscal affairs; and (c) a central staff agency with respect to capital improvements design and construction. For convenience, these agencies are hereafter respectively called (a) State program office, (b) State fiscal office, and (c) State construction service office.

The respective roles of the user agency, the staff agencies and the governor himself are as follows.

³This is not to suggest that there should be three separate State departments.

Planning

Setting statewide goals, objectives and standards. Initially the goals and objectives are formulated by the State program office. The user agencies may, and generally should, participate in the formulation of the goals and objectives, or suggest and react to those formulated by the program office. The program office submits the statements of goals and objectives to the governor, who makes the final decision within the executive branch.

The formulation of statewide standards and criteria is the responsibility of the State central agencies. The standards and criteria with respect to operating programs and to determining capital improvements needs and priorities are the responsibility of the State program office. The standards and criteria with respect to the structural engineering, architectural, development and construction aspects of capital improvements, including standards for estimating costs, are the responsibility of the State construction service office. The formulation of fiscal strategies is the responsibility of the State fiscal office.

The statewide standards and criteria formulated by the staff agencies are general in nature, applicable generally to all State capital improvements. Standards and criteria which are peculiar to capital improvements of a special kind, such as school buildings, university buildings, hospitals, etc., are formulated by the user agency responsible for the operating programs these capital improvements are intended to serve. Thus, the department of education is responsible for the specific standards and criteria applicable to public school buildings and libraries, and the university of Hawaii is responsible for standards and criteria applicable to university buildings.

Formulating programs. The setting of program objectives, determining criteria by which to measure progress, identifying alternatives, estimating costs and benefits of the alternatives, comparing and analyzing the alternatives, and selection of the preferred alternatives are performed initially by the user agency. The user agency's determination is then subject to review by the State program office.

The State program office's review, with respect to operating programs, is (a) to determine whether or not the operating programs recommended are consistent with statewide goals and objectives and the operating programs recommended by other user agencies; (b) to assess the adequacy of the analysis conducted by the user agency; and (c) to determine the reasonableness of the cost estimates for the recommended operating programs.

The State program office's review, with respect to capital improvements, is (a) to determine whether or not the standards and criteria formulated by the user agency for the acquisition, development and construction of capital improvements of a particular kind (e.g., school buildings) are consistent with the general, statewide standards, (b) to assess the reasonableness of the need for, and the estimates of the costs of acquiring capital improvements, in the light of the operating programs (both size and content) being recommended and the standards developed by the user agency, and (c) to assess the quality of the analysis conducted in the selection of the recommended way of assuring the availability of the capital improvements.

Resource allocation. The State program office then recommends to the governor the operating programs which should be undertaken by the

State, the sizes of the various operating programs and the amount of resources (in dollars) which should be allocated to the major missions of government and to capital improvements in the next fiscal year (and in each of the succeeding four or five fiscal years). The recommendations are made in the light of the State's fiscal strategies and priority standards established by the State fiscal office, and the existing and projected economic conditions of the community.

Programming

The user agency is primarily responsible for programming its operating programs and the capital improvements programs over a span of five or six years, within the total resources (in dollars) allocated to the agency. Thus, the user agency time-phases the activities necessary to acquire, develop and construct the capital improvements. It determines what site is to be acquired when, whether or not a multi-building complex is to be developed in increments and, if so, in what order, when the project scheme is to be developed, when the building design is to be prepared and when the building is to be constructed.

The State program office *reviews* the programs developed by the user agency. The review considers whether or not the site selected is in keeping with statewide economic and physical planning goals; the State's fiscal strategies; the future implications of the capital improvements expenditures; the economic conditions of the community; and whether or not the program is consistent with State policies established in the planning phase of the planning process. In this connection, it may refer the cost estimates of the user agency to the State construction service

office for a check on the accuracy of the estimates. The staff agency's recommendations are then made to the governor for approval, disapproval or modification and for submission to the legislature.

Budgeting

The decisions reached by the governor are then translated into a budget for submission to the legislature. The preparation of the State's budget is the responsibility of the State program office.

Implementation

The implementation of the appropriations made by the legislature is the joint responsibility of the user agency and the staff agency. The user agency is responsible for the formulation of the development scheme, which determines placement of buildings on the site, determination of the functional relationships between and among buildings, rooms, facilities and fixtures, the room size and space requirements, etc. The user agency is, of course, expected to comply with statewide standards for construction. The State construction service office, in turn, is expected to render advice and data respecting use efficiency, space utilization and costs.

The actual designing of the project—that is, the drawing of schematics, preliminary plans and final drawings—is the responsibility of either the user agency or the staff agency. Where capital improvements are constantly recurring, rather than sporadic and occasional, it would appear that the user agency may well be staffed to be responsible for the design of the projects. On the other hand, where the user agency has only sporadic capital improvements requirements, permitting it to maintain a staff for the purpose of

designing the projects may well be a waste of public funds and the central staff agency may well be assigned the responsibility.

Where the central staff agency is responsible for the designing of the project, the staff agency's function is technical—that is, it is responsible for the drawings according to accepted principles of engineering and architecture. It must, however, be guided by the use intended of the capital improvements, the requirements of the operating programs it is intended to serve, and the functional needs of the building as determined by the user agency. Thus, all schematics and drawings are subject to the approval of the user agency.

Once the final plans are approved by the user agency, the actual construction rests in the staff agency. There are general State laws and regulations which govern the letting of contracts for all capital improvements. The advertising for bids, the selection of the contractor, and the supervision to be rendered during construction should be the function of the staff agency. Acceptance of the project, once completed, should be the function of both the user agency and the State construction service office. The user agency checks for conformance with the needs of the operating program, and the staff agency checks for adherence to engineering requirements.

Evaluation

Evaluation is the function primarily of the user agency. It is, after all, the user agency which becomes aware of the functional deficiencies in a building or physical facility. Such discovery may well lead to changes in the standards and criteria for capital improvements acquisition, development and construction. The staff

agency, which has the responsibility for engineering and architectural designs and workmanship, reviews for efficiency in designing projects. Its findings may lead to changes in statewide standards and criteria.

Staff capabilities

To permit the user agency and the central staff agencies to properly discharge their respective responsibilities, it would appear that each is required to have personnel with the following capabilities:

1. **User agency.** Each user agency requires a staff composed of (a) those with program analytic capabilities and (b) in user agencies which prepare project designs, those with engineering or architectural competencies.

2. **State program office.** The State program office requires personnel with analytic and economic capabilities to formulate statewide goals and objectives, determine priorities, and review for sufficiency, adequacy and reasonableness the user agencies' operating programs and capital improvements programs and the process by which they are prepared.

3. **State fiscal office.** This office requires personnel with fiscal and economic background for it to make economic forecasts and revenue projections and to formulate the State's fiscal strategies.

4. **State construction service office.** This office needs technical personnel versed in engineering and architecture. It also requires personnel with research capabilities to study such matters as methods of construction, construction materials, construction costs, space utilization and space use efficiency. This office should be responsible for finding new, economic methods by which capital improvements may be developed and constructed.

PART III
AN ANALYSIS OF THE STATE'S CAPITAL IMPROVEMENTS PLANNING PROCESS

Chapter 4

THE PRESENT PROCESS, GENERALLY

In this chapter we describe generally that which is now taking place by which the State's operating programs and capital improvements programs are prepared. We analyze the present process in the next chapter.

The State government today produces two budget documents. One of these documents, called the *operating budget*, reflects a one-year cost of personnel and operations for the various operating programs of the State. The other document, called the *capital improvements budget*, reflects the State's capital improvements requirements on a six-year basis. These two documents are the products of essentially two separate and independent processes. They are as follows.

Operating Budget Process

1. Issuance of instructions by the department of budget and finance. In mid-July of each year, the department of budget and finance issues its *Operating Budget Instructions*. This document instructs each State department to prepare and submit to the central budget agency by September 15, (a) estimates and justifications for current service, workload increase and expansion expenditures for the ensuing fiscal period, and (b) a program evaluation report.

The *Instructions* directs the departments to supply the following data in the program evaluation report:

- . an historical background of the program;
- . the current bases for the program;
- . the program goals;
- . the program objectives—annual and projected for five years;
- . the program activities—including workload measures;
- . the program finances—source, past expenditures, operational expansion requirement estimates for the future five-year period, and departmental earnings.

2. Preparation by departmental program chiefs. With some variations, in each department, the budget request and the program evaluation report are prepared initially by the program chiefs. The program chiefs' budget requests and evaluation reports are then forwarded to the departmental fiscal office, whose primary functions are to guide and coordinate the efforts of the program chiefs. The fiscal office consolidates the budget requests and evaluation reports prepared by the program chiefs. The consolidated departmental estimates and program evaluation report are then approved by the department head for submission to the department of budget and finance. The department head may, of course, revise or modify the estimates and report put together by the fiscal office. Generally, he acts upon the advice of his chief fiscal officer.

3. **Review by department of budget and finance.** The department of budget and finance reviews the estimates of the departments and either accepts them or returns them for revision, and subsequently prepares the governor's budget. This review is performed by the budget analysts in the budget division of the department of budget and finance. There are ten budget analysts and six budget aids, under the direction of a supervising budget analyst,¹ organized into five functional groups: higher education, public education, development and natural resources, health, protective and social services, and finance, commerce and staff. They review the departmental estimates primarily to determine the reasonableness of each department's estimates and the sufficiency of the justifications for the budget requests. The program evaluation report serves as a source of information for the budget analysts to gain an understanding of the department's programs. No action is ever taken on the report itself.

4. **Revenue estimation and revisions in departmental requests.** Subsequent to an initial review by the budget analysts, revenue projections are obtained by the department of budget and finance. If the projection is low, the budget analysts begin slicing the budget requests. Only in the cases of the department of education and the university of Hawaii, does the requesting department have an opportunity to recommend its own cuts, although, in all cases, any department may, if it chooses, appeal to the governor to save the cuts made by the budget analysts.

If the projection is high, additional funds may be allocated to the various departments, and the departments generally have the opportunity to designate where the increases in the budget are to be made. The amount allocated to any department may be appealed to the governor, whose decision is final within the executive branch.

5. **The budget.** After each department's requests have been reviewed and finalized, the department of budget and finance compiles all departments' requests into a final operating budget. The budget is presented to the governor, and upon his approval, it is submitted to the legislature.

Capital Improvements Budget Process

1. **Issuance of instructions by the department of planning and economic development.** In late August of each year, the department of planning and economic development issues its *Instructions for the Preparation and Submission of Departmental Six-Year Capital Improvements Programs*. The *Instructions* prescribes the general procedures to be followed by the departments in submitting their capital improvements requests, defines what is and what is not *capital improvements*, specifies that plot plans and departmental organizational charts accompany the capital improvements requests, and sets the due dates. Together with the *Instructions*, two sample forms are provided the departments. To the forms are attached further detailed instructions as to the manner in which the forms are to be completed.

One of the two sample forms is known as *Form A*. The instructions attached to Form A require that a form be completed for each departmental project. On the form, the departments are required to supply the following,

¹As of November 30, 1967, three budget analyst positions and three budget aid positions were vacant.

among other, information: project location; project description; effect of the project on the department's annual salary costs, maintenance costs, and other current expenses; the construction time required; the status of site acquisition; the estimated costs of acquiring land, developing the land, drawing plans, construction, landscaping and beautification, and initial equipment; the annual increments (over the six-year period) in which the project is to be completed; means of financing; and justifications for the project. The project justification is to include the following items:

- . the department's objectives and programs related to capacity of existing plant;
- . future objectives and programs to be served and projected need for the facilities;
- . a concise statement where applicable, as to expected economic impact of the project (e.g., direct employment resulting, private investment induced, new business generated, new employment forthcoming, availability of labor skills, etc.);
- . federal, State or departmental standards to be met;
- . age of structure, fire risk, sanitary conditions, etc., of building or buildings to be replaced or rehabilitated;
- . resulting percentage increase in facilities based on added space or service rendered—for example, the number of additional hospital beds;

- . a copy of all program studies, planning reports, applications for matching *federal* funds, relevant statistical tables or graphs showing population or enrollment trends, overcrowding, etc.;
- . effect on the reporting unit's program if the project is not undertaken;
- . specific description of the programs to be served by the project, citing number and kind of persons to be served, personnel to be housed, vehicle, etc., to be served by the facility.

A note is attached to the instructions accompanying Form A that if needs cannot be expressed in specific terms in the project justification as required, then it may be possible that although the project is desirable, further study is required, and that under these circumstances, a request for only pre-planning funds should be made with a rough estimate of the probable construction cost involved. It also suggests that there is at least a year's leadtime between planning and probable construction.

The second of the two sample forms is labeled, *Form B*. On this form, the departments are asked to summarize all projects for which a Form A has been completed, in the order of their priority.

2. **Preparation at departmental level.** In general, these departmental requests are prepared in a manner similar to the operating program documents. The program units prepare the initial requests, and these requests are consolidated at the fiscal office. The department of accounting and general services participates to

the extent that it assesses and consolidates requests where more than one department may use a facility and assists the departmental program staffs in making cost estimates of proposed facilities. On occasions, outside consultants have been hired, especially where extensive physical developments are anticipated. For example, the department of health engaged a consultant for the State hospital.

Some departments have established some criteria to determine their need for capital facilities. Highways has sufficiency studies; education has enrollment projections; health has federal standards to be met or maintained. The program projections, as reflected in their program evaluation reports, do not include data on facilities although the departments say that these projections are the source for identifying capital requirements.

Except where capital facilities are to be used by more than one department, the requests are generally sent directly by the departments to the department of planning and economic development. Where the facilities are to be used in common by various agencies, the request is generally formulated by the department of accounting and general services and then sent to the department of planning and economic development. None of the requests are sent to the department of budget and finance.

3. Review by department of planning and economic development. Upon receipt of the various departmental requests, the department of planning and economic development groups the departmental project requests into broad functional areas of economic development, education, health and welfare, defense, general government and judiciary. The requests are then

reviewed by a staff consisting of three budget analysts, four planners, one economist and one economic research analyst.² The review function performed by the department of planning and economic development has two primary purposes: first, to check the proposed projects against the general plan of the State to see that they are in consonance with it;³ and second, to schedule the projects throughout the six-year period. The latter function is performed by checking prior authorizations and expenditures and timing the various projects over the six years.

A check of prior authorizations and expenditures is made to determine whether or not the project, or any phase of it, has been authorized in the past. If a phase of the project had been authorized in the past, a further check is made to determine its status and whether the project is ready for the next phase.

The six-year program as finally developed by the department of planning and economic development reflects the department's thinking as to the priority in which the various projects should be undertaken. In formulating this six-year program, it is sometimes necessary for changes to be made in the priorities previously established by the departments themselves. In such instances, the changes in priorities may be left to the departments concerned.

It is said that which projects should be included in the first of the six years and which ones should be left to future years are deter-

²As of October 31, 1967, one budget analyst was on special assignment, two budget analyst positions and one planner position were vacant.

³Section 98F-4, RLH 1955.

mined by (a) the relative urgency of the projects and (b) the relative merits of the projects, based on the statements of justifications supplied by the departments. It is also said that where a project will require several years to complete, only that phase of the project for which money is required in the first year is included in the first of the six-year program. Then, too, on occasions, a project may be eliminated entirely from the six-year program.

In practice, however, generally all of the department's first year requests are included in the first of the six-year budget finally prepared by the department of planning and economic development, and often, the first of the department of planning and economic development's six-year budget includes planning and construction monies, even though the projects are likely to take two or more years to plan and construct. Only on rare occasions are the justifications supplied by the departments found to be so poorly stated that the first year's requests are pushed back to subsequent years or are eliminated entirely from the six-year program. The result is, of course, that there are more projects included in the first of the six-year program than the amount the State can possibly or reasonably expect to undertake in one fiscal year. This "front loading" of projects occurs, since no great financial constraint is placed on capital improvements program in any one year.

In its review of the departmental requests, the department of planning and economic development pays scant attention to the question of the need for a project or its relationship to operating program objectives. The department of planning and economic development reportedly considers this question to be a departmental prerogative. The department of planning and economic

development, further, does not generally relate projects among different functional groups nor analyze the economic impact of each on the community.

4. **The budget.** Upon completion of its review and its development of the six-year capital improvements program, the department of planning and economic development submits its proposal to the governor. The governor reviews the proposal and may reinstate some projects in the first year at the request of the departments or on his own volition. This final document is prepared and sent to the legislature, and copies are also provided the department of budget and finance and other concerned parties for information purpose.

5. **Legislative action.** The legislature legally acts upon only the first-year projects listed in the six-year program. Generally, all projects included in the first year of the governor's six-year program, are finally authorized by the legislature. In addition, the legislature has as a matter of course invariably included other capital improvements projects in the first of the six-year program.

Chapter 5

THE ANALYSIS

The State's current process by which capital improvements programs are budgeted has serious shortcomings. *First*, it is not integrated with the State's operating programs; *second*, there is no real planning in the development of the State's operating program; and *third*, there is no real planning in the development of the State's capital improvements program.

Lack of a Comprehensive Process

The separateness of the processes by which the operating budget and the capital improvements budget are prepared has been traditional in the State. The department of planning and economic development has no part in the formulation of the operating budget, and conversely, the department of budget and finance has no role in the preparation of the capital improvements budget. At no time are the efforts of one department coordinated with those of the other. Thus, the two documents bear little relationship to one another. In addition, the operating budget projects no further than one year, but the capital improvements budget is a six-year document. As a consequence, the State legislature, too, has treated and considered the two budgets separate and apart from each other.

Such a separation is artificial and divisive to the accomplishment of government's programs of service. It has resulted in capital facilities being viewed as ends in themselves, rather than as means to the real ends of government. This complete separation of the processes by which operating and capital improvements budgets are prepared finds no basis or support in the State's Constitution or statutes.

Article VI, section 4 of the Constitution of the State of Hawaii provides:

Within such time prior to the opening of each regular session as may be prescribed by law, the governor shall submit to the legislature, a budget setting forth a complete plan of proposed general fund expenditures and anticipated receipts of the State for the ensuing fiscal period, together with other information as the legislature may require. The budget shall be compiled in two parts; one setting forth all proposed operating expen-

ditures for the ensuing fiscal period and the other, all capital improvements expenditures proposed to be undertaken during such period. . . . [Emphasis added]

The State statutes are in accord with the Constitution's mandate for a single budget. Section 35-2, Revised Laws of Hawaii 1955, provides that the department of budget and finance "shall prepare the budget for the governor". The term, *budget* as used in that section is defined by section 35-1 to mean "the budget required to be transmitted to the legislature", which is, of course, the budget referred to in the Constitution.

That the department of budget and finance is to be responsible for the preparation of both the operating and capital improvements portions of the budget is assumed in that section of the revised laws of Hawaii which provides for the duties and responsibilities of the department of planning and economic development. It reads:

Prior to each regular session of the legislature, the director of finance shall supply the director [of planning and economic development] with copies of the various requests for capital expenditures as received from the state agencies for inclusion in the proposed state capital budget. The director of finance shall also supply the director [of planning and economic development] with a list of proposed public works to be constructed during the succeeding six years.¹

The purpose of transmitting a copy of the capital expenditure requests and proposed public works to the director of planning and economic development is to enable him to review the capital expenditure requests and proposed public works "to

¹Section 98F-4, RLH 1955.

determine if they are in accordance with the [State's] general plan" and to "prepare a report thereon for the legislature, including his recommendations on the governor's proposed capital budget".²

There is then, no legal basis to permit the two processes by which the State's operating and capital improvements budgets are formulated by the executive and acted upon by the legislature to occur separately and apart from each other. In our framework, planning for capital improvements is only a part of the total planning process. It occurs in conjunction with and in support of the total planning process by which the State determines its programs to carry out its major missions.

Inadequacies in Operating Program Planning

Effective capital improvements planning requires an effective overall operating program planning. To the extent that the operating program planning suffers inadequacies, so too does the capital program. The major deficiency in the process by which operating programs are budgeted is that there is no real planning at all. What does occur is little of programming and a lot of budgeting.

1. **Planning.** The formulation of sound operating programs begins in the planning phase of the total planning process. That phase calls for the identification of public needs, the formulation of goals and objectives, the establishment of criteria and standards by which to measure effectiveness and progress, the identification of alternative ways of attaining the objectives, the identification of the costs and benefits, risks,

uncertainties and assumptions inherent in each alternative, an analysis of the various alternative ways, the selection of the preferred alternatives and a determination of the resources to be allocated.

When measured against this framework, we find that none of the activities which take place in the State today in the formulation of operating programs meets any of these requirements.

Statements of community *needs* which the programs are supposed to serve reflect little that is new or original or the result of basic social, economic or political research. A simple statement to the effect that the program exists because the law established it is frequently found.

Goals are poorly stated and often reflect a total lack of understanding of goal setting as a planning device. For example, one program goal is stated as "to maintain the current services and workload". *Objectives* are often stated in terms of the amount of work which will be performed rather than the result which will be brought about. For example: "to process between 10,000 and 11,000 certificates annually" reflects the effort which will be required to accomplish something. Objectives should be stated in terms of the "something" to be accomplished rather than the efforts required to bring it about. Because objectives are stated in the manner they are, so measures of progress are stated in the same terms rather than in terms of results accomplished. As a consequence, we only know whether we are doing all the work we set out to do, not whether we are achieving something of value for our citizens.

No serious thought is given to *alternative* ways of achieving the missions of government. Without explicit statements of objectives and without identification of alternative ways of attaining

²*Ibid.*

those objectives, there can, of course, be no analysis to determine the *best* programs which the department ought to carry on. On-going programs are accepted as the ones the department will continue to administer during the next fiscal year and workload increases are automatically added to these on-going programs. The same approaches, methods and techniques thus go on year after year with little real concern for their continuing value or whether other approaches might provide better results. The value of the services being provided is rarely related to the costs of providing them in terms which are comparable.

Operating expenditure projections which are the final result of the planning effort are either grossly estimated or not estimated at all. What these expenditures will bring in benefits to the State and its citizens is difficult to determine, and an analysis of the future course of the programs and possible alternatives to them are vague or absent. And finally, while personnel, supplies and equipment requirements are estimated by the process, capital facility requirements apparently are not.

Departmental lack of proper planning stems from the absence of explicit statements of the State's goals and objectives. It also results from the failure of the department of budget and finance to provide guidance to the departments. Although the department of budget and finance annually instructs the various State departments to include in their program evaluation reports, data with respect to program goals, program objectives (annual and projected for five years) and program finances (the sources, past expenditures, operational expansion requirement estimates for the future five-year period, and departmental earnings), the various terms (such as *goals*, *objectives*, etc.) have never been explicitly defined,

the reasons for the requirements have not been clearly explained, and no standards have been established to determine the adequacy of the departments' program evaluation reports. The department of budget and finance has not insisted upon *analysis* of all operating programs, and has used the evaluation reports for information purposes only. No action is ever taken on these reports. Thus, the program evaluation reports have generally tended to be no more than *justifications* for the departments' requests for the ensuing fiscal year.

2. **Programming and Budgeting.** *Programming* is defined in our framework as the layout and time-phasing of the selected means of attaining objectives in an orderly fashion. It requires the specification of which programs are to be implemented when, what resources are required at what point in time for each program, the sequence in which, and when and how, each resource that is required is to be acquired, developed or constructed; and the cost of acquiring, developing, constructing and maintaining each resource in each of the next five or six years.

Without planning, there can be no real *programming*. The operating budget encompasses a single fiscal year, and there is no scheme by which programs are phased-in or phased-out over a span of five or six years. All programs are assumed to continue indefinitely in the future, and there is no real look to determine future monetary consequences and expected end-results of each operating program. Thus, what comes out of the various departments for transmittal to the department of budget and finance is a proposed budget based on on-going programs, anticipated workload increase and few new programs, and not one based on planning and programming. The review by the department of budget and finance is a review to

determine sufficiency of *justifications* for the money requests, not to check on the adequacy of planning and programming which entails *analysis*.

3. **Budgeting.** Presented with this budget, the legislature is limited in its examination. Without a thorough analysis conducted in the planning phase, and without information regarding that analysis, the legislature can do very little by way of determining the need to continue existing programs. Nearly 95 percent of the total State operating expenditure in any year consists of these current services. With respect to workload increases and expansion items, the legislature can do hardly any better, since these items are not accompanied by any information regarding the results expected by such increases and expansions. They are generally justified only in terms of the work the departments propose to do.

4. **Staff capabilities.** Neither the operating departments nor the department of budget and finance has today the capabilities of conducting in-depth analysis of the State's operating programs. Within the various departments, the fiscal office puts together the budget requests of the respective departments. These fiscal officers lack analytic skill to conduct such in-depth analysis required for a meaningful planning and programming of operating programs. In the department of budget and finance, the emphasis has been on the "sufficiency of the justification" rather than on analysis of the operating programs in the light of statewide goals, program objectives, the alternatives, costs and benefits.

Deficiencies in Capital Improvements Planning

Capital improvements planning—that is, the identification of the need for capital improvements and the steps that are to be taken to assure the availability of capital improvements—current-

ly suffers from the lack of meaningful operational program planning. Lacking operational program planning, there is also a lack of a full capital improvements planning.

The activities which are undertaken today in the name of capital improvements planning are deficient. The major deficiencies may be summarized as follows: (1) most of the *planning* activities are performed after the legislature authorizes funds for capital improvements; (2) *planning* is generally confined to specific projects selected by the governor for implementation, rather than to the total capital improvements needs of operating programs; and (3) there is much confusion regarding the respective roles of the various staff and user agencies in capital improvements planning.

1. **Planning phase.** Capital improvements planning is supportive of operational program planning. As operational programs are being developed in the planning phase of the total planning process, planning for capital improvements should begin. Capital improvements planning in this phase consists of identifying the need for capital improvements as alternative operating programs are identified and compared. In addition, capital improvements planning requires that in this phase, standards and criteria for the effective and efficient acquisition of the needed capital improvements be established, that alternative ways of assuring the availability of the needed capital improvements be identified, that these various alternatives be compared in terms of their costs and benefits, that the preferred alternatives be selected, and that the State's total resources be allocated to the various operating programs for capital acquisition. In our view, none of these tasks is currently being performed adequately by the State.

Needs. Since presently there is lacking operating program planning in the *real* sense, obviously, there is little systematic identification of the *need* for capital improvements as operating programs are formulated. Thus, no questions are asked at an early stage, such as these: (a) If this route is taken or this operating program is selected, how long can we expect the program to last—is it temporary or permanent? (b) What is the expected program size (in terms of the target group, emphasis, etc.) one, five and 20 years from now? (c) Is this alternative designed to replace or substitute for an existing program; if so, is the present physical facilities adequate for the purpose of the proposed substitute? (d) What is the program content and what effect will it have on the design or use of existing or new capital improvements? (e) What are the existing State and departmental policies with respect to capital improvements, and how do they affect assuring the availability of capital improvements for these alternatives?

Even as to operating programs which have been in existence for many years and are assumed to continue in the future, very little effort is being expended today to forecast the capital improvements requirements for these programs in the next 10, 20 or more years. Thus, the department of education, for example, has yet to identify its *long-range* needs. The department *plans* capital improvements in terms of the yearly six-year program which all State departments are required to formulate.

Standards and criteria. In the planning phase of the total planning process, *standards and criteria* to assure the economic, efficient and effective acquisition and availability of capital improvements should be formulated. These standards are necessary to determine for each alterna-

tive operating programs as they are proposed and for the selected operating programs, the kind, size, utility and cost of the capital facilities which will be required.

There are two levels of government which are involved in the establishment of these standards and criteria—the State central agencies and the user agencies. The standards established by the State central agencies are general in nature and applicable generally throughout the State regardless of the kind, nature and purpose of the capital improvements. On the other hand, the standards established by the user agencies are more specific and of peculiar applicability to the kinds of capital improvements for which the user agency is responsible—e.g., education, the university, health, etc.

Currently, the user agencies formulate their capital improvements requests without appropriate guidance from the State central agencies. The instructions which are issued annually by the department of planning and economic development outline the procedures and specify the information it requires to *justify* the capital improvements requests of the departments. These instructions, however, are intended for budget purposes—not for planning or even for programming. These instructions assume that planning and programming have already taken place—an assumption which is not correct.

There is a general lack of statewide standards to guide planning and programming of capital improvements at the user agency level. The department of budget and finance, which acts as the State's central program office, has not established standards and criteria respecting (a) relationship between operating programs and capital improvements programs; (b) methods and factors to consider in determining need for capital im-

provements; (c) the State's economic, social and political policies which affect location of public buildings and public improvements; (d) the State's operating program emphasis; and (e) the basis and manner in which the State's total capital improvements will be programmed.

The department of budget and finance, which also acts as the State's fiscal office, has done little in terms of formulating the State's fiscal strategies.¹ Further, it has given little guidance to the departments as to the fiscal constraints—economic conditions, cash position, etc.—under which the State's capital improvements program will be shaped.

The department of accounting and general services, which acts as the State's construction service office and as the coordinator and principal agency to formulate capital improvements for State office buildings, which are used in common by several State agencies, have not established standards and criteria such as: (a) how to determine the optimum maximum and minimum sizes for a site; how to determine reasonable cost of site acquisition; the factors to consider in determining desirability of sites, such as population concentration, distances from urban areas, etc., (b) what generally constitutes an efficient use and placement of buildings; the factors to consider in determining the maximum number of people a building or room should accommodate; the factors which determine efficient placement of fixtures; and (c) the minimum specifications for building construction and land development; the economic factors which should guide the departments in the selection of materials; how to estimate costs of construction and maintenance of capital improvements.

¹See our report on capital improvements financing.

At the user agency level, some departments have established some criteria to guide them in determining their capital improvements needs. For example, the department of education has school building standards which specify the minimum and maximum enrollment for an elementary school and for a secondary school.² However, these standards are largely incomplete. Statements such as "Elementary School buildings should . . . be located in residential neighborhoods away from hazards to character development and physical health; be designed to bring children, parents, and school personnel together in a friendly cooperative atmosphere; have the educational and enabling services necessary to promote confidence in the school program and enable teachers to fulfill their particular function—this means adequate library, health and counseling services, hot lunches, and custodial service"; and "Secondary School buildings should . . . be planned so that priority is given to the construction of classrooms and other facilities necessary to provide for the required subjects and minimum electives; be planned so that the number of regular and special classrooms needed for each new school is based on the current pupil-teacher ratio and upon the required and elective courses offered"³ are not very helpful. They do not specify, for example, how large a classroom ought to be, what basic physical features are required for each school, when wooden, concrete, one-story, or two-story structures should be considered, what constitutes optimum utilization of a science laboratory, etc.

²Policy on school building standards, *School Code: Policies and Regulations, State of Hawaii*, pp. 2630-2630a.

³*Ibid.*

The university of Hawaii has attempted to formulate some standards and guides for its capital improvements.⁴ In many respects, however, the standards are general, rather than specific. It appears that the attempt has thus far been no more than preliminary.

Alternatives, analysis and selection. There is little to indicate that a thorough consideration of alternative ways of assuring the availability of capital improvements is performed. Some questions are asked as to whether or not the present physical facilities can accommodate a larger clientele. Beyond this, no alternatives are suggested such as renting, leasing, changing program operations or the operational programs themselves. No estimates are made of the risks and uncertainties involved in the projects (for example, the soundness of the estimate of the clientele), and the spill-over effects on private and other public activities are not considered.

2. Programming. In the total planning process, programming is that phase of planning which requires the operating programs to be time-phased over a period of five or six years, indicating what operating program is to be implemented when; what resources (including capital improvements) are required; in what stages the resources are to be acquired; what step in the acquisition of capital improvements is to take place in what year; and what the costs of the resources are for the first fiscal year and for the succeeding four or five years.

The *Instructions* issued by the department of planning and economic development requires the user agencies to list their capital improvements requests over a six-year period. In form, the capi-

tal improvements budget resembles a *program* for the acquisition of capital improvements. In fact, however, it is not a *program* in the real sense. The projects are listed in the six-year budget without much thought as to the sequence in which the projects should be acquired and as to the steps in which each project is to be undertaken. Project scheduling tends toward a phenomenon known as *front loading*; that is, as many projects as justifications will permit are listed in the first of the six-year period. Although it is generally conceded that it takes approximately three years from formulating development scheme to construction, the projects are generally not time-phased over a three-year period, but monies for planning and construction are often requested in the first of the six-year budget.

Front loading occurs because: (a) *planning* is inadequate; future capital improvements requirements are not being tied to future operational program needs; and without planning, real programming cannot take place; and (b) there is a general lack of fiscal constraints which act to limit the number of projects which can be included in the first of the six-year budget; the State's fiscal strategies and the economic conditions of the community are not taken into account.

3. Review by State central agencies. In neither the planning nor the programming phase is there any meaningful review of the department's capital improvements proposals. No review is ever conducted by the department of budget and finance, although it is the agency responsible for State operating programs and fiscal policies. The review by the department of planning and economic development is primarily to determine conformance with the State's general plan and to check upon the sufficiency of the justifications

⁴ *General Guide for University of Hawaii System, Physical Planning.*

supplied by the departments for their capital improvements requests. It conducts no operational program analysis to determine the relevancy, need or urgency of the capital improvements, nor does it review the adequacy of the process by which the departments prepared their requests. It makes no check on the accuracy of the cost estimates, except where they appear clearly gross. It does not check the proposed projects against the current and future economic conditions of the State and the State's fiscal strategies. It makes no analysis of the impact of the various projects upon other projects within or without the same functional areas or upon the community. Prior to legislative appropriation of monies for capital improvements, no check is made by any central agency with respect to the adequacy of the development scheme. No real analysis, therefore, occurs at either the department level or at the State central agency level with respect to the departments' budgetary requests for capital improvements.

4. **The budget.** The executive's budget for capital improvements put together by the department of planning and economic development is thus essentially a compilation of the departmental requests. As presented to the legislature it contains many deficiencies. The projects are poorly defined and frequently represent only the broadest idea of a project. There are no alternatives suggested and there is no analysis for legislative review as to the best way to assure the availability of the needed capital improvements. Cost estimates are very gross, often leading, after legislative authorization, either to a deferral of the project for lack of sufficient funds or to the construction of something less than was initially intended. Accurate estimates of increased operating expenditures maintenance costs are not given;

special requirements for the clientele or staff are not thought out. In summary, legislative action is sought without furnishing the legislature with that kind of information and analytic document which explain the why and how of the various capital improvements projects included in the budget.

5. **Post-legislative activities.** Currently, the real work in *planning* capital improvements begins after the legislature has authorized the expenditure of funds. Since there is always more projects authorized than can possibly be undertaken in any given fiscal year, the decision as to which projects should be undertaken is made by the governor. His decision is based in part upon the amount of bonds the State is able to float in the year and the amount of cash which is available to finance capital improvements, and in part upon the urgency of the need for particular projects.

Planning which occurs after legislative authorization is not the kind of planning which should have occurred in the planning and programming phases of the total planning process. The emphasis in post-legislative planning is upon particular projects which the governor has decided should be undertaken.

The activities which occur after legislative authorization and the governor's decision are the following:

. **Decision as to increment.** Often the legislative authorization or the amount released by the governor proves to be insufficient as plans for the project are developed. This leads to either to a delay in the project until the legislature at a subsequent session authorizes additional funds or to the development of the project in increments. The decision is made by the user agency. Except in the case of the university of Hawaii, the department of accounting and gen-

eral services often influences that decision. Insufficiency of funds occurs, of course, because the costs of projects are often underestimated at the time the budget is put together. In our framework, decisions respecting incremental development and reasonable estimates are required to be made in the programming phase, prior to the formulation of the executive budget.

• **Site selection and acquisition.** Often the legislature authorizes funds even before the site for the project had been decided upon. Thus, it is after legislative authorization that efforts are exerted to find a suitable site. Except with respect to the university of Hawaii, although the user agency determines generally the guidelines for site selection, it is the department of accounting and general services which determines the location. It searches for several sites which meet the user agency's guidelines and generally picks that site which costs the least. Final decisions on all site selections are made by the governor.

• **Development scheme.** The scheme for the development of the project is known by a variety of names—*project development*, *program planning*, *development plans*, and *physical development planning*. It is in this stage that the anticipated size of the target group the operating programs are intended to serve are estimated, the kind of spaces, support facilities and fixtures needed are identified, the sizes of rooms and the interrelationship of rooms and buildings are determined, traffic conditions are analyzed, aesthetics considered, and costs estimated. It is said that the major purposes of the development scheme are to determine need and

to estimate cost accurately. The department of accounting and general services concedes that the development of the scheme is the responsibility of the user agency, since it is tied in closely with the needs of operational programs. Except with respect to the university of Hawaii, however, the department of accounting and general services appears to take an active role in the formulation of development schemes.

In our framework, this development scheme finds its basis in the planning and programming phases where the needs are identified, standards prescribed and alternative ways of meeting the need are determined and analyzed. Further, in our framework, the development scheme is expected to be completed prior to the agency's requests for funds for design and construction.

• **Master plan.** Where a project calls for the development and construction of a complex of buildings, the State engages in that activity called, *master planning*. In this master planning state, determinations are made respecting the increments in which the buildings are to be constructed, if funds for the construction of the entire complex is inadequate or if the entire complex is not immediately needed; the relationship of buildings to one another; the need for one, two or three story buildings; etc. Except in the case of the university of Hawaii, the department of accounting and general services assumes the responsibility for the master plan. In our framework, of course, *master planning*, is one of those things required to be performed prior to the request for funds for design and construction.

Design preparation. Design preparation is undertaken essentially in three parts: drawing schematics, drawing preliminary blueprints (also called preliminary plans) and drawing final blueprints (also called final plans). Schematics are essentially floor plans which in single-dimension pictures graphically display the placement of the buildings in a complex and the layout of the rooms. Schematics further show where the doors, desks, sinks, shelves, etc., will be located. Schematics, in a large sense, visually display that which is included in the development scheme.

Preliminary drawings and final drawings are of course the blueprints to enable the construction of the capital improvement. They are three-dimensional and they show elevation, height of buildings, height and width of rooms, etc. Together with the final drawings are prepared the specifications for construction.

Except with respect to the university of Hawaii when it is named the expending agency in the appropriations bill, the department of accounting and general services is responsible for the preparation of the schematics and preliminary and final drawings. The department of accounting and general services generally engages the services of an architect at the schematic stage. All schematics and preliminary and final drawings are subject to the approval of the user agency.

In our framework, schematics, preliminary drawings and final drawings are required prior to any legislative authorization of construction funds for the capital improvement. This is not the case today, inasmuch as the budget pre-

sented to the legislature often contains requests for both planning and construction funds in the same year.

Construction. In all cases, the department of accounting and general services is responsible for calling for bids and letting construction and development contracts to independent contractors. Final acceptance of the construction work is the responsibility of both the department of accounting and general services and the user agency. In our framework, construction begins only after specific authorization and appropriation of funds for construction by the legislature.

The above process, of course, deviates substantially from that process outlined in our framework. No real planning can occur after legislative authorization and the selection of the projects by the governor, since the emphasis is then upon projects, rather than on a plan for capital improvements in toto. Thus, in the process described above, little, if any, consideration is given to those matters which are included in the planning and programming phases of our framework. No systematic thought is given to coordinating capital improvements with operating programs, little consideration is given to the future status of operating programs, no standards are developed to guide selection and construction of capital improvements, no alternatives are really considered, and no systematic scheduling is attempted by which to assure the availability of needed capital improvements. Little, if any, systematic consideration is given to fiscal and economic matters and to the impact of a project upon the community and the economy of the State. Except as to those projects which are on the drawing board or in the

process of construction, there is little else to indicate what the future promises in terms of capital improvements. At no time in the current process does any State central office review any of the activities performed by the user agencies in an effort to weld together the State's total operating and capital improvements programs.

6. **Staff capabilities.** The department of planning and economic development which puts together the governor's capital improvements budget is staffed with budget analysts and economists. They are essentially reviewers of the justifications presented by the various departments for their capital improvements request. There is little to indicate that they are familiar with the operating programs which the capital improvements are intended to support, or that they are able to conduct in-depth analysis to determine the adequacy and sufficiency of the kind of planning which our framework requires in capital improvements. Under our statutes, of course, the staff of the department of planning and economic development is required only to determine whether or not the proposed capital improvements are in accord with the State general plan.

As indicated earlier, the staff of the department of budget and finance performs virtually no analysis of operating programs and of the resources required to carry them out; nor does it appear that the staff is able to perform that kind of analysis required in our framework.

The staff at the department of accounting and general services are in the main engineers by training. The staff's capabilities are at present limited to a general supervision in the drawing of schematics and the preliminary and final drawings and to a review of construction specifications formulated by the architect. Little, if any, effort is exercised to formulate standards of statewide

applicability in the design and construction of buildings. Virtually no research or study is conducted by the staff leading to construction standards, identification of economic materials in the construction of capital improvements, space utilization standards, and standards by which construction cost estimates may be made with greater accuracy. The staff further has no architect and has no architectural skills to check upon the functional designs prepared by independent architects who are hired by the department for capital improvement projects. At most, it is able to check only the structural aspects of the designs.

The user agencies, except the university of Hawaii, are today without that kind of staff needed to develop meaningful operating and capital improvements programs. They lack capability to formulate standards for the particular kind of capital improvements for which they are responsible and to perform in-depth analysis of operating programs and operating program capital improvement needs, to render accurate cost estimates and to formulate meaningful development schemes. They lack engineering and architectural skills to provide direction and supervision over the independent architects who are engaged to prepare schematics and preliminary and final drawings.

7. **Conflicts between the university of Hawaii and the department of accounting and general services.** In the performance of those activities which occur subsequent to legislative authorization of capital improvements, there is a rather sharp disagreement between the university of Hawaii and the department of accounting and general services as to the roles each should play. The department of accounting and general services maintains that it should be responsible for all actions from the drawing of schematics to

construction. On the other hand, the university of Hawaii contends that it should be responsible for all activities up to and including final drawings. In the past, the legislature has often named the university of Hawaii as the expending agency. In such cases, the university of Hawaii has assumed responsibility up to and including final drawings. In other cases, however, the department of accounting and general services has been designated the expending agency for university projects.

The complaint of the university is that the department of accounting and general services generally lacks the capabilities to move its projects along; that it has no architects on the staff and it must hire architects to prepare schematics and drawings; that in fact the department of accounting and general services acts merely as a conduit between the architect and user agencies for the transmission of information; and that the architect is not authorized to consult directly with the user agency. On the other hand, the university boasts that it has on its capital improvements staff two engineers, three architects, one research personnel, one safety officer, and one coordinator for small capital improvements projects. The university further complains that there is often disagreements between the university and the department of accounting and general services with respect to the floor plans, relationship among buildings and the placement of fixtures in the drawing of schematics. It claims that these are operating program matters which should be the province of the university.

Our findings show that the university does, in fact, have the engineers and architects to perform such jobs as drawing schematics and preliminary and final plans or to provide structural

and functional checks on the work performed by independent architects. We also find that disagreements do arise mainly because there is lacking at the present time, clear and explicit statewide standards which govern capital improvements construction.

It is interesting to note that the department of education has little to complain about the department of accounting and general services. In our view, there is a close working relationship between the department of education and the department of accounting and general services, because there is insufficient staff capabilities at the department of education. The department is, therefore, more than happy to leave the technical aspects of construction and to receive advice and suggestions in the formulation of its development scheme. It is noted, however, that even with respect to the department of education, the department of accounting and general services cannot supply readily information and data with respect to cost estimates and standards for space utilization, construction materials, and construction specifications. These are apparently solved on a project by project basis between the department of education and the department of accounting and general services.

Chapter 6

SUMMARY AND RECOMMENDATIONS

Generally, the State today lacks meaningful capital improvements planning. This is in part due to a lack of planning in the development of

the State's operating programs and in part due to the inadequacies in the manner in which capital improvements are budgeted. In this final chapter, we summarize our findings and recommend several courses of action.

Comprehensive Planning

Planning capital improvements is really a part of a larger process by which the State's operating programs are developed, the resources needed for those operating programs are identified and steps are taken to insure that the capital improvements are available at the time they are needed by the operating programs. By *operating programs* we mean those activities or groups of activities, the performance of which leads directly to the accomplishment of government's major missions in promoting the health, safety, education and welfare of the general public. Capital improvements are only one kind of resources which enable government to implement its operating programs.

Although capital improvements are supportive of operating programs, they are budgeted by a process which is entirely separate and distinct from that process by which the operating programs are developed. This is contrary to the State Constitution and statute which envision a single budget, comprised of two parts, one part enumerating the operating costs and the other part listing the capital improvements costs of each operating program. Since operating programs and capital improvements are budgeted through two separate and distinct processes, there is today no clear idea as to where we are headed in terms of the missions of government and the capital costs which are likely to be entailed in the future.

We recommend that the budget of the State be formulated through a single process which results in a single budget, showing the requirements of each operating program in two parts—operating and capital—both projected five or six years into the future with a narrative to explain the relationship between the two parts.

Planning-Programming-Budgeting for Operating Programs

Capital improvements, being supportive of operating programs, can be meaningfully planned, only if operating programs are properly prepared. Currently, there is no real, systematic method by which operating programs may be developed. As a result, the operating budget is a single-year document, which consists mainly of on-going programs which have been with us for many years.

To assist in the systematic development of operating programs, we recommend that the State adopt that system commonly referred to as the *Planning-Programming-Budgeting System*.¹ The meaning of each term is explained by the following description of the activities which comprise *planning*, *programming*, and *budgeting*.

1. **Planning.** Systematic planning requires the following:

- . The top levels of government (the governor and the legislature) should establish state-wide goals and objectives based on realistic assessment of public needs. (Legislative

¹The governor of the State recently announced that the State will embark on the planning-programming-budgeting system.

determination is generally made when the executive's budget, prepared under the planning-programming-budgeting system, is presented to the legislature.) Objectives tell us in a specific terms, what the major missions of government are and the results which we expect from government endeavor in five, six or more years in the future.

- . All State departments should formulate sub-objectives within those functional areas of government over which they are directly responsible. These departmental objectives must be consistent with statewide objectives.
- . Standards and criteria must be established by which progress in the attainment of the objectives may be measured.
- . Programmers and others involved in the formulation of operational programs must identify the various alternative ways in which the objectives may be attained. Included among the alternatives should be those activities now being performed.
- . In-depth analysis of the various alternatives must be performed. The alternatives should be compared in terms of their respective costs and benefits, risks and uncertainties.
- . Operating programs are selected from the alternatives on the basis of which ones offer the greatest promise at a given cost or which ones will probably lead to the attainment of the objectives at the least cost.

2. **Programming.** Programming requires that the selected alternatives be laid out over a five or six-year timetable, indicating for each operating program and for each year, the full costs of implementing the program and the incremental results expected. It is in the programming phase of the planning process that all relevant costs are fully identified, the first year's costs are estimated as precisely as possible and the future years' cost implications are displayed.

3. **Budgeting.** The budget should reflect the program timetable and be supported by documents, explaining the in-depth analysis conducted which led to the selection of the preferred operating programs and the manner in which costs were estimated. The analytic documents are necessary so that the legislature is supplied with that kind of information it needs for it to make meaningful decisions respecting the directions in which the State should proceed and the operating programs it should undertake.

Planning-Programming-Budgeting for Capital Improvements

Since capital improvements are one of the several kinds of resources required to implement operating programs, planning for capital improvements must occur as operating programs are being developed. Currently, there is no real planning for capital improvements, in part because there is no real planning for operating programs. What does occur in the name of capital improvements planning is far from adequate. The shortcomings in the present capital improvements planning process are: (1) capital improvements are not planned as part of the total planning process; (2) most of the *planning* efforts occur after legislative enactment of the capital improvements bill; (3) the emphasis is

upon specific projects, rather than upon the total need for capital improvements, and (4) there is a lack of clarity in the roles of the various State central and user agencies.

We recommend that capital improvements planning be conducted within the context of the planning-programming-budgeting system, as follows:

1. **Planning.** Planning for capital improvements should begin as operating programs are being developed. As public needs in the major missions of government are being identified, as objectives are being established, and as alternative ways of attaining the objectives are being identified and analyzed, the following planning activities for capital improvements should take place:

. The need for capital improvements should be identified as operating program alternatives are suggested. The need should be based on the nature, content and size of the operating program. The following kinds of questions should be raised: what target group is the operating program intended to benefit; what are the future implications of the program in terms of size, permanency, etc.; and is the program one which needs capital improvements of its own or can it share physical facilities with other operating programs?

. Statewide and departmental standards and criteria should be established to assure the acquisition of needed capital improvements efficiently, economically, and effectively. Statewide standards should be those which affect all capital improvements in the State; departmental standards affect capital improvements for particular kinds of operating programs

over which the departments have jurisdiction—e.g., school buildings, hospitals, etc. Departmental standards must, of course, conform to and be consistent with statewide standards.

Among the statewide standards which should be established are those governing construction in general, the State's fiscal strategies, and the State's priorities in which capital improvements are to be acquired, developed and constructed.

Departmental standards are those governing construction of the particular kinds of capital improvements and those setting departmental priorities.

. Different ways of insuring the availability of the capital improvements at the time they are needed should be explored. Among the alternative ways are: adding to existing building; re-constructing existing facilities, leasing or renting, and constructing new facilities.

. An analysis of the alternative ways of assuring the availability of the needed capital improvements should be conducted. The future uncertainties of the operating programs and the risks involved in pursuing an alternative way are indeed relevant factors to consider in the analysis.

. Based on the fiscal strategies developed on a statewide basis, the State's current and future fiscal condition, the economic conditions of the community, the departments' proposed operating programs and resource needs, and the State's priorities, the State's total re-

sources should be allocated among the major missions of government. Within the allocation, the departments should then proceed to finalize their operating and capital improvements programs.

2. **Programming.** Since capital improvements are expensive to acquire, and since, once acquired, they are generally expected to be available for 10, 20 or more years, planning for capital improvements may extend beyond the time-span for operating program planning. Regardless of the time-span, however, all capital improvements should be programmed for a period covering five or six years. Programming for capital improvements entails the layout of all capital improvements on which some activity is anticipated within the five or six years. The layout should indicate what step of which capital improvements for what operating program is to be undertaken in what year. Generally, the major steps in the acquisition of capital improvements are: site selection, site acquisition, developing a scheme (a narrative description of the space required, what operating programs are to be accommodated, how the buildings in a complex and the rooms are to be functionally arranged, etc.), designing the physical facility (drawing of schematics and preliminary and final blueprints), and construction.

3. **Budgeting.** Currently, since no real planning and programming occurs, the six-year capital improvements budget prepared by the executive branch reflects a phenomenon known as "front loading," that is, the first year of the six-year budget contains virtually all of the departments' first-year requests. There are, therefore, included in the first year, more projects than can reasonably be expected to be undertaken in any single fiscal year. In addition, it is not uncommon to

find in the first of the six-year budget, requests for funds for both planning and construction, even though it is known that, on the average, it takes approximately three years from initial planning to final construction of a project.

The legislature generally approves the executive's budget, with the addition of a few more projects. The result is that the governor is given the power and authority to decide from among all of the first-year projects, which ones should be undertaken in the next fiscal year.

"Front loading" occurs because there is, today, no real financial constraints placed upon the number of projects to be included in any fiscal year. In addition, the review of departmental requests are confined to determining whether or not the justifications for the requests are adequate, and, generally, only in a few instances is a justification found so poorly stated that the departmental request is pushed back in the six-year plan or eliminated entirely.

We recommend the following budgeting practices to prevent "front loading," to limit legislative capital improvements authorization for any one year to that which can reasonably be expected to be undertaken in that fiscal year and to permit the legislature to exercise greater authority in the determination as to what projects shall be undertaken.

- . The budget should reflect only that amount which the State's fiscal strategies reveal can reasonably be expected to be undertaken.
- . Money should be appropriated in stages, rather than in combination of stages. That is, money should be appropriated in separate years for site acquisition, design preparation, and construction.

No money should be requested for any stage of a capital improvements project, unless the prior steps have been substantially completed. For example, no money should be requested for design unless the development scheme has been completed, and no money should be requested for construction unless at least the schematics and preliminary drawings have been finished.

The budget should be accompanied by analytic documents, describing how the need for capital improvements was identified, what alternatives were considered, what comparisons were made of the alternatives, and what in-depth analyses were performed, including a description of the social and economic factors considered in planning and programming capital improvements.

Responsibilities and Capabilities of State Central Agencies

Three State central staff agencies are currently involved in the preparation of the State's operating and capital improvements budgets: the department of budget and finance, the department of planning and economic development; and the department of accounting and general services.

The department of budget and finance is responsible for preparing the governor's operating budget, and the department of planning and economic development is responsible for preparing the governor's capital improvements budget. The department of accounting and general services is responsible, generally, for the preparation of schematics and the preliminary and final drawings of projects; it is also responsible for all planning of State office buildings (which house

the administrative units of two or more State agencies).

We find:

1. The preparation of the capital improvements budget by the department of planning and economic development is contrary to law and to proper planning. The State Constitution envisions a single budget document, composed of two parts—operating and capital. The State statute places the responsibility for preparing the State budget in the department of budget and finance. The statute requires only that a copy of the capital improvements portion of the budget be supplied the department of planning and economic development so that it can check the proposed capital improvements against the State's general plan.

The department of planning and economic development's preparation of the capital improvements budget is divisive of a comprehensive planning process by which the major missions of government may be accomplished. Capital improvements are only resources to permit the effective implementation of operating programs.

2. Neither the department of budget and finance nor the department of planning and economic development performs adequate review of the departmental operating and capital improvements requests. The focus of both departments in the current review process is upon the adequacy of the *justifications* of the budgetary requests. No analysis is made by either department to determine the adequacy of the process by which the departmental requests were formulated. Although the department of budget and finance requests each department to submit a program evaluation report together with the budgetary request, and although it directs that the report include, among other things, state-

ments of goals and objectives, in practice it never insists upon in-depth analysis of operating programs and it does not check the reports for analysis. It takes no action on the evaluation reports. The reports thus have become no more than a source of information for the department of budget and finance to become acquainted with the programs and operations of the departments. The result has been that the reports generally fail to meet the standards of the planning-programming-budgeting system. For example, objectives are often input-oriented—that is, they are stated in terms of what government is doing, rather than in terms of what government expects as a result.

3. None of the central staff agencies has established adequate standards for the guidance of the operating departments in the formulation of its capital improvements requests. For example, there are lacking explicit statements of (a) the manner in which State priorities of capital improvements are determined, (b) the fiscal strategies which influence the amount of capital improvements to be budgeted, (c) the method by which the State's resources will be allocated among the major missions of government, (d) the social and economic factors which should be considered by the departments in planning capital improvements, (e) the statewide standards for construction of physical improvements, (f) the economics of building materials, and (g) the standards of space utilization.

4. Generally, the State central agencies lack sufficient capabilities to perform that kind of functions which are required under the planning-programming-budgeting system. The department of budget and finance, for example, lacks sufficient capabilities to perform analyses of the adequacy of the departments' proposed pro-

grams and the process by which they are developed. It lacks sufficient fiscal and economic capabilities to perform fiscal analyses, to make economic forecasts and to formulate the State's fiscal strategies. The department of accounting and general services lacks the technical capabilities to conduct research and to review the structural and functional aspects of drawings prepared by the architects it hires.

We recommend:

1. Both the operating budget and the capital improvements budget be prepared by the department of budget and finance as is now contemplated by the State Constitution and statute; that the department of planning and economic development restrict its functions to those assigned by law—i.e., to review proposed capital improvements for compliance with the State general plan. The department of budget and finance, as the central agency responsible for the coordination of operational program planning, should be the principal State department concerned with the total planning process.

2. The department of budget and finance review both operating and capital improvements budgetary requests to test the adequacy of the process by which the departmental requests are formulated; that it require all State departments to perform in-depth analysis, rather than merely to prepare justifications, in the preparation of their requests for operating and capital improvements requests.¹

¹In the governor's announcement that the State is embarking on the planning-programming-budgeting system, it was indicated that the initial effort in this regard will be under the supervision of a central analysis group working out of the governor's office. The extent of the authority of the central analysis group to review departmental requests is not clear to us. We name the department of budget and finance in our report since it is now the agency which puts together the State's operating budget, and thus ostensibly is responsible for State programs.

3. The department of budget and finance be responsible for the formulation of statewide standards such as those governing the priorities in which capital improvements are to be constructed, the fiscal strategies which are to be applied and the factors which the departments ought to take into account in developing and programming their operating and capital improvements requests and the allocation of the State's resources among the major missions of government. The department of accounting and general services be responsible for setting statewide standards for such things as construction, specifications, materials, space utilization and cost estimates. The department of accounting and general services should, further, engage in research which leads to economy in construction and efficiency in utilization of capital improvements.

4. Through staff training or supplement, (a) the department of budget and finance be provided with capabilities to perform in-depth analysis of the departmental operating and capital improvements programs and the process by which they are developed, to set statewide standards for the guidance of all departments, to perform fiscal analysis, to make economic forecasts and to formulate the State's fiscal strategies; and (b) the department of accounting and general services be provided with capabilities to establish statewide standards for construction, material, cost estimates, space utilization, etc., to perform research leading to economy in construction and efficiency in utilization of space, and to perform architectural as well as engineering functions or to review both the structural and functional aspects of work done by independent architects.

Responsibilities and Capabilities of User Agencies

We find that, generally, all user agencies lack capabilities to perform systematic analysis in the development of operating and capital improvements programs. Currently, none of the departments performs analysis. Justification is substituted for analysis, and both operating and capital improvements programs are put together generally by the fiscal officer in each department. We also find that, generally, the user agencies lack capabilities to perform the following portions of the capital improvements programs: the preparation of schematics and preliminary and final drawings; calling for construction bids; letting contracts; and inspecting the structural and functional aspects of actual construction. These portions of the capital improvements programs require certain engineering and architectural skills which are not usually found in the user agencies, except at the university and to some extent in the department of education.

In this connection it should be noted that there have been differences between the university of Hawaii and the department of accounting and general services respecting (a) the standards to be used in the preparation of development schemes (project development reports) and (b) the role of the university in the preparation of schematics and preliminary and final drawings. The first difference is the result of the lack of statewide standards respecting space utilization, functional arrangement of rooms and buildings, cost estimates, etc. Our recommendation for the establishment of these standards is noted above. The second difference arises because (a) the university has the engineering and architectural capabilities to be responsible for the preparation of schematics and drawings, while the department of accounting and general

services is notably lacking in architectural skills, and (b) the university believes that schematics and drawings are closely tied to operational programs.

Neither the university nor any of the user agencies refutes the responsibility of the department of accounting and general services for calling for bids, contract letting and inspection of construction work.

We recommend:

1. Through staff training or supplement, the user agencies be provided with staff capabilities to perform in-depth analysis required by the planning-programming-budgeting system in the development of operating and capital improvements programs.

2. Except in the case of a user agency which is engaged in the acquisition of capital improvements constantly and possesses the technical capabilities, schematics and preliminary and final drawings be prepared by the department of accounting and general services for all user agencies.

PART IV. APPENDIX

COPY

SPECIAL COMMITTEE REPORT NO. 6*

Honolulu, Hawaii
March 20, 1968

Honorable Tadao Beppu, Speaker
House of Representatives
Fourth Legislature
Budget Session of 1968
State of Hawaii

Sir:

Your joint House-Senate interim committee appointed to study the capital improvements program, pursuant to Conference Committee Report No. 26, S. B. No. 1, S. D. 2, H. D. 1, C. D. 1 (Act 217, SLH 1967), begs leave to report as follows:

Background

During the 1967 session, the legislature determined that there was a decided and immediate need to conduct a thorough study of the capital improvements system and process. The expression of need for the study was prompted by the growing concern that there were deficiencies and weaknesses in the existing capital improvements system and process which were not conducive to meeting public requirements and legislative intent. While the large backlog of capital improvements authorized by the legislature but not implemented was one of the outstanding symptoms pointing to deficiencies in the system, it was recognized that only through a comprehensive study could root causes be identified and improvements sought.

The limitations of time during the 1967 session did not permit the legislature to conduct such a study and initiate changes to the existing system. However, it was proposed that during the interim period between sessions, a joint committee composed of the joint select committee of the Senate and a committee appointed by the Speaker of the House of Representatives assume responsibility for a detailed study of the existing system and consider alternative ways by which capital improvements may be authorized, funded and implemented.

*The copy of the special committee report reproduced here is the one submitted to the House of Representatives. The special committee report submitted to the Senate is identical in content with the one submitted to the House.

Organization

Having been duly appointed, your joint committee held its initial meeting on August 11, 1967. The scope of the capital improvements process was analyzed, and it was agreed that the study could best be conducted by dividing it into the following three phases:

1. **Planning.** That phase of the system having to do with deciding what capital facilities are needed in the future and programming, budgeting and authorizing their acquisition, development or construction.

2. **Implementation.** That phase of the system in which the facilities which have been authorized are designed and constructed.

3. **Financing.** All of those matters having to do with the problem of how to pay for the facilities.

The Office of the Legislative Auditor was requested to provide staff assistance for the study. Your committee established as a guide that while all three phases of the study should be pursued to obtain a comprehensive picture of the entire capital improvements system and process, each particular phase of the study should constitute an in-depth examination.

Progress

Your committee reports that substantial progress has been made in conducting the study, including the completion of one phase. Emphasis was given to the completion of the study on capital improvements planning for submission to the legislature during the 1968 session. Your committee believes that the study of capital improvements planning lays the basic and essential foundation for an understanding of the capital improvements system and process. In addition, it serves as a base from which sequentially, the related study phases on implementation and financing may proceed toward completion.

Study of State Capital Improvements Planning Process

Under the guidance and direction of your committee, the Office of the Legislative Auditor has prepared the study entitled, "State Capital Improvements Planning Process," which your committee respectfully submits. Your committee has reviewed the study, approves of its contents, and supports its recommendations.

The study sets forth a framework against which the State's present capital improvements planning process can be examined, it analyzes the State's current planning process, and on the basis of that analysis, it arrives at conclusions and makes recommendations for improvements.

While the study outlines in detail the principal considerations of the capital improvements planning process, your committee wishes to emphasize the major conclusion that the State today lacks meaningful capital improvements planning. This is due partly to the lack of planning in the development of the State's operating programs and partly to the inadequacies in the manner in which capital improvements are budgeted. The study stresses that

capital improvements are not ends in themselves but are supportive of the State's operating programs. The approach to effective capital improvements planning is dependent upon the systematic development of operating programs, and towards this end, the adoption of the system commonly referred to as "Planning-Programming-Budgeting System" is recommended. The study thoroughly and logically justifies this approach.

Your committee is cognizant of the plans announced by the Governor that the State will embark on a "Planning-Programming-Budgeting System." For this reason, your committee feels that the study on capital improvements planning is being presented at an appropriate time. It hopes that the report will serve not only the purposes of the legislature but will contribute to the current undertaking of the administration as well.

A review of existing reports and studies does not show that any other political jurisdiction has published a detailed report on capital improvements planning using the approach followed in our study. Because the study stands alone and cannot be readily compared with or evaluated against other efforts, your committee recognizes that there may be omissions of essential points or that there may be a need to elaborate upon certain aspects. Comments on the study are welcomed.

Recommendation

Your committee believes that the study on the capital improvements planning process should receive the considered attention of the administration and that there should be appropriate follow-up by the legislature. Accordingly, your committee recommends that:

1. The study be transmitted to the Governor for his consideration and evaluation and for dissemination to all affected State departments and agencies.

2. The administration submit its comments on the study, including its views on the recommendations, to the joint committee, through the Office of the Legislative Auditor, by May 3, 1968.

3. A joint committee composed of members of the House of Representatives and members of the Senate be appointed to work with the Office of the Legislative Auditor during the interim period between the 1968 session and the 1969 session to pursue and complete the remaining two phases of the study on capital improvements implementation and financing.

Respectfully submitted,

MEMBERS ON THE PART OF
THE SENATE

/S/ NADAO YOSHINAGA
Nadao Yoshinaga, Co-Chairman

MEMBERS ON THE PART OF
THE HOUSE

/S/ HIRAM K. KAMAKA
Hiram K. Kamaka, Co-Chairman

/S/ GEORGE R. ARIYOSHI
George R. Ariyoshi

/S/ BARNEY B. MENOR
Barney B. Menor

/S/ WILLIAM E. FERNANDES
William E. Fernandes

/S/ TAKESHI KUDO
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/S/ JOHN T. USHIJIMA
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