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CASE STUDIES OF INSTITUTIONAL RESPONSES TO THE CONDITION OF FISCAL STRINGENCY 1974-1975 TO 1978-1979 BY THREE MICHIGAN UNIVERSITIES AND STATE COLLEGES

By

James D. Fielder, Jr.

A DISSERTATION

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ABSTRACT

CASE STUDIES OF INSTITUTIONAL RESPONSES TO THE CONDITION
OF FISCAL STRINGENCY 1974-75 TO 1978-79 BY THREE
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The purpose of this study was to obtain information regarding institutional strategies that were implemented in response to the condition of fiscal stringency during the period 1974-75 to 1978-79.

The researcher used a descriptive methodology, including as data-collection techniques (a) the collection, review, and analysis of institutional data reported to the State of Michigan, Department of Management and Budget; (b) the collection and review of institutional published documents; and (c) semi-structured interviews with administrative staff. The findings obtained during the data-collection portion of the project were reported in institutional case studies. The findings for each case study were combined into major findings for the research study.

This study examined on a case-study basis Grand Valley State Colleges, Oakland University, and the University of Michigan for the period of 1974-75 to 1978-79. There were several important findings documented by the study.

1. The three institutions did enter a period of continuing profound fiscal stringency in 1974-75.

2. The three institutions used a variety of cost-reduction programs to respond to fiscal stringency, including the termination of tenured faculty members and the discontinuance of academic programs.

3. The respondents from the institutions reported an upsurge in fund-raising activities to augment state appropriations.

4. The respondents from the institutions concurred that the major problem encountered was internal communication.

5. The respondents from the institutions reported a major change in the type of institutional planning from operational (short term) planning to a combination of operational and strategic planning (long term).

6. The respondents from the institutions reported that successful responses to fiscal stringency had occurred at each institution.

7. The respondents from the institutions stated that the benefits from the period of fiscal stringency did not outweigh the disadvantages.

To Nathan James Fielder

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My sincere thanks are due to my friends and family, who were indirectly responsible for the completion of this study.

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CHAPTER I

THE PROBLEM

Introduction

The Golden Years (Han & Wynn, 1970) of American higher education occurred in the late 1950s and 1960s. Now higher education is encountering the New Depression in Higher Education (Cheit, 1971) during the 1970s. During the late 1950s and most of the 1960s, higher education experienced unprecedented growth. Student enrollment doubled, income and expenditures tripled, and physical-plant outlay increased fourfold (Cheit, 1971). During this period of accelerated growth, there was little need for priority setting. It was evident that increasing enrollments and related increasing revenue could support all the proposed programs. However, growth in higher education was not limited to enrollment increases, capital-outlay improvement, or revenue increases. The expansion also included programmatic alterations and additions, increased public service, and increased research efforts. The security of an expanding budget also allowed for greater creativity and innovation in instruction, research, and public service. The mood on campuses has been described as "expansionistic," with college personnel tapping new resources at the state and national levels. The "Golden Years" brought a sense of satisfaction and confidence to the American public as it began to recognize that higher education was available to the masses in unparalleled quantities.

During this period of rapid growth, institutional plans were not carefully developed to provide for the continuity of physical-plant maintenance, faculty salary or tenure schedules, fiscal commitments to expensive academic programs, curriculum development, and the overall financial stability of colleges and universities (Cheit, 1971). Institutions were caught up in the notion of trading up in order to compete with sister institutions. The resultant actions led to undercapitalization and overextension on a program, physical-plant, and expenditure basis (Cheit, 1971, p. 138).

Higher education in the United States and in Michigan is currently experiencing the "prospect of no growth or even decline in enrollments and income" (Ashworth, 1979; Milliken, 1979). The State of Michigan is feeling the effect of declining revenue, and enrollment figures indicate that a downturn in the number of students attending educational institutions has already occurred. The factors affecting the financial status of higher education in Michigan are numerous and complex.

Presently, Michigan is falling in national comparative rankings for the funding of higher education institutions. According to a national survey completed by Chambers (1977), Michigan ranks fortieth among all states when comparing percentage increases in higher education appropriations over the last ten years. If the Michigan appropriation increases had kept pace with the national average over this period, support for Michigan higher education institutions would be $129 million greater than the current level, i.e., greater by 16 percent. As recently as 1966-67, Michigan's state support for higher education, on a per capita basis, ranked seventh among the 50 states. Measured by the same standard, Michigan's rank dropped to twenty-fourth for 1979-80. When ranked in terms of funds per $1,000 of personal income, Michigan's state appropriations for higher education were ranked nineteenth in 1966-67 and dropped to thirty-fifth in 1979-80. Ten years ago, higher education in Michigan received 20.7 percent of the state's general fund/general purpose budget. In 1978-79, only 17.6 percent of that budget was appropriated for higher education (Michigan State University, Budget Request, 1979).

Even with the increases in tuition revenue that have occurred, the overall budgets of institutions have decreased in actual purchasing power per students, according to preliminary data reported by the federal government's National Center for Education Statistics (Chronicle of Higher Education, 1979).

In the period under examination, 1974-75 to 1978-79, there were two Executive Orders that reduced appropriations to Michigan higher education institutions. An Executive Order occurs when the projected state revenues fall below the projected expenditures of monies already appropriated. The Governor of the state has the responsibility for managing a balanced budget; thus an Executive Order is used to reduce mid-year expenditure patterns. On December 16, 1974, Governor William G. Milliken issued Executive Order 1974-11, which reduced the Fiscal Year 1975 state appropriations to public four-year colleges and universities by $6,419,117.

The oil embargo and ensuing economic recession in Michigan continued longer than was anticipated, further compounding the financial situation for the state. On December 9, 1974, Governor Milliken issued Executive Order 1975-12, which reduced appropriations to state colleges and universities by $7,510,250 for fiscal year 1976. Any December reduction of state appropriations by Executive Order causes institutions to drastically curtail planned expenditures, since two-quarters of the institutional fiscal year have already passed.

Following two years with an Executive Order, the institutions of higher education were expending fewer constant dollars per student than in Fiscal Year 1974. In Fiscal Year 1974 the institutions expended an average of $1,935 per Fiscal Year Equated Student, in Fiscal Year 1975 the figure dropped to $1,869 per student, and in Fiscal Year 1976 the figure dropped to $1,781. It was not until Fiscal Year 1979, five years later, that the constant dollars expended per student surpassed the Fiscal Year 1974 level. Constant dollars reflect a division of current dollars by the Higher Education Price Index yearly figure; this calculation deflates the current dollars to the Fiscal Year 1967 level. This five-year period is the period under examination during this research project.

A second factor contributing to budgetary constraints on a state and national level is declining enrollment. One of the most important elements influencing university planning today is the probable decrease in enrollments projected to occur during the 1980s and 1990s. A recent publication stated: "Higher education in the United States has grown throughout most of its 340 years. Now it faces a quarter of a century of little growth or no growth in enrollments for the first time in history" (Carnegie Foundation, 1976).

In March 1979, the Michigan State Colleges and Universities Presidents' Council published an enrollment-projection research project completed by Dr. James R. Moor, Jr. Moor concluded that the Michigan postsecondary education sector

> . . . should expect a virtual steady-state in enrollments through the early 1980's; followed by slow and then more rapid declines through the mid 1990's, ranging, at a maximum of from 15 percent to 20 percent of present enrollment. . . . If the economic growth and base education assumptions are correct, baccalaureate enrollments may fall as much as 30,000 students by the mid 1990's, while junior colleges will experience up to a 40,000 student decline. (p. 65)

The Moor report projected a continuing decline in enrollments, which supports the hypothesis of increasing financial and programmatic concern for the Michigan institutions of higher education.

The latest enrollment figures for the public four-year institutions in Michigan describe a declining setting. Since the peak year of student-hour production, there has been a 5.4 percent decline for the total system (Endriss & Fielder, 1979). At recent executive and legislative hearings the presidents of Michigan's colleges and universities painted a dim picture of the enrollment pressures and budget situations that exist at the institutions.

The Michigan public four-year higher education system is nationally renowned for excellence, diversity, and autonomy. Each of these descriptors has been threatened by the condition of fiscal stringency. The State of Michigan has the constitutional responsibility to provide the citizens of this state with a sound educational system. Past and present problems caused by the condition of fiscal stringency could seriously impede the delivery of the educational services unless educational leaders systematically plan the best possible use of physical, fiscal, and human resources.

Purpose

This research project was designed to obtain information regarding how the institutions responded to a period of fiscal stringency that existed from 1974-75 to 1978-79. This research project was limited to a review of the instructional program. The purpose was to obtain information regarding institutional strategies that were implemented in response to the condition of fiscal stringency that existed in the period under examination. The format of this study is descriptive, with propositions for investigating, rather than research hypotheses used as research guidelines.

Definitions

Fiscal stringency--A condition of limited state revenue and escalating state costs, which necessitate the mid-year curtailment or elimination of planned or existing programs (Glenny, 1974, p. 8).

Retrenchment--Midyear cutbacks required when the state finds its revenues insufficient to cover authorized budget levels (Glenny, 1974, p. 8).

Reallocation--A fiscal event that redirects resources (Glenny, 1974, p. 9).

Operational planning--The planning and management of resources (financial, material, and human) during a future time frame (spanning more than one year) with the objective of being flexible and adaptable during a period of change.

State fiscal year--A time period that extends from October 1 of a given year to September 30 of the following year. State appropriations are recommended in terms of a state fiscal year and later converted to an institutional fiscal year.

Institutional fiscal year--A time period that extends from July 1 of a given year to June 30 of the following year. The state appropriation for institutional fiscal year is calculated by capturing 75 percent of the state fiscal year appropriation plus 25 percent of the previous state fiscal year appropriation.

Student credit hour--Number of semester credit hours times the number of students taking the course.

Program discontinuance--The termination of an academic program consisting of more than one course.

Declining enrollment--The decreased production of student credit hours at a specific institution as reported by that institution to the Department of Management and Budget. The decrease may also be interpreted from a Fiscal Year Equated Student figure.

Fiscal year equated student--A constant used to provide consistency and comparability among the Michigan public four-year institutions, used as a measure of student enrollment. Undergraduate total student credit hour production is divided by 31 student credit hours to compute the undergraduate FYES figure. Graduate I student credit hour production is divided by 24 SCHs to compute FYES at the Graduate I level. Graduate II student credit hours (SCHs) are divided by 16 to compute Graduate II FYES.

Need for the Study

The issue of fiscal stringency is very timely since the State of Michigan begins to adjust to financial and demographic changes. These changes have already begun to occur and are projected to intensify. Limited information is currently available detailing how institutions of higher education responded to the state fiscal stringency that existed between 1974-75 and 1978-79.

This study is important to the State of Michigan, its citizens, students, leaders, and all persons involved in Michigan higher education. The State of Michigan has a very large investment in higher education, an investment too large to allow waste due to a lack of planning (Pierce & Milliken, 1979). For the 1979-80 fiscal year, the State of Michigan is appropriating $623 million to the four-year institutions for general-fund support (Public Act 93, 1979). According to Senator Jack Faxon (1979), "the management of constrained budgets is likely to become the single most troublesome problem ever to face the Michigan higher education community." It is evident that research is necessary to determine what management strategies have proven effective in dealing with this problem. Such research has been requested by members of the State of Michigan Legislature and the Executive Office.

Dr. Gerald H. Miller, former Director of the Department of Management and Budget, stated in a speech to the 1979 "Patterns" conference held in May 1979 that the need for research and planning to deal with the "decade of financial constraints" is imperative.

Finally, this study is important in providing information for other administrators who will be facing parallel situations. This study will identify the institutional administrative responses to fiscal stringency. The President, Vice-President for Academic Affairs, and Vice-President for Business Affairs will be asked to respond to questions during an interview designed to obtain information concerning the responses to fiscal stringency. We need to know what strategies the educational leaders at the institutions implemented in response to the condition of fiscal stringency. The immediate and long-range success of higher education depends on improved institutional management and planning. The identification of programs that have been implemented at the institutions is necessary public information in order to prepare other institutions for the anticipated decline in state appropriations and student enrollments.

Procedures

First, a thorough and systematic review of the institutional data submitted to the Department of Management and Budget for the years 1974-75 to 1978-79 will occur in order to obtain information regarding alterations in programs, expenditures, and current staffing patterns. This review of institutional data will use trend analysis to determine any changes that have occurred in reported instructional data files.

Following a review of the data and literature, personal semi-structured interviews will be conducted. The purpose of the interviews is to add verification and clarification to the data summary conclusions. The interviews will also provide insight into areas that could not be reviewed through data analysis. The semi-structured interview format is widely used in current educational and social research as a means of obtaining information which is available through no other means. The sample selected for this project will be obtained from the Michigan public four-year institutions. The sample population interviewed will consist of three groups of institutional administrators. The Presidents, Vice-Presidents for Business Affairs, and Vice-Presidents for Academic Affairs will be asked to respond to a set of questions. The interview results will be compiled and presented in a narrative descriptive format.

Limitations and Scope

This research project is limited to the research techniques used for a case study. The data analysis of the research will be limited in two ways. First, the institutional representatives selected to be interviewed will be limited both by the design of the sampling technique and by their willingness to be interviewed. Second, the data-collection technique that will be used is a semi-structured interview format; therefore, the results are subject to the limitations associated with the use of such techniques. This study is also limited to a five-year period between 1974-75 and 1978-79. The analysis of submitted institutional data and the content of the interviews will be limited to obtaining information regarding the instructional programs at the three public four-year institutions chosen for this case study.

Overview

This research project is divided into five chapters. The first chapter was the statement of the problem, which included a brief introduction, purpose, definitions, need for the study, procedures for the study, and limitations of the study. A more extensive review of the pertinent literature is found in Chapter II. Chapter III consists of a description of the methodology used for the study. Details are presented for the collection techniques and treatment of the results. Chapter IV reports the findings of the study as presented in a descriptive-case-study format. Chapter V consists of conclusions and implications for future research.

CHAPTER II

REVIEW OF THE LITERATURE

Chapter II is a review of national literature that has been written concerning the financial stability of the American institutions of higher education. Particular attention was given to including reviews of several national studies, reports, articles, and books pertaining specifically to the instructional-program changes in response to fiscal stringency.

The second section of this chapter is a review of the Michigan higher education sector in a data format. The section contains data on enrollment trends, expenditure trends, and revenue changes that have occurred in Michigan. The section on Michigan illustrates through data the facts that were presented in the first narrative section.

Review of the Literature

Higher education in the United States during the 1950s and 1960s was a growth-oriented industry. Capital outlay, appropriations, and enrollment increased dramatically during this period (Jenny & Wynn, 1970). The start of the 1970s signalled a change in the environment in which higher education was accustomed to functioning. The following quotation illustrates the point:

> The market is now transformed: we presently face a glut of Ph.D.s and prospective professors; the baby boom is over; the age-cohort is declining; the draft may be ending. And since

> institutions always change in response to changes in their market, major shifts in power will be occurring in higher education in the next several years. Many institutions will be beating the bushes for students and will be able to be choosy about recruiting faculty. (Hefferlin, 1971, p. 41)

Bowen and Douglas (1971) concurred with Hefferlin and further clarified the environmental situation:

> The institutions are equally obliged to offer new programs of education, research, and public service related to the pressing environmental, urban, and social problems of American society. The net result of all these forces is financial stringency. (p. 2)

Quindry and Masten (1976) also addressed the educational environment:

> There was consistent improvement in postsecondary financing from 1950 to 1968 and a decline thereafter. The decline reflected the disenchantment of the public and state legislature with higher education, waning enthusiasm for scientific research, and growing national enthusiasm for social programs. (p. 516)

A study completed by Hechinger (1971) indicated that the decade of the 1970s was to be a difficult one. Hechinger stated: "America's institutions of higher learning, both public and private, have entered a period of profound fiscal stringency" (p. 37).

A national study completed by Earl Cheit in 1970-71 was sponsored by the Carnegie Commission on Higher Education and the Ford Foundation. The study was designed to answer three main questions: (1) What are the characteristics of the financial problem facing higher education? (2) How general is the problem among institutions of different types? (3) How are the colleges and universities responding to their financial problems--with programs, cost reduction, and income production? The study included 41 institutions of which 23 were private and 18 public. The institutions ranged in size from

714 students at Tougaloo College to 46,881 at the University of Minnesota, Minneapolis, for the fall 1968 enrollment.

The Cheit survey of the financial condition of the institutions was completed in 1970. The data for the project were collected through the use of a structured-interview format. Supportive income, expenditure, and enrollment data were collected for the years 1959-60 to 1970-71. The interview guideline consisted of 30 questions subdivided into the following sections: overall financial condition, factors condition, efficiency and productivity, increasing income, reducing expenditure, and policy view and recommendations. The summary statements for the project stated that "the essence of the problem is that costs and income are both rising, but costs are rising at a steady or a slowly growing rate, whereas income is growing at a declining rate" (Cheit, 1971).

During the 1960s, current fund expenditure increased by 8.1 percent per student per year. For the institutions reported in financial difficulty, the rate was 10.3 percent increase per year. According to the study there were five major components for expenditure growth. The components were general inflation, faculty salaries, student aid, cost of campus disturbances, growth in responsibility, activities, and aspirations. Cheit indicated that almost all of the institutions in the study were cutting expenditures, and most private schools were being forced into deficits.

The study findings supported the fact that income was growing but at a decreasing rate. Cheit reported that growth rates were declining in the following areas: federal government support, gifts and grants, and endowment income. State appropriations were reported as continuing to grow at approximately the same rate on the national scene. Tuition had been increased annually, and many institutions found that this was limiting access of students to the institutions.

The second major question addressed the prominence of the financial problem throughout higher education. At the time of this study, 29 of the 41 colleges and universities (71 percent) were judged either in or heading for financial difficulty, according to the criteria used in the study. The remaining 29 percent were considered not in financial difficulty at the time of the study. The criteria for the study were as follows:

> An institution was judged in financial difficulty if its current financial condition forced upon it a loss of program or services that are regarded as part of the program. An institution was classified as headed for financial trouble if, at the time of the study, it had been able to meet current responsibilities without reducing quality, but either could not ensure that it could much longer meet program and quality standards or could not plan support for evolving program growth. Those colleges and universities which could meet current quality and program standards and could, with some assurance, plan the program growth they wanted, were classified not in financial trouble. (Cheit, 1971).

The study was not generalized beyond the sample of the study since the methodology did not include random sampling as a selection technique. A generalization that was made was that the findings indicated that all types of institutions were affected. Cheit stated, "No class of institution is exempt from the problem or free from financial difficulty." As noted by the author, the institutional type that was affected the most was the urban institution.

The third question that was addressed was how are the colleges and universities responding to their financial problem. The common criterion used for determining financial strength was the presence or absence of planned program growth or reduction. The institutions headed for financial difficulty have curtailed expenditures by limiting program growth, freezing positions, and executing other cost-saving measures. According to Cheit, there was little evidence that the institutions headed for financial difficulty had cut academic programs.

The results of the study indicated that the institutions in financial difficulty had gone more deeply into cost cutting. Some of these institutions were reported to have dropped departments and graduate majors. The following quotation indicated the approaches employed by the institutions:

> The institutional responses have followed the likely sequence of cuts in maintenance first, with the next cuts being in expenditures for supplies, equipment, and travel. Funds are dropped for experimental programs and extracurricular activities and events. The pressure of the cost-income squeeze is strong enough that schools have begun to reduce funds made available for student aid and special admissions. There are reductions in campus communication budgets, cultural activities, and certain kinds of student services. Also, there typically are cuts in the number of nonacademic employees. (Cheit, 1971)

The institutions universally included fund raising as a response to financial difficulty. Cheit reported that there was also an increase in academic and financial planning.

The fourth major question that developed during the study was whether or not medical schools were an important factor in the financial trouble of universities. A special report on medical and dental education was critically underfunded and recommended policies for increased financial support. The study included one question on medical education: "Is the medical school a significant factor among the major factors influencing the financial situation?" The outcome of this study was an indication that the institutions were attempting to establish the medical schools as financially independent of the institution.

The study generated four additional questions to which Cheit responded. Is the money crisis on campus having beneficial effects? Are the schools doing enough to gain control of their financial situation? How serious is the financial problem likely to become if present trends continue? What broader issue must colleges and universities face as a result of their financial problems?

The benefit reported by the institutions was the increased willingness on campus to review the cost of operations. The increased willingness to manage through cost-analysis techniques had been reported by administrators, faculty, and students.

The second question related to institutional control of the financial situation was more complex. It was apparent from the study that the institutions were increasing the attempts to reduce expenditures and to increase income. A second component of this situation was that there were definite factors that inhibited the institutions from accomplishing these objectives. Cheit stated in the study:

> Any planned adjustment of funds between academic fields must take account of faculty tenure as a bar to flexibility and the academic tradition that precludes laying off faculty. There is a difference in expectations between campus and industry.

The third question related to future projections of the financial problems. The study supported the fact that the financial troubles will continue. Cheit reported that financial conditions are dynamic and that the financial condition at two institutions worsened significantly in the two months immediately following campus visits. The University of Michigan reported that the legislature reduced appropriations below what was anticipated. The College of San Mateo was reported not in financial trouble at the time of the study, but with the defeat of a local tax-millage election, the college fell into financial difficulty. San Mateo reported that it anticipated laying off 40 percent of its staff and reducing enrollment. The College of San Mateo reported four reasons for the millage defeat: (1) general revolt against high taxes, (2) a reduced regard for higher education generally, (3) a reaction of older people against the current styles of younger people, (4) a lingering resentment against some campus activities following the May 1970 invasion of Cambodia.

The final question addressed by this comprehensive financial study was: What broader issues must colleges and universities face as a result of their financial problems? The universal response to this question was that institutions must restore public confidence in higher education. Three main ingredients were identified as necessary factors:

> First, the colleges and universities must appear to be governable. The campus disorders significantly disrupted both campus operation and the public image of the institutions. Second, the institutions must dispel the image of being inefficient and non-productive. Accountability for expenditures is now being called for by the general public. The institutions must address

this question internally in order to reply to external demands for the information. Third, the institutions of higher education must develop an identifiable purpose. (Cheit, 1971)

The history of higher education has been linked directly to serving a purpose for the American society, whether that reason was to provide education and mobility for the influx of post-World War II GIs, or to provide young graduates in response to Sputnik. The current status of higher education was mixed with no specific set of purposes or priorities.

Cheit summarized the study in the following quotation:

> First, this study makes clear that the money crisis in higher education is indeed real. Almost no school is immune from its effects. For most schools, it will mean serious problems of retrenchment and readjustment. As this study has shown, the extent to which colleges and universities of all types are in economic trouble is great, and they are genuinely working at reducing their financial difficulties.

Furniss (1974) concurred with Cheit's findings on fiscal stringency and stated that

> Colleges and universities faced with stable or declining enrollments and funds, with spiraling inflation, or with legislative commands to change their missions may be required to reduce or eliminate programs and terminate staff. (p. 159)

A Carnegie Commission study completed in 1971 stated that

> Higher education in the early 1970's is experiencing its greatest financial crisis. This anomalous juxtaposition of triumph and depression is a fact that must be accepted, and adjustments must be made to it. It may seem unfair to some; it may be welcomed by others; but it remains a dominant reality in higher education and in American Society. (p. 1)

The Carnegie Commission study titled <u>The More Effective Use of Resources: An Imperative for Higher Education</u> (1972) identified three primary areas of difference between the 1960s and the 1970s. First, the total-cost increases were due to both quantitative and qualitative growth. Second, inflation increased at a faster rate than the momentum of the growth. Third, while growth increased and the cost per unit program increased, income was leveling off.

Jellema (1973) studied 540 private colleges and universities to determine the financial soundness of the institutions. The base year for the collection of data was 1968, and 1971 was the end point for the data projection. Jellema stated:

> Not only was the number of institutions reporting deficits increasing, but the extent of the deficits they are running was increasing. In 1968, 35 percent of the private institutions reported deficits; in 1969, 43 percent. Next the figure jumped to 58 percent and then increased an additional 2 percent the following year.
>
> The increase in the size of the collective net deficit after 1970 is due more to the extent of the deficits in institutions with deficits than to increasing numbers of institutions with deficits. (p. 9)

A follow-up study was conducted, surveying 507 institutions of the original group. The findings were dramatic, indicating that the deficit was greater than anticipated. The projection for future action was likewise negative, with increasing deficits at affected institutions. Jellema noted that some institutions had responded by temporarily (one or two years) freezing faculty salaries, increasing tuition, and seeking greater endowment (p. 24).

The second part of the Jellema study focused on enrollment at the 431 private institutions that completed the surveys. Jellema concluded from the research that fewer applicants were generating an increased number of applications, and a higher percentage of applicants were being accepted into the institutions (p. 33). Jellema stated that there was a need to improve several areas in order to compete in the higher education market of the future. These areas for improvement included data collection, data analysis, admission practices, and academic programs.

The third major area examined in the Jellema study was the revenue portion of the institution's budget. Jellema noted that on the national scene, 68.1 percent of general-fund revenue was generated by tuition and fees, 15.3 percent from restricted and unrestricted gifst, 7.6 percent from endowment income, 1.7 percent contributed services, and the remaining 7.3 percent from other sources (p. 56). The author stated that the traditional sources of revenue were "insufficiently elastic" to meet increasing needs (p. 86).

Jellema proposed the establishment of a federally sponsored income-contingency loan plan. The plan would aid the student wishing to attend a private institution, and it would aid the institution because of the guaranteed nature of the federal loan. This plan would help offset the increasing cost differential that exists between the public and private sector. The authors concluded that the institutions must improve management efficiency and development-fund generation and live with decreased program expectations.

In the section on institutional expenditure, Jellema noted that the average expenditure pattern is 50.4 percent instruction and departmental research; 25.2 percent for general administration, student services, staff benefits, and general institutional expenses; 12 percent for the operation and maintenance of plant; 5.3 percent for libraries; and the remainder for all other expenses (p. 89).

The final section enumerated the responses to the deficit budgets at the private institutions. The responses as presented by Jellema included, in order of frequency:

> Borrow other (including from current funds); transfer from unappropriated surplus; raise tuition; increase fund raising activities, defer maintenance, retrench expenditures, transfer from other reserves, borrow from endowment, spend principal of funds functioning as endowments; cut back on depreciation allowance, spend appreciation on endowment funds. (p. 139).

The New Depression in Higher Education--Two Years Later (1973) was a follow-up study based on the earlier project completed by Cheit in 1971. The first study validated the point that expenditures were rising faster than income, and the resulting gap was putting most of America's colleges and universities under heavy and increasing financial pressures. The conclusions of the two-year follow-up study were summarized by Cheit (1973) in seven statements:

1. The institutions generally have improved financial condition.
2. On the whole, private institutions are in somewhat better control of their situations than public institutions.
3. There are still greater extremes of financial condition in the private sector versus the public.
4. Within the public sector state colleges feel most secure and research universities most insecure.
5. As a group, the research universities seem to be in the greatest state of concern about the future.
6. Administrators at institutions of all types endorse student aid programs and believe their institutions would benefit from them.
7. Finally, the assessment of financial condition is difficult and the present fiscal stability is fragile.

Cheit further clarified that the fiscal stability was fragile for several reasons:

1. Inflation is an unpredictable external influence on the institution.
2. Trends in voluntary support vacillate rapidly and are very susceptible to change due to reform in tax laws.

3. Enrollments are expected to decline instead of remaining steady.
4. State aid is expected to decrease as a portion of the state budget.

The author commented on the future of higher education in his summary statements:

> A concern that this process of reduced expectations may have future adverse consequences is expressed in the response from Harvard University, which notes that financial stringency has the effect of sacrificing innovation and imagination. It "sacrifices the future for the present." Future constituencies are unrepresented.

In the mid-1970s there was a growing awareness of the difficulties faced by American higher education. Planning and budgeting became relevant topics of campus conversation as the faculty became aware of the impending financial press. Increasing concern was focused on the tenure process and potential problems that it caused. The concern was that, during a state of declining enrollment or declining finances, the institutions that are heavily tenured would lose much of their financial flexibility (Furniss, 1974).

The loss of flexibility during times of financial press elevated the importance of the tenure process. West (1974) proposed a tenure quota system based on salaries instead of numbers of full-time faculty members. The system was designed to aid the institutions in their response to fiscal stringency. West noted the typical institutional response:

> As budgets and enrollments shrink in colleges and universities throughout the country, administrators are limiting the percentages of tenured faculty in order to stretch financial resources. (p. 96)

Nisbet (1973), in "The Future of Tenure," enumerated seven other reasons for the decline of the tenure structure. They were as follows:

1. Rearrangement of national priorities
2. The degraded positions of universities and colleges
3. The blurring of academic and non-academic functions
4. The rise of new and competing institutions
5. The revolt of the young and ambitious
6. The rise of labor unions
7. The rage to litigate.

Joney (1972) concurred on the current position of tenure. Honey clarified that if faculty influence was aimed at narrow faculty interests, then it was running counter to the expectations of institutional responsiveness and accountability (p. 25).

The American Association of University Professors (AAUP) (1975) noted the economic position of the faculty members in a report on the economic status of the profession: "1974 was a year of severe recession accompanied by unprecedented inflation. Faculty members bore their share of the resulting economic hardships." The AAUP report stated that inflation erased any faculty gains made in regard to purchasing power.

Jenny (1975) stated in an article for The Journal of Education Finance that

> Most recent studies on inflation in higher education support William Bowen's earlier findings. Bowen reported that the expenditure mix in higher education institutions is such in both nature and weighting that inflation rates for institutional costs exceed those that prevail in the economy as a whole. (p. 27)

Jenny concluded the article by recommending that higher priority should be given to institutional planning that would allow for the continuation of experimentation, innovation, and expansion of key disciplines (pp. 28-33).

Meeth (1974) noted the historical resistance to planning within the higher education sector. The following quotation by Palola and associates concurred: "Institutions, administrators, and faculties are very reluctant planners."

In a study completed by Meeth, the author examined 66 established independent colleges that offered baccalaureate degrees. The collection of data for the study was accomplished through the use of surveys with follow-up clarification interviews. The data were detailed to the level of individual reporting of courses, the instructor by name, credit hours generated, tuition charged for the course, and extensive breakdown of income and expenditure data. The author noted that there were problems caused by lack of complete data submission and inconsistent data.

The data collected were analyzed in order to determine the cost of the curriculum, cost per credit hour, and other instructional cost ratios. Calculations were also completed to include student load and faculty teaching loads. Meeth discussed the use of the cost analysis for planning purposes. The most extensive use of the cost-analysis material provided was the inclusion in institutional long-range planning efforts (p. 100). The data were provided to various institutional audiences, including boards of trustees, faculty senates, and alumni. The author suggested using the data to initiate institutional self-examination studies.

Meeth outlined a comprehensive planning strategy that could be followed by institutions. The suggested steps included were:

1. Building a data base,
2. Data analysis and interpretation,
3. Cost analysis strategy,
4. Application of strategy,
5. Planning strategy. (p. 145)

The author reported the advantages and disadvantages of long-range planning, as well as suggested data-collection forms. Meeth concluded Quality Education for Less Money by compiling 12 recommendations that were designed to reduce costs, to increase efficiency, to increase effectiveness, and to increase institutional stability.

1. Maintain a 1 to 5 ratio between part-time and full-time faculty and staff.
2. Hire faculty with flexible skills.
3. Develop a strong institutional research office.
4. Develop long range plans.
5. Participate in cooperative efforts with other institutions.
6. Reduce the size of the faculty and the administration.
7. Develop plans and programs for reducing attrition.
8. Increase enrollment.
9. Expect administrators to teach.
10. Relate budget spending to income.
11. Change concepts of purchasing.
12. Develop economic policy guidelines for the curriculum. (p. 149)

Meeth recommended that institutions must increase enrollment and reduce attrition in order to increase institutional stability. A key factor in attendance had historically been the derived and anticipated benefits gained from a college education. A study completed in 1974 questioned the soundness of any assumptions regarding return on college investment:

> It is important to recognize that the market turnaround of the seventies is a far-reaching unprecedented development of sizable dimensions. By all relevant measures, the economic status of college graduates is deteriorating, with employment prospects for the young declining exceptionally sharply. (Freeman & Hollomon, 1975, p. 24)

Freeman and Hollomon (1975) pointed out that the rate of return on the college investment fell significantly between 1969 and 1974. According to one set of estimates, the return dropped from 11 to 12 percent in 1969 to 7 to 8 percent in 1974 (p. 27). The authors' analysis of the causes of the 1970s turnaround suggested that the market development represented a major break with the past. The basis for this dramatic change has been the balance of supply and demand. Paradoxically, there has been an increase in the number of college graduates at the same time as a decrease in the number of positions available for the graduates.

The authors stated that the job market had a significant effect on student enrollment. The effect of declining enrollment would hold dire consequences for the institutions.

> Lack of growth will reduce the flexibility of higher education to meet changing demands for education and research. The traditional mode of adjusting the mix of faculty among fields, altering the characteristics of new teachers, will be severely limited. (p. 29)

Freeman and Hollomon concluded that the financial problems of higher education in a period of decline may be compounded by increases in the cost of other inputs. The pressures of both academic and non-academic costs would press the financial structure of the institutions.

The financial state of higher education was studied by Lupton, Augenblick, and Heyison and reported in the September 1976 Change magazine. The authors reviewed the financial condition of 2,163 institutions through analysis of data provided to HEGIS. Approximately one-half of all the institutions were rated as financially unhealthy. An important finding of this study was that there was a direct correlation between size and financial well-being. The institutions with over 10,000 students as a group were in substantially better financial condition. Certain economies of scale were reportedly realized in larger institutions, particularly in the area of fixed costs. The large institutions also had the advantage of greater financial flexibility (pp. 25-26).

The analysis of the expenditure performance of various institutions illustrated that the expenditures for healthy institutions grew at a 50 percent rate as compared to the expenditure growth pattern at the financially unhealthy institutions. The analysis also indicated that healthy institutions increased expenditures in the areas of instruction, while unhealthy institutions increased expenditures in public service and research.

The authors also reviewed the influence of enrollment changes at the institutions. The findings supported the hypothesis that above-average enrollment increases reflect financial stability for the period 1972-1974 (p. 28).

Bowen and Glenny (1976) completed a major one-year study titled State Budgeting for Higher Education: State Fiscal Stringency and Public Higher Education. This study reviewed the institutional responses to fiscal stringency during the year 1975. Bowen and Glenny stated:

> The procedures and criteria for reducing expenditures are of immediate practical concern to state and institutional officials and budget professionals. Of more crucial importance retrenchment presents in cameo form, major problems with which higher education must grapple over the next two decades. Which academic programs will be given priority in the face of fiscal stringency or enrollment decline, or both? (p. 1)

The authors developed a set of six questions related to fiscal stringency and retrenchment. The questions are as follows:

1. What are the immediate responses to retrenchment? How selective can they be?
2. Who should participate in establishing procedures and selecting priorities and criteria for retrenchment?
3. What impediments are there on the flexibility required to respond to fiscal stringency? How can these be overcome?
4. What special academic and support programs should receive particular attention during retrenchment?
5. What criteria and procedures should be used for layoff of personnel during retrenchment?
6. What are the possible longer term implications of retrenchment? (p. 15)

Bowen and Glenny responded to the first question by differentiating between immediate across-the-board cuts and the anticipated curtailment of expenditures. The authors concluded from the study that unexpected mid-year revenue reduction caused the institutions to respond with equal across-the-board cuts.

> Across-the-board cuts may be justified or unavoidable when retrenchment strikes without warning and must be implemented without delay, but there seems to be no excuse for making across-the-board cuts when ample warning has been given. (p. 26)

Several potential problems were noted by the authors in relation to across-the-board cuts. First, these equal cuts implied that all subordinate units presently were being equally funded. Second, discretion for the cuts was typically granted to subordinate units; the action taken may have caused disproportionate expenditures in later years (Phillips, 1975, p. 25). Third, across-the-board cuts generally resulted in severe reductions in the nonpersonnel areas.

Who should participate in establishing procedures and selecting priorities and criteria for retrenchment? This second question was answered in three summary statements by Bowen and Glenny.

1. Wide participation is often the only means to keep people informed in a rapidly moving situation.
2. Selection and application of criteria and procedures are different during retrenchment than during periods of growth.
3. Retrenchment requires a wider range of people than usually participate in academic programming and budgeting. (p. 27)

The authors concluded from the results of the study that the participation of the faculty was a necessary ingredient in order for the institution to successfully respond to fiscal stringency.

The reply to the third question, "What impediments are there on the flexibility required to respond to fiscal stringency?" was broken into two sections. The first section was a brief review of the state policies or procedures that limited the institutional flexibility. The authors noted from the study that the state agencies rarely interceded in the internal management decisions of an institution (p. 34).

The state restrictions imposed on the higher education sector are typically the same as those imposed on other state agencies (e.g., travel, expense, salary controls, etc.). Bowen and Glenny stated that the legislative language included in an appropriation bill that specified expenditure on a line-item basis proved restrictive to the institution.

Institutional rules, regulations, and procedures also limited the flexibility of an institution's response to fiscal stringency. The authors concluded from the study that there was a reluctance on the part of institutions to change internal rules or regulations. This resistance was reportedly due to the concern for disruption of the normalcy of campus operations.

Bowen and Glenny concluded that

> Flexibility is essential if the response to fiscal stringency is to be effective. If the principal actors can select targets for reduction or redistribute resources among programs or campuses, or both, higher education can remain a viable and dynamic enterprise. The mere existence of flexibility will not assure its creative use, but without flexibility the enterprise will stagnate. (p. 30)

The authors responded to the fourth question by explaining a paradox that exists. The study results indicated the desire of institutional administrators to protect the experimental and innovative programs, affirmative action, and programs for adults. However, the desire for protection did not necessarily translate into insulating these programs from possible reduction. Bowen and Glenny noted the importance of these innovative programs for the future of higher education. The support of these programs occurred due to the reallocation of existing monies from other less-important programs. The authors noted that the "protection of these programs will come about only through deliberate and positive action" (p. 43).

The fifth question was in the area that had caused the most litigation and referred to the procedures and criteria used for personnel layoff. Bowen and Glenny stated that personnel layoff was definitely the "thorniest" issue and that study results indicated that there were four main aspects across the states: procedural, programmatic, attitudinal, and budgetary (p. 52).

The initial response to personnel layoff was the discovery that careful and exact procedures did not exist. The authors recommended the following: "We do strongly urge that procedures be examined and revised, or that new procedures be adopted before the need for their use arises" (p. 52). A similar finding was reported in relation to programmatic concerns. The issue of program curtailment or discontinuance had been treated as secondary in nature.

> Rather than waiting for events to reinforce the possibility that retrenchment will be considered almost solely in terms of personnel decisions, higher education systems and institutions should initiate reviews of academic programs early enough to provide a context for staffing changes when the evil day of fiscal stringency comes. (p. 54)

The attitudinal aspect regarding personnel layoff was reported by Bowen and Glenny as being as important as the personnel provisions. The authors concurred with Furniss (1974), who stated that a campus environment "low in anxiety and conflict may be a suitable goal for retrenchment procedures" (p. 171).

The key item discussed regarding budgetary concerns was the need to provide flexibility. This flexibility allowed the personnel administrators other alternatives to layoffs, including transfer to other departments or reduced workload schedules to spread the reduction.

The last question addressed the long-term implications of fiscal stringency. This study indicated that most periods of fiscal stringency had been of very short duration, with a quick recovery period following. The authors noted that the current and projected future indicated a longer period of fiscal stringency. This extended period would affect state-level program priorities, student access, student choice, and tuition policies. The authors stated:

> Although retrenchment brings immediate responses that may or may not have implications for the future, the major long-term result, we believe, will be systematic change in the administrative processes that support academic and budgetary decisions. (p. 61)

Bowen and Glenny concluded the report of the study by stating 11 key guidelines to be applied during a period of fiscal stringency. The authors stated that planning was extremely necessary to deal with the adversity caused by fiscal stringency. The planning would include the following guidelines:

1. Selective as opposed to across-the-board reductions will usually be the more appropriate response, if time is available to implement them. Only by accident will proportionate cutbacks recognize the differential needs of campuses and programs.
2. Across-the-board reductions may be the only alternative, if time is not available or if institutional morale is perceived to require them. If used, such reductions should be based on total annual budgets to the extent possible, not on fund balances at the time of the reductions. The happenstance of expenditure timing should not replace earlier, more considered, judgments on relative needs.
3. Fixed or relatively fixed costs should be clearly identified, examined, and widely publicized. Utility costs and contractual salary commitments, for example, reduce the margin for programmatic response. These limits on flexibility should be explicitly stated.
4. Existing faculty and student consultative groups should be brought into discussions as early as possible. If appropriate groups do not exist, ad hoc advisory committees should be established and kept fully informed.
5. Institutional rules and regulations limiting fiscal flexibility should be identified and revised to assure maximum flexibility.
6. State rules and regulations limiting fiscal flexibility should be identified and appropriate changes requested to assure maximum flexibility.
7. Use of flexibility by subordinate units should be analyzed and, if necessary, control points should be established to assure that future needs in both personnel and support areas are not sacrificed to current convenience.
8. Procedures for faculty layoff or relocation should be reexamined. The actual or imminent use of these procedures is likely to indicate modifications that had not been considered when procedures were originally developed.
9. Governors and legislatures must indicate explicitly what changes in state policy they wish to have implemented when fiscal stringency upsets the expected and traditional relationships among student access, program quality, and state support.

10. State higher education agencies and institutions must base budget requests on realistic multi-year fiscal projections that incorporate specific academic program priorities.
11. Governors and legislatures must recognize, at least in principle, the need for multi-year funding in higher education so that reallocation of funds can be phased over time. (p. 80)

Folger (1977) stated in "Prospects for Higher Education Finance in the Next Decade" that

> The period from 1974-1976 stands out as one in which a combination of recession, larger than expected enrollment increases, and double digit inflation combined to produce fiscal difficulty for most institutions. Higher education institutions also discovered that their priority for state funding was not as high as it had been and that in a recession period, the costs of welfare, health, unemployment compensation and other more immediate problems took priority over the long range investment in education. (p. 189)

The author predicted that there will be two major trends that will dramatically affect higher education. Folger projected an enrollment decline for the period 1975-1985 in both the public and private sectors. The second major aspect was the effect that inflation would have on higher education. Double-digit inflation quickly eroded any gain made by limiting expenditures.

In an article for Newsweek, Sewall and Lee (1979) concurred with Folger on the enrollment decrease. They stated, "Across the nation enrollments will tumble in the next ten years; before 1990, the population of 18 to 24 year olds will decline by an estimated 15 percent" (p. 100).

Scott (1978) stated that federal-government regulations were another factor limiting the institutional responsiveness. He noted that federal support had increased for students and supported research but declined for the institutions. The increasing federal regulations were placing larger burdens on the institutions (Finn, 1975; Halperin, 1978; Scott, 1978).

Adams (1977) cited specific data related to federal support of higher education:

> Two examples illustrate this volatility of federal support in terms of constant dollar, federal expenditures for graduate fellowships increased from roughly $35 million in 1960-61 to a peak of roughly $250 million in 1967-68, only to drop precipitously to $50 million in 1974-75. Similarly, federal construction loans and grants rose from roughly $11 million in 1953-54 to a peak of $1,500 million in 1967-68, only to fall to $210 million in 1974-75. (p. 87)

Adams further stated that

> The half-hearted commitment of the federal government to higher education, and current methods of financing it by the states, tend to undermine a central function of public higher education, which is to serve as an instrument of vertical mobility in a democratic society. This is especially so in periods of rapidly rising prices for tuition and auxiliary services. (p. 88)

At the close of the decade there was much conern in the higher education sector regarding the level of funding that the institutions were receiving as well as in the sector of financial stability at the institutions.

<u>The Three R's of the Eighties</u> was written by Mortimer and Tierney in 1979 and examined the institutional responses to the fiscal changes that have occurred. This study also included three specific case studies: the University of Michigan, the University of Pennsylvania, and the Pennsylvania State College System.

The research project was divided into three major sections. The first section reviewed the projected conditions in which the institutions will be operating. The future conditions included were "declining numbers of college-age youths, changing trends in institutional revenues, inflation rates, and trends in instructional expenditures." The second major section of the study reviewed the major institutional strategies employed "to cut expenses including reductions in growth rates, reductions in the budget base, changes in student-faculty ratios, internal reallocations, program review, staff reductions and dismissals, and program discontinuance" (p. 2). The final section summarized the report and stated nine recommendations based on the analysis of likely trends for the 1980s.

The enrollment projection supported in the study by Mortimer and Tierney was illustrated by the following quotation:

> According to the Chronicle article, the demographic forecast is for a 19 percent national decline in the number of eighteen year olds between 1980 and 1990. Cartter (1976) estimates that the decline in the traditional college-age cohort (18 to 21 year olds) will be somewhat smaller, approximately 15 percent. Neither percentage is comforting nor is it temporary. If one were to look beyond 1990, the potential pool of college students will have declined 6 to 15 percent by the year 2000, and by 5 to 12 percent by stating that "we cannot expect population growth to add to the growth of college enrollments beyond what will happen over the next several years." (p. 6)

The enrollment decline has not been universally accepted. Bowen (1975) pointed out that the older students would affect the decline of students from 18 to 21 years of age. The nontraditional student population participation was difficult to project. Cartter and Soleman (1976) pointed out that it would take approximately five part-time students to replace one traditional full-time student. It was doubtful that there would be enough nontraditional students to offset the decline in traditional students.

Student matriculation rates were reported as difficult to predict. Mortimer and Tierney (1979) pointed out that the college-age matriculation rates were approximately 50 percent in several states. Bowen (1975) stated that college enrollment could be doubled if these high rates became a national phenomenon. According to Mortimer and Tierney, the matriculation trends reflected a decline in attendance, not an increase. The decline in attendance rates had been attributed to the end of the draft, according to Cartter (1976) and to the decrease in economic incentive for college attendance. Freeman (1976) stated that as the rate of financial return drops to 7 or 8 percent the students may elect not to attend college but instead to work.

Of greater concern to the individual institutions than the national trend was the local attendance issue. Population shifts were occurring throughout the United States, with in-migration occurring in the sunbelt region and out-migration occurring in the industrial-oriented northeast section of the country.

> In its September 5, 1978 issue, the "Chronicle of Higher Education" presented a map of the states that expect to gain in the number of 18 year olds, and states expected to lose or remain the same. (Magarrell, 1978, p. 1)

College enrollment will also continue to be reflected by student preference. The current trend toward specific career or vocational academic areas has altered the programmatic mix at the institutions. The institutional flexibility to respond to student choice will increasingly become more important. Mortimer and Tierney referenced this point and emphasized the change to job-oriented curricula and changing patterns of majors. This subjection was summarized as:

> Hollander (1978) supports the development of "enrollment related alternatives" to the present "enrollment driven" budget model; this change would improve the institutions' chance of positively responding to the enrollment decline. (p. 10)

Mortimer and Tierney pointed out that the institutions were not aware of the effects on enrollments that a tuition increase would cause. Jenny (1967) stated that such information was difficult to obtain due to the complex factors that influence college attendance. Jackson and Weatherby (1975) concluded that an increase in tuition costs would decrease the likelihood of college attendance. The tuition and fee factors for the private institutions were also extremely important. The higher student costs of private institutions versus public institutions were of major concern for presidents of private institutions that were attempting to provide accessibility. Jenny and Wynn (1970) stated that a resulting "student-aid subsidy gap constitutes one of the fastest growing elements in an institution's cost structure."

The second revenue source for institutional funds enumerated by Mortimer and Tierney was the federal government. The main point of this subsection was that federal-government aid to higher education was continuing to increase, but at a much slower rate. Cheit pointed out in <u>The New Depression in Higher Education: A Study of Financial Conditions at 41 Colleges and Universities</u> that federal funds obligated to colleges and universities increased at a relatively rapid rate in the early and mid-1960s, only to slow precipitously to 2 percent per year starting in 1968. The increased federal regulation connected to the appropriations was also negatively affecting the institutions, according to Roark (1978) in the article, "Universities Could Lose Millions in Research Pay," written for The Chronicle of Higher Education.

State appropriations were identified as the third major revenue source for the institution by Mortimer and Tierney. However, according to Magarrell (1978), the higher education sector had lost its high priority within the state budget. This shifting of state priorities was reflected in decreased appropriations for the institutions. Another important factor was the earlier recession in the decade of the 1970s, which had eroded much of the institutional flexibility for responding to decreased state appropriations (p. 13).

The fourth revenue source identified by Mortimer and Tierney was in the area of private gifts. The point was made that private gifts fluctuate with the economy. In good times private gifts increased, and in a recession gifts decreased. The private gifts as a revenue source were also influenced by tax laws. The 5 percent write-off given to private citizens or businesses that support charitable organizations was the impetus for donations. Mortimer and Tierney pointed out that any change in the tax laws could significantly affect this revenue source.

The fifth revenue source identified in The Three R's of the Eighties: Reduction, Reallocation and Retrenchment was endowment income. The authors clarified two important issues regarding this revenue source. The first important issue was the maintenance of the purchasing power of the endowment. Without careful management and reinvestment practices, the value of the endowment could be eroded. The second important issue concerning endowment management was the concern for a high rate of return. Magarrell and Cheit both pointed out that the events of recent years had led the institutions to invest in high-interest bonds versus common stocks (p. 14).

The final source of institutional revenue was identified as other income. This source was defined by Mortimer and Tierney to include

> sales and services of education activities (e.g., sales of scientific and literary publications, the products of dairy creameries, food technology divisions, and poultry farms), the recovery of indirect costs, and incidental fees and rentals. This type of revenue tends to be relatively more important for public and private universities than other types of institutions primarily because of their research orientation. (p. 14)

Mortimer and Tierney projected total revenue needs for higher education by multiplying the percentage of revenues derived from various sources times the total operating revenues for the base year of 1974-75. The ten-year projection is illustrated in Table 1 and indicates a 6.3 percent average annual rate of growth for the public universities and a 7.9 percent average annual growth rate for the private institutions.

The projections of revenue included in Table 1 contain several assumptions that, if erroneous, could substantially affect the outcomes of the projections. Mortimer and Tierney clarified their projections with the following statement:

> The supplementary assumptions are imbedded in the average annual growth rates for the various sources of revenues. It is at this point that revenue forecasts become extremely hazardous. For the public university, these growth rates were derived from recent experience (1972-73 through 1976-77) of one such institution. The growth ratios for the private universities were,

Table 1.--Actual and projected operating revenues[a] of a public and a private university for 1974-75 and 1984-85[b] (in thousands of dollars).

Source[c]	Public University			Private University		
	Base Year (1974-75)	Average Annual Growth Rate	Projected 1984-85 Values	Base Year (1974-75)	Average Annual Growth Rate	Projected 1984-85 Values
Tuition and fees	15,118	7.8	32.039	19,913	9.2	48,013
Federal government	23,364	6.4	43.447	19,656	8.0	42,436
State & local government	47,150	5.2	78,278	2,441	4.0	3,613
Gifts	2,749	7.4	5,613	5,845	6.4	10,869
Endowment income	740	6.4	1,376	3,918	6.4	7,286
Other	16,587	7.5	34,169	12,461	7.5	25,669
Total income	105,708	6.3	194,992	64,234	7.9	137,886

[a]Excludes revenues for capital expenditures, student aid, and auxiliary enterprises.

[b]Assumptions:

a. The two institutions had balanced budgets in 1974-75. Thus, total revenues were set equal to total expenditures.

b. The level of enrollment remains constant over the 1974-75--1974-75 period.

[c]The distribution of total revenues by source was based on the percentage shown in Mortimer and Tierney, 1979, Table 1, p. 15.

> for the most part, borrowed from Hopkins and Massey (1977). It should be reiterated that these growth rates may diverge significantly from the actual growth that will occur. (p. 16)

A review of the projections indicated that the rate of growth would cause several of the revenue sources to double during the time span.

The discussion of institutional expenditures was the next subsection of the report. The authors stated that projecting expenditure data was more reliable than projecting revenue. The expenditures were continuing to grow at a rapid pace.

> The explanation of the growth, in institutional expenditures have focused on three factors: inflation, increased responsibilities, and the nature of educational technology (Bowen, 1969; Jenny & Wynn, 1970; Balderson, 1974). (p. 17)

According to Mortimer and Tierney, the increase in costs for goods at the institutions was higher than the increase of the consumer price index. The rationale for this statement pertains to the cost of specialized goods consumed by the institutions versus general goods consumed by the public. Increased responsibilities, the second area cited, typically represent high-cost areas of specialization. Examples given in the report were specialized high-cost research programs and graduate studies. Federally mandated programs have also increased institutional responsibilities and costs. The third area identified for expenditure increases was educational technology (p. 18). The Mortimer and Tierney report discussed two aspects in this area. Education was not able to affect costs by increasing technology due to the fact that education was a labor-intensive, not a capital-intensive, organization.

Costs per student increased relative to costs in general. The second aspect was that cost efficiency was difficult to achieve in a period of stable or declining enrollment. Cost per student increased during a period of declining enrollment due to increasingly "fixed" labor costs. The authors noted that the institutions have responded to fiscal stringency by curtailing expenditures in the following manner.

> A number of actions were taken to accomplish this level of reduction. Institutions deferred the maintenance of their physical plants, froze the salaries of faculty and staff, left vacancies unfilled, and increased the efficiency of their operations in food handling, purchasing and class scheduling (Cheit, 1973; Jellema, 1973). Such actions, however, represent temporary solutions to the "cost-income squeeze." Continuation of such practices could have adverse consequences for the quality of institutional faculty and facilities (Wynn, 1974). (p. 20)

The second major section of the Mortimer and Tierney study discussed institutional strategies employed in response to financial exigency. There were six primary areas presented: reductions in growth rates, reduction in budget base, internal reallocations, program review as resource reallocation, staff reductions, staff dismissed, staff retrenchment, and program discontinuance.

Reductions in growth rates were mainly dependent on a reduction of the increases in salary packages. Mortimer and Tierney stated that institutional expenditures are 70-80 percent salary costs. The reduction of a salary increase in any given year will have a long-term effect on the institution's budget.

Mortimer and Tierney identified two primary areas for reduction of the budget base. The first area discussed related to changes in staff composition at the institution and the discussion of the pros and cons of increasing the number of part-time faculty.

McCabe and Brezner (1978) stated that increased employment of part-time faculty may offer some cost savings, since part-time faculty received lower stipends and often received few, if any, fringe benefits. Mortimer and Tierney quoted Ernst and McFarlane (1978) on the cons of part-time faculty employment:

> Part-timers may not be as familiar with the college's missions, philosophies, and academic policies. It is difficult to meld part-time and full-time faculty into a cohesive college faculty, especially if multiple locations are involved. It also is quite difficult to coordinate course content, develop uniform standards of student performance, and establish continuity of instruction when part-time faculty are used excessively. (p. 27)

Mortimer and Tierney stated that other techniques for changing staff composition rely on the promotion and tenure policies. Institutions have used a variety of techniques, including extending pre-tenure period, increasing the proportion of nontenured positions to tenured positions, and establishing early retirement programs.

The second area discussed for reduction of the budget base related to changing student-faculty ratios. Mortimer and Tierney identified three ways to increase the student-faculty ratio. "First, increase the number of students and hold the number of faculty constant, second reduce the number of faculty and hold student numbers constant or third, a combination of the two" (p. 28).

Mortimer and Tierney stated that the institutions appear to be responding to the financial stringency through increased use of reallocation of internal resources. Pennsylvania State University reported the response to the revenue-expenditure gap as reductions in the expenditure base due to internal budget reallocations.

> A five-year planning and budget process was begun in 1977 to guide budgetary decisions at Penn State. These plans are based on income and expense projections for the period. Each college and administrative unit on the campus plans on the basis of budget targets that are assigned by central administration. (p. 29)

Mortimer and Tierney reported that the University of Michigan was willing to provide insight into the internal-management process regarding reallocation. Harold T. Shapiro, then the Vice-President for Academic Affairs, provided clarification regarding institutional procedures.

> In his article, "Resource Planning and Flexibility," Shapiro explores some of the meanings and uses of fiscal flexibility and some of the relationships between resource planning and resource flexibility at The University of Michigan. He reports that since 1969-70, there have been several reductions in the base operating budget, some imposed by the state in the form of shortfalls in expected state appropriations and others self-imposed to meet perceived priority objectives. These reductions varied from one-third of 1 percent to 3 percent of the total annual base operating budget. For the most part, the self-imposed contractions of the budget resulted in what he characterizes as temporary and ad hoc measures. While in the decade of the sixties there had been considerable discretionary flexibility built into the budget, this flexibility had diminished to practically zero in the seventies. (p. 30)

In regard to flexibility in reallocations, Shapiro stated that

> financial flexibility is no more than the conventional and prudent practice of maintaining sufficient financial liquidity so that if revenues fall or expenditures increase unexpectedly, monies can be found to fill the gap. That gives the organization time to adjust; it avoids crisis management and sudden disruption in operations which might cause permanent and irreparable damage, since for most institutions real growth as a source of flexibility will no longer be the case. (p. 21)

The internal-reallocation plan at the University of Michigan was called the "Priority Fund" and consisted of a continual reallocation process. The "Priority Fund" represented 1 percent of each unit's funding returned to the institution to establish a central fund. The units requested increased funding to establish new programs, equipment improvement, or program adjustment. This priority fund had also altered the approach to the budget-planning cycle. Mortimer and Tierney stated that the budget cycle had changed to reflect a planning mode versus an after-the-fact reporting of expenditures. In the 1975 Carnegie Report titled More Than Survival, the foundation recommended the establishment of an institutional self-renewal fund of from 1 to 3 percent annually. This fund would increase the flexibility of institutional response and allow for newer and expanded programs to be implemented.

Mortimer and Tierney pointed out that program review was increasing in use as a tool to reallocate resources. Lee and Bowen (1971) indicated that program review was used to establish the need for new or expanded programs, not for the reverse. The authors cited additional studies indicating that program review was becoming a more intense activity on campuses throughout the United States. In the 1978 report by Barak and Berdahl titled "State-Level Academic Program Review in Higher Education," the following trend was reported:

> In 1960 there were 16 state-level governing boards, and in 1975 there were 19 governing boards all of which had potential program review authority. In 1960 there were 8 state-level coordinating agencies, 3 with program approval authority and 4 with authority to recommend. In 1978 there were 28 coordinating agencies of which 20 had program review and 8 had authority to recommend approval. (p. 32)

As noted by the authors, the area of program review had increased in frequency of use and also depth of analysis. A decision-making process by Mortimer and McConnell was cited as a recommended institutional process that could improve institutional responsiveness.

1. The process and criteria must themselves be the subject of early consultation before alternatives become rigidified.
2. The procedures should be jointly formulated by both faculty and administrators.
3. Where possible, there must be adequate time to conduct reviews.
4. The information must be freely available to all persons concerned with the review. Those who would restrict the free flow of information should bear the responsibility for justifying the restriction.
5. Once reviews have been conducted, there should be adequate feedback concerning the results.
6. Any decisions reached should be communicated widely. (p. 35)

Staff reductions, dismissals, and retrenchment was the next area presented by Mortimer and Tierney. There was substantial evidence to support the notion that staff retrenchment was widely supported as an institutional option used to respond to financial difficulty. The authors cited a study on staff-reduction policies by Sprenger and Schultz as important evidence to indicate the implementation of staff-reduction procedures. The study included 163 institutions from 14 different states; the data illustrated that 74 percent of the private four-year institutions and 66 percent of the public four-year institutions had undergone or were currently in the process of staff reductions for the years 1970-1973. A quotation from the report enumerated the increases in staff reduction:

> The number of full-time staff who were affected by reduction increased substantially each year for the three-year period, increasing from a total of 178 in 1972-72 to 259 in 1972-73 and to 517 in 1973. That represents an increase over 291 percent in three years. (p. 22)

Following is a rank order of the reasons for staff reductions reported in the Sprenger and Schultz study:

1. Decreased enrollment
2. Increased operating costs
3. Reduced state funds
4. Decreased federal funds
5. Decreased contributions
6. Decreased foundation grants

Fifty-two of the 91 institutions reported that an enrollment decrease was the primary reason for staff reductions. Sprenger and Schultz also reported the methods of reducing staff and ranked them in order of frequency. Commonly used methods were listed as

1. Not filling vacancies--277
2. Terminating non-tenured faculty--201
3. Terminating part-time faculty--125
4. Terminating teaching assistants--118
5. Early retirement--51
6. Seniority of tenured faculty--48
7. Reassignment--35
8. Performance--34 (p. 36)

The area of program discontinuance in a time of declining resources was the last issue discussed by Mortimer and Tierney in the second section of the study. The authors stated that the discontinuance of academic programs was an "almost inevitable outcome of budget gaps." The authors also stated that there are substantial problems that must be overcome in order to effect change. The authors cited a 1978 study by Davis and Dougherty that identified six barriers to program closure:

1. Lack of data base to interpret criteria
2. Time consuming involvement of academic offices, dean, and faculty members
3. Emotionalism and resulting decreased objectivity
4. Distrust by faculty due to lack of consultative processes
5. Ambivalence over making decisions
6. Political climate--public versus private institutions will vary on this (p. 45)

Program closure was tied directly to the question of faculty termination or reassignment. Both areas were of primary concern for the academic administrations at the institutions.

The final section of this report consisted of nine summary statements based on the analysis of the reported data. Mortimer and Tierney concluded that:

1. National discussion of demographic focuses too simplistically on decline in the numbers of college age youth without concomitant attention to the different sectional and regional growth statistics and the superior competitive position of certain types of institutions.
2. Concentration on the projected decline in enrollments diverts attention from the continuing "cost-income squeeze" faced by most institutions.
3. There is little flexibility in most institutional budgets because colleges have been adjusting to the cost-income squeeze since the early 1970's.
4. There is a need to clean up some of the terminology related to what constitutes legitimate bases for reducing the size of staff or closing programs.
5. Patterns of faculty-administrative interaction will undergo severe stress when considering reductions, reallocations, and retrenchments.
6. There is no way to free administrators from the necessity of hard decisions in the area of reductions, reallocations, and retrenchments.
7. It is difficult to overestimate the need for strategies that will increase institutional flexibility.
8. Institutions must strive to develop a consistent philosophy that synthesizes strategy for the 1980's.
9. Within these environmental constraints, the institution must adopt goals with operational meaning. (p. 55)

Michigan in the 1970s

Data Base

The data base used for this section is a computerized system-wide information network. In 1974-75 the Department of Management and Budget, State of Michigan, instituted a computerized data system for the public four-year institutions. Since that initial year, numerous data items have been added to or deleted from the data base. The current data base consists of data entered via remote terminals by the institutions in adherence to consistent definitions and instructions issued by the State of Michigan. The system was designed to aid in the compilation of institutional and systemwide data that would enable interested parties to perform institutional analysis.

Data Review

This section consists of three main aspects of Michigan higher education. The aspects to be reviewed are enrollment trends, expenditure trends, and revenue trends.

Michigan higher education has followed the same general enrollment pattern as that found throughout the United States. Table 2 contains actual enrollment data for the years 1970-71 to 1978-79. A review of the data illustrates the fluctuation in the actual Michigan higher education enrollment pattern. The first half of the decade can be characterized as a growth period with fiscal-year equated students increasing 7.3 percent between the years 1970-71 and 1975-76. Since 1975-76 there has been a substantial decrease in fiscal-year equated students, a decrease of 6 percent.

The Michigan elementary and secondary school systems have already experienced the decline in student numbers. This trend is anticipated to affect the institutions of higher education in the decade of the 1980s. Many elementary schools have been closed, with teaching personnel terminated. The enrollment decline due directly to birth has not yet affected Michigan higher education, yet the

Table 2.--Fiscal-year equated students by institution and fiscal year: 1970-71 through 1978-79.

Inst.	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79
CMU	14,676	14,996	14,736	14,651	14,962	15,827	15,712	15,883	15,771
EMU	18,084	18,396	17,027	16,151	16,214	16,131	15,136	14,506	13,712
FSC	9,551	9,645	9,537	9,377	10,161	10,230	10,347	10,377	10,721
GVSC	3,241	4,041	4,874	5,410	6,071	6,480	6,146	5,849	5,445
LSSC	1,403	1,449	1,640	1,672	1,788	1,985	2,116	1,997	2,023
MSU	41,253	41,124	40,349	40,623	42,380	42,839	41,096	40,730	40,201
MTU	5,313	5,426	5,491	5,373	5,943	6,416	6,804	7,297	7,638
NMU	7,723	7,761	7,414	7,498	7,624	7,975	8,055	8,043	7,804
OU	6,643	6,981	7,403	8,241	8,537	8,612	8,493	8,825	8,873
SVSC	1,503	1,658	1,695	1,717	2,027	2,409	2,396	2,420	2,531
UMAA	36,093	35,516	36,221	36,744	37,471	37,469	36,658	35,613	35,197
UMD	835	1,400	1,837	2,506	3,301	3,858	4,180	4,242	4,472
UMF	1,573	1,820	2,077	2,447	2,554	2,739	2,730	2,716	2,742
WSU	28,666	28,942	26,715	26,871	28,397	30,819	27,780	26,215	24,381
WMU	22,834	21,867	20,806	20,267	20,181	20,127	19,635	19,182	18,907
Total	199,391	201,022	197,822	199,548	207,611	213,916	207,284	203,895	201,418

Source: Bureau of the Budget, Operating Budget Requests--Appendix A, Final for Respective Year.

system has declined over 12,000 fiscal-year equated students since the peak year of 1975-76. It should be noted that 1975-76 may, in fact, be an artificially high year due to the state's economy. In 1974, oil embargo and auto recession, which started in fiscal year 1974-75 and continued into 1975-76, directly affected enrollment at the institutions. In times of economic turmoil and increasing unemployment, there historically has been a one-year enrollment surge. The end of the recession and the increase in the number of employment opportunities usually signals the respective decline in student enrollment. This scenario held true for the Michigan experience in the years 1974 through 1976.

Another important factor to consider is that enrollment changes have not occurred equally across academic subprograms. Table 3 consists of student credit hour production by academic subprogram for the years 1974-75 to 1978-79. Table 4 is the calculated rank change by academic subprogram between the years 1974-75 and 1978-79. Table 4 supports the hypothesis that there has been a significant shift in student enrollment from the traditionally classified liberal arts curriculum toward the hard sciences and specific technical-career-oriented curriculums. The academic disciplines of Business and Commerce Technology and Computer and Information Sciences have incurred the greatest increases--171 percent and 90 percent, respectively. The disciplines of Education and Library Science have received the largest decreases in student enrollment--23 percent and 30 percent, respectively.

Table 3.--Total Michigan higher education student credit hours.

Program	1974-75 Total Student	1975-76 Total Student	1976-77 Total Student	1977-78 Total Student	1978-79 Total Student
Agric and Nat Resources	83,524	91,770	89,416	85,829	81,468
Architect and Envir Des	22,662	23,475	21,962	23,922	22,531
Area Studies	7,368	7,922	7,744	8,094	8,302
Biological Sciences	297,077	300,387	270,211	264,058	241,054
Business and Management	464,552	509,801	547,960	596,377	627,880
Communications	64,638	65,787	67,110	63,120	72,297
Computer and Info Sci	35,657	37,995	39,410	46,197	67,807
Education	813,568	832,087	768,293	705,111	625,892
Engineering	197,442	210,408	226,557	241,038	259,685
Fine and Applied Arts	280,265	285,634	264,386	262,906	256,492
Foreign Languages	152,633	154,698	143,247	142,621	140,058
Home Economics	74,627	78,541	78,115	74,987	75,513
Law	58,061	58,955	56,753	57,574	57,211
Letters	652,812	667,173	635,281	625,087	612,189
Library Science	21,403	19,670	16,733	15,305	14,811
Mathematics	367,731	389,025	390,288	402,699	397,531
Military Science	3,881	4,035	4,315	4,449	4,141
Physical Sciences	385,386	403,043	389,017	376,566	373,828
Psychology	302,918	307,754	292,052	281,777	286,802
Public Affairs and Servs	99,815	104,085	100,712	106,916	121,005
Social Sciences	966,584	994,892	924,466	882,829	130,296
Interdisciplinary Stud	202,864	178,883	194,757	170,995	157,382
Business & Commerce Tech	10,196	10,829	11,451	10,031	27,446
Data Processing Tech	0	0	0	141	201
Health & Paramed Tech	21,850	24,398	24,561	22,134	22,063
Mech & Engineering Tech	70,124	87,664	93,760	95,686	95,530
Natural Sciences Tech	2,736	4,716	6,468	7,669	4,907
Public Service Technology	0	0	0	0	3,232
Osteopathic Medicine	0	0	23,101	23,971	25,810
Medicine	225,372	229,880	215,612	214,949	216,961
Dentistry	32,006	32,658	33,509	33,138	31,445
Public Health	24,207	25,344	23,172	19,919	20,137
Pharmacy	35,956	36,155	31,015	30,120	30,613
Nursing	52,150	49,000	51,939	59,026	62,617
Veterinary Medicine	26,301	25,245	24,056	23,209	24,997
Other Health Professions	35,651	44,006	47,074	46,285	50,673
Optometry	0	420	1,196	2,091	3,243
Program total	6,092,017	6,296,335	6,115,699	6,026,826	5,954,050

Table 4.--Total Michigan student credit hour rank change.

Program	1974-75 to 1978-79
Business & Commerce Tech	170.87
Computer and Info Sci	90.42
Natural Sciences Tech	82.36
Other Health Professions	42.25
Mech & Engineering Tech	36.28
Business and Management	35.17
Engineering	31.54
Public Affairs and Servs	21.25
Nursing	20.11
Area Studies	12.85
Communications	11.87
Mathematics	8.11
Military Science	6.88
Home Economics	1.19
Health & Paramed Tech	0.98
Architect and Envir Des	-0.58
Law	-1.47
Dentistry	-1.76
Agric and Nat Resources	-2.46
Physical Sciences	-3.00
Medicine	-3.73
Veterinary Medicine	-4.98
Psychology	-5.32
Letters	-6.22
Foreign Languages	-8.24
Fine and Applied Arts	-8.49
Social Sciences	-14.10
Pharmacy	-14.90
Public Health	-16.88
Biological Sciences	-18.86
Interdisciplinary Stud	-22.43
Education	-23.07
Library Science	-30.94

The unequal increases and decreases in student enrollment within academic subprograms increased the inflexibility of institutional budgets attempting to respond to changing student interests. It was difficult to move tenured faculty from such diverse academic programs even with retraining programs. A review of Table 5 presents full-time faculty numbers for the total Michigan four-year public system. The faculty changes, even though only three years of computerized data exist, mirror the changes recorded in the credit hour production by academic subprograms.

A key factor that must be considered concerning the enrollment situation is the changing student characteristics. The decrease in fiscal year equated students at the four-year institutions occurred at the same time that the headcount enrollment increased at the institutions. A parallel does exist between fiscal year equated students and headcount figures in that both increased until fiscal year 1975-76. However, unlike the fiscal year students, headcount figures have not continued to decline. Table 6 represents the Michigan public four-year institutions headcount trend data. Table 7 represents the calculated fiscal year equated students per headcount. A review of data in Table 7 is supported by the explanation that the data reflect decreasing full-time student attendance and increased part-time student attendance. Several reasons are reported for this situation. First, students were electing to respond to increased costs by taking fewer courses each term, thus decreasing cost per term and increasing length of time in college. Second, the students were older, with employment and other outside responsibilities.

This change increased the institutional costs for supportive services due to increased numbers of students generating fewer credits per student. This trend was expected to continue, causing greater effect on institutional programs and budgets.

Table 5.--Michigan higher education full-time faculty.

Program	1977-78 FT Faculty	1978-79 FT Faculty	1979-80 FT Faculty	Change 1977-78 to 1979-80
Agric and Nat Resources	282	289	278	-0.014
Architect and Envir Des	24	29	30	0.250
Area Studies	0	0	0	0.000
Biological Sciences	428	440	439	0.027
Business and Management	557	616	657	0.180
Communications	76	87	63	0.393
Computer and Info Sci	45	47	63	0.393
Education	1,101	1,088	994	-0.097
Engineering	547	568	570	0.041
Fine and Applied Arts	594	597	604	0.016
Foreign Languages	308	307	303	-0.015
Home Economics	119	140	131	0.103
Law	90	87	89	-0.017
Letters	916	934	899	-0.018
Library Science	34	36	36	0.059
Mathematics	436	476	466	0.069
Military Science	0	0	0	0.000
Physical Sciences	599	583	567	-0.053
Psychology	290	287	293	0.009
Public Affairs and Servs	170	189	200	0.176
Social Sciences	1,075	1,082	1,039	-0.033
Interdisciplinary Stud	199	182	170	-0.145
Business & Commerce Tech	20	22	37	0.850
Data Processing Tech	0	0	0	0.000
Health & Paramed Tech	54	49	54	-0.007
Mech & Engineering Tech	190	196	203	0.068
Natural Sciences Tech	16	24	25	0.580
Public Service Technology	0	0	3	0.000
Osteopathic Medicine	0	0	0	0.000
Medicine	0	0	0	0.000
Dentistry	0	0	0	0.000
Public Health	99	104	104	0.051
Pharmacy	64	61	62	-0.031
Nursing	297	300	298	0.004
Veterinary Medicine	30	49	39	0.300
Other Health Professions	87	98	106	0.220
Optometry	9	13	17	0.889
Instruction total	9,053	9,292	9,178	0.014

Table 6.--Michigan higher education fall headcount.

College	1974-75 Fall Headcount	1975-76 Fall Headcount	1976-77 Fall Headcount	1977-78 Fall Headcount	1978-79 Fall Headcount
Central Michigan Univ.	16,354	17,745	17,690	17,886	17,701
Eastern Michigan Univ.	20,424	20,373	19,265	19,333	18,751
Ferris State College	9,264	9,460	9,934	9,965	10,208
Grand Valley State Coll.	6,677	7,340	7,540	7,469	7,065
Lake Superior State Coll.	2,064	2,371	2,457	2,261	2,401
Michigan State Univ.	46,831	48,670	46,921	47,034	46,338
Michigan Tech. Univ.	5,366	5,958	6,387	6,807	7,130
Northern Michigan Univ.	8,848	9,548	9,287	9,368	9,400
Oakland University	10,216	10,526	10,457	11,051	11,220
Saginaw Valley State Coll.	2,638	3,232	3,322	3,529	3,706
University of Michigan	36,895	37,273	36,648	36,510	36,359
U of M--Dearborn Campus	4,298	4,858	5,275	5,480	5,957
U of M--Flint Campus	3,179	3,474	3,685	3,801	3,921
Wayne State University	34,706	38,073	34,818	34,389	33,524
Western Michigan Univ.	22,846	23,279	22,973	22,497	22,272
Colleges total	230,606	242,180	236,659	237,380	235,953

Table 7.--Fiscal year equated student per headcount.

College	1974-75	1975-76	1976-77	1977-78	1978-79
Central Michigan Univ.	0.91	0.89	0.89	0.89	0.89
Eastern Michigan Univ.	0.79	0.79	0.79	0.75	0.73
Ferris State College	1.10	1.08	1.04	1.04	1.05
Grand Valley State Coll.	0.91	0.88	0.82	0.78	0.77
Lake Superior State Coll.	0.87	0.84	0.86	0.89	0.84
Michigan State Univ.	0.90	0.88	0.88	0.87	0.87
Michigan Tech. Univ.	1.11	1.08	1.07	1.07	1.07
Northern Michigan Univ.	0.86	0.84	0.87	0.86	0.83
Oakland University	0.84	0.82	0.81	0.80	0.79
Saginaw Valley State Coll.	0.77	0.75	0.72	0.69	0.68
University of Michigan	1.02	1.01	1.00	0.98	0.97
U of M--Dearborn Campus	0.77	0.79	0.79	0.77	0.75
U of M--Flint Campus	0.80	0.79	0.74	0.71	0.70
Wayne State University	0.82	0.81	0.80	0.76	0.76
Western Michigan Univ.	0.88	0.86	0.85	0.85	0.85
Colleges total	0.90	0.88	0.88	0.86	0.85

Expenditures were the second main area of Michigan data to be reviewed. Expenditures of Michigan state government for all purposes increased by 191 percent from 1970 to 1979, and by 51 percent after adjusting for population and price changes. The increase may have resulted from new activities in quality of services or inefficiency, or a combination of these factors. It was difficult to measure changes in quality and efficiency in state operation. It was also difficult to distinguish quantitatively between new and expanded activities. If it was assumed that quality and efficiency did not materially change from 1970 to 1979, the increase in expenditure could be attributed to new and expanded activities, both of which were governmental responses to problems arising from changes in technology and societal values.

There were nine major categories of state government activities. Between 1970 and 1979, four experienced expenditure increases in excess of population and price increases (General Government, Health and Welfare, Safety and Correction, and Regulatory); four experienced expenditure increases less than population and price increases (Education, Conservation and Recreation, Transportation, and Grants); and one area experienced an increase equal to population and price increases (Mental Health). The major category exceeding population and price increases was Health and Welfare--66 percent--and the major area category below population and price increases was Education--34 percent.

While there may be numerous reasons for this phenomenon, several suggested reasons include the rapid expansion of Medicaid programs, greater-than-average price increases in medical care, greater-than-average population increases among the aged, and less-than-average population increases among the younger population.

Table 8 contains data on state expenditures for higher education as a percentage of the total state general fund/general purpose expenditures. From 1968-69 to 1979-80, the percentage of state expenditures for the public four-year institutions dropped from 17.8 percent to 13.7 percent. This 4.1 percent drop had a significant effect on the institutions and the programs offered at the institutions.

Table 9 presents expenditure data by major program at the institutions. The beginning year for these data is 1975-76 due to the inconsistent reporting of expenditure data before that time. The major program area, research, has received the highest increase in expenditures--60 percent; instruction has received only a 42 percent increase. The area of plant operation and maintenance has experienced a 54 percent increase, due primarily to the inflated energy costs. The institutions are currently using fewer units of fuel than in 1975-76, but the inflated costs have more than compensated for the decrease in units used.

Table 10 presents data relating expenditures to fiscal year equated students in both inflated and real dollars. The significant facts on this table are that in constant dollars (deflated by price index) both gross expenditures and state appropriations per fiscal year equated student declined after 1973-74 and did not regain the 1973-74 level until 1978-79. This economic valley was a reflection of the state's economic recession in 1974-75 and 1975-76, coupled

Table 8.--State expenditures for higher education as percentage of total state general fund/general purpose expenditures excluding capital outlay.

Year	Total GF-GP Expends. (Millions)	Total Higher Education		State 4-Year Institutions		Community Colleges	
		Expends. (Millions)	Percent	Expends. (Millions)	Percent	Expends. (Millions)	Percent
1968-69	$1,269.3	263.2	20.7	226.4	17.8	26.4	2.1
1969-70	1,490.4	306.4	20.6	253.1	17.0	41.0	2.8
1970-71	1,739.8	336.4	19.3	280.6	16.1	43.4	2.5
1971-72	1,971.1	370.8	18.8	307.4	15.6	49.9	2.5
1972-73	2,283.7	425.4	18.6	353.0	15.5	58.6	2.6
1973-74	2,497.7	475.0	19.0	391.5	15.7	66.6	2.7
1974-75	2,729.2	522.3	19.1	422.6	15.5	78.2	2.9
1975-76	3,546.6	683.6	19.3	544.3	15.3	111.8	3.2
1976-77	3,263.2	591.2	18.1	464.5	14.2	100.7	3.1
1977-78	3,747.0	657.5	17.5	516.9	13.8	110.1	2.9
1978-79	4,237.1	731.8	17.3	576.6	13.6	121.9	2.9
1979-80	4,600.4	808.4	17.6	630.0	13.7	134.6	2.9

Table 9.--Michigan higher education total general fund expenditures by reporting program.

Total	1975-76 Total Gen Fund Expends	1976-77 Total Gen Fund Expends	1977-78 Total Gen Fund Expends	1978-79 Total Gen Fund Expends	1979-80 Total Gen Fund Expends	% Inc 75-76 to 79-80
Instruction total	$314,926,422	$336,113,312	$369,078,375	$407,799,142	$448,542,974	0.424
Research total	22,478,101	21,521,719	26,432,653	33,275,733	35,843,853	0.595
Public service total	21,855,914	23,492,911	23,995,840	25,399,180	30,967,735	0.417
Academic support	77,110,547	83,469,182	88,244,515	97,799,738	107,372,323	0.392
Student services total	46,906,082	46,429,810	50,060,273	47,816,570	52,274,857	0.114
Institution supp total	64,476,469	68,467,980	75,543,114	85,097,065	94,480,696	0.465
Plant oper & main total	75,960,737	85,862,883	94,936,146	108,300,277	117,035,931	0.541
Financial aid total	28,258,196	26,342,159	28,462,821	29,702,635	33,464,082	0.184
Auxil enterprises total	14,685,106	16,044,176	17,412,152	11,532,751	11,785,342	-0.197
Mandatory transfer total	9,946,042	11,227,766	10,305,585	9,394,134	7,957,912	-0.200
Total	$676,603,616	$718,971,898	$784,471,474	$856,117,225	$939,725,705	0.389

Table 10.--Expenditures for state colleges and universities, 1968-69 to 1980-81.

Year	Gross Expenditures (000)	FYES	Gross Expend. Per FYES	Higher Education Price Index	Gross Exp. Per FYES in Constant $'s	State Approp. (000)	State Approp. Per FYES	State Approp. per FYES in Constant $'s
1968-69	$358,929	180,929	$1,981	113.2	$1,750	$226,445	$1,252	$1,106
1969-70	403,352	191,365	2,108	121.0	1,742	253,056	1,322	1,093
1970-71	445,019	199,392	2,232	128.6	1,736	280,605	1,407	1,094
1971-72	486,515	201,022	2,402	135.8	1,768	307,408	1,529	1,125
1972-73	531,011	197,841	2,684	143.0	1,876	352,965	1,784	1,248
1973-74	591,229	199,564	2,963	153.1	1,935	391,543	1,962	1,281
1974-75	644,697	207,504	3,107	166.2	1,869	423,230	2,039	1,226
1975-76	675,325	213,913	3,157	177.2	1,781	435,421	2,035	1,148
1976-77	718,971	207,284	3,469	188.7	1,839	464,497	2,241	1,188
1977-78	784,471	203,895	3,847	201.3	1,911	516,705	2,534	1,259
1978-79	856,117	201,420	4,250	217.1	1,958	576,609	2,863	1,319

Note: State appropriations based on July-June fiscal year from 1968-69 to 1974-75 and on October-September fiscal year thereafter.

with the rapidly increasing inflation rates. In both 1974-75 and 1975-76, there was an Executive Order that further reduced appropriations to the institutions. It is important to note that during this time the fiscal year equated students were also declining.

Revenue is the third major area regarding Michigan higher education that is reviewed in this section. Revenues of Michigan state government from all sources increased by 201 percent from 1970 to 1979, and by 51 percent after adjusting for population and price changes. The difference between the increase in expenditures and revenues reflected a deficit in current operations in 1970 and a surplus in 1979.

The public four-year institutions of higher education received approximately 66 percent of the average total institutional revenue from state appropriations. Table 11 presents the state appropriations for the institutions. The range of increases was indicative of the enrollment changes, academic program mix, new buildings, and mission of the institutions.

Table 12 presents data on the tuition and fee portion of institutional revenue. It should be noted that the enrollment increases accounted for part of the variance that existed between institutions. For those institutions that have experienced significant enrollment growth (Ferris State College, Michigan Technological University, Saginaw Valley State College, and University of Michigan--Dearborn) the tuition increases were due primarily to an enrollment increase, not necessarily a tuition-rate increase. For those institutions that have experienced a dramatic loss in enrollment, the

Table 11.--Michigan higher education state appropriations.

System	1974-75 State Approp Inst FY	1975-76 State Approp Inst FY	1976-77 State Approp Inst FY	1977-78 State Approp Inst FY	1978-79 State Approp Inst FY
Central Michigan Univ.	$ 20,113,405	$ 20,608,828	$ 21,162,024	$ 23,386,451	$ 26,290,950
Eastern Michigan Univ.	23,284,415	24,302,154	24,889,250	27,542,225	30,967,203
Ferris State College	13,755,427	14,469,324	14,887,680	17,032,650	19,416,350
Grand Valley State Coll.	8,483,313	9,051,909	9,435,075	10,564,750	11,793,650
Lake Superior State Coll.	3,139,316	3,507,921	3,918,628	4,458,872	5,039,175
Michigan State Univ.	84,381,188	87,405,893	89,752,924	99,382,901	109,614,225
Agric. Experiment Sta.	6,811,571	6,975,047	7,554,875	8,956,650	10,738,050
Coop. Extension Service	6,305,084	6,497,945	7,034,600	7,983,900	8,972,000
Michigan Tech. Univ.	12,100,107	12,886,629	13,336,870	15,215,025	17,295,300
Northern Michigan Univ.	12,579,944	13,693,907	14,340,650	16,342,525	18,532,325
Oakland University	12,515,903	13,243,095	13,802,802	15,301,400	17,498,475
Saginaw Valley State Coll.	3,012,130	3,921,045	4,386,750	5,125,975	5,864,025
University of Michigan	95,680,635	98,315,585	99,934,197	109,937,490	130,759,871
U of M--Dearborn Campus	5,858,288	6,303,870	6,741,850	7,519,975	8,343,200
U of M--Flint Campus	5,064,082	5,229,021	5,819,550	6,755,450	7,646,050
Wayne State University	66,848,995	69,958,366	71,576,444	79,727,900	90,809,500
Western Michigan Univ.	32,401,575	33,322,000	33,893,000	37,318,000	41,684,000
Institute of Gerontology	394,887	547,697	601,100	729,175	805,900
U.P. Health Project	122,140	128,016	205,001	222,224	237,375
MTU--Research Units	1,066,495	1,088,100	1,138,180	1,228,075	1,317,225
U of M--Mental Hlth Unit	8,243,465	8,308,327	8,451,903	8,937,460	0
System total	$422,162,365	$439,764,679	$452,863,353	$503,669,073	$563,624,849

Table 12.--Michigan higher education tuition and fee revenue.

College	1974-75 Tuition and Fees	1975-76 Tuition and Fees	1976-77 Tuition and Fees	1977-78 Tuition and Fees	1978-79 Tuition and Fees
Central Michigan Univ.	$ 9,539,000	$ 10,532,688	$ 11,976,489	$ 13,123,671	$ 13,105,080
Eastern Michigan Univ.	10,454,000	11,575,673	11,774,783	12,519,786	12,485,204
Ferris State College	4,120,000	5,874,252	6,950,687	7,544,075	8,655,644
Grand Valley State Coll.	3,983,000	4,740,657	4,852,758	5,073,503	4,814,072
Lake Superior State Coll.	1,019,064	1,196,817	1,357,512	1,410,752	1,639,798
Michigan State Univ.	35,077,000	41,542,041	44,362,332	48,408,887	50,792,561
Michigan Tech. Univ.	4,019,000	4,746,957	5,435,523	6,259,287	7,052,300
Northern Michigan Univ.	4,721,000	5,321,969	6,004,802	6,522,282	6,225,119
Oakland University	5,858,000	6,269,218	7,079,121	7,174,939	7,473,001
Saginaw Valley State Col.	1,112,000	1,486,242	1,703,628	1,813,029	2,040,368
University of Michigan	48,033,000	53,055,079	57,427,260	60,595,412	66,791,941
U of M--Dearborn Campus	2,364,000	2,768,693	3,482,154	4,001,881	4,653,907
U of M--Flint Campus	1,707,000	1,912,532	2,092,195	2,209,150	2,377,742
Wayne State University	26,685,000	31,160,220	30,058,771	29,919,280	32,297,015
Western Michigan Univ.	14,183,000	15,430,000	17,002,000	16,721,000	17,236,000
Colleges total	$173,874,064	$197,613,038	$211,560,015	$223,296,934	$237,639,752

tuition and fee percentage change was significantly below the system average (Eastern Michigan University, Grand Valley State College, Wayne State University, and Western Michigan University). The tuition and fee revenue has kept pace with state appropriations on a system-wide basis.

The revenue area of investment income is illustrated in Table 13 and reflects both a revenue increase and an increased institutional dependence on investment income.

Table 14 presents data related to federal-government research grants, and the overhead contracts arranged by the institutions. The system average increased at a rate greater than either state appropriations or tuition and fee revenue. The 46 percent increase in this area for the period 1974-75 to 1978-79 reflected the institutions' successful attempt to garner increased outside funds.

Summary

The fiscal stringency that started in the middle of the decade of the 1970s was real in Michigan higher education. The problems presented by this financial instability were reported in the literature as ranging from deferred maintenance of plant to discontinuance of academic programs and staff. One of the areas of significant concern explored in several studies was the institutional responses to fiscal stringency. This study was limted to examining the instructional-program responses at the institutions.

Michigan higher education has experienced parallel problems to those reported in the national literature. As the section

Table 13.--Michigan higher education investment-income revenue.

College	1974-75 Investment Income	1975-76 Investment Income	1976-77 Investment Income	1977-78 Investment Income	1978-79 Investment Income
Central Michigan Univ.	$ 451,000	$ 378,588	$ 311,967	$ 459,426	$ 761,466
Eastern Michigan Univ.	400,000	293,513	189,769	255,522	403,622
Ferris State College	187,000	109,297	126,825	183,435	312,667
Grand Valley State Coll.	102,000	76,755	55,969	98,142	140,382
Lake Superior State Coll.	41,465	39,380	38,121	30,000	33,000
Michigan State Univ.	1,889,000	1,233,020	1,078,328	1,884,290	2,713,470
Michigan Tech. Univ.	203,000	199,678	148,584	145,155	315,580
Northern Michigan Univ.	277,000	218,119	236,313	220,630	336,181
Oakland University	105,000	72,592	57,920	130,726	178,305
Saginaw Valley State Coll.	10,000	15,695	11,212	12,879	51,128
University of Michigan	1,046,000	811,361	526,149	688,320	1,152,643
U of M--Dearborn Campus	36,000	24,016	26,597	57,655	69,113
U of M--Flint Campus	45,000	32,021	37,867	48,046	64,322
Wayne State University	291,000	178,786	87,004	152,000	528,300
Western Michigan Univ.	520,000	324,000	277,000	367,000	717,000
Colleges total	$5,603,465	$4,006,821	$3,209,625	$4,733,226	$7,777,179

Table 14.--Michigan higher education indirect-cost-recovery revenue.

College	1974-75 Indirect Cost Recovery	1975-76 Indirect Cost Recovery	1976-77 Indirect Cost Recovery	1977-78 Indirect Cost Recovery	1978-79 Indirect Cost Recovery
Central Michigan Univ.	$ 444,000	$ 53,656	$ 53,837	$ 116,987	$ 187,187
Eastern Michigan Univ.	150,000	217,374	231,242	211,738	292,130
Ferris State College	49,000	72,684	132,540	62,390	36,162
Grand Valley State Coll.	123,000	173,354	127,894	144,099	134,226
Lake Superior State Coll.	10,870	13,598	15,313	11,928	13,598
Michigan State Univ.	4,503,000	5,263,917	5,884,962	6,454,968	6,944,978
Michigan Tech. Univ.	378,000	401,980	480,721	686,805	744,733
Northern Michigan Univ.	32,000	62,811	42,804	66,655	37,882
Oakland University	262,000	286,567	349,245	434,382	517,180
Saginaw Valley State Coll.	22,000	20,040	29,148	42,941	45,877
University of Michigan	10,836,000	11,836,000	12,500,000	13,750,000	14,409,206
U of M--Dearborn Campus	0	0	0	0	0
U of M--Flint Campus	0	0	0	0	0
Wayne State University	1,581,000	1,818,208	2,239,467	2,900,179	3,460,200
Western Michigan Univ.	221,000	227,000	230,000	268,000	333,000
Colleges total	$18,611,870	$20,447,189	$22,317,173	$25,151,072	$27,156,359

containing Michigan data illustrated, there has been a decline in fiscal year equated students. When the decline is coupled with high inflation rates and slowing state appropriations, the financial problems become more dramatic.

The review of the literature did not produce any studies documenting or analyzing the Michigan institutional response to the condition of fiscal stringency. However, the literature review did serve as a foundation for the development of research propositions.

The review of the literature was presented in a chronological format, reporting individual studies related to the topic, as recommended by a previous adviser. However, this researcher concluded that the alternate format, in which the subject matter is summarized and organized by topic, is easier for the reader to follow and would use that approach in future research investigation.

CHAPTER III

METHODOLOGY

This chapter describes the methodology used in the research project. This chapter contains the design of the study, a description of case-study methodology, the setting of the study, the research propositions, the selection of the sample, the development of the instrument, collection of the data, and data presentation.

Design of the Study

This study was designed to obtain information regarding institutional strategies that were implemented in the instructional program in response to the condition of fiscal stringency that occurred in Michigan between 1974-75 and 1978-79.

The study was based on the use of case-study methodology. Case-study methodology is characterized by the systematic review of the subject matter being studied. In the field of education, case-study methodology is used to explore areas that previously could not be quantified and therefore researched.

> Case studies are distinguished by the intensive, detailed investigation of a single unit, an individual, a school system, a community, etc. The depth of analysis associated with such studies yields important and unique information. (Dyer, p. 189)

The case-study approach was not restricted and should not be restricted to one mode of data collection. In fact, a variety of data-collection techniques was required to adequately investigate all aspects of the subject. In this study the data collection included several modes: data collection from state-reported institutional data, public records, public acts, board minutes, institutional annual statements, faculty contracts, and institutional planning documents. The data collection also included campus visits with direct interviews of the selected administrative personnel.

This study used semi-structured interviews as a data-collection mode instead of mailed questionnaires. The advantages to the interview mode included: (1) a higher completion rate than mail questionnaires; (2) the interviewer could increase the respondents' motivation to give complete and more accurate answers; (3) interviews permitted greater flexibility--the respondent could ask for questions to be clarified, and the interviewer could probe for more detail when the response was ambiguous or incomplete; (4) the interviewer controlled the sequence in which questions were posed; (5) complex topics that were difficult to express in writing could be examined; (6) the interviewer could ensure that each question was answered; and (7) telephone callbacks for clarification of information from interviews were simple and economical (Dyer, p. 158).

Semi-structured interviews were used as a data-collection technique during this study. The interviews were conducted with three representatives from each institution in the study. The three interviewees at each institution were the President, Vice-President for Academic Affairs, and the Vice-President for Business Affairs. Additional institutional administrative personnel were contacted to provide further clarification on specific questions. At each institution the Budget Director and the Director of Institutional Studies were questioned to aid in data clarification and collection for the study. During this study the respondents were not identified due to the sensitive nature of the study. The respondents to the pilot study advised that individual responses should not be used. In the initial contact with each interviewee, the researcher made a commitment to use institutional responses versus individually identified responses. The 11 propositions that were established during the literature review provided the framework for the interviews; the propositions were further examined by the questions.

Setting of the Study

This study included the Michigan public four-year institutions as the population from which a sample was selected. The sample included three institutions selected from the diverse 15 public four-year institutions. The depth and breadth of academic programs, student enrollment, institutional age, geographic location, physical-plant size, faculty size, and institutional instructional budget all were factors affecting the selection of a sample.

Research Propositions

The set of 11 propositions was established from a review of the literature and served as the central focus for this study. These propositions were not research hypotheses to be tested, but instead were central issues that reoccurred throughout the literature or topics raised in the pilot study. The interview questionnaire was designed to obtain information directly related to each proposition.

The first proposition was established during the initial stages of the literature review. National literature and studies contained statements that the effects of fiscal stringency had begun to appear by the middle of the 1970s (Auindry & Masten, Bowen & Douglas, Cheit, Jenny & Wynn).

Proposition 1: The institutions will report that fiscal stringency started in the middle of the 1970s.

The second and third propositions as subject areas occurred with increasing frequency in national literature throughout the 1970s. There were several national studies completed regarding institutional financial condition, but no specific Michigan studies on institutional financial condition, reduction of costs, or revenue-augmentation strategies.

Proposition 2: The institutions will report that cost-saving strategies were implemented in the instructional program in response to fiscal stringency.

Proposition 3: The institutions will report that revenue-augmentation strategies were implemented in response to fiscal stringency.

The area of personnel reduction as a response to fiscal stringency was discussed prominently in the literature. Staff and faculty reductions were reported as one response to fiscal stringency used by the institutions (Bowen & Glenny, 1975; Cheit, 1971; Furniss, 1974; Jellema, 1973; Mortimer & Tierney, 1979; Sprenger & Schultz, 1974; Wynn, 1971).

<u>Proposition 4</u>: The institutions will report that reduction of personnel was used in response to fiscal stringency.

The fifth proposition was a corollary to the fourth proposition and concerned the area of academic-program discontinuance. Instructional-program discontinuance had been a main concern for higher education institutions. The results of the literature study demonstrated the prevalence of dialogue and the increasing activity regarding academic-program discontinuance (Cheit, 1971; Jellema, 1973; Mortimer & Tierney, 1979).

<u>Proposition 5</u>: The institutions will report that the discontinuance of academic programs was used as one response to fiscal stringency.

The sixth proposition covered the area of faculty involvement in the process of institutional response to fiscal stringency. According to several authors, there was a greater advantage to having full involvement of faculty in the process than otherwise (Bowen & Glenny, 1975; Furniss, 1974).

<u>Proposition 6</u>: The institutions will report that faculty members were involved in developing institutional responses to fiscal stringency.

The seventh area was not covered extensively in the literature or the national studies but was raised in the pilot study as an important topic.

Proposition 7: The institutions will report that there was some benefit from the period of fiscal stringency.

The problems that prevented the institutions from responding to fiscal stringency was the eighth area that was addressed. Several authors discussed this topic as the institutional inability to respond and the resultant effect on the institutions' flexibility (Bowen & Glenny, 1975; Folger, 1977; Mortimer & Tierney, 1979).

Proposition 8: The institutions will not vary in the reporting of major problems encountered in the attempts to respond to fiscal stringency.

Several authors reported that the institutions were responding to fiscal stringency and identified programs and responses that were being implemented. However, no studies of Michigan higher education enumerated responses that were effective in responding to the fiscal stringency.

Proposition 9: The institutions will not vary in the reporting of successful responses to fiscal stringency.

The area of institutional planning is of primary concern to this research project. The institutional planning long and short range, for both enrollment and budget control, is a necessary ingredient in a succession-encompass operation (Adams, 1975; Furniss, 1974; Jellema, 1978; Meeth, 1974; Mortimer & Tierney, 1979; Nisbet, 1973).

Proposition 10: The institutions will report that both operational and strategic planning occurred at the institution during the 1970s.

The last proposition concerned a look ahead into the future of Michigan higher education. Mayhew, in his book, Surviving the Eighties, addressed the concern, stating that the 1980s will be a difficult decade for American higher education (Cheit, 1971; Mortimer & Tierney, 1979; Mayhew, 1979).

Proposition 11: The institutions will not vary on the projection of the future of higher education as it relates to fiscal stringency.

Sample Selection

The common empirical criteria used to establish the presence of fiscal stringency in the Michigan public four-year institutions was the decline in constant dollars expended per full-time student. The decrease in constant-dollar expenditure per student directly affected the flexibility of the institutional budget and caused institutions to respond by implementing the curtailment or elimination of planned or existing programs. Table 15, column four, illustrates the decline in constant dollars. Note the specific years marked with an asterisk. There were two Executive Orders in the period under examination, which caused constant-dollar expenditures per full-time student to decline from the previous year's figure. The aggregate average for the system indicated that the fiscal years 1975 to 1978 were years with reduced constant-dollar expenditures per fiscal year equated student as compared to the 1974 level.

Table 15.--Expenditures for state colleges and universities: 1974-75 to 1978-79.

Year	Fiscal Year Equated Students	Higher Education Price Index	Gross Expenditures per FYES in Constant Dollars
1974	199,564	153.1	$1,935
1975	207,504	166.2	1,869*
1976	213,913	177.2	1,781*
1977	207,284	188.7	1,839*
1978	203,895	201.3	1,911*
1979	201,420	217.1	1,958

*Note decreases in constant dollars from 1974.

The criteria used in selecting the sample of institutions included in this case study were: geographical location of the institution, student enrollment (including recent enrollment trends), programmatic diversity of the institution, fiscal continuity, and the role and mission of the institution. The 15 Michigan public four-year colleges and universities are quite diverse in all of the criteria. Because these differences might influence the study, an effort was made to select institutions that would provide for adequate diversity and include a small, medium, and large institution. "It is important to select a sample of adequate size in order to produce research data that reliably approximates the data that would be obtained if the entire population were studied" (Borg & Gall, 1974).

The sample selected included three of the public four-year institutions. The institutions were selected to obtain a variation in enrollment size, faculty size, programmatic offerings, age, and differences in role and mission.

The first institution selected to be studied was Grand Valley State Colleges. This institution was established by the Michigan Legislature in 1960 and grew to a peak of 6,480 full-time students in 1976. Since that time this primarily liberal arts commuter institution has declined over 1,000 full-time students.

The second institution selected was Oakland University. This institution, near Rochester, became an independent state university in 1970 after operating as a branch of Michigan State University for 11 years. Oakland started as a baccalaureate-degree-granting institution and now offers substantial graduate programs, including doctoral programs in engineering and reading education. Oakland's geographical location in a heavily populated southeastern region of the state enhanced the continued growth of the commuter student body.

The University of Michigan was the third institution selected for this case study. The University of Michigan is a multifaceted institution with diverse programmatic offerings including three professional schools. This institution has taken deliberate action to gradually reduce the student enrollment in order to control the quality of the academic programs.

Procedures for Obtaining Data

The data collection was based on the use of semi-structured interviews. The initial step in the data-collection process was a contact letter sent to each prospective respondent. The letter requested their confidential participation and stated the purpose of the research project. A telephone contact followed to make the necessary arrangements for scheduling the interviews. The respondents were informed in the telephone contact that the interview would be recorded to facilitate accurate data collection, if there were no objections.

The researcher interviewed each respondent on a one-to-one basis in their respective offices. The interviews were designed to take approximately one hour and were to be tape recorded. The interviewer followed a predetermined format, adhering to a set questionnaire. During the interview the interviewer used a simplified check list to assure that sufficient information was obtained regarding each proposition.

The ability to replicate this research for verification or expansion of findings was a key element involved in the design and execution of the study. The case-study research format that was employed contained areas that required careful documentation to control subjectivity. Research guidelines were developed early to provide for maximum control of subjectivity. The following summary is a presentation of the actual steps implemented to complete this study.

1. Selection and refinement of the research topic.

2. Review of relevant literature, including related studies and institutional data.

3. Additional review and refinement of the research topic in conjunction with the literature review.

4. Preparation of the research propositions, including the review of the literature with verification provided by a panel of experts.

5. Preparation of the pilot-study questionnaire, including semi-structured question guideline. Careful attention was taken to include questions related to the research propositions.

6. Pilot-study interviews were completed with the President and Vice-President of Business at Michigan State University.

7. Input from these two executive officers was incorporated into the interview questionnaire. Substantial improvements were made to the questionnaire to provide increased direction to the interview.

8. A sample of three institutions was selected from the 15 Michigan public four-year institutions, including an institution from each category of enrollment: small, medium, and large.

9. Letters of introduction were forwarded to the Presidents of Grand Valley State Colleges, Oakland University, and the University of Michigan, introducing the researcher and requesting their participation.

10. Approval for participation was received from each institution.

11. Telephone contacts were completed with the President, Vice-President for Academic Affairs, and Vice-President for Business to schedule personal semi-structured interviews.

12. On-site interviews were completed with each officer. Additional clarification questions were directed to the Directors of

Budget and Institutional Analysis as were deemed necessary by the researcher.

13. The interviews were tape recorded and followed the semi-structured format as presented in the appendices.

14. Answers obtained during the interviews were codified by the researcher.

15. To provide additional verification regarding the accuracy of the researcher's codification, a qualified professional was retained to review three taped interviews against the codified data.

16. The information obtained from each of the interviews was compiled into an institutional case study without reference to the respondent's name.

17. While no attempt was made to compare institutions directly, the principal findings from the three case studies were summarized to ascertain some of the similarities and any unique approaches that were employed to respond to the problem under study.

Semi-Structured Interviews

The lack of a written historical record that presented the institutional administrative strategies that were implemented in response to the condition of fiscal stringency necessitated the use of other data-collection techniques to obtain the information required to complete the study. Therefore, the method chosen for data collection in this study was the use of semi-structured interviews, or, as defined by Maccoby and Maccoby (1954), a semi-structured or "semi-standardized" interview format. It consisted of a format with a series of set questions that were used in all interviews with the option of slight digressions, which allowed the interviewer to ask probing questions. The semi-structured approach provided for increased reliability and face validity according to the Maccobys (Maccoby & Maccoby, 1954, p. 452). The interview approach also had the advantage of increasing the completion rate of the respondents. The advantages of the interview over the mailed questionnaire in certain situations were illustrated by Jackson and Rothney (1961). It was found in the Jackson and Rothney study, which compared the two data-collection techniques, that a higher proportion of the sample completed each interview item than the corresponding questionnaire item. Also, 98 percent of the planned interviews were completed, compared with 83 percent of the mailed questionnaires.

> The semi-structured interview, therefore, has the advantage of being reasonably objective while still permitting a more thorough understanding of the respondent's opinions and the reasons behind them than would be possible using the mailed questionnaire. The semi-structured interview is generally most appropriate for interview studies in education. It provides a desirable combination of objectivity and depth and often permits gathering valuable data that could not be successfully obtained by any other approach (Jackson & Rothney, 1961).

The study propositions were designed to encompass a broad range of topics, and yet these propositions were also intentionally designed to pursue narrow issues as well. The propositions were compiled after review of relevant literature and conversations with respected authorities in the field of higher education.

The literature contained a questionnaire that served as a comparative model to the formulation of the research instrument. Earl F. Cheit, the author of <u>The New Depression of Higher Education</u>

(1971), compiled a questionnaire that was administered to college and university administrators. The context of the questionnaire was the examination of the financial conditions at the respective, selected institutions. This research instrument was constructed to examine areas that were parallel to the Cheit questionnaire. A greater emphasis was placed on the activities that have occurred during the decade of the 1970s in response to fiscal stringency.

The format and content of the propositions were reviewed by President Robert F. Roelofs, Oakland Community College; Dr. Frederick R. Whims, Director of the Education Division, Office of the Budget, Department of Management and Budget; and Douglas Smith, Special Assistant to Governor William G. Milliken for education. The input that was provided by these individuals was analyzed, and appropriate alterations to the propositions were completed by the researcher.

A pilot study was designed and executed to determine the strengths and weaknesses of the propositions and the interview techniques. Michigan State University, a four-year comprehensive institution, was selected for the pilot study, and the President and Vice-President for Business Affairs were interviewed. After the interviews were completed, each respondent was asked to criticize the delivery, content, and clarity of the interview. Specific questions addressed the coverage of the topic. Comments were carefully noted, and appropriate changes were made to the interview format. The pilot study was very successful in pinpointing the weaknesses of the questions. The input from the respondents was instrumental in the development of a more effective and comprehensive set of questions.

The issues to be pursued by the interviewer were designed to address critical issues perceived by the researcher to have affected the institutions during the decade of the 1970s. Each question was not a single entity, but instead tied into the propositions, which provided continuity in a logical progression. The questions were designed to obtain information that would allow comparative examination of the 11 propositions. Each question was designed to be congruent with one of the propositions enumerated in this chapter.

Data-Analysis Procedures

At the completion of the interviews, the researcher listened to each interview and codified the results into narrative form. To provide additional verification regarding the accuracy of the researcher's codification, an objective professional was retained to review three taped interviews against the codified data. James L. Murdock, Vice-Chancellor of Budget and Finance, University of Michigan-Flint, provided his services for the verification process. The results of Vice-Chancellor Murdock's inquiries indicated that the researcher had performed an accurate codification of the interviews.

The three primary interviewees were the President, the Vice-President for Academic Affairs, and the Vice-President for Business Affairs. These officers provided the majority of information; however, additional administrative personnel were questioned to complete data collection.

The information obtained from the interviews was compiled into an institutional case study without reference to the individual's name.

No comparisons between case studies were completed following the descriptive-case-study format. The findings for each case study were combined into principal findings for the research study.

CHAPTER IV

CASE STUDIES

Case Study: Grand Valley State Colleges

Grand Valley State Colleges, a unique public institution that was established during a rapid-growth period of Michigan's higher education history, was the first institution to be involved in the study. The educational focus of the college is on liberal arts; its founders believed that the best preparation for successful lives and careers comes from the breadth of knowledge and human values associated with the arts, humanities, and social and natural sciences. In the fall of 1963, the college opened its doors to the first class of 226 students, who came to a one-building institution with a faculty of 15 members, 16 liberal arts programs, and an operating budget of $660,904, of which 75 percent came from state appropriations.

The founding principles of the institution were to provide individual instruction through small class size, discussion sessions, seminars, and tutorials, all of which were characteristic of the personalized education found in small colleges. A second major premise of Grand Valley State Colleges was the establishment of individual colleges within the corporate structure. The college-within-a-college concept was a further attempt to provide increased individualized attention and education to the students specializing in the separate colleges. The coexistence of diverse colleges, each with its own philosophy, goals, and programs, was an acknowledgment that differing styles of teaching and learning could achieve mutually shared and meaningful educational goals. At the peak of this doctrine there was a federation of four undergraduate and two graduate colleges--the College of Arts and Sciences (established in 1963), Thomas Jefferson College (1968), William James College (1971), Kirkhof College (1973), F. E. Seidman Graduate College of Business and Administration (1973), and the College of Graduate Studies (1975).

All students within each undergraduate college fulfilled liberal arts requirements and then majored in a liberal arts discipline, an interdisciplinary field, or in a professional field. Grand Valley had shown that the combination of liberal arts and more specialized career preparation was both workable and desirable. Internships, independent and interdisciplinary studies, special projects, senior seminars, clinical experiences, research projects, and performances and exhibits enabled students to integrate what they have learned.

Grand Valley State Colleges was selected for study due to its geographic location, program offerings, size of faculty, and student body. It represented the smallest and newest institution that was examined during this study. The unique liberal arts programmatic structure was a contributing factor for its inclusion.

The procedure followed to obtain the necessary information was an in-depth review of the data that Grand Valley had reported to the State of Michigan. Included also was a review of relevant documents, including Board of Control minutes, financial statements, newspaper articles, and internal documents. The last step used for data collection was a campus visitation, which included interviews with the President, Vice-President for Academic Affairs, and the Vice-President for Business Affairs. The interviews were used to obtain clarifying information regarding the propositions that provided a framework for the study.

Proposition 1

> The institution will report that the fiscal stringency started in the middle of the 1970s.

The three respondents were asked if they agreed with this definition of fiscal stringency: a condition of limited state revenue and escalating costs that necessitated the mid-year curtailment or elimination of planned or existing programs. The institutional representatives agreed with the stated definition. One respondent stated,

> The severity of the fiscal problem or the quality of life at the institution began to deteriorate when faculty and staff members did not have the financial resources they believed were necessary to conduct their affairs and responsibilities normally. The period of the mid-1970's was recognized by the increasing inability to proceed with the business as usual doctrine.

Grand Valley administrators reported that fiscal stringency started during the mid-1970s. A qualifying statement was that the first time the institution had to cut back was immediately following the oil embargo in 1973-74. The institutional officers knew the state was in financial difficulty and recognized that the Executive Order 1974-11, enacted December 1974, and Executive Order 1975-12, enacted December 1975, were the results of the state revenue problem. The Executive Orders in fiscal years 1975 and 1976 did not in themselves create a state of fiscal stringency, but they did create the condition that led to fiscal stringency according to one respondent. The specific financial condition was the inability of the institution to meet the current or projected budget without dramatic alteration. The Executive Orders 1974-11 and 1975-12 necessitated for the first time an alteration in the working budget at Grand Valley State Colleges. Decisions were made on how to capture the necessary dollars with the minimum effect on the institution during the current budget cycle. During the mid-1970s it was believed that the cuts were temporary cutbacks in appropriations that would be restored in subsequent years.

According to the respondents, the two Executive Orders that occurred in fiscal year 1975 and fiscal year 1976 reduced the state appropriations to the institutions of higher education in Michigan. The important ingredient that heightened the negative effect of these reductions was double-digit inflation, which occurred at the same time. The combined effect resulted in an actual decrease in constant dollars that were appropriated or expended during this period. Even though the state reduced the appropriations through Executive Orders, the appropriations from year to year increased when inflation was not discounted. It was not until the institution accounted for the inflation and enrollment that the true effect on the budget was apparent. Table 16 presents selected institutional data regarding the appropriations, expenditures, and enrollment at Grand Valley State Colleges. Table 17 presents the effect of the interaction of these ingredients on a constant dollar per fiscal year equated student basis.

Table 16.--Grand Valley State Colleges institutional data.

Year	State Appropriations	Institutional Expenditures	Instructional Expenditures	Fiscal Year Equated Students
1974-75	$ 8,483,313	$13,067,500	$6,220,800	6,071
1975-76	9,051,909	12,584,865	6,671,120	6,480
1976-77	9,435,075	14,613,364	7,023,417	6,146
1977-78	10,564,075	15,940,841	7,391,813	5,849
1978-79	11,793,650	16,954,000	7,976,211	5,445

Table 17.--Grand Valley State Colleges calculated data.

Year	Higher Education Price Index	Constant Dollars State Appropria-tions per FYES	Constant Dollars Total Expenditures per FYES	Constant Dollars Instruction Expenditures per FYES
1974-75	166.2	$841	$1,295	$616
1975-76	177.2	788	1,096	581
1976-77	188.7	813	1,260	606
1977-78	201.3	897	1,354	628
1978-79	217.1	997	1,434	675

Table 17, column 2, presents state appropriations per fiscal year equated student deflated to a constant-dollar figure by using the Higher Education Price Index as a divisor. As noted in the table, years 1974-75 through 1976-77 represented years when the state appropriations on a constant-dollar basis actually decreased. The same trend is true when reviewing either the total institutional expenditures column 3, or the instructional program expenditures column 4, on a constant-dollar basis. The empirical data supported the statements made by the institutional administrators that fiscal stringency started to affect Grand Valley State Colleges during the mid-1970s.

<u>Proposition 2</u>

> The institution will report that cost-saving strategies were implemented in the instructional program in response to fiscal stringency.

The persons interviewed enumerated many specific strategies that were used, as well as several consequences that resulted from the fiscal stringency. The persons interviewed stated that the institutional strategies used to respond to fiscal stringency changed as the institution progressed through increasing fiscal stress. The issuance of the State of Michigan Executive Order 1974-11 signalled the start of continuing and intensifying budgeting difficulties for the institution.

The response to Executive Order 1974-11 was to follow a strategy that would minimally affect the programs of the institution. The effect of the Executive Order was to reduce the amount of funds appropriated to the college. The actual effect of the Executive

Order caused the institution to receive a decreased allotment from the state than was already budgeted by the institution. This mid-year reduction in expected revenue necessitated a corresponding mid-year reduction in expenditures. Executive Order 1974-11 reduced the original state appropriation to Grand Valley by $129,187. There was general agreement among the interviewees that the first state reduction was responded to by one-time, across-the-board cuts. Areas were identified in the budget by expenditure category and nonselective, across-the-board reductions in nonsalary accounts. The following actions were taken by the institution to respond to the necessary mid-year reduction:

1. Funds allocated for professional travel were reduced; both the frequency of travel and the expenditure level per trip were examined by executives. An actual cap of $150 per trip was established, with the faculty or staff member responsible for the balance of the cost.

2. Funds for professional memberships were reduced, with a specific shift from institutional responsibility to individual responsibility. The savings in this program were notably low, but it did effectively communicate to the university community that a budget problem was occurring.

3. Funds for supplies and office expenses were targeted for reduction. This nonsalary account reduction, according to one respondent, produced the same effect as the budget limitation on professional memberships. The action produced limited savings but communicated strongly the need to reduce budgets.

4. Funds for the acquisition of equipment, either new or replacement, were reduced. Those interviewed stated that there was a very strong reaction to this reduction by faculty members. Statements were made that without the acquisition of new equipment to replace obsolete or irreparable equipment, the academic programs would be severely affected and handicapped in making new programmatic offerings.

5. Funds for the acquisition of library books and resources were reduced. This budget item was identified because it represented a large nonsalary fund source. Concerns were raised regarding this cut, but the administrative response was that it was only a one-time cut and that it would be restored in the next annual budget, which promised to be better.

6. Funds to other nonsalary accounts were reduced in an effort to prevent reductions in salary accounts.

7. Unbudgeted revenue funds were frozen and later applied toward the cut in 1974-75. This fund was the result of larger tuition revenue than projected, primarily due to Grand Valley's continued growth in enrollment. These funds were viewed as unbudgeted revenue and therefore readily available for Executive Order reductions.

Executive Order 1975-12 reduced the appropriated monies for Grand Valley by $160,000. This second Executive Order within 13 months had a greater effect on the institution.

According to the three persons interviewed, the response to the second mandated reduction was much the same as actions taken in the previous year. A strong attempt was made to protect salary accounts and to reduce again nonsalary accounts and unallocated funds. Additional activity occurred at Grand Valley State Colleges in the form of executive reorganization and reclaiming salary from vacant positions or prolonged searches.

Before the reorganization occurred, there were four academic Vice-Presidents, each with administrative responsibilities for an undergraduate college. The four were titled Vice-President for the College of Arts and Sciences, Vice-President for Thomas Jefferson College, Vice-President for William James College, and Vice-President for Kirkhof College. During 1976 an administrative review was completed, and the decision was made to update the structure by eliminating the four Vice-Presidencies for college positions. The streamlined replacement structure included a Vice-President for Institutional Development, a Vice-President for Academic Affairs, and a Vice-President for Administration. One respondent stated that the replacement structure much more closely reflected the structure in other contemporary institutions. The cost savings incurred from this reorganization included direct salary savings through the elimination of one vice-presidential-level position and indirect savings through the centralization of academic-affairs administration.

As reported by one respondent, the centralization of academic-affairs administration in one office allowed for increased effectiveness and efficiency. There could be increased direct monitoring of departmental budgets, increased analysis of expenditures, and much less duplication of staffing and staff efforts. It was stated by one respondent that this one specific response was a benefit to the institution.

The other responses to Executive Order 1975-12 followed the same across-the-board, one-time-cut strategy as was followed in the previous cut. These included reductions by account codes in the following expenditure categories: travel, memberships, supplies and office expenses, equipment, library acquisitions, and other nonsalary accounts. Funds from unbudgeted tuition revenue were also allocated to respond to the reduction.

The institutional response to Executive Order 1975-12 included the administrative decision to collect limited salary savings from vacant positions. Positions were allowed to remain open longer than normal, with the units capturing some salary savings.

The summary statements made by those persons interviewed concerning the response to the two Executive Orders indicated the continuing institutional belief that the State of Michigan revenue problems were short run in nature. The institutional responses were primarily aimed at squeezing funds out of accounts and using one-time, across-the-board cuts. The flexibility of the institutional budget was constricted, but the integrity of the program was left untouched. According to one respondent, the reductions that occurred in fiscal year 1975 and fiscal year 1976 were not as harmful as educators led the outside society to believe, and some "belt-tightening" was actually good for the institution because the college was trying to do too much for too many.

The years 1977 and 1978 were without Executive Orders and according to those interviewed were good years for the institution. In 1976 the state appropriation for Grand Valley State Colleges was $8,964,007. In 1978 the appropriation was $10,823,900. This represented a 20.7 percent increase in a two-year period. Enrollment, however, underwent even a more significant change, dropping from a high of 6,480 fiscal year equated students in 1976 to 5,849 fiscal year equated students in 1978. This 9.7 percent enrollment decline was not planned and caused increasing stress on both the administration of the curriculum and the institution's revenue budget.

The decrease in credit hour production was most significant in the social science and humanities areas. Social science dropped from 42,444 student credit hours produced in 1976 to 31,776 student credit hours in 1978. This 10,668 student credit hour decline represented a loss of 25 percent of the discipline production. Psychology dropped 2,730 student credit hours from 1976 to 1978 for a 18.8 percent decline. The discipline receiving the largest decline on a percentage basis was interdisciplinary studies, from 16,576 student credit hours in 1976 to 10,945 student credit hours in 1978 or a 34 percent decline.

A strong statement by two respondents was that the significance of these declines was not so much the magnitude but the fact that the declines occurred in the disciplines on which the institution was founded. The liberal arts base with individualized instruction and strong interdisciplinary education was no longer attracting and retaining students.

A second significant factor stated was that the original disciplines were heavily tenured, and therefore reducing expenditures in those disciplines was delayed. During the same two-year period that the student credit hours declined 25 percent in social sciences, the full-time-equivalent faculty actually increased by two faculty members. The discipline of psychology between the years 1976 and 1978 declined 18.8 percent in student credit hour production while adding three faculty members and increasing expenditures by 2.3 percent. Interdisciplinary studies declined 34 percent in student credit hour production between 1976 and 1978 while declining by four full-time-equivalent faculty and decreasing expenditures by 28.1 percent. The significant decrease in both faculty members and expenditures in the interdisciplinary studies area reflected the ability of the college to lay off part-time nontenured faculty members. These faculty members were typically the last hired, with the least seniority. According to those persons interviewed, the continuing shift of student interest from the liberal arts to other more marketable degrees was of increasing concern for the executive officers.

As stated by the interviewees, the student shift was decreasing the institution's ability to respond to fiscal stringency, and the decline in student credit hour production, and therefore tuition revenue, coupled with the inability of the institution's administrators to reduce the expenditures proportional to the credit hour decline, aggravated the budget situation.

In fiscal year 1978-79, Grand Valley State Colleges introduced for the first time the concept of a base budget. A base budget provided the institution with an awareness of the ongoing costs incurred by the institution. Base budgeting as a management tool provided the administration with an opportunity to review expected revenues and expenditures. Grand Valley State Colleges produced a base budget that incorporated both revenues and expenditures. State appropriations and student tuition and fee estimates were the two revenue components that were tied to student enrollment figures to estimate total revenue available for 1978-79. The expenditure side of the balance sheet included estimates on salary and nonsalary costs. The bottom line, as stated by those interviewed, projected a 1979-80 budget that was significantly out of balance.

On January 29, 1979, President Arend D. Lubbers established the Budget Process Task Force. According to those persons interviewed, the membership of the task force was as important in the process as was the work of the task force and the charge to the group. The membership of the group included the Vice-President for Administration as chairperson and nine other members representing a cross-section of institutional committees and functions. The task force included faculty members, a student representative, and administrative professional individuals. One respondent stated that

> The work of the task force in response to fiscal stringency was a result of the lack of deliberate action in the mid-1970s' The lack of specific and selective cuts to budgets as compared to the across-the-board cuts that were standard operating procedure in the mid-1970s precipitated the base-budget actions taken in 1978-79.

The memorandum creating the task force stated:

> Our preliminary planning for 1979-80 indicates that we have a very serious revenue shortfall resulting from our projected

> enrollment decline. We must plan for a balanced budget which adequately addresses institutional priorities in the next year as well as succeeding years. A balanced budget is not possible without some significant reductions and reallocations of funds.

The charge to the task force was to make recommendations concerning the following issues:

1. Overall approach
2. Timetable
3. Suggested guidelines and criteria for decision making
4. Governance participation in the process
5. Personnel policies that pertain to budget management

In the initial meeting in February 1979, the task force acknowledged that financial pressures relating to inflation, state-appropriations curtailment, and enrollment decline had already been felt in earlier years. The task force acknowledged that the financial pressures had been addressed primarily through minor budget changes, salary savings resulting from vacancies, and other temporary actions that did not modify the base budget. The committee drafted the following statement:

> Our preliminary analysis indicated that the magnitude of the problem for 1979-80 and subsequent years is such that more substantial changes must be addressed and that the base budget must indeed be rearranged.

The task force established a set of assumptions that were used to respond to the charge. The assumptions established in February 1979 were as follows:

1. Fall-term headcount would be 6,747 students and the fiscal year equated students (FYES) would be 5,005. At the 5,005 FYES level, the enrollment would have dropped 1,475 FYES from the peak of 6,480 in 1975-76.

2. Salary increases for 1979-80 would equal 7%, the maximum allowed for under President Carter's guidelines for wage increases.
3. Tuition rates would be increased 7.2%, the maximum increase provided for under President Carter's price increase guideline.
4. That the state appropriation for Grand Valley in 1979-80 would equal the Governor's recommendation adjusted to Grand Valley's fiscal year.

Based upon these assumptions and projections of revenues and expenditures, the task force concluded that the base budget must be reduced at least $900,000, but no more than $1,900,000, depending on the resources required for new programs and additional activities that were under consideration. The task force stated that

> We must acknowledge that this is not a problem for next year alone and that reallocations or changes in the base budget which are made for 1979-80 must be examined in light of 1980-81 and subsequent years as well. Further, the magnitude of the problem indicates the need for a total institutional response.

According to those persons interviewed, the task force was to have a short-term and limited charge and was specifically designed not to make budget recommendations, but rather to determine the seriousness of the problem and to outline a process for dealing with it within the time constraints. The respondents stated that the nature of the task force allowed the group the freedom to systematically explore various approaches to budgeting. The task force reviewed and debated the advantages and disadvantages of several budgeting alternatives and systems. It established a set of four guiding principles that were followed in selecting the budgeting alternative to be used.

> First, there must be a logical order to the process. Second, it was not desirable to create a new decision making structure. Third, the process should be consistent with Grand Valley's tradition and involve as much participation as possible. Fourth, the process must result in a balanced budget.

The task force reviewed and discarded the following budgeting alternatives. Across-the-board cuts were discarded due to the nonselective nature that they required and because they did not change the configuration of the budget for the future. Object-code cuts were also discarded because they required selective cutting by expenditure type and usually were limited to solving small, temporary budget problems. Freezing open positions was not considered an acceptable solution because it was also nonselective and could negatively affect an academic or nonacademic program of highest priority. Zero-base budgeting was reviewed and subsequently discarded due to the time-consuming nature of reviewing the total budget and prioritizing all of the programs.

The approach that was recommended to address the immediate problem was a budget reallocation process.

> It involved the identification of the lowest priorities among programs or activities across the entire institution and the subsequent elimination of some of these to provide funds for higher priority new programs or activities and to balance the budget.

The task force identified a three-step process for developing the 1979-80 budget.

1. The establishment and implementation of an interim target reduction.
2. The development of a tentative budget plan.
3. The adoption of a final budget plan.

According to those persons interviewed, the response to fiscal stringency in 1978-79 took a very specific and selective approach. As a result of many meetings and thorough investigation of the financial problem confronting the institution, the administration made recommendations of proposals to the Board of Control.

In response to the administration's request, the Board of Control declared a state of financial emergency and charged the administration with taking the necessary actions to balance the budget. The state of financial emergency was declared by the Board of Control in April 1979 for Grand Valley State Colleges. As a result of this declaration, the administration took the following actions in the academic areas.

1. The administration recommended the elimination of Thomas Jefferson College for Spring 1981, including the layoff of tenured faculty, administrative professional staff members, clerical and technical staff members, and the elimination of budgets for supplies and expenses.

2. The administration recommended the reduction of faculty members in William James College. Both tenured and nontenured were targeted for partial reductions.

3. The administration recommended that the School of Business undergraduate portion be merged with the MBA program. This merger was designed to reduce duplication and reduce overhead administrative costs.

4. The administration recommended that the College of Graduate Studies, which only taught master's-level courses, be merged with the undergraduate program in the College of Arts and Sciences. The desire to merge these two programs was to eliminate unnecessary and costly duplication.

5. The administration recommended the elimination of the Religious Studies Institute. Low institutional priority and cost savings were the reasons for this recommendation.

6. The administration recommended the establishment of the Center for Research and Development. The goal of this new center was to generate additional grant and development activity to augment revenue.

The Board of Control received the administration's recommendations and thoroughly reviewed the implications of actions to be taken. In the April 1979 Board of Control meeting, the Board accepted all of the recommendations except for the closure of Thomas Jefferson College. A strong debate ensued, and the Board held a special hearing to receive strong dialogue concerning the closure of a specialized college. In May 1979, the Board of Control voted to close Thomas Jefferson College.

According to the persons interviewed, the steps taken to respond to fiscal stringency in Spring 1979 were very significant for several reasons.

1. The declaration of financial emergency by the Board of Control was a necessary step, which allowed the administration to close academic programs and lay off tenured faculty.

2. The process that was established by the Budget Process Task Force provided an opportunity for the education of all sectors of institutional leadership as well as establishing a formalized vehicle for communication and information dissemination.

3. The internal budget reallocation of resources that was implemented was the first time that deliberate selective budget resources decisions had been made.

4. The administrative decision to cut deeper than was immediately necessary to solve the current problem allowed for increased budget flexibility for reallocation. The reallocation occurred with the decrease of funds from low-priority programs, i.e., Thomas Jefferson College, to the provision of funds for new programs, i.e., Center for Research and Development.

5. The review of all college guidelines, policies, and procedures that in any way were integrated with the budget/policy-making machinery was a strong step toward effective institutional leadership.

6. The analysis of revenues, expenditure patterns, enrollment trends, program marketability, and human resources was integrated for the first time in the institution's history.

The results of the administrative actions implemented as a result of the Board of Control support were felt throughout the institution.

In the spring of 1979, tenured faculty members were terminated for the first time in Grand Valley State Colleges' history. Table 18, Spring 1979 Administrative Actions, reflects actions taken and an index of the level of authorizations for the actions.

The actions taken resulted in the termination of 16 faculty members, primarily from the Thomas Jefferson College. However, William James College also had a partial reduction of nontenured faculty

Table 18.--Grand Valley State Colleges' Spring 1979 administrative actions.

	Administrative Recommendation	Administrative Action	Board Action
Declaration of financial emergency	x		x
Establishment of base budget	x	x	
Establishment of budget process task force	x	x	
Closing of Thomas Jefferson College	x	x	x
Reduction of William James College	x	x	x
Merger School of Business with MBA	x	x	x
Elimination of Religious Studies Institute	x	x	x
Establishment of Center for Research and Development	x	x	x
Layoff of tenured faculty	x	x	x
Layoff of nontenured faculty	x	x	
Layoff of administrative staff	x	x	
Layoff of clerical/technical staff	x	x	
Reduction in equipment purchases	x	x	
Reduction in supplies expenditures	x	x	
Reduction in library acquisitions	x	x	
Review of programs for centrality	x	x	
Review of role and mission	x	x	x
Planning process established	x	x	

members. The termination of tenured faculty members was the most significant action taken in 1979. The administration recommended that the Board of Control declare a state of financial emergency in order to close Thomas Jefferson College and terminate tenured faculty.

Grand Valley operated within the framework of an Administrative Manual, which specifically detailed the process for personnel termination. To terminate tenured faculty, it was necessary for the institution to be operating in a state of financial emergency. The second caveat was that program discontinuance must occur in order to terminate tenured faculty within the specific academic program.

The closure of Thomas Jefferson College by the Board of Control provided a strong statement regarding the administrative desire to effect change. Thomas Jefferson College was designed to provide a liberal arts curriculum in an interdisciplinary approach to undergraduate education. This College embraced the founding fathers' concepts; therefore, the discontinuance of this college was a very strong role and mission statement. The discontinuance schedule was adjusted to allow the students currently in the program to complete their education within the college. Students, however, were strongly encouraged to transfer to other colleges within Grand Valley, and administrative efforts were made to allow for a smooth transfer.

Several consequences occurred as a direct result of the state-mandated cuts. According to one respondent, a primary consequence was that the fiscal stringency prevented Grand Valley State Colleges from rounding out its curriculum offerings and becoming a complete institution. "The institution had desired to add professional career-oriented programs to supplement the well-established base of liberal arts; the programs identified were physical therapy, a master's degree in nursing, and a school of engineering."

The second consequence stated by one respondent was that services to students had decreased. According to one administrator, the institutional mandate was to provide a quality education to the students. Due to the forced reductions, resources to provide the following student services were curtailed: registration, financial aid, housing, recreation, counseling, placement, and other student services. The continued cutback of the personnel performing these services decreased the ability of the institution to meet the needs of the students.

The third consequence stated was that the continued budget squeeze on the institution had caused increased attention on all budget matters.

<u>Proposition 3</u>

> The institution will report that revenue-increasing strategies have been implemented in response to fiscal stringency.

According to those interviewed, this aspect of institutional management had not been successful. One respondent stated, "In the mid-seventies the institution was still believing that enrollment growth would continue to produce tuition revenue and as a parallel would come increasing state appropriations." According to those interviewed, the decline in student credit hour production that occurred in 1976-77 and 1977-78 was to a certain extent not reflected in a parallel loss of tuition revenue for two reasons. First, the tuition and fee rate increases that occurred offset the tuition loss due to credit hour declines. Second, state appropriations continued to increase in 1976-77 and 1977-78, which buffered the effect of declining tuition revenue as a function of credit hour production.

Grand Valley stepped up the institution's lobbying efforts in the state legislature with the goal of increasing state appropriations. This effort was carried out by increasing the liaison work between the institution and the following state offices: the Department of Management and Budget, the Bureau of Facilities, the Senate Fiscal Agency, the House Fiscal Agency, the Senate, the House of Representatives, and the Governor's office. One respondent reported that efforts in this arena were not as fruitful as was desired, and that Grand Valley was specifically attempting to both increase the percentage of the state budget that was spent on higher education and also increase the institution's share of any appropriations to higher education.

The second specific program undertaken to augment revenue was to build student enrollment. This program was reported to have had mixed results. From the peak year of student credit hour production in 1975-76, student credit hour production steadily declined. The decline in student credit hour production was not paralleled by a proportional drop in student-headcount figures. The difference in these two measures of enrollment was very important to the institution's budget. The headcount figures reflected the actual number of unduplicated students who registered for courses and relied on student services. The student credit hour production reflected the rate at which students registered for courses. As pointed out by one respondent, the overhead institutional cost was linked to the tuition fee per credit hour, not to head count. The trend at Grand Valley was a significant decrease in the average student credit hour load; in 1974-75 the ratio of head-count students to fiscal year equated students was 1.1:1.0. By 1978-79 that ratio had increased to 1.3:1.0. This change reflected an 18 percent decrease in the credit hour load carried by the average student.

The third strategy implemented to increase revenue was to attract outside grant and research funds. As discussed by those persons interviewed, it proved difficult to raise funds in this area for two main reasons. First, other higher education institutions in not only Michigan but also in the United States were establishing development and research grant offices in an effort to augment general-fund revenue. Second, the role and mission of Grand Valley State Colleges was liberal arts, which was not an area that typically attracted heavy grant activity. In Spring 1979, Grand Valley formally established the Center for Research and Development; this center was designed to support faculty members in their efforts to attract outside funding for special projects.

Proposition 4

> The institution will report that reduction of personnel has been used in response to fiscal stringency.

According to the interview participants, Grand Valley State Colleges did use this technique to respond to the constrained budget at three specific times during the period under review. Following the first Executive Order in December 1974, Executive Order 1974-11, the institution took measures to respond to the reduction. These measures, while designed not to affect the integrity of the institution, did entail actions that resulted in reduction in personnel. First, actions were taken to freeze open positions or positions that opened through attrition. This action lasted through June 1975 and effectively reduced the total number of personnel. The second action was the postponement of new-program development and therefore not hiring new staff. This action curtailed further program development.

Executive Order 1975-12, which occurred in December 1975, caused greater reliance on a reduction in personnel to capture needed dollars. This Executive Order reduced appropriations to Grand Valley by $160,000 for fiscal year 1975-76. The institution implemented the same basic plan of strategies but also added other forms of personnel reductions. In 1975-76 the academic units reorganized and eliminated several top administrative positions. This reorganization at the top created greater efficiency and immediate personnel savings.

The second form of personnel reduction implemented was non-selective staff attrition. This method had tremendous limitations because staff vacancies occurred randomly and not necessarily in a planned fashion. According to one respondent, attrition forced the institution to accept decreases of staff or faculty in areas that were the highest in student demand. The effect was that personnel cost savings could be gained in the short run, but in the long run it could cripple the institution's ability to offer critical academic programs.

With the declaration of financial emergency in Spring 1979, Grand Valley moved into a new frontier of personnel layoff. The Board of Control declaration allowed the administration to lay off not only nontenured part-time faculty members but also tenured faculty members. Without the Board of Control declaration, the institution would not have been able to take such drastic but necessary action. According to two of the respondents, this action was believed beyond all realms of possibility by the faculty. As stated during the interviews, faculty members--both the affected and some of the nonaffected--believed that they were in a totally secure and, to some extent, protected profession. The actions taken in Spring 1979 were drastic in order to reduce the base budget by approximately $1,000,000. The direct effect was a layoff of 16 tenured faculty members. Those faculty members terminated were primarily in the Thomas Jefferson College, a liberal arts college that had already experienced dramatic enrollment losses. Throughout the period of 1974-75 to 1978-79, decreases in student enrollment and small class sizes meant that part-time faculty members were not retained or were terminated.

According to the respondents, the nonacademic side of the budget received more severe cuts in fiscal years 1975, 1976, and 1979. To protect the academic programs, the administration turned to the nonacademic sector for a greater percentage of cuts in both salary and nonsalary budget accounts in the years 1974-75 and 1975-76. These cuts were felt in two primary fashions: First, those persons who were cut were not rehired; second, those persons remaining were expected to pick up the level of services provided by the total staff.

One respondent stated, "The movement through the seventies was paralleled by increasing budget difficulties and decreasing staff morale." As pointed out in the interview, the continuing decline in staff morale was coupled directly to budget uncertainty and administrative actions. The previously secure environment that public higher education offered was becoming a very volatile, cyclical environment. It was becoming increasingly difficult to attract and retain top-quality faculty and staff. According to those interviewed, this was a direct result of personnel actions that had occurred.

Proposition 5

> The institution will report that the discontinuance of academic programs has been used as one response to fiscal stringency.

At Grand Valley this response did not occur until Spring 1979, with the Board of Control declaration of a financial emergency. The declaration was a result of the two Executive Order reductions and the administration's introduction of a base budget as a planning tool. The projected budget for fiscal year 1979-80 indicated that institutional expenditures would exceed revenues by at least $900,000. The Presidential establishment of a Budget Process Task Force to review institutional budget and administrative processes led to a recommendation of budget reallocations and reductions.

The academic portion of the institution's budget was slated for reorganization, academic-program consolidations, and eliminations. The School of Business undergraduate division was merged with the Master's in Business Administration. This program consolidation was executed to reduce administrative overhead and to promote greater coordination within the two programs. The undergraduate College of Arts and Sciences was combined with the College of Graduate Studies, a master's-level liberal arts program. The consolidation of these two units was also based on budget savings through elimination of parallel and duplicative services.

According to the respondent, as class sizes continued to decrease through the mid-1970s, it became evident to the institution's executives that deliberate actions would be required if the institution was to survive continuing changes. The administration recommended to the Board of Control in April 1979 that an entire college within Grand Valley State Colleges be eliminated. Thomas Jefferson College was one of the original colleges that was established and had the role to provide a liberal arts interdisciplinary education program. According to one respondent, the basic tenets of this college most closely paralleled the founding fathers' belief in the importance of general education as a foundation for life.

The recommendation to close Thomas Jefferson College was based on the lack of student demand for the curriculum that it was offering. The lack of enrollment had driven the cost per class or costs per student credit hour up steadily. The recommendation was strongly opposed by some members of the community, as well as some faculty and students. At the May 1979 Board of Control meeting, a vote was slated for discontinuance. The scheduled discontinuance was phased to allow students to transfer to other colleges within the institution or to graduate from Thomas Jefferson College.

In addition to this college elimination, the Religious Studies Institute was eliminated, also because of declining enrollment.

Proposition 6

> The institution will report that faculty members were involved in developing institutional responses to fiscal stringency.

According to those persons interviewed, until 1979 the only direct involvement of faculty members was on an informal basis. The institutional actions that occurred before 1978-79 were limited to actions that did not reallocate institutional resources and were targeted for nonacademic areas. The actions that were taken were limited in scope and were directed by the administrators. Therefore, the faculty were not involved in a formalized consultative process.

In Spring 1979, the establishment of the Budget Process Task Force signalled the first direct formal involvement of faculty members. The Task Force process involved all central faculty governing bodies in reviewing and advising on the budget recommendations that were being developed. The three primary faculty groups that were directly involved were the Faculty Salary and Budget Committee, the Executive Committee of the Faculty Senate, and the All College Academic Senate.

The Budget Process Task Force had faculty representation and was designed to elicit active involvement from all faculty members. The faculty involvement in the Budget Process Task Force started with the formal appointment of the Task Force members and continued throughout the duration of the Task Force. As stated by one respondent, the faculty involvement was both formal and informal: The faculty members on the Task Force served as a formal communication link with the remaining faculty body, and the informal communication was ongoing. This formal and informal communication network proved to be a strong asset to the Task Force due to the feedback that was constantly being received from the faculty.

According to those persons interviewed, the involvement of faculty members was believed to be extremely important if the Task Force and other administrative recommendations were to be accepted on the campus. The communication of a willingness by the administration to seek faculty input was a necessary ingredient to the success of the program. The Task-Force-designed budget-reallocation process recommended that tenured faculty positions be eliminated for the first time in Grand Valley State Colleges' history. The budget-reallocation process involved the redistribution of funding from academic units rated as lower priority to academic units rated as higher priority. The Spring 1979 budget process ended with the Task Force recommendations and subsequent administrative actions reallocating funds and tenured faculty positions within academic affairs.

The faculty members were involved indirectly and directly in the Budget Process Task Force and in the review of academic programs that were to be phased out or consolidated. According to one respondent, without the input of the faculty, including all the sensitivities that parallel such programmatic recommendations, it would have been impossible to address all the issues.

Proposition 7

> The institution will report that there has been some benefit from the period of fiscal stringency.

This proposition and the questioning that went along with it in the interviewing stage of the data collection elicited by far the strongest and most cohesive answers from those persons interviewed at the institution.

The state of increasing fiscal stringency that occurred throughout the 1970s was a definite benefit to the campus. As stated by one respondent, "The continued belt tightening that occurred was actually good for the campus. . . . The cries that were heard about the terrible plight of Michigan higher education were over-statements." The other respondents supported this statement with the qualifier that the state-required cuts actually allowed the administration to take actions that it would normally not have been able to take. The state-issued Executive Orders 1974-11 and 1975-12 provided a backdrop for the formal actions taken on campus, including the declaration of financial emergency in Spring 1979. According to those persons interviewed, the administration was aware of the decreasing institutional budget flexibility but felt that for local (institutional) political reasons significant retrenchment or reallocation action could not be taken unless there was a backdrop of required budget constrictions by the state.

As stated by one respondent, "it was difficult to take action without formal state action that provided an impetus." With the introduction of the base-budget concept in Spring 1979 and the issuance of a declaration of financial emergency came several direct benefits to the campus.

First, the introduction of a base budget established the concept of a balanced budget for both current and base years. The fact that the budget was projected to be out of balance by an estimated $900,000 required the administration to take direct action to correct the situation. This required budget reduction and fund-reallocation actions would not have been possible without the fiscal stringency. Second, the Board of Control enactment of the condition of financial emergency mandated an internal reallocation process. According to one respondent, the academic community would not accept the prioritization and cutting of both academic programs and faculty unless it was forced to do so. The administration believed that it was not possible or wise to suggest such actions without firm and substantiated reasons. For these two reasons, the externally imposed fiscal stringency provided the administration with not only a reason to take such action, but also, to some extent, a requirement to take such action. All those interviewed stated that such reallocation action was long overdue and direct benefit to the continuation of a sound academic program. The third stated benefit was that with the backdrop of fiscal stringency and the ensuing budget cuts, the institution's budget flexibility increased. According to one respondent, Grand Valley State Colleges was trying to do too much and had spread resources over too wide an area. By prioritization and subsequent elimination of some programs, more funds became available for high-priority items.

Proposition 8

> The institution will report major problems encountered in the attempt to respond to fiscal stringency.

According to the interviewees, the most significant problem encountered was internal communication. The respondents clarified by stating that communication within the institution was their chief problem. The respondents identified three specific subcategories of problems within internal communication systems.

First, according to one respondent, "the campus community was unaware and naive of the budgeting process." This naivete increased the difficulty of establishing a process to effect budget reallocation and change. It was first necessary to educate the campus regarding budgeting techniques before any communication could occur regarding possible changes within the budget. During this period of fiscal stringency there was a strong sense of urgency that was not dissipated until appropriate actions were taken. Attempting to communicate the basics of budgeting during such a period was difficult, at best, according to one respondent.

A second problem area that was linked directly to communicating the concept of base budgeting during a period of fiscal stringency was the need to change past practice and attitudes toward funding levels. According to those persons interviewed, staff members at the campus had always operated on the basis that once a program was established, it would never be discontinued or reduced; this belief was especially strong on the academic side of the institution. This expectation of continuation or momentum of the status quo made it extremely difficult to communicate the need for change. As one respondent stated, "the believability of the need to cut programs and staff was low. It was necessary to persuade and educate staff members regarding the error of past funding practices before convincing the campus community of the present funding necessities."

The third subpart to this internal communication problem was that the communication of the existence of a budget problem created a "we/they" attitude. As stated by a respondent, there was a tendency to form immediate lines of separation between the administration and the remainder of the campus community. This alienation and formation of opposition groups increased the difficulty of internal communication and therefore the ability to effect any change. The barriers that such a campus attitude forms were substantial and required even greater amounts of time and resources to erode such attitudes. As pointed out by one respondent, this internal communication problem was geometrically larger than any problem caused by the external environment.

Proposition 9

> The institution will report successful responses to fiscal stringency.

The response to this proposition by those interviewed fell specifically into the category of process versus specific programmatic successes. Those persons interviewed all stated that the success of any institutional response to fiscal stringency was limited to the existence of a process that allowed for open deliberation and communication by all campus members. One respondent emphasized that it was impossible to implement institutional responses to fiscal stringency without a definitive communication process. The process established by the institution was the Budget Process Task Force appointed by the President in 1979, which formalized the communication and deliberation framework for budget responses. According to the interviewees, the period from the middle to the end of the 1970s was increasingly difficult in terms of both decreased budget flexibility and communication. One respondent stated, "When you know the dollar amount to be cut and the need to change, then do it by moving with dispatch." The budget-review process should be followed to allow for communication and deliberation, but process time should be compressed. This shorted process was termed the only effective way to respond to fiscal stringency.

A second successful measure was the administration's willingness to provide up-to-date data for those involved in the review process. Provision and interpretation of the data helped in communicating the administration's intention to involve the entire campus in a deliberative process.

Proposition 10

> The institution will report that both operational and strategic planning occurred at the institution during the 1970s.

According to those persons interviewed, the institution had undergone a transition regarding the type of planning that was done. As stated by one respondent, "at the start of the mid-seventies, the only type of planning that was completed was administrative in nature and was tied directly to the current budgeting process." As illustrated by the type of reductions that occurred in the early 1970s and the lack of a base-budget review process, the institutional planning that occurred was operational. The actions in Spring 1979 signalled the first time that the institution provided any strategic or long-range planning. According to these interviewees, it was not until the base-budget concept was introduced that any planning for future years occurred. The realization of a sizable deficit required the institution to move swiftly to establish an integrated operation (short range) and strategic (long range) budget process.

Proposition 11

> The institutions will not vary on the projection of the future of higher education.

The respondents did not vary in the projected outlook for the future of Michigan higher education and Grand Valley State Colleges. The respondents reported:

1. The future for Michigan higher education will be more of the same in terms of a decreasing proportion of funds coming from the state.
2. Tuition will continue to increase at a strong pace, increasing the difficulty for students to attend college.
3. If inflation continues at its present rate, increasing selective program cuts will become necessary at all the institutions.
4. Career and professional programs will flourish in the future as students attempt to link education directly to careers.

Given the above statements, all respondents noted that Grand Valley State Colleges would be smaller but stronger in the future. One respondent stated that Grand Valley would improve its market share of the college-age students. The concluding remark by one of the respondents was that higher education would receive decreasing support from the public, but that it would survive.

Case Study: Oakland University

Oakland University is located in Oakland County in the northern tier of suburbs of the Detroit metropolitan area. The University is situated on 1,500 acres about five miles east of Pontiac, five miles west of Rochester, and 28 miles north of Detroit. Oakland County has one of the highest per capita incomes in the United States, and there is substantial industrial and commercial enterprise within commuting distance of the campus. The immediate area around the campus is undergoing intense residential and commercial development.

Noting that Oakland County was the second most populous county in the state and projecting substantial growth in the second half of the century, the Oakland County Planning Commission decided in 1955 that an institution of higher education should be located in the county. The Planning Commission convinced Mrs. Matilda R. Wilson that Michigan State University would be interested in developing a new campus on Meadow Brook Farms, some 75 miles from the main campus in East Lansing. After satisfactory negotiation between Mrs. Wilson and Michigan State University's President Hannah and Vice-President Varner, a gift from Mrs. Wilson of the entire estate and $2 million was announced publicly on January 3, 1957. On that date the Michigan State University Board of Trustees accepted the gift, and on January 23 and 24, 1957, the Michigan House of Representatives and the Michigan Senate, respectively, pledged support and earmarked the land to establish an institution of higher education.

The initial group of 24 faculty was appointed in early 1959. The first student class of about 570 students, all freshmen and entirely commuters, was admitted and registered in September 1959. In 1963, the first graduating class of 146 students received undergraduate degrees. Also, in 1963 the institution changed its name from "Michigan State University-Oakland" to "Oakland University." The enrollment and academic program growth that occurred was dramatic, with the administration taking the formal step to obtain the title of "university" instead of college due to the complexity of programs being offered.

In 1970, by Legislative Act 35, Public Acts of 1970, Oakland University was established as an independent public university under the authority of its own appointed Board of Trustees. Thus, the 13-year formal association with Michigan State University ended.

In 1971, the newly independent Oakland University was the scene of a ten-day faculty strike. This strike was the first in the United States by a university faculty and led to unionization of all faculty at the institution. There were several factors contributing to the environment that fostered the strike and subsequent unionization.

First, the state's economy was becoming increasingly cyclical, causing uncertainty in revenue generation. This uncertainty at the state level was passed directly to the institution in the form of reduced appropriations. A second contributing factor was the decline in public support for higher education as compared to other state departments. Not only were the state expenditures increasing at a slower rate, but also the portion of the funding to higher education was decreasing. The third and perhaps the most significant factor was the large shift in student enrollment patterns. Precipitous drops in teacher-education enrollment threatened the stability of major areas of arts and sciences and also a significant portion of graduate education. These factors combined to cause anxieties and uneasiness in the faculty ranks concerning job security, promotional opportunity, work loads, salary rates, and potential administrative action. The outcome of these anxieties was the faculty strike and unionization, an unprecedented action taken by any college faculty to date.

The responses to the 11 propositions reflect a compilation of data obtained during interviews with the President, Provost, and Vice-President for Business Affairs at Oakland University.

Proposition 1

> The institution will report that the period of fiscal stringency started during the mid-1970s.

The persons interviewed stated that the definition of fiscal stringency as presented during the interview reflected an accurate definition of fiscal stringency. One respondent clarified the definition by adding that the ability of the state to fulfill the appropriated funds was the real question to be addressed. One tenet of the definition was that mid-year reductions in state-appropriated funds to the institution forced the institutions into immediate mid-year cutbacks. It was these mid-year cutbacks that were both unanticipated and severe that mandated the drastic institutional response.

The specific year that was identified by the respondents as the start of fiscal stringency for Oakland University was the 1975 academic year. According to one respondent, the actual start of the "financial pinch" was in the 1974 academic year. But the effect was minimal in terms of specific institutional responses. As stated by that respondent, 1974 was the year in which the institution's administration began to focus on the continual loss of institutional budget flexibility. The enrollment shift from the liberal arts areas to the professional-career-linked disciplines was cited as a strong contributing factor to the loss of an institutional budget flexibility in academic year 1974-75.

Executive Order 1974-11 was issued, which reduced the state appropriations to Oakland University by $190,597. This Executive Order was issued on December 16, 1974, a full six months into the institutional fiscal year. As explained by one respondent, in order to reclaim funds of that magnitude in mid-year, it was necessary to take swift and, at times, heavy cuts. This unanticipated cut required that the budget reductions occurred in any area where it was possible to institute savings.

In 1976 another Executive Order was issued, which affected Michigan higher education and Oakland University. Oakland University received a cut of $250,000. Again, this mid-year reduction necessitated reductions to programs, staff, and nonsalary items. As one respondent noted, the years 1975 and 1976 were difficult transition years for Oakland University.

Table 19 lists the enrollment, expenditure, and state appropriation trend at Oakland University for the years 1974-75 to 1978-79. The areas of state appropriations column 2 and expenditures columns 3 and 4 reflect the slow but steady increase in current dollars. The column on fiscal year equated students reflects the general growth pattern of the institution. The year 1976-77 represented the only year in which the student enrollment actually declined. A review of the data supported the fact that this one-year fluctuation was an abnormality as contrasted to the usual slow-growth mode of Oakland University.

Table 20 presents the effects of inflation and enrollment on the current dollars. The dollar figures in Table 20 have been divided by the fiscal year equated students and deflated by the Higher Education Price Index. The deflation of current dollars by the Higher Education Price Index discounts the effect of inflation and presents the constant-dollar figure that Oakland had to expend. As noted by one respondent, the constant dollars per student declined throughout the period under examination.

<u>Proposition 2</u>

> The institutions will report that cost-saving strategies were implemented in the instructional program in response to fiscal stringency.

According to those persons interviewed, Oakland University's response to fiscal stringency was both cumbersome and complex. The initial response was caused by Executive Order 1974-11, which occurred in December 1974. This mid-year cutback required the institution to take immediate and, according to one respondent, severe actions.

Table 19.--Oakland University institutional data.

Year	State Appropriations	Institutional Expenditures	Instructional Expenditures	Fiscal Year Equated Students
1974-75	$12,515,903	$19,300,427	$ 8,884,118	8,537
1975-76	13,243,095	20,088,590	9,335,710	8,612
1976-77	13,802,802	21,342,657	9,752,992	8,493
1977-78	15,301,400	23,126,327	10,611,730	8,825
1978-79	17,498,475	25,876,696	11,988,101	8,873

Table 20.--Oakland University calculated data.

Year	Higher Education Price Index	Constant Dollars State Appropriations per FYES	Constant Dollars Total Expenditures per FYES	Constant Dollars Instruction Expenditures per FYES
1974-75	166.2	$882	$1,360	$626
1975-76	177.2	868	1,316	612
1976-77	188.7	861	1,332	608
1977-78	201.3	861	1,302	597
1978-79	217.1	908	1,343	622

The following was the reported sequence of events that occurred at Oakland University as a result of the mid-year reduction in state appropriations. The President, the Vice-President for Business, and the Budget Director met to determine the severity of the budget problem. After it was determined that the institution did not have enough fund reserves to solve the problem, a decision was made to make fund reductions. The President in January 1975 gave each executive officer a target cut figure based on the percentage of the total general fund budget that each area held. Each executive officer was to prepare itemized accounts to be cut within their respective areas. Using presidential discretion, the President then determined where the cuts were to occur.

An institutional policy was established that the instructional program should be protected as much as possible. Due to the contractual agreement with the faculty, academic cuts were limited initially to nontenured positions and nonsalary accounts with the aim of preventing faculty layoff.

According to one respondent, the protection of the academic budget required that a larger proportion of the cut must occur in the nonacademic budget. The following actions occurred in the nonacademic budget area:

1. Staff layoff occurred--61 positions were affected either through elimination or reduction in hours.
2. Attrition of vacancies and delayed filling of vacancies was implemented.
3. Equipment purchases and repair was eliminated except in emergency situations.
4. Routine maintenance was curtailed and special remodeling was temporarily eliminated.

5. Staff travel budgets were frozen.
6. Office and normal operating supply accounts were frozen.

The Provost took the following actions to accumulate the academic proportion of the cuts:

1. Library acquisitions were curtailed.
2. Academic lab and classroom remodeling was delayed.
3. A reduction in support staff occurred, affecting 18 positions.
4. Nonsalary accounts were scrutinized, but reduction was limited due to the fact that nonsalary accounts contained only 8% of the academic budget.
5. Part-time and nontenure-track faculty members were notified that due to budget constraints, no commitment could be made regarding future employment.
6. Student employment was reduced, affecting financial-aid programs.

The second Executive Order 1975-12 occurred in December 1975, exactly six months into the academic year 1975-76. The state-mandated cut of $250,000 from Oakland University's budget caused a more severe reactions.

According to two of those persons interviewed, the reduction in 1975 was softened by the fact that some fund reserves existed that could be used to reduce the amounts of actual cuts necessary. However, with the enactment of Executive Order 1975-12, it became apparent to the institutional leaders that a more severe budget problem existed.

The same sequence occurred in response to the second Executive Order. However, according to one respondent, the budget cuts on the nonacademic budgets were beginning to affect "the quality of work life." The issue of staff morale was raised as an incalculable problem affecting the institution. Not only were there staff reductions, but also the work load increased without appropriate compensation adjustments. In addition to the six responses that occurred in 1975, several other programs were instituted.

1. Telephone budgets were cut severely in both the academic and nonacademic budgets. Telephones were allocated at the rate of three or four staff members per telephone, as compared to the previous one per phone.
2. Planned compensation increases were reduced for staff members, and those with reduced appointments or layoff status remained unchanged.
3. A management-by-objective budgeting tool was focused on, with results expected from each unit. Priority setting within programs occurred, with the lowest item targeted for severe reductions. E.g., routine grounds and garden maintenance were a lower priority than building maintenance; therefore, grounds and garden maintenance received a greater percentage of cuts.

In response to Executive Order 1975-12, the academic portion of the budget took unprecedented actions.

1. A position-shift-layoff was implemented, affecting 18 positions and precipitating a two-day faculty strike.
2. Academic program suspension occurred with the suspension of seven programs.
3. Seventeen nontenured faculty received layoff notifications.
4. Student labor received severe cuts, which directly affected the financial-aid program.
5. For the first time, meal, mileage, and travel guidelines were exacted and stringently enforced.
6. Library acquisitions were frozen, and periodical subscriptions were maintained but not expanded.
7. Instructional-equipment budgets were frozen, with the funds reallocated into other budget areas.

According to those interviewed, the fiscal years 1977, 1978, and 1979 were typified as years of increased planning and slow, deliberate reallocation and restoration of budget levels.

<u>Proposition 3</u>

> The institution will report that revenue-augmentation strategies were implemented in response to fiscal stringency.

This area was highlighted by the respondents due to the unique programs that were implemented by Oakland University. There were several areas identified by the respondents as standard responses to increase revenue: maintenance or increased student enrollment, increased tuition rates, increased student resident rates, and increased development activities.

The student enrollment at Oakland University since its start had been on a slow-growth curve. One respondent noted that this slow but constant enrollment and therefore revenue increase was budgeted as an incremental revenue source. The additional student enrollment and credit hour production was a strong asset in the fiscal years 1974-75 and 1975-76 when the institution received state-appropriation cuts amounting to $440,597. The growth of academic-program offerings was curtailed in 1975-76 and 1976-77 due to the budget situation. The lack of available funds necessary as start-up funds for new programs prevented the institution from expanding program curriculum. According to one respondent, the decline of 119 fiscal year equated students in 1976-77 was seen as a direct consequence of the fiscal stringency. The inability of the institution to retain faculty members and the inability to establish new programs directly correlated with the decline in enrollment.

The area of state lobbying received intensification during this period. John DeCarlo, Vice-President for State Relations, was directed to spend 20 percent of his time in the state capital. He spent increased time lobbying the offices of the Governor, legislative offices, Management and Budget offices, and any other office connected with the appropriations process. The institutional effort also included the encouragement of gubernatorial-appointed Board members to lobby identified offices, including giving testimony at appropriation hearings.

The respondents identified the following programs as unique revenue-augmentation programs:

1. An assessment per student per term for library acquisitions. This program was reviewed and supported by the student government in 1975-76 as a means of preventing substantial erosion to the library periodical budget and augmenting the acquisition fund.
2. The 1976 selling of a piece of University commercial property for $300,000 to use for the acquisition of instructional equipment.
3. The administration approached the Oakland Foundation to take over funding of certain general fund items. These items included partial funding of the Meadowbrook Theatre, Meadowbrook Mansion, and associated maintenance costs. Previous year funding levels had allowed for general fund payments for use of these facilities; however, at no time had the general fund been totally responsible for these items.

Oakland University also stepped up its efforts to acquire outside funding through the federal government, foundations, or industry. The office for faculty research received additional attention and support with the direction to increase the proportion of funded activities.

The respondents stated that the years 1974-75 and 1975-76 were the years that received the greatest focus on developing revenue sources due to the realization that this portion of the revenue budget would have to increase to offset the continued erosion of the state appropriations. The years 1976-77, 1977-78, and 1978-79 were less intense; however, this area continued to receive top priority, according to one respondent.

<u>Proposition 4</u>

> The institution will report that reduction of personnel was used in response to fiscal stringency.

According to those persons interviewed, reduction of institutional personnel was used in both 1974-75 and 1975-76. The remainder of the 1977-78 and 1978-79 period did not have specific personnel-reduction actions implemented, as reported to the researcher. The first reduction in personnel occurred directly as a result of Executive Order 1974-11 and primarily affected the nonacademic area.

In response to the budget reduction, 61 positions were affected in the nonacademic area in fiscal year 1974-75. The reduction in these positions reflected a variety of personnel actions, including reduction in hours, reduction of appointment, elimination of position with layoff of the incumbent, elimination of position due to attrition, and not filling or delayed filling of an open position. According to one respondent, these reductions were more severe in the nonacademic sector because of the inability to make swift changes in the academic sector. One respondent stated: "The reduction of staff in the nonacademic sector had a negative impact on the institutional environment and the quality of student life."

The mid-year curtailment of funding that occurred in 1974-75 also affected the academic sector. Notification was given to part-time and nontenure faculty members that no commitment for employment could be made. As reported by one respondent, 18 academic-support-staff positions were also affected. The support-staff-reduction activities included reduction in appointment, reduction in hours, and attrition of vacant positions.

Executive Order 1975-12, which occurred in December 1975, had a much greater effect on the academic sector. According to one respondent, the personnel actions that occurred in 1975-76 were unprecedented and significantly affected the institution.

As explained by one respondent, Oakland University has had a contractual agreement with the faculty since 1971. This faculty agreement specifically defined and outlined all possible administrative actions regarding faculty. The faculty agreement outlined policies governing the appointment, compensation, retention, promotion, discipline, layoff and recall rights of faculty, as well as other pertinent articles. This all-encompassing agreement was identified by one respondent as providing the necessary tool to respond to Executive Order 1975-12.

In Spring 1976, Oakland University used Article VIII, Section 39, of the faculty agreement and enacted a position-shift-layoff. Under the contract, the institution was obligated to maintain a student-faculty ratio of 20.7 students to one faculty member. As long as this ratio is not negatively affected, the management of the institution has the right to transfer faculty appointments from areas of low priority to areas of higher priority. The contract also states that the institution does not have to be in a state of financial emergency to activate Article VIII, Section 39. The following items were the actions taken:

1. Careful adherence to all guidelines.
2. Management prioritization of academic programs.
3. Layoff of any faculty member, not contractually covered, in the targeted program before implementation of the position-shift-layoff.
4. Total involvement of faculty positions to be shifted.
5. Identification of specific faculty positions to be shifted.
6. Proper notification of layoff and recall rights, including 18-month continuation of appointment.
7. Assurance that remaining faculty in the affected program were capable of work.

As reported by the respondents, even though the position-shift-layoff was an effective tool to redirect academic resources, it negatively affected the institution in the short run. As a consequence of the administrative action, Oakland University had a two-day faculty strike in 1976 to protest the actions. The administration had carefully adhered to all tenets of the faculty agreement, with administrative presentations to faculty governing groups to ensure communication.

Proposition 5

> The institution will report that the discontinuance of academic programs was used as one response to fiscal stringency.

It was agreed by all persons interviewed that this response to fiscal stringency was the most severe action that an institution could implement. Oakland University used the discontinuance of academic programs in 1976 and in no other year under study.

In conjunction with the position-shift-layoff that occurred in 1976, seven academic programs were suspended. According to two of the interviewees, the programs were suspended for a combination of reasons: low institutional priority, low student enrollment, high cost per student, and lack of faculty credentials. The following four-year academic programs were suspended in 1976:

- Bachelor of Arts (B.A.)
- Studio Art
- Classical Civilization
- Classical Languages
- Latin
- Speech Communications
- Latin--Secondary Education

In addition, the Academy of Dramatic Arts Programs, a two-year academic program, was suspended. As stated by one respondent:

> The suspension of any academic program at the University undermined the institutional responsibility to provide programmatic depth and breadth for the students. The current suspensions would not have occurred during times of budget adequacy.

As reported by one respondent, a corollary to the suspension of academic programs was the absence of new program starts. Funds were not available for the up-front costs associated with starting a program, including faculty recruitment, equipment acquisition, and other associated costs. As noted, the faculty political arena would likely not support a new program start-up at the costs of a current program. An additional fact presented was that during this period the State of Michigan Legislature was scrutinizing new programs carefully before funding recognition.

Proposition 6

> The institution will report that faculty members were involved in developing institutional responses to fiscal stringency.

According to one respondent, the involvement of the faculty was a crucial element in the ability of Oakland University to respond to fiscal stringency. In January 1975, the President assigned target cuts for the institution in response to Executive Order 1974-11. As part of the academic-sector response, the Provost worked on a consultative basis with two parallel faculty groups: the Faculty Senate and the Faculty Agreement Committee. Each group was involved in the process to ensure that all faculty members were informed concerning administrative actions. The involvement of the faculty intensified after the February 1975 assignment of targeted cuts to the budget centers within academic affairs. The negotiation process continued, with faculty members recommending areas for budget reduction and aiding in the prioritization of programs.

Executive Order 1975-12, which occurred in December 1975, signalled the start of another period of intense faculty involvement in developing institutional responses to fiscal stringency. The layoff could not have been an effective program without the support of the faculty. Even though a strike occurred, there was recognition by the faculty that the administration had the right to allocate resources as necessary. The faculty involvement consisted of a programmatic review committee, a budget review committee, and a contract-interpretation committee. All committees performed the informal role of communication and the formal role of reviewing suggested institutional actions.

According to those persons interviewed, faculty involvement in institutional planning was formalized with the appointment of the University Planning Committee in 1976.

> Impetus for the establishment of the committee came from a desire to expand the planning program, from renewed faculty interest in planning triggered by suspension of the classics major and the Academy of Dramatic Art in 1976, and from concern about the future because of the rapidly changing state demographic patterns. The University President selected University Planning Committee members from nominees submitted by several representative bodies. Six faculty, three students, and two administrative professional staff were named to the committee through the nomination process, and several academic administrators were also appointed to the committee.

One respondent stated that the involvement of the faculty was not just in the area of developing institutional responses to fiscal stringency, but also entailed a consultative network advising the institution's administration on all areas of importance. The faculty involvement continued on both the formal and informal levels throughout the period under examination.

<u>Proposition 7</u>

> The institution will report that there were some benefits from the period of fiscal stringency.

The immediate reply by one respondent was, "An administrator would have to be a masochist to state that fiscal stringency was a benefit." This same respondent clarified further, stating that "All institutions over time develop inefficiencies, cumbersome organizations, fat, redundancies, and unnecessary duplications, which deserve focus in times of fiscal stringency."

The formal actions taken by the State of Michigan in the form of Executive Orders 1974-11 and 1975-12 provided a framework for the administration to act. The externally imposed reductions precipitated internal organizational changes and, as a consequence, improvement in efficiency and communication. One respondent stated that a specific benefit to the campus was that communication improved with the desire of all groups to be involved in the institutional changes.

The respondents generally agreed that the required cuts forced the administration to prioritize programs and budgets. This exercise would not have been completed as quickly or comprehensively without budget restraints.

Proposition 8

> The institution will report major problems encountered in the attempt to respond to fiscal stringency.

According to those persons interviewed, the largest problem encountered was internal procedural hurdles. Specifically identified was the faculty agreement, which made it difficult to achieve immediate savings. One respondent stated that

> The formal faculty agreement provided a framework for the management of faculty members. Yet, at the same time, the bureaucracy that it established prevented swift administrative action, which was the purpose of the agreement anyway.

The mid-year Executive Orders 1974-11 and 1975-12 that required a total reduction of $440,597 from the general fund account forced cost savings to be implemented with minimum planning. This, according to one respondent, was a conceptual problem for the institution's management. The institutional budget was carefully constructed each year after the review of campus activities and programs, without prioritization. Within each executive officer's budget, specific programs were recommended and designated expenditures assigned to that unit. In 1974-75 and 1975-76, the budget-building exercise was primarily the responsibility of the President, the Vice-President for Business Affairs, and the Budget Officer. These individuals were responsible for reviewing the input from all sectors and boiling it into an institutional budget. One respondent stated that:

> Mid-year cutbacks caused a conceptual problem due to the fact that there was minimal time to effect relatively major cost savings--the implication was that planning was not recognized as important--the opposite of what the budget-building project was all about.

The immediacy of the cutbacks caused not only a conceptual problem, but also an implementation problem.

As noted in the quotation from one respondent, that faculty agreement specified actions that must occur in order to effect change. This agreement, in effect, protected the academic sector from significant cuts during 1974-75 and shifted the responsibility for cuts to the nonacademic side. The implementation of academic-side cutbacks was resolved to be deliberate, cumbersome, and slow, due to structure. According to one respondent, an early administrative determination was made regarding the suspension of academic programs. The implementation of a position-shift-layoff was significantly delayed due to faculty governance and the faculty agreement.

The respondents agreed that, in retrospect, the implementation of cutbacks could have been minimized if there had been advance warning of the mid-year cuts and therefore more planning time. The key element of the implementation stage was the requirement for involvement and communication with all sectors of the university community.

Proposition 9

> The institution will report successful responses to fiscal stringency.

The respondents agreed that the position-shift-layoff implemented in Spring 1976 was by far the most effective single response. One respondent commented that: "Even though the position-shift-layoff was effective and legal, it was a cumbersome and traumatic experience for the institution to go through--it was outrageous to lay off tenured faculty."

A successful outgrowth of the dramatic actions taken in 1974-75 and 1975-76 was an increased interest in campus communication and involvement. The success of Oakland's response to fiscal stringency was tied to the ability of the key actors to communicate adequately the need for change and to elicit the input from those affected.

A second successful response identified by one respondent was the institutional commitment to protect the academic sector at the costs of the nonacademic sector. Even though a position-shift-layoff occurred, the academic sector did not suffer the cutbacks that occurred in personnel, services, and programs that were implemented on the nonacademic side of the budget. This commitment was established in January 1975 by Oakland's President as a means to protect the key mandate of the university--instruction. This response to fiscal stringency prevented the erosion of academic quality and helped to counter concerns by faculty members about the future.

Proposition 10

> The institution will report that both operational and strategic planning occurred at the institution during the 1970s.

According to those persons interviewed, there was a significant change in the type of planning that occurred at the institution. In the fiscal years of 1974-75 and 1975-76, the planning was current year in nature. This operational planning was based on the fact that adequate funds were available for programs. The primary individuals involved in planning in 1974-75 and 1975-76 were the President, the Vice-President for Business Affairs, and the Budget Officer. As stated by two respondents, these three individuals reviewed proposals and implemented budgets. There was not the involvement in an organized formal network of all campus sectors.

The Executive Orders that occurred in December 1974 and 1975 directly affected the type of planning that occurred at Oakland. According to one respondent, "it was only after the second Executive Order that we realized how vulnerable the institution was without significant planning."

The appointment of the University Planning Committee by the President in Spring 1976 signalled the formalized start of strategic long-range planning at Oakland University. The charge to the committee was to complete planning for the future of the University (5 to 15 years). The committee was composed of six faculty, three students, two administrative-professional staff, and several academic administrators. According to one respondent, this significant step by the administration encouraged increased dialogue and formal communication at the institution than had previously existed. The initial report of this committee was presented to the President in September 1978 and consisted of 36 pages of carefully reviewed proposals. This strategic plan included recommendations for the 1978-1993 periods, five-year University goals and objectives, academic and budget projections, and analysis of the 15-year projections. The planning document provided target figures for fund levels, physical-plant size, and student enrollment. Guidelines were presented for public-service programs, academic-support services, student life, curriculum, and faculty administrative levels.

In addition to the appointment of the University Planning Committee in 1976, the President established the University Budget Committee in Spring 1977. One interviewee noted that the formalization of the budget planning was recognition that greater institutional involvement was necessary than was apparent in 1974-75 and 1975-76. The membership of this committee consisted of the President, the Vice-President for Business Affairs, the Academic Deans, and the Budget Officer. The inclusion of budget planning into the strategic planning network was aimed at providing greater lead time and increased budget flexibility if it was necessary to respond to additional cutbacks.

Proposition 11

> The institution will not vary on the projection of the future of higher education.

There was general agreement among the interviewees regarding what the future for Oakland University would be. Each respondent predicted that there would be a continued erosion of the state-appropriation percentage of the budget, which would cause a direct increase in the portion of the budget supported by tuition revenues. The erosion of state support could not be offset by tuition increases; therefore further cutbacks are surely to continue.

A mutual concern was expressed by the interviewees that continued significant curtailment of state spending in Michigan higher education would cause it to lose in national prominence. This would directly affect Oakland's ability to attract and retain outstanding students and faculty members. The availability of funds would also have a direct effect on the ability of faculty members to attract outside grant activity.

Case Study: University of Michigan

The University of Michigan was founded in 1817 in the frontier town of Detroit as "Michigania," an institution chartered by the Territorial Legislature. The institution accepted a gift of 40 acres in Ann Arbor, Michigan, and subsequently reorganized and relocated to Ann Arbor in 1837. The first college class was admitted in 1841, when the first buildings were constructed. The constitution of 1850 made the University of Michigan unique among state universities by providing for the guarantee of autonomy by mandating the public election of a Board of Regents. This still stands as one of the unique characteristics of the University of Michigan, which has allowed for some political insulation. The autonomous principle was reaffirmed by the constitutions of 1908 and 1963. As recently as 1978, the Michigan Legislature reviewed mandating that all Boards of

Control for higher education institutions should be appointed by the Governor of Michigan.

The University of Michigan is located in the heart of the city of Ann Arbor, which has a population of 107,000 people. Nearly 200 major buildings on the Ann Arbor campus of 2,608 acres house 35 libraries with nearly six million volumes, 9 museums, several hospitals, and hundreds of laboratories. These research and teaching laboratories are internally renowned in many fields, receiving annual awards and numerous research projects. Within the university structure, an academic program is evaluated based partially on the outside research projects that it is performing.

The University of Michigan faculty rank within the top five of American institutions of higher education. These rankings are important not only for outside press but also for internal budget and space allocation. Each program competes strongly with world-renowned departments in their attempts to attract and retain top faculty and students. The faculty ratio of 12 students to one faculty member is presented as a mark of the university's commitment to students.

The University of Michigan has taken deliberate action to begin to down-size. This action was based on the expected continuation of funding difficulties, as well as the decreasing pool of high school seniors. The university has made it a specific policy not to alter academic standards in order to attract a certain freshman-class size.

Proposition 1

> The institution will report that the period of fiscal stringency started during the mid-1970s.

There was agreement among those persons interviewed that fiscal stringency started with Executive Order 1974-11, which occurred in December 1974. The definition of fiscal stringency as a condition of limited state revenue and escalating costs which necessitated the mid-year curtailment or elimination of planned or existing programs was stated as an accurate description of the condition that the University of Michigan faced in 1974-75. Executive Order 1975-12, which occurred in December 1975, was the second forced reduction within a 12-month period and also occurred mid-year. According to one respondent, mid-year state reductions were of much greater severity than first-quarter reductions or decreased initial appropriations. The later in the fiscal year that a state reduction was imposed, the less time was available to plan, implement, and capture unexpended funds. The fiscal stringency occurred because the mid-year cuts magnified the actual dollar amount that was cut.

As stated by one respondent, in 1974-75 and 1975-76 the Executive Orders that occurred were perceived as the result of a short-lived state fiscal problem. It was not until additional economic research was conducted at the University of Michigan on the State of Michigan's financial position that the probable permanence of the fiscal-stringency condition was recognized. The Executive Orders 1974-11 and 1975-12 were perceived as an external symptom of a long-range economic problem.

There was general agreement among those interviewed that the period from July 1976 through June 1979 represented an improvement in the state financial condition and the parallel state appropriations to the University of Michigan. Even though the improvement occurred, it did not offset the damage that the university incurred as a result of Executive Orders 1974-11 and 1975-12. The institution's budget flexibility had been the strength of the institution for decades. The start of fiscal stringency reduced budget flexibility and curtailed the quality of the university, according to one respondent. Throughout the period under examination, the institution was involved in programs designed to reallocate internal budgets and prevent wholesale reductions in the general-fund portion of the university.

Table 21 presents the raw data for the University of Michigan on state appropriations, institutional expenditures, instructional expenditures from the general fund, and fiscal year equated students. Throughout the period under examination, the university had a slow and steady decline in fiscal year equated students. This decline was planned and reflected the desire of the University of Michigan to begin a slow down-sizing of the institution. A significant statement was reflected in the data on instructional dollars expended during this period of fiscal stringency and declining state appropriations. Table 21, column 4, reflects this information. Also during this time, constant dollars expended in instruction reflected the ability to transfer funds from other budget areas to the instructional program. This is reflected in the figure presented in Table 22, column 5, consant dollar instructional expenditures per fiscal year equated

Table 21.--The University of Michigan institutional data.

Year	State Appropriations	Institutional Expenditures	Instructional Expenditures	Fiscal Year Equated Students
1974-75	$ 95,681,000	$157,622,000	$ 75,453,000	37,471
1975-76	98,316,000	165,749,000	79,493,000	37,469
1976-77	99,934,000	173,838,000	85,648,000	36,658
1977-78	109,937,000	187,475,000	93,388,000	35,613
1978-79	130,760,000	216,350,000	106,993,000	35,197

Table 22.--The University of Michigan calculated data.

Year	Higher Education Price Index	Constant Dollars State Appropriations per FYES	Constant Dollars Total Expenditures per FYES	Constant Dollars Instruction Expenditures per FYES
1974-75	166.2	$1,536	$2,531	$1,212
1975-76	177.2	1,481	2,496	1,197
1976-77	188.7	1,445	2,513	1,238
1977-78	201.3	1,534	2,615	1,303
1978-79	217.1	1,711	2,831	1,400

student. In 1974-75 the university expended $1,212 constant dollars per fiscal year equated student, and in 1978-79 the university expended $1,400 constant dollars per fiscal year equated student, a 15.5 percent increase. The increase was a result of deliberate institutional action, including internal reallocation of funds and decreasing student enrollment, according to those interviewed.

Proposition 2

> The institution will report that cost-saving strategies were implemented in the instructional program in response to fiscal stringency.

According to those persons interviewed, specific responses at the instructional level did not occur in the years 1974-75 and 1975-76. The institution responded to Executive Order 1974-11 and 1975-12 through the use of non-general-fund-account balances versus direct cuts to the general fund. One respondent identified the sources for the funds used to respond to the Executive Orders: the residual balance from the indirect cost recovery fund, the designated fund, and the undesignated endowment fund. The indirect cost recovery fund was established to recover indirect overhead costs associated with primarily outside research grants. The indirect costs charged to granting agencies included facility and laboratory rent, utilities, clerical and administrative support, and research charges. The funds available for redirection from the designated fund consisted of interest accumulated on working capital. The funds available for reallocation from the undesignated endowment fund were the accumulation of small gifts. These three funds were historically used for one-time, nonreoccurring projects, such as research-laboratory renovation, specific research or instructional-equipment acquisition, major renovation or maintenance projects, library acquisition and augmentation, nonreoccurring alumni or development activities, and capital-improvement activities. The use of these funds to respond to Executive Orders 1974-11 and 1975-12 was deemed an appropriate response at the time, according to one respondent. "However, the use of funds, previously budgeted for nonreoccurring specific projects, to directly augment ongoing and reoccurring general-fund activities was, in hindsight, a questionable activity," stated one respondent.

Account centers that were affected by the 1975-76 Executive Order were nonsalary instructional accounts. The two account centers that received the largest reductions were supplies and equipment. The data presented in Table 23 clearly illustrate the dramatic decrease in the instructional-equipment budget from $287,764 in 1974-75 to $93,969 in 1975-76. This reduction was a budgetary decision and not due to the fact that equipment acquisition was not required that year. One respondent noted that the same magnitude cut was taken in the instructional-supplies account, with a decrease of $770,863.

Table 23.--The University of Michigan general-fund expenditures in instructional units (in thousands).

	1974-75	1975-76	1976-77	1977-78	1978-79
Equipment	$ 288	$ 94	$ 384	$ 275	$ 215
Supplies	4,477	3,706	3,856	5,036	5,214

According to those persons interviewed, the most significant deliberate action taken by the institution was the implementation of the priority fund in 1977-78. The priority fund was established by the institution to provide increased budget flexibility through reallocation. Stated below are the basic guidelines:

1. Academic units were to turn back .5 to .66 percent of the allocated general-fund budget to the priority fund each year for three years.
2. Nonacademic units were to turn back 1 percent of the allocated general-fund budget to the priority fund each year for three years.
3. Each unit had the option of proposing programs for funding from the priority fund.
4. Each unit in the institution was in competition for the priority-fund allocation.
5. All proposals for funding were reviewed by the Vice-President for Academic Affairs, the Dean's Council, and the Budget Priority Committee.
6. Final authorization to allocate funds from the priority fund was given by the Vice-President for Academic Affairs.
7. The priority fund was established as a management tool with open access for institutional groups.

According to one respondent, the priority fund served as an effective vehicle for reallocating funds from the noninstructional units to the instructional units. It also served the purpose of reallocating funds from lower-priority instructional units to instructional units with higher priority.

In 1977-78 and 1978-79, the institution implemented an alteration to the annual compensation plan. One respondent stated that:

> In 1977-78 and ensuing years the administration implemented a salary increase plan that caused units to partially fund pay increases from unit budgets. After the announced compensation plan of an 8 percent increase for 1977-78 the units were allocated a 7 percent increase and were required to accumulate the additional 1 percent from internal salary cannibalization without touching the nonsalary accounts.

The units were further restricted because the minimum announced pay package must be met. In addition to the compensation plan just reviewed, the institution implemented two programs designed to ensure that the university would remain competitive in the marketplace. According to one respondent, after study of national, state, and local job-market statistics, in 1977 it was determined that the university was not providing enough flexibility in its compensation program. This caused the institution to fall from competition on salaries. The inability of a unit to compensate a talented individual and therefore retain the individual was causing a loss of key personnel. The university implemented a less rigid plan on annual compensation in 1977-78. This revised plan allowed a unit to give additional annual adjustments to recognize merit or marketplace factors. The second plan implemented in conjunction with the reduced rigidity on annual compensation plan was a mandated annual increase in minimum compensation. This second plan was designed primarily to affect the lower clerical classifications as it was documented that the university was paying less than the local labor market, and units were experiencing high turnover in these positions.

One respondent stated that the University of Michigan was a "dynamic organism constantly changing, reallocating, reducing, and expanding." It was pointed out that while there were program consolidations during the period under examination, it could not be documented that the consolidations occurred because of fiscal stringency. Throughout the long history of the University of Michigan, the institution has reduced, consolidated, and eliminated programs even during times of plenty.

The respondents agreed that it would be an error to report that major steps were taken in the instructional units to effect dramatic cost-saving strategies during this short period of time under study.

Proposition 3

> The institution will report that revenue-augmentation strategies were implemented in response to fiscal stringency.

The respondents during the interview stated that revenue augmentation had always been an area of top priority for the University of Michigan. The University Offices for Development and State Relations are both vice-presidential levels on the university cabinet. The two respective offices have complete staffs and had been actively involved in direct-revenue-generating activities for decades. According to one respondent, the Executive Orders 1974-11 and 1975-12 did not cause the institution to implement immediate changes. "The University of Michigan has been through many cyclical periods with the state budget, and the institution never responded to fluctuations by dramatic actions."

Activities that did occur at the institution during this time period included tuition-rate increases, alteration of student-enrollment mix, and increased aggressiveness toward acquiring research grants. As stated by one respondent, "The budgetary requirement to continue raising tuition levels was not adequate to charge students more, but instead, a function of the economy." The state and national economic figures documented the fact that inflation continued to increase at a high rate between 1974-75 and 1978-79. A guideline that had been used for research purposes was the Higher Education Price Index by Kent Halstead (Table 24). This index reflected the costs of items used specifically in higher education, as compared to the consumer price index. According to one respondent, there were two actions that were occurring between 1974-75 and 1978-79. The rate of the State of Michigan's economic growth was slowing, and the rate of inflation was increasing. This meant that the cost of doing business was increasing at the same time that the funds provided to the University of Michigan were increasing at a slower rate.

Table 24.--Higher Education Price Index.

Year	Price Index
1974-75	166.2
1975-76	177.2
1976-77	188.7
1977-78	201.3
1978-79	217.1

Note: Halstead analyzed the costs of items consumer primarily by institutions of higher education to develop this price index.

One result was the increased tuition rates for students. During this time period, undergraduate tuition rates increased from $852 per semester to $1,170 per semester--a 37 percent increase for in-state students. Graduate-level tuition increased 53 percent. These tuition-rate increases directly affected the increase in tuition revenue for the University of Michigan. In 1974-75, the university collected $48,033,000 in tuition and fee revenue, and in 1978-79 the same revenue account generated $66,791,941--a 39 percent increase. (See Table 25.)

Table 25.--The University of Michigan tuition and fee revenues.

Year	Tuition and Fee Revenue
1974-75	$48,033,000
1975-76	53,055,079
1976-77	57,427,260
1977-78	60,595,412
1978-79	66,791,941

One respondent stated that the increase in tuition and fee revenue was directly related to the mix in student enrollment. The University of Michigan had the reputation as a nationally and internationally recognized research institution that could easily admit additional out-of-state and foreign students. The significant factor was that out-of-state students paid much higher tuition rates--a ratio of 3:1 as compared to in-state counterparts. (See Table 26, columns 1 through 4.)

Table 26.--The University of Michigan tuition rates.

Year	In-State Undergraduate	Out-of-State Undergraduate	In-State Graduate	Out-of-State Graduate
1974-75	$ 852	$2,700	$1,096	$2,840
1975-76	904	2,862	1,160	3,008
1976-77	980	3,134	1,272	3,300
1977-78	1,078	3,350	1,440	3,552
1978-79	1,170	3,530	1,690	3,800

The increase in tuition and fee revenue occurred even though there was a decline in student credit hour production during the time period under discussion. In 1974-75 the total student credit hour production was 1,029,564; by 1978-79 that figure had decreased to 1,001,449--a 2.7 percent decline.

The decline in student credit hours for the institution was centered at the undergraduate level. In 1974-75 the undergraduate student credit hour production was 775,707; in 1978-79 that figure had decreased to 662,503 student credit hour production, as reported to the State of Michigan. At the same time this decrease was occurring in undergraduate education, graduate education experienced a 34 percent growth from 253,857 student credit hours in 1974-75 to 338,946 student credit hours in 1978-79. This shift from undergraduate to graduate-level enrollment was a direct benefit to the tuition and fee revenue account.

The last area of revenue-augmentation activities addressed by the respondents was outside-grant activity. In 1977 the university established an incentive plan for faculty members and units that successfully acquired outside research or other grant activities. The procurement and retainment of research dollars was used as an element in reviewing a faculty member's performance for annual raises, tenure-track activity, and general review concerning promotion. The level of outside grants was also used as a criterion in the evaluation of an academic unit's merit.

The revenue-augmentation activities continued throughout the period under examination as the institutional executive officers realized that these funds were necessary to supplant the declining state portion of the budget.

Proposition 4

> The institution will report that reduction of personnel was used in response to fiscal stringency.

There was very emphatic agreement from all persons questioned at the institution that there was no centralized implementation of an instructional-unit reduction in personnel. The 1974-75 and 1975-76 Executive Orders were responded to out of centralized institutional fund accounts and did not require specific unit personnel actions. However, it was noted by one respondent that throughout the period under examination, personnel fluctuations did occur. The academic deans at the University of Michigan had a degree of autonomy that allowed for nonreappointment and appointment of nontenure-track faculty members. During this time period there was an increase in turnover at the unit level, but specifically not centrally controlled or coordinated.

Regarding appointment activities for tenured faculty members, one respondent stated that:

> The University of Michigan has not and will not consider the layoff of tenured faculty members. The damage by such an action would be indeterminant in the loss of institutional quality due to the foreseeable inability to attract and retain quality students and faculty.

In the noninstructional area, unit consolidation occurred with the merger of the University Architects Office, the University Planner Office, and the Plant Extension Office into one administrative unit in 1978-79. According to one respondent, this action was taken to eliminate duplication of administrative overhead and improve efficiency in the delivery of service to the campus. The noninstructional areas experienced increased pressure due to the emphasis placed on protecting the instructional units from fiscal stress.

Proposition 5

> The institution will report that the discontinuance of academic programs was used as one response to fiscal stringency.

According to those persons interviewed, the University of Michigan did not use discontinuance of academic programs as a direct response to fiscal stringency. During the time period under examination, there were several actions taken within the academic sector. However, as noted by one respondent, the changes that did occur would have occurred in a timely manner anyway.

In 1976-77 one aspect of the speech pathology program in the School of Public Health was transferred into the School of Education under the special education program. The transfer was designed to improve the delivery of instruction and to eliminate some costs due to duplication. Faculty and staff members received transfer without layoff. The Bachelor of Science, School of Pharmacy, was also targeted for phase-out as it was determined that greater emphasis should be placed on graduate education. The one program that was terminated was the Population Planning Program. This program in the School of Public Health was phased out due to low institutional priority and high costs.

According to one respondent, the University of Michigan did note that program discontinuance could be a significant problem for the institution. In 1976-77, as a consequence, the university undertook a study to establish appropriate guidelines for the discontinuance of academic programs.

<u>Proposition 6</u>

> The institution will report that faculty members were involved in developing institutional responses to fiscal stringency.

There was general agreement among those persons interviewed regarding the historically active involvement of the faculty at the institution. In response to both Executive Orders, 1974-11 and 1975-12, the University of Michigan met the obligated fund cut by transferring funds from non-general-fund accounts. There was minimal involvement of faculty members except in the review by the Budget Priority Committee of the action that the administration was taking. The Budget Priority Committee consisted of representative faculty members involved in the review and therefore advisory role regarding administrative decisions. As one respondent noted:

> The reputation of this institution was built on the talents and reputations of the faculty members. It has been their direct involvement in this institution that has allowed the reputation to grow.

Faculty involvement at the University was expected in all areas, including the review of nonacademic units' performance and recommended changes. With the establishment of the priority fund in 1977-78, the involvement of the faculty members increased. Faculty involvement at the academic-unit level consisted of the documentation of funding proposals that were presented to the priority fund for review. The faculty members were involved in the review of all funding proposals through the Budget Priority Committee, which reviewed and made recommendations on funding to the Vice-President for Academic Affairs. The priority fund was established to reallocate funds from areas of low priority to areas of high priority, which increased budget flexibility. Throughout the remainder of the time period under research, faculty involvement maintained a key role in institutional decision making-- a role not likely to diminish, according to one respondent.

Proposition 7

> The institution will report that there were some benefits from the period of fiscal stringency.

The interviewees agreed that the only benefits to the institution were spin-off benefits. The fiscal stringency increased the review and analysis of each unit's performance. The benefit to the institution was that the additional scrutiny focused on areas where cost savings were implementable and beneficial. The institution-wide review, which became more acute as a result of the priority fund, led to increased budget flexibility. As one respondent noted, "The new-found budget flexibility still did not match the budget flexibility that existed prior to Executive Order 1974-11." According to one interviewee, the benefits that occurred because of fiscal stringency could have been surpassed without fiscal stringency.

Proposition 8

> The institution will report major problems encountered in the attempt to respond to fiscal stringency.

As reported by the interviewees, the major problem encountered was institutional budget inflexibility. The institutional response to

Executive Orders 1974-11 and 1975-12 had, to some extent, contributed to the decrease in budget flexibility. The use of funds from the designated fund interest, residual amounts in the indirect-costs-recovery fund, and funds from the undesignated-endowment fund eroded the ability of the institution to use those funds for normal purposes. At the end of fiscal year 1975-76, two years after the start of fiscal stringency, no hard decisions to prioritize funding had occurred, according to one respondent.

Proposition 9

> The institution will report successful responses to fiscal stringency.

There was unanimous agreement among the respondents that the most successful response was the priority fund established in 1977-78. The priority fund was established by the institution to provide increased budget flexibility through internal budget reallocations. The design of the program allowed for movement of funds, based on prioritization of the funding proposals. Academic units were required to turn back between .5 and .66 percent of the allocated general-fund budget to the central priority fund. Nonacademic units were required to turn back 1 percent of the allocated budget to the priority fund. The priority fund was a management tool that received broad publicity, broad participation, and broad acceptance. According to one respondent, it was an excellent mechanism that achieved success due to its announced objectives, openness of participation, and, of course, timeliness. There were, however, two criticisms of the fund: first, that it was not started sooner and second, that it should have been for a larger percentage.

A second successful response to fiscal stringency was the willingness of all institutional factions to participate in institutional dialogue. According to one respondent, up to and including the years 1974-75 and 1975-76, the campus dialogue typically focused on narrow issues. However, with the realization of the permanence of the condition of fiscal stringency, more attention was focused on the broad issue of institutional quality. The goal of an informed institution, through communication, was in itself a successful attainment.

Proposition 10

> The institution will report that both operational and strategic planning occurred at the institution during the 1970s.

The interviewees agreed that there was a definite change in the type of planning that was completed at the institution during this time. In the early years of the period under examination, the planning that was completed was limited to current-year budgeting based on historical trends and accounting for present demands. The procedure that was followed during 1974-75 and 1975-76 was primarily incremental budgeting. The University of Michigan had grown accustomed to increased tuition revenues based on enrollment growth, increased state appropriations, and an increased endowment fund. The need for the difficult task of program prioritization had not existed as strongly before the two Executive Orders occurred. The institutional administrators realized the importance of long-range strategic planning once the economic picture of the state was presented.

The type of planning that began to occur in 1976-77 and continued through the remainder of the period under examination was long range. As pointed out by one respondent, the use of computer modeling provided the institutional managers with a tool to begin reviewing possible alternatives and consequences of potential administrative actions. Of key importance to the modeling effort was the use of multi-year raw data as compared to the earlier reliance on only prior-year data. The modeling of the institutional budget was extended to five-year projections, which allowed key administrators to see the long-range effect of salary packages, utility costs, state appropriation levels, and other budget elements. The sophistication of the modeling allowed for a trial-and-error approach to long-range planning without the consequences of real budgeting. According to one respondent, the fiscal stringency that occurred forced the institution to begin looking at budget alternatives that may never have been considered without the fiscal stringency.

Proposition 11

> The institutions will not vary on the projection of the future of higher education.

There was total agreement among those interviewed that the future of public higher education in Michigan was one of continued fiscal stringency. The University of Michigan will not change its basic nature. The integrity of the institution will be maintained and possibly enhanced. One respondent replied to a question about the university plan to become smaller and better by stating, "There is nothing good about being smaller, only that it is a strategy to enhance the overall quality of the institution."

CHAPTER V

SUMMARY AND IMPLICATIONS

Summary of the Study

The five-year period from 1974-75 to 1978-79 was a critical period for Michigan institutions of higher education. During this short period the institutions were responding to dramatic reductions in financial resources. On December 16, 1974, Executive Order 1974-11 was signed into law by Governor William G. Milliken, reducing state appropriations to Michigan public four-year higher education institutions by $6,419,117. This specific act precipitated the start of fiscal stringency for the institutions. On December 9, 1975, Executive Order 1975-12 was signed into law by Governor Milliken, reducing state appropriations to Michigan's public four-year institutions by $7,510,250. These two actions reduced funds available to the institutions by $13.9 million.

Following the two years with these Executive Order reductions, the public four-year institutions of higher education were expending fewer constant dollars per student than in fiscal year 1973-74. In fiscal year 1973-74, the institutions spent an average of $1,935 per fiscal year equated student. In fiscal year 1974-75, that figure dropped to $1,864 per student. In fiscal year 1975-76, that figure continued to drop to $1,781. It was not until fiscal year 1978-79, five years later, that the constant dollars expended per student surpassed the fiscal year 1973-74 expenditure year level.

The sequence of events that occurred at the state level and consequently at the institutional level reflected increasing costs and decreasing revenue.

> The essence of the problem was that costs and income were both rising, but costs were rising at a steady or a slowly growing rate, whereas income was growing at a declining rate. (Cheit, 1973)

The institutions were faced with a mid-year dilemma of responding to unanticipated reductions of appropriated state funds in December 1974. As a result of the State of Michigan Executive Orders 1974-11 and 1975-12, the institutions of higher education "entered a period of profound fiscal stringency" (Hechinger, 1972).

The studies previously conducted on a national level, as reported in Chapter II, researched institutional financial conditions, cost-reduction programs, and revenue-increasing programs. The findings and recommendations did not specifically address the State of Michigan's financial situation. The researcher studied three higher education institutions in Michigan to observe and report institutional responses to fiscal stringency during the period of 1974-75 to 1978-79.

The researcher used a descriptive methodology, including as data-collection techniques (a) the collection, review, and analysis of institutional data reported to the State of Michigan, Department of Management and Budget, Education Division; (b) the collection and review of institution-published documents, including financial statements, Board minutes, and internal planning documents; and (c) semi-structured interviews with administrative staff members, which were used to obtain increased insight into the institutions' responses. The interview segment of the data collection represented the major source of detailed information obtained from the institutions. The semi-structured interviews were constructed to obtain information in response to 11 propositions. The propositions were not hypotheses to be tested, but central themes that reoccurred throughout the literature and topics judged pertinent by the researcher. The 11 propositions included identifying and reporting the following areas: the start of fiscal stringency, the cost-saving strategies implemented in the instructional program, the revenue-augmentation strategies implemented, the reduction of personnel, programs implemented, the discontinuance of academic programs implemented, the involvement of faculty members in developing institutional responses, the benefits of fiscal stringency, the major problems encountered in attempts to respond, successful programs implemented, the type of planning during the five-year period, and predictions for the future condition of higher education.

The purpose of this study was to obtain information regarding institutional strategies that were implemented in response to conditions of fiscal stringency during the period of 1974-75 to 1978-79. The research was limited to three public four-year higher education institutions in Michigan.

The interview segment of the data collection represented the most fruitful source of the detailed information supplied by the institutions. The information obtained during the data-collection portion of the project was compiled following the descriptive-study format. The findings for each case study, however, are combined into major findings for the research study and reported under six major headings and eight subheadings.

Major Findings

The Start of Fiscal Stringency

The findings in this area are reported under two subheadings: the precipitating factor and the general fiscal trend.

The precipitating factor.--There was unanimous agreement among all those interviewed at the three institutions that the single most identifiable precipitating factor was the State of Michigan's issuance of Executive Order 1974-11 on December 16, 1974. Executive Order 1974-11 reduced the appropriations to public four-year higher education institutions by $6,419,117. There were several direct effects at the institutional level due to this state reduction. The four-year institutions operated on a fiscal-year basis that started in July and ended in June of the following calendar year. The timing of a mid-year cutback was such that the institutional budget was based on regular equal appropriations and expenditures and one-half the fiscal year was complete. The resultant effect was to double the necessary institutional cutback in order to effect the state-mandated cut. The unanticipated reductions required swift and direct institutional actions. The ripple effect on public four-year education was dramatic and signaled the progressive decline in state funding.

The $6,419,117 mid-year reduction in state appropriations resulted in fewer constant dollars appropriated and expended per fiscal year equated student in 1974-75 as compared to 1973-74. This reduction was the first alteration of the steadily increasing expenditure trend that occurred in Michigan higher education throughout the previous decade.

The general fiscal trend.--The issuance of Executive Order 1974-11 signaled the start of fiscal stringency in 1974-75. The general trend for the State of Michigan budget included increased demands placed on a revenue base that did not grow as expected. The consequences of this factor were twofold. First, the State of Michigan was forced to curtail mid-year appropriations; second, the state used appropriation shifts between units of government to respond to state needs. In fiscal year 1974-75 the State of Michigan total general fund/general purpose expenditures were $2.729 billion; in 1978-79 the expenditures had increased to $4.237 billion, or an increase of 55 percent during the five-year period. In 1974-75 Michigan public four-year institutions received $422.6 million of state funds, or 15.5 percent of the state budget. In 1978-79 the public four-year institutions received $576.6 million, or 13.6 percent of the state budget. The public four-year increase over this five-year period represented a growth of 36 percent, while the state budget grew 55 percent. If the public four-year institutions had received in 1978-79 the same proportion of the state budget as 1974-75, the appropriations would have been $656.7 million or $80.15 million more than was received. (See Table 8, Chapter II.) The decreasing percentage of funding to higher education was directly linked to the increasing state expenditures in state mental health, social services, and the criminal justice system. As stated by one respondent, the State of Michigan chose to place a decreasing priority on Michigan higher education.

The slowed growth in state appropriations, combined with the rapid growth of inflation, caused the institutions to enter a prolonged period of decreasing budget flexibility. A significant factor that constrained budget flexibility was the large portion of institutional budgets tied directly to salaries. Higher education has been a labor-intensive organization since its beginning (Mortimer & Tierney, 1979, p. 19). Therefore, to effect any significant cost savings, it was necessary to curtail salaries. The history of American higher education included the development and entrenchment of tenure as a realistic and permanent fixture within the system. The linkage of tenure to salary decreased the flexible portion of the institutional budget.

Cost-Reduction Programs

The three institutions studied in this research project implemented various cost-reduction programs and revenue-generating programs. The major findings for this topic are reported in two subparts: personnel reductions and programmatic reductions.

Personnel reductions.--All three institutions reported that personnel-reduction programs were implemented either directly or indirectly during this period. The period of fiscal stringency caused the institutions to take unprecedented personnel actions, actions that required executive-officer approval and board approval in some cases. As reported by all three institutions, the curtailment of funding for personnel was a drastic and severe action required by the difficult financial situation. There was also a concurrence among the respondents that in order to effect any significant budget reduction it was necessary to reduce personnel costs.

The personnel-reduction programs implemented represented a wide variety of cost-saving strategies. As reported by the institutions involved in the study, the implementation of personnel-reduction programs started immediately after the issuance of Executive Order 1974-11 and intensified throughout the period researched. A varying degree of reduction control was reported, ranging from centrally imposed cuts to suggested salary guidelines. There was, however, agreement by all three institutions that the academic sector of the budget was protected as much as possible. Due to the desire to isolate the academic sector from reduction, the nonacademic sector was responsible for absorbing a larger portion of the reductions.

Throughout the period under examination, various strategies were proposed and implemented at each of the institutions. A common element that emerged was the desire by all respondents to avoid any action that would limit institutional flexibility. The institution administrators generally concurred on the sequence of personnel actions that were taken.

Tables 27, 28, and 29 present the actions that were reported by each institution during this study. The actions reported do not necessarily reflect a centralized approach to a reduction action but may reflect actions that occurred at the unit level. At each institution unit level, discretion was given to implement cost-reduction actions. The institutions differed in the amount of direction and discretion that was given from a central level. The lower numbered actions reflect actions that were implemented in direct response to the issuance of Executive Orders 1974-11 and 1975-12.

Table 27.--Grand Valley State Colleges' personnel cost-reduction strategies.

Action	1974-75	1975-76	1976-77	1977-78	1978-79
Freeze on hiring	x	x			x
Freeze on promotion	x	x			x
Reduction in hours	x	x	x		x
Freeze on travel, memberships	x	x	x		x
Attrition of positions	x	x	x	x	x
Layoff of teaching assistants	x	x	x	x	x
Layoff of nontenured faculty	x	x	x	x	x
Termination of nontenured faculty	x	x	x	x	x
Layoff of tenured faculty	x	x			x
Termination of tenured faculty					x
Early retirement--faculty			x	x	x
Declaration of financial emergency					x

As the period of fiscal stringency continued and budget flexibility decreased, additional actions were taken, including the termination of tenured faculty. As stated by one respondent, "The termination of tenured faculty, although legal and necessary, was a travesty for higher education to endure."

Table 28.--Oakland University's personnel cost-reduction strategies.

Action	1974-75	1975-76	1976-77	1977-78	1978-79
Freeze on hiring	x	x			
Freeze on promotion		x			
Reduction in appointment		x			
Freeze on travel, memberships	x	x	x		
Attrition of position	x	x			
Layoff of teaching assistants	x	x	x	x	x
Reduction of student positions	x	x	x	x	x
Position-shift-layoff		x			
Layoff of contingency faculty	x	x	x		
Layoff of tenured faculty		x	x	x	x

Table 29.--The University of Michigan's personnel cost-reduction strategies.

Action	1974-75	1975-76	1976-77	1977-78	1978 79
Lower salary increases		x	x	x	x
Reduction in hours		x			
Reduction in appointment	x	x	x		
Attrition of positions		x	x	x	x

A major consequence of the personnel reductions was the immediate and possibly long-term effect on the fiber of the institution. The implementation of cost-reduction strategies had a direct effect on the institutions' faculty and staff. One consequence that was reported was the deterioration of faculty and staff morale. Faculty and staff who had not been involved in institutional budget committees were typically unaware of the difficult financial situation that the State of Michigan was experiencing. According to those interviewed, the issuance of Executive Order 1974-11 created more awareness of the budget process than any previous administrative action. The heightened awareness of fiscal stringency, coupled with the institutional publicity on personnel cost-reduction programs, increased the faculty and staff concern for position and salary stability. Each institution reported specific cases of both formal and informal faculty protest of administrative personnel actions.

Program reductions.--All three institutions reported the use of nonsalary programmatic reductions in an effort to respond to fiscal stringency. As reported by Bowen and Glenny (1975, p. 34), Cheit (1973), Jellema (1973, p. 49), and in Chapter II of this study, institutions facing mid-year curtailment of appropriations or cutbacks typically responded by one-time, across-the-board cuts. In 1974-75, with the issuance of Executive Order 1974-11, both Grand Valley State Colleges and Oakland University imposed across-the-board programmatic cuts. The University of Michigan stated that programmatic cuts were implemented throughout the period; however, they were not at a centralized level. The most readily available funds were centrally administered nonsalary fund accounts. These funds, although budgeted, typically remained uncommitted until the expenditure occurred. As reported by the institutions, nonsalary programmatic cuts were used heavily during 1974-75 and 1975-76, and due to renewed funding in 1976 and 1977, fewer reductions were implemented.

Across-the-board cuts were implemented for two reasons, according to those interviewed. First, the short time period between the Executive Orders and the effective date of the legislative action left no alternative. Institutional administrators were responding to immediate budget cuts; therefore, selective programmatic cuts were difficult to implement without a deliberate process. The across-the-board programmatic cuts could be imposed by centralized executive action. Second, across-the-board cuts were implemented because the actions were seen initially as nonpolitical by the institution. Both Grand Valley State Colleges and Oakland University reported that across-the-board cuts were preferred in 1974-75.

As the institutions moved through the period under examination, an attitudinal change toward programmatic cuts occurred. There was a concurrence among those interviewed that across-the-board cuts caused several potential problems. First, across-the-board cuts were typically an equal percentage cut for all programs. In actuality, the older programs had a larger percentage of non-general-fund support and therefore could more easily absorb a general-fund cut. Second, equal cuts implied that all programs were of equal merit to the institution. This second point was the focus of debate at Grand Valley State Colleges. The presumption of programmatic equality did not coincide with the desire that some programs continue to grow. Third, across-the-board cuts, although centrally imposed, were implemented at a delegated level. The discretion given to the lower-level administrators implied that subordinate personnel were capable of providing adequate decisions concerning major budget cuts.

The major concern regarding across-the-board programmatic cuts was that it decreased institutional budget flexibility. The simplicity of the program did not overcome the fact that funding needs were not equal among fund accounts. The need to provide additional monies to academic programs in a growth mode as compared to units in decline was the primary drive behind preventing repeated across-the-board cuts. Priority setting among programs became the topic of institutional discussion at each institution by 1976-77.

As reported in Chapter IV, all three institutions implemented academic programmatic reductions between the years 1974-75 and 1978-79. Grand Valley State Colleges implemented academic-program consolidations, including the merger of the School of Business undergraduate division with the Master's of Business Administration, and the undergraduate College of Arts and Sciences was combined with the College of Graduate Studies. Grand Valley also eliminated the Religious Study Institute as an academic program. The most dramatic action taken by Grand Valley State Colleges, which occurred in April 1979, was the closure of Thomas Jefferson College. The closure of this college included the termination of 16 faculty members and the discontinuance of the academic program.

Oakland University suspended six four-year academic programs in Spring 1976. These programs included studio art, classical civilization, classical languages, Latin, speech communications, and Latin--secondary education. Also suspended was the two-year Academy of Dramatic Arts Program. The implementation of these institutional changes required that Oakland University impose a position-shift-layoff for faculty members. Oakland University operated under a faculty contractual agreement since 1971, which very explicitly specified the administrative actions that must be taken in order to suspend an academic program or lay off a tenured faculty member. The actions taken resulted in a two-day faculty strike protesting the suspension of academic programs and the imposition of the position-shift-layoff. As stated by one respondent at Oakland University:

> The suspension of any academic program at the university undermined the institutional responsibility to provide programmatic depth and breadth for the students. The suspensions would not have occurred during times of budget adequacy.

According to those persons interviewed, the University of Michigan did not use discontinuance of academic programs as a direct response to fiscal stringency. During the time period under examination, there were several reduction actions that occurred. However, as noted by one respondent, the change that did occur would have occurred anyway for academic reasons.

The programmatic budget reductions that occurred first were designed to avoid cutting academic programs. The curtailment of academic programs occurred only after a centralized decision was made that the other cost centers could no longer absorb further cuts. Table 30 presents in ranked frequency order the programmatic reductions that were implemented at the institutions. "Programmatic reductions represented a dramatic change for the institutions that had become accustomed to programmatic continuance and growth." The preceding statement sums up the general opinions of the institutional administrators who were interviewed.

Table 30.--Programmatic-reductions summary.

Rank Order	Programmatic Reduction
1	Equipment acquisition
2	Library acquisitions
3	Operating supplies
4	Building renovation
5	Building maintenance
6	Grounds maintenance
7	Capital improvements
8	Equipment repair
9	Staff travel
10	Staff memberships
11	Phone service
12	Student employment
13	Academic-program consolidation
14	Academic-program reduction
15	Academic-program suspension

Revenue-Augmentation Programs

The major findings for this topic are reported in two subparts: strategies to improve state support and strategies to improve institutional support.

Strategies to improve state support.--All three institutions reported the use of several techniques designed to improve state appropriations to Michigan higher education. Specific efforts were reported by each institution to improve the appropriations, both general fund and capital outlay, for the institutions.

It was a known fact that public higher education was receiving a decreasing percentage of the state budget as compared to previous-year funding levels. The first approach taken by the institutions was the use of the Michigan Presidents Council to serve as a focal point for requesting additional funding for the system. As reported by one respondent, there was concern among the institutions that unless the institutional leaders banded together and ceased competing with one another for a portion of the appropriations, the entire four-year public system would receive less funding. In actuality, this group effort resulted in more attention being given to Michigan higher education by the legislative and executive branches of the state government. During this period, two separate higher education task forces were established to review institutional funding, enrollment patterns, role and mission, academic program planning, and a general overview of the system. The task forces had representation from each institution and worked to establish a funding model.

The reports from the task force were used quite extensively in the development of the Legislative Funding Model developed by the Senate Fiscal Agency. The three institutions in this study were all directly involved in the development of the funding model, which stated that Michigan public four-year higher education continued to be underfunded by the State of Michigan.

The results of this funding model were widely publicized by the media, as well as receiving local attention on the three campuses. The purpose of the publicity was to draw public attention to and political support for increasing funding to the entire Michigan higher education sector.

Each institution also increased the efforts to garner a larger percentage of the finite state budget for the institution. All three institutions reported increasing efforts in the area of state lobbying. There was concurrence that each institution specifically identified state offices that would be lobbied on a given topic. The increase in lobbying efforts by Oakland University, Grand Valley State Colleges, and the University of Michigan was completed by the staff of the Vice-President for State Relations. Grand Valley State Colleges reported that the efforts were not as successful as desired.

Strategies to improve institutional support.--All three institutions reported the use of fund-generating strategies to decrease the dependency on funding from the state. In 1974-75 the issuance of Executive Order 1974-11 was viewed as a temporary budget decrease. However, with the continued budget reductions that occurred, the institutions realized the financial vulnerability of state funding.

Each institution implemented a variety of strategies to increase revenue. Tuition and fee revenue generated directly from the student enrollment represented the largest percentage of an institution's revenue budget other than state appropriations. The first strategy implemented at the institution was to increase enrollment and therefore tuition and fee revenue. This program had been very successful at Grand Valley State Colleges during the previous five-year span. During academic year 1975-76, the administration documented a dramatic decrease in prospective student enrollment. The enrollment in 1976-77 decreased 5.1 percent from 1975-76. This decrease in the face of state-appropriation reductions and continued inflation resulted in heavy focus on institutional enrollment. Grand Valley State Colleges reported that attempts to stabilize enrollment were unsuccessful. Oakland University continued to be in a controlled-enrollment-growth pattern that provided additional revenue. Oakland

University experienced an enrollment decline in 1976-77 representing the only year with a decline. Oakland University operated with a faculty contract that specified a student-faculty ratio; therefore, if enrollment increased, the administration was required to employ the additional number of faculty to balance the ratio. This contract constrained revenue flexibility by tying enrollment to faculty. The University of Michigan was in a controlled-enrollment decline during the period under examination. According to those interviewed, the university had the opportunity to take additional students at any time due to the international reputation of the University of Michigan. The University of Michigan allowed a change in the ratio of out-of-state students as compared to in-state students to occur. Out-of-state students pay a larger percentage of the cost of their education than in-state students (Table 26).

One specific problem that was raised concerning the use of enrollment growth as a revenue-generating item was as follows: If an institution became dependent upon the use of enrollment-growth funds to support on-going programs, any decrease in enrollment caused dramatic problems for the continuation of programs.

The institutions all reported the implementation of programs that were reported in the literature. Table 31 presents the standard revenue-augmentation programs that were implemented by the institutions. In addition to the standard approaches, Oakland University used several strategies that were unique. First, Oakland University levied a student self-imposed fee for library acquisition aimed at offsetting the reduced library acquisition budget. This approach was supported by the student government and was successfully presented to the students and implemented for one year in 1975-76. Oakland University also reported the disposal of a $300,000 piece of commercial property to augment instructional-equipment budgets.

Table 31.--Revenue-augmentation strategies.

Strategy	GVSC	OU	U of M
Maintain or increase enrollment	x	x	x
Increase tuition rates	x	x	x
Increase student residential rates	x	x	x
Increase lobbying efforts	x	x	x
Increase federal and state grants	x	x	x
Increase industrial grants			x
Increase development efforts	x	x	x
Sale of institutional property		x	
Special fee levy		x	
Transfer activities to non-general-fund accounts		x	x

Problems Encountered

The major findings in this category are reported in two subparts: external problems and internal problems.

External problems encountered.--There was agreement among all those interviewed that the problems caused by the external environment were minor. It was anticipated by the researcher that the institutions would report encountering major external problems in the attempts to respond to fiscal stringency. The institutional administrators agreed that little interference to administrative action occurred due to existing local, state, or federal laws. The external problem that was identified was the lack of political support for continued priority funding for higher education.

Internal problems encountered.--The institutions concurred on the prevalence of problems existing within the structure of each institution. The major internal problem encountered by the institution attempting to respond to fiscal stringency was the lack of faculty and staff understanding of the budget process. Before the start of fiscal stringency, there had been limited need or desire for faculty involvement in the budgeting process because adequate funds were available for each project. The start of fiscal stringency signalled the start of program prioritization and, in turn, differential funding. The lack of faculty and staff knowledge of the budgeting process, from state appropriations through departmental expenditures, prevented swift budget decisions. Both Oakland University and Grand Valley State Colleges reported that the lack of sophistication regarding how the budget system operated caused suspicion and concern among faculty and staff. The lack of a systemized communication network on budgeting matters was quickly compensated for with the establishment of budgeting and planning committees.

A second major problem encountered was the formal contractual agreements with faculty and staff. Oakland University respondents spoke openly regarding the administrative frustration due to the faculty contract. The presence of a contractual agreement curtailed swift administrative responses both with faculty and staff. Contractual agreements contained language regarding notification of layoff, review process, representation rights, and termination procedures that must be followed in order to lay off a staff or faculty member. Each of the institutions reported that contractual agreements served a purpose in preventing capricious administrative action, yet even so the result was a cumbersome problem.

A third problem identified was the reduced budget flexibility. As reported, it was difficult to maneuver funds when each unit had already been reduced. This problem became more acute until each institution began to prioritize funding needs. The establishment of a budgeting process relieved some of the pressure on the institutional administrators through the inclusion of faculty and staff in a deliberative process aimed at budget reduction and reallocation. The emergence of a "we-they" attitude was reduced with the appointment of numerous advisory committees on each campus.

Institutional Planning

As reported by all the respondents, the type of institutional planning changed dramatically from 1974-75 to 1978-79. In 1974-75 the type of planning completed by the institutions was operational planning or planning based only on the current-year budget. This prevalent type of planning included current-year-enrollment staffing and budget needs. The actual planning was primarily confined to a limited group of staff, including the President, the Vice-President for Budget and Finance, and the institutional Budget Officer. Among these three individuals, the majority of funding decisions were completed. The type of budgeting was typically incremental, with planned increases occurring for all units based on past performance.

The issuance of Executive Orders 1974-11 and 1975-12 required a change in the type of planning that occurred. Institutions reported the increased implementation of strategic planning and the decreased use of operational planning. Strategic planning involved planning the management of resources in future years with the objective of providing flexibility and adaptability. All three institutions reported the increase of planning activities of a multiyear nature. Grand Valley State Colleges reported that the introduction of a base-budget concept in November 1978 was the start of long-range planning. On January 29, 1979, President Arend D. Lubbers established the Budget Process Task Force. The charge to the committee was to plan for a balanced budget that adequately addressed institutional priorities in the next year, as well as succeeding years. This task force consisted of faculty and staff and acted in an advisory capacity to the President of Grand Valley State Colleges.

The appointment of the University Planning Committee by the President of Oakland University in Spring 1976 signalled the formalized start of strategic long-range planning. The charge to the committee was to complete planning for the future of the university, including faculty and staffing needs, student enrollment, capital needs, budgetary concerns, and academic-program needs. The committee was composed of six faculty, three students, two administrative professional staff, and several academic administrators. This significant step by the President encouraged increased dialogue and formal communication at the institution. In addition to the appointment of the University Planning Committee, the President established the University Budget Committee in Spring 1977. The inclusion of budget planning into the strategic planning network was aimed at providing greater lead time and greater budget flexibility if it was necessary to respond to additional cutbacks.

The University of Michigan reported that strategic long-range planning began in 1976-77. The use of computer modeling provided the institutional managers with a tool to begin reviewing possible alternatives and consequences of potential administrative actions. A key ingredient in the modeling effort was the use of multiyear raw data as compared to single-year data previously used. The modeling of the institutional budget was extended to five-year projections, which allowed executives to see the long-range effect of salary packages, utility costs, tuition rates, state appropriation levels, and other budget elements. The sophisticated modeling allowed for a trial-and-error approach to long-range planning without the consequences of real budgeting.

All respondents concurred that the use of strategic planning was of greater importance than at any time during the recent history of Michigan higher education.

Effective Programs

There was agreement among the respondents that the most effective program was a strong communication program. All three institutions reported the establishment of budget and planning committees, which all contained the key element of communication. The success of an institutional response to fiscal stringency was limited to the existence of a process that allowed for open deliberation and communication. The process established by each institution formalized the communication and deliberation framework for budget responses and provided an environment that previously did not exist.

Grand Valley State Colleges' respondents stated that the most successful program implemented was the presidential appointment of a planning committee. The planning committee provided a centralized focal point for discussion and intense deliberation on institutional responses to fiscal stringency.

Oakland University respondents reported that the position-shift-layoff was the most effective program implemented. This program was very formalized and involved open committees of an advisory nature. The position-shift-layoff provided an orderly, previously agreed upon vehicle to reduce academic programs and reassign faculty members. The executives noted that the process, although administratively effective, was cumbersome and difficult to implement. The emotional level of laying off faculty members was reduced only because all the logistics had been previously agreed upon.

There was unanimous agreement among respondents at the University of Michigan that the priority fund established in 1977-78 was the most successful program. The priority fund was established to provide increased budget flexibility through internal reallocations. The design of the program allowed for movement of funds, based on prioritization of funding proposals. Both academic and nonacademic units were required to return a percentage of the units' funding and then to apply for funding of specific projects. The priority fund was a management tool that received broad publicity, broad participation, and broad acceptance at the university.

There was agreement among all those interviewed that without the implementation of a response to fiscal stringency the institution would not survive into the future. The institutional administrators were aware by 1975-76 that the state fiscal position was severe enough that it could not be ignored. Respondents stated that the ability of the institution to confront the budget problem directly was itself a successful strategy.

Implications of the Study

Conclusions

This study examined on a case-study basis Grand Valley State Colleges, Oakland University, and the University of Michigan for the period 1974-75 to 1978-79. The study was limited to these three institutions as a representative sample of the 15 Michigan public four-year institutions. Several important conclusions were documented by the study.

1. The three institutions did enter a period of continuing profound fiscal stringency in 1974-75. This period of fiscal stringency continued through 1978-79, the ending point of the study.

2. The three institutions used a variety of cost-reduction programs in attempts to respond to fiscal stringency. These attempts included, at the extreme, the termination of tenured faculty members at two of the institutions and the discontinuance of academic programs at all three institutions.

3. The respondents from the institutions reported an upsurge in fund-raising activities as an attempt to decrease institutional

budget dependency on state appropriations. Activities ranged from disposition of institutional property to the self-imposed levy of student fees for library acquisitions.

4. The respondents from the three institutions concurred that the major problem encountered, as attempts were made to respond to fiscal stringency, was internal communication. The lack of communication and miscommunication limited the institutional ability to respond. In an effort to improve communication and provide an avenue for dialogue with all campus factions, each institution reported the establishment of budget and planning committees during the period.

5. The respondents from the three institutions reported a major change in the type of planning that occurred at the institutions, from operational (short-term) to strategic (long-range) planning. This change was a necessity for survival, as multiyear planning provided an understanding of the effects of current budget decisions on the future and therefore increased budget flexibility.

6. The respondents from the three institutions reported that successful responses to fiscal stringency had occurred at each institution. The programs implemented ranged from internal reallocations of budget to termination of an academic college.

7. The respondents from the institutions stated that the benefits from the period of fiscal stringency did not outweigh the disadvantages. The only significant benefit that was identified was that the issuance of Executive Orders provided a formal backdrop for the reduction of institutional deadwood. As stated by one respondent: "All institutions over time develop inefficiencies, cumbersome

organizations, fat, redundancies and unnecessary duplications, which deserve focus in times of fiscal stringency." The benefit to the institutions was that the additional scrutiny focused on areas in which cost savings were implementable.

8. The future of Michigan public higher education was a topic that elicited sober comments from the respondents. The concern was that the continued presence of fiscal stringency would cause Michigan to fall from its leadership role in American higher education. The effects of fiscal stringency would be of a long-term nature as the institutions would be unable to attract and retain outstanding faculty and staff due to compensation and current laboratory-equipment conditions. The ripple effect would cause a decrease in the ability to attract and retain outstanding students, a decrease in the ability to attract governmental or industrial research grants, and an inability to provide the depth and breadth of academic programs that have made Michigan higher education famous. The potential effect on the Michigan economy will be staggering, as the needed young graduates are recruited out of state due to high tuition and decreasing institutional quality. The challenge to Michigan higher education institutions will be to provide quality programs during a period of decreasing resources.

Implications for Future Study

1. The results of this study support the literature and provide useful data and procedures for the study of public and private two- and four-year institutions of higher education.

2. The author notes that the topic researched was broad, and the inclusion of three individual case studies limited the examination of a specific research segment. It is recommended that future studies of this type be limited to singular institutions or a finite topic across several institutions.

3. Four issues were raised by this research project, which warrant further examination:

a. Has the period of fiscal stringency continued since 1978-79, and, if so, what have the institutions done to respond?

b. What type of planning implemented by the institutions has been beneficial to the institutional decision makers?

c. What actions implemented by the institutions between 1974-75 and 1978-79 have had an effect on the institution?

d. How does an institution in a period of fiscal stringency and declining student population provide budget flexibility of the magnitude necessary to start new programs and protect existing programs?

APPENDICES

APPENDIX A

LETTER OF INTRODUCTION

STATE OF MICHIGAN

WILLIAM G. MILLIKEN, Governor

DEPARTMENT OF MANAGEMENT AND BUDGET

P.O. BOX 30026, LEWIS CASS BLDG., LANSING, MICHIGAN 48909
GERALD H. MILLER, Director

I have been working with Jim Fielder, a member of our staff, for the past few months in developing a dissertation proposal that would not only meet graduation requirements, but would also be a useful contribution to the understanding of higher education management practices. Jim has informed me that his doctorate committee has reviewed and approved his dissertation proposal. The subject chosen by Jim pertains to fiscal stringency in Michigan higher education, a topic which I consider to be a most timely issue.

Jim has worked within this division for two and one-half years while also pursuing a doctoral degree from Michigan State University. I am very confident of Jim's capabilities in conducting this research activity, and since interviewing key decision makers is required to complete the study, I am requesting your assistance, knowing that you can share your most candid observations in complete confidence.

I recognize that you have very busy schedules, but I believe that the time spent will contribute to a better understanding of how you, as representatives of higher education institutions, deal with the problem of fiscal stringency. If I can answer any concerns which you might have regarding this request, please feel free to contact me.

Sincerely,

Fred R Whims

Dr. Frederick R. Whims, Director
Education Division
Office of the Budget

APPENDIX B

LETTER OF REQUEST

Dear :

As you know, I am presently an analyst in the Education Division, Department of Management and Budget, and I am also a doctoral candidate in Higher Education Administration at Michigan State University. I am writing to ask for your assistance and participation in my dissertation study of Michigan's institutional responses to the condition of fiscal stringency that existed during the seventies.

In order to collect the pertinent information, I would like to interview you because of your role in the leadership of Michigan higher education. The interview will be structured around questions considered relevant, but will allow for discussion of the issues and for qualifying statements. Individual responses will remain confidential, with findings being reported by institution.

The interview will take approximately one hour and will be arranged at your convenience. I will call your office to confirm an appointment and make the necessary scheduling arrangements.

After the study has been completed, I will be happy to provide an abstract of the research. Thank you for your consideration.

Sincerely,

James D. Fielder, Jr.

APPENDIX C

SAMPLE LETTERS

Dr. Cecil Mackey, President
Michigan State University
East Lansing, Michigan 48824

Dear Dr. Mackey:

Thank you for agreeing to be involved in the pilot-testing segment of my dissertation on fiscal stringency in Michigan higher education. To reiterate, your interview, or any of the material discussed, will not be used in the dissertation. The purpose of the pilot interview is to ascertain whether or not the focus of the study is precise, with the appropriate questions providing clarity.

I have enclosed the statement of purpose for the study and an interview guideline. These materials should address some of the questions you undoubtedly have concerning my request.

Again, thank you for your willingness to cooperate. I will arrange my schedule according to your needs for the interview.

Sincerely,

James D. Fielder, Jr.

Dr. Cecil Mackey
President
Michigan State University
East Lansing, Michigan 48824

Dear Dr. Mackey:

Thank you very much for taking the time from your busy schedule to be interviewed.

The contribution that you made is appreciated, and I have made a few adjustments to the interview guideline as a result of our conversation. I will share the results of the study with you at its completion.

Again, thank you for your willingness to be involved. I look forward to seeing you at the budget hearings this fall.

Sincerely,

James D. Fielder, Jr.

APPENDIX D

PILOT STUDY QUESTIONNAIRE

A. FISCAL STRINGENCY--GENERAL INTRODUCTION

1. Do you generally agree with the definition just cited?

2. When did this institution first encounter the condition of fiscal stringency?

B. INSTITUTIONAL RESPONSES

1. Higher education institutions have ten basic reporting categories. How has this institution responded differently to fiscal stringency in these areas? (instruction, research, public service, institutional support, academic support, student services, plant operations, financial aid, auxiliary enterprises, and mandatory transfers)

2. What has been done to reduce expenditures?

3. What has been done to increase revenue?

4. What policies or procedures have been changed in response to fiscal stringency?

5. What management strategies or responses would you report as most effective in responding to the condition of fiscal stringency?

6. Has the condition of fiscal stringency been a benefit to your campus?

7. How has the condition of fiscal stringency been a benefit to your campus?

8. Who participated in establishing procedures and selection priorities that were used in the institutional response?

9. Have faculty members been involved?

10. What has been the process for establishing personnel involvement?

C. MAJOR PROBLEMS

1. What major problems have you encountered within the institution in attempting to respond to the condition of fiscal stringency?

2. Are the problems different by reporting area?

3. Which of the problems have been eliminated?

4. What problems have been encountered with existing state or federal policies or procedures?

5. Has the condition of fiscal stringency limited the flexibility of the institutional responses?

6. How has the condition of fiscal stringency limited the flexibility?

D. FUTURE OUTLOOK

1. If present conditions continue, what do you see as the institutional responses to fiscal stringency in the 1980s?

2. What has this institution done to avoid future fiscal stringency?

3. Has the institutional planning been operational or strategic in nature?

4. Which of the ten reporting areas will receive the highest priority?

5. Have these priorities been established? If so, how?

6. What are the long-term implications of the condition of fiscal stringency?

APPENDIX E

REVISED QUESTIONNAIRE

Proposition 1

1. When did this institution first encounter the condition of fiscal stringency?

2. Would you identify a specific date and action that you would associate with the start of fiscal stringency?

3. Has the fiscal stringency continued throughout the period 1974-75 to 1978-79?

Proposition 2

1. Has this institution implemented cost-saving strategies in response to fiscal stringency?

2. Has this institution reduced, reallocated, or altered an annual budget in response to fiscal stringency?

3. What has been the process for developing budget cuts?

4. How would you characterize cuts of a programmatic nature?

5. Being as specific as possible, enumerate the cost-reduction actions taken by this institution.

Proposition 3

1. What institutional programs have been implemented in an attempt to increase institutional revenue?

2. What revenue-generating actions other than raising tuition and fee rates were targeted for review?

3. What did the institution do to obtain additional funding from areas other than the state appropriations (private industry, federal government, etc.)?

4. What formal offices, committees, or lobbying groups were organized to seek additional funding?

5. Were state, federal, foundations, or other offices specifically lobbied for funding?

6. What was the most effective revenue-augmentation program implemented?

7. Was there a specific date or action that precipitated the need for revenue increase?

Proposition 4

1. Were personnel-reduction activities used as a means to formally respond to fiscal stringency?

2. What personnel actions were implemented in an attempt to respond? When did these actions occur?

3. Who was responsible for taking personnel-reduction actions?

4. Was there a definite personnel plan in place at the start of fiscal stringency, including policies or guidelines?

5. Did the scope of personnel actions change during the period under review?

6. Was there opposition to the personnel actions?

7. Can you identify a specific personnel-reduction policy, program, or action that was effective?

Proposition 5

1. Was the academic-program budget reduced, reallocated, or altered as a cost-reduction strategy?

2. Was the suspension or discontinuance of academic programs used as a response to fiscal stringency?

3. What specific date and action signalled the start of programmatic reviews?

4. Did the institution have written academic-program-reduction policies or guidelines at the start of the implemented cuts?

5. How was the priority of cuts established?

6. What was done to protect the recently established innovative programs?

7. Can you identify any specific strategies or activities that were effective in reducing academic programs?

Proposition 6

1. Were faculty members directly involved in developing institutional responses to fiscal stringency?

2. At what point in the period under review did the faculty members become involved? (formally, informally)

3. To what extent were faculty members involved (directly, indirectly) in the process?

4. Did faculty involvement change during the period under review?

5. Did the institutional administrators take any specific actions to increase or decrease the frequency and depth of faculty involvement?

Proposition 7

1. Did the period of fiscal stringency provide any benefit to the institution?

2. Are there any specific actions that were identified as beneficial to the institution?

Proposition 8

1. Did the institution encounter major problems in the attempt to respond to fiscal stringency?

2. What problems were encountered, and when did the problems occur?

3. Did the problems encountered change during the period 1974-75 to 1978-79?

4. Have any of the problems been reduced or eliminated? If so, how?

5. Were any of the problems encountered directly linked to institutional policies or guidelines?

6. Were any of the problems encountered directly linked to state or federal policies or guidelines?

Proposition 9

1. Can you identify any successful responses to fiscal stringency?
2. Were there any programs implemented that you would recommend to other institutions?
3. Were there any responses attempted that you would specifically recommend other institutions to avoid?

Proposition 10

1. Does the institution use formal budget planning or institutional planning?
2. Has the institution used operational (short-range) or strategic (long-range) planning throughout the period under review?
3. Has there been a shift in the type of planning completed?
4. What institutional personnel have historically been involved in institutional planning?
5. Has there been a change in the institutional personnel involvement in planning?
6. If the institution has established programmatic or funding priorities, how was this accomplished?

Proposition 11

1. What do you see as the future of Michigan higher education?
2. What do you see as the future of this institution?
3. What do you foresee for Michigan higher education and this institution if the condition of fiscal stringency continues?
4. Has this institution taken steps to reduce the impact of future fiscal stringency?

THANK YOU FOR THE INTERVIEW.

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