PLANNING FOR THE EIGHTIES

A Report to the Duke University Board of Trustees

December 8, 1978
Summary

Duke is a distinguished University. During the last decade it has achieved substantial momentum in its quest for academic excellence.

It has also operated with a balanced budget despite high rates of inflation and increased costs resulting from federal regulations, higher taxes, and the energy crisis. The budget has been balanced by more stringent controls over expenses, new sources of income, increased income from gifts and the recovery of indirect expenses, increased enrollment, and annual increases in tuition. But salary increases for some have not kept pace with inflation; maintenance has been deferred; some academic programs have been restricted; fewer books are being purchased.

Costs will increase at a faster rate than income from endowment, gifts, and indirect expenses in the future. Substantial annual increases in tuition will not be sufficient to maintain the present level of excellence, much less permit qualitative improvement, if we continue to attempt to function as we have done in the past.

A great private university must be composed of educational components which are better than or different from those in public universities, if in the long run, it will be able to charge higher tuition and continue to achieve a high level of support from corporations, foundations, and individual donors. The financial forecast makes it clear that Duke can be qualitatively superior only if it restricts the scope of its educational programs and concentrates the resources available on fewer activities.
Duke's position is not unique. Princeton University's Priorities Committee recently concluded that "... In the fact of financial adversity, it is better to do fewer things and do them well, than it is to spread the effect of a cutback evenly across all segments of the University."

We must therefore engage in planning for retrenchment, not growth. We must be prepared to reexamine many assumptions which have been tacitly accepted in the past, and explore new ways to function more effectively, increase revenue, and decrease costs. No major change in the fundamental nature of the University is contemplated. The disciplines which constitute the core of a modern University will continue to be taught, either in existing departments and programs or in consolidation of these activities. A broad curriculum in the humanities, social sciences, and natural sciences must be available to undergraduates. A strong graduate program must exist in the same subjects and in interdisciplinary areas. A small number of high-quality professional schools must continue to flourish. The tenured status of present faculty must be respected. But we cannot continue to do all we are now doing or do all that we continue in the same ways.

The memorandum which follows attempts to analyze the nature of the problems facing us, describing how the budget has been balanced in the past, and the problems we will face in attempting to balance it in the future. It proposes a number of possible changes in the manner in which Duke functions which will have no substantial economic significance but which might permit the University to function more effectively. It then considers alternatives for increasing income and alternatives for reducing costs. The Table of Contents outlines the specific matters covered. The most important parts of the memorandum deal with reduction in the size of the faculty (Section V-E), and describe the process by which
the various constituencies of the University should be involved in providing advice to the Board of Trustees before any significant decisions are made (Section VII).
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Memorandum

To: Members of the Faculty

From: A. Kenneth Pye

Subject: Planning for the Eighties

Enclosed you will find a Long-Range Planning Report which has been submitted to the Board of Trustees on this date. During the coming months I will attempt to meet with each department and school in order to share views and obtain advice. I regret that it is necessary to submit such a document rather than a blueprint for expansion of our activities and programs. I do so only because I see no other alternative consistent with my responsibility to the University. Your assistance will be deeply appreciated.

Enclosure
Memorandum

To: Duke University Board of Trustees
From: A. Kenneth Pye AKP
Subject: Planning for the Eighties
Planning for the Eighties

I
Introduction

It has been clear for some time that the University must engage in a new type of planning for the future if it is to cope successfully with the pressures of inflation and at the same time pursue its objective of excellence. Long-range planning has been attempted at Duke several times in the past, most recently in 1972. In general, the 1972 efforts produced "wishing lists" in which individuals, departments, schools, and programs enumerated what they needed to achieve their goals. These requests were modified, synthesized by committees, and combined to produce a document describing the kind of university Duke would like to be. The 1972 document was a useful vehicle for determining priorities in the Epoch Campaign. The campaign, however, as is true of most such campaigns, was required to accept money for the purposes which donors wished, rather than the purposes to which the faculty and Board had accorded priority, with the result that many of the programs contemplated in the 1972 planning document have proved incapable of achievement within the limits of available resources.

The 1972 document reflected the then still current national attitudes of the desirability of expansion and growth, and the assumption that whatever was desirable could somehow be afforded. The last six years have required re-examination of this basic hypothesis by government, private business, and higher education. For the foreseeable future, it seems likely that expansion and
growth in terms of basic facilities and programs are not feasible objectives, except in a limited number of areas such as international studies. Indeed, as this document will attempt to set forth, the existing scope of the University's activities must be restricted if the present level of excellence is to be maintained within the limits of resources likely to be available. Even greater restrictions must take place if there is to be an opportunity to achieve a higher level of excellence.

In the fall of 1977 I requested that the Executive Committee of the Academic Council nominate members of the faculty to sit with me to provide advice and counsel concerning planning for the future of the University. These nominees, the Provost, and three additional members of the faculty selected by me, have met regularly during the last year and considered a wide range of material, copies of which have been made available to the Executive Committee. I have benefited greatly from their advice but take sole responsibility both for the conclusions and recommendations which follow. Several members of my committee agreed with many of my perceptions but we did not attempt to proceed by vote or to seek a consensus at this stage of our deliberations, and I cannot impute to them either agreement or responsibility for the observations which follow.

This document does not deal with the Medical Center directly, except for the School of Nursing, which is administratively a part of the Medical Center but which is financed from the same funds that support Arts and Sciences and the professional schools other than the School of Medicine. There are, of course, overlaps. Several basic science departments associated with the Medical Center are components of the Graduate School. Many of the problems of the non-medical components are shared by the Medical Center. To the degree possible, I have
attempted to isolate the problems of non-medical components, primarily because of the difference in the source of funds of non-medical activities.

The School of Medicine has, for the last seven years, operated on a formula of receiving 16.2 per cent of the unrestricted income of the University. Increases in its cost must be financed from external sources or increased tuition, not from the funds available for the other academic components of the University. If the formula produces a surplus, it is transferred to restricted funds which function as quasi-endowment. The hospital has since the first year of President Sanford's administration operated at a "break even" level without subsidy from the endowment, and will continue to do so.

For convenience, I have used "campus" to describe non-medical components of the University and the School of Nursing, and "Medical Center" to describe activities directly related to teaching and research in medicine, allied medical programs, hospital administration, and the patient care functions of the hospital.

Duke is a distinguished University. During the last five years we have achieved substantial momentum in a drive toward academic excellence. Efforts aimed at planning for the future should not be regarded as a halt in this process but as the necessary prerequisite for sustained progress. The primary functions of the University are teaching and research. Necessarily, it must have an excellent cadre of academicians in a basic core of disciplines. It is inconceivable that a private university such as Duke can flourish without a first-rate undergraduate school, a strong graduate school, and several distinguished professional schools. Every activity in which we are now engaged is not essential to excellence in teaching and research within these perimeters. Little of what
we do is poor; most is superior; some is excellent; almost all of what we do fulfills a useful purpose. With adequate resources we could, over time, develop excellence across the board. Such resources are unlikely to be available, and we must, therefore, plan to preserve and improve the essential nucleus of our future greatness.

II
The Nature of the Problem

The basic problem is that our expenses are increasing and will increase at a faster rate than will our income in the near future. This trend towards an inevitable deficit can be avoided only by hard reexamination of some of the basic assumptions upon which we have been proceeding. Some of these assumptions have resulted from faculty or Board policy, some have assumed the status of "quasi-tradition" without authoritative decision by anyone. In University budgeting, we separate educational and general expenses (which include instruction and research), student services, libraries, general administration, plant operations, financial aid, and auxiliaries, but these are accounting categories which we utilize for convenience. In a very real sense, it is the costs of teachers, libraries, and financial aid which are the core of the University while general administration, plant operations, and most auxiliaries provide the logistical support required for instruction and research.

A. Increased Expenses During the Last Decade.

Faculty costs have risen in part because of a modest increase in the size of the faculty and in part because of efforts to approach the increase in the cost of living. Although faculty salaries have never been frozen, average
faculty compensation has not kept up with the cost of living. During this period, however, there has been a substantial increase in the cost of fringe benefits, and recent changes in the social security laws have both increased the costs to the University and required reexamination of the formula of University contributions to social security and TIAA-CREF. The fringe benefit cost for medical insurance will continue to increase at a faster rate than the cost of living index, and the likelihood is the same for tuition benefits, disability insurance, and group life insurance.

The major increase in costs has been occasioned by increases in biweekly salaries, which have risen at a faster rate than the cost of living. Traditionally, low wage rates were paid to Duke non-academic employees prior to 1967, and substantial jumps have been required to catch up. The minimum wage laws have doubled the minimum wage in recent years, with a substantial additional increase to take place in each of the next two years. A less significant factor in the past, but of major concern in the future, is the potential impact of trade unionism, which could exert considerable pressure to provide favored treatment to unionized employees, necessarily at the expense of student tuition, the salaries paid to non-unionized employees (including the faculty), libraries, financial assistance to students, or a combination of these activities. The major increase in costs in fringe benefits associated with personnel, particularly social security, compounds the problem.

The costs of general administration have increased at an extremely fast rate, largely because of two factors. The first is the need to comply with federal regulatory programs which have imposed the cost apparatus incident to affirmative action, the implementation of ERISA, the implementation of OSHA, detailed record keeping required by the Fair Labor Standards Act, and the
negotiation and implementation of collective bargaining agreements resulting from the application of the National Labor Relations Act to universities. These are only the major federal programs. Incremental costs resulting from federal intervention into subjects as varied as research involving human subjects, the protection of student privacy, the regulation of school catalogs, scholarship, loan and withdrawal policies, grants-in-aid in intercollegiate athletics, price controls over tuition, etc., combine to require an administrative apparatus which was unknown prior to 1968 and which probably will have to be expanded in the future.

The second factor contributing to the increase in general administration costs is the expansion of the activities of the University which require a greater use of technology and more people to manage. Much of this has resulted from the expansion of the Medical Center and, while the costs are allocated back to the Medical Center, the University has been required to introduce systems which would not have been necessary without the volume of transactions occasioned by the expansion of health care and research activities in the Medical Center, with a portion of these costs being picked up by general administration or academic users.

Financial aid costs have increased substantially, for a number of reasons. Each new increase in tuition and living costs raises both the amount of need of students now on financial aid and the number of students who need financial aid. In the undergraduate school, the policy of meeting 100 per cent of demonstrated need has resulted in a greatly accelerated demand for financial aid while the income from endowed funds has remained virtually constant. Part of this increased demand has thus far been met by available federal funds in the form of
BOGs,\textsuperscript{1} SOGs,\textsuperscript{2} and College Work-Study and NDSL\textsuperscript{3} funds, but the demand on current fund financial aid support has increased dramatically, as is reflected elsewhere in this report. In the Graduate School, the withdrawal of government support from a number of graduate student aid programs has produced severe pressure on the graduate student aid mechanism. While the level of current fund support has increased annually, it has not done so at the same rate as tuition, and has not been able to compensate completely for the withdrawal of federal funds. The reduction in the size of the Graduate School F.T.E.s\textsuperscript{4} has only partly alleviated the need for aid while reducing the income available to provide grants. Graduate students receive a much higher percentage of current fund financial aid than do undergraduates or professional students, but only a small fraction of legitimate demands of the departments can be met from the funds that are available. Financial aid has risen in the professional schools but remains at a much lower level than the Graduate School, and no effort is made to meet 100 per cent of need without extremely heavy dependency on outside loans.

Library costs have also increased at rapid rates. Historically, library salaries at Duke have been low. Efforts have been made to make them competitive,

\begin{enumerate}
\item The Basic Educational Opportunity Grant program is a direct grant program for undergraduate students. The government determines each student’s eligibility and funds are sent directly to whatever college or vocational school the student chooses to attend. The maximum grant is $1,800.

\item The Supplemental Educational Opportunity Grant program is a campus-based program for undergraduates with "exceptional financial need." The University awards grants ranging from $200 to $1,500 per year.

\item The National Direct Student Loan program (formerly called the National Defense Loan program) provides institutions with 3 per cent interest long-term loan funds for needy undergraduates and graduate students. Undergraduates with sufficient need may borrow up to $5,000 over four years; graduate students may accumulate a total of $10,000 for combined undergraduate and graduate loans under the program. Additional funds at higher interest rates may be borrowed under the Federally Insured Loan Program (FISL).

\item Defined as tuition income divided by the annual tuition rate.
\end{enumerate}
although they still compare poorly with salaries paid in some distinguished libraries. The cost of books has increased several times faster than the cost-of-living index, and although current fund support for library acquisitions has increased at a high rate—in the range of 8–10 per cent a year—it has not been possible, because of the difference in book costs, to accede as many books annually as in some earlier years. Nevertheless, new books have been acquired at an extraordinary rate compared to earlier periods at Duke. The size of the Library reached 1,000,000 in 1950–51 and 2,000,000 in 1968–69. In less than a decade we have added the third million volumes. To continue acquisitions at this rate would involve extremely high costs. As computerization is being used more widely in libraries, we have added on computer costs without yet realizing concurrent savings in personnel costs.

Ten years ago university use of computers was in its infancy. We now have an annual contract with the Triangle Universities Computation Center which costs one-third of a million dollars, our own large computers both on the campus and in the hospital, and over sixty small computers. Our hardware is excellent but the costs involved in software and in terminals continue to increase. The University has lagged far behind in undergraduate and graduate instruction involving computers. We can anticipate computer costs rising substantially faster than the cost of living over the next few years.

Operation and maintenance costs have also increased faster than the cost of living. The major factors have been biweekly salaries of maintenance personnel; the increase in the cost of coal, electricity, and water; and the problems of dealing with deferred maintenance on an aging facility. The general energy costs involved in a decentralized campus involving hundreds of buildings are staggering, and will continue to increase at a rate dramatically higher than the
general cost of living. For example, during the last five years we have reduced the consumption of electricity by 4 per cent despite the addition of new buildings. During the same period our costs increased from $1.7 to $4 million.

A significant reason for the cost increases has been the construction of a number of buildings with high maintenance and operations costs which were built with no new endowment to produce income to defray these costs. Gross Chemical Building, Perkins Library, Music, and additions to Nursing and Engineering are prime examples.

Legal costs, which were very low at the beginning of the decade, have now reached major proportions as a result of the host of government regulatory activities previously described, requirements to defend Title VII actions and labor litigation, as well as increased utilization of counsel in the deferred gifts area of Institutional Advancement, the more sophisticated and complex business matters involved in attempts by the University to find improved investment opportunities, and the financing of the new hospital. These activities will not abate.

During the next few years, costs of the athletic enterprises will increase at a more rapid rate than will income from athletics. This results partly from the unlikelihood that ticket sales will progress at the same rate as inflationary expenses, in part from increased support for non-revenue sports, and in part from restraints that have been placed on athletic expenditures during the last few years. If HEW insists upon its present interpretation of "equality" for women athletes, costs will skyrocket without any reasonable chance of generating income to defray them.
B. The Problem of Income.

Most of the revenue sources of the University have not increased at the same rate as have expenses. A major problem is in endowment and endowment income. The size of the endowment has not grown to keep pace with inflation and endowment income has not been keeping pace with inflation, much less the level of University expenses. For instance, this year it is anticipated that the income from the endowment will increase at the rate of less than one percent, a rate that may occur at the cost of the management objective for quasi-endowment growth.

Unrestricted gifts have increased substantially in terms of percentage but the total dollars involved is still small. Total unrestricted gifts anticipated in 1978-79 amount to $1.4 million out of a budget of $77 million. Of particular concern in the giving area is the failure of the Epoch Campaign to reach its goals for general endowment, endowment for financial aid, endowment for physical plant maintenance, and endowment for faculty salaries. The total amount raised during the Epoch Campaign for general unrestricted endowment of all sorts was $5.2 million, of which $3.5 million was in the form of deferred gifts.

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<th>FY 1975-76</th>
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<th>FY 1977-78</th>
<th>Market Value 6-30-78</th>
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<tr>
<td>Total Rate of Return</td>
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<tr>
<td>Restricted Endowment Pools</td>
<td>+11.98%</td>
<td>+9.75%</td>
<td>+1.54%</td>
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<tr>
<td>Total Rate of Return</td>
<td></td>
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</tr>
<tr>
<td>Unrestricted Endowment Pools</td>
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<td>-3.92%</td>
<td>+3.99%</td>
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<td>Dow Jones Composite Change</td>
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<tr>
<td>Standard &amp; Poor Composite</td>
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<td>-3.64%</td>
<td>-4.92%</td>
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<tr>
<td>Change</td>
<td>+ 5.91%</td>
<td>+6.93%</td>
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These sums, which fell below the goals of the Campaign, nevertheless represented a substantial increase over previous efforts to raise endowment.

A major increase in revenue in recent years has been investment income managed by the Treasurer of the University. The combination of short-term loans, stock options, and similar programs in 1977-78 produced approximately $1.1 million.

The recovery of indirect expenses on government contracts and grants has increased at a rate roughly equivalent to expenses, but this is largely the result of Medical Center recoveries. Duke's percentage of non-Medical total government grants and contracts declined from .536 per cent in 1969 to .367 per cent in 1975. In addition, the restructured policies of some government agencies such as the National Science Foundation have resulted in either cutbacks or funding at rates that do not keep pace with increases in inflation or at levels which require the recovery of less than 100 per cent of indirect costs. The result is that overhead recovery in campus-based divisions has not kept pace with the increases in expenses of the campus. Further, on the horizon is an O.M.B. proposal to limit the recovery of indirect expenses which may reduce Duke's overhead recovery by as much as $1 million annually.

Federal government grants to undergraduate students continue to be limited to a relatively low level of financial assistance, reflected in SOGs and BOGs. Students receiving such grants usually require additional financial assistance from the University. Nevertheless, these grants amounted to $648,118 during 1977-78, with an additional level of $584,338 in funds available for College Work-Study, and $1,035,801 in National Direct Student Loan funds. The NDSL grants have been responsible for a major increase in the loan equity of the University over
the last decade, but continuation of this program is in jeopardy. Its elimi-
nation would require recourse to federally insured student loans at a higher
rate of interest and might require the return to the government of funds now
functioning as permanent loan funds. The level of BOG and SOG funding should
increase as a result of the 1978 changes in the law.

State aid is at present limited to $500 for each North Carolina under-
graduate. It produces a relatively small sum of money ($248,050) but permits
some North Carolina students to attend Duke who would not otherwise be able to
do so.

Substantial federal assistance is still available to graduate students,
primarily in the form of training grants, and federal funding is available for
individual research projects and limited program activities. Outside the area
of student aid, it is not a major factor affecting the instructional activities
of the University. However, it is a significant factor in research, particularly
in the physical sciences, Psychology, and Engineering.

In other areas, federal decisions to end grants for building, a program
heavily utilized by Duke in the 1960s, have led to a need for private funding
for all capital construction.

C. The 1978-79 Budget.

The 1978-79 budget is not atypical of that in recent years. It
reflects an increase of 10.3 per cent in income from students, resulting pri-
marily from an increase in tuition and fees of roughly 8.5 per cent; a substantial
increase in Summer Session income; and small increases in endowment income. Total
revenue will increase at 9.7 per cent.
In terms of costs, all instructional and departmental research increased at the rate of 8.7 per cent; organized activities at 8.5 per cent; libraries at 8.4 per cent; student services at 9.3 per cent; operations and maintenance of the physical plant at 7.8 per cent; and general administration at 13.1 per cent, primarily because of major cost additions in the Office of the Counsel, University personnel, and Material Support. The increase in total educational and general expenses has been budgeted at 9.9 per cent for the year. This is a year in which inflation is predicted at somewhere around 8.5 per cent. The total funds available for increases in wages and salaries was 5.5 per cent for biweekly and monthly employees, although many individuals received higher increases. We were able to budget a 5.5 per cent increase for faculty. The University of North Carolina, by comparison, was able to provide 6 per cent across the board increases for faculty with an additional 1.5 per cent for merit increases.

D. How the Budget has been Balanced.

In recent years the budget has been balanced primarily because of a number of factors. There has been stringent budget management resulting in a steady state size of the traditional departments. Increases in the size of the faculty have been almost entirely the result of the addition of departments, such as Computer Science and Policy Sciences, which were added without the elimination of any existing departments. As has been indicated earlier, faculty and staff salary increases have not in general kept pace with the cost of living, and have begun to lag behind the rates of increase at some universities with which we compete, although some individual faculty salaries have kept pace or exceeded it. There has been a gradual restriction in library acquisitions, departing from the tradition of buying almost everything that was requested by faculty members. Maintenance of buildings has been deferred. Renovation of existing
facilities has been kept at a minimum, resulting in serious immediate and long-range problems. During a number of the years of the last decade, we have not been able to purchase laboratory equipment to replace obsolete equipment, although that situation has been alleviated substantially during the last two years. We have not added academic facilities such as computer terminals for students in the numbers that are desirable, nor do we have the intramural and extracurricular recreational facilities such as handball, squash, racket ball, and tennis courts, which are both needed and now regularly found in universities with which we compete. There is inadequate clerical support in departments whose secretaries were traditionally paid for by grants which have now disappeared. The number and size of our graduate awards are neither competitive with those offered by some universities with which we compete nor sufficient to maintain programs of vitality in several departments.

The stringent budget controls would not have been adequate, however, had there not been annual increases in tuition of increasing magnitude, a gradual increase in the size of the student body in Trinity, Engineering, and Law, and increased income from short-term investments. The relationship between expenses and tuition income has produced less costly operations in Law and Engineering which have helped to defray expenses but which cannot be continued without the sacrifice of quality in those divisions.

E. Balancing the Budget in the Future.

Our present problems will become more acute in the foreseeable future. We hope that endowment will increase as the market rises and there will be some increase in endowment income. Neither a major increase in endowment income nor a major source of new endowment, however, appears to be on the horizon.
There is no reasonable possibility of major increases in indirect recovery on government contracts and grants outside the Medical Center; indeed, government policies may reduce the levels of recovery. Efforts nonetheless must be made to increase both the volume of grants and the level of recovery of indirect expenses. Unrestricted gifts should continue, but a 100 per cent increase in unrestricted gifts over the next four years would produce only an additional $1.4 million in income.

There are real threats to the potential for increasing endowment and annual giving from proposed changes in the tax laws. Limitations on the deduction of gifts of appreciated property would materially hinder the accumulation of endowment. Restrictions on deferred gifts, either through limitation of the deduction for appreciated property or changes in the estate tax laws, would also materially hinder the accumulation of endowment. Increasing the incentive to using the standardized deduction may have substantial impact on annual giving, although efforts to permit the charitable deduction to be listed "above the line," if successful, will have a highly beneficial impact. During recent years we have experienced sporadic attempts to subject more University property to local taxation.

There is a reasonable possibility of gradually increasing state aid and federal aid but little likelihood that the increase will be of a magnitude that will balance the greater need for student assistance if present admissions and financial aid policies continue. Indeed, the present system of charging students who can pay the equivalent of a surtax to recycle their tuition income to provide assistance to students who cannot afford to attend Duke may cause significant problems in the quality of the undergraduate student body, as the number of students graduating from high school decreases and the percentage of
this pool who can afford annual increases in tuition also decreases.

The unwillingness of the federal government to provide greater support for graduate education, aggravated by longer periods of residence by graduate students who have poor job prospects, will continue, while maintenance of a viable number of highly capable graduate students is essential for the retention of our ablest faculty. The cost of a critical mass of highly qualified graduate students must be borne by the University if alternative funding is not available. The price for failing to do so would be a dramatic change in the nature of this University.

A higher percentage of undergraduate students will be unable to pay tuition and living costs at Duke as these costs increase annually. An effort to meet 100 per cent of need will require even greater increases in tuition to fund those who are unable to pay more than a small share of the total costs. There will be an increasing dependence of professional students on University sources of financial assistance, whether grants or University-based loans, if the NDSL program is repealed, as appears to be likely.

Our expense problem will become more acute over the near future. We can anticipate a more limited turnover in academic and administrative positions because of a number of factors: the "steady state" faculty pattern in higher education during the next decade; federal restrictions on our right to require retirement at an age lower than 70; and the present demography of a faculty hired in their late 20s and 30s between 1957 and 1967. In addition, the consistent increase in the minimum wage, which will probably ultimately be pegged to a percentage of average industrial wage without regard to local employment markets, not only raises the costs of biweekly employees at the lower levels but places
pressure on the entire wage structure which otherwise would be compressed to unacceptable limits. Nor can the possibility of unionization of the hospital with fall-out effects on campus wage and salary levels be ignored.

We also must be in a position to compensate our able faculty more effectively than we have been doing. Two examples point out the problem. An able professor who has taught effectively and published over the last decade at Duke would have received above average salary increments. The total of this salary increase would, in most cases, barely exceed increases in the cost of living. The take-home pay actually would not have kept pace with the cost of living because the salary increases have placed him in higher income tax brackets and his social security taxes have skyrocketed. During the same period, the value of each share in his retirement has not kept pace with the cost of living because of market performance, and the University's future contributions to his retirement fund will be reduced because of its obligation to pay increased social security.

An average senior professor is still being paid a competitive salary. The situation is more serious for juniors. In a second example, a "high" annual increase in salary on a percentage basis produces a relatively small increase in total dollars for assistant professors. Increasingly, such persons must consider positions in government or industry, often at salaries double those they are receiving at Duke. Yet the future of the University requires that the best be retained to provide the leadership for tomorrow.

Biweekly costs too will rise as a result of an inability to retire employees before age 70, increases in employer contributions to social security, and the pressures of inflation. The new retirement floor will probably be accompanied by increased costs for medical insurance and disability insurance, as well as the
costs of retention of workers at the top of wage scales. We must be able to reward merit while still meeting cost of living increases for employees who perform acceptably. We must continue to improve the retirement system for biweekly employees.

We have just passed the threshold of costs incident to compliance with OSHA, Title IX, etc. A continuation of the intercollegiate athletic program at its present level will require a higher level of subsidization. Compliance with the handicapped regulations alone will cost over $500,000 in the next two years. Much needs to be done to increase the numbers of women and minorities in the faculty, but the narrow needs of the departments, the small number of vacancies, and the limited pool of highly qualified people in some fields means that some additional costs will be required to deal with this problem effectively.

Improved management within the University may require a move toward more permanency in the position of departmental chairman and a higher level of compensation for the extra duties expected of chairmen. In some disciplines, such as Law and the Graduate School of Business, the disparity between academic salaries and salaries in the private sector will have to be narrowed if the ablest people are to be attracted. A limited number of key positions within the management of the University also must be compensated at a level which if not competitive with private industry must at least respond to the growing level of disparity.

Energy costs will continue to spiral. Duke will accept its share of the costs of the recent coal industry settlement, as well as the increase in oil costs which will continue to occur as inflation in the United States continues and the dollar weakens. The move towards an "all-electric" campus in the 1960s was fortunately aborted, but the cost of all-electric, windowless buildings will
continue to plague us. Included in energy costs must be the payment of the costs of the $6 million steam plant which must be debt-financed. Major efforts at conservation will not be adequate to take care of costs of this magnitude.

Of particular importance is the legacy of deferred maintenance. All other problems are dwarfed by the requirements for roofing, electrical and plumbing repairs, painting, etc., which reflect the condition of simultaneous plant obsolescence and a failure to either repair when needs arise or budget sufficient depreciation to provide for necessary renovation.

It is possible for us to continue for at least a few years more as we have done in the immediate past. We can gradually permit size to increase, tolerate overcrowding in our dormitories, annually increase tuition, defer maintenance, and impose gradual restrictions across the board on all our departments, while increasing our expenditures for general administration and plant operations. Such an approach, in my judgment, would be the antithesis of excellence; it would be programmed mediocrity.

In my opinion, it is a truism that a good, not to speak of a great, private university must be composed of educational components which are better than or different from those in public universities if in the long run it will be able to charge higher tuition and continue to achieve a high level of support from corporations, foundations, and private donors. I do not speak solely of the scholarly reputation of its professors or the quality of its library and physical facilities, but would include the opportunity for individual learning experiences of quality for its students and a superior level of academic and non-academic counseling during the period in which a young person progresses from adolescence to adulthood. My analysis suggests that future development will preclude us from
doing what we are now doing as well as we have been doing it, much less improving
our educational product in the terms of instruction and counseling students and
making major contributions to scholarship, unless we are prepared to limit the
scope of what we are now doing in order to concentrate our resources on the things
which we can do best. I agree with Princeton University's Priorities Committee
which concluded this spring that "... in the face of financial adversity, it
is better to do fewer things, and do them well, than it is to try to spread the
effects of a cut-back evenly across all segments of the University." It is not
necessary that we do as many things as Berkeley. What is important is that we do
what we do as well or better, or that we do certain things that a Berkeley cannot
do.

The price of permitting a gradual erosion of quality which is implicit in
faculty salaries that do not meet cost of living increases, deferred maintenance,
reduced library acquisitions, and inadequate financial aid, must be measured in
a number of ways. Objective indications of reduced quality are comparatively
easy to measure; other factors combine to pose more difficult issues. One di-
mension is faculty morale. Faculty morale at Duke is suffering, and will continue
to suffer, from a gradual perception that academia in the eighties is going to be
something quite different than was academia in the sixties. Attempts at new
initiatives, funding for new programs, administrative receptivity to creative
ways of doing the same things better, simply cannot exist in a climate in which
no money can be budgeted for qualitative improvement because every dollar must be
targeted for maintenance of effort.

Another dimension is student morale. A university whose physical facilities
are deteriorating, which cannot compare with a public university in recreational
facilities, which requires the average student to accumulate substantial debts, and which cannot attract or retain the ablest scholars, ceases to be the kind of place which young people aspire to attend. There is a vast difference between a school whose student body matriculates because it is the least undesirable of their alternatives and a school which the average student would prefer to attend over any other alternative. These matters of the spirit may be equally important reasons for retrenchment, an assertion of priorities, and reallocation of resources. A faculty that knows that it has a chance to be better, a student body that is proud of the institution it is attending—these are long-term assurances of quality that transcend ACE rankings or SAT scores in the measurement of the worth of an institution.

If I am right and retrenchment is either (1) required to balance the budget in future years and/or (2) desirable to provide some flexibility and discretion in an effort to achieve excellence on a more selective basis, then it follows that planning should be directed toward the achievement of those ends. Obviously, such planning would involve efforts to both increase income and cut expenses in our present operations. It involves something else as well, however. Included must be a reexamination of some things we have been doing which do not have major cost consequences but simply suggest opportunities for improved scholarship, improved teaching, and better management. In addition, we must be prepared to question a series of assumptions, most of which have never been formally approved by this Board but which are firmly adhered to by one or more of the University's constituencies and which thus far in University planning have been treated as immutables. I attempted to list some of these "assumptions" at the outset of my committee's deliberations:
1. The undergraduate student body should remain approximately its present size.

2. Ability to pay educational costs should be irrelevant to admission to the undergraduate school.

3. The University should provide 100 per cent of need to all undergraduates admitted.

4. The University should continue all of its present graduate programs because a department must have a graduate program to attract able scholars and no University can be great without a broad graduate curriculum.

5. The Graduate School should have substantial resources to make grants without regard to financial need because good graduate students cannot be expected to pay the costs from their own resources or loans.

6. Duke is a residential college and therefore it should continue to assure eight semesters of campus housing to every student who desires to live on campus and make efforts to accommodate the transfer students it cannot now house.

7. The placement opportunities available to Duke Ph.D.s should not be a major factor in determining the size of the Graduate School because such scholars are a national resource for which there will always be a need.

8. The present tenure system should not be modified because compliance with AAUP policies is necessary for faculty morale, stability, and academic freedom.

9. Serious consideration should not be given to the elimination of departments or professional schools because there is no way to really evaluate their relative strengths and weaknesses and to attempt to do so will damage faculty and student morale and will probably have to be abandoned.

10. A strong program of intercollegiate athletics is necessary (a) to maintain alumni support, (b) attract students, (c) encourage gifts, even if such programs operate at substantial deficits.

11. High visibility prestige activities such as the Primate Facility, the Marine Laboratory, etc., should be continued without regard to limited number of students and faculty involved because the reputation of Duke is enhanced by these activities.

12. Distinguished departments or schools, as determined from national rankings, should continue to exist in present form without regard to student demand for courses offered or ability
to generate external support because the reputation of the University depends upon these departments and schools.

13. The libraries of the University should continue to rank in the top twenty-five in the nation without regard to the increasing demands for computer use and laboratory equipment.

14. Undergraduates should be allowed to select a major (and/or second major) without reference to any criteria other than willingness and ability to meet the department's minimum requirements.

These are "assumptions" most of which I would gladly endorse if I could do so with a sense of fiscal responsibility. Our efforts to respect all of them are part of the problem which we now face. The point of the matter is that we cannot do everything as well as we would prefer. The problem is that almost everything we do, we do reasonably well, so that when we speak of curtailing or eliminating, we are not talking about discontinuing things that are undesirable; we are speaking of curtailing or eliminating something which we would like very much to retain if we could afford to do so without sacrifices to other programs or activities which we regard as of a higher level of excellence or importance.

In this document I will propose the examination of these and some other policies which we now follow, with the ultimate objective of limiting the scope of the University to a level which is manageable and which will provide flexibility for improvements that will provide a higher potential for excellence. I fully appreciate that in so doing we must face at the outset the criteria that must be used in determining curtailment or elimination of any activities, the processes that must be followed in order to assure those who may be affected an opportunity to be heard and to influence the ultimate decision, a legitimation of what must be accomplished in the eyes of the constituencies of the University, and a sense of confidence by those making the decisions that whatever is done
constitutes the least undesirable alternative.

The faculty must play a significant role in these processes, but ultimately the responsibility for making the recommendations to this Board must be that of the officers, and the responsibility of the ultimate decisions must be that of the Board. We hope to be able to utilize the resources of the individual departments and schools, the Academic Council, the Undergraduate Faculty Council, and our student and alumni associations in such a way that final decisions are made after receipt of the informed judgments of the constituencies involved.

The Board should keep an open mind on the matters discussed until it has the benefit of the views and recommendations of all our constituencies, recognizing that the faculty has a particularly important role to play in planning for the future. The ultimate responsibility of this Board, however, is not only to the existing faculty, students, and alumni, but to future generations, to past generations, and to the public. It must make the decisions it thinks are best regardless of my views or the views of any particular segment of the University.

The next four sections of this document deal with (1) non-economic possibilities for improvement, (2) alternatives for increasing income, (3) alternatives for reducing expenses, including the discontinuance of existing activities, and (4) the process by which hard decisions should be made. Necessarily, the description of alternatives will be brief. Some are self-explanatory; others will require a staff paper followed by detailed consideration by different constituencies before submission to the Board for decision.
III
Planning for Non-Economic Objectives

Much needs to be done in rethinking some of the ways in which we have conducted our affairs, completely apart from the necessity of husbanding and reallocating our resources. Concern with costs should not blind us to consideration of areas in which we can improve without major economic consequences. I have incorporated a number of areas of concern under this heading. The following comments are not suggestions for action but may be perceptive of problems that require thoughtful consideration. Neither are they intended to imply that our present operations are weak, or to be critical of the great accomplishments which have occurred during the last half-century. Duke is an outstanding university. Its weakest components are vastly superior to those found in all but a few universities. We need to improve our self-confidence, not to reduce it. The comments which follow suggest avenues by which we might improve an already sound enterprise. They are offered with the expectation that we have the confidence and maturity to examine how we might improve without forgetting how good we already are. If none is adopted, Duke will still be an excellent center of learning.

A. Creation of an Atmosphere More Conducive to Scholarship and Colleagueship.

The University has grown and become compartmentalized into specialties. Both growth and specialization are inevitable products of progress. They have produced a greater capacity for effective instruction and research than existed when the University was a smaller association of scholars without the laboratories, libraries, or high-quality students now available. In the opinion of some, there is room for improvement in relationships among (1) faculty of different departments; (2) faculty and administration; (3) faculty, administration, and students.
We need to retain and improve confidence, common objectives, appreciation of mutual contributions, confidence in the future, willingness to sacrifice for the common good, and a sharing of intellectual interest within the faculty. Simultaneously, there are complaints of lack of leadership and lack of participation in decision-making and little recognition that one of the prices paid for full participation of all segments of the community in decision-making is less capacity for prompt decisive action by those responsible for leading.

We need to concern ourselves with improving the ambiance in which instruction and research takes place and in which administrators, faculty, and students interact. Informal visits by top administrators with departments, regularly scheduled meetings with departmental chairmen, regular meetings of the deans of the constituent schools, and informal social and discussion sessions by members of different departments can help. Publication of a bibliography of scholarly writings by individual professors, the revival of faculty colloquia, greater participation by faculty in the activities of student federations and closer rapport with the leaders of the student governments can be significant. The possibility of a faculty luncheon club in the present Union building when the new Rathskeller is built, and the possibility of setting aside plots for gardens for faculty, staff and students are examples of activities which provide a stimulus for interaction. Serious concern at the departmental level directed to those things which departments have in common with faculty in other disciplines, e.g., the curriculum, improvement of teaching, the learning process, must be cultivated. The list is almost endless.

We have every right to be proud of our accomplishments, but we must always be careful to avoid an attitude of complacency. We do not need or desire a place
where everyone is critical of all that has happened in the past or is planned for the future, but neither do we want an environment where change is anathema or professional apathy is a respectable way of life.

B. Reorganization of Academic Administration.

Serious consideration must be given to the reorganization of academic administration. At the present time the Provost has a wide range of officers reporting directly to him, ranging from the Director of Placement to the Dean of Faculty. The result is the necessity of dealing constantly with detail, with very little time left for the "big" issues. The function of the Provost must be intellectual leadership and academic development, and he must have the staff to deal with the day-to-day problems which the operation of a sophisticated and complex academic enterprise necessitates. No one wants more administrators than are necessary, but it is false economy to have too few. For example, it is remarkable that no one is charged with the specific responsibility for developing and implementing plans for faculty motivation and development. Elimination of duplication of function may free time to provide greater coordination.

We have no College of Arts and Sciences. The result is that no one above the departmental level really has primary administrative responsibility for the course offerings in Arts and Sciences. The Dean of the Graduate School and his executive committee approve graduate course offerings but wisely have never attempted to produce an integrated graduate curriculum. The Dean of Trinity College has virtually no impact on curriculum other than to serve as an ex officio member of the Executive Committee of the Undergraduate Faculty Council of Arts and Sciences. The Dean of Faculty is principally concerned with the subject of faculty appointments, and his office has over the years assumed payroll
responsibilities that should belong to a lower level administrative functionary. The result is that curriculum is basically determined by departments.

Within the departments, courses are adopted subject to ultimate approval by UFCAS or the Executive Committee of the Graduate School. Some courses are probably offered because they have always been offered. Some courses are probably offered primarily because a particular professor wishes to offer them. Some courses are offered because the department has determined that they represent an important area of study for majors in the department, graduate students in the department, or the student body at large. Few departments have systematically evaluated their curriculum to determine what courses are necessary to fulfill the department's mission or what courses duplicate those in other departments.

There is no one in central administration with the specific responsibility of determining whether a new faculty member selected to fill a vacancy meets a significant need in presenting the curriculum that the department should make available to students. Obviously, departmental chairmen do not choose people whose courses are irrelevant to the department's mission, nor does the Dean of Faculty approve an appointment which does not meet an asserted need, but the inter-relationship between staffing and the curriculum is not as intimate as would be desirable. The result is departments of substantial size which are left with total voids if they lose a single professor while they have "clusters of excellence" of several professors teaching extremely similar subject matter.

The Dean of Trinity College is in a particularly anomalous position in that he has no direct authority over the faculty or curriculum of the college over which he presides. He is basically a "super" dean of students responsible for advising, counseling, and student activities but held accountable for the total educational product of a College over which he has little control.
The principal decision makers in the choice of faculty and in curriculum matters are departmental chairmen, who report to the Dean of Faculty with virtually no relationship to the Dean of Trinity College and a relationship with the Dean of the Graduate School normally confined to the approval of graduate courses, the admission of graduate students and the allocation of grants-in-aid. Departmental chairmen serve for initial terms of three to five years subject to reappointment. There is remarkably high turnover in most departments. Few chairmen stay long enough to develop the administrative expertise required to manage, as distinguished from monitor, the affairs of the department. Experience has demonstrated that long tenure is not necessarily desirable; but there can be little doubt that three years is an extremely short time to acquire the talents required for effective leadership of enterprises as complex as some of our departments.

The Dean of Engineering is also in an anomalous position in that he is held responsible for instruction and research in the entire School of Engineering but does not have authority commensurate with this responsibility. Recently there has been recognition that although departmental chairmen report to the Dean in matters affecting undergraduate education, he has limited authority over graduate curriculum, grants-in-aid, biweekly employees of the departments, or some facilities occupied by the departments. He is required, in substance, to negotiate with departmental chairmen in order to achieve an integrated educational program and a proper allocation of the resources made available by central administration for Engineering education.

Central to administrative reorganization is the need to place in one person the administrative responsibility for staffing and curriculum matters in Arts and
Sciences subject, of course, to normal faculty participation in determining faculty appointments and curriculum. Such a person—whether he be called Dean of the College of Arts and Sciences or some other title—needs to take a personal responsibility for which courses are offered, who teaches them, and the quality of instruction. The Dean of Trinity College needs to have a direct role in the development of the curriculum and the selection of faculty of the college over which he presides, and the same is true of the Dean of the Graduate School. The Dean of Trinity must be recognized primarily as an academic dean. The Dean of the Engineering School must have authority over the faculties, staffs, and resources committed to Engineering, and participate in the development of graduate curriculum to the same degree that he now participates in undergraduate curriculum matters. He should have a significant vote in allocating the funds made available by the Graduate School grants-in-aid. Departmental chairmen in Arts and Sciences should report directly to the person who has the overall responsibility for curriculum and staffing in Arts and Sciences. In addition, they should be given greater incentives for assuming the position and continuing in their capacity as departmental chairmen, including appropriate salary differentials to compensate for the additional effort required, and assistance in acquiring the entrepreneurial and administrative skills to manage effectively.

The Graduate School Committee of the Academic Council recommended last spring that divisional boards of visitors be appointed. Such a suggestion has much merit. We need outside evaluations of the quality of our departments and how they relate to one another.
There is no formal organization of the deans of the schools of the University, although some are included in the Provost’s Group. The deans need to meet regularly under the chairmanship of the Provost to discuss common administrative and educational problems and the potential for closer relationships between their faculties.

Our administrative table of organization abounds with titles of Assistant Provost and Vice Provost, giving the impression that the Provost has a substantial staff. In fact, almost all of the people holding these titles have independent administrative duties that engage their full time and effort, leaving the Provost with virtually no staff. Reexamination of titles is appropriate.

Student Services needs to be reorganized. A wide variety of student affairs activities report to the Dean of Student Affairs, who reports to the Dean of Trinity College for some purposes and the Provost for others. An Assistant Provost has responsibility for undergraduate admissions, financial aid and registrar functions. Student Counseling and Placement report directly to the Provost. Student Services need to be reorganized under one administrator whose responsibilities include service to the entire student community.

We also need to look into the future when considering how our disciplines are organized. Traditionally, each discipline is organized within a department, although in fact some of our departments resemble a confederacy more than a single unified discipline. In the long range, we must ask ourselves whether it is necessary to have as many departments as we have disciplines or whether it may be better to combine several disciplines within a single department.
Such an approach might encourage greater interdisciplinary effort, which is sadly lacking at present, as well as greater managerial effectiveness. Likewise, we should ask whether we should not have some specialists whose scholarship does not legitimately fit into any existing department. We might also inquire whether the organization of departments under divisional deans would be desirable.

Most departments are basically structured as they were when the University came into existence. We should be examining how they should be organized for the twenty-first century. We may very well conclude that we need units with a less narrow focus; that new areas of knowledge need to be explored through interdisciplinary effort and that such effort should be organized on a departmental basis; that some fields of knowledge which we have been exploring, while still valuable, are less critical to the anticipated problems of the twenty-first century than are areas which we have not yet begun to explore.

C. Improvement of the Faculty

We have a very good faculty at Duke, but there is reason to believe that a number of impartial outside observers might conclude that the University deserves a faculty of greater overall distinction than it presently has, given the resources that have been expended over the last half-century. Whether this is true is less important than the realization that no matter how good the faculty is, it is capable of improvement.

We should address the ways in which we can improve the quality of the faculty. Obviously, careful consideration needs to be given to the limited number of new positions that will become available during a period of retrenchment.
Certainly we will continue to look for good teachers, scholars of considerable promise, persons with intellectual vision. We must also concern ourselves with the potential that each new appointee has for interdisciplinary involvement in the major issues likely to require investigation in the immediate future. More joint appointments across disciplines or between Duke and the University of North Carolina might be particularly useful. In short, many new appointees should have a University potential greater than that required to meet the more parochial needs of their departments if we are to develop the capacity for genuine, significant interdisciplinary efforts.

Secondly, we must examine the presence or potential of entrepreneurial skills, at least in some appointments. This element has been almost wholly absent from our considerations in the past, yet we need such skills--particularly in our chairmen, but more and more in every professor--as we depend more upon external funds for support of research efforts.

Finally, there must be a continued commitment to the University's policy of affirmative action. We have too few women and too few members of minority groups. The challenge is to acquire more without sacrificing quality during a period of retrenchment.

Most of the faculty who joined us over the last few decades are with us now. Any genuine effort aimed at improvement cannot ignore this reality. We must provide greater levels of incentives for the faculty. We must experiment with "banking" research leave for faculty who generate soft fund support for their nine-month teaching or research obligations as well as other techniques of utilizing at least part of the overhead generated by grants for their academic endeavors. We need to examine wider salary differentials reflecting greater
discrimination between the most and the least meritorious of our faculty. In a perfect world, all faculty members with tenure would have equal ability and work equally hard. In the world in which we live, neither of these is true. Our obligation must be to retain the most able, which means a greater reliance on merit increases in salary administration.

We need to formulate a program of faculty development, not in the sense of an administrative infrastructure, but a faculty-generated program to improve the research capability, the teaching capability, and the grantsmanship of colleagues. A high priority should be placed upon such a program in future requests to the Duke Endowment for special funding. It is an anomaly that institutions such as Duke invest little in the development of the personnel upon which they depend for institutional accomplishment and prestige.

Our process for deciding on promotion and the award of tenure must also be examined. It is increasingly evident that there will be virtually no new positions available in the University if we continue to award tenure in the same percentage of cases as in earlier years. Raising the standards of tenure means that young professors will pay the price for leniency shown in the past. An alternative is lengthening the period of time before tenure is awarded. A number of major universities have already done so. Written policies governing the substance and procedures of promotion and tenure decisions must be developed. These matters are now under consideration by the Dean of Faculty and the committee that he chairs.

We must periodically evaluate tenured faculty in terms of their teaching, research, and participation in University affairs. This is already done in a general way prior to annual recommendations for salary increases, but we have no
systematic examination of tenured faculty as is done with the renewal of an appointment, promotion, the award of tenure, or the Academic Council Executive Committee's appraisal of central administration. The reexamination should be conducted with the objective of assisting colleagues who are no longer fulfilling the promise that they once demonstrated as well as rewarding colleagues who are excelling in the arts of their profession. In a few cases where a colleague over a substantial period of time has produced no distinguished research and mediocre or worse teaching, he should be informed that he should not anticipate future salary increases unless he becomes more productive and that if he should choose to resign and accept employment elsewhere, the University is prepared to negotiate a settlement with him.

We should also examine differential staffing. In many departments professors have a load of two courses per semester. The assumption of an additional course is viewed as a special obligation. Such teaching loads are small compared to the norm before the decade of the sixties, particularly when enrollment in many of our courses is extremely small. A four-course load may be a substantial obligation for a professor engaged in a major research project. Indeed, it may be more than he can undertake without sacrificing the quality of his teaching. It may be an extremely light load, however, for a teacher who during a particular year is not engaged in major research. There is no compelling reason why some should not teach more and others teach less, depending upon the level of their competence and commitment to their scholarly endeavors and the needs of their department. Interdisciplinary activities have been handicapped by refusal of departments to reduce the teaching loads of professors exercising leadership in these ventures. The Provost has authority to overrule such decisions, and should do so when the interests of the University and a particular department
do not coincide.

We must reexamine faculty fringe benefits. As has been indicated earlier in this memorandum, the tie-in relationship between the University contribution to social security and its contribution to TIAA-CREF has resulted in lower contributions to future retirements as the social security laws have changed during recent years. We need to develop a formula that provides assurance of a reasonable retirement income, recognizing that the financial constraints already described limit the amount that the University can contribute. Other fringe benefits also need to be studied. The cost of group life insurance may very well increase as a result of the new mandatory retirement age. Tuition benefits are both extremely costly and increasingly beneficial to the faculty in the School of Medicine while fewer faculty in other disciplines participate in the program. The value of our disability insurance is less clear, given the rise in premiums, than it was at the time the program was initiated. The faculty needs to be consulted and needs to appreciate that dollars spent for fringe benefits are dollars not available for salaries, but that the same number of dollars spent in some types of fringe benefits may produce a substantial tax advantage to the recipient. These questions are now under consideration by the appropriate committees.

D. Curriculum.

Throughout this memorandum there have been suggestions that the present curriculum of the University has developed in a topsy-turvy manner reflecting in large part the capability of members of the faculty who are or were interested in presenting specific courses. There is far too little interdisciplinary effort, and in some important areas, such as international studies, there is little organization in the form of an integrated program. Each department should
engage in a systematic consideration of its curriculum. It should ask itself a series of questions:

1. Have we explored the possibility of interdisciplinary work with other departments which have courses dealing with the same or similar subject matter? Are there major problems worthy of study by our students which should be examined from an interdisciplinary perspective in which our disciplines should play a major role?

2. Are some of our courses no longer as important as they were at the time they were initiated? Should they be replaced with courses which we do not now offer but which are of greater significance?

3. Are we teaching a particular course because the students wish to take it, because a colleague wishes to teach it, or because we have reached the considered judgment that it is important enough to merit study by students? Do we have a balanced curriculum in the sense of providing introductory courses, courses for our majors, courses for our graduate students, and courses for those outside the discipline who need some introduction to it? Have there been demands for special courses we are not offering, and have we considered these demands fairly in light of the resources available to us?

4. Have we examined the possibility of cooperating with the University of North Carolina to provide courses which would complement one another when neither of us can offer a full sequence?

5. Have we examined our scheduling to determine whether some of our small courses can be offered in alternate years with enrollments still sufficiently small to be functional, thereby freeing colleagues for other courses or for research?

6. Have we developed a coordinated program for students who are accelerating to utilize the Summer Sessions as an integral part of a three-year curriculum?

7. Do the courses described in the University Bulletins honestly describe the courses likely to be available to students?

8. Is our faculty taking advantage of the resources of the Teaching Council to develop new courses? Has the Teaching Council helped our teaching effectiveness?

Some current problems require study at a level higher than the department. During the last year the University greatly benefited from an extremely diligent
Curriculum Committee of the UFCAS. This year a task force will be further pursuing the question of major changes in the undergraduate curriculum. The Provost has assumed responsibility for the development of a program of international studies at the undergraduate level, upon the advice of the Board of Trustees. In the future, much more serious consideration must be given to the subject of continuing education. There is reason for central administration to take the initiative for the development of a few model courses of an interdisciplinary nature that might serve as catalysts for curriculum revision in a number of departments. Thoughtful curriculum studies by our professional schools should also be undertaken. In short, much needs to be done.

E. Graduate School.

No one seriously questions the importance of having a strong and effective program of graduate studies if the University is to continue as a major academic enterprise. There is reason, however, to reexamine some of the practices and policies which have developed through the years.

The Graduate School is comparatively new at Duke. Its development is a tribute to the early leadership of Paul Gross, and the able leadership of others who have served as Dean. A viable, strong school has been built in a short period of time. Any proposed major changes in its operation must therefore be examined with great care.

As indicated, there needs to be greater coordination of the curriculum of the Graduate School with that of the undergraduate school in Arts and Sciences. It seems appropriate that the Dean of the Graduate School should play a significant role in representing the interests of graduate education in the development of the overall curriculum in Arts and Sciences.
We now have Ph.D. programs in over thirty disciplines, including a number of disciplines in our professional schools. Additional departments wish to initiate such programs. Graduate programs are costly enterprises in terms of faculty, laboratories, libraries, and financial assistance. The laboratories are in existence and the needed equipment can be acquired. The library is an extraordinary resource and must be maintained at a high level of acquisitions, although we may not be able to maintain its relative standing in comparable size with major state libraries. The faculty is available to provide the necessary instruction. The major problem is adequate financial aid.

The Graduate School receives greater support in financial aid than any other division of the University. In 1977-78, approximately $2.1 million were distributed in Duke funds to graduate students, an amount equal to over 80 percent of the tuition collected from Graduate School students. In addition, over $2.4 million were available for the support of graduate students from other restricted funds. No other division of the University approaches this level of financial support. Nevertheless, this level of support is inadequate for a graduate school of the size and diversity characteristic of Duke. Graduate awards in excess of tuition have not kept pace with the cost of living, and graduate enrollment has stabilized, with prospects of future reduction if the number of positions available at universities continues to decrease, particularly in the humanities. The University simply does not have substantial additional hard funds to put into graduate grants-in-aid without sacrificing unmet need in the other divisions.

Under these circumstances, it seems appropriate to consider alternatives to our present system of allocating graduate awards. Strong arguments can be made that the Graduate School would improve if we had fewer awards in greater
amounts. One method of achieving this result is for some departments to make awards only in alternate years, increasing the amount of each award to make it competitive with those offered at other universities. The result would be fewer students, but perhaps more able ones.

There is a wide range of quality among graduate students in the different departments, even allowing for the difference in perception among departments concerning relative qualifications. A strong argument can be made that money should not be allocated to departments in lump sums, as is now done, unless restrictions are placed upon the departments in terms of minimal academic credentials required for initial awards. The objectives of such restrictions would be that most hard fund support would be awarded to graduate students of a high quality in departments which have good records of training successful Ph.D.s. If a department could not produce students meeting the requisite minimal qualifications, serious consideration might be given to a discontinuance of its graduate program, unless there are a substantial number of students prepared to pay for their own expenses, with the understanding that the program might be reinstituted if conditions change.

Consideration might also be given to limiting the number of years in which support will be granted from hard funds, requiring support in any additional year to come from grants or from the student's own resources. All grants might be made subject to annual assessment of the progress of the student and be subject to termination if the student does not demonstrate the academic potential he was thought to possess at the time the grant was awarded.

The Graduate School is the only division of the University that makes no attempt to "package" awards, i.e., combine an award with a loan and College Work-
Study. Certainly, most grant funds should be distributed initially on the basis of merit, but students receiving such grants might benefit from a package that also contained a loan in their first year and a reasonable assurance of College Work-Study eligibility in succeeding years. After the first year, packaging might be extremely advantageous for students who do not receive awards or students whose awards defray only a small part of their expenses. However, such an approach would cause substantial problems in that it is difficult to allocate to the Graduate School a substantial percentage of the money available for NDSL and grants-in-aid when such funds are needed in other divisions which have a much smaller level of hard fund support for grants-in-aid.

Serious consideration should be given to distinguishing graduate awards which are associated with teaching assistantships from those awards to which no obligations are attached. At the present time, the grants-in-aid include both categories. Almost 50 per cent of the recipients, in fact, have some obligations attached to the awards they receive. The position of the Graduate School is that such funds are primarily grants-in-aid and should be administered accordingly. In reality, however, there is substantial difference between funds which are used for teaching assistants in English, Chemistry, and Physics, where the services of the recipients benefit the teaching mission of the departments, and other grants-in-aid. Such grants are not compensation for services, since the services are an integral part of the program leading to the degree, but are substantially different from other grants. Some kind of priority must be accorded to awards for teaching assistants so long as we utilize the services of the recipients in staffing our academic program.

The Graduate School has long eschewed part-time programs. There may be substantial merit to such a prohibition in the first year of a student's work
toward a Ph.D. It is less clear that the prohibition makes equal sense among all disciplines or that in succeeding years it may not be possible for a student to function in a part-time capacity as is done at some other universities.

Greater consideration should be given to terminal master's programs in some disciplines, including those offered to part-time students. The success of the MBA program at night suggests that there may be a market for part-time education in other disciplines. Successful programs would generate revenue which could be made available for additional grants-in-aid for students in full-time doctoral programs. A limited number of part-time master's degree programs might be extremely attractive to qualified students in the Triangle area.

Many of the rules of the Graduate School preclude substantial diversity in graduate programs among the different departments. Stipulations concerning course requirements are examples. It might be wise for Duke to experiment with a few pilot departments and programs designed to produce Ph.D.s through a different method of education. One example would be to model a program along the lines of the training of doctorands in European universities. This would involve the admission of a few highly qualified graduate students, adequately supported, each of whom would come to Duke in effect to serve an apprenticeship with a scholar of his choice. No formal instruction in class or seminar might be required, although the student would have the option of taking such courses as best meet his needs. The essence of the student's education would involve work in close collaboration with his chosen mentor on a serious dissertation. Many of the skills associated with graduate instruction—such as bibliographic techniques—would be required. Quality control might be maintained by requiring an external examiner to approve the final award of the degree. Undoubtedly, there are other techniques that might be followed, particularly with students
who seek a future in educational administration.

F. The Arts.

It is frequently stated that the arts have been neglected at Duke. This may have been true at one time but certainly is an inaccurate portrayal of the last decade. The Department of Music has increased in size and quality and is housed in one of the finest buildings on the campus. The Department of Art has a new chairman and an administrative commitment to fill outstanding vacancies. The drama program is functioning more successfully than at any time in the recent past. The Art Museum has been created and has operated at a substantial expenditure. Page Auditorium has been air conditioned. A wide range of programs in music, dance, drama, and visual arts is presented to students through the Office of Cultural Affairs, the University Union, the Duke Chapel's arts programs, Hoof 'n Horse, the Duke Symphony Orchestra, the Duke Chorale, the Duke Wind Symphony, the Duke Jazz Ensemble, the Ciompi Quartet, the American Opera Company, and others. Almost two hundred performances and recitals in music alone took place on the campus last year. The presence this year of the American Dance Festival created a greater potential, assuming that the Festival can be put on a sound financial basis that ensures that the University will in fact not be a major contributor to its program. Proposals for the American Musical Theatre suggest even more avenues.

This is not to imply that there are no problems. Both the Department of Music and the Department of Art are attempting to achieve the twin objectives of scholarly approaches to history and theory while at the same time teaching applied art. Some of our applied artists are members of the faculty; others are performers in residence. A high percentage of our teachers of applied music are part-time members of the faculty. The program in dance administered by the
Physical Education Department is narrow in scope. There is an understandable desire to do everything: provide performances for the region as well as for the Duke community; teach applied skills in art, music, and drama; engage in instruction and research in theory and history of art and music; operate a major museum by national standards; serve as a home for national companies who cannot afford permanent quarters elsewhere; and construct theatres to improve the conditions in which the performing arts flourish.

A strong argument can be made that Duke should have devoted more of its resources to the arts at an earlier stage in its history. Arguably, it could have made a greater national impact in art and music than in the sciences or law, forestry, education, or a series of other educational programs. Certainly, there is a national need for someone to do more than is now being done. The problem is that the existing commitment of resources was in place at the time that a new stimulus was given to the development of the arts at Duke. The costs associated with the new ventures which have been initiated during the last decade have all been add-ons to the University budget; nothing has been replaced. The ambitious program that some would urge for the future would involve much greater annual costs with little expectation of funding from private or governmental sources. In large measure, the decision of how much more can be done in the arts is bound together with the decision of what we are doing elsewhere that we should discontinue. It is simply impossible to continue to add new programs in the arts, or in any other area, without discontinuing something we are already doing.

G. The Library.

The Library will soon present a report on long-range planning which raises substantial questions concerning future space needs, status of the East Campus Library, consolidated libraries for the sciences, and similar matters. Many
of these issues cannot be appropriately addressed until further academic planning takes place. The Library does not exist for itself; it exists to support teaching and research. Priorities with reference to teaching and research need to be determined in the first instance. Additional plans must be made, however, to deal with certain events over which we have no control, such as the closing out of the Library of Congress catalog. Discussions of Library problems will be conducted by the faculty during this year.

Qualitative improvements of the nature suggested in this section will not suffice to solve the basic underlying problem of costs exceeding revenue. This problem can be met only through a combination of increasing revenue and reducing costs.

IV
Alternatives for Increasing Income

A. Increasing Income from Endowment, Gifts, and Grants.

1. Endowment Income.

It is obviously necessary to increase the yield on our present endowment. During recent years there has been a continual pattern of expenses rising at a faster rate than endowment income, with the result that the difference has been borne primarily by income from students. During this fiscal year, neither the income from the permanent endowment nor the quasi-endowment will increase at a rate equal to the increase in expenses. The President and the Investment Committee have initiated action to achieve these goals, including the regular evaluation of the performance of our portfolio managers and consideration of
ventures more risky than simply holding blue chip investments. Such efforts will result in a higher rate of return, if successful. Explorations during 1977-78 of potential investments in the Florida National Bank and a series of real estate transactions suggest the directions which must be followed with renewed vigor.

In addition, the highest priority must be given to the raising of new endowment. During the Epoch Campaign, approximately $18 million was added to endowment, of which about one-third was in the form of deferred gifts. This is a substantial beginning, but only a beginning.

The development of the University during the last decade clearly shows a tendency to seek money for buildings rather than for endowment. Thus, the net investment in physical plant increased by approximately $140 million between 1968 and 1977 while the value of the University's endowment increased approximately $21-1/2 million. Over the same period of time, the total number of chairs of endowed professors in the University increased by only thirteen, and most of these are not fully endowed. The increase in the endowment of the University over the period was inadequate to cover the $6-1/2 million increase in annual plant maintenance and operation costs or the $5-1/2 million increase in scholarships and fellowships awarded annually. In part, inability to raise endowment is a function of the age and wealth of our alumni and the inability of any university to alter a donor's desire to be remembered in the form of a building rather than a chair or scholarship fund. In part, however, it also reflects a series of "priorities" whether in the form of a Music Building, a new Library, a Chemistry Building, or a University Center. Regardless of what else is done in the near future, there must be a genuine commitment that nothing will take precedence over the raising of endowment. The matter is of particular concern in that the
opportunity to raise endowment through gifts of appreciated property—and particularly the opportunity to do so through a deferred giving mechanism that assures the donor and spouse income for life; a charitable deduction of appreciated property; and avoidance of capital gains and estate taxes—is under attack.

The importance that priority be given to raising endowment has been impressed upon the Institutional Advancement division, and the new Capital Gifts Committee will undoubtedly continue to monitor its performance. The Vice President for Institutional Advancement has devoted the summer of 1978 to rethinking the operation of Institutional Advancement in terms of organization, staffing, objectives, and evaluation of performance, with the central theme of increasing annual giving and capital gifts for endowment.

2. Annual Giving.

Annual giving reached the level of $2,236,000 in 1977-78. However, $750,000 of this amount represented specific gifts to the Iron Dukes and $445,000 to the Schools of Medicine and Law, leaving less than one-half of the funds raised for support of the remaining components of the University. The goal is to reach $4,000,000 during the next few years, but the gap between present performance and this goal indicates there is no reason for complacency.

Duke has enthusiastic and loyal alumni, many of whom have been more than generous in their support of the University. Most, however, graduated from Duke without any appreciation of the problems of financing a private university, and many have great difficulty believing that Duke needs money as much as their church or some other university which they attended. It is commonplace at alumni meetings to hear the feeling expressed that Duke does not need small gifts because
of the Duke Endowment. Much has been done during the last ten years to change this perception. The joint statement by the Duke Endowment and the University was a starting point. The Epoch Campaign increased the level of understanding of our problems, renewed relationships with alumni who had become disenchanted with the University during the late sixties, and attracted people who had not previously provided support. The fact remains, though, that the number of alumni contributing to the University is small in comparison with other great universities, and the size of the average gift is small. The failure by alumni of some divisions to support the University is almost embarrassing. The relative age and financial status of our alumni explains our inability to achieve major capital gifts. It does not explain either the low percentage of donors or the low level of average gifts. An alumni constituency, like any other constituency, must be serviced and courted over a period of time before significant results can be expected. During 1977-78, 70 alumni meetings were held in 22 states across the country, as compared to approximately 72 in the preceding two years. Efforts are being made to institute regular visitations. The number of people from Duke appearing at such meetings is still small. The first meeting of an alumni chapter may require the presence of the President or Chancellor, but more than this will be required for a sustained effort. Serious consideration must be given to adopting programs that have proved successful in other universities such as Stanford, which through its "Portable Stanford Series" and "Mini-College Alumni Day" across the country augments the ties between faculty and alumni to the ultimate financial benefit of the university.


A clear effort must be launched to increase the level of government and foundation contracts and grants in the non-medical sectors. Particular emphasis
must be placed on government grants because of the potential of achieving a high level of overhead recovery. As indicated previously, there has been a net decrease in the percentage of government contracts and grants going to the non-medical sectors of the University in recent years. In part, this reflects a high percentage of government money going into the sciences and the relatively small size of our science facilities. In part, it reflects an understandable failure throughout much of the academic sector to develop an entrepreneurial capacity to seek grants.

Faculty have been reluctant to write grant proposals because the effort needed to do so seems to be at the expense of time and energy required to do a proper job of teaching and writing the results of previous research. But one means by which the faculty can help the University with fund raising and remain true to the purpose for which they became academics is by developing research grant proposals in those disciplines where external funding is available and where funding is related to the research interests of the faculty member. Both the potential for distinguished scholarship and entrepreneurial ability must be considered to a greater degree in selection of faculty and in the award of tenure and in promotion. New senior appointments in those disciplines where external funding is available should be considered in the light of the capability of producing sustained scholarship that will be supported at least in part by such funding.

Much more can be done to improve the capability of the existing faculty to determine fields in which grant money is available, to prepare proposals, and to achieve funding. An improved program of incentives to departments and to principal investigators needs to be explored. In the fall of 1977 a modest program of incentives returning 4 per cent of overhead recovery to departments receiving
grants was initiated. It was moderately successful. More needs to be done to encourage departments and principal investigators. In the past, the principal incentive was that many grants, particularly in the sciences, built in two-ninths' summer salaries, thereby assuring eleven paid months a year to a professor with a grant. Incentives are needed to encourage grants that will replace costs now met through current fund support, such as part of a professor's salary during the normal academic year.

The discussions within the Chancellor's Long-Range Planning Committee revealed an absence of any organized system to make sure that faculty members are aware of potential grant opportunities in their disciplines. The Medical Center operates an elaborate system of sponsored programs, with primary responsibility entrusted to departmental chairmen. No such formal apparatus exists on the campus. We need to establish at least a limited capability of screening announcements and circulars of the major government agencies and foundations, and providing the information in useful form to departmental chairmen for distribution. This function can be performed at a relatively low cost. Whether it should be lodged in the Graduate School, the Office of the University Counsel, or Institutional Advancement requires further exploration.

One of the major differences between the campus and the Medical Center in terms of entrepreneurial skills rests in the fact that chairmen of Medical Center departments occupy a quasi-permanent status, with many serving for most of their professional lives. On the campus, chairmen regularly serve an initial term of three to five years, with relatively few succeeding themselves. A system of such regular rotation makes the acquisition of managerial skills or incentives for long-range planning most difficult. A department chairman may spend one year learning the job, one year doing it, and one year preparing to return to
teaching and research. There is reason to believe that permanent chairmanships might discourage many able scholars. The same individuals might accept appointment for longer periods than are now routine. In addition, most of the chairmen are on nine-month salaries and view themselves as presiding over equals rather than as managers of scholarly enterprises. Consideration must also be given to upgrading the status of chairmen, increasing pay with an eleven-month commitment, at least in the large departments, and redefining the position so that it quite clearly imposes upon the incumbent the obligation of seeking and assisting colleagues in obtaining external support.


The reorganization of responsibility for federal government relations which occurred this year should put us in a better position to respond effectively to federal initiatives and to cooperate with and coordinate activities of sister universities in efforts to achieve a higher level of funding by the federal government of University activities. During the spring and summer of 1978, almost daily action was required to monitor student tuition, tax credits, and the alternatives of increased appropriations for BOGs and SOGs. Regular contact continues to be maintained with those monitoring the Congressional committees with jurisdiction over federal taxation. We must continue to (1) expand programs of financial assistance to students; (2) increase funding for research at least at levels sufficient to compensate for inflation; (3) maintain our capacity to recover the actual indirect costs incident to contracts and grants; and (4) fight efforts which endanger either our autonomy or the charitable deduction.

We must also continue to encourage state support for students attending private institutions. In particular, we must continue to emphasize (1) the value to the state in a dual system of higher education; (2) the value to the citizen
in being able to choose the kind of institution he wishes to attend; and (3) the relatively small costs to the state compared to those involved in the state system.

B. Increasing Size.

Most divisions of the University are already as large as can be taught effectively within available resources. The School of Medicine and the School of Law would require major increases in resources if their enrollments were increased, and in the Schools of Divinity and Law it would be impossible to increase enrollments without substantial dilution of quality. The School of Nursing is facing difficulties in terms of the size and quality of its applicant pool and this year was unable to make its enrollment estimates at an acceptable level of quality. The Graduate School has been facing declining enrollments and, in the absence of a major increase in the graduate awards budget, will continue to do so. The applicant pools of many disciplines are simply too small to produce a large number of students of high quality. The Graduate School of Business Administration will increase in size, but must raise $20 million to increase its endowment and construct a building before it can reach its enrollment goal.

The only components of the University in which there is a reasonable opportunity for increases in size are the School of Engineering and Trinity College of Arts and Sciences. Both the size and the quality of the Engineering applicant pool are increasing rapidly. The Trinity College pool is large with little difference between the academic qualifications of the students who are accepted and the next two or three hundred students who cannot be accepted. The physical resources for instruction and research can accommodate larger student bodies with the sole exception of a needed Engineering library, which will be necessary even if the size of the Engineering School is not increased.
An addition of up to 200 students a year divided between Arts and Sciences and Engineering could be taught by the existing faculty with some increases necessary to accommodate the needs of freshmen and sophomore classes in Engineering, Chemistry, Zoology, Physics, and Economics. The additional revenue received from tuition would more than compensate for the new faculty required, primarily because of underutilization of existing faculty in most disciplines in junior and senior courses.

An increase in size from 5,700 to 6,500 thus could be accomplished with relatively little difficulty from the point of view of quality applicants, capable instruction, and facilities for research. The size of this student body would be approximately the same as that of Stanford.

Substantial disadvantages might attach to such an increase in size. In the first place, the quality of student life might suffer substantially by an increase of approximately 14 per cent in the undergraduate student body. Recreational and extracurricular space and dining facilities are barely adequate for our present student body, although extracurricular space demands will be alleviated by the construction of the University Center. Even this structure, however, will not meet the need for meeting rooms for sororities and other groups. Furthermore, there is a "closeness" which is lost in almost direct relationship to increases in size, and some of the best of college life may be the close association with peers and teachers.

In the second place, expansion of the student body would require deviation from the policy which assures any Duke undergraduate who matriculates as a freshman of four years' residence on campus. We are unable to accommodate appropriately the 5,700 undergraduates now at Duke. There is substantial overcrowding in "triples," some students are required to live in less than adequate facilities in
Trent Drive Hall and Hanes House Annex, and we are unable to accommodate transfer students on the basis of equality with freshman matriculants. To enroll 800 additional undergraduates, or any substantial fraction thereof, would make it impossible to adhere to the present policy. The construction of new dormitories to accommodate this number of students is not fiscally responsible. It would be possible to limit residence on the campus to three of the four undergraduate years, or to institute a requirement that students living in the Durham area must live off campus, or to establish other alternatives. To many, however, the opportunity for residential living at college is a highlight of the Duke experience, and the absence of assurance of University accommodation could have a serious impact upon our ability to recruit the best students. There is little additional quality housing available in Durham, and rental rates may escalate shortly.

A third factor deals with the available applicant pool in the years to come. As Juanita Kreps pointed out in her perceptive introduction to the University's 1976 self-study, the pool of college-age applicants will drop off precipitously in the years between 1980 and 1990. The number of students meeting Duke's entrance requirements is already a small fraction of the total high school population. The number willing to assume the loan obligations implicit in attending a high-tuition school such as Duke is low, and may become lower as tuition and living costs increase. The combination of these factors raises serious questions as to whether a class of students two hundred larger in number than the present class with the same academic credentials can be recruited ten years from now.

The impact upon research also deserves consideration. The departments in Arts and Sciences are smaller than those in most other universities with similar undergraduate enrollments. A substantial increase in numbers could be
taught effectively but the price in diversion of effort from research and
graduate instruction might be significant.

A final factor is that increasing the size of the undergraduate student
body primarily for the purpose of producing revenue is an easy way to deal with
the problem in the short run. It does not solve the long-range problem. This
is in substance what has been happening at Duke during the last decade, during
which the enrollment in the undergraduate schools increased from 4,599 in 1968
to 5,801 in 1977. The problem is that revenue produced by increasing enrollment
is soon expended, leaving no way to cope with future problems except to again
increase enrollment. Far greater stability may be reached by decreasing costs
where that is possible without affecting the overall academic standing of the in-
stitution, and using increases in enrollment only as a last resort.

Central administration has indicated its intent to keep the overall student
body at its present size. Any change in their policy would require a specific re-
versal of it. The matter deserves thorough study and resolution by the Board
in order to fix the perimeters of income and future planning.

C. Increasing Tuition.

Duke tuition is low in comparison with the tuition charged by the major
schools of the northeast, Chicago, and Stanford. It is high compared with tuition
charged at state universities and roughly the same as that of Emory, Vanderbilt,
and Tulane. We are, as a practical matter, no longer in price competition with
state universities, where the gap is so great that few price-conscious parents
can afford to bridge it. The gap is increasing yearly, and will continue to do so.

We have kept Duke tuition as low as possible even at the expense of im-
proving the quality of our educational product because it seemed prudent to do so
as long as possible. We have benefited to some degree (but how much is unclear) from price competition with the northeastern schools with which we compete. Some students have chosen Duke because it is less expensive than other schools of similar quality. We have remained competitive with the southern schools. Undoubtedly, there are some parents who can afford to send their children to Duke now but who would not be able, or would be unwilling, to do so if our tuition were the same as that of Princeton, Harvard, Yale, Columbia or Chicago. We may question, however, whether the number of students whom we attract by price competition, or the number of students we would lose by increasing tuition, is as significant as the loss of revenue involved in not bridging the gap between Duke and the other major private institutions.

It is difficult to understand how we can produce an education of equal excellence when our endowment is smaller, our tuition is smaller, and our educational programs are roughly the same. We must, therefore, seriously consider raising tuition if the increase can be accomplished by programmed improvements in the level of excellence of our academic programs and not simply absorbed in maintaining our level of operations.

1. Meeting 100 per cent of Need.

Directly related to the value of such increase is our present policy in which we purport to meet 100 per cent of the need of each student admitted to an undergraduate school without reference to need. About one-quarter of our undergraduates receive financial assistance.

No one wants an undergraduate school from which extremely able students are excluded because of inability to afford the costs. It does not necessarily follow that our present policy is wise. The University at present pledges itself to meet 100 per cent of need for each undergraduate student who matriculates, and
does not consider "need" in its decision to admit. The origin of the policy is
unclear; certainly, no Board of Trustees resolution ever committed the University
to this policy.

In determining "need," the undergraduate financial aid office prepares a
budget for the average student including tuition, room and board, fees, medical
expenses, travel, etc. Necessarily, this budget is for a mythical average student;
some students live on less, some students require substantially more. The cost
for the "average" student is the base figure which is utilized in the calculation
of need. The first step in this calculation is to determine the parents' capacity
to contribute. This is accomplished through a calculation made by College Scholarship Service upon an analysis of a standard form (FAF). The method for computing
capacity to pay tends to track federal regulations in order to assure eligibility
for federal funds for the most disadvantaged students. At present, for instance,
a parent's equity in the family home is included in assets available to defray
college expenses. The government could determine that it is not an asset, at
which time the parents' capacity to pay would be reduced as a result of the
application of the formula.

The first portion of unmet need (budget for the average student minus in-
dividual student's parents' capacity to pay) is met by a so-called self-help
package. A student is expected to meet a certain amount of his expenses through
summer employment, college work-study, employment during the year, or borrowing
through the National Direct Student Loan program. The total amount is determined
by the financial aid office, and for 1978-79 is $1,950. This amount has been in-
creasing but there has been a policy against permitting students to undertake
loans in excess of $4,800 during their undergraduate years. As a result, the total
amount of self-help has a potential ceiling which will be reached very soon. The
present level of self-help is roughly the same as that in other institutions with which we compete.

The student has a choice of how to meet the self-help portion of the package within the loan limits. During recent years we have had a large number of students who do not in fact work the hours allocated for them in a college work-study component, either because they need less than the budget for an "average" student or because their need is met from sources not disclosed in the parents' financial statement, or because of summer earnings higher than those estimated.

There has been increasing criticism by some students that the student budget is unreasonable. For the year 1978-79, the student budget is $6,900 to attend Duke. While it is less than some students require, it is probably more than some spend. It will continue to be a source of criticism so long as the University promises to meet 100 per cent of demonstrated need and students assert the right to determine how much they need.

After deduction of the self-help portion and of the sum which the parent is able to contribute, there may still be unmet need. In such an event, the unmet need is satisfied from federal BOG and SOG funds, endowed or restricted funds, or current operating funds. In addition, there may be outside scholarships awarded without reference to need or which are sufficient to meet need. In 1978-79, we estimate that the University will receive $677,189 for the BOG and SOG funds and $248,099 from the State of North Carolina. It will disburse $1,035,000 in endowed and restricted funds (figure includes outside scholarships

1. Estimates were made prior to the October 1978 legislation increasing eligibility and maximum amounts for BOGs. Hence, the BOG estimates may be low.
awarded to students through the University), and will be required to expend $1,471,000 from its current operating budget to pick up the deficit between the total need of students and the amount satisfied from the preceding sources. It is this open-ended commitment to fund all remaining need from current operating funds that constitutes a major source of difficulty in balancing the budget.

Each new increase in tuition and living expenses increases (1) the number of students who need financial assistance to attend Duke and (2) the amount which each student on financial aid needs. The eligibility level for BSG and SSG precludes major reliance upon federal programs. The amount of state and federal support is increasing, but not to the same degree as is student need. The difference is not being made up from endowment or gifts. As a result, the amount of support from current unrestricted funds has increased from $652,000 in 1971 to $1,471,000 in 1978-79. Future predictions suggest that we have just begun the rise on the curve and that current unrestricted fund support for undergraduate student aid will increase dramatically during the next five years.

The problem would be less significant if need were considered in the admissions process, but we have always avoided considering ability to pay as a criterion for admission. Because of the relatively small increases in endowment income and annual giving, the principal source of funding of the policy is annual tuition increases. In a sense we are charging more tuition to some students to pick up the unmet needs of others.

The problem is not unique to Duke, of course. During the period between 1971 and 1976, the period for which comparative figures are available, Duke's use of current funds for undergraduate student aid increased approximately $350,000; Johns Hopkins - $550,000; Northwestern - $3.5 million; Stanford - $1.5 million;
Rochester - $5 million; Vanderbilt - $350,000; Brown - $700,000; Cornell - $2 million; Dartmouth - $400,000; Pennsylvania - $1.5 million. At the same time, however, Chicago reduced its current fund appropriation for undergraduate financial aid by $.5 million; Princeton reduced its from $500,000 to zero; and Harvard's increased by only $180,000.

Duke is in a different position from most of these schools. It has far less endowment funds available for undergraduate financial aid than most of the schools with which it competes. The result is that it needs to depend on current funds to a much greater degree if it purports to meet 100 per cent of need. The reasons that the Duke dependency on current funds has been able to stay within any reasonable limits during the five-year period are (1) our tuition has increased at a much lower rate than at the other major universities with which we compete, and (2) the relatively low percentage of our students requesting financial assistance. As Duke tuition increases, the aggregate need will increase, and with it will occur a geometric increase in dependency on current funds.

Duke has traditionally provided less financial assistance to its students than most of the schools with which we compete. In part, this has been because of the demography of the student body. During 1976, the last year for which comparative data is available, total undergraduate aid at Duke from all sources as a percentage of undergraduate fees and income was 16.1 per cent. The overall average of the thirty schools with which we usually compare ourselves was 27.4 per cent. Undergraduate aid from current unrestricted funds as a percentage of undergraduate fees and income was only 5.8 per cent at Duke as compared to 9.5 per cent as the average of other schools. It will be recalled that 1976 was before the major increases in current fund support occurred. We can expect that that percentage will rise steadily and, if unchecked, will probably exceed the
average in the very near future because of the failure to raise substantial endowment for undergraduate student aid in the past.

The problem of whether to continue to meet 100 per cent of need is directly related to the question of increasing tuition. No useful purpose will be served by raising tuition substantially if a high percentage of the tuition thus raised will simply be refunneled back to students on the basis of need. The reason for raising tuition is to provide dollars for qualitative improvement, not simply to provide an accounting entry or to improve comparative statistics of the percentage of scholarships awarded. Clearly, less than 100 per cent of the tuition raised would be recycled in the form of financial aid. It is necessary, however, to understand that an increasing percentage of tuition raised will be so recycled if the present policies are continued of (1) admitting without regard to need and (2) meeting 100 per cent of need.

No one suggests that financial aid should not be available for the most able students who wish to attend Duke. No one suggests that financial aid should not be available to minority students—who have been historically underrepresented in the Duke student body—who are able to meet Duke entrance requirements. The question arises with reference to our other students, who are accepted without reference to need on the basis of credentials which are only marginally different from other students who are rejected. There is reason to believe that many of the rejected students are willing and able to pay Duke tuition while many of those accepted require major financial aid.

It is possible to construct a model in which the most able students are accepted without regard to need and whose need is met to the level of 100 per cent; minority students are accepted without regard to need with 100 per cent of
need being met; and the remainder of the class is accepted without regard to need but with a fixed maximum level of University support in addition to loans and college work-study, thereby making it clear that some of these students will not be able to afford to come. Preliminary estimates suggest no major change in the demographic characteristics of the student body or in the academic potential of the student body, but much more detailed research needs to be done.

A decision to fund less than 100 per cent of need for all students would result in substantial student concern because of their widely held belief that anyone who is qualified should be able to attend Duke. The same view is held by many concerned faculty. It would also have some impact on our admissions potential in that there is obviously a prestige factor in being included among those schools that purport to meet 100 per cent of need. The question is again one of the least undesirable alternative. A decision with reference to the policies that should govern us in the future is essential in order to determine the degree to which increases in tuition will be available for qualitative improvement in the years to come.

2. Differential Tuition.

At Duke the same basic tuition is charged all students except in the School of Medicine and in the Divinity School. In Medicine, tuition is substantially higher; in Divinity, tuition has been traditionally fixed at one-half of the tuition charged in Trinity. More thought needs to be given to the reasons why tuition is fixed at certain levels. In Divinity, for instance, it might be wiser to charge higher tuition, returning the additional revenues to be used for financial assistance. In Law, it might be wiser to raise the tuition, allocating the additional revenue for qualitative improvements. In the Summer Sessions, it might be desirable to charge tuition at a lower rate to encourage greater use of our resources
during the summer months. There is no compelling reason why tuition should be uniform when the competitive position of different divisions in attracting students is quite different.

D. More Effective Utilization of Existing Facilities.

Many of the facilities of the University are operated on an inefficient basis, despite the overcrowding of some facilities during peak periods and the general impression of shortage of space. A concentration of courses during the hours between 10:00 a.m. and 4:00 p.m. five days a week means that many of our classrooms are vacant much of the time. The concentration of courses during the period from 11:20 a.m. to 12:10 p.m. on Mondays, Wednesdays, and Fridays results in overcrowded conditions in the dining halls that undoubtedly discourage people from eating there at lunch. It also has substantial impact upon bus scheduling. At the same time, student activity space is at a premium with some lecture halls doing double duty for teaching and student use, resulting in increased cost of maintenance. Scheduling earlier in the morning, later in the afternoon, and on occasional Saturdays would do much to alleviate the situation. The total savings that can be effectuated through a more rational scheduling of courses offered may not be great, but it is symptomatic of the underlying problem. Traditionally, Duke departments—or even individual professors—have scheduled very much as they saw fit. Primary emphasis has not been placed on the economies that might be accomplished through coordinated activities with others in different disciplines.

Consideration should also be given to whether economies can be effected through the centralization of some of the small shops now operated by different departments in the sciences and Engineering. The savings which have occurred through a greater centralization of duplicating services are encouraging.
Effective use of facilities also raises questions about the wisdom of permitting some graduate students to remain in the University for lengthy periods without receiving degrees, paying only nominal tuition although using libraries, laboratories, and faculty time. A modest increase in fees may be appropriate, recognizing that the difference in Graduate School tuition between Duke and state schools offering programs of similar quality already places Duke at a competitive disadvantage, and that many students in the sciences participate in supported research which generates overhead recovery. Consideration needs to be given to setting time limitations which must be met for a degree to be conferred.

1. Summer Programs.

In particular, the physical plant of the University is underutilized between the second week in May and the first of September. The inauguration of three summer sessions and a gradual increase in sponsored research during the summer months have improved academic utilization, and recent special programs aimed at attracting groups for short period have been helpful. The American Dance Festival offers the potential of efficient utilization of the East Campus if it can raise sufficient funds to pay its costs. In part, the potential for summer use is now limited by the number of buildings that are not air conditioned, but air conditioning could follow if academic programs can be developed to utilize the space effectively.

Summer Session enrollments have remained virtually stable:

<table>
<thead>
<tr>
<th>Year</th>
<th>Total (less duplicates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>2,322</td>
</tr>
<tr>
<td>1976</td>
<td>2,188</td>
</tr>
<tr>
<td>1977</td>
<td>2,400</td>
</tr>
<tr>
<td>1978</td>
<td>2,387</td>
</tr>
</tbody>
</table>

During the last year efforts were made to attract more students from other universities in view of the fact that 93 per cent of enrollment in the 1977 Summer
Session were Duke students. Modest success was achieved. A summer program for high school seniors likewise achieved modest success. Effective use of the physical facilities during the summer requires a more coordinated program involving at least three elements:

a. **Substantial Recruitment of Students at Other Schools.** There are large numbers of students who would have liked to attend Duke but were not accepted. Attendance at Duke during the summers can be significant for them in their efforts to achieve admission to graduate or professional schools. Duke's athletic facilities contribute to the University's attractiveness as a place for summer study, and, as a result of the summer cultural activities, the American Dance Festival, and other activities, the recreational programs are much broader than existed formerly. We need to locate people and attract them to Duke, particularly those who are already enrolled in schools with similar tuitions.

b. **Cooperative Programs with Other Universities.** We have been discussing the possibility of cooperation with Davidson, which has a large number of pre-medical students and a limited laboratory capability for educating them in all the scientific fields which they would like to study. The required facilities, equipment, and faculty exist at Duke. They could be utilized if we could promise Davidson that a definite schedule of courses would be offered and Davidson could promise us that a specified number of students would attend. In addition, a commitment to offer specified courses in first-year subjects would permit Davidson to initiate a second semester matriculation program such at that which Duke now operates and at the
same time provide students for the Duke Summer Sessions. This is only one example of potential cooperative ventures with other schools which need summer programs of the quality of Duke but which for reason of size or other causes do not wish to operate summer sessions themselves.

c. Development of a Coordinated Accelerated Program in Departments with a Substantial Number of Majors. A substantial number of students who attend our Summer Session plan to accelerate. Our present schedule ensures that there will be elective courses available for them if they study in the summer but it is impossible for them to know far in advance which courses will be offered. As a result, efforts to plan an accelerated program are extremely difficult unless the student wishes to risk the possibility that he will not be able to take certain courses. In addition, the prerequisites of some departments necessitate that certain courses be taken in proper sequence, thereby complicating the problem for the student, and financial aid is sometimes not available in the summer.

Substantial savings can be realized by a Duke student if he accelerates. This is particularly true if he matriculates at Duke with advance placement, which is true of more students this fall than ever before. Savings of a year's living costs alone make acceleration attractive, particularly for the student who plans to enter graduate or professional school upon graduation. What is needed is an integrated accelerated program in which a student is assured that certain courses will be offered two years in advance, thereby permitting him to plan his complete academic career at the end of his first year. Such a
program would require that a few courses in each department be offered each semester regardless of enrollment. In all probability, there is staff available to offer these courses on the usual salary arrangements. Additional faculty might be recruited by offering research leave in the fall or spring semester in exchange for a commitment for specified instructional duties in the summer. Some universities such as Dartmouth require summer teaching, but this alternative seems unnecessary at Duke.

A substantial increase in the number of students graduating in three years or three and one-half years would permit more students to be matriculated and would ease the difficulties caused by limiting undergraduate enrollment on the basis of the number of dormitory beds available.

Efforts to improve summer sessions are hampered by the differential in tuition rates between Duke and public institutions. The problem may become more acute if the entire allocation of NDSL and College Work-Study money is needed for the regular academic year. Two possibilities deserve study. One would make College Work-Study and NDSL funds—and perhaps grants—available to eligible Duke students without regard to whether courses are undertaken in the summer or regular academic year, limiting support to a specified number of semesters, including summer sessions. A second possibility would be to lower tuition materially in the summer (which is already slightly lower than tuition charged during the fall and spring) with the objective of attracting a larger number of students. A variant could offer scholarships to North Carolina residents in amounts sufficient to compensate for the lower tuition rate at the University of North Carolina. Each alternative deserves careful study.
2. Athletics and Special Events.

Many activities at Duke are open to the general public in addition to students, faculty and staff. Basketball tickets are at a premium but there is obviously adequate space for additional people at football games. The Athletic Department is considering a variety of ticket arrangements that would increase gross revenue. In addition, there is at least the potential that men's soccer and women's basketball may become revenue sports in the foreseeable future.

Increased consideration must be given to the economics of the concert and drama series offered during the regular year and during the summer. Changing patterns of audience viewing and the effect of inflation on the average theatre- and concert-goer may require fewer or different kinds of programs. Again, coordination with the programs available at other universities in the immediate area is more important than ever.

3. Libraries.

The Duke library is a resource for scholars throughout the region and for citizens of the area who have no connection with Duke. In the past, the library facilities have been made available to anyone without requiring any kind of payment for the use of the facilities. Access to the general public without fee is required for public documents. But a number of other major universities in the country would charge for the use of the manuscripts and rare books by scholars and the ordinary check-out of books by local residents. We should consider instituting modest charges for those other than students, faculty, alumni, and staff who utilize our library facilities. It is doubtful that such fees would discourage users, particularly if the funds generated were pledged for new acquisitions.
E. Income Producing Programs Utilizing University Facilities and Personnel.

The utilization of private University resources primarily to generate income raises substantial practical and philosophical questions. Many faculty cringe at the suggestion of involvement in anything smacking of commercialism. Experience in the Medical Center suggests that there may be opportunities to serve the public while producing income to defray educational expenses and simultaneously augmenting the income of faculty. The Medical and Surgical Private Diagnostic Clinics are engaged in such activities, and the funds returned to the Medical Center from these operations are largely responsible for the high quality and relatively low tuition of the School of Medicine. The Community Health Services Corporation performs a similar function to the benefit of the Department of Community and Family Medicine. Another example may be the American Musical Theatre, in which the creativity, performing arts, and capital are to be provided externally but the facilities of Duke are to be utilized. Under consideration is a corporation which would consult with private businesses concerning environmental and energy conservation problems, utilizing Duke faculty who would share with the University in any income. Licensing of software produced by University data processing, a patent policy, and formal contracts for consulting from University legal and administrative services are other possible avenues deserving exploration. A pilot project to conduct continuing education in the humanities in southern cities through professors whose departmental commitments have been covered from funds made available by grants is another approach. Obviously, we cannot in any way sacrifice our primary function of teaching and research, but creative efforts aimed at combining University facilities and the talents of faculty and staff to produce additional income for the University and the faculty should not be ignored.
Similar cooperative programs must be considered in evaluating requests for improved facilities. The general pattern at Duke has been to provide improved facilities as funds became available, although the new facilities may be used by comparatively few people within the University. Maintenance and operation costs have been borne by the current fund budget. This model continues to be appropriate for classrooms, offices, laboratories, and libraries.

Ancillary facilities may be financed differently in some cases. The Faculty Club at Duke has excellent facilities for swimming and tennis for faculty and staff, and costs the University nothing. Land was made available, a lease for nominal rent was negotiated, payroll deduction was utilized initially, and a loan was made by the University to the Club at the same interest as that paid by the University.

In the future some specialized facilities may be needed by other groups of employees, students, or faculty. The University should seriously consider making land available, or, in some cases, building the facility subject to user charges adequate to cover operating expenses—as in the case in the G. C. Searle Center for Continuing Education in the Medical Center—rather than assuming long-run obligations for facilities that may be desirable but are not essential.

V
Reducing Costs

A. Introduction.

It is a regrettable fact that an increase in income will not be sufficient to balance the budget and provide funds for continued qualitative improvement in
the academic program of the University. It will also be necessary to cut expenses.

The principal expenses of the University are library purchases, student financial aid, the salaries of personnel, and utilities. Of these, salaries are by far the largest component. Only if the total cost of personnel is reduced is there any reasonable expectation that expenses can be reduced substantially.

B. Reduction in Support Activities.

The principal business of a university is instruction and research. Hence, it is natural that the first effort in the reduction of costs should be directed toward those components of the University which provide logistical support but are not directly engaged in the teaching and research functions. At Duke, most of these personnel are in the Business and Finance division, University Relations, Alumni and Community Relations, Institutional Advancement, and Intercollegiate Athletics. These are the divisions that have been subject to the closest budget scrutiny in recent years, and, unfortunately, relatively few positions can be eliminated without reduction in the capability of the University to attract students, generate external support, or to operate the campus efficiently. The staffs of Institutional Advancement, University Relations, and Alumni and Community Relations are among the smallest in the nation for universities of similar size. The Institutional Advancement staff, for instance, is less than one-fourth the size of that at Stanford. In addition, a substantial portion of the total expenses of these divisions is charged back to the Medical Center and, hence, elimination of positions would free only limited funds for campus-related academic programs.

The Business and Finance staff is the largest division but has actually accomplished a modest reduction in size in recent years despite a substantial
increase in the volume of work involved, particularly in Personnel and Accounting. Two senior positions are scheduled for elimination upon retirement of the incumbents. This division in particular has been affected seriously by the impact of government regulatory activities, which have greatly increased the paperwork and the number of people necessary to process it. A substantial percentage of these costs is allocated to the School of Medicine; other expenses are charged to the hospital and are met through revenue provided by patients.

Only if the general scope of the University is reduced can substantial economies be made in these areas, but even then it is difficult to imagine smaller staffs in Institutional Advancement and Alumni and Community Relations, or more than one or two reductions in University Relations.

The size of the staff of Intercollegiate Athletics is small compared to other universities of similar stature or other universities operating intercollegiate athletic programs of the same breadth. Preliminary projections suggest an increase in the total deficit of Intercollegiate Athletics resulting primarily from the fact that gate receipts of football are not keeping pace with the inflationary impact of expenses for the other sports. At the present time, reduction or elimination of the most costly sports—basketball and football—would cost more in revenue than would be saved in expenses, and whatever economies can be accomplished will probably be outweighed by the increasing level of support required for women's intercollegiate athletics mandated by federal law. Reduction in the scope of our present program may be required to avoid spiraling increases in costs, but any substantial decreases in the present level of costs could be accomplished only if almost all intercollegiate athletics were eliminated. These matters are under study by a special Trustee committee.
The principal direct support services for academic affairs are the library, student financial aid, support staff of clerical and laboratory assistants, and student services. The costs of library acquisitions are accelerating at a rate which suggests that no major reduction in library costs is foreseeable, regardless of what changes may be made in library operations. Indeed, these costs will increase substantially even if no effort is made to keep pace with some of the great public libraries. Computerization of cataloging may result in some personnel cuts, and personnel costs now associated with reader services might be reduced, but any savings resulting from either activity will be needed for additional library acquisitions and new equipment. Some savings can be accomplished through greater cooperation with the University of North Carolina, particularly in the acquisition of journals and in specialized foreign language collections, but even these savings will be insignificant when compared to the increase in book prices.

As suggested elsewhere, no reasonable savings can be anticipated in student financial aid unless the size of the student body is reduced. Indeed, student financial aid can be regarded as a sponge which could absorb almost unlimited funds at Duke, and may do so in the undergraduate division if the University remains committed to meeting 100 per cent of need while admitting students without reference to ability to pay. The staff administering financial aid is modest in size, with the increase in recent years primarily attributable to the fact that additional personnel have been needed to process and collect loans, upon which there has been increased dependency.

Clerical support is modest at best. Some savings may be accomplished through the replacement of personnel as use of word processing equipment increases, but thus far economies projected by the vendors of this equipment have not
materialized where experiments have been conducted. Many academic departments are operating with reduced personnel because they are unable to replace clerical and laboratory assistants formerly paid for through government grants. The clerical force may be cut substantially only if the number of faculty and staff it serves is reduced. Even if this is accomplished, the level of funding must be increased to retain the most competent employees.

The student services staff is again among the smallest of the universities with which we normally compare ourselves, in part because of substantial involvement by students in the management of their own affairs. Some minor reduction in the staff may be possible, but no significant savings are likely to materialize, and additional demands for improved counseling services may actually increase costs.

Obviously, it is possible to cut some costs. Our in-house charges for routine repairs, painting or renovations are higher than charged by private contractors. Last year the University, including the hospital, reproduced thirty-one million copies of original documents. We used 241 tons of computing paper. Efforts must continue to deal with these problems in addition to, not in lieu of, more fundamental changes.

C. Reduction in Non-Academic Activities.

A series of University activities are not directly related to the existing academic programs of the University but contribute materially to the entire ambiance of the University. In addition to general administrative expenses and building operation costs associated with these activities, the Duke Gardens cost $100,000 a year to maintain; the Art Museum costs $92,000; the Duke Pre-School operates at a deficit; and the Chapel and related religious activities are budgeted
at $152,000. In other universities, these activities might be regarded as so tangential that they could be eliminated without serious harm. At Duke, the Chapel and the Duke Gardens are at the core of the campus atmosphere, and substantial money has been spent on facilities for an Art Museum and the acquisition of a collection which arguably fulfills an independent function of the University in transmitting culture from one generation to the next, as well as potentially serving as a major resource of instruction in a number of departments.

The Pre-School has some relationship with the Psychology Department but primarily functions as a fringe benefit for faculty members who wish their children to study under its auspices. Elimination would save little money, and its existence is of value in attracting and retaining junior faculty.

We must consider the total savings involved in eliminating a number of activities, each of which operates at a small deficit but which in combination involve substantial costs. Simultaneously, we must examine whether some activities, such as the Gardens, may be operated at lower cost through creative thinking about planting policy, and whether the Art Museum might sell items given to it which it cannot display and which are tangential to its primary collection.

D. Reduction in Academic Activities.

Some academic ventures are also on the fringe of the University's teaching and research programs. The Primate Center is costly, although this year gifts and grants have reduced the annual cost to a modest deficit borne by the operating budget. Under its present directorship it has made substantial strides toward serving a number of disciplines within the University whereas at an earlier time the number of faculty and students involved in its activities was minimal. We need to examine whether there are additional possibilities of cooperating with other universities in the use of the facility.
The Marine Laboratory at Beaufort cost over $360,000 (excluding allocated administrative expenses) in 1977-78, constituting 3.8 per cent of the undesignated endowment and gift revenues of the University. The capital costs will escalate in the future as it becomes necessary to replace equipment and buildings. A number of different departments, in both the campus and the Medical Center divisions, conduct research at Beaufort. Approximately forty undergraduate Duke students study there each semester, and twenty graduate students do their work at the Marine Lab. Undergraduates from other institutions study there in the summer. Much of the additional costs in recent years has been associated with the Oceanography program, and particularly with the vessels. The Eastward is growing old, with predictable higher maintenance costs unless it is repaired or replaced.

The Marine Lab is clearly a highly prestigious activity. It is difficult to effectuate economies in an operation as small and as inherently expensive unless the scope is drastically reduced, as would be the case, for instance, if its Oceanography program was discontinued. Discussions have begun about the possibility of joint efforts with the University of North Carolina system for the operation of a major vessel made available by the National Science Foundation. The Marine Lab would provide the facility, and the state universities would provide financial support for its operation. In one sense, the money from the University is simply pump priming for a wide range of research made possible by government grants. But the total outlay is substantial, the relationship to undergraduate education minimal, and graduate education is restricted to only a few fields.

The Duke Press has an annual deficit of about $75,000, in addition to building and indirect costs, but contributes substantially to academic excellence
and the prestige of the University through the publication of our learned journals and hard cover books. The future of the Press as it is now being managed is under study, but all alternatives under consideration would require at least as much funding in the foreseeable future to subsidize the publication of the research of our faculty.

E. Reduction in Size of Faculty.

Regrettably, the principal area offering major opportunities for reducing expenses is in the reduction of the size of the faculty outside the Medical Center. If the size of the faculty is reduced, other economies also become possible. Necessarily, any discussions of this subject elicit deep concern and resistance. Certainly, the tenure rights of all existing faculty must be respected, and any reductions must be accomplished over a period of years as vacancies occur or through voluntary relinquishment of faculty status in exchange for settlements. What is needed is a decision now with a plan which will require several decades to implement.

The size of necessary reduction is arguable. Only if there is a reduction in the vicinity of 15 per cent will there be any reasonable possibility of accomplishing substantial cuts in supporting activities at the same time. For the purpose of this memorandum, I shall assume that the objective is 15 per cent without proposing to commit the University to any exact magnitude of change. A figure of 15 per cent represents roughly eighty positions, or about $2,000,000, in addition to substantial cuts in supporting personnel and services. Efforts in this direction must make it clear to the faculty that only if we accomplish such economies will it be possible to (1) keep pace with inflation; (2) provide merit increases; (3) provide an adequate retirement in an inflationary world.
1. *Techniques for Administrative Reduction.*

Assuming that the Board of Trustees agreed to this objective, the obvious questions would remain concerning the manner in which such changes could be accomplished. A variety of techniques could be employed, some less desirable than others. The first stage has been accomplished: When vacancies occur through resignation or death, the decision rests with the Provost as to whether the position will be filled or whether the vacancy may be made available to another department. There has been a custom at Duke that departments only grow larger. They expand to meet increased enrollments or research opportunities but do not contract when enrollment decreases or research contracts disappear.

During recent years, the Dean of Faculty has succeeded in blocking automatic replacements not justified by enrollments or research potential. As a result, the size of the humanities departments has been reduced from 125 to 115 since 1970; the size of the science faculties has remained relatively constant. Faculty in the social sciences has increased. There is still a presumption that a field once covered should continue to be covered and that departmental excellence requires augmentation, not reduction, in size.

A specific size for each department has never been established as a reflection of a clear determination by central administration or by this Board that a department of x number is necessary to meet the specific teaching and research responsibilities being undertaken. New departments have received a commitment of a certain size but have been permitted to expand. Any contraction follows a substantial period of lag in enrollments. The result is that we have a number of departments in which the enrollment does not justify the size, nor is the size explained in terms of productive research. There is undoubtedly a critical mass beneath which a department cannot go without ceasing to exist as a viable academic
unit, but there are a number of departments that can operate quite effectively with fewer personnel by offering low enrollment courses in alternate years; by offering some elective courses in the summer instead of during the usual academic year; by using part-time staff; or by utilizing capabilities existing in other departments for beginning level instruction. Only if there is a clear exercise of central control over the allocation of faculty resources that become available can the size of different departments be related to the unit of instruction or to research productivity. The responsibility for configuration of faculty fields must rest with the Provost.

Serious consideration should be given to the merger of some departments. In some instances, students might benefit from a broader focus. In other situations, we would avoid duplication of effort. The tendency at Duke has been towards proliferation, not integration, although the University has resisted new fads to a commendable degree. There are a number of possibilities deserving study. Many possibilities for merger have been considered before and have been rejected for what then appeared to be valid reasons. The same result may occur again. We should, however, examine the possibilities with an open mind.

Additional economies can be accomplished by not filling vacancies in areas of substantial duplications. A number of similar courses are offered undergraduates by different departments. Some are probably justified because of different methodology or viewpoint. Some undoubtedly are taught because professors desire to teach them or a department wishes to provide a complete curriculum to its majors within the confines of the department.

Other economies can be effected if departments rethink what they are attempting to do, both in undergraduate and graduate education, and produce curricula related to these objectives. The need to reexamine curricula has been
discussed earlier in this memorandum.

It is possible that considerable use may be made of part-time faculty in situations in which a particular course needs to be offered but other instructional needs are being met by others within the department. In this regard, greater utilization of faculties at neighboring universities needs to be accomplished. In the past there has been a tendency not to do so because the use of such persons would block opportunities for obtaining a permanent departmental position. Now there is an urgent need not to think in terms of expansion but to consider whether contraction can be accomplished without impairing academic integrity. We also need to work out comparative programs with neighboring institutions. It is clear, for instance that we cannot teach all languages our students desire to study. We now teach Hindi, Arabic, Persian, Chinese, Japanese, Swahili, Italian and Portuguese in addition to French, Spanish, Russian and German. We need to develop a coordinated program with the University of North Carolina in which we share responsibility for language instruction in areas of limited student demand.

In some areas it may be desirable to take steps to reduce the size of departments without waiting for vacancies that may occur at random. A programmed reduction in size may be appropriate in some areas by encouraging early retirement or, in some cases, making settlements with faculty members who have greater opportunities in other universities with less need for faculty who can both teach and engage in productive research.

Additional economies may be accomplished in some disciplines by adopting incentives which would encourage faculty to include portions of their nine-month salaries on government grants and contracts. A significant number of faculty
members have grants that pay their salaries during the summer months but, with the exception of Biomedical Engineering, very few have grants that pay any portion of their nine-month salaries. Their research, of course, goes on through the year. In substance, the University subsidizes their research during the year and they are effectively employed on an eleven-month basis. The University benefits from the overhead recovery generated by their grants but those funds reflect the actual cost for support services not related to their salaries. More creative arrangements are required to induce more faculty members to organize their grants on this basis.

Regrettably, all of these measures will be insufficient to meet our needs. At the most, a few positions in a few departments will be eliminated. It is doubtful whether these will exceed the number of positions for minorities that must be found if the racial composition of the University faculty is to be changed in any significant way. More drastic steps are required.

One option is to apply across-the-board reductions applicable to all departments. Such an approach would, in my judgment, be disastrous. Some programs, such as Law and Graduate Business, are understaffed but have existing commitments from the administration to bring them up to strength; some departments are understaffed in terms of their teaching responsibilities; and there is a substantial difference among departments in terms of research productivity and national reputations. In short, such an approach would not improve quality in any way and would reduce quality in our most distinguished departments at the same rate as in our less distinguished activities. Furthermore, such an approach would in no way reflect the value of particular departments to the teaching and research missions of the University as a whole.
2. **Discontinuance of Academic Programs.**

The only alternative is discontinuance of some programs or components of programs, unquestionably the most disagreeable approach because of the nature of the choices which must be made, the effect on the people involved, and the difference of opinion as to which units must be retained and which must be eliminated. Few universities have ever been able to make such hard choices. Several have attempted and then backed off, in the process losing some valuable faculty and substantially impairing morale of others. If such an approach is to be adopted, a decision concerning which units should be eliminated should be made at one time with assurance to the faculty that no other eliminations are projected for a period of at least a decade. In addition, the decision as to which units should be discontinued must be made in accordance with generally accepted criteria after contributions from the faculty, although it must be recognized that any efforts to take decisive action will be met by calls for further study, complaints that inadequate data are available to justify a decision, assertions that inappropriate weight is given to certain factors, claims of professional bias, assertions of inadequate participation by all who are affected, and a series of other objections, all of which are designed to avoid any firm decision that might have a detrimental effect on an individual or his colleagues. To a very real degree, the future of the University depends upon a willingness to make these hard choices, recognizing that all humans may err but that errors are less likely to occur if there is reasonable assurance that the process has been conducted thoughtfully and with the best interests of the University as a whole constantly in mind.

It should be recognized that such difficult decisions do not suggest immediate savings of significance. Commitment to tenured faculty must be respected. In the short run, a decision to discontinue an academic program or a component
thereof may actually increase costs, as enrollments in particular programs may
decline at a faster rate than the size of the faculty involved in these pro-
grams.

It should also be understood that no major change in the fundamental nature
of the University is contemplated. The disciplines which constitute the core of
a modern university will continue to be taught, whether in existing departments
and programs or in consolidation of these activities. A broad curriculum in the
humanities, social sciences, and natural sciences must be available to under-
graduates. A strong graduate program must exist in the same subjects and in inter-
disciplinary areas. A small number of high quality professional schools will cer-
tainly continue to flourish. The mission of university professors at Duke, as
elsewhere, is to impart knowledge to undergraduate and graduate students and to
their colleagues who read scholarly journals, attend scholarly meetings, and
build on research that has preceded their efforts. No effort should be considered
which would radically change the nature of the University.

What should be attempted is to narrow our scope in order to do better that
which we will continue. A decision to discontinue some programs would be regret-
table, but necessary to achieve this objective. Once a decision has been made to
proceed in this direction, the next step is to determine the criteria that should
be utilized.

3. **Criteria for Discontinuance.**

No single criterion is adequate for such decisions, and the application of
different criteria may produce different results. Fortunately, the number of
activities to be discontinued is likely to be small, and only when the application
of multiple criteria produces the same results should serious consideration
be given to the drastic alternative of phasing out a program. The following criteria seem appropriate:

a. **The Relevance of the Program to the University's Fundamental Goals.** Obviously, no department or program exists at Duke that is not relevant to the broad goals of the University. It is likewise clear, however, that some goals are more basic than others, and some programs relate more closely to these goals than others. It is difficult to imagine a university without a Department of English, but such fine universities as Rochester and Johns Hopkins function without Schools of Law; Princeton functions without a School of Medicine; and a number of great universities have no faculties in fields such as education, divinity, forestry, nursing, or policy sciences.

b. **The Degree to Which a Program Relates to, Complements, or Supports Other Programs.** Some programs are virtually independent; they depend on little academic support from other components and contribute very little to other programs. Others require support from other disciplines but contribute little. Others both receive and contribute substantial support. The discontinuance of a program that contributes little to other academic endeavors would obviously have less impact upon the overall academic programs of the University than the elimination of a program upon which other disciplines depend or which when combined with other disciplines creates an interdisciplinary endeavor of independent merit.

c. **Quality of the Program(s).** Any assessment of quality is fraught with peril but is not impossible. Indeed, it is remarkable
similar are the assessments of disinterested informed observers who have access to relevant data. An assessment of quality has several components:

(1) The quality of the student body. There is a substantial difference in the admissions profiles of our undergraduate students. At the undergraduate level, data exists comparing the quality of students in Arts and Sciences, Engineering, and Nursing. Data exists comparing graduate students who apply, who are accepted, and who matriculate in the different disciplines and in the professional schools. Some departments place greater weight on verbal proficiency; others on mathematical aptitude; others on grade point average. All modify judgments on the basis of age, motivation, experience, etc. Nevertheless, it is possible to conclude that some schools and departments enroll graduate students who do not have the academic records or board scores required by other disciplines.

A complicating factor is posed by the fact that the quality of students in all our departments compares favorably with students in the same disciplines at most other universities. There is a "pecking order" in which some disciplines historically do not attract a very high percentage of the brightest. We must ask ourselves whether it is enough for a department to rank high when compared with other universities in the same discipline, although the same department ranks very low when compared to other Duke departments.

(2) The quality of the faculty. This in turn can be divided into research productivity and excellence in teaching, and teaching
may be subdivided in terms of undergraduate and graduate instruction. Again, the problem is formidable but not impossible.

We have available external ratings based upon graduate curricula and research productivity. Such ratings tend to be out of date, but the mere fact of their existence may be relevant. A department with a 3.3. American Council on Education rating may not be materially better than a department with a 2.9 because of recent resignations, retirements, new additions, or other causes. Nevertheless, its high reputation makes it easier to attract promising people who by their association both improve the real quality of the department and contribute to their own mobility. In addition, external ratings provide a measure of validation for internal peer assessment.

The chief mechanism for evaluation of the quality of the faculty must be internal assessment by distinguished scholars at Duke, supplemented where appropriate by scholars from other universities. Simultaneously, the Provost and Dean of Faculty should make their assessments, benefiting from a wealth of knowledge and an opportunity to compare performance in different disciplines. Significant to such an appraisal may be the capacity of a program to attract first-rate scholars and retain those already here over a reasonable period.

d. Costs. All academic programs at Duke are subsidized from the endowment, but some cost appreciably more than others in terms of gross costs and costs per student taught. A program with a large
enrollment and relatively small faculty is much less costly than a school with a relatively large faculty and a more limited enrollment and which depends upon other divisions to provide much of the instruction to its students. A department that generates substantial overhead recovery costs much less than a department of the same size that does not do so. Although the cost accounting necessary to separate undergraduate and graduate education would be both expensive and fraught with controversies, rough estimates of income produced and costs can be calculated for departments, and a fully allocated income-expense analysis is available for professional schools. (See table on following page.)

Sole reliance on a cost per student approach could severely damage academic standards, but consideration of costs as one factor is imperative.

e. **Student Demand.** In the professional schools and in disciplines in the Graduate School, the size of the applicant pool has a direct bearing on the quality of students, and trends in stable or reduced demand suggest either lower potential quality in the future or a reduced number of students. The quality of students is an important measure of the quality of the program, and reduction in size means greater deficits unless accompanied by a simultaneous reduction in faculty which may be precluded by tenure.

In Trinity, student demand is significant in the sense of (1) demand to major in specific departments; (2) demand to undertake elective courses outside the field of majors; and (3) "service"
Duke University  
Fully Allocated Profit/(Loss) Statement  
FY 1977-78 Actual  
(000 omitted)

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<th>Memo:</th>
<th>Revenue</th>
<th>Expense</th>
<th>Profit/(Loss) before Unassigned</th>
<th>Profit/(Loss) before Unassigned</th>
<th>% Use of Unassigned Income</th>
<th>Cost per Paid FTE Student</th>
<th>No. Paid FTE Students</th>
<th>% Paid FTE Students</th>
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courses which serve as prerequisites for advanced work in the same or other departments. Student demand for courses in particular disciplines tends to fluctuate substantially over a generation. Today's fad may not be tantalizing to students in the next generation. Part of our difficulty stems from a tenure policy that does not permit rapid fluctuation in faculty size to correspond with reduced demand.

We have a number of departments with small enrollments which predictably will not increase materially in the immediate future. In part, this is the result of change in student attitudes; in part, because of faculty added primarily for graduate instruction and research who at one time were supported from external sources; in part, because of the nature of the discipline; in part, because of the reduction from a five- to a four-course requirement and the weak divisional requirements under the "new" curriculum. The problem is accentuated because some departments with low undergraduate enrollments may have substantial graduate student responsibilities. The number of students taught in some courses in the humanities may increase substantially if divisional requirements are increased in the curriculum reform now under way. The effect of low enrollments is probably more relevant to reduction in size than to elimination but nevertheless deserves consideration. The Dean of Faculty has substantial comparative data to permit assessment.

f. Demand for Graduates with Advanced Degrees. The degree to which there are job opportunities for graduates is a more debatable criterion. It is often argued that (1) the education of scholars is
an end in itself and requires no justification in terms of meeting a society's need for educated leadership, and/or, alternatively, (2) the education of scholars provides a reservoir of trained talent which any society can put to good use, at least in the long run. Furthermore, any effort to restrict graduate output because of the absence of need is met by arguments that society's need for specific disciplines fluctuates widely, and the government's capacity to estimate supply and demand leaves much to be desired.

Nevertheless, society's need for people educated in certain disciplines (or, put differently, the jobs available) clearly has relevance to a private university in that (1) students are unlikely to pay from their own resources or borrow to pay for the costs of an education when there are no jobs at the end of a lengthy educational experience, and (2) the government is unlikely to provide financial aid to educate people if it believes, however erroneously, that there is no need for graduates in the fields being supported. Short run projections or erroneous projections may result in a shortage of educated manpower, as has occurred in several fields in recent years. In addition, in some fields where there are jobs, but not on the faculties of major colleges and universities, there is a question whether the nature of the costly education designed to produce research scholars is appropriate for students who will probably find employment in commercial laboratories, community colleges, or middle-range government bureaucracies.

In professional education, the relationship between the availability of jobs and the justification of programs is closer. These
schools exist primarily to provide educated persons for the professions they serve. In the post-baccalaureate professional schools at Duke there is limited financial aid in the form or grants, and all professional students will probably be required to depend on loans to a greater degree in the future. Hence, the future of a highly qualified pool depends upon the ability to attract people who have enough confidence in their economic prospects in the future to borrow in order to finance their education.

g. Duplication of State University Programs. Obviously, most of our academic programs are duplicated at the University of North Carolina and other great state universities. This is completely appropriate for those disciplines which are regarded as central to the purposes of the University. In other disciplines, it becomes relevant whether Duke programs are unique (a state university cannot offer a Divinity School) qualitatively superior, or otherwise different to a degree that justifies a student paying the higher tuition charged at Duke. It is unlikely that departments or professional schools which are not materially better or different from their counterparts in state universities will be able to continue to attract high quality students when the total number of students dips significantly during the next decade.

h. The Original Intentions of Mr. Duke. Mr. Duke had certain clear ideas about the disciplines which he thought should be present in the University fifty years ago. The Indenture of Trust by which the University was created spoke specifically of construction to the end that "... Duke University may eventually include Trinity
College as its undergraduate department for men, a School of Religious Training, a School for Training Teachers, a School of Chemistry, a Law School, a Coordinate College for Women, a School of Business Administration, a Graduate School of Arts and Sciences, a Medical School, and an Engineering School, as and when funds are available." We do not know what his ideas would be today, except that he eschewed mediocrity and sought excellence in everything he undertook. His original views are not binding upon us, and the Trustees have in the past acted contrary to his original intent, but his views, of course, deserve serious consideration.

As indicated earlier, a great number of departments and programs would meet at least one of these criteria for discontinuance. Only a few are likely to meet several. Only these departments and programs or specific components thereof are appropriate objects for careful examination to determine whether the University would be stronger or weaker if the resources now allocated to any of them were used instead in other areas where the potential exists for a higher level of excellence. Specific components in these departments may be sufficiently valuable to justify retention as components of other departments or schools, or as independent programs. Individual professors may continue to teach specific courses as members of the University faculty although a decision is reached to discontinue the department to which they now belong. It does not necessarily follow that all faculty or all courses must be parts of departments.

The reduction in faculty size would be accompanied by a reduction in support services, the amount of which would depend on the program discontinued. Discontinuance of a department in Arts and Sciences would have only modest effect
on support services. Discontinuance of a professional school might accomplish substantial savings other than faculty costs.

VI
Non-Academic Programs

The principal thrust of this memorandum has dealt with academic programs. Some mention seems appropriate of the need for future planning in other sectors.

A. Business and Finance Division.

During the present year, the Business and Finance Committee has developed a long-range capital program, which is not fully funded. The Board has requested that we produce a proposal for funding the program no later than the Spring meeting. During the present year, a long-range capital program for the academic departments must also be developed.

A long-range program for the demolition of the Burlington housing in the central campus area is underway. A plan for future energy consumption consistent with the National Energy Policy needs to be developed, as well as a more effective energy conservation program on the campus. Serious consideration must be given to non-income producing, non-educational properties owned by the University, with the objective of increasing the endowment. Contingent plans must be developed for loans to students in the event the NDSL program is replaced by the Congress. Serious consideration must be given to the concept of a board system supplemented by limited menus on the West Campus if the Dining Halls continue to experience difficulty in breaking even. Central Purchasing and other aspects of Material Support, as well as Sponsored Programs and our auxiliary enterprises, need to be
evaluated in terms of their cost and benefits. Serious consideration must be
given to the possibility of more contracting out, where possible under existing
union agreements. The reorganization of the Wage and Salary structure as well
as other activities of the Personnel Department must be pursued with vigor. A
high priority must be given to improvement of morale of biweekly employees.
A coordinated data processing system for administrative, research and instruction-
al use is being developed. The University's payroll system must be revised to
reduce processing time and improve the data base. Reexamination of the manner
in which our insurance and travel programs are organized seems appropriate.
These and a number of other matters discussed at the Business and Finance annual
planning conference are now being accomplished or scheduled. A separate report
will be forthcoming.

B. Institutional Advancement.

Our Institutional Advancement priorities must be changed to reflect less
emphasis on the total number of dollars raised and more emphasis on the purposes
for which gifts may be utilized. Less emphasis must be placed on the cost of
raising funds if the funds raised can be used to defray ongoing obligations
involving teaching and research, either in program support that releases current
funds or in endowment, while considerably lower costs are justified for gifts-
in-kind or for program support that would add an activity which is not essential
to the University's goals. Primary emphasis must be placed on raising endowment,
particularly through planned giving, and on raising the level of annual giving
to support the academic divisions.

There needs to be greater support and education of the faculty in grants-
manship in their particular disciplines; a new effort to identify and cultivate
potential donors with no previous association with the University; and the
development of a strategy that will encourage continued support during a period of retrenchment when we cannot promise bold new initiatives to potential donors.

Some steps have already been accomplished in reorganization of our development activities, including a higher measure of decentralization in fund raising in the professional schools and the Medical Center. We have, in substance, concluded that the dangers of lack of coordination are outweighed by the opportunities for greater fund raising. A series of other alternatives deserve examination. Included among these are decentralization of staff and location of part-time development officers in cities of wealth, paid in part on a contingency basis; the use of credit cards for loyalty fund giving; and an improved capacity to identify new prospects. We must also examine the amount of time development officers spend in Durham as compared to the amount of time they spend in visiting prospects. We must also improve our capacity to evaluate performance of development officers with the clear understanding that performance in the field of development must be judged by results and not by effort.

C. University Relations.

Careful consideration must be given to the Publications Division to determine the degree to which its efforts are complementary to or unnecessarily duplicative of the University Print Shop. Consideration should be given to the objectives, and methods of implementing them, of the news service staff, particularly in terms of the effort devoted to news releases to North Carolina newspapers as compared to efforts aimed at the national media. We must again examine how we can improve the image of the University in the local community by methods other than press releases. We need to evaluate the cost-effectiveness of several public relations activities which have become routine.
D. **Alumni Relations.**

Continued efforts must be made to integrate the efforts of Alumni Relations and those of Institutional Advancement. We should consider alumni educational programs modeled after those at Stanford, a closer relationship between Continuing Education and alumni educational programs, and the development of techniques to permit more alumni to learn of what is happening at Duke without the necessity of attending formal meetings.

Of major importance is adapting the traditional format of meetings to meet the needs of alumni who are young, many of whom have small children and many of whom have working spouses. The traditional format of downtown dinner meetings requires considerable expense in terms of travel and babysitting. A greater variety of informal meetings—picnics, late afternoon cocktail parties, block tickets at athletic events or concerts followed by short gatherings—must be adopted if we are to meet the needs of the group which now comprises the bulk of our alumni. Alumni trips abroad should also include low cost programs designed for our young alumni.

E. **Other Matters.**

I have not attempted to deal with a whole series of matters which also require planning. In particular, I have chosen not to deal directly with the entire problem of improving the educational experience of our students outside the classroom, or the improvement of our teaching. Those areas that have been enumerated are chosen as examples because of their particular importance. Much of the work is now going on but much more needs to be done in all these areas. In addition, we cannot hesitate to look again at old issues, not with any intention to change our decisions concerning them, but to ensure that new, relevant factors have not been introduced since decisions were originally made. Among
such major issues are the separate incorporation of the hospital; the long-range utilization of the Duke Forest; the level of favoritism that should be shown to non-alumni related North Carolina applicants; and the continuation of intercollegiate athletics. No one should assume that there is necessarily any intent to change an existing policy because it is being reexamined. At the same time, however, we should be prepared to reexamine any policy if study shows good reason to do so.

VII
The Process for Effecting Change

This document is submitted to the Board as an informational memorandum. No immediate action is sought. It seems appropriate that the Board initially consider the memorandum and suggest areas of substantial disagreement, or other areas of particular concern. There is little point in future consideration and administrative planning of alternatives which the Board at the outset judges to be contrary to the best interests of the University. I may have erred in omitting areas that, in the opinion of the Board, deserve more prompt attention. Hopefully, most of the proposals or observations contained in the memorandum will not evoke an immediate negative response. As to matters which need further exploration, I urge that the Board maintain a completely open mind until it has the advice of different segments of the University community. As indicated earlier, it is unlikely that any consensus can be reached with constituencies so diverse except where something can be accomplished that has no immediate impact upon the aspirations of any constituency. It can be anticipated, however, that a number of helpful responses will be forthcoming from different constituencies,
and the Board should have the advantage of these views, as well as those of central administration, before taking any definite action that has a long-range impact on the University's future. Undoubtedly, I will profit from such advice and will attempt to reflect what I have learned in my ultimate recommendations to the President. I plan to follow the following procedure unless instructed otherwise.

1. The Executive Committee has decided that a portion of the Board's December meeting will be allocated to a general discussion of the memorandum, with the understanding that no decisions will be made at that time to do anything other than instruct me that no useful purpose would be served by further study of some specific proposal or proposed course of action.

2. Copies of the memorandum will be made available to members of the faculty, with an invitation from me soliciting any individual comments that they may choose to make about any part of the report.

3. I will formally submit the memorandum to the Academic Council, soliciting its opinion, endorsement, disapproval, suggestions, or proposed modifications of the memorandum.

4. I will formally submit the memorandum on the same basis to distinguished professors of the University, to the deans of the schools of the University, to the Associated Students of Duke University, to the student governing bodies of the graduate and professional schools, and to the National Alumni Council, seeking any comments that they would make.

5. I will meet with each department and school, the Undergraduate Faculty Council of Arts and Sciences, the Academic Council, or any other group, to answer questions and share ideas.

6. Officers of the University will prepare more detailed plans or proposals to deal with particular problems discussed in this memorandum. Beginning in January, Joel Fleishman will devote his full time to studies of some of the more significant problems. During the year, the first reports of the Special Committee on Educational Policy and Programs in Trinity College, the Library-Long Range Planning Document, the reports of several specialized Task Forces, and the study of data processing needs will become available and will be considered.

7. The Planning Committee which has advised me during the last year will continue to serve as a sounding board for proposals made by me. The Provost will replace me in the regular meetings of the Committee. I shall ask the Committee to assume the difficult task of initially attempting to apply to the departments and schools of the University the criteria for the discontinuance of academic programs contained in the memorandum. After such initial screening, the Planning Committee will
select those departments or schools which in its judgment appear to compare unfavorably with other departments and schools in terms of relevance to primary goals of the University, costs, quality, etc. It will advise the Provost of its actions. The Provost will provide any departments so designated with an opportunity to respond through deans or faculty action. The Committee and the Provost will study the responses. The Provost will make recommendations to me.

8. At the September 1979 meeting of the Board, I will report to the Board concerning the progress made up to that point.

9. I will prepare a draft report of specific proposals which I think should be submitted to the Board. The appropriate student, faculty and alumni bodies will be given an opportunity to comment.

10. After consideration of these comments, I will make my recommendations to the President.

11. At the December 1979 or February 1980 meeting, the President will (a) make recommendations to the Board for steps requiring Board action, and (b) for those not requiring Board action, outline administrative measures designed to carry out the fundamental premise of this report—that major changes in policy must be initiated if the University is to achieve the financial stability that will permit it to excel in the next decade. The Board will then be asked to address a number of difficult questions. In its discretion, it could act on these matters, refer them back for additional study, or instruct the officers to pursue alternative courses of action.

VIII
Conclusions

The tasks confronting us are formidable. We should expect sincere differences of opinion and considerable reluctance to make unpleasant choices which affect people and programs. The future of the University depends upon our willingness to make hard decisions to assure our capability for future greatness. I am confident that this Board, and the many constituencies which comprise the University, will be worthy of the challenges facing us.
The views expressed in the preceding memorandum are my own. I wish to express my appreciation to the following members of the faculty for their advice and assistance:

H. Keith Brodie
William H. Cartwright
Frederic N. Cleaveland
Eugene D. Day
Walter I. Dellinger
Lawrence E. Evans
Ernestine Friedl
Willis D. Hawley
Allen C. Kelley
Sydney Nathans
Anne F. Scott
Harmon L. Smith
Bruce Wardropper

[Signature]