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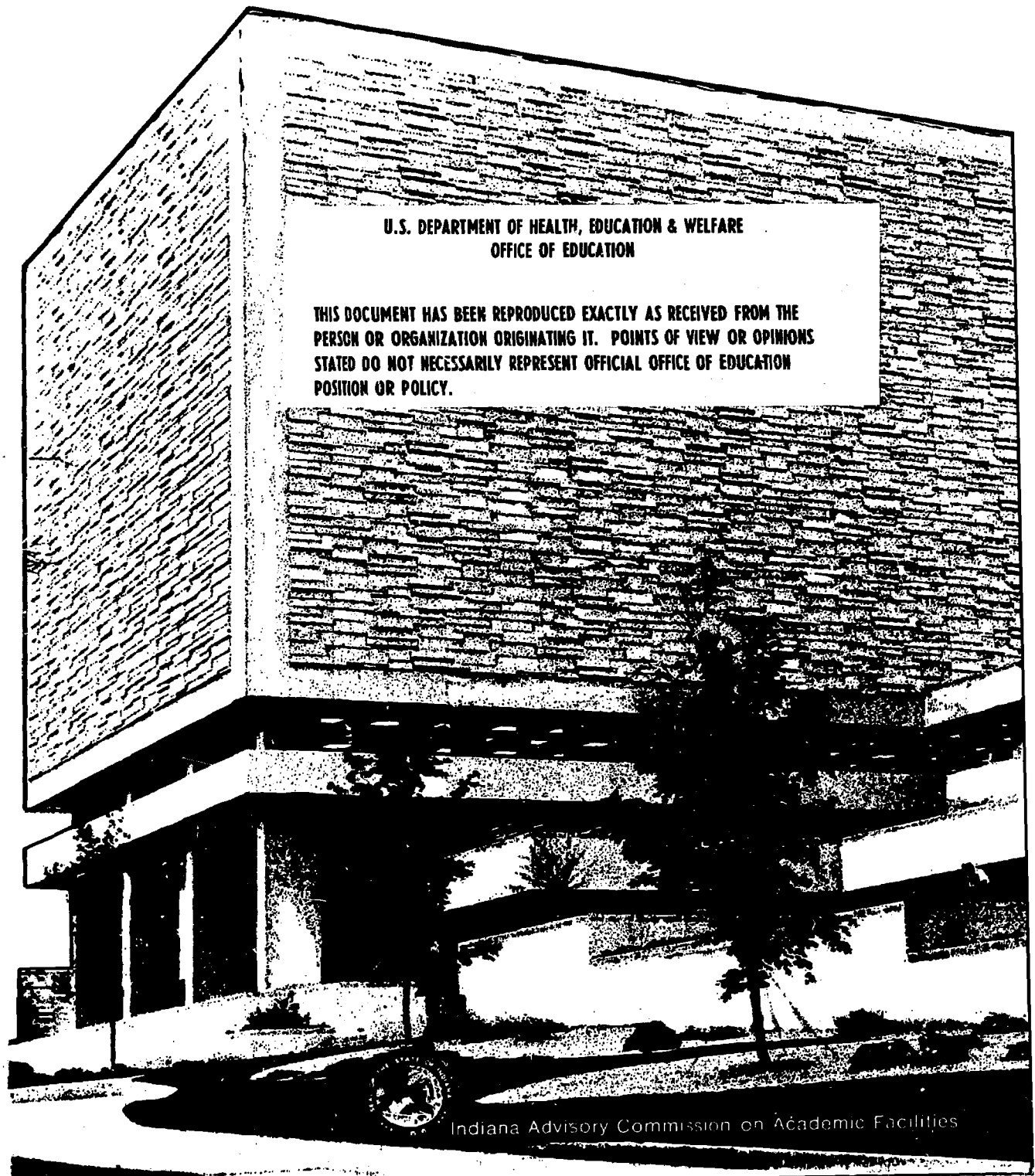
ABSTRACT

This study documents the second of three phases of the Indiana Higher Education Facilities Comprehensive Planning Study. Papers comprising this second phase of the study are devoted to long-run forecasts of needs and resources and related significant considerations. This portion of the study focuses on financing higher education. Consideration is given to the following basic sources of income: student tuition and fees, Federal and State allocations, private gifts and grants, and endowments. In making revenue source projections for public and private institutions in Indiana, the report anticipates that total income will increase annually in actual dollar amounts while the proportional share of each source of income is expected to change. Appendixes offer tables comparing various aspects of States' funding of higher education. A related document is EA 003 081. (JF)

Higher Education in Indiana

FINANCING HIGHER EDUCATION

LONG-RANGE NEEDS AND RESOURCES Working Papers



Indiana Advisory Commission on Academic Facilities

INDIANA HIGHER EDUCATION FACILITIES COMPREHENSIVE PLANNING STUDY

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THE FUTURE FINANCING OF HIGHER EDUCATION IN THE STATE OF INDIANA

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THE INDIANA ADVISORY COMMISSION ON ACADEMIC FACILITIES

in Cooperation with
THE INDIANA CONFERENCE ON HIGHER EDUCATION

1969

FOREWORD

This paper is one of a series of specialized reports prepared as a part of a comprehensive study designed to provide a clear profile on an institutional and statewide basis of the current and future relationships between the demand for and the supply of higher education in Indiana. The study, which is programmed in three phases, will make possible the determination of the needs for higher education resources and facilities, as well as identification of various feasible alternatives for meeting those needs.

Survey data and analysis comprising the first phase of the study were published last year in a series of five current status reports, dealing with finances, enrollments, programs and personnel, student migration, and facilities inventories and utilization. Papers comprising the second phase of the study are devoted to long-run forecasts of needs and resources and related significant considerations. The third phase of the study will consist of a final report that will relate the data and the findings developed during the first phases of the study and include a proposed higher education computer simulation model designed to facilitate the analysis of the probable impact of a wide range of variables.

With cooperation from the Indiana Conference of Higher Education, the Indiana Higher Education Facilities Comprehensive Planning Study is sponsored by the Indiana Advisory Commission on Academic Facilities under grants from the U.S. Office of Education authorized by the Higher Education Facilities Act of 1963 (PL 88-204), as amended.

While emphasis of the comprehensive study is directed toward facilities needs, it is recognized that those needs are and will continue to be significantly affected by a broad spectrum of factors exerting substantial influences. The overall effort is, therefore, multifaceted and designed to provide

both factual data and professional analysis and opinion for higher educational policy makers at the institutional as well as state level. A resulting end product will hopefully be the encouragement of efficient higher education resources utilization and the progressive provision of academic facilities in keeping with realistic needs in consonance with available resources and compatible with programmed needs and demands.

The views and opinions expressed in this paper are those of the author and do not necessarily reflect those of the Indiana Advisory Commission on Academic Facilities, the Indiana Conference of Higher Education, or the Study Director and other members of the staff.

R. E. Masters
Executive Secretary
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ABOUT THE SERIES

This working paper is one of a series of specialized reports that have eminated from the Higher Education Facilities Planning Study undertaken in the summer of 1967 with the sponsorship of the Indiana Advisory Commission on Academic Facilities and the Indiana Conference on Higher Education.

As part of the study, a series of current status reports on the needs and resources of Indiana institutions of higher learning were published in the summer of 1968. These included the following:

Current Status Report 1-Finances

Current Status Report 2-Enrollment Projects

Current Status Report 3-Programs and Personnel

Current Status Report 4-Student Migration Patterns

Current Status Report 5-Facilities Inventory and Utilization

The working paper series results mainly from staff research during the second year of the study. Papers tentatively scheduled to be published in this series are:

A Simulation Model for Post-High School Education

Demand for Academic Programs

Determinants of Cost Differences

Faculty and Staff Needs

Financing Higher Education

Regional Demand for Post-High School Education

Survey of High School Senior Education Intentions

The Future Space Requirements

The final report, which will be based on all previous staff research efforts over the course of the study, is scheduled to be published in late 1969.

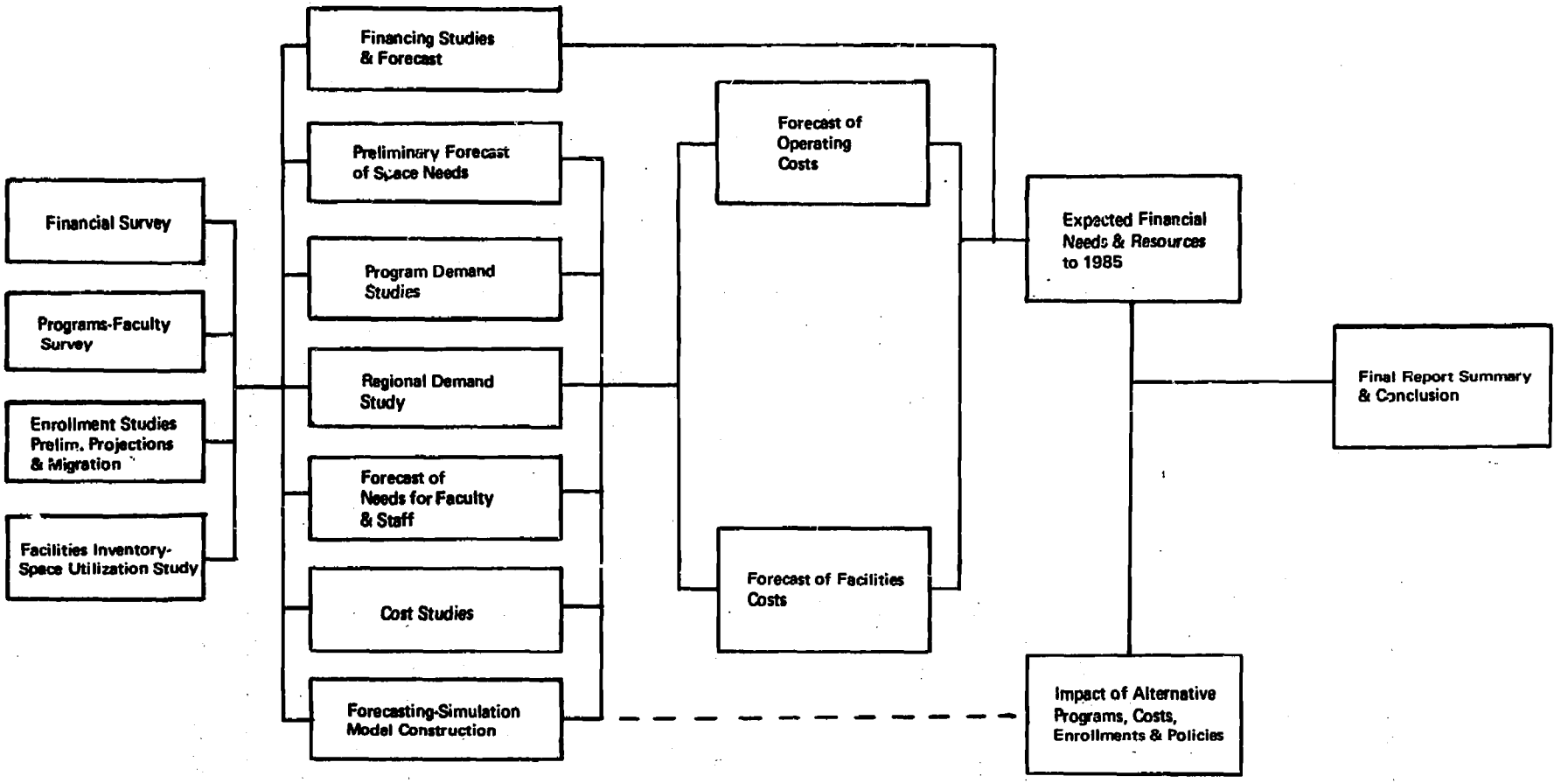
Our purpose in publishing this working paper series is to make available to those requesting documentation much of the research detail behind the findings and projections presented in our final report. The papers are essentially in draft form and do not necessarily receive the endorsement of other members of the staff, the membership of the Advisory Commission on Academic Facilities, or the Indiana Conference on Higher Education.

Charles F. Bonser

Study Director

Advisory Commission on Academic Facilities

DESIGN OF INDIANA HIGHER EDUCATION FACILITIES STUDY



SUMMARY

There are several basic sources of income for every college and university. The most basic of these are student tuition and fee income; federal government allocations; state government allocations; private gifts and grants; and income from endowment funds. These five sources constitute approximately 90 percent of the total income for educational and general purposes in institutions of higher education in the state. The remaining 10 percent includes such diverse sources as sales and services of educational departments and income from public service hospitals.

Generally, the larger the institution, the more diversified are its sources of income. Small private institutions, for example, would not have public service and services of educational departments. The importance of the several income sources varies also with the control of the individual institution. Public institutions receive the largest percentage of their educational and general funds from state tax appropriations while private institutions rely most heavily on student tuition and fee income.

In making revenue source projections for public and private institutions in Indiana, we expect all income to increase annually in actual dollar amounts. The total educational and general income for public institutions is expected to increase from the 1968 amount of $236 million to $937 million in 1985. Likewise, educational and general income in the private sector is anticipated to increase from $86 million in 1968 to $313 million in 1985.

Within this same period the various sources of income are anticipated to change in their relationship to total educational and general income. Depending on other income sources, tuition and fee income could remain

relatively the same proportion of the total as it is currently. Tuition and fee income presently constitutes approximately 14 percent of the educational and general total in the public sector and approximately 62 percent of the total in the private sector. Increases in other sources of income would reduce the proportion of total income derived from tuition and fees.

The income from endowment funds and from private gifts and grants will probably continue to increase in actual dollar amounts but decrease as a percentage of the total. Income from the federal government is expected to increase more significantly than other sources, which would have the effect of slightly reducing state governmental appropriations as a percentage of the educational and general total.

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PREFACE

In this portion of the Indiana Facilities Study, we will examine some of the basic theories concerning financing institutions of higher education in the state of Indiana. Although it is difficult to predict accurately what will happen in future years, we will try to estimate the amount of money available to colleges and universities from several major sources, based on the levels of support provided in the past, coupled with some basic assumptions regarding the next decade and a half.

It must be stated at the outset that, although individual sources of institutional income will be examined separately, they are inseparable in the total financial picture. Higher education is a labor intensive process; that is, the major cost comes from salaries. The operating expenses of colleges and universities are closely related to the number of students, faculty, and staff involved in the educational process. Basically, the interrelation among the various components may be stated as follows: (1) The demand for higher education to a large degree is dependent upon the cost to the student. We assume that the less the student must pay, the greater the number of students wishing to take advantage of an educational opportunity will be. (2) The cost to the student depends upon the magnitude of other income sources. The assumption is that tuition and fee charges make up the difference between financial support such as state appropriations and endowment income and the total cost of educating the students. (3) Sources of income other than tuition and fees frequently depend on the number of students enrolled and the number of personnel required to educate them. Legislative appropriations, for example, may be allocated to individual institutions on such bases as enrollment, student-faculty ratio, and the like.

In considering the variety of income sources available to colleges and universities, the relative importance of each must be explored. Although we may be certain that income for higher education from all income sources will rise in the future, we are less positive about the predictions that can be made about the magnitude of the total revenue or of the "mix" of the sources. A few studies estimating income sources for higher education have been made on a nationwide basis, but they are short range, usually projected only to 1975. As data from the last decade have shown, the amount of income for Indiana colleges and universities has varied considerably, and these variations will plague us in the years ahead. In the following pages we will present some generalized estimates that hopefully will prove valid as the future unfolds.

Higher education in the United States is presently in the middle of a 20-year growth period. The marked increases in enrollment and financing in the 1960's will most likely continue during the 1970's, and we should see a greater proportion of our citizens becoming more aware of and taking advantage of the increasing opportunities for education. If we are able to meet the demands of the forthcoming decade adequately, the 1980's should result in a leveling of rapid growth rates and financial investments, and a much more gradual increase will be detected toward 1990.

I. THE FUTURE FINANCING OF HIGHER EDUCATION

In the past decade higher education has received unparalleled support both in the United States and in Indiana. Investment in higher education is not limited by available resources; it is restricted only by the amount of money that society is willing to provide for it. A decade and a half ago, the system of higher education in the United States was seemingly impoverished: the need for expanded physical facilities was great, and faculty salaries were far below salary levels in comparable professions. In view of the technological advances of the U.S.S.R. and the cold war, the need to spend more money for education became obvious. To the casual observer today, higher education appears to be a prosperous enterprise with new multistoried buildings dotting the landscape and faculty salaries at a much more respectable level. The reason for this great impetus to higher education is that students, parents, donors, and governments have chosen to support the colleges and universities more than ever before.

A recent Carnegie Commission report estimated that expenditures by institutions of higher education in the United States rose from approximately 1 percent of the gross national product ($432 billion) in 1957 to slightly over 2 percent in 1967, when the GNP was $736 billion. In addition, the report predicted that by 1976-77 institutional expenditures will be about 3 percent of the expected GNP of $1,400 billion.[1] The increase from 1957 to 1967 means that the rate of growth in finances for

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[1]Carnegie Commission on Higher Education, Quality and Equality: New Levels of Federal Responsibility for Higher Education (New York: McGraw-Hill, Inc., 1968), p. 6.

higher education has been twice that of the national economy and is expected to increase at a more rapid rate than the national economy in the decade ahead. The major questions now are: (1) If higher education continues to expand, how much money will be needed to support it? (2) Will the resources be available? (3) Will the public be willing to supply the necessary funds?

The Carnegie Commission states that a century ago enrollment in colleges and universities in the United States was about 50,000, and enrollment today is approximately 6 million on a full-time equivalent (FTE) basis. More than one-half of this increase took place between 1958 and 1967. It is estimated that United States enrollments will be between 8 and 9 million by 1976. The relative proportion of young people enrolled in colleges and universities varies from one part of the country to another, but it is apparent that those responsible for the financial support of higher education must prepare for an additional 3 million students across the country by 1976-77. Enrollments will continue to rise--but at a slower rate--after 1976-77 for about another decade and will then level off until the year 2000. The heaviest expansion costs are anticipated for the period ending about 1980.[2]

College and university enrollments have more than doubled in the last decade while operating costs have tripled. This relationship between enrollments and costs has been relatively stable for all institutions in the country over the last few decades and will probably continue to be so. In Indiana, total college and university enrollments more than doubled over the past decade (from 80,277 in 1957 to 165,765 in 1967).[3] Enrollments in the

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[2] Quality and Equality: New Levels of Federal Responsibility for Higher Education, pp. 3-4.

[3] Nelson M. Parkhurst and Betty Suddarth, Enrollment Projections, Higher Education in Indiana, Current Status Report 2 (Bloomington, Ind.: Indiana Advisory Commission on Academic Facilities, 1968), pp. 18-20.

public institutions increased more than 100 percent, and the rise in the private schools was approximately 58 percent. Our projections for the next decade show that total state enrollment in higher education will rise approximately 100 percent before leveling off in the early 1980's. (This assumption is unrelated to the enrollment estimates of Parkhurst and Suddarth cited previously.) According to the enrollment-cost ratio, then, the financial support for higher education by 1985 will be at least three times what it currently is. The total 1967-68 educational and general income for institutions of higher education in Indiana was $322.6 million; this amount was almost four times the $83.9 million income for 1957-58,[4] an increase of 284.5 percent. Should the current amount increase over the next 15 years at the same rate as in the last decade, educational and general income would be approximately $1,250 million.

The state population in the college-age group is anticipated to continue increasing through the mid-1970's, after which a leveling off or slight decline may occur in actual numbers of persons in this age category.[5] However, this should not significantly affect Indiana college enrollments through 1985 since the percentage of students of college age attending college is expected to increase. The number of people above college age entering, returning to, or continuing in college will also rise, as will the number of part-time students and the number of students enrolled in the upper division and graduate level programs.

Over the past two decades Indiana students increasingly have tended to remain in Indiana to attend college, and the number of students migrating

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[4]Harry Lincoln Keith and M. M. Chambers, Finances, Higher Education in Indiana, Current Status Report 1 (Bloomington, Ind.: Indiana Advisory Commission on Academic Facilities, 1968), p. 43.

[5]Number of births extracted from Higher Education in Indiana, Current Status Report 2: Enrollment Projections, p. 9.

to Indiana from other states has nearly doubled in the same period.[6] These trends are very likely to continue over the next decade.

The various factors mentioned will aid in stimulating investment in higher education in Indiana in the immediate future. Often, as the level of instruction is raised, the corresponding costs of producing it are also raised. Due to the lower faculty-student ratio, the elaborate and expensive equipment for advanced technological instruction, and the high cost of personnel, more resources are needed to produce upper division and graduate and professional curricula. Since graduate enrollments are expected to increase more than undergraduate enrollments (particularly in the public institutions), Indiana will be responsible for educating more students at the higher and most costly levels of instruction.

The major sources of financial support for institutions of higher education traditionally have been the students (or the students and their parents), state, national, and local governments, and private donors. The student contributes tuition and fees. Governmental support includes state appropriations of tax funds for operating expenses, local tax levies, and/or federal grants and contracts that purchase the institution's services. Gifts and bequests from private donors may constitute unrestricted funds that are to be used at the discretion of the institution or funds limited to specific purposes. In many instances, private gifts are added to the institution's endowment and only the annual income from such funds may be used. Private gifts may come from parents, alumni, corporations, religious groups, or any group or individual whether affiliated with the institution or not.

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[6]Patricia L. Nagel, Student Migration Patterns, Higher Education in Indiana, Current Status Report 4 (Bloomington, Ind.: Indiana Advisory Commission on Academic Facilities, 1968), pp. 6-14.

STUDENT FEES

How much of the cost of education a student should pay is one of the major problems involved in determining the future financing of higher education. Tuition and fees in private schools in Indiana (and across the nation) are substantially higher than those of public institutions. The reason for this, of course, is that the students are the major source of income for private institutions. In 1966-67, tuition and fees provided almost 65 percent of the total educational and general income for private schools in Indiana. The corresponding figure for the public institutions was only slightly more than 12 percent.[7] Tuition and fee statements (fall, 1967) found in Indiana college and university catalogs show that charges per year to students ranged from between $300 and $360 in the public institutions (in-state undergraduate fees) to $1,830 in one private school. Over half of the private schools listed tuition and fee charges of $1,000 or more. These amounts are generally basic fees without the inclusion of special fees (such as individual music instruction and are exclusive of room and board charges.

Obviously, the income from tuition and fees in both public and private schools has increased over the years simply by the increases in enrollment. However, the income from this source has increased at a higher rate than enrollments, thus indicating that tuition and fees have been raised by both public and private schools. Private schools have found it necessary to charge higher fees in order to carry out their educational mission without resorting to public money or control. Despite these higher fees, the private schools

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[7] Finances, Higher Education in Indiana, Current Status Report 1, p. 42.

have continued to expand their enrollments, have frequently served special constituencies, and have offered a different kind of educational service than is found in the public schools. Private school administrators are probably continually tempted to raise student charges (the major source of income) in order to meet spiraling costs. They find themselves in the dilemma of needing additional funds for annual operations but being unwilling either to limit the clientele to upper or upper-middle class students or to price themselves out of the educational market. Even though private schools have made splendid efforts to provide financial assistance to students who cannot bear the costs of attendance, most of the low-income students attend public institutions where fees are traditionally lower.

If educational opportunity is an aim of the country and of the state of Indiana, it is, then, important to keep tuition charges at a minimum in the public institutions. Even though tuition for private schools is high, a low income student is not denied an education since he may attend a low-cost public institution. This does not mean that public institutions are any less selective or are inferior to private ones--only that they are different and that one of their major functions is to be accessible to many.

In a recent publication by the Carnegie Commission on Higher Education, Howard R. Bowen stated:

> My conclusion is that substantial differences in tuitions between private and public institutions are practically feasible, socially justifiable, and economically necessary. So long as low-tuition public institutions provide an alternative to students of modest means, no one can claim to be seriously damaged if he pays more to attend a private institution. However, for reasons I have already suggested, high tuitions are not an equitable method of finance. If carried to an extreme, they would tend to limit private colleges and universities to the more affluent students and make of them class institutions--a fate to be avoided at all costs. The case for keeping tuitions down is valid in the private

> as well as in the public sector, and private institutions should not regress from their present commendable efforts to accommodate students from low-income families.[8]

In the same article Mr. Bowen explains that the application of tuitions to different students is uneven and regressive even with a comprehensive system of student aid. Tuition is paid by the student, by his parents, or sometimes shared between the two, and the amount of tuition is not adjusted to the circumstances of the payer. The amount levied on the poor, self-supporting student is no different from that levied on the affluent parent. Tuitions are clearly more inequitable than the system of federal, state, and local taxes from which educational appropriations are derived and certainly are more regressive than private donations, which are usually made by the well-to-do out of relatively unneeded income. An increase in tuitions with a corresponding lightening of the load on taxes and gifts would accentuate regressivity and inequity in the system of educational finance.[9]

The student encounters several costs other than those for tuition and fees, books and supplies, and incidentals, such as laundry, travel, and entertainment. If he does not have the advantage of living at home, he must pay for room and board. An often overlooked cost to the student is that of his forgone earnings. Because he is a full-time college student, he does not enter the labor force until the completion of his course of study, although he may have a temporary job during the summer months. With these factors in mind, it can be estimated that the college student living away from home spends a

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[8] Howard R. Bowen, The Finance of Higher Education (Berkeley: Carnegie Commission on Higher Education, 1968), p. 28. (Mr. Bowen was formerly president of Grinnell College and currently is an economist and president of the State University of Iowa.)

[9] The Finance of Higher Education, p. 27.

minimum of between $1,500 and $2,000 in direct educational costs per year and loses perhaps another $3,000 or $4,000 in forgone earnings, making his collegiate year cost between $4,500 and $6,000.

There are two major points of view with regard to the financing of institutions and their students. Some advocate financing institutions primarily with tuition and fees and financing students through parental contributions, work opportunities, and long-term loans. Carried to an extreme, this could result in differential charges set according to the actual cost of the various educational programs. This would mean that most technical and professional curricula would be priced higher than some other areas of study. For example, the fee for chemistry would be higher than that for English or education. Financial aid for students would include a system of long-term loans, probably a variation of the Educational Opportunity Bank originally suggested by Milton Friedman, Jerrold Zacharias, and others. Under this kind of plan, the student would repay a fixed percentage of his income after graduation for a long period of time--perhaps 30 or 40 years. The repayment would probably include his original debt plus additional funds that would then be used as loans to future generations of students. The drawbacks to this type of student financing are that it would place in the hands of the student excessive financial power over the institution and would also tend to limit his educational and curricular choices by his ability to pay for specific courses. The extensive use of loans might limit opportunity for many students, particularly women and minority groups, who would not wish to go heavily into debt.

The other major point of view is represented by educators and economists who would eliminate tuition and fees in public institutions and minimize them in private schools. Students would be financed by parental contributions, some employment, and a large system of grants. Loans would be available

only as an incidental form of student aid. Proponents of this type of student financing advocate that the small fees charged would be the same for all fields of study, thus removing all financial barriers from the students' freedom of choice. To eliminate student fees is probably unrealistic and would narrow the financial base of the school, which, in turn, might limit its autonomy. Also, the student would be prohibited from making a financial contribution to an educational process in which he undoubtedly receives personal benefits.

A special issue related to tuition and fees concerns differential fees for resident and nonresident students. In almost all states, out-of-state fees in public institutions are now nearly or fully double those of in-state charges. It is understandable that most legislatures are unwilling to appropriate funds to educate students from other states, but in view of the increased mobility of the population these fees may be considered to inhibit the students' freedom of educational choice. Generally, we assume that these migrating students are somewhat more affluent than those who remain at home. Their inclusion in the academic community to which they migrate tends to produce a more cosmopolitan atmosphere and helps to avoid a condition of inbred provincialism on the campus and promotes the economic growth of the community and the state. (A student living in a state for an academic year could be a greater economic asset than a summer or winter tourist spending a few days or weeks.) Perhaps as federal contributions to institutions of higher education grow, these interstate financial barriers may be reduced to some extent. In some instances, students actually receive financial assistance from their home state to study in other states. For example, Kentucky provides assistance for its students of veterinary medicine because no such facilities exist in the state, and Kansas has a similar program for

its dental students. The Western Interstate Commission of Higher Education provides for the interchange of students among the 13 far western states at reduced costs when in-state facilities are not available.

It is true that current practices in aiding students financially tend to ameliorate the inequities of tuition charges, but it is unlikely that they remove them. Even low interest loans add another financial burden to the student after he completes his college education. We assume that most students in the upper income levels in the United States will probably go on to college since they can afford to attend either private or public institutions. If we are concerned with expanding the opportunity for higher education to increasing numbers of high school graduates, the emphasis must be placed on attracting low-income students. It is doubtful that sufficiently large aid funds could be amassed to provide these low-income students with scholarships and grants-in-aid in proportion to their financial need. Scholarships usually stress academic performance first and need second. Grants-in-aid are not widespread or easily obtained. Loans may be a partial answer for some students, but they place an extra burden on women, who do not wish to have their prospective husbands assume their educational indebtedness, and on low-income minority groups, who have nothing to offer for collateral and who find it difficult to see the advantage of borrowing money for an "intangible" such as a college education. For this latter group, to borrow for automobiles, television sets, and the like, seems more practical because they feel that they have some equity in a tangible and marketable item. The regional campuses of Indiana's public institutions that are within commuting distance of many financially disadvantaged students should fulfill some of the qualifications for low-cost education. Evening classes provide instruction at a time that is convenient for students who must work during

the day; the commuting or "living at home" aspect of these institutional affiliates is emphasized by the lack of residence hall facilities. It is surprising, therefore, to find that fees per credit hour are higher at the regional campuses for in-state undergraduate instruction that they are for comparable courses on the main campuses.

Basically, there are two points of view regarding tuition and fee charges. One viewpoint stresses the theory that education is a commodity on the open market that people buy for their own gratification. No one should expect to get it free any more than he should expect to get food and clothing free. The price rightly changes with the market and the state of supply and demand. Since the student benefits most from the educational process as an individual, he should be expected to bear its full cost. The opposing point of view is that while higher education undoubtedly results in private gains and benefits for the individual, these private gains are outweighed by benefits to the total society. Higher education is seen as a public function and therefore a public obligation to be provided on a free or very low-cost basis. Although it should not be a public monopoly, higher education is too important to the nation to be left to the vagaries of an unregulated private pricing system.

In Table 1 the total tuition and fee income for Indiana public and private schools has been divided by total fall enrollment for the corresponding year, giving an approximate average tuition and fee income per student. Since the results are averages, they bear a reasonable resemblance to the amounts charged according to the institutions' catalogs. The aver-

TABLE 1

Income from Tuition and Fees, Total Fall Enrollments, Tuition and Fee Income per Student, in Indiana Public and Private Institutions of Higher Education, Fiscal Years 1957-58 and 1967-68

	Tuition and Fee Income	Total Fall Enrollment	Tuition and Fee Income per Student
1957-58			
Public	$ 8,729,618	45,103	$193.54
Private	18,760,786	35,124	534.13
TOTAL	27,490,404	80,227	
1967-68			
Public	32,451,901	110,248	294.35
Private	53,566,412	55,150	971.29
TOTAL	86,018,313	165,398	

SOURCES: Financial data from "Financial Statistics of Institutions of Higher Education," Department of Health, Education, and Welfare as submitted by the individual institutions. Enrollments from Nelson Parkhurst and T. N. Gunderson, Report of Enrollment in Indiana Colleges and Universities, Indiana Association of Collegiate Registrars and Admissions Officers, Purdue University, October, 1957 and October, 1967.

age 1967 tuition charge per student (in-state, undergraduate) was $330 for public institutions and $1,084 for private institutions. Table 1 makes no correction for fee differentiations between in-state and out-of-state students, for part-time students, or for differences between professional and technical curricula offered. For public schools the increase in tuition and fee income per student from $193.54 in 1957-58 to $294.35 in 1967-68 is 52.1 percent. The corresponding increase in private schools is 81.8 percent.

Columns 2 and 3 of Table 1 show that tuition and fee income increased 271.7 percent in public colleges and universities and 185.5 percent in private schools in the decade 1957-58 to 1967-68. During the same periods enrollments increased 144.4 percent in the public institutions and 57.0 percent in the private.

Over the past 15 years (1952 to 1967) total enrollment in Indiana's public institutions more than tripled, from 32,865 to 110,248, an increase of 235.5 percent. During the same period, private school enrollments increased 125.3 percent, rising from 24,476 to 55,150.[10] According to the Department of Health, Education, and Welfare publication Digest of Educational Statistics, 1966 and 1968, public enrollments in the United States rose from 1,101,240 in 1952 to 4,816,028 in 1967, an increase of 337.0 percent. Over the same period, private enrollments rose from 1,033,002 to 2,095,720, an increase of 102.0 percent. According to these nationwide figures, Indiana is behind the national rate of increase for public institutions and ahead of the rate of increase for private schools.

If enrollments in Indiana public and private institutions continue to increase during the next 15 years, even at a slightly lower rate than in the past, in the public schools they will probably more than double, and private enrollment may almost double. It must be kept in mind that any estimate of private enrollment is highly tenuous since many private institutions, in an effort to maintain optimal conditions relative to students, faculty, and facilities, deliberately limit the number of students they accept. Roughly speaking, however, it is conceivable that by 1985 public enrollments may stand at approximately 230,000 and private enrollments at approximately 90,000.

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[10] Enrollment Projections, Higher Education in Indiana, Current Status Report 2, pp. 19-20.

One of the better approaches to estimating tuition and fee income is to establish anticipated enrollment figures and multiply them by the estimated average tuition and fee charge per student. Although this method includes two variables, enrollments and average tuition, it should yield a more realistic result than any straight-line projection based on increases of previous years.

As may be seen in Figure 1, several independent projections have been made of enrollments in Indiana colleges and universities. One such study not represented in the figure was conducted by Nelson Parkhurst.[11] (Since his projections of graduate student enrollment are made on a statewide basis only and are not divided between public and private institutions, they could not be included in the graph.) In making detailed projections of the number of students in both public and private institutions, Parkhurst utilized a variety of mathematical models, and total enrollment estimates resulted in a range of projections. He estimates that in 1975 total enrollment will be somewhere between 241,456 to 254,959 students, and in 1985, from 253,672 to 282,623. Mr. Harris projects a public enrollment figure, for 1975 only, of 190,400 students. His projection (used in his article primarily to estimate general fund expenditures in Indiana for operating expenses is based on anticipated enrollment multiplied by an estimated state cost per student. Mr. McGrath has made annual estimates of both public and private enrollments to 1985 based on the adoption of several of the state policy commission's recommendations for expanding educational opportunity for Indiana youth beyond high school. They estimate an enrollment of 190,700 in public and 82,600 in private institutions in 1975, and in 1985 the predicted figures are 227,500 and 82,400, respectively. Another estimate, made by Keith and Chambers for 1985, is that the public school

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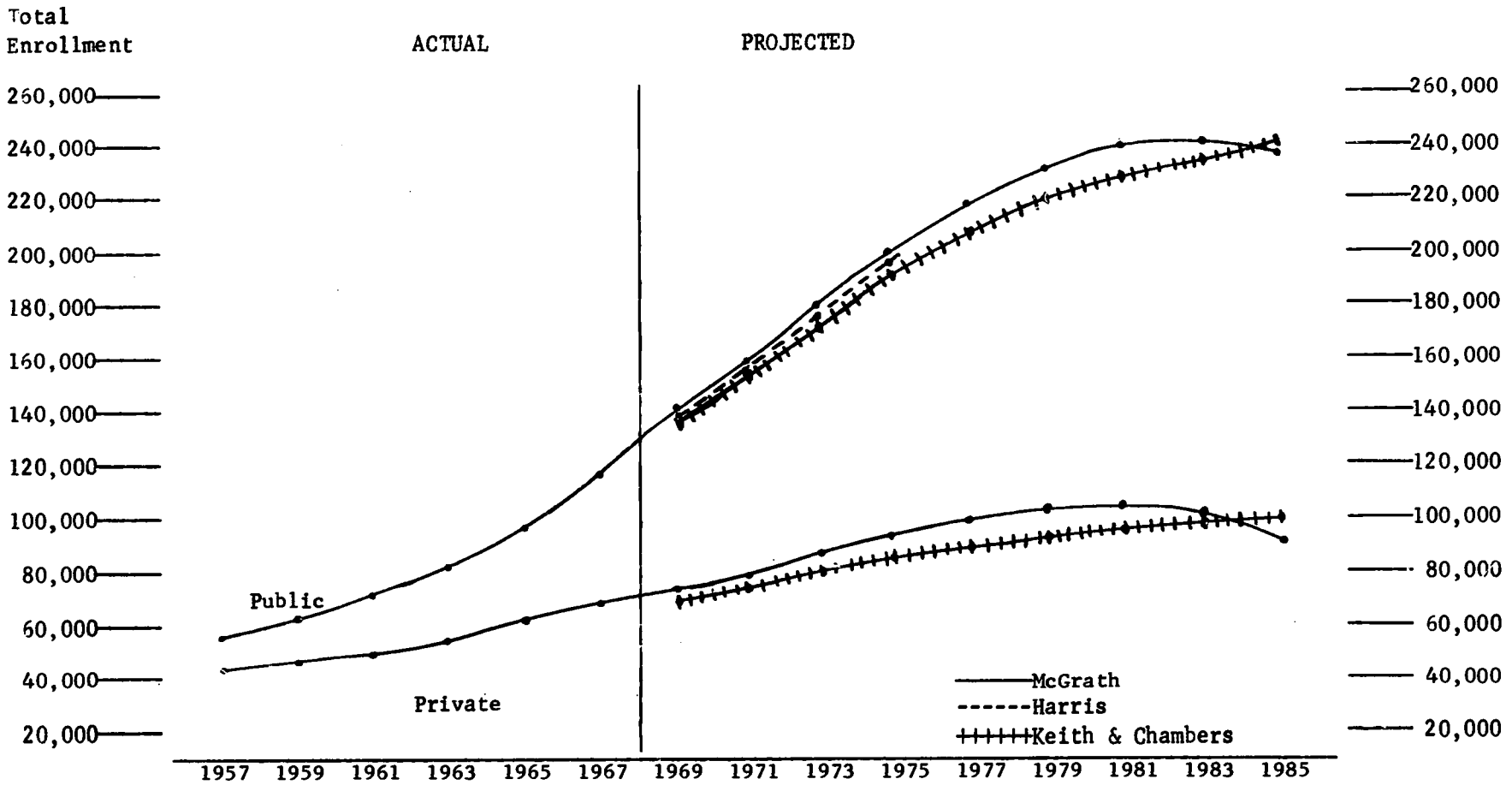
[11] Enrollment Projections, Higher Education in Indiana, Current Status Report 2.

FIGURE 1

Total Enrollments in Indiana Institutions of Higher Education, Public and Private*



*Actual figures are for fall, 1957 to fall, 1967. Projected figures are for spring, 1968 to fall, 1985.

SOURCES: McGrath, An Indiana Pattern for Higher Education, State Policy Commission on Post-High School Education, December, 1968, p. 26; J.S. Harris, "Overview of the Fiscal Outlook of State Government to 1975," Indiana Business Review, July-August, 1968, p. 19; N.M. Parkhurst, Enrollment Projections, Higher Education in Indiana, Current Status Report 2, 1969.

enrollment will be 230,000 while that of the private schools will be 90,000.

These individual projections should be considered to vary more in 1985 than in 1975. The reason, of course, is that as any prediction goes further into the future, the realm of possibility widens considerably and the factors determining support of and demand for higher education become more highly speculative.

Table 2 gives our projected enrollment figures for 1985. These figures are based on the assumption that enrollments will increase at the maximum levels suggested by the previously discussed studies and that tuition and fee income per student will also increase, with relatively small gains occurring in public schools and less than doubling in private schools.

TABLE 2

Estimated Income from Total Tuition and Fees, Enrollments, and Tuition and Fee Income per Student, in Indiana Public and Private Institutions 1985

	Total Fall Enrollments	Tuition and Fee Income per Student	Total Tuition and Fee Income
Public	230,000	$ 400.00	$ 92,000,000
Private	90,000	1,750.00	157,500,000
TOTAL	320,000		249,500,000

In 1967-68, Indiana's tuition and fee income comprised 26.7 percent of the total educational and general income. The total tuition and fee income for 1985 of about $250 million, if this estimate is relatively correct, would be 20.0 percent of that year's anticipated educational and general income total of $1,250 million. The ratio of tuition and fee income to the total has been decreasing over the last decade, particularly in the public institutions, and a continuation of this decline seems inevitable.

Table 3 shows several sources of income and their estimated changes as a percent of the total on a nationwide basis.

TABLE 3

Nationwide Income For Higher Education by Source
Fiscal Years 1967-68 and 1979-80

Source	Percentage 1967-68	Percentage 1979-80	Amount* 1967-68	Amount* 1979-80
State and local government	29%	25%	$ 3,600	$ 8,250
Federal government	30	40	3,700	13,200
Student fees	26	24	3,300	7,920
Private gifts and grants	5	4	690	1,320
Other	9	9	1,060	2,310
TOTAL	100	100	$12,350	$33,000

*Amount in millions of dollars.

SOURCE: Howard R. Bowen, "The Financing of Higher Education," in The Future Academic Community: Continuity and Change (a collection of background papers for participants in the 1968 annual meeting of the American Council on Education, Washington, D.C., 1968), p. 77.

As indicated by the figures, income from state and local governments, student fees, and private gifts and grants will increase in actual dollar amounts in 1979-80 but will comprise a smaller portion of the total financial support. Student fees are projected to increase in actual dollar amount almost 150 percent, although as a percent of total higher education income they are expected to decrease 2 percent. The averages for Indiana are slightly above these national averages; because of the large number of private institutions in the state, tuition and fee income as a percent of a statewide total is significantly higher than in states with relatively few private schools.

In Indiana tuition and fee income in both public and private schools has decreased as a percentage of the total educational and general income in the past several years. In the public institutions, this income source amounted to 13.1 percent of the total in 1957-58, dropped to 10.6 percent in 1961-62, and rose again to 12.3 percent in 1966-67; in private schools

tuition and fee income represented 67.5 percent in 1957-58, rose to a high of 68.9 percent in 1965-66, and declined to 64.3 percent in 1967-68.[12] Even though the actual income from this source has increased annually and has fluctuated as a percentage of total income, it was still a smaller percentage of the total in 1966-67 than in 1957-58. The students enrolled in our colleges and universities will undoubtedly continue to provide financial support through tuition and fees, but since this source of income is generally controlled by the institution and can produce additional revenues quickly, the amount of support will depend in part on the relationship or "mix" of other income sources. Although additional students will mean additional income, increases in tuition and fee charges will probably not keep pace with income from other sources. Therefore, this source will very likely continue to decrease as a portion of the total, both in Indiana and nationwide.

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[12] Finances, Higher Education in Indiana, Current Status Report 1, p. 50.

II. STATE GOVERNMENT SOURCES OF INCOME

State tax funds, appropriated annually or biennially by state legislatures, are the largest source of operating income for all higher education institutions. In 1915 about 10 percent of the national total of all state revenues went for higher education, but the percentage declined in subsequent years as other important matters, such as highways, public health, and social welfare, came to the attention of state legislatures. In the middle 1950's higher education's share of total revenues (5 to 6 percent) was the lowest it had ever been. However, since that time the amount allocated for higher education has increased steadily. By 1959-60 total appropriations amounted to approximately $1.4 billion; by 1965-66 they reached $3.1 billion; and for the current 1968-69 fiscal year they are almost $5.1 billion, or slightly more than 12 percent of total state revenues. Thus, state tax support in the United States more than doubled in the first half of the present decade and increased more than 3½ times from 1959-60 to the 1968-69 fiscal year. These contributions to higher education by state governments account for more than one-third of the total educational and general operating income of all institutions and slightly more than one-half of that of the public institutions.

Appendix A gives a complete tabulation of state appropriations for 1959-60 and 1968-69. In actual funds appropriated, California has consistently ranked first among the 50 states. In 1959-60, appropriations in California were $189 million and they have risen steadily to a high of $638 million in 1968-69. In 1959-60 Indiana ranked seventh among the states with appropriations of slightly more than $45 million; for fiscal year 1968-69, Indiana's appropriation of almost $145 million ranks tenth in the country. Nationally, the appropriations for 1968-69 range from California's high to a low of slightly more than $10 million in New Hampshire.

TABLE 4

Appropriations of Indiana Tax Funds for Operating Expenses of Higher Education, Fiscal Years 1959-60 Through 1968-69

Fiscal Year	Funds Appropriated*	Dollar Gain Over Preceding Fiscal Year*	Percentage Gain Over Preceding Fiscal Year
1959-60	$ 45,463		
1960-61	50,163	$ 4,700	10.33%
1961-62	55,316	5,153	10.27
1962-63	62,709	7,393	13.36
1963-64	70,866	8,157	13.00
1964-65	80,134	9,268	13.07
1965-66	90,105	9,971	12.44
1966-67	104,312	14,207	15.76
1967-68	132,628	28,316	27.14
1968-69	144,715	12,087	9.11
TOTAL GAIN		99,252	218.31

*Amount in millions of dollars.

SOURCE: M. M. Chambers, A Record of Progress: Ten Years of State Tax Support of Higher Education, 1959-60 Through 1968-69 (Danville, Ill.: Interstate Printers & Publishers, Inc., 1969).

During the last decade only Oklahoma did not at least double its appropriations for higher education. The greatest increases were made by Hawaii (525 percent) and New York (515 percent). The weighted average increase for all states from 1959-60 to 1968-69 was 261 percent. Thus Indiana, with an increase of 218.31 percent, was below the national average.

Table 4 gives Indiana's higher education appropriations for fiscal years 1959-60 through 1968-69. A comparison of these figures with those for fiscal year 1969-70 should prove interesting. The total state appropriation for

1969-70 is $150,979,000[13] (which excludes $3,154,000 for state scholarships and $180,000 for a guaranteed loan program). This is a dollar gain of only $6,264,000, or 4.32 percent over the comparable 1968-69 appropriation. Although the 1969-70 figure is higher than any preceding year, the dollar gain over the 1968-69 appropriation and the percent of increase are both the lowest in the last decade.

While the latest appropriation is indeed larger than that for the 1968-69 fiscal year, the increase is primarily channeled to the smaller state universities and to the regional campuses of the larger state institutions. For the first time in over three decades the appropriations to the main campuses of the larger state universities have dropped from the preceding year. The following table illustrates state tax funds appropriated for the operating expenses of the Indiana and Purdue University main campuses for fiscal years 1968-69 and 1969-70.

TABLE 5

Indiana Tax Fund Appropriations For Operating Expenses
At Indiana University and Purdue University Main Campuses,
Fiscal Years 1968-69 and 1969-70

Campus	1968-69 Appropriation	1969-70 Appropriation	Net Decline
Indiana University	$40,900,000	$39,500,000	$1,400,000
Purdue University	42,100,000	41,250,000	850,000

For any institution of higher education a reduction in annual income forces the board of trustees into making difficult financial decisions. Faced with less money than is needed to operate the institution, the fundamental

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[13]M. M. Chambers, Grapevine (April, 1969), p. 803.

question is whether to make cut-backs in curriculum and personnel in order to operate within the confines of a reduced budget or to raise student fees in order to fill the financial gap in the existing budget. Practically all boards of trustees of public institutions have faced this dilemma at one time or another. In almost every instance, a decision to reduce the program and personnel has been equated with a reduction in the quality of the institution. Primarily for that reason boards of trustees usually increase fees slightly, apologetically admitting that by so doing they may be excluding a small number of students who cannot afford to attend the institution.

Such is the current situation in Indiana. The reduced appropriation for the 1969-70 fiscal year has caused in-state undergraduate fees to increase approximately 68 percent at Indiana University and nearly 75 percent at Purdue. The magnitude of these fee increases is much greater than the usual $30-to-$50 increases usually considered by boards of trustees across the country.

An often mentioned solution to the individual student's financial problem resulting from this enormous fee increase is to channel considerably greater funds into scholarships, grants, and loan programs. This increase in student financial aid is likened to a program of graduated student fees in that those students who can afford to pay the full amount presumably will and those who cannot may apply for financial assistance.

At several state universities systems of graduated fees are now under consideration, and one was actually in operation during 1968-69 at Michigan State University. Although the Michigan State Board of Trustees voted to terminate the graduated fee structure after the initial trial year, the mechanics of the system are worthy of mention.

The announced fee at Michigan State for undergraduates is $184 per quarter.

An individual student could have this amount reduced to the minimum of $123 by submitting a copy of the federal income tax form 1040 to the university. The fees are assessed as 1 percent of the family income. This actually affects those students whose family income is between $12,300 and $18,400. By producing the federal income tax form indicating family income below $12,000, the student is assessed the minimum $123 fee. The 1 percent assessment applies to family income above the $12,300 amount and up to $18,400. For example, if the student's family income was $15,000, his university fee for the term would be $150. Approximately 40 to 50 percent of Michigan State's undergraduates apply for the fee reduction, and of those, about 80 percent pay the minimum amount. Graduate fees are slightly higher, but fee reductions are figured in the same manner as undergraduate fees. Approximately one-half of the graduate students apply for the fee reduction, and of those, approximately 95 percent pay the minimum amount. The graduated fee system at Michigan State is applicable only to students who are residents of Michigan.

A different kind of graduated fee structure is being considered by the Ohio legislature. The plan would involve an increase in instructional fees for students whose families have incomes of more than $7,500 a year after federal income tax. Students from families in the $5,000 to $7,500 bracket would pay just 50 percent of the proposed increase, and those from families whose income is less than $5,000 would pay no fees at all. The average fee is now about $450 a year. The proposed increase would raise this figure to $750 for a three-quarter academic year for students whose families are above the $7,500 income line. Those in the middle bracket would pay $600 a year. Students whose family income is less than $5,000 would not be assessed any increase, and the $450 they pay at present would be covered by an aid program.

Differential student fees at state institutions stimulate the question of whether or not educational institutions should be considered agencies for the redistribution of wealth within a state or within the society. The tax structure has traditionally been the means for such redistribution of personal income, and the inclusion of institutions of higher education in this function represents a relatively new departure in both philosophy and action.

An interesting way to assess the financial support for annual operations of higher education in a given state is to figure the state tax cost per citizen and the ratio of total state tax cost to the total personal income. Such an analysis of the 50 states for fiscal 1968 shows that the greatest proportional effort does not always produce the greatest support for higher education. The national average state tax cost per citizen in 1968 amounted to $25.56. The average ratio of total state tax cost to personal income is 0.75 percent. The range of state tax cost per citizen is from $42.80 in Alaska to $12.80 in Massachusetts. Even though Alaska ranks first, indicating that Alaska's citizens pay more for higher education than those in any other state, the total state tax cost equals only 0.925 percent of the total personal income. Alaska ranks 19th in the ratio of total state tax cost to personal income, which means that in 18 other states the tax cost is less per citizen but is a greater percent of total personal income. Massachusetts, on the other hand, has the lowest tax cost per citizen and also the lowest ratio of total state tax cost to personal income (approximately 0.33 percent). This is attributed primarily to the fact that enrollments, and consequently appropriations, are low in public institutions. Tax costs generally are higher in the far western states where the highest proportion of students is enrolled in public colleges and universities. Two such states have no private institutions at all. State tax costs are generally lower in the

North Atlantic states where as many as 80 percent of the students are enrolled in private institutions.

In many instances, heavily populated states with high personal incomes need not spend as much per citizen nor have a high ratio of state tax cost to personal income in order to appropriate substantial funds to higher education. California is a good example. In terms of total appropriations, it ranks first in the nation, but its tax cost per citizen is only $33.70 (19th in the nation), and the total state tax cost as a ratio of total personal income is only 0.835 percent (28th in the nation).

In a tabulation of the 50 states for fiscal 1968 (Appendix B), Indiana ranks 19th with a state tax cost per citizen of $28.16. However, when total state tax cost for operating expenses is calculated as a percent of the total personal income, the result is 0.85 percent, placing Indiana in the 26th position among the states.

Table 6 compares Indiana with other states that appropriate a similar amount of funds for the operating expenses of higher education, using 1968-69 data. Comparisons of tax cost per citizen and the ratio of total state tax cost to total personal income are also given. As the table illustrates,

TABLE 6

State Tax Appropriations for Operating Expenses Of Higher Education, State Tax Cost Per Citizen, and Total State Tax Cost as a Percent of Total Personal Income, Eight States, Fiscal Year 1967-68

State	Total Appropriations*	State Tax Cost Per Citizen	Ratio of Total State Tax Cost as % of Total Personal Income
Ohio	$174,136	$16.48	0.480%
Florida	156,645	25.86	0.840
Wisconsin	155,957	37.04	1.105
INDIANA	144,715	28.16	0.850
Washington	137,051	42.76	1.160
North Carolina	114,709	22.85	0.865
Missouri	112,764	24.59	0.770
Georgia	112,524	25.17	0.905

*Amount in millions of dollars.

TABLE 7

Appropriations of State Tax Funds for Operating Expenses of Higher Education as a Percent of Total State Tax Revenue, Eight States, Fiscal Year 1966-67

State	State Tax Revenue*	Appropriations for Operating Expenses of Higher Education*	Appropriations as % of State Tax Revenue
Ohio	$1157.8	$ 93.3	8.1%
Florida	876.8	95.5	10.9
Wisconsin	921.1	95.2	10.3
INDIANA	771.3	104.3	13.5
Washington	775.6	95.0	12.2
North Carolina	840.7	81.2	9.7
Missouri	615.1	74.8	12.2
Georgia	667.8	59.2	8.9

*Amount in million of dollars.

SOURCES: Total state tax revenues from U. S. Department of Commerce, published in the Washington Report. Appropriations for operating expenses of higher education from M. M. Chambers, A Record of Progress, (Danville, Ill. : Interstate Printers and Publishers, 1969). (A complete tabulation of the 50 states may be found in Appendix C.)

Ohio, with a large population and a relatively high total personal income, is able to make a substantially larger appropriation with a smaller state tax cost per citizen and a much smaller percent of total personal income than Indiana. Washington, on the other hand, has a lower total appropriation than Indiana, but the cost to each citizen is almost 50 percent greater and constitutes a much higher percentage of total personal income.

The eight states can also be compared using 1966-67 state tax revenue data. These figures are given in Table 7. Of these states, Indiana had the highest percent of total state tax revenues going to higher education and the highest appropriation in actual dollar amounts. However, by 1968-69, as shown in Table 6, Indiana was surpassed by Ohio, Florida, and Wisconsin in total tax appropriations.

In a recent study by John S. Harris[14] of Indiana's fiscal outlook to 1975, enrollments in the four state universities are projected to be about 190,396 in 1975, and the amount paid by each student for annual operating expenses for that year is expected to be $1,504. A projected income for the state universities, based on these estimates, is $286.4 million. Harris also projects an additional $10 million for construction costs in 1975, bringing the total state contribution to $296.4 million. Indiana state funds channeled to higher education increased 191 percent from 1955 to 1965 and projections for the 1965-75 period indicate an increase of 242 percent.

Harris enumerates several basic supply and demand factors that underlie these continued increases. Briefly, they are: (1) a greater proportion of the state's population falling into the 18-to-24 age group; (2) increases in the percentage of this age group attending college; (3) increases in students over 24 years of age; (4) an increasing percentage of students entering graduate school; (5) increased expansion of the regional campuses; (6) increases in the proportion of students enrolling in public rather than private institutions; and (7) yearly increases in per student cost of about 4.2 percent in the state-supported institutions.

Indiana higher education appropriations amounted to 19.8 percent of the general fund expenditures in 1955 and rose to 21.9 percent in 1965; they are estimated to be about 32 percent of the total expenditures in 1975. The components of the expenditures may be seen in Table 8.

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[14]John S. Harris, "Overview of the Fiscal Outlook of Indiana State Government to 1975," Indiana Business Review, Vol. 43 (July-August, 1968), pp. 13-24. (Mr. Harris is Acting Director of the Fiscal Analysis Division of the Indiana Legislative Council.)

TABLE 8

Indiana General Fund Expenditures for Fiscal Years 1955, 1965, and 1975

Components	Expenditures*			Percentage Change	
	1955	1965	1975	1955-65	1965-75
Higher education	$ 29.7	$ 86.6	$296.4	191.6%	242.3%
State aid to local schools	58.5	168.4	347.0	187.9	106.1
Health and hospitals	23.6	44.8	100.4	89.8	124.1
Welfare	12.0	16.8	42.7	40.0	154.2
General government	8.0	16.3	36.0	103.8	120.8
Retirement funds	3.9	29.4	46.8	653.8	59.2
All other	14.3	32.9	60.6	130.1	84.2
TOTAL	$150.0	$395.2	$929.9	163.5%	135.3%

*Amount in millions of dollars.

SOURCE: "Overview of the Fiscal Outlook of Indiana State Government to 1975," p. 15.

Harris does not expect that the total Indiana general fund expenditures will increase as rapidly over the 1965-75 decade as they did in the previous ten years. The percentage of increase is also projected to drop in state aid to local schools (due primarily to a leveling off of elementary and secondary enrollments), retirement funds, and "all other" expenditures. However, a marked increase is expected in higher education, health and hospitals, and welfare. The rate of gain for general government expenditures is also expected to rise, but not as much as the others.

It should be noted here that Harris's predictions and data deal with both capital and operating funds, whereas most of the other tabulations in this report concern only operating funds. In addition, Table 8 gives expenditures from the Indiana general fund only. It is important to realize that in the state of Indiana dedicated funds, such as those exclusively designated for highways and roads, are almost equal in amount to general funds. During the period 1967-69, for example, total appropriations from the general fund

were $1,290,882,900 while appropriations from dedicated funds were $1,078,946,743. The 1967-69 appropriations for higher education of $310,654,705 represented 13.1 percent of all state appropriations (about $2.3 billion). The 13.1 percent is a significant increase over the preceding two-year period when higher education received 12.0 percent (slightly over $213 million) of total statewide appropriations.[15]

Indiana tax appropriations for higher education operating expenses have risen from the 1959-60 sum of $44,463,000 to $150,979,000 in 1969-70, an increase of 232.09 percent. Harris's projection of $286,400,000 for 1974-75 represents an increase of only 89.69 percent over the 1969-70 appropriation.

If three-fourths of the statewide total of educational and general income projected for fiscal 1985 were allocated to public schools, this amount would be $937,300,000. But if the portion that is comprised of state tax funds should continue to decrease slightly to just over one-half of the total income, the state tax funds in fiscal 1985 would be $487.4 million. Our 1985 projection represents an increase of only 70.18 percent over Harris's 1975 amount and an increase of 222.82 percent over the 1969-70 actual appropriation. In other words, the percent of increase between 1970 and 1985 in state tax funds for the operational expenses of higher education is projected to be less than it actually was between fiscal 1960 and fiscal 1970.

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[15] State of Indiana, 1967-1969 Biennial Budget as Passed by the 1967 General Assembly (Prepared by the State Budget Agency, Indianapolis, Indiana).

III. INCOME FROM FEDERAL GOVERNMENTAL SOURCES

The impact of federal government funds on higher education has been stronger than any other income source. In actual dollar amounts, state tax sources continue to contribute the most to higher education. Currently, state tax funds make up approximately one-fourth and federal funds not quite one-fourth of the income for all institutions in the country. The funds from the federal government over the last few years have become increasingly more significant. Table 9 shows federal funds allocated for higher education for the fiscal years 1962 through 1969. Even though the 1969 estimates are not complete, it can be assumed that federal funds to higher education have more than tripled over these eight years.

Generally, federal funds distributed to institutions of higher education have been allocated for specific projects and services. In a sense, the federal government purchases the services of an institution to complete a task that it cannot or does not deem feasible to do itself. The Morrill Land-Grant Act, signed by President Lincoln in 1862, brought into existence what has now become a series of categorical grants for education. Federal grants are still categorical rather than general. Many persons think this practice distorts a state's total program because the federally supported programs receive the financial advantage. This is particularly apparent under some acts that made state matching of federal grants a prerequisite to obtaining money. In matching the federal funds the state is compelled to channel some of its own tax money to help support a favored category, which skews the state's total educational program in favor of the federally aided programs.

Much of the governmental interest (and consequently funding) in this "post-Sputnik" era is in the scientific and technological programs. With

TABLE 9

Federal Funds Allocated for Higher Education and Related Activities

Type of Support	Expenditures* 1962	1963	1964	1965	1966	1967	1968	1969
Basic research	$602.9	$691.6	$698.6	$784.9	$940.3	$1,036.5	$1,102.3	$1,102.3**
Research facilities	121.8	157.9	133.5	191.7	194.0	203.1	192.4	192.4**
Training grants	196.0	234.6	261.2	282.4	365.5	363.6	391.5	433.3
Fellowships and traineeships	100.9	143.0	181.8	196.9	264.9	350.2	392.0	431.9
Facilities and equipment	37.1	41.0	56.1	384.1	668.9	822.2	790.1	289.3
Other institutional support	33.0	43.4	69.5	93.4	163.8	169.9	187.8	258.2
Other student assistance	103.9	69.9	62.3	100.4	214.2	590.6	666.8	787.5
Other higher education assistance	11.7	16.4	17.4	18.8	18.8	54.6	69.8	96.0
TOTAL	1,210.3	1,397.8	1,480.4	2,052.6	2,830.4	3,590.7	3,792.7	3,590.9

*Amount in millions of dollars.

**Estimates for 1969 are not available; this figure is for 1968.

SOURCE: Office of Education, Department of Health, Education, and Welfare, Digest of Educational Statistics, 1968, OE-10024-68 (Washington, D.C.: U.S. Gov't. Printing Ofc., 1968), p. 107.

such an emphasis, it is reasonable to assume that the larger, more diverse institutions possess the necessary background, facilities, and personnel required by such programs while the small liberal arts colleges do not. Critics of the federal government's categorical approach charge that: (1) a comparatively few large universities (about half public and half private) are favored by the federal support; (2) the degree of red tape and auditing for the expenditure of trivial sums may actually hamper the scholarly and scientific work; (3) the system of charging "overhead" or "indirect" costs usually does not fully reimburse the college or university for the use of its own resources in the subsidized project; and (4) by accepting a continual series of short-term grants and contracts from various sources, the institution fragments its academic and scientific unity and in large part surrenders its ultimate control to the external agencies upon which it becomes dependent for funds.

Each of these four criticisms may have some validity, but none of the problems is so incurable that it justifies abolishing or diminishing the program of federal support. President Nixon's task force on education recently made a report summarized in The Chronicle of Higher Education.[16] The report discusses three possible methods of federal financing for education: (1) general aid, that is, unspecified general funds given in a lump sum to the states or to specific institutions; (2) block grants, which are given or loaned for broadly defined purposes; and (3) categorical grants, which are given or loaned for specific, often narrowly defined, purposes. Because of the unclear definition of block grants, the task force termed them "designated block grants" in order to distinguish them clearly from the area of general aid.

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[16] The Chronicle of Higher Education (Baltimore, Maryland) February 24, 1969, pp. 3-4.

The task force examined each of the three methods of federal funding. Their report states that general aid might result in some undesirable consequences including the following: (1) it would probably reopen the church-state issue in an aggravated form; (2) it might cause problems in the civil rights area; (3) if widely adopted, it would destroy the opportunity for a national approach to solving urgent national educational problems; (4) in some instances it might stimulate new wage and salary demands by academic and nonacademic staff, which would increase the cost of education greatly without a commensurate improvement in quality; and (5) it probably would aggravate the present problem of maldistribution of educational funds between rural areas, suburbs and cities.

The definition of general aid is not specified in the Chronicle article. The term could mean either that federal moneys are allocated to the individual states and then from the states to the various institutions, or that federal funds are allocated directly to the institutions. Certainly some of the undesirable consequences mentioned would result if general aid went first to the states and then to the institutions, but ill effects might not occur from direct allocations. The question of church and state for example, is not a matter of contention with regard to facilities grants or student aid funds since they are already available to both church-related and non-church-related institutions.

The summary indicates that the task force does not believe that general aid is politically feasible at this time because Congress probably would not be willing to relinquish the political power represented in block and categorical grants. The President's task force seems to view general aid as a replacement for block and categorical grants. If these grants were augmented with general aid given directly to the institutions, the political power of

Congress would probably not be diminished. The possibility of a combination of types of federal support should be explored in the hope that the effects of one type would ameliorate the undesirable characteristics of others.

The task force does recognize some of the problems associated with categorical grants and believes that there should be a general movement away from a narrow definition of categorical aid and toward the more broadly defined "designated block grants." The task force report emphasizes that in conjunction with a movement away from the categorical type of support, federal funds should be used to strengthen state departments of education. It also notes that many public and private institutions of higher education are strongly opposed to any form of state control over their federal funds.

The report concludes that all existing education legislation should be made more efficient and less of a burden on state and local authorities. At state and local levels seeking funds has become unnecessarily burdensome and time-consuming because of the multitude of different pieces of federal education legislation. For example, the United States Office of Education alone administers 167 different programs.

Most of the national associations of higher education have gone on record in favor of general federal aid allocated directly to the educational institutions. The various associations have not reached a general agreement on the magnitude of funds or on a means of distribution, but the proposals frequently mention federal subsidy amounting to as much as 25 percent of the institution's operating costs.

One method by which these federal funds could be distributed to the individual colleges and universities (excepting theological schools and seminaries) is on a basis of the number of degrees granted at various

academic levels during the preceding year. In this manner, federal support would not merely encourage increases in enrollment, but would encourage actual degree production. It would tend to give more aid to those institutions that grant more degrees and more advanced degrees than to those institutions which do not.

To date there have been no federal funds distributed, either to the states or to individual institutions, that may be termed "general aid." The emphasis has continued to be on categorical grants for specific research projects. Only recently have small private colleges received federal funds other than those distributed through the Higher Education Facilities Program and programs of student aid. Even the small sums granted for research purposes, primarily through the National Science Foundation, seem to be leading toward greater diversity of federal moneys and a greater interest in encouraging the spirit of research in smaller institutions. Should this trend continue, the federal government quite possibly may come to the conclusion that all higher education is important for the growth and development of the nation. If this viewpoint prevails, the introduction of general unrestricted federal aid to both public and private schools throughout the country might evolve in the next decade.

Some educators have speculated that if the war in Vietnam ended in the near future large sums of federal funds currently directed toward defense would be released and could be channeled toward domestic programs, including higher education. Experience indicates, however, that even after the termination of such a conflict federal financial obligations are such that defense spending remains high for several succeeding years. It would be unrealistic to assume that even if the Vietnam war were resolved in 1970 substantial reductions in defense spending would be realized much before 1980.

Turning now to the relation of the federal government to Indiana, 1957-58 federal funds for educational and general purposes (exclusive of federal funds for capital grants and student aid) constituted 7.1 percent of all educational and general income in all colleges and universities in the state. Just one decade later, in 1967-68, federal funds accounted for 15.4 percent of the statewide total. In actual dollar amounts, the increase was from slightly over $6.7 million in 1957-58 to slightly more than $48.5 million in 1967-68. These amounts represent an increase of 638.8 percent on a statewide basis.

These increases seem most impressive, both in terms of dollars and percent. However, it must be emphasized that these federal funds are not distributed equally among the various colleges and universities in Indiana. Approximately 80 percent of all income from the federal government for educational and general purposes is allocated to the public institutions in the state. Of the remaining 20 percent, one private institution receives 16 percent, leaving 4 percent of the original total to be distributed among some 20 other private institutions. Thus, the great majority of private institutions in the state does not receive federal funds in any significant amount.

Federal funds for public colleges and universities rose from $5.5 million in 1957-58 to $39.4 million in 1967-68, an increase of 616.36 percent. Federal funds to private schools rose from $1.3 million to $10.1 million over the same period, an increase of 676.92 percent. These funds represented 8.3 percent of the total educational and general income in the public sector in 1957-58 and 16.7 percent in 1967-68. In the private sector, they constituted 4.7 percent of the total in 1957-58 and 11.7 percent in 1967-68.

Projections indicate that by 1985 federal money will become a larger

proportion of the total educational and general incomes of both public and private schools although the rate of growth is expected to be somewhat more rapid in private schools. Federal funds are expected to constitute approximately 27.5 percent of the total educational and general income in public colleges and universities in 1985 and approximately 25.3 percent of the total in the private schools. In actual dollars, the public institutions should collectively receive $487.4 million in 1985, an increase of 554.31 percent over the amount of federal funds received in 1967-68, which is, however, less than the percentage increase of federal funds over the decade 1957-58 to 1967-68. Private schools, on the other hand, will receive federal funds for their total educational and general operating expenses in the magnitude of $79.2 million. This amount represents an increase of 684.16 percent, which is slightly above the rate of increase over the 1957-58 to 1967-68 decade.

IV. INCOME FROM ENDOWMENT FUNDS FOR EDUCATIONAL AND GENERAL PURPOSES

An endowment is a fund held by a charitable corporation under the stipulation that the principal is to be held intact and inviolate, and only the income is to be expendable for the corporate purposes. This type of fund is sometimes more loosely called a permanent fund or trust fund. Regardless of the terminology applied, a perpetual charitable trust of this type is a source of income for the institution as long as it exists. Endowment gifts of this kind usually will last forever, although it is possible to create a trust of a limited duration or to authorize expenditure of the principal at the discretion of the trustee.

Funds placed in endowment without specification as to special purpose constitute the institution's general endowment fund. If the income is to be used only for one or more specified purposes, the fund is called a restricted endowment, and each must be accounted for as a separate fund. In the past it was felt that these funds had to be invested separately, rather than to pool them for investment purposes with each receiving its proportionate share of the gains or losses. Now, however, this latter practice seems to be generally regarded as permissible and legitimate.

Generally, endowment funds and the income from them tend to be more important for private institutions than public ones. Private institutions across the country, as in Indiana, hold approximately 85 percent of all institutional endowment funds. Although this at first may seem impressive, it must be noted that within the private sector of higher education, most of the endowment funds are centered in relatively few institutions. There are perhaps 100 private institutions among the total of about 2,500 in the United States in which endowment principal, and consequently endowment income,

represents the major income. The Boston Fund, an investment corporation that conducted the fifteenth annual survey of college endowment funds, found that the endowment funds of 69 leading colleges and universities grew by nearly $750 million during the 1968 fiscal year, and that earnings averaged about 3.7 percent of the principal.[17] Seventy-one institutions participated in the study and their endowments ranged from $9.3 million (Colorado College) to $1.15 billion (Harvard) and totaled approximately $7.2 billion.

The Boston Fund reports that well over half of these college and university endowment funds are now invested in common stocks. Table 10 gives a breakdown of the investments for fiscal 1968.

TABLE 10

Endowment Fund Investments, by Category, of 71 Colleges and Universities, Fiscal Year 1967-68

Investments	Market Value	Percentages
Common stocks	$4,397,902,343	61.3%
Bonds	1,862,905,883	26.0
Mortgages and real estate	547,598,411	7.6
Cash or equivalent	151,337,795	2.1
Preferred stocks	138,881,565	1.9
Miscellaneous	80,306,722	1.1
TOTAL	7,178,932,719	100.0

The heavy investment in common stocks is a comparatively recent development, brought about by the necessity of hedging against inflation. Two generations ago common stocks were almost universally regarded as too speculative for the investment of charitable trust funds, but various economic events seem to have changed that point of view.

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[17] Boston Fund, "1968 Study of College and University Endowment Funds," Boston Management and Research Co., Inc., 1969.

TABLE 11

The 10 Leading Stocks Held By Colleges And Universities In 1968

Stocks	Total Market Value*
International Business Machines	$298.1
Eastman Kodak	204.6
Xerox	131.6
Standard Oil of New Jersey	107.1
General Motors	100.0
Gulf Oil	86.6
Texaco	83.1
Coca-Cola	70.5
Ford Motors	35.7
Sears, Roebuck and Company	27.3

*Amount in millions of dollars.

The Boston Fund also indicated the ten leading stocks in the portfolios of the endowed universities and colleges (see Table 11). All of the corporations listed are huge national and international organizations and include the manufacturers of gasoline and oil, automobiles, business machines, cameras, soft drinks, and general merchandise. Some of them are considerably diversified.

A report prepared recently by the research department of the New York Stock Exchange was summarized in The Chronicle of Higher Education.[18] The study concludes that most endowment funds are too small to gain substantially from a more rapid turnover of their stock portfolios. Only the larger funds have the investment staffs to analyze individual issues. Directors of smaller funds, who rely on banks and trust companies and the advice of knowledgeable trustees, may not be motivated to increase performance because the endowment may be too small to justify the added expense of investigating many more security issues.

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[18] The Chronicle of Higher Education (Baltimore, Maryland), January 13, 1969.

The New York Stock Exchange report also notes that while at least 1,200 of the nation's colleges and universities have endowment funds, five of them--Harvard University, University of Texas, Yale University, Massachusetts Institute of Technology, and University of Rochester--possess 23 percent of all endowment assets. The report adds that about 180 such funds possess 85 percent of all endowment assets. The study predicts that colleges, universities, and other nonprofit institutions will double their assets and holdings of common stock by 1975. At the end of 1966, such institutions (including foundations, religious groups, and charitable organizations) had endowments of about $50 billion, of which $26.6 billion was in common stock. Based on an annual growth rate of 8 percent over the past decade, assets should rise to $100 billion by 1975, with $57 billion in common stock.

From the data derived from the H.E.W. "Financial Statistics of Institutions of Higher Education," it is impossible to assess accurately the total income from endowments or the diversification of investments for any Indiana institution. We can only assume that those Indiana colleges and universities with large endowments follow a pattern similar to the institutions sampled in national studies. The H.E.W. data on endowment income for Indiana institutions concern only educational, general, and student aid designations; other restricted endowments are unreported. It is entirely possible that much of a particular institution's endowment income could be restricted to uses other than general operating expenses and student aid. Large and complex institutions often have one or more affiliated, private, nonprofit corporations, usually called university foundations, that receive gifts, manage investments, and distribute the income for designated purposes.

These foundations can be authorized by their charters to execute various functions that may not be deemed appropriate for execution by the institution's board of trustees. Even though some restricted endowment income and perhaps even endowment funds held by the university foundations are not reported, we may assume that the H.E.W. data for endowment income designated for educational and general usage are accurate. Other restricted endowment income should not affect the relationship of educational and general endowment income to the total of income sources.

In Indiana over the last decade, the portion of endowment income allocated for educational and general use has been between 0.1 and 0.3 percent of the total educational and general income in public institutions and between 4.5 and 6.5 percent of the total in private institutions. Obviously such an income source is almost negligible for public colleges and universities and relatively small for private schools. Although over the last decade income from endowment for educational and general purposes has steadily increased in actual dollar amounts, it has steadily decreased as a percentage of total educational and general income. This situation gives rise to speculation that most college and universities will no longer depend on endowment as a major general income source, which would rule out the possibility of such funds playing any significant role in easing future financial crises. Very few institutions in Indiana today rely heavily on income from endowment. Only five colleges in the state have endowment incomes that constitute more than 10 percent of their total educational and general income, and most of these schools have small enrollments.

In the fiscal year 1967-68, the reported endowment income for educational and general purposes in public schools was slightly less than $400,000 and comprised almost 11 percent of total statewide endowment income. Private

institutions, on the other hand, reported an aggregated endowment income of almost $3.5 million, or 89.8 percent of the statewide total (see Table 12).

TABLE 12

Income from Endowment Funds, Public, Private, and Total for Educational and General Purposes and for Student Aid, Fiscal Year 1968

	Amount	Percent of State Total
Educational and General Purposes		
Public	$ 394,560	10.2%
Private	3,466,958	89.8
TOTAL	3,861,518	100.0
Student Aid Purposes		
Public	146,611	20.2
Private	578,359	79.8
TOTAL	724,970	100.0

Endowment income restricted for student aid totaled slightly less than $150,000 in the public sector and slightly less than $580,000 in the private sector. Of the 36 institutions included in the study, 15 reported no endowment income for student aid, and 9 reported no endowment income for educational and general purposes. Several of these institutions reported endowment income only for student aid or for educational and general purposes.

While the very nature of endowment funds precludes their extinction as a source of revenue, we must assume that they will continue to play a smaller role in the total financing of Indiana higher education in the future. Actual endowment funds are expected to increase over the next decade as they have in the past. In the mid-1980's educational and general endowment income will probably remain at approximately 0.1 percent of the total in the public sector and between 2.5 and 3.0 percent in the private sector.

V. INCOME FROM PRIVATE GIFTS AND GRANTS FOR EDUCATIONAL AND GENERAL PURPOSES

Almost all private colleges and universities are charitable corporations, holding many separate charitable trusts. Colleges constitute a distinctive and prominent example of such organizations, but there are also many others, including philanthropic foundations, private charitable hospitals, libraries, church organizations, and associations such as the Red Cross, Boy Scouts, Girl Scouts, YMCA, and YWCA. Nearly all state and municipal institutions of higher education are public corporations capable of receiving and executing charitable trusts, and practically all of them receive a stream of private gifts.

Private gifts and grants may be received by educational institutions in much the same way as endowment funds, and in some cases private gifts are donated for the express purpose of adding to the institution's endowment principal. Private gifts fall into two major categories: they may be unrestricted gifts to be used as the institution chooses, or they may be restricted gifts to be used only for the purposes designated by the donor. Private gifts generally come from general welfare foundations; nonalumni individuals; alumni; business corporations; religious denominations; and nonalumni, nonchurch groups, which are usually called "friends" of the institution.

Only the income from private gifts and grants designated for educational and general uses is considered here. There may be considerable income from private gifts designated for specific purposes that would not appear in any tabulation of funds for general operating purposes. The latest higher education financial data available from the United States Office of Education are for 1965-66. Table 13, which was extracted from these data, compares the private gift income in Indiana with that of the United States.

TABLE 13

Educational and General Income, Private Gifts and Grants, and Private Gifts and Grants as a Percent of Educational and General Income, Fiscal Year 1965-66

	Number of Institutions	Total Educational & General Income	Private Gifts & Grants Income	Private Gifts as % of Total Educ. & Gen. Income
All Institutions:				
United States*	1,948	$10,340,164,000	$642,698,000	6.22%
Indiana	39	241,429,153	15,490,842	6.41
Public Institutions:				
United States	741	6,047,297,000	156,358,000	2.59
Indiana	5	176,629,258	8,333,852	4.71
Private Institutions:				
United States	1,207	4,292,867,000	486,340,000	11.33
Indiana	34	64,799,895	7,156,990	11.04

*The United States category is aggregated and includes the 50 states, the District of Columbia, U.S. Service Schools separately grouped, and outlying areas.

SOURCE: Adapted from National Center for Educational Statistics, U.S. Office of Education, Department of Health, Education, and Welfare, Financial Statistics of Institutions of Higher Education, Current Funds Revenues and Expenditures, 1965-66, OE-52010-66 (Washington, D.C.: U.S. Gov't. Printing Office, January, 1969), p. 10.

Private gifts for educational and general use constitute a higher percentage of the total educational and general income in Indiana public institutions than they do for the average nationwide total of public institutions. Indiana private schools, on the other hand, have a lower percentage of their total educational and general income from private gifts than the national average. The higher percentage in the public sector in 1965-66, however, is enough to raise the statewide average somewhat above the national

average for all institutions of higher education.

In relation to the United States as a whole, Indiana's total of private gift income in fiscal 1965-66 represented 2.41 percent of all such revenue reported nationally. This is the smallest percentage recorded for Indiana in the last 15 years. While Indiana's percentage in this income category has fluctuated since 1949-50, highest percentages occurred in the fiscal years 1951-52 and 1961-62, when income from private gifts comprised 2.91 percent of the nationwide total. In 1963-64 this percentage had dropped to 2.57 percent.[19] The percentage cannot be calculated for the current fiscal year because data are not yet available beyond the fiscal year 1965-66.

The total revenue from private gifts may vary substantially from year to year for any given institution due to such factors as the initiation of a specific fund-raising campaign or the unexpected large donation from one of the institution's benefactors. Most institutions encourage donations, particularly from the alumni, and some of the larger universities employ full-time staffs just for fund-raising purposes. Those institutions that do not employ such personnel often rely on outside agencies to manage major campaigns.

According to a recently completed survey conducted by the American Association of Fund-Raising Counsel, published in The Chronicle of Higher Education,[20] at least 114 colleges and universities have recently completed or are still conducting major capital fund-raising programs and have raised a total of more than $2.3 billion. The association survey shows that 98

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[19] Finances, Higher Education in Indiana, Current Status Report 1, p. 55.

[20] The Chronicle of Higher Education (Baltimore, Maryland, January 13, 1969), p. 6.

institutions are currently engaged in capital campaigns to raise some $3.5 billion. In addition, 16 institutions reported that they recently completed programs that raised over $619 million against combined goals of $523 million.

Among the most successful campaigns are those of the University of Southern California, which raised $142.4 million in seven years against a goal of $106.7 million; New York University, which raised $100.3 million in a $100 million campaign; and the University of Michigan which raised $72.8 million in a three-year $55 million campaign. The University of Rochester raised $47.4 million in a three-year, $38 million effort.

Since the association's last survey in October, 1967, the institutions responding to the survey reported raising $611.4 million toward their combined goal of $4.1 billion. Only one Indiana institution was listed in this annual association report. DePauw University is credited with raising $8.7 million in the first three years of a ten-year campaign with a goal of $30 million.

The total private gifts to all colleges and universities in the United States for fiscal year 1966-67 were reported by the Council for Financial Aid to Education and the American Alumni Council to exceed $1.5 billion. This amount is an estimate based on returns from 1,042 institutions, which reported receiving more than $1.26 billion. The major sources of private gifts for 1966-67 and the contributions of each are shown in Table 14.

This is the first time since 1958-59 that philanthropic foundations have not contributed the most in private gifts to institutions of higher education. Some observers are inclined to speculate that a downward trend is inevitable. Some of the major foundations are now channeling large sums to special current social problems and are less inclined to give general gifts to higher education. Of the various sources of private gifts, business corporations

have shown the highest average annual percent rate of increase (9.2) from 1956-57 to 1966-67 and seem to be the most likely source to expand their donations to colleges and universities in the future.

TABLE 14

Private Gifts to 1,042 American Colleges and Universities By Major Sources, Actual Amounts, and Percent of Total, Fiscal Year 1966-67

Sources	Amount	Percent of Total
Nonalumni individuals	$ 319,917,809	25.2%
General welfare foundations	289,532,440	22.8
Alumni	277,746,466	21.9
Business corporations	213,194,423	16.8
Religious denominations	91,536,357	7.2
Nonalumni, nonchurch groups	59,947,561	4.7
Other sources	18,093,580	1.4
TOTAL	$1,269,968,536	100.0%
Extrapolated to all institutions in the United States	$1,580,000,000	

SOURCE: Council for Financial Aid to Education, Inc., 6 East 45th Street, New York, New York.

In fiscal 1966-67, the major private universities received the most money from private gifts. State universities and colleges showed a slight decrease in the percent they received of the total. In 1965-66, state institutions received 19.1 percent of the total; in 1966-67 they received 18.4 percent. Municipal colleges and universities showed the greatest average increase in 1966-67 over the previous year in institutional support. Table 15 shows the institutions reporting the 20 highest totals of private gifts in the survey year 1966-67.

The analysts of the data from the 1,042 institutions concluded that for the fiscal year 1966-67, 50.9 percent of the total was contributed for capital purposes and 49.1 percent for current operations. Unrestricted gifts comprised 30.0 percent of the total; gifts for physical plant, 24.6 percent; and gifts for student aid, 13.7 percent.

TABLE 15

Twenty Universities Receiving the Largest Totals of Private Gifts, Fiscal Year 1966-67

Institution	Gift*	Institution	Gift*
Harvard U.	$38,346	Vanderbilt U.	$19,436
Yale U.	33,287	U. of Pennsylvania	18,680
U. Of California	25,067	U. of Rochester	18,526
Cornell U.	23,123	U. of So. California	17,909
New York U.	22,552	Mass. Inst. of Tech.	17,862
U. of Michigan	22,496	Brandeis U.	14,243
U. of Chicago	22,141	Georgetown U.	13,671
Stanford U.	21,602	Northwestern U.	13,477
Columbia U.	20,456	Johns Hopkins U.	13,406
Brigham Young U.	19,501	U. of Wisconsin	13,165

*Amount in thousands of dollars.

SOURCE: Council for Financial Aid to Education, Inc.

TABLE 16

Private Gifts and Grants for Educational and General Purposes to Indiana Institutions of Higher Education in Actual Dollar Amounts and as a Percent of Total Educational and General Income, Fiscal Years 1957-58 to 1967-68

	1957-58	1959-60	1961-62	1963-64	1965-66	1967-68
Actual Dollars*						
Public	$3.0	$ 3.8	$ 6.0	$ 6.3	$ 8.3	$ 2.8
Private	5.5	6.5	7.1	7.9	7.2	9.4
TOTAL	8.5	10.3	13.1	14.2	15.5	12.2
As Percent of Total Educational and General Income						
Public	4.5%	4.6%	5.8%	4.6%	4.7%	1.2%
Private	19.9	18.6	16.9	15.0	11.2	10.9
STATEWIDE AVERAGE	9.1	8.7	9.0	7.5	6.4	3.8

*Amount in millions of dollars.

Table 16 shows the role played by private gifts and grants to institutions of higher education in the state of Indiana over the last decade. In general, the actual dollar amounts of private gifts and grants have been steadily increasing in Indiana's public and private institutions over the last

decade. (A drop in the public sector in 1967-68 is an exception, but it may be due to a different mode of reporting such income on the H.E.W. forms.) For private schools, private gifts and grants comprise a much larger percentage of the total educational and general income than they do for public schools, although this percentage is steadily declining.

As is true with any tabulation of financial statistics, simple totals of public and private schools may be misleading because they do not actually represent any given institution within these two groupings. Such is the case with private gift income. The proportion of the total educational and general income that is comprised of private gifts varies greatly from one institution to another. Generally, the smaller colleges in Indiana rely more heavily on this income source than do the larger ones. In two institutions, each having less than 500 students, private gifts constituted over 50 percent of the total educational and general income in fiscal 1967-68. Even though private gifts represented 10.9 percent of the total for the private sector, nine institutions received less than 10 percent of their total income from private gifts in 1967-68.

Undoubtedly private gifts will continue to be a source of income for Indiana colleges and universities in future years. With each passing year, more students are graduated from Indiana institutions and become potential alumni contributors. Increasing efforts on the part of the colleges and universities to expand the base of voluntary support and cultivate additional donors will probably result in continual increases in private gifts and grants over the next decade. Due to the rapidly increasing cost of higher education, however, it is doubtful that private gifts will increase as a percentage of total educational and general income; instead, they will probably continue the current trend downward but level off eventually to about half of the present percentage of the total educational and general income.

VI. THE TOTAL FINANCING MIX

In Indiana over the last decade, the income from every source in both public and private institutions of higher education has increased in actual dollar amounts. Our analysis of the various components of income sources indicates that the relationship of the various income sources to the total educational and general income has also been changing over the last ten years. By way of background, it may be helpful to refer to Tables 17 and 18.

Income from both private gifts and endowment funds for educational and general purposes, when tabulated as a percentage of total income, has been declining gradually in the public sector and somewhat more markedly in the private sector. On the other hand, the federal government's contribution to higher education in the state has increased dramatically both in actual dollars and as a percent of the total income. State governmental appropriations, as a percent of the total, have fluctuated somewhat but have consistently provided over one-half of the operating income of public institutions. The relationship of student fee income has likewise fluctuated but has remained under 14 percent of the total educational and general income of public schools. The most important source of income for private institutions is student fees, and on a statewide basis they have constituted between 60 and 70 percent of the educational and general total.

What will happen in the years ahead will depend largely on factors outside of the educational institutions. The most obvious of these factors is the role to be played by the federal government in public and private higher education in the country. Increased federal support of a general nature (in addition to the specific categorical grants now in existence) could stimulate extensive reorganization of the total financing mix of higher education. If massive unrestricted federal assistance were initiated, it

TABLE 17

Sources of Income for Educational and General Purposes
In Indiana Public Institutions of Higher Education,
Fiscal Years 1957-58 to 1967-68

Sources of Income*	1957-58	1959-60	1961-62	1963-64	1965-66	1967-68
Tuition and fee income	$ 8.7	$ 9.6	$ 11.2	$ 16.7	$ 22.5	$ 32.5
Federal government	5.5	9.3	12.6	20.5	27.8	39.4
State government	37.8	47.3	57.7	73.6	89.2	131.0
Private gifts and grants	3.0	3.8	6.0	6.3	8.3	2.8
Endowment income	0.2	0.2	0.2	0.2	0.3	0.4
Other sources+	11.0	12.7	16.6	20.6	28.5	30.2
Total Educational and General Income	$66.2	$82.9	$104.3	$137.9	$176.6	$236.3
Sources of Income as % of Total Income						
Tuition and fee income	13.1%	11.6%	10.7%	12.1%	12.7%	13.8%
Federal government	8.3	11.2	12.1	14.9	15.7	16.7
State government	57.1	57.1	55.3	53.4	50.5	55.4
Private gifts and grants	4.5	4.6	5.8	4.6	4.7	1.2
Endowment income	0.3	0.2	0.2	0.1	0.1	0.2
Other sources+	16.6	15.1	15.9	14.9	16.1	12.7

*Amount in millions of dollars.

+Other sources of income include: local government sources; nongovernmental sponsored research; separately budgeted research other than state and federal; sponsored programs other than state and federal; public service hospitals; organized activities of educational departments; and sales and services of educational departments.

TABLE 18

Sources of Income for Educational and General Purposes
In Indiana Private Institutions of Higher Education,
Fiscal Years 1957-58 to 1967-68

Sources of Income*	1957-58	1959-60	1961-62	1963-64	1965-66	1967-68
Tuition and fee income	$18.8	$23.1	$29.0	$33.6	$44.7	$53.6
Federal government	1.3	2.1	3.0	4.6	5.8	10.1
State government+	0.07	0.08	0.1	0.2	0.3	0.3
Private gifts and grants	5.5	6.5	7.1	7.9	7.2	9.4
Endowment income	1.8	1.9	2.2	2.5	3.0	3.9
Other sources**	0.2	1.3	0.6	3.8	3.1	9.1
Total Educational and General Income	$27.7	$35.0	$42.0	$52.6	$64.1	$86.4
Sources of Income as % of Total Income						
Tuition and fee income	67.9%	66.0%	69.0%	63.9%	69.7%	62.0%
Federal government	4.7	6.0	7.1	8.7	9.0	11.7
State government+	0.2	0.2	0.2	0.3	0.4	0.3
Private gifts and grants	19.9	18.6	16.9	15.0	11.2	10.9
Endowment income	6.5	5.4	5.2	4.8	4.7	4.5
Other sources**	0.7	3.7	1.4	7.2	4.8	10.5

*Amount in millions of dollars.

+Vincennes University receives state aid, but in this portion of the study it is grouped with private institutions.

**Other sources of income would include local government sources; nongovernmental sponsored research; separately budgeted research other than state and federal; sponsored programs other than state and federal; public service hospitals; organized activities of educational departments; and sales and services of educational departments.

could result in the reduction or total elimination of differential fees for out-of-state students at public colleges and universities. Although it would seem extremely unrealistic to assume that private institutions would ever be free to students, federal financial aid could do much to help stablize the existing fee structure so that increases in fees would not have to be commensurate with rising costs.

A method of state financing used in Pennsylvania may be instructive in considering the possibilities connected with increased federal aid. Since 1965-66 the Pennsylvania legislature has provided operating funds to two state-related, private institutions--Temple University and the University of Pittsburgh--and to Pennsylvania State University. These particular funds, which are designated as tuition reduction supplements, were initiated to provide the private institutions with needed funds and to reduce student fees to a level comparable to the state schools. This unique method of financing might be equally applicable to unrestricted federal moneys if they become available to private institutions of higher education.

The degree of commitment and support given by state citizens to higher education in terms of state tax appropriations for operating expenses is currently a subject of much discussion in Indiana. Such factors as the state tax structure and the willingness of the Indiana General Assembly to place Indiana higher education among the top priorities of the state's responsibilities will greatly affect the growth of Indiana's public institutions in the future.

Many knowledgeable observers speculate that the present tax structure in the state of Indiana will need significant revision in the near future if matters of statewide importance are to receive adequate funding. Although Indiana has one of the best composite state tax systems in the country, it

also has some of the lowest rates. In 1968, for example, 44 states had general sales taxes ranging from 2 to 6 percent. Indiana, however, was among the lowest five of these states with its rate of 2 percent.

The creation and development of Indiana's public institutions of higher education have always been considered matters of statewide concern. If this concern is to be kept alive in the future, state financial support of higher education must continue. Even though the national and international reputation of Indiana's public institutions is growing, approximately 4/5 of the students enrolled are Indiana residents. Any reduction in state financial support may be interpreted as a slackening of state responsibility.

The appropriation of substantial amounts of federal money for use in Indiana's state institutions is a relatively recent development. Since increasing reliance is being placed on these funds, the role that they are to play in shaping the universities' progress should receive careful consideration. The funds should be viewed as the means to a partnership in support of higher education, with the state and the federal government both playing a strong part.

Over the last decade, Indiana public colleges and universities have received at least 70 percent of the total statewide educational and general income, and the percentage has been growing, as Table 19 indicates. This

TABLE 19

Indiana Public and Private Higher Education Income as a Percent of Total Statewide Income for Educational and General Purposes, Fiscal Years 1957-58 to 1967-68

Sectors	1957-58	1959-60	1961-62	1963-64	1965-66	1967-68
Public	70.5%	70.3%	71.3%	72.4%	73.4%	73.2%
Private	29.5	29.7	28.7	27.6	26.6	26.8

trend for the public sector is expected to continue until fiscal 1985 when the public schools will probably receive about 75.0 percent of the statewide total of educational and general income and the private schools, about 25.0 percent.

If a total statewide income for educational and general purposes of $1,250 million is projected for 1985, then the public sector would receive about $937.3 million and the private sector, $312.7 million. The corresponding amounts for fiscal 1968 are $236.3 million for the public sector and $86.4 million for the private sector. The increases projected for fiscal 1985 are 296.7 percent for the public and 261.9 percent for the private institutions. Since the increases over the last decade (fiscal 1958 to fiscal 1968) have amounted to 256.9 percent in the public sector and 211.9 percent in the private sector, the projections for 1985 seem reasonable. They indicate only a 40 percent increase for public institutions and a 50 percent increase for private institutions over the percent that occurred during the last ten years.

How the various sources of educational and general income will average themselves in making up the composite financial picture for higher education in Indiana is a matter of speculation. The total picture will no doubt continue to change and develop in the years ahead as it has over the last decade. The following forecast will seek to highlight some of the developments that may take place in the major income sources.

Tuition and fee income. Depending on public sentiment and organization of the state tax rates, change may take place in either of two opposite directions. Should a policy of low-cost availability of education be adopted, fees in public institutions could remain low and fees in private institutions remain relatively stable. This, of course, would necessitate greater funding

by state and federal sources. If high fees and increased student loans become prevalent, tuition and fee income would be much greater than it is now. For this forecast we assume that the former policy is more realistic because the income from tuition and fees is expected to decrease as a percent of the educational and general total both in the public and private sectors of Indiana higher education. Major increases in federal funds to higher education could also be reflected in lower costs to students. In spite of an anticipated decrease as a percent of the total, tuition and fee income will probably still provide one-half of the educational and general income in private schools.

Income from the federal government. Income from the federal government is expected to increase substantially over its current level, particularly to private schools. The trend toward dispensing greater amounts of federal funds to small private institutions has already been discussed; most likely the amounts will continue to increase. The possibility of general, current, annual federal financial aid to cover a fraction of annual operating expenses for all accredited institutions, both public and private, is presently being considered and may become a part of higher education financing several years hence. Categorical grants that, in effect, purchase the services of an institution will undoubtedly continue for the next decade.

Income from the state government. The income from the state government is expected to increase in actual dollar amounts, although it may decrease slightly as a percentage of total educational and general income. The extent and size of federal funding will have some relation to the amount of state tax funds engendered, but despite a slight relative decrease, state funds are expected to provide at least one-half of the educational and general income in the public sector.

Income from private gifts and grants. This income source is expected to continue its current decline as a percent of the educational and general total, although additional funds should be generated each year. Contributions from philanthropic foundations will probably decline, but gifts from business and industrial corporations should increase substantially.

Income from endowment. Much of the income from endowments is designated for specific educational functions. Income from this source is generally expected to increase annually in actual dollar amounts, and a more skillful management of endowment funds might also increase the return on investments. As a percentage of the total educational and general income, however, endowment income will probably continue its current decline.

Other sources of income. Income from this category generally goes to the larger and more complex institutions; the income will probably continue its current slight decline in the public sector but should increase in the private sector as private institutions realize some of the potential resources of this relatively untapped source of income. As the private institutions increase in size, this category will probably become more important as an income source.

Table 20 gives our projections to 1985 for each of these income sources for both public and private Indiana institutions of higher education. Each income source is represented as a percent of the total projected educational and general income. It should be emphasized that these projections are generalizations and may not be at all applicable to any given institution, public or private, in Indiana in 1985. Within the two sectors of higher education over the 1958-68 decade, we have found marked deviations on the

part of individual institutions from the generalized average.

The projections given in Table 20 are based on trends in the composition of the total educational and general income in the public and private sectors of higher education in Indiana over the last decade. In some cases these trends are expected to continue; in other cases they are expected to undergo some modification. The proposed development of these trends is based partly on past financial developments in higher education in the nation. However, in making projections of this type, there are relatively few concrete facts upon which to draw. We do know the number of babies born in 1966 and are relatively certain how many of them will be 18 years old and ready to be counted in the college age population in the fall of 1984, barring any national disaster. However, due to the increasing mobility of the United States population, we cannot assume that all children born in Indiana will remain in the state until they are 18 years old or will go to college in Indiana. Another factor to consider is that the number of births in the United States began to decline slightly in the early 1960's and then more rapidly from the middle 1960's to the present. This decline in the number of births should not seriously affect the enrollments of college age young people until 1980, and then only if the percentage of high school graduates entering post high school educational institutions does not increase. A third important factor to consider is that over the past several decades the cost of higher education has roughly tripled each time college enrollments have doubled.

These factors have been considered in making the projections for 1985. We have also made some assumptions concerning the factors. First, we have assumed that despite the decrease in the number of births annually, more persons in the age brackets above college age (18-22) will either continue

TABLE 20

Sources of Income for Educational and General Purposes
in Indiana Public and Private Institutions of Higher Education
Projected to Fiscal Year 1985

Sources of Income*	Public Institutions	Private Institutions
Tuition and fee income	$ 92.0	$157.5
Federal government	257.8	79.2
State government	487.4	2.8
Private gifts and grants	5.6	16.9
Endowment income	0.9	9.4
Other sources**	93.6	46.9
Total Educational and General Income	$937.3	$312.7
Sources of Income as % of Total Income		
Tuition and fee income	9.8%	50.4%
Federal government	27.5	25.3
State government	52.0	0.9
Private gifts and grants	0.6	5.4
Endowment income	0.1	3.0
Other sources**	10.0	15.0
Total	100.0	100.0

*Amount in millions of dollars.

**Other sources of income include local government sources; nongovernmental sponsored research; separately budgeted research other than state and federal; sponsored programs other than state and federal; public service hospitals; organized activities of educational departments; and sales and services of educational departments.

in or return to college in sufficient numbers to offset any possible decrease in the college age enrollments. Second, we have assumed that the percentage of high school graduates entering college will continue to increase; more people will enroll in our institutions of higher education, and they will stay longer. Third, the upper division, graduate, and professional levels of higher education are expected to expand at a more rapid rate than the lower divisions. Since this level of instruction is more costly, it will add to the need for increased financial support. Relatively higher costs of instruction will also be caused by inflation in the economy, by expansion of instructional programs and facilities, and by the continual upgrading of university and college salaries to levels commensurate with other professions. As is evidenced by the spiralling relationship of costs to enrollments, economies of scale generally do not apply to educational institutions because of the increasing quality and diversity of the product.

The goals of increased educational opportunity and increased financial support for higher education are not unattainable. However, they do require a commitment on the part of the citizens of Indiana to foster and preserve the academic excellence of the state's colleges and universities and to enable these institutions to expand their services commensurate with the increasing number of qualified prospective students.

VII. THE SPECIAL CASE OF THE PRIVATE COLLEGES

At the present time, private colleges and universities in Indiana must rely primarily on student tuition and fees to produce the needed income for the annual operations of their institutions. While the public institutions receive considerable funding from the state and federal government, no state funds and few federal funds are channeled to private institutions. This situation places the private institutions in the uncomfortable position of having to raise student tuition and fees in order to meet rapidly increasing costs. By so doing, the institution runs the risk of limiting its clientele to only upper-income students and excluding the academically able, but economically disadvantaged students.

The private institutions in Indiana enroll approximately 30 percent of all students in the state, and their enrollments generally have increased at a rate substantially lower than public institutions' enrollments over the last decade. The smallest institutions in Indiana have increased enrollments at a higher rate than the larger private institutions, but several colleges in the state still have fewer than 500 students. The slower rate of growth in the private sector may be due to several factors: (1) highly specific or limited curricula such as that required for the training of Roman Catholic priests; (2) an institutional policy limiting or maintaining a certain enrollment level; or (3) the financial inability to expand faculties and facilities to accommodate additional students.

We have already examined the various sources of higher education income in Indiana. For most of the private institutions the income from endowment funds is negligible, constituting between 4.5 and 6.5 percent of the total educational and general income on a statewide basis over the last

ten years. The income from private gifts and grants has constituted between 10 and 20 percent of the educational and general total in the private sector over the last decade. In terms of actual dollar amounts, both endowment income and private gift income have been increasing during the last ten years, but the most significant fact is that both of these income sources have been declining as a percent of the total educational and general income. While some individual private institutions rely more heavily on these two income sources than others, the statewide picture is not encouraging. The question now confronting the private institutions is: Where will additional funds be found to alieviate the need for increasing student tuition and fees still further?

The two major avenues for obtaining additional financial support for private colleges and universities are the state and federal governments. Traditionally the state legislatures have largely ignored the private institutions because of their commitments to the public institutions within their state boundaries. There have been notable exceptions, however, as in the case of the Pennsylvania state legislature, which provides tuition reduction supplements to private institutions in the state.

Several recent studies have suggested state support of private higher education as one solution to this financial dilemma. One of these studies, a report on private higher education in New York State issued in January, 1968 by a committee chaired by McGeorge Bundy,[21] emphasized the need to view all higher education in New York as a combined program of both the public and private sectors. Such an overview provides for state financial

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[21] New York State and Private Higher Education (Albany, N.Y.: Bureau of Publications, State Education Department, January, 1968).

assistance to private institutions on the basis that it is more wise and more economically feasible to support and expand existing private facilities than to duplicate them in the public sector. One of the recommendations of the report reads:

> When the Board of Regents determines, after an inquiry which it has initiated, that new or expanded graduate programs are required to meet specific manpower needs, it should consider contracting with private institutions for such purposes as an equally attractive alternative to expansion of public institutions. Its recommendations in each case should be made on the basis of the institutional resources available, the comparative cost and other relevant factors.[22]

The report stresses the need for a statewide planning and coordinating program that would be sophisticated enough to determine alternative ways of meeting the state's needs in terms of costs and benefits. On the question of how the state funds should be distributed to private institutions, the report says,

> We conclude from New York's experience with the Scholar Incentive Program that aid via the student turns out essentially to be aid to the student. We think that is good and should be continued. But our studies . . . do not give support to the view that aid to the student has materially aided the institutions or that increased aid to the student in the future would 'flow through' to the appreciable benefit of the institutions. If the aid is to be significant while still a modest amount in toto, it must be direct.[23]

One of the major issues involving state aid to private colleges and universities is whether such assistance to secular institutions is constitutional. In many states, as in New York, an amendment to the state constitution may be necessary before all private institutions of higher education

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[22] New York State and Private Higher Education, p. 42.

[23] New York State and Private Higher Education, p. 46.

would be eligible for state funds under any kind of program. The allocation of state moneys would probably follow some kind of formula that would necessarily differ from one state to another. The New York report suggests that state funds be tied to the number of earned degrees conferred annually, with differentials for the appropriate levels and types of degrees approximately proportional to the average differences in cost. By this means, state funds would encourage the actual production of academic degrees instead of merely encouraging increases in enrollments. This method of allocation also accepts the fact that there are differentials in financing the various educational levels. The New York study suggests that the cost of producing a doctorate is six times that of a bachelor's or master's degree.

Another problem confronting the proposal and adoption of such a program of state aid to private institutions is that of including out-of-state students in the degree count for aid purposes. The Bundy committee favors their inclusion in the New York plan, but this could become a major issue in many states, particularly those that have a greater in-migration than out-migration of college students.

In March, 1969 a commission to study private higher education in Illinois produced a report similar to that of the New York study.[24] This commission, chaired by T. R. McConnel, made several recommendations favoring direct state aid to private colleges and universities in Illinois.

The Illinois group listed four basic premises that underlie their recommendations for public support of private higher education.

1. It is essential to preserve and strengthen the dual system of higher education in the state.

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[24] Strengthening Private Higher Education in Illinois (Springfield, Ill. : Illinois Board of Higher Education, March, 1969).

2. The private institutions must retain the maximum degree of independence in decision making.

3. The range of educational opportunities available to students must be preserved and extended along with the freedom of each student to choose the institution he wishes to attend.

4. The private institutions should realize that, in general, growth in size will not ease financial problems since tuition income covers substantially less than total operating costs.

In recommending state financial support to private higher education in Illinois, the commission

1. urged that the purpose of assistance from public funds should be directed toward the improvement of quality rather than the expansion of enrollment;

2. believed that direct assistance will enable the private institutions to continue to meet the State's objectives which are so admirably expressed in the scholarship and grant program;

3. emphasized that, for a modest investment, the citizens of Illinois can help insure the continuation and improvement of the range of educational opportunities available to both young people and adults;

4. stressed that the magnitude of such assistance is well within the State's economic resources;

5. concluded that such assistance can be given without endangering in any way the financial support and educational development of the public institutions of which the people of the State of Illinois are justifiably proud.[25]

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[25] Strengthening Private Higher Education in Illinois, p. 46.

The Illinois report recommended direct grants to private institutions in much the same manner as the New York plan, but suggested that the moneys be allocated on the basis of $500 for each Illinois State Scholarship recipient; $100 for all other full-time equivalent undergraduate students; and $200 for all other full time equivalent undergraduate students enrolled in the junior and senior years. It also recommended further study of the needs for graduate and professional education in Illinois but did not suggest any plan or amount of state funding necessary for such programs.

Regarding the church-state issue, the commission held that fulfillment of a public purpose should be primary and controlling, and that aid to a private institution should not support sectarian purpose or indoctrination or in any way press a sectarian purpose or value on students in the institution. The commission did not feel that church relationship or affiliation in and of itself should preclude state assistance, but it left the interpretation of the degree of church affiliation up to a proposed board of higher education, which would propose appropriate legislation containing broad general guidelines to use in interpreting degree of affiliation.

As can readily be observed in the proposals from New York and Illinois, the idea of providing private institutions with public money is gaining wider attention than ever before. Many of the plans now being brought forth contain references to such problems as the church-state issue, out-of-state students, and methods of allocating public funds to private institutions. Each state has its own unique problems, and any plan for the distribution of public funds to private institutions of higher education must take them into account. It may be several years before the legislators and the citizens of a given state accept the need for public support of private higher education and are willing to take the necessary steps in constitutional

revisions (where needed) and in personal philosophy to put needed plans into operation.

An emphasis on federal support of higher education has been evidenced in the Nixon Task Force on Education. At this time there is still a hesitancy to suggest general unrestricted aid to colleges and universities in the country, and it may be several years before the smaller private institutions could be considered for anything more than the present facilities loans and grants for which they are eligible. Because there has been much discussion concerning federal funding of private institutions of higher education, the necessity to study and make recommendations on a statewide basis may have been diminished in the hope that the federal government will do it instead.

There is little prospect that the private institutions in Indiana will receive large sums of state or federal money in the immediate future, but this should certainly not rule out the possibility for increased cooperation, research, and evaluation of financial problems with which they are confronted.

APPENDIX A State Rankings Showing Total State Tax Appropriations for Operating Expenses of Higher Education, Fiscal Years, 1959-60 and 1968-69

1959-60			1968-69			Percentage
State	Appropriation*	Rank	State	Appropriation*	Rank	Gain
California	$188.604	1	California	$637.788	1	238.7
Michigan	95.599	2	New York	482.986	2	515.0
Illinois	90.289	3	Illinois	301.136	3	233.5
New York	78.546	4	Pennsylvania	264.693	4	509.0
Texas	71.021	5	Michigan	262.424	5	174.0
Washington	46.909	6	Texas	259.425	6	265.7
INDIANA	45.463	7	Ohio	174.136	7	302.0
Pennsylvania	43.471	8	Florida	156.645	8	288.0
Ohio	43.331	9	Wisconsin	155.957	9	312.7
Florida	40.392	10	INDIANA	144.715	10	218.7
Louisiana	40.062	11	Washington	137.051	11	192.7
Wisconsin	37.834	12	N. Carolina	114.709	12	303.5
Minnesota	36.173	13	Missouri	112.764	13	355.5
Iowa	34.630	14	Georgia	112.524	14	367.5
Oregon	28.719	15	Virginia	107.524	15	321.0
N. Carolina	28.419	16	Minnesota	105.131	16	199.5
Oklahoma	27.014	17	Louisiana	99.222	17	147.5
Virginia	25.544	18	New Jersey	95.047	18	332.7
Kansas	25.036	19	Iowa	85.773	19	147.5
Missouri	24.744	20	Kentucky	82.350	20	450.5
Georgia	24.058	21	Maryland	79.742	21	234.5
Maryland	23.818	22	Tennessee	73.137	22	329.5
New Jersey	21.982	23	Colorado	70.586	23	308.5
Alabama	21.283	24	Kansas	69.108	24	176.0
Colorado	17.271	25	Massachusetts	69.097	25	468.0
Tennessee	17.022	26	Oregon	67.984	26	136.5
W. Virginia	16.919	27	Connecticut	61.513	27	401.7
Nebraska	15.217	28	Alabama	58.462	28	174.5
Mississippi	15.118	29	Arizona	55.121	29	292.5
Kentucky	14.954	30	Oklahoma	52.858	30	95.5
Arizona	14.042	31	W. Virginia	49.033	31	190.0
Arkansas	13.551	32	Mississippi	47.804	32	216.5
Utah	13.139	33	Arkansas	44.547	33	229.0
Connecticut	12.273	34	S. Carolina	39.645	34	227.7
Massachusetts	12.167	35	Utah	33.695	35	156.5
S. Carolina	12.113	36	Nebraska	33.248	36	118.5
Montana	11.230	37	New Mexico	31.262	37	180.0
New Mexico	11.165	38	Hawaii	30.987	38	525.0
N. Dakota	9.368	39	Montana	24.418	39	117.5
Idaho	8.799	40	Rhode Island	21.545	40	381.7
S. Dakota	8.128	41	Idaho	20.601	41	134.7
Hawaii	4.958	42	N. Dakota	19.888	42	112.7
Wyoming	4.935	43	Maine	17.873	43	432.5
Rhode Island	4.477	44	S. Dakota	17.152	44	111.0
New Hampshire	3.973	45	Delaware	14.095	45	277.5
Delaware	3.731	46	Nevada	12.339	46	235.7
Nevada	3.682	47	Wyoming	11.123	47	125.7
Maine	3.356	48	Vermont	10.940	48	235.7
Vermont	3.264	49	Alaska	10.400	49	393.0
Alaska	2.111	50	New Hampshire	10.221	50	157.7

*Amount in millions of dollars.

SOURCE: M.M. Chambers, A Record of Progress: Ten Years of State Tax Support of Higher Education, 1959-60 Through 1968-69 (Danville, ILL.: Interstate Printers and Publishers, Inc., 1969), p. 4.

APPENDIX B State Tax Cost of Annual Operation of Higher Education Per Citizen and Ratio of State Tax Cost to Total of Personal Income, 1968

State Tax Cost Per Citizen

State	Amount	Rank
Alaska	$42.80	1
Washington	42.76	2
Hawaii	42.74	3
Wisconsin	37.04	4
Wyoming	35.65	5
Montana	35.65	6
Colorado	35.45	7
Oregon	33.92	8
California	33.70	9
Arizona	33.65	10
Utah	32.75	11
N. Dakota	32.50	12
New Mexico	31.29	13
Iowa	31.25	14
Kansas	30.42	15
Michigan	30.09	16
Idaho	29.39	17
Minnesota	28.88	18
INDIANA	28.61	19
Nevada	27.85	20
Illinois	27.58	21
Louisiana	27.17	22
W. Viginia	26.93	23
Delaware	26.90	24
New York	26.72	25
S. Dakota	26.35	26
Kentucky	25.99	27
Vermont	25.92	28
Florida	25.86	29
Georgia	25.17	30
Missouri	24.59	31
Rhode Island	24.43	32
Virginia	24.37	33
Texas	24.07	34
Nebraska	23.38	35
N. Carolina	22.85	36
Pennsylvania	22.64	37
Arkansas	22.25	38
Maryland	21.67	39
Oklahoma	21.37	40
Connecticut	20.87	41
Mississippi	20.62	42
Tennessee	18.56	43
Maine	18.50	44
Alabama	16.56	45
Ohio	16.48	46
S. Carolina	15.18	47
New Hampshire	14.64	48
New Jersey	13.57	49
Massachusetts	12.80	50

Ratio of State Tax Cost to Total Personal Income

State	Rank	Percent
Montana	1	1.23
N. Dakota	2	1.21
Washington	3	1.16
Hawaii	4	1.15
Utah	5	1.15
New Mexico	6	1.15
Wyoming	7	1.14
Arizona	8	1.13
Wisconsin	9	1.10
W. Virginia	10	1.09
Idaho	11	1.09
Oregon	12	1.03
Colorado	13	1.02
Louisiana	14	1.02
Kentucky	15	.99
Arkansas	16	.97
Mississippi	17	.97
Iowa	18	.93
Alaska	19	.92
S. Dakota	20	.92
Kansas	21	.91
Georgia	22	.90
Minnesota	23	.88
N. Carolina	24	.86
Vermont	25	.86
INDIANA	26	.85
Florida	27	.84
California	28	.83
Michigan	29	.83
Texas	30	.78
Virginia	31	.78
Missouri	32	.77
Oklahoma	33	.75
Tennessee	34	.72
Alabama	35	.71
Nevada	36	.70
Nebraska	37	.69
Illinois	38	.69
Delaware	39	.68
Rhode Island	40	.67
Pennsylvania	41	.66
New York	42	.65
Maine	43	.65
S. Carolina	44	.63
Maryland	45	.58
Connecticut	46	.50
Ohio	47	.48
New Hampshire	48	.45
New Jersey	49	.34
Massachusetts	50	.33

SOURCE: M.M. Chambers, Grapevine (Bloomington, Ind.: Indiana University, January, 1969)

APPENDIX C Appropriations of State Tax Funds for Operating Expenses of Higher Education as a Percent of Total State Tax Revenue, by State, Fiscal Year 1966-67

State	Total State Tax Revenue*	Total Appropriations for Operating Expenses*	Appropriations as % of Tax Revenue
Alabama	$ 483.1	$ 54.8	11.3%
Alaska	58.2	7.3	12.5
Arizona	298.5	40.5	13.6
Arkansas	283.9	28.7	10.1
California	3,485.1	489.1	14.0
Colorado	335.7	51.9	15.5
Connecticut	468.2	34.9	7.5
Delaware	140.1	8.7	6.2
Florida	876.8	95.5	10.9
Georgia	667.8	59.2	8.9
Hawaii	220.1	23.9	10.9
Idaho	128.5	15.5	12.1
Illinois	1,450.3	204.4	14.1
INDIANA	771.3	104.3	13.5
Iowa	452.8	61.3	13.5
Kansas	355.2	54.8	15.4
Kentucky	465.7	63.2	13.6
Louisiana	690.4	87.1	12.6
Maine	132.5	13.5	10.2
Maryland	614.4	61.6	9.6
Massachusetts	953.7	43.9	4.6
Michigan	1,530.8	231.6	14.4
Minnesota	660.1	72.5	11.0
Mississippi	307.9	36.7	11.9
Missouri	615.1	74.8	12.2
Montana	92.8	16.8	18.1
Nebraska	136.5	21.9	16.0
Nevada	87.2	8.1	9.3
New Hampshire	66.2	7.2	10.9
New Jersey	834.0	75.7	9.1
New Mexico	205.8	26.1	12.7
New York	4,056.3	353.8	8.7
North Carolina	840.7	81.2	9.7
North Dakota	86.6	14.0	16.2
Ohio	1,157.8	93.3	8.1
Oklahoma	401.0	41.9	10.4
Oregon	322.7	55.6	17.2
Pennsylvania	1,769.3	137.5	7.7
Rhode Island	143.4	15.4	10.7
South Carolina	395.8	27.5	6.9
South Dakota	83.6	14.3	17.1
Tennessee	514.4	50.3	9.7
Texas	1,335.8	164.5	12.3
Utah	175.4	24.9	14.2
Vermont	78.7	10.3	8.9
Virginia	634.9	64.1	10.0
Washington	775.6	95.0	12.2
West Virginia	281.7	32.3	11.5
Wisconsin	921.1	95.2	10.3
Wyoming	55.3	8.8	15.9

*Amount in millions of dollars.