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The commission recommended: (1) establishment by the General Assembly of a Board of Regents; (2) number and terms of Board members; (3) setting the Regent's duties as (a) setting policy for public higher education, (b) making long-range plans in coordination with private schools, (c) approving new schools and major changes of policy, (d) coordinating budget and accounting procedures, (e) handling federal funds, (f) appointing a Chancellor for administration, planning, and research, (g) setting up advisory councils and commissions; (4) development of comprehensive colleges with local control; (5) appointment of an Advisory Council on Education for the Health Professions; (6) retaining the Clinical Teaching Center Program in the Health Professions; (7) conversion of regional state university campuses to autonomous institutions; (8) accountability to the Regents of all expenditures; (9) Regents control of federal funds for vocational/technical training; (10) transfer to the Regents of the Advisory Commission on Academic Facilities; (11) transfer of the duties of the Medical Education Board to the Regents; (12) placing the Indiana Higher Education Telecommunication System under the Regents; (13) transfer of duties of the Indiana Educational Services Foundation to the Regents; (14) ex-officio representation by the Regents on the Indiana Education Council; (15) expansion of the scholarship program; (16) cooperation with the Civil Rights Commission; (17) appointing a lay committee on Private higher education. (HH)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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An Indiana Pattern for HIGHER EDUCATION

Report of the State Policy Commission
on Post High School Education
December, 1968

JL 690 032

STATE POLICY COMMISSION ON POST HIGH SCHOOL EDUCATION

REPORT OF THE COMMISSION

DECEMBER, 1968

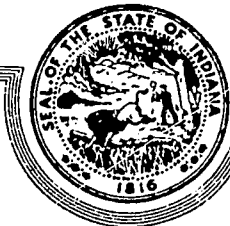
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INFORMATION**

INDIANAPOLIS, INDIANA

STATE OF INDIANA



INDIANA PLIS 46-94

STATE POLICY COMMISSION ON
POST HIGH SCHOOL EDUCATION

ROOM 610 - ILLINOIS BUILDING
317-632-8476

December 1, 1968

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Dr. George S. Taggart

Honorable Roger D. Branigin
Governor of Indiana
State House
Indianapolis, Indiana 46204

Dear Governor Branigin:

I am pleased to transmit with this letter the Report of the State Policy Commission on Post High School Education. In accordance with Chapter 238 of the Laws of 1967, which established this Commission, copies of this Report are also being sent to each member of the General Assembly.

The other members of the Commission join me in expressing appreciation to you for the opportunity to participate in the work of the Commission. While more time would always be desirable in a study of this importance we feel that we have examined the major issues of post high school education facing the citizens of Indiana in this crucial year. Our major recommendations, as summarized in Chapter II of this Report, are designed to help meet the long-range challenge of the times to all of those persons who are concerned with the post high school education of our youth, whether they be in the educational profession, sit as members of the General Assembly or in the Governor's chair, or serve in the many capacities of public-spirited citizens.

Specifically we would call your attention to our first four recommendations, although the others seem to us to be just as essential in order to achieve the purposes inherent in the first four.

The need for a coordinating board for all public post high school education has come to be generally recognized in Indiana as it has in other states, more than forty of which have already established such boards by legislative enactment or constitutional revision. In the Board of Regents, here proposed for Indiana, we have endeavored to protect the individuality and internal authority of the individual colleges and universities,

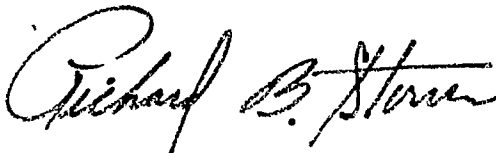
operating under their own institutional boards, and at the same time provide for the necessary function of planning for post high school education and that degree of state-wide coordination which is necessary to assure the citizens of Indiana that all essential needs for post high school education are being met and that the State's resources of talent, money, and material things are most effectively utilized.

The next major recommendation--the creation of a system of community colleges out of the structure of the Indiana Vocational Technical College--is designed: (1) to expand those opportunities for vocational and technical education, the need for which has long been recognized and which led to the establishment of Indiana Vocational Technical College in the first place; and, (2) to provide opportunities for post high school education of other kinds for large numbers of Indiana youth who, today, do not qualify for admission to the State's four-year colleges, public and private, and/or do not have the financial resources to pay the current costs of attending college away from home.

The members of the Commission have taken their responsibilities seriously. They have studied the pressing problems of post high school education in Indiana and have also made a conscientious effort to understand how other states have endeavored to solve similar problems. They have been receptive to the many suggestions which have come to them through oral presentations or by written documents. They have given generously of their time and efforts and they take pleasure in presenting this Report to you and to the members of the General Assembly.

It is their hope that all the recommendations contained in this Report, and the various other sections of the Report as well, will receive widespread consideration and form the agenda for public discussion by all interested individuals and groups in our society so that the policies of the State relating to post high school education, as determined by its elected officials, will best meet the educational needs of our citizens.

Respectfully submitted,



Richard B. Stoner
Chairman of the Commission

FOREWORD

With only a limited time available, the Commission members conscientiously undertook their assignment to study and to make recommendations as to the future of post high school education in Indiana. Each member of the Commission has actively participated in formulating our recommendations.

The Commission was fortunate to secure the service of Dr. Earl J. McGrath as Executive Director. Dr. McGrath, a former United States Commissioner of Education, is Director of the Higher Education Center at Temple University and was Director of the Institute of Higher Education, Teachers College, Columbia University, at the time of his appointment. Without his wise leadership and broad experience we would not have completed our assignment with the depth of analysis it required.

As Associate Director, the Commission chose Dr. Wm. J. Haggerty, who ably directed the work of the staff of the Commission and the activities of its office in Indianapolis. Dr. Haggerty, a consultant to the State University of New York, was formerly President of the State University College at New Paltz, New York.

Although there have been many differences of opinion expressed in the Commission's discussions the individual recommendations set forth reflect substantial unanimity of the Commission. The exchange of ideas by the members and their dedication to the task have been exceptionally gratifying to me and to the staff.

Richard B. Stoner, Chairman

TABLE OF CONTENTS

	<i>Page</i>
LETTER OF TRANSMITTAL	
FOREWORD	vii
 CHAPTER	
I. INTRODUCTION	1
II. SUMMARY OF RECOMMENDATIONS	5
III. INDIANA HIGHER EDUCATION AT THE CROSSROADS—1968	9
Higher Education In The Nation—1968	9
Post High School Education In Indiana—1968	16
Indiana Institutions and Enrolments	16
Student Migration	23
Programs And Degrees	24
Legislative Concern For Post High School Education	24
IV. STATE-WIDE PLANNING AND COORDINATION	27
Establishment Of A Board Of Regents	29
Functions Of The Board Of Regents	31
V. TWO-YEAR POST HIGH SCHOOL EDUCATION—COMMUNITY COLLEGES AND INDIANA VOCATIONAL TECHNICAL COLLEGE	39
Present Two-Year Programs	39
Indiana Vocational Technical College (IVTC)	39
Regional Centers of Indiana and Purdue Universities	43
Vincennes University	43
The Private Colleges	44
School Districts	44
The Community College Idea	46
Relationship Of Community Colleges To Other Educational	
Institutions In The State	48
Private Institutions	48
State Universities	48
Regional Campuses	49
Other State Institutions and Agencies	50
Conclusions And Recommendations	51
VI. EDUCATION FOR THE HEALTH PROFESSIONS	57
Medical Education	59
Dental Education	66
Nursing Education	67
Education For The Allied Health Professions	69
Preparing Faculty For Medical And Health Education Programs	70

x

CHAPTER	Page
VII. REGIONAL CAMPUSES	71
VIII. FISCAL PROBLEMS AND FINANCIAL MANAGEMENT	79
Indiana's Economic Base	79
Costs of Public Post High School Education	81
Financial Procedures	84
IX. FOUNDATIONS ASSOCIATED WITH PUBLIC COLLEGES AND UNIVERSITIES	87
X. STUDENT FINANCIAL AIDS	91
XI. RELATIONS OF PUBLIC POST HIGH SCHOOL INSTITUTIONS AND THE BOARD OF REGENTS TO STATE AGENCIES, BOARDS, AND COMMISSIONS	93
The Board of Vocational And Technical Education	93
The Indiana Advisory Commission On Academic Facilities	94
The Medical Education Board	96
The Indiana Higher Education Telecommunication System	96
The Indiana Educational Services Foundation	97
The Education Council	97
XII. THE PRIVATE COLLEGES	99

APPENDIXES

1. Geographic Origins Of Students Enrolled In Indiana Colleges and Universities, Fall, 1967,	100
2. Earned Degrees Conferred By Indiana Institutions, Public and Private, 1966-1967 And 1967 Summer	103
3. Integration Of Senior Universities In A State-Wide System Of Medical Education	108

TABLES AND FIGURES

TABLE

I. Higher Education Enrolments In The United States, 1955-1975	10
II. Students And Faculty And Degrees Granted In United States Colleges And Universities, 1965 Actual Figures Compared With Estimates For 1980	11
III. Expenditures For Colleges And Universities In The United States, 1955-1965 And Estimated Expenditures, 1966-1980, (In Billions Of Dollars)	13

TABLE

Page

IV.	Indiana Institutions Offering Post High School Education Including Branches, Institutes, And Regional Centers	17
V.	Enrolments In Indiana Post High School Institutions, 1950-1967, And Projected Enrolments, 1968-1985	21
VI.	Proportion Of Students Enrolled In Public And Private Colleges, United States And Indiana, 1955-1980	23
VII.	Indiana Vocational Technical College Enrolments, 1967 And 1968	42
VIII.	Two-Year Programs At Vincennes University	43
IX.	Less Than Four-Year Programs In Indiana Private Colleges	45
X.	Standing Of Indiana, Among The 50 States, On Population, Per Capita Income, And Various Measures Related To The Health Professions (As Of 1965-66)	58
XI.	Enrolment, Indiana University School Of Medicine, 1957-58 To 1967-68	59
XII.	Medical Interns And Residents In Indiana Hospitals In 1967 And Under The New Internship And Residency Training Program Of 1968	61
XIII.	Standing Of Indiana And Nearby States On Various Measures Relating To Registered Nurses	68
XIV.	Standing Of Indiana And Nearby States On Various Measures Relating To Licensed Practical Nurses	68
XV.	Regional Campus Enrolment Recapitulation	75
XVI.	Amounts Of General Revenue From State And Local Taxes Per \$1,000 Of Personal Income, By States, 1966	80
XVII.	Total Appropriations Made To All Public Institutions Of Post High School Education In Indiana For Selected Years Since 1945-46	81
XVIII.	Appropriations To And Appropriation Requests From Indiana Public Post High School Institutions For Selected Years	82
XIX.	Current Educational And General Income And Expenditures Of Public Colleges And Universities Of Indiana—1968-69	83
XX.	Estimated Educational And General Costs For Public Post High School Education For 1975, 1980, and 1985	84
XXI.	The Cost Of Going To College In Indiana	91

XII

TABLE

Page

XXII.	Distribution Of Hoosier Scholar Awards	92
XXIII.	Grants Recommended For Construction Projects, Equipment And Closed-Circuit Television On Indiana College And University Campuses By The Indiana Advisory Commission On Academic Facilities, 1965-1968	95

FIGURE

A.	Enrolments In United States Colleges And Universities, 1955-1980	12
B.	Expenditures For United States Colleges And Universities— 1955, 1965, and 1980 (In Billions Of Dollars)	14
C.	Enrolments In Indiana Colleges And Universities, 1950-1985	22
D.	Indiana Vocational Technical College—Regional Organization	41
E.	Geographical Location Of Indiana Institutions And Centers Of Post High School Education	52

INTRODUCTION

The State Policy Commission on Post High School Education was established by Chapter 238 of the Laws of Indiana, passed by the 1967 General Assembly, and signed by the Governor on March 10, 1967. The same legislative session had passed several other bills relating to post high school education and had considered many others, particularly a group of bills seeking the establishment of a new medical school in various parts of the State. Previous General Assemblies had sought to establish committees and commissions to study and advise on aspects of post high school education, some broadly inclusive of the whole field and others confined to a particular aspect.

The Bill establishing the Commission called for twenty-nine members:

Two chosen from the House, one from each party

Two chosen from the Senate, one from each party

Twenty-two appointed by the Governor, two from each Congressional District

Three appointed by the Governor, regardless of residence except that they must be Indiana residents

The members of the Commission are:

From the House:

Mr. Nickolas V. Angel, Munster

Mr. Robert L. Jones, Jr., Indianapolis

From the Senate:

Mr. Allan Bloom, Fort Wayne

Mr. Robert P. O'Bannon, Corydon

1st Congressional District:

Mr. Michael Kraft, Gary

Mr. Adam Benjamin, Jr., Gary

2nd Congressional District:

Mr. E. Joseph Bannon, Lafayette

Mrs. Eugenia H. Honeywell, Wabash

3rd Congressional District:

Rev. Theodore M. Hesburgh,

Notre Dame¹

Mr. Franklin D. Schurz, South Bend

4th Congressional District:

Mr. Edward D. Auer, Fort Wayne

Dr. Richard Bateman

5th Congressional District:

Mr. Fletcher F. Ferguson, Pendleton

Dr. George S. Taggart, Anderson

6th Congressional District:

Dr. Paul W. Cook, Jr.,

Crawfordsville²

Dr. Richard M. Park, Franklin

¹ Reverend Hesburgh was represented on the Commission and at its meetings by Reverend John E. Walsh, Notre Dame.

² Resigned on August 20, 1968

2 Chapter I—Introduction

7th Congressional District Mr. Louis J. Fontaine, Greencastle	10th Congressional District: Dr. Landrum Bolling, Richmond Mr. John W. Fisher, Muncie, Vice Chairman
8th Congressional District: Mr. Harold O. McCutchan, Evansville Dr. Charles E. Rochelle, Evansville ³	11th Congressional District: Mr. John P. Collett, Indianapolis Mr. John A. Norris, Indianapolis
9th Congressional District: Mr. Robert B. Bulleit, Seymour Mr. Richard B. Stoner, Columbus, Chairman	Members at Large: Dr. Hayward Campbell, Jr., Indianapolis Mr. Harry T. Ice, Indianapolis ⁴ Mr. Beurt SerVaas, Indianapolis

Mr. Richard B. Stoner of Columbus, representing the Ninth Congressional District, was designated by Governor Branigin as Chairman of the Commission. At their first meeting the members of the Commission elected Mr. John W. Fisher their Vice Chairman.

The Bill establishing the Commission assigned it the task of studying the existing State educational institutions, the needs of the people and the State for different kinds of post high school education, the possibility and desirability of establishing new institutions of different types, and the methods of management and cooperation among these State institutions, as well as the task of making such other recommendations as the Commission "may deem wise and expedient with respect to the future of public post high school education in Indiana."

The office of the Commission was opened in Indianapolis on April 2, 1968. During the past several months the Directors have been assisted by the following consultants:

Dr. Paul G. Bulger, Professor of Higher Education, State University of New York at Albany

Dr. Thad L. Hungate, Retired Professor of Education, Teachers College, Columbia University, New York

Dr. Cariyle F. Jacobsen, Executive Director, Hospital Review and Planning Council of Central New York

Dr. L. Richard Meeth, Dean of the College, Park College, Missouri

Dr. Walter E. Sindlinger, Chairman, Department of Higher and Adult Education, Teachers College, Columbia University, New York

In addition several nationally prominent experts in the field of higher education have met with the members of the Commission to make their experience available and to help explore the major problems facing the Commission and the various alternative solutions to those problems. These persons included Dr. Lyman A. Glenny, Executive Director, Illinois Board of Higher Education; Dr. James F. Hall, President, Dutchess

³ Resigned on October 18, 1968

Community College, a member unit of the State University of New York; Dr. T. R. McConnell, Research Educator, Center for Research and Development in Higher Education, University of California, Berkeley.

The office of the Commission was ably managed by Mrs. Rita W. Gillenardo, Administrative Assistant to the Commission.

The Commission has held meetings for its members as follows:

January 15, 1968	—Indianapolis (first formal meeting)
March 5	—All-day meeting in Indianapolis
June 4	—All-day meeting in Indianapolis
July 12-14	—Three-day meeting at French Lick
July 31	—Evening meeting in Indianapolis
September 13	—All-day meeting in Indianapolis
October 23	—All-day meeting in Indianapolis

At these meetings the Commission has, in addition to consulting with those persons named above, had the opportunity to hear from the Presidents of the four State Universities of Indiana, and of Vincennes University and Indiana Vocational Technical College, and also the Superintendent of Public Instruction.

Five full days of public hearings were held by the Commission as follows:

July 31	—Indianapolis
August 1	—Indianapolis
August 8	—Evansville
August 13	—Fort Wayne
August 14	—Hammond

These hearings were widely publicized and more than 75 persons appeared to make statements to the Commission on some aspect of post high school education. Several persons who appeared at the hearings, in addition to making oral statements, submitted materials for the use of the Commission. The transcripts of these hearings run to more than 700 pages.

The Director, the Associate Director, and the Consultants interviewed large numbers of persons in different parts of the State and many persons in various agencies of State government in Indianapolis.

The Commission asked all post high school institutions, public and private, to send copies of recent reports, catalogs, statistics, and other materials which might be helpful to the Commission in its work. In addition, questionnaires were mailed to all of Indiana's colleges and universities, public and private, asking for comparable information on geographical sources of students; age, sex, and marital status of students; admission trends of both freshman and transfer students in recent years; student financial problems; and enrolments and degrees. The college officials in the State were most cooperative in complying with these requests of the Commission. Another set of questionnaires went to the Indiana Vocational Technical College Institutes. Questionnaires were also sent to high school guidance counselors and principals and to superintendents of schools seeking to learn their views on a number of matters related to post high

4 Chapter I—Introduction

school education in Indiana and outside the State. These questionnaires to high school guidance counselors and administrators also sought the opinions of the respondents as to the adequacy of the post high school educational opportunities in Indiana now available for their graduates.

A large quantity of material developed by the Consultants in their reports and in many other previous reports by consulting firms and other Indiana committees and commissions as well as numerous reports from other states were available to the Commission and its staff.

One of the Commission's consultants, Dr. Bulger, met with personnel representatives of industrial and business firms in the Indianapolis area to discuss the needs of such corporations for persons with various kinds and amounts of post high school education and the degree to which such needs could be met in terms of the graduates of existing post high school institutions in the Indianapolis area.

The Commission received excellent cooperation from the Governor's Office, the Legislative Council, the Office of the Secretary of State, the Civil Rights Commission, the Budget Agency, the State Scholarship Commission, the Indiana Advisory Commission on Academic Facilities, the Office of Manpower Studies—Purdue University, and the Indiana Employment Security Division.

Several non-governmental organizations were helpful in publicizing the Commission's hearings; notably the Indiana Conference of Higher Education, the Indiana Farm Bureau, Inc., the Indiana Association of Cities and Towns, the Indiana State AFL-CIO, the Indiana Farmers Union, Inc., the Indiana Congress of Parents and Teachers, Inc., the Indiana State Teachers Association, the Indianapolis League of Women Voters, the Indiana State Chamber of Commerce and local Chambers of Commerce throughout the State.

SUMMARY OF RECOMMENDATIONS

THE COMMISSION RECOMMENDS THAT:

1. The General Assembly should establish a state-wide planning and coordinating Board of Regents, with responsibility for all public post high school education in the State. This Board should be appointed by July 1, 1969. (p. 29)¹

2. The Board of Regents should be composed of nine Indiana citizens, appointed by the Governor, with overlapping terms of four years, and eligible for reappointment. A member of the Board should be designated by the Governor to serve as Chairman for the duration of his term. No member of the Board should be a trustee, officer, or employee of any public or private institution of post high school education in Indiana or of the State Government. Members of the Board, if serving at the time, should retire on December 31st, next succeeding their 70th birthday. (p. 30)

3. The Board of Regents should:

- a. Make all policies and decisions relating to public post high school education other than those which normally fall within the internal affairs of the institutions and agencies for which it is responsible, except those reserved to the General Assembly and the Governor. (p. 31)
- b. Have responsibility for making long and intermediate-range plans for all aspects of public post high school education in Indiana, including continuous review of such plans. In planning for public post high school education, the Board should take into account state relations with and the present and projected level of the educational activities of the private colleges. (p. 32)
- c. Approve all new public institutions and all major changes in policies and programs of public post high school education. (p. 33)

¹ Numbers in parenthesis refer to the page(s) in this Report where the particular recommendation is discussed.

- d. Review all budget requests of the public institutions of post high school education and, after such revisions as it may consider necessary, approve and transmit such requests to the budget agencies and appropriate offices of the state government; and
 - (1) Approve all expenditures for the public institutions of post high school education from sources other than state revenues;
 - (2) Prescribe uniform budgetary and accounting procedures;
 - (3) Be responsible for the control of the expenditures of funds for all public institutions of post high school education. (p. 34)
- e. Be designated as the agency to receive federal funds for post high school education where such an agency is required by federal law and practice. (p. 36)
- f. Appoint a Chancellor and such other full-time and part-time staff members, on recommendation of the Chancellor, as may be necessary to carry on the administrative, planning, and research work of the Board. (p. 36)
- g. Establish such advisory councils, committees, or commissions as may be necessary to provide the information and judgments needed for the proper carrying out of its responsibilities. (p. 37)

4. The General Assembly should authorize the Board of Regents to develop a system of comprehensive community colleges by expanding The Indiana Vocational Technical College. The present Board of the Indiana Vocational Technical College should be converted into a State Community College Board which, with its staff, should be responsible to the Board of Regents. There should be local Community College Boards for each community college, or for groups of community colleges closely related geographically. (p. 51)

5. The Board of Regents should establish and appoint an Advisory Council on Education for the Health Professions, composed of citizens-at-large, representatives of the health professions, and persons involved in education for the health professions, which would advise the Board with regard to the expansion and coordination of facilities and programs of education for the health professions. (p. 70)

6. The new Clinical Teaching Center Program for interns and residents should be continued until the Advisory Council on Education for the Health Professions and the Board of Regents have had time to evaluate its effectiveness. (p. 70)

7. The Board of Regents should plan for the conversion of the regional campuses of the state universities to autonomous institutions, with their

own Boards of Trustees (as recommended by the Commission later in this report); and the General Assembly should authorize the Board of Regents to effectuate such conversions at such locations and at such times as, in the judgment of the Board, would be in the best interests of the citizens of the State. (p. 77)

8. All expenditures made by or in behalf of the state institutions from whatever sources (public or private) should be reported to the Board of Regents and should conform to the activities, programs, and purposes of the respective institutions, as approved by the Board of Regents and the General Assembly. (p. 89)

9. The General Assembly should provide that funds which come from the Federal Government through the Board of Vocational and Technical Education, for public post high school education, should be under the control of the Board of Regents and that the Board of Vocational and Technical Education should coordinate its activities with the Board of Regents on all matters affecting post high school vocational education. (p. 93)

10. The Governor be urged to transfer the functions of the Indiana Advisory Commission on Academic Facilities to the new Board of Regents and to designate the Board of Regents as the agency in Indiana to carry out, at the state level, the provisions of the Federal Higher Education Acts of 1963 and 1965, and any other similar acts. (p. 94)

11. The General Assembly should dissolve the Medical Education Board and transfer its legal functions to the Board of Regents. (p. 97)

12. The General Assembly should amend the act creating the Indiana Higher Education Telecommunication System to place that system under the jurisdiction of the Board of Regents. (p. 97)

13. The General Assembly should transfer the functions of the Indiana Educational Services Foundation to the Board of Regents and the Foundation should be dissolved, or, through some other means, the functions of the Foundation should be brought under the general supervision of the Board of Regents. (p. 97)

14. The General Assembly should provide that the Chairman, or another representative of the Board of Regents, should become an ex-officio member of the Indiana Education Council. (p. 97)

15. The Board of Regents should cooperate with the State Scholarship Commission in order to expand and make more flexible present state scholarship programs, so that Indiana youth will not be denied the opportunity to go to college for financial reasons. More state scholarship funds should be made available and should be distributed more on the basis of the financial needs of the students than solely on the basis of academic records.

Loan funds should be acquired by the State Scholarship Commission and made widely available to qualified and needy students. (p. 92)

16. The Board of Regents should cooperate with the State's Civil Rights Commission in its efforts to study the opportunities for post high school education for minority groups and should participate in such cooperative measures as will help to equalize educational opportunity at the post high school level for all Indiana citizens. (p. 98)

17. The General Assembly should authorize the Governor to appoint a select committee of informed lay individuals not connected with any Indiana institution of post high school education to study and prepare proposals concerning the future role and financing of the private sector of Indiana's system of post high school education. (p. 99)

chapter III

INDIANA HIGHER EDUCATION AT THE CROSSROADS—1968

There are several persons in the country today who feel that the current problems of the nation's colleges and universities and of higher education generally are as crucial as the problems faced by any other generation. This appears to be true for the country as a whole and for many of the states, including Indiana.

HIGHER EDUCATION IN THE NATION—1968

Several things have dramatized the present state of higher education in this country:

- 1. The sheer size of the post high school educational enterprise—the numbers of students, teachers, and institutions, involving a large percentage of the population in one way or another.***

Two recent publications have forecast the changes to come—(1) the United States Office of Education in its 1966 edition of *Projection of Educational Statistics*, which gives actual enrolment figures back to 1955-56 and estimated figures ahead to 1975-76¹; and (2) an estimate by Sidney G. Tickton, Vice President of the Academy for Educational Development, who compares actual figures for 1965 with projected figures for 1980².

The Office of Education figures are shown in Table I and Tickton's figures in Table II. The difference that is evident between the two sets of figures for 1965 results from the fact that Tickton includes enrolled students who are not necessarily candidates for degrees but who nevertheless occupy seats in college and university classes. Figure A. combines the data of Tables I and II.

¹ *Projections of Educational Statistics to 1975-76* (1966 Edition), U.S. Office of Education, U. S. Government Printing Office.

² *The Magnitude of American Higher Education in 1980* by Sidney G. Tickton, constituting a chapter in *Campus, 1980*, a volume of essays edited by Alvin C. Eurich, Delacorte Press, 1968. (Quoted with permission.)

Table I. Higher Education Enrolments in the United States, 1955-1975¹

(000 omitted)

	All Institutions of Higher Education			Public Institutions			Private Institutions		
	Under- grad.	Grad.	Total	Under- grad.	Grad.	Total	Under- grad.	Grad.	Total
1955	2,419	242	2,661	1,369	115	1,484	1,050	127	1,227
1960	3,227	356	3,583	1,929	187	2,116	1,298	169	1,467
1965	4,945	582	5,527	3,273	352	3,625	1,672	230	1,902
1970	6,473	825	7,298	4,441	530	4,971	2,032	295	2,327
1975	7,905	1,090	8,995	5,580	735	6,315	2,325	355	2,680

These two sets of figures illustrate clearly the national expectations concerning the rapid growth of higher education in the next seven to twelve years.

2. The increasing costs, which take an ever larger share of everyone's tax dollar, and which require expenditures from the incomes and savings of a large number of the nation's parents who are helping their sons and daughters to go to college.

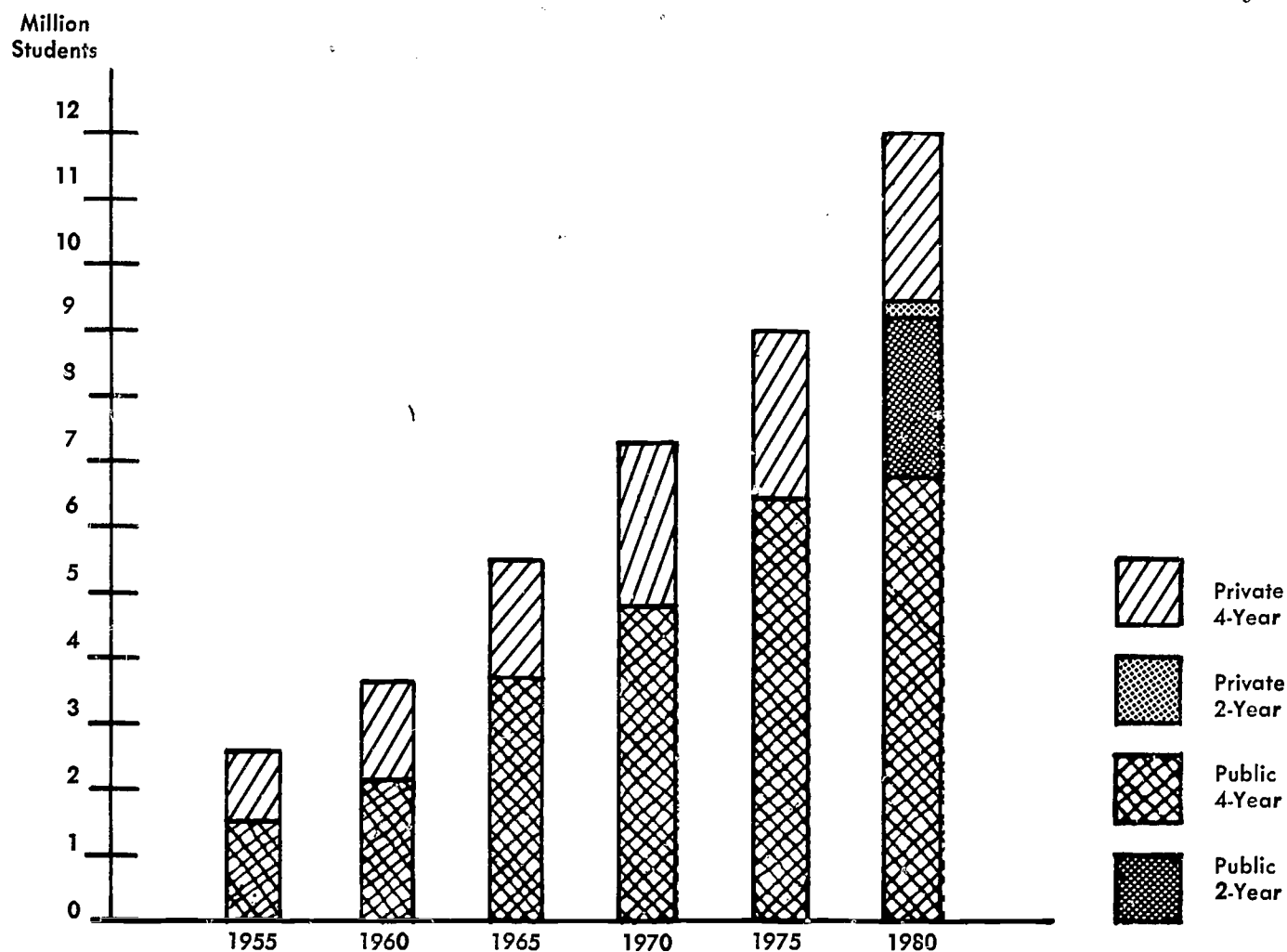
It is estimated by the Federal Government¹ that operating and capital expenditures in 1975-76 will be \$15.1 billion for public institutions and \$10.2 billion for private institutions—a total of \$25.3 billion for all higher education just seven years from now. Tickton estimates that the total annual expenditure will be \$32.5 billion by 1980. These estimates of the financial outlay to be required for colleges and universities in 1980, and the relation of such expenditures to the gross national product, are shown in Table III and Figure B. While the anticipated expenditures are expected to have increased by more than 600 per cent between 1955 and 1980, and to more than double between 1965 and 1980, the percentage that such figures are of the gross national product is estimated at only three-tenths of one percent higher in 1980 than in 1965. It seems probable, however, that large increases in the support for higher education are dependent on the continued expansion of the economy.

¹ Projections of Educational Statistics to 1975-76, op. cit.

Table II. Students and Faculty and Degrees Granted in United States Colleges and Universities, 1965 Actual Figures Compared With Estimates for 1980¹

	<u>1965</u>	<u>1980</u>	<u>Percentage Change</u>
College Age Population, 18-24	20,744,000	29,168,000	+ 41%
18-21	12,348,000	17,068,000	+ 38%
College and University Enrolments			
Public Institutions	3,969,000	9,250,000	+133%
Private Institutions	1,951,000	2,750,000	+ 41%
All Institutions	5,920,000	12,000,000	+103%
Percentage Distribution of Students			
Public Institutions	67%	77%	
Private Institutions	33%	23%	
Enrolment by Types of Institutions			
		% of Total	% of Total
Public Institutions, 2-Year	789,000	13%	2,500,000 21%
4-Year	3,095,000	52%	6,750,000 56%
Private Institutions, 2-Year	111,000	2%	120,000 1%
4-Year	1,925,000	33%	2,630,000 22%
Enrolment by Level			
Undergraduate	5,160,000	87%	9,600,000 80%
Graduate	760,000	13%	2,400,000 20%
Members of College and University Faculty			
Members, Instructor or Above in Rank:			
Full-time	245,000	420,000	+ 71%
Part-time	90,000	180,000	+100%
Teaching Assistants and Fellows	65,000	145,000	+123%
Total Faculty	400,000	745,000	+ 86%
Earned Degrees Conferred			
Bachelor's and 1st Professional	540,000	1,025,000	+ 90%
Natural Sciences and Related Fields	136,600	255,225	+ 87%
Social Sciences and Related Fields	403,400	769,775	+ 91%
Master's Degrees	126,200	275,800	+119%
Natural Sciences and Related Fields	34,850	102,873	+195%
Social Sciences and Related Fields	91,350	172,927	+ 89%
Doctor's Degrees	17,500	45,000	+157%
Natural Sciences and Related Fields	8,890	25,290	+184%
Social Sciences and Related Fields	8,610	19,710	+129%

¹ Campus, 1980, op. cit., pp. 13-20

Figure A. Enrolments in United States Colleges and Universities, 1955-1980¹

¹ Based on data given in Tables I and II.

3. The major reliance that government and industry have placed on the human and technical resources of the universities to provide the knowledge and technical know-how necessary to support the expanding industrial economy and the military commitments of the country.

There are some indications that the far-reaching involvement of higher education with ongoing industrial and governmental operations is distracting the colleges and universities from their unique historic roles and responsibilities and that there is too great a dependence, in some institutions, on the income that comes to the campus from contract research and other subsidies. There are some who feel that these relationships threaten the independence of some of the larger institutions.

4. Student unrest and protest in its various manifestations, which touches almost every campus.

This complicated phenomenon, new to most institutions in recent years, is a complex one, and it is difficult to understand clearly its antecedents and its future course. It is linked by some with secretly planned subversion, by others with social and inter-

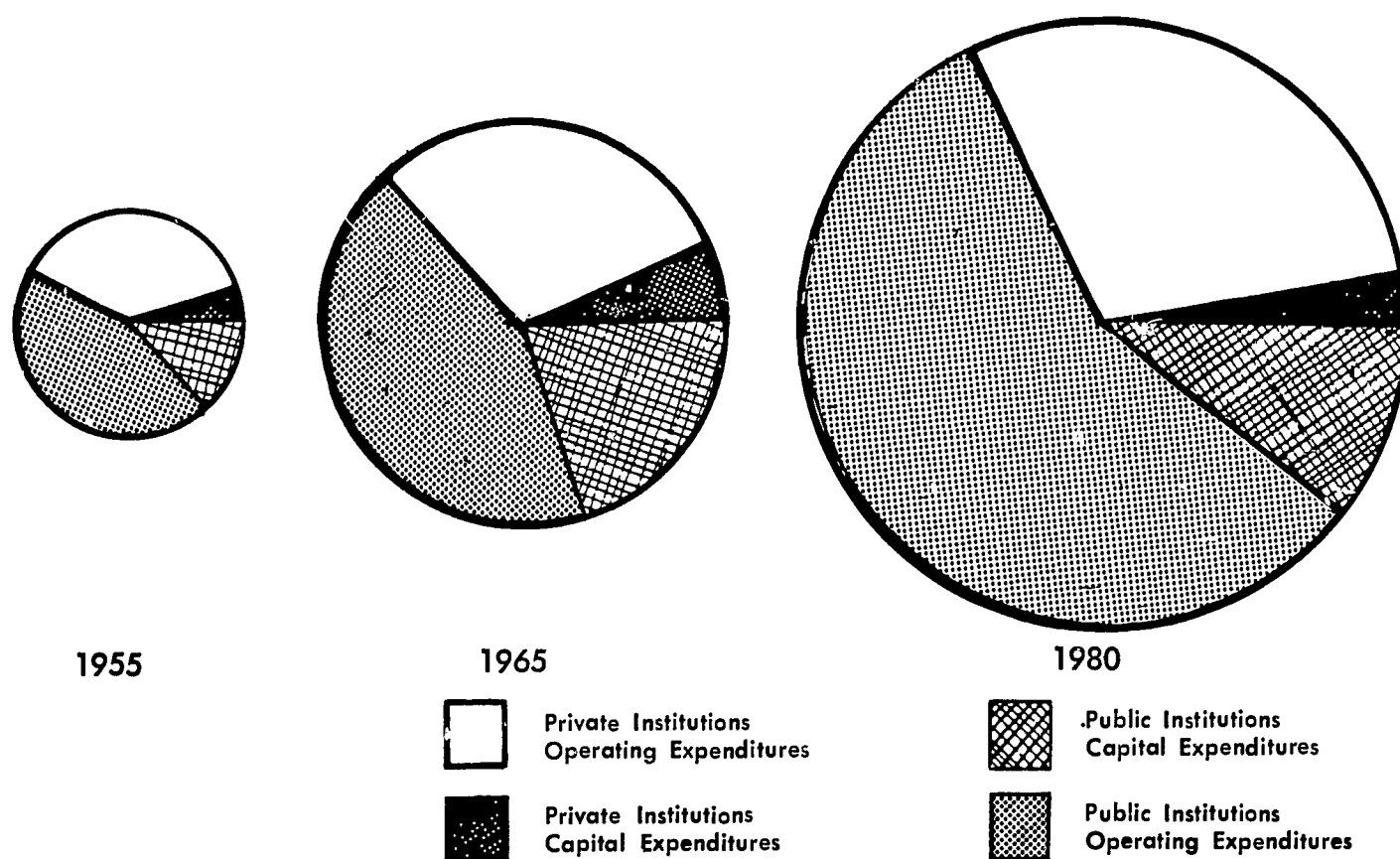
Table III. Expenditures for Colleges and Universities in the United States, 1955-65 and Estimated Expenditures, 1966-1980, (In Billions of Dollars)¹

YEAR	Total Expenditures			Public Institutions			Private Institutions		
	Total	Current Operating	Capital	Total	Current Operating	Capital	Total	Current Operating	Capital
1955-56	\$ 5.0	\$ 4.0	\$1.0	\$ 2.8	\$ 2.2	\$.6	\$ 2.2	\$1.8	\$.4
56-57	5.8	4.5	1.3	3.3	2.5	.8	2.5	2.0	.5
57-58	6.1	4.8	1.3	3.5	2.7	.8	2.6	2.1	.5
58-59	6.9	5.3	1.6	3.9	3.0	.9	3.0	2.3	.7
59-60	7.4	5.8	1.6	4.1	3.2	.9	3.3	2.6	.7
1960-61	8.3	6.4	1.9	4.6	3.5	1.1	3.7	2.9	.8
61-62	9.2	7.3	1.9	5.1	4.0	1.1	4.1	3.3	.8
62-63	10.6	8.1	2.5	5.9	4.4	1.5	4.7	3.7	1.0
63-64	12.0	9.0	3.0	6.9	5.0	1.9	5.1	4.0	1.1
64-65	13.5	10.0	3.5	7.9	5.6	2.3	5.6	4.4	1.2
1965-66	15.2	11.4	3.8	9.0	6.5	2.5	6.2	4.9	1.3
66-67	16.3	12.7	3.6	9.7	7.3	2.4	6.6	5.4	1.2
67-68	17.6	14.1	3.5	10.4	8.1	2.3	7.2	6.0	1.2
68-69	18.4	15.1	3.3	10.9	8.7	2.2	7.5	6.4	1.1
69-70	18.7	15.7	3.0	11.2	9.2	2.0	7.5	6.5	1.0
1970-71	19.7	16.8	2.9	11.7	9.7	2.0	8.0	7.1	.9
71-72	20.6	17.9	2.7	12.2	10.3	1.9	8.4	7.6	.8
72-73	21.7	19.0	2.7	12.9	11.0	1.9	8.8	8.0	.8
73-74	23.2	20.2	3.0	13.8	11.7	2.1	9.4	8.5	.9
74-75	24.4	21.4	3.0	14.5	12.4	2.1	9.9	9.0	.9
1975-76	25.3	22.5	2.8	15.1	13.1	2.0	10.2	9.4	.8
1980-81	32.5	28.5	4.0	21.8	18.8	3.0	10.7	9.7	1.0
Percentage Increase, 1965-1980	+114	+150	+5	+142	+189	+20	+72	+98	-23

¹ Figures for 1955-1965 (Actual) and 1966-1975 (Projected) from *Projections of Educational Statistics to 1975-76*, Op. cit. Figures for 1980-81 and data concerning gross national product from *Campus, 1980*, op. cit.

Relation of College and University Expenditures to Gross National Product	1965	1980	Percentage Increase
Expenditures by Colleges and Universities	\$ 15.2	\$ 32.5	+114%
Gross National Product	\$681.2	\$1,300.0	+ 91%
College and University Expenditures as a Percent of Gross National Product	2.2%	2.5%	

Figure B. Expenditures for United States Colleges and Universities—1955, 1965, and 1980 (in Billions of Dollars)¹



¹Based on Table III.

national or military situations (the war in Vietnam), and by others with many other aspects of our society and culture, and the forces and experiences that have been influencing the young men and women now in college. It is a dramatic and potent aspect of college and university life today and has caused trustees, presidents, faculty members, and students, and friends and critics of higher education to engage in more urgent and serious thought about the structure and mission of the college and the inter-relationships of the different groups who compose it than any other development in a long time.

These four factors pertaining to higher education—size, cost, relationship to industry and government, and student unrest—have caused many persons both within and without the college and university campuses to try to estimate the future course of events in higher education.

There seems to be some agreement throughout the country on the importance of certain issues, assumptions, and expectations such as the following:

1. **There is an urgent need to reconsider the purposes of the college and university, to redefine their objectives, and to reestablish the relative priority of those purposes and objectives. Probably no institution can legitimately claim responsibility for pursuing all of the different insti-**

tuitional goals of higher education. Institutions should define the status and priority for each major function which they claim to pursue.

- 2. When the purposes of the institutions have been reevaluated and reconfirmed, the curriculum and educational activities need to be restructured and brought up to date so that they can play their most effective role in the achievement of institutional purposes.**
- 3. Students in the years ahead will have more flexibility in their timetable for acquiring higher education. Some will want to and be able to condense their "four year" courses into three years through year round attendance at institutions which are on some plan of year round operation. Other students may take five, six, seven, or more years for a wide variety of legitimate reasons to finish their "four year" programs. There will also be more opportunity for self teaching and independent study and new ways of evaluating student achievement.**
- 4. Present and new institutions, at least some, in urban regions have an obligation to study and investigate and serve the citizens of their urban environment with a purpose and spirit similar to that which characterized the relationship between the land grant colleges and their rural clientele.**
- 4. Adults will seek and receive continuing education of more variety and for longer periods than ever before at the colleges and universities of the country.**
- 6. The historic national commitment to education is moving the country slowly toward some degree of universal higher education. With all the sons and daughters of all the parents in some type of post high school institution, it is clear that there must be several kinds of post high school institutions and many types of post high school programs. Two-year institutions of various kinds will provide the opportunities for many of the new students.**
- 7. The proportion of students in public institutions will increase from about two-thirds to more than three-fourths in the next few years.**
- 8. The importance of institutional planning and also state-wide planning and coordination for the orderly growth and development of higher education is essential to meet the growing needs for higher education, to avoid duplication, and to use wisely the limited funds available.**
- 9. Ways must be found to insure the financial resources, from one source**

or another, needed to enable every qualified young person to attend an institution which offers the program he needs.

10. *Although the private colleges will be taking care of a decreasing share of the total job of higher education, they will still be providing opportunities for larger numbers of students, and serious consideration should be given to the problem of how they can continue to carry on their essential part of the total task.*

POST HIGH SCHOOL EDUCATION IN INDIANA—1968

All of the ten foregoing generalizations apply to some degree to post high school education in Indiana as well as in the country as a whole. In the preceding chapter, which summarizes its recommendations, and in the chapters that follow, the Commission has indicated what in its judgment are the most urgent and priority steps that need to be taken.

Indiana Institutions and Enrolments

The citizens of Indiana have been fortunate in having sixty-nine public and private colleges, centers, and universities to teach their youth and to serve their State and communities. These institutions are listed in Table IV with their date of founding, accredited status, religious affiliation if any, and their fall, 1967, enrolment. Their geographical locations are shown on the map in Figure E. In order to give a complete picture of post high school education in Indiana all institutions and enrolments are shown, including those of Indiana Vocational Technical College. Not all of the IVTC institutes are listed in the first part of Table IV as only six reported enrolments in 1967. They are included in the Enrolment Summary in this table and also in the table and map in Chapter V. It is interesting to note that of the eight institutions established during the twenty-three years since World War II, one (Bethel College) is private; one is the system called Indiana Vocational Technical College; and the other six are the regional centers of Calumet, Indianapolis, and Westville, established by Purdue University; Kokomo and Gary, established by Indiana University; and Evansville established by Indiana State University.

While enrolment forecasts are difficult to make with any close degree of accuracy, most long-range estimates tending to be underestimates rather than overestimates, it is essential to make such estimates in connection with any effort toward planning for the years ahead. In Table V and Figure C the Commission presents the enrolment picture for Indiana back to 1950 as contained in the **Enrollment Projections** report by Parkhurst and Suddarth,¹ and estimates by the Commission staff to 1985 for both

¹ Op. cit.

Table IV. Indiana Institutions Offering Post High School Education Including Branches, Institutes, and Regional Centers

PUBLIC INSTITUTIONS

		Founded	Regionally Accredited ¹	Religious Affiliation and/or Control	Enrollment Fall, 1967
BALL STATE UNIVERSITY	Muncie	1918	Yes	State	14,047
INDIANA STATE UNIVERSITY	Terre Haute	1870	Yes	State	(13,674)
Main Campus	Terre Haute	1870			12,752
Evansville Center	Evansville	1967			922
INDIANA UNIVERSITY	Bloomington	1820	Yes	State	(48,563)
Main Campus	Bloomington	1820			27,098
Fort Wayne Center	Fort Wayne	1917			2,634
Indianapolis Downtown Center	Indianapolis	1916			4,527
Indianapolis Professional Divisions	Indianapolis	1903-1967			4,013
Kokomo Center ²	Kokomo	1945			1,121
Northwest Center	Gary	1948			3,493
South Bend Center ²	South Bend	1940			3,001
Southeastern Center ²	Jeffersonville-New Albany	1941			1,919
INDIANA VOCATIONAL TECHNICAL COLLEGE ³		1965	No	State	(2,216)
Region IV, Tippewa Regional Institute	Lafayette				29
Region V, North Central Regional Institute	Kokomo				239
Region VII, Wabash Valley Regional Institute	Terre Haute				215
Region VIII, Part 1, Mallory Regional Institute	Indianapolis				1,152
Part 2, Weir Cook Division	Indianapolis				362
Region IX, Whitewater Regional Institute	Richmond				219
PURDUE UNIVERSITY	Lafayette	1869	Yes	State	(33,735)
Main Campus	Lafayette	1869			23,588
Calumet Center	Hammond	1946			3,115

		Founded	Regionally Accredited	Religious Affiliation and/or Control	Enrollment Fall, 1967
Fort Wayne Center	Fort Wayne	1943			2,404
Indianapolis Center	Indianapolis	1946			3,505
North Central Center	Westville	1946			1,123
VINCENNES UNIVERSITY	Vincennes	1801	Yes	State and County	2,244
PRIVATE INSTITUTIONS					
ANCILLA DOMINI COLLEGE	Donaldson	1937	No	Roman Catholic	66
ANDERSON COLLEGE	Anderson	1917	Yes	Church of God	2,532
BETHEL COLLEGE	Mishawaka	1947	No	United Missionary	479
BUTLER UNIVERSITY	Indianapolis	1855	Yes	Private	4,042
CHRISTIAN THEOLOGICAL SEMINARY	Indianapolis	1924	⁴	Disciples of Christ	255
CONCORDIA SENIOR COLLEGE	Fort Wayne	1839	Yes	Lutheran	501
DEPAUW UNIVERSITY	Greencastle	1937	Yes	Private	2,450
EARLHAM COLLEGE	Richmond	1847	Yes	Society of Friends	1,151
FORT WAYNE ART INSTITUTE	Fort Wayne	1922	No	Private	135
FORT WAYNE BIBLE COLLEGE	Fort Wayne	1904	⁵	Interdenominational	526
FRANKLIN COLLEGE	Franklin	1834	Yes	Baptist	723
GOSHEN COLLEGE	Goshen	1894	Yes	Mennonite	1,263
GRACE THEOLOGICAL SEMINARY AND COLLEGE	Winona Lake	1937	No	Brethren	671
HANOVER COLLEGE	Hanover	1827	Yes	Presbyterian	1,020
HUNTINGTON COLLEGE	Huntington	1897	Yes	United Brethren	490
INDIANA CENTRAL COLLEGE	Indianapolis	1902	Yes	Ev. United Brethren	2,525
INDIANA INSTITUTE OF TECHNOLOGY	Fort Wayne	1930	Yes	Private	1,118

	Founded	Regionally Accredited	Religious Affiliation and/or Control	Enrolment Fall, 1967
MANCHESTER COLLEGE	1889	Yes	Brethren	1,483
MARIAN COLLEGE	1937	Yes	Roman Catholic	1,060
MARION COLLEGE	1920	Yes	Methodist	733
OAKLAND CITY COLLEGE	1885	No	Baptist	657
ROSE POLYTECHNIC INSTITUTE	1874	Yes	Private	970
ST. BENEDICT COLLEGE	1914	No	Roman Catholic	184
ST. FRANCIS COLLEGE	1890	Yes	Roman Catholic	1,710
ST. JOSEPH COLLEGE	1889	Yes	Roman Catholic	(2,599)
Main Campus				1,423
Capuchin Seminary				46
Calumet Campus				1,130
ST. MARY-OF-THE-WOODS COLLEGE	1840	Yes	Roman Catholic	648
ST. MARY'S COLLEGE	1844	Yes	Roman Catholic	1,414
ST. MEINRAD SEMINARY	1861	Yes	Roman Catholic	274
TAYLOR UNIVERSITY	1846	Yes	Private	1,281
TRI-STATE COLLEGE	1884	Yes	Private	1,859
UNIVERSITY OF EVANSVILLE	1854	Yes	Private	3,174
UNIVERSITY OF NOTRE DAME	1842	Yes	Roman Catholic	7,723
VALPARAISO UNIVERSITY	1859	Yes	Lutheran	(4,378)
Main Campus				3,950
Fort Wayne Center				44
Valparaiso Center				384
WABASH COLLEGE	1832	Yes	Private	891
Crawfordsville				
JOINT PUBLIC AND PRIVATE CENTER				
Eastern Indiana Center ⁶	1946		Public and Private	669
Earlham College, Richmond				

ENROLMENT SUMMARY CLASSIFICATION OF INSTITUTIONS

	1963	Enrolment ⁷ 1967	1968	Number of Insti- tutions—1968 ⁸
PUBLIC INSTITUTIONS AND CENTERS—TOTAL	74,451	114,391	126,182	31
Main Campuses	54,970	79,729	88,141	6
Centers and Institutes	19,481	34,662	38,041	25
PRIVATE INSTITUTIONS AND CENTERS—TOTAL	44,090	51,985	53,385	38
Main Campuses	43,142	50,809	51,641	34
Centers and Institutes	948	1,176	1,744	4
ALL INSTITUTIONS AND CENTERS—TOTAL	118,541	166,376	179,567	69
Main Campuses	98,112	130,538	139,782	40
Centers and Institutes	20,429	35,838	39,785	29

¹ Regional centers of the State Universities have been included in the regional accreditation of the Universities. Beginning in 1969 each center will have to meet accrediting criteria independently to maintain its accredited status with the North Central Association of Colleges and Secondary Schools, the regional agency serving Indiana.

² Purdue University offers at these Indiana University Centers under a cooperative "host-guest" arrangement certain courses based on the needs expressed in the regions served by these centers.

³ As of December, 1968, Indiana Vocational Technical College had divided the State into thirteen planning and administrative regions (see Figure D, Chapter V). In ten of these thirteen regions, eleven institutes (two in Indianapolis) reported enrolment figures in 1968. One other region had located its regional institute, making twelve institutes in all, but there were no students reported from this particular unit. The twelve actually located institutes constitute the number used in the **Enrolment Summary** in this table and in Figure E. Also, the main office of IVTC in Indianapolis is counted as a main campus in the **Enrolment Summary** even though it has no separate enrolment of its own. Details concerning these regions and institutes are given in Chapter V, including Table VII.

⁴ Accredited by American Association of Theological Schools.

⁵ Accredited by Accrediting Association of Bible Colleges.

⁶ Sponsored by: Ball State University, Indiana State University, Indiana University, Purdue University, and Indiana Vocational Technical College at Earlham College. Enrolment for this center is included under Centers and Institutes for public institutions and for all institutions.

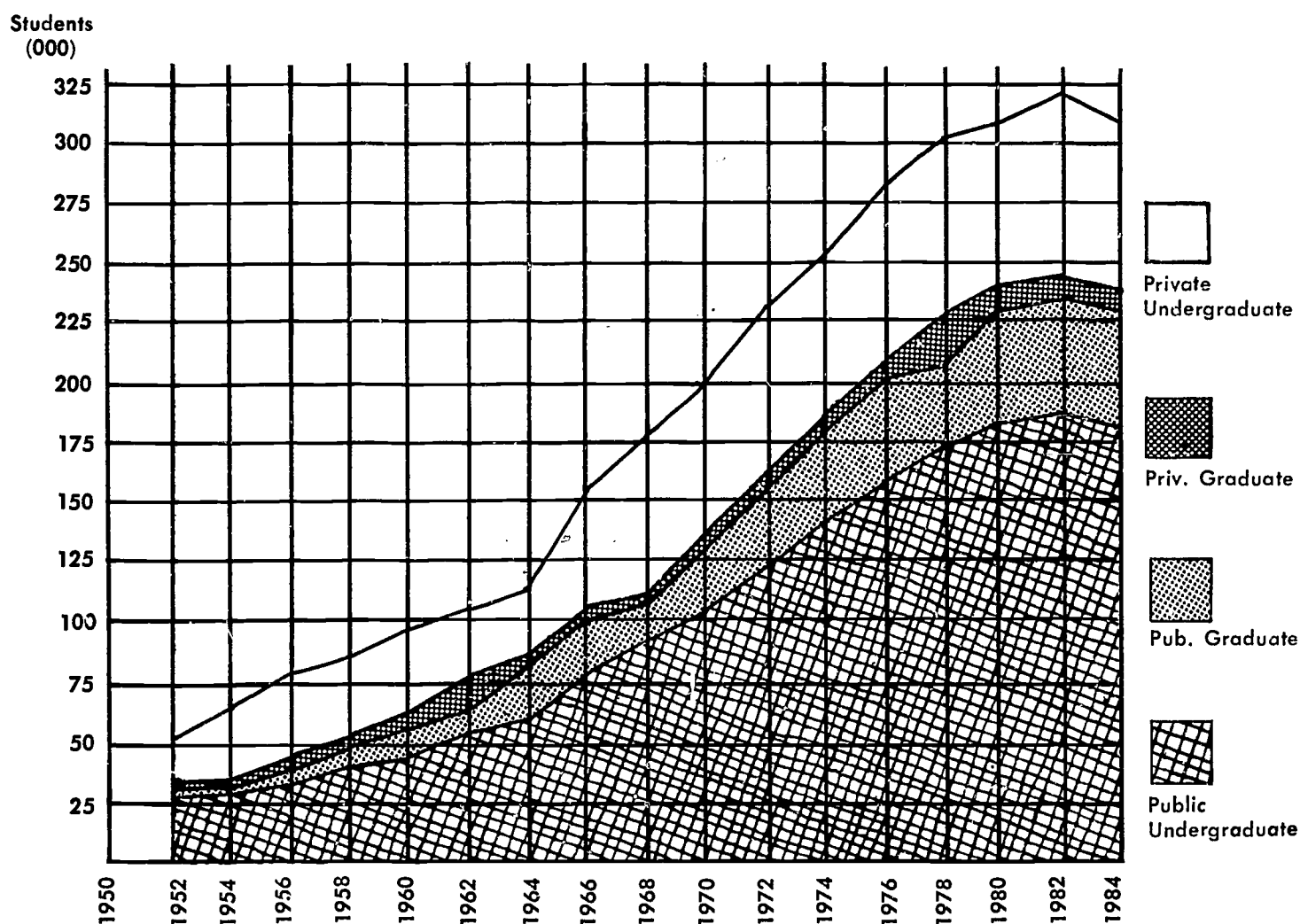
⁷ The enrolment figures for 1963 and 1968 are from **Enrollment Projections** by Nelson M. Parkhurst and Betty Suddarth, **Current Status Report No. 2**, in the **Higher Education in Indiana** series, Bureau of Business Research, Indiana University, for the Indiana Advisory Commission on Academic Facilities, in cooperation with the Indiana Conference of Higher Education, 1968. The 1967 enrolment figures are from the annual reports of the United States Office of Education.

⁸ The geographical location of each of these institutions is indicated on Figure E.

Table V. Enrolments in Indiana Post High School Institutions, 1950-1967, and Projected Enrolments, 1968-1985¹

	ALL INSTITUTIONS			PUBLIC INSTITUTIONS			PRIVATE INSTITUTIONS		
	Total	Under-grad.	Grad.	Total	Under-grad.	Grad.	Total	Under-grad.	Grad.
1950	55,000	53,518			28,864			24,654	
1951	56,506	47,592	8,914	32,557	25,426	7,131	23,949	22,166	1,783
1952	57,341	49,069	8,272	32,677	26,059	6,618	24,664	23,010	1,654
1953	59,686	51,345	8,341	33,927	27,254	6,673	25,759	24,091	1,668
1954	65,549	56,813	8,736	37,504	30,515	6,989	28,045	26,298	1,747
1955	72,703	63,296	9,407	41,470	33,944	7,526	31,233	29,352	1,881
1956	78,339	68,492	9,847	44,596	36,718	7,878	33,743	31,774	1,969
1957	80,227	69,577	10,650	44,916	36,396	8,520	35,311	33,181	2,130
1958	86,353	74,299	12,054	49,008	39,365	9,643	37,345	34,934	2,411
1959	89,876	76,294	13,582	51,389	40,523	10,866	38,587	35,771	2,716
1960	98,085	83,291	14,794	57,631	45,796	11,835	40,454	37,495	2,959
1961	106,103	89,827	16,276	63,815	50,794	13,021	42,288	39,033	3,255
1962	113,009	95,270	17,739	68,841	54,650	14,191	44,168	40,620	3,548
1963	118,626	98,803	19,823	72,941	57,083	15,858	45,685	41,720	3,965
1964	128,579	107,460	21,119	80,053	63,158	16,895	48,526	44,302	4,224
1965	143,983	120,394	23,589	91,788	72,917	18,871	52,195	47,477	4,718
1966	154,985	127,565	27,420	100,630	78,694	21,936	54,355	48,871	5,484
1967	165,765	136,191	29,574	109,790	86,131	23,659	55,975	50,060	5,915
1968	176,325	146,880	29,445	113,121	89,271	23,850	63,204	57,609	5,595
1969	186,352	152,341	34,011	121,149	93,531	27,618	65,203	58,810	6,393
1970	199,306	173,293	36,013	131,269	101,954	29,315	68,037	61,339	6,698
1971	213,961	175,820	38,141	143,108	111,985	31,123	70,853	63,835	7,018
1972	230,899	190,664	40,235	156,439	123,527	32,912	74,460	67,137	7,323
1973	243,780	201,076	42,704	166,958	131,941	35,017	76,822	69,135	7,687
1974	258,031	211,819	46,212	178,367	140,381	37,986	79,664	71,438	8,226
1975	273,368	224,624	48,744	190,789	150,624	40,165	82,579	74,000	8,579
1976	284,729	234,608	50,121	200,561	159,161	41,400	84,168	75,447	8,721
1977	296,756	244,849	51,907	210,789	167,810	42,979	85,967	77,039	8,928
1978	305,735	251,151	54,584	218,665	173,360	45,305	87,070	77,791	9,279
1979	312,754	256,042	56,712	225,157	177,973	47,184	87,597	78,069	9,528
1980	319,234	262,337	56,897	231,503	184,051	47,452	87,731	78,286	9,445
1981	321,483	263,246	58,237	233,789	185,103	48,686	87,694	78,143	9,551
1982	322,875	263,055	59,820	235,395	185,266	50,129	87,480	77,789	9,691
1983	318,225	259,531	58,694	232,764	183,461	49,303	85,461	76,070	9,391
1984	313,895	254,946	58,949	229,954	180,441	49,513	83,941	74,505	9,436
1985	309,877	250,244	59,633	227,500	177,409	50,091	82,377	72,835	9,542

¹Data for this Table are based on the report, **Enrollment Projections**, by Parkhurst and Suddarth, op. cit., and estimates and projections by the staff of the Commission based on the recommendations in this report for expanding the opportunities available to Indiana youth for post high school education.

Figure C. Enrolments in Indiana Colleges and Universities—1950-1985¹¹ Based on data in Table V.

public and private institutions and for both undergraduate and graduate students. In these two exhibits it is evident that the future trends in post high school education in Indiana will roughly parallel those for the country as a whole, with Indiana increasing somewhat faster due to the increasing opportunities for post high school education for substantial numbers of young men and women who, for financial and/or academic reasons, cannot now go to college. The increases reflected in Tables II and V are:

	Percentage Increase in Enrolment, 1965-1980	
	Indiana	United States
All Institutions	+122%	+103%
Public Institutions	+152%	+133%
Private Institutions	+ 68%	+ 41%

Even this growth in post high school attendance will not bring Indiana to the national average based on the percentage of college age students attending college.

Over the past decade, enrolments at Indiana's public institutions have risen from 57 per cent of the State's total enrolment to 63 per cent. As Table VI illustrates, by 1980 Indiana's public institutions may be enrolling 72 percent of its students.

Table VI. Proportion of Students Enrolled in Public and Private Colleges, United States and Indiana, 1955-1980¹

	United States		Indiana	
	Public	Private	Public	Private
1955	55.8%	44.2%	57.0%	43.0%
1960	59.1	40.9	58.8	41.2
1965	65.6	34.4	63.1	36.9
1970	68.1	31.9	65.9	34.1
1975	70.2	29.8	69.8	30.2
1980	77.1	22.9	72.5	27.5

¹United States data from U.S. Office of Education and Tickton, op. cit.; Indiana data from **Enrolment Projections** by Parkhurst and Suddarth, op. cit., and from estimates by the staff of the Commission.

According to the Commission's estimates, Indiana's private institutions should expect to expand their enrolment from 1965 to 1980 by 68 per cent, while the State must plan to increase public enrolments by 152 per cent, partially through the creation of new public colleges and partially through judicious expansion of enrolments at existing institutions.

STUDENT MIGRATION

It is of interest to note the migration into Indiana of both undergraduate and graduate students attending Indiana's public and private institutions, as indicated in Appendix 1.

In analyzing the data of this Appendix, it will be seen that the percentages of various groups from the State of Indiana are as follows:

	<u>Per Cent from Indiana</u>
All Institutions	
All Students	71%
Undergraduates	72%
Graduates	65%
Public Institutions	
All Students	82%
Undergraduates	87%
Graduates	63%
Private Institutions	
All Students	48%
Undergraduates	46%
Graduates	70%

About seven of every ten students in Indiana colleges and universities live in Indiana. For those in public institutions, however, 82 percent are from Indiana while in the private institutions more than half of the students come from outside Indiana. Or, to put it another way: Of the approximately 116,000 Indiana students attending Indiana

institutions, about 25,000 or 22 per cent attend private institutions and 91,000 or 78 per cent attend public institutions. A much larger number of students from other states comes to Indiana to attend college than the number of Indiana youth who go to college outside Indiana.

PROGRAMS AND DEGREES

The post high school institutions in Indiana, public and private, offer the usual variety of programs and degrees, academic and professional, usually found in the various states. In Appendix 2 these programs and the degrees and certificates conferred in each during 1966-67, including the summer of 1967, are presented. Only two and one-half per cent (646) of all 25,376 degrees and certificates awarded indicated the completion of two-year programs.

LEGISLATIVE CONCERN FOR POST HIGH SCHOOL EDUCATION

The concern of the citizens of Indiana for their programs and institutions of post high school education has been reflected by their representatives in the General Assembly. The period beginning with the end of World War II, with the large number of returning G.I.'s entering or re-entering colleges and universities, with rapid increases in the proportion of 18 to 21 year olds seeking college opportunities, with the increased emphasis on science and technology resulting from the war effort, and with the consequent increased costs and appropriations has been a period of great expansion of higher education, of many innovations in educational technology, and also a period in which many questions have been raised concerning the best way to plan for the total effort of the State in providing higher education.

Many proposals have been embodied in bills submitted to the General Assembly. Several of these bills included specific proposals to carry out the particular desires of different groups or regions in the State. Many of them did not pass although some did.

In the years since 1945 more than 120 bills have been introduced in the General Assembly pertaining to some aspect of post high school education in Indiana. More than 50 of these bills have been enacted into law. They have concerned such issues as the changing of the names of the public higher institutions and the building of parking lots for university employees to the establishment of medical schools, new State universities, four-year liberal arts colleges, community college systems, boards of regents and a school of architecture, and the establishment of such important agencies as the Indiana Vocational Technical College, the State Scholarship Commission, the Indiana Higher Education Telecommunication System, and The Medical Education Board. It is clear from examining the bills that have been introduced since 1945 that the General Assembly has become increasingly concerned with the operation of institutions and centers for post high school education.

It also seems very clear that the members of the General Assembly have been struggling with several major and minor professional problems in the field of post high school education in addition to the broad related questions of public policy. The pressures for appropriations are great and the evaluation of the relative merits of different proposals is complicated.

As the people of Indiana, in 1968, face the continuing problems of post high school education and the decisions as to what directions should be followed, there will need to be available to those who determine major policies and who make the crucial decisions the best and most complete information that can be assembled concerning the issues being discussed and the best professional guidance that can be secured to provide an objective long-range and state-wide point of view towards those issues.

STATE-WIDE PLANNING AND COORDINATION

Post high school education, and particularly public higher education, has grown so rapidly in the years since World War II that its overall character has greatly changed. Increases in the number of institutions, in the number of students, and in the variety of curricular offerings have not been matched in any previous period of comparable length. There are many more young people of college age in the population today; more of them are insisting on an opportunity for post high school education; and the needs of society in the computer age demand more, better, and more varied programs of post high school education for its citizens. These unprecedented developments have caused the public colleges and universities in the several states to request large increases in funds from the legislatures. These competing requests for funds from several institutions, the possibility of unnecessary overlapping and duplication of functions and services, the need to assure the people of the state that all essential educational services and opportunities are being provided for its youth, and the imperative need for systematic and continuous long-range planning have led state after state to establish some means for comprehensive and continuous coordination of all their post high school institutions and educational services. Increasingly, members of the legislative and executive branches of state government feel reluctant to make major decisions about such complicated matters as the establishment of new institutions, the expansion of others, the allocation of funds to each of them, and the approval of new programs. These officers of government recognize the need for the assistance and advice of a high level board, aided by a competent professional staff of educators to deal continuously on a state-wide basis with the problems of post high school education. It is not surprising, therefore, that forty-three states have already established some type of coordinating agency for the purpose.

In the years ahead the need for careful planning and the difficulties involved in allocating limited resources will grow because of the predictable increases in the number of young people demanding some form of post high school education. Comprehensive planning and coordination would be required on a state-wide basis even if no changes in the programs of the constituent institutions were required. Continuing analyses of entering classes reveal, however, that the additional students exhibit greater diversity of ability and interest. If the more widely varying academic characteristics of the ever-expanding student population are to be accommodated, the institutions must inaugurate a greater diversity of educational programs and a broader range of admission requirements than they have had in the past.

The variation of student abilities and interests has in recent years been paralleled by an increase in the number of occupations requiring advanced education different

from that previously offered by colleges and universities. The wide range of new vocations related to the use of computers offers striking examples of the demand for new types of educational programs beyond the high school. Developments in computer science and technology are constantly placing new responsibilities on educational institutions to train highly skilled personnel, varying from technician to Ph.D.'s in the engineering and mathematical sciences. A few years ago, the United States Bureau of Labor Statistics reported that for the first time in our history more than half of the employed persons in the United States worked in service, rather than in production, industries. This shift in the labor force has created demands for a greater variety of training programs connected with the needs of the service occupations. Many institutions which a few years ago offered only a limited number of degree or two-year educational programs now provide instruction in dozens of fields leading to new kinds of employment. This multiplication and diversification of educational offerings will unquestionably continue.

In earlier years when the programs of colleges and universities were comparatively simple, the cost of offering them constituted a much smaller proportion of the state's budget than it does today. The members of the legislatures and the governors could review the proposed budgetary items with considerable understanding of the purposes for which the various appropriations were being made. Now, however, the governmental units which request appropriations, from both the legislative and executive branches have become highly complex, and their fiscal needs have expanded greatly. The expansion in the budgetary needs of post high school educational institutions has been particularly rapid. Although the executive and legislative officers of the state government under the law have the responsibility to see that the funds which they appropriate provide balanced and coordinated programs of instruction suitable to the needs and interests of the youth of the state, they have neither the time nor access to the professional competence necessary to make a detailed review of the fiscal requests submitted to them by the various public institutions of higher education. A stage has now been reached at which these responsibilities can be discharged only with the assistance of a public body specifically empowered to plan and coordinate the state's program of higher education.

A "system of voluntary coordination" has existed among the four large State Universities for many years. Under this arrangement the four University Presidents and other administrative personnel have regularly held joint consultative conferences. Joint committees of the four Boards of Trustees and of staff members have been established, and they have achieved a certain degree of joint planning and joint budget presentation. The four Universities have interchanged information and reached some informal agreements on the appropriate functions and spheres of influence of each institution. These voluntary relationships among the four State Universities have unquestionably resulted in a degree of planning with consequent forestalling of unnecessary duplication and other advantages to the State. This coordinating device has, however, been a process in which all of the participants represented interests of the four existing State Universities. As spokesmen for these institutions, they inevitably reflected not only their long institutional histories and traditions but also their most cherished ambitions for future development. Among dynamic educational leaders, such aspirations are inevi-

table; and when appropriately restrained by considerations of the State's overall educational needs, they are desirable. Any responsible group of administrators of vision and social sensitivity would act in similar fashion. And Indiana has through the years been particularly fortunate in having at the head of its public colleges and universities educators of high ability and dedication. This "system of voluntary coordination", however, has not included a central staff of professionally qualified persons, unattached to any individual institution, charged with responsibility to assemble relevant data and to make long-range comprehensive plans for the future development of higher education in the State. Hence there has been no formal body to consider the overall need for post high school education in Indiana, gather information on the educational demands of high school graduates and their parents, and identify and assess the educational needs of the various social and economic interests and groups of the State.

The need for a comprehensive plan for higher education in Indiana can be observed in the development of regional centers. Through the years the two oldest and largest State Universities, Indiana University and Purdue University, have each extended their services over the State by establishing, in addition to the main campuses at Bloomington and Lafayette, "two systems" of regional centers. These universities were responding to a need in the absence of any other planning body. Indiana University has seven such centers with two in Indianapolis, Purdue has four, and Indiana State University one. In Chapter VII, the services and the future development of these centers is discussed; they can serve to illustrate the value of statewide planning and coordination. It is obvious that a central planning and coordinating body would have produced a more closely coordinated development of the State's post high school education efforts in these communities, a result which simply could not be achieved under the former system. If the experience of other states is instructive, a more unified plan of development would result in more varied services in higher education, a greater division of labor among the constituent institutions, and savings in staff and facilities.

ESTABLISHMENT OF A BOARD OF REGENTS

In view of all these factors, this Commission believes that the time has come in the State of Indiana when:

- 1. The General Assembly should establish a state-wide planning and coordinating Board of Regents, with responsibility for all public post high school education in the State. This Board should be appointed by July 1, 1969.**

It was stated earlier that only seven of the fifty states have not provided some kind of board to serve these functions of coordination and planning. It may have been somewhat to the disadvantage of Indiana to have delayed so much longer than its sister states in establishing this type of public body. On the other hand Indiana can profit from their various experiences. The Commission has heard the testimony of persons who have been involved in the work of similar boards in other states, and it has had the advice of other persons who have evaluated the operation of these agencies. This review of experience elsewhere as well as its own study of post high school education in Indiana led the Commission to conclude that a Board of

Regents should be established in Indiana at the earliest possible moment. Since considerable time must necessarily pass before such an agency can be properly staffed and put into effective operation, the General Assembly which meets in 1969 should act as promptly as possible in this matter.

In the act establishing the Board of Regents it should be given jurisdiction over all the publicly supported institutions, programs, and agencies of post high school education in the State of Indiana. At present these include:

- Ball State University at Muncie
- Indiana State University at Terre Haute
- Indiana University at Bloomington
- Purdue University at Lafayette
- The Regional Centers of the State Universities
- Vincennes University
- Indiana Vocational Technical College

The act should also provide that all public institutions, programs, agencies, or centers of post high school education, when established, should automatically fall under the jurisdiction of the Board of Regents.

Certain other agencies and commissions, considered later in this report, whose functions and responsibilities deal with post high school education should also fall under the jurisdiction of the Board of Regents or, in some cases, be absorbed by the Board.

2. **The Board of Regents should be composed of nine Indiana citizens, appointed by the Governor, with overlapping terms of four years, and eligible for reappointment. A member of the Board should be designated by the Governor to serve as chairman for the duration of his term. No member of the Board should be a trustee, officer, or employee of any public or private institution of post high school education in Indiana or of the state government. Members of the Board, if serving at the time, should retire on December 31st, next succeeding their 70th birthday.**

Except for the Constitutional restriction in Article 15, which limits to four years the tenure in any office created by the General Assembly, the Commission would have recommended terms of nine years for the members of the Board of Regents. A relatively long term of nine years would conform to the opinion of those who have studied such boards that it should be difficult for any appointing officer to control its policies or actions. The Commission would like to record its opinion that those persons and committees charged with the consideration of revisions to the Indiana Constitution give some thought to the removal of the restriction noted above so that the members of this Board, and perhaps other boards, might have terms longer than four years.

The members of this Board of Regents should be selected because they represent the highest quality of public-spirited citizen. They should be chosen because of their generally acknowledged and respected leadership in public affairs in Indiana and

because of their interest in the education of its citizens. Although this recommendation states that trustees, officers, and employees of post high school institutions and of the State government should be barred by law from appointment, it should be pointed out that such a person would become eligible if he resigned the position that prevented him from being considered. This restriction is designed to eliminate any possible and natural conflict of interest on the part of a person when the welfare of the institution which he represents might be affected by decisions pending before the Board of Regents on which he sits.

The Commission considered such matters as a legal stipulation requiring exact geographical representation on the Board according to Congressional districts or some other type of geographical area; or formally recognized representation from various interest groups in the State; or a mandated proportion of numbers from particular political parties. The Commission gave extensive consideration to these matters and studied related policies in other states, some of which have made such provisions while others have not. The Commission concluded that it should only recommend to succeeding Governors that the Board of Regents should be broadly representative of the major interests of the State and of its various geographical areas, leaving to them the selection of persons best able to discharge the important responsibilities of Board membership.

A Board of Regents with relatively few members has real advantages over a larger body. A small Board can function as a committee of the whole with greater certainty that its members can be present at both regular and special meetings. In the beginning at least, this will be important because the Board will probably have to meet at least once a month. Since the Board will be meeting frequently and will involve only a few persons, it will be possible to avoid conducting its operations by means of standing committees with special assignments. Experience shows that standing committees over a period of time tend to arrogate to themselves special competence on certain subjects to the neglect of the potential contribution of other members of the Board. Even worse, special standing committees sometimes presume to make professional and technical judgments which ought to be left to the Board's professional staff. The Board should, of course, make its own rules and regulations for the calling and the conduct of its meetings. The Board members should receive no compensation for their services but should be reimbursed by the State for actual expenses incurred in connection with the work of the Board.

FUNCTIONS OF THE BOARD OF REGENTS

3. The Board of Regents should:

- a. Make all policies and decisions relating to public post high school education other than those which normally fall within the internal affairs of the institutions and agencies for which it is responsible, except those reserved to the General Assembly and the Governor.**

This recommendation emphasizes in another way the proper relationship that should exist between the Board of Regents and the public institutions of higher education. The Board ought not undertake to make policies normally reserved to the officers

and faculty members of institutions of higher education. It ought to limit itself to the determination of such general overall policy, planning, and budget review as will assist the General Assembly and the Governor in visualizing the development of higher education in the State and in anticipating the resources needed to support it. Where controversies have arisen in other states which have established coordinating boards, they have often revolved around the board's invasion of institutional prerogatives. It is essential, therefore, that appointments to the Board of Regents be made from among men and women who have been accustomed to making general policy and leaving the administration of institutions to their own boards and officers.

It is even more important that the Board of Regents select an executive officer and other staff members who understand that the internal administration of institutions should be left to local officers and that amicable and effective relationships can be maintained with these officers only so long as the staff, as well as the Board, does not interfere with their internal operations. There will, of course, inevitably be times when the actions of the Board, on the advice of its professional staff, will restrain local institutions from undertaking developments which they consider desirable and necessary. If this were not true, the general planning and supervision which the Board of Regents is appointed to provide could be completely nullified. On the other hand, the effectiveness of the Board of Regents and its professional staff can in the last analysis be measured in terms of the extent to which all concerned feel, without selfish ambition or invidious emulation, that they are involved in a common enterprise.

- b. Have responsibility for making long and intermediate-range plans for all aspects of public post high school education in Indiana, including continuous review of such plans. In planning for public post high school education, the Board should take into account state relations with and the present and projected level of the educational activities of the private colleges.**

One of the primary functions of a Board of Regents is the making and continuous revision of a master plan of post high school education for the entire State. The Act which established this Commission provided that some kind of comprehensive State plan should be designed for the development of higher education over a period of twenty years. After considering this matter, the Commission decided that within the relatively short time available it would be impossible to develop a satisfactory comprehensive master plan for higher education in Indiana for so long a period. Moreover, it noted that almost every plan for post high school education in other states, covering even a decade, has had to be radically altered because of spiralling enrolments and the states' changing needs for new educational services. Accordingly, the Commission turned its attention to the mechanisms that should be established to make such a plan and to revise it periodically in terms of the changing conditions within the State. To this end, it has brought together certain bodies of fact which can be used as guidelines for these future developments.

It is the firm conviction of the Commission that the future development of post high school education in Indiana can only rest on a sound academic, economic, and social basis if the Board of Regents sets as one of its first responsibilities the making

of a master plan. Such a comprehensive plan can only be prepared in total form as a number of additional studies and surveys are made by the Board's professional staff, which will be referred to later. If such studies and analyses are to be efficiently conducted, all the constituent elements of post high school education supported by the State should be required by law to submit to the Board any information which it requests. The master-planning process should enable the Board of Regents to make recommendations directly to the Governor, the General Assembly, and the officers and governing boards of the constituent institutions concerning the continuing development of higher education in Indiana and the part which each institution should play in it. Public reports should also be made to the citizens of the State as often as necessary to keep them fully informed of the problems which the Board faces and the progress being made in dealing with them.

The legislation establishing the Board may require an official annual report from the Board as well as periodic reports on planning projects as they are carried out. Furthermore, even though agencies of the State may have no authority to require the private colleges and universities to submit the kinds of basic data needed in any long-range, comprehensive planning, the Board of Regents should make every effort to involve these institutions in such planning on a voluntary, cooperative basis. And before any stage in such a plan is completed and recommendations made by the Board for legislative or executive action, full consideration should be given to the effect of the proposed action on the privately supported institutions. The Board of Regents and the other State authorities cannot properly avoid the responsibility of providing a comprehensive program of public higher education for all Indiana citizens. There will be instances, however, in which unnecessary duplication and unwise expenditure of public funds can be prevented by the development of master planning encompassing both public and private institutions.

c. Approve all new public institutions and all major changes in policies and programs of public post high school education.

It would seem axiomatic that a Board of Regents, charged with responsibility for all post high school education, would, of necessity, have to have the final approval, subject only to the budgetary approval of the General Assembly and the Governor, of any new institution within its jurisdiction. The word "programs" in this recommendation is subject to definition and interpretation. This is an area where the Board of Regents must have clear approval authority if it is to exercise its planning and coordinating authority effectively. At the same time it is an area where an overzealous Board, or a Board too preoccupied with the detailed implementation of plans and purposes, might overstep the appropriate boundaries of its functions and responsibilities.

The State of Illinois has developed a sound statement with reference to the sphere of responsibility of its own Board of Higher Education. There the language used, in part, to define the Board's jurisdiction is "new unit of instruction, research, or public service" and this term is interpreted as including a "college, school, division, an institute, department or other unit in any field of instruction, research, or public service". It "does not include reasonable and moderate extensions of existing curricula, research or public service programs which have a direct relationship to existing programs".

Criteria such as these, appropriate to Indiana, to determine whether a particular proposed change or program is a "major" one should be laid down in the policies and regulations of the Board of Regents as soon as possible after it comes into being.

The other activities of the Board of Regents can not be successfully carried out without this power to approve major changes and new programs in the constituent institutions. As has been demonstrated again and again in the complex of institutions of higher education operated by the several states, each institution has its own ambitions and generally, where unrestrained, these may include the intention to offer all kinds of programs for all kinds of students. The resulting duplication of effort and overlapping of function in the extension of educational opportunity can only be prevented if the Board of Regents has the power to determine where and under what circumstances new services are to be established.

The Board of Regents should also have responsibility for approving all academic and nonacademic construction projects. Physical facilities should be an integral part of the master plan for the development of post high school education in the State. If institutions have the right to build facilities with their own revenue bonds or other funds, or to permit other agencies, such as institutionally related foundations, to do so without approval of a statewide planning agency, the mere existence of such buildings may impose conditions on the State which conflict directly with an overall master plan. Hence, construction activities and academic master planning can only proceed in a coordinated way if the Board of Regents has supervision of both.

- d. Review all budget requests of the public institutions of post high school education and, after such revisions as it may consider necessary, approve and transmit such requests to the budget agencies and appropriate offices of the state government; and**
 - (1) Approve all expenditures for the public institutions of post high school education from sources other than state revenues;**
 - (2) Prescribe uniform budgetary and accounting procedures;**
 - (3) Be responsible for the control of the expenditures of funds for all public institutions of post high school education.**

As early as 1925, Indiana and Purdue Universities were allocated funds by the General Assembly in approximately equal amounts. Twenty-five years later the President of Indiana University, Dr. Herman B Wells, said that, "This formula may have had merit in the beginning. . . . In recent years, however, the system has been inequitable and intolerable. The two institutions have different enrollment structures, and so on. To give each exactly the same amount regardless of need is unfair to the students and staff of both institutions and to the taxpayers".

Recognizing the problem of the need for a more realistic appraisal of the budgetary requests of the public colleges and universities, the 1949 General Assembly stipulated "that the four State universities and colleges shall cooperate in working out a formula to be presented periodically to the legislature and any other proper authorities for budgetary purposes". The formula was to be based on numbers of students, from Indiana and outside, costs per student, and other factors which it was hoped would pro-

duce a more realistic picture of the comparative needs of the institutions involved. While this procedure has been followed the presentation of clear, complete, and comparable budget requests of the State's post high school institutions and a realistic evaluation of their implications has not yet been achieved.

In 1961 the General Assembly drastically changed the budget procedure through the passing of the new Budget Agency Act and the new Department of Administration Act, both of which sought to bring greater order into the administrative and budget procedures of the State government. While, during these years, there was an issue as to the different roles of the executive and legislative branches of government in the budget procedure, there was also a growing concern about the way in which the budgets of the public Universities were presented. Difficulties were encountered by the General Assembly and its Budget Committee in connection with the 1963 and 1965 budget requests from the State Universities. In 1967 the General Assembly still had difficulty in considering the Universities' requests and in finally arriving at an appropriation figure. This was the situation in the last General Assembly in spite of the fact that the Universities had been instructed to prepare their operating fund requests on two bases, one following the older approach and the other employing the new concept of programmed budgeting. Under the old approach the requests for 1967-69 constituted a 59 per cent increase over the previous biennium. Under the new approach a 92 per cent increase was requested. Thus the budget Committee has had continued difficulty, over a period of several years, in developing an adequate, detailed plan for considering the requests from the public Universities.

If this situation is to be corrected, the Board of Regents must be charged with responsibility for coordinating institutional plans and activities and recommending suitable financial support for them. In its institutional budgetary review the Board will, in its discretion, add to, delete, or modify institutional proposals. Following its review the Board will submit its budgetary recommendations to the Governor and the General Assembly together with its reasons for the important actions taken. Through this process of review and recommendation, the Board of Regents will relieve the Governor and the General Assembly of the almost impossible task of making detailed analyses of budgetary requests. At the same time, this process will assure them that all the post high school educational needs of the State are being considered by an impartial body. Only if the Board of Regents has these powers of review and modification of institutional budgetary requests and of recommendation to the Governor and the General Assembly, will it be possible to carry out the provisions of a master plan through the control of the role, the programs, and the size of the various state-supported institutions.

The responsibility of the Board of Regents for funds from various sources ought to be clearly established. At present there are at least five sources of funds which the public post high school institutions may use. They are:

1. State appropriations
2. Student fees, tuition, and charges
3. Income from the sale of bonds
4. Gifts, grants and contracts
5. Earnings and sales

Sometimes money from several of these sources may be designated for a particular program or special project. Nevertheless, the Board of Regents must have authority to exercise the same kind of jurisdiction over any and all funds expended by or for these institutions, regardless of their source. This means that the Board must have complete and accurate information on all funds used for institutional purposes in order to do its assigned job of planning for and coordinating all aspects of post high school education. Financial reports to the Board should be required to include specific information concerning the source of all types of funds.

e. Be designated as the agency to receive federal funds for post high school education where such an agency is required by federal law and practice.

As a part of the responsibility involved in this function the Board of Regents should:

- (1) Maintain a reservoir of up-to-date information on Federally supported programs in order to keep institutions fully informed of the availability of various kinds of financial aid.
- (2) Provide liaison between Federal agencies and the public institutions of post high school education in Indiana.
- (3) Consolidate requests for Federal appropriations where this is in accordance with Federal law and practice.
- (4) Assess the financial implication of requests to the Federal government for contingent State support.

f. Appoint a Chancellor and such other full-time and part-time staff members, on recommendation of the Chancellor, as may be necessary to carry on the administrative, planning, and research work of the Board.

Whether or not the Board of Regents can function expeditiously and effectively will depend upon the number and kind of staff it has in its service. One of the most important functions it has to perform is the selection and appointment of its own executive officer. The title of the holder of this office should carry the connotation of high status in relation to the other executive officers in the system of higher education. The Commission believes that, in the case of Indiana, the title Chancellor would be most suitable since the chief executive officers of the constituent institutions already bear the title President. The Chancellor should be paid at a rate no less than that of the university presidents, and his professional administrative staff should be paid at a rate at least equal to the rate paid to the top professional staff members of the State Universities.

The Commission believes that at the outset the Board of Regents could maintain a relatively small permanent staff of highly trained professional persons to perform the functions required of it by the legislative and executive branches of the government and the other functions commonly discharged by such an office. In the early stages of the Board's work, a number of studies will have to be made to support the master plan. In order to conserve its financial resources and yet gain the most competent help with

its various problems, the Board of Regents ought to provide for consultants and short-term workers especially qualified to make studies in certain areas of higher education. These individuals and ad hoc working groups could be disbanded after the completion of their specific missions. In connection with some of its major responsibilities, the Board of Regents may require the continuing advice and assistance of other groups whose advice, judgments, and recommendations on specific areas of higher education would be especially valuable. One such group, a Council on Education for the Health Professions, is recommended later in this Report.

g. Establish such advisory councils, committees, or commissions as may be necessary to provide the information and judgments needed for the proper carrying out of its responsibilities.

In order to insure adequate representation of the interests of the institutions which compose the State's system of post high school education under the Board of Regents, the Board may want to establish Councils or Commissions which would provide communication between the members of the Board, the Chairman, or other representatives of the Boards of Trustees of those institutions, or their Presidents, or other administrative officers. Such advisory groups could be temporary or continuing depending on the nature of the matters the Board has under consideration.

chapter V

TWO-YEAR POST HIGH SCHOOL EDUCATION— COMMUNITY COLLEGES AND INDIANA VOCATIONAL TECHNICAL COLLEGE

The growth of science and technology in American society has markedly changed the requirements for both initial and continuing employment. Men and women who have completed only a secondary school program have increasing difficulty in finding gainful work, since more and more positions in commerce and industry call for two years of specialized post high school education.

These two-year programs constitute the most vigorous element in American higher education at the present time. Great diversity of opinion exists about their content, their organization, and their sponsorship; and a wider variety of models are being tested at this level than at any other in the educational system.

PRESENT TWO-YEAR PROGRAMS

In Indiana, the State's needs at this level are presently met by five types of institutions: the Indiana Vocational Technical College, the regional centers of the State Universities, Vincennes University, the private colleges, and the public secondary schools and area vocational schools.

Indiana Vocational Technical College (IVTC)

Recognition of the value of two-year post high school education led the Indiana General Assembly in 1963 to establish the Indiana Vocational Technical College to provide primarily non-baccalaureate programs for a variety of students—youngsters who had not graduated from high school, high school graduates who are not planning to attend college but who are interested in vocational technical programs of less than four years' duration, others who might have completed college but who wished to gain additional specific vocational or technical training, and adults who need additional training or retraining of a vocational or technical type.

IVTC is not really a single institution but rather a state-wide system which supervises programs in thirteen geographical regions of the State. It is governed by a Board of seven trustees appointed by the Governor. It is financed by State funds appropriated by the General Assembly and by Federal funds allocated by the State Board of Vocational and Technical Education. It has established thirteen geographical regions in the State (see Figure D.) and has appointed regional Boards of Trustees to govern regional

institutes in all regions with the exception of Region 8 which centers in Indianapolis and which currently is operated by the State-level Board.

Through the Fall of 1968, Indiana Vocational Technical College had undertaken very few programs. Those which were started in 1967 are the following:

Region 1—A program in practical nursing at St. Anthony's Hospital in Michigan City.

Region 4—In cooperation with Purdue University, a training program in fluid power; a course for operating room technicians at St. Elizabeth Hospital in Lafayette; a medical laboratory assistant program at the same hospital.

Region 5—In cooperation with Purdue and Indiana Universities, classes in industrial electronics.

Region 8—In the Mallory Regional Institute in Indianapolis, a large number of technology, skill training, and apprenticeship courses have been offered in cooperation with the Indianapolis School System. The Weir Cook Training Center in Indianapolis produces a wide variety of courses under the Manpower Development and Training Act, including trade and industrial training, self-improvement courses and basic adult education. Also in cooperation with Purdue University, the Weir Cook Center offered a course in air conditioning, refrigeration, and heating.

Region 9—In cooperation with Earlham College, courses in machine tool operation, blueprint reading, machine maintenance and repair.

Region 10—A program leading to Licensed Practical Nurse certification.

Region 11—A vocational school is functioning in cooperation with Indiana Vocational Technical College in addition to these programs now underway in the various regions.

State-wide programs in the food industries have been conducted by the Indiana Restaurant Association in cooperation with Indiana Vocational Technical College.

In the Fall of 1968, Indiana Vocational Technical College reported enrolments of 4,252 students, of whom 1,831 (1,222 full-time and 609 part-time) were registered for credit in the subjects listed below:

Accounting	Electronics
Air Conditioning	Machine Technology
Architectural Drafting	Machine Tool Technology
Auto Mechanic	Medical Assistant
Aviation Mechanic	Medical Laboratory Assistant
Commercial Art	Operating Room Technology
Computer Programming	Practical Nursing
Computer Technology	Secretarial Science
Culinary Art	Technical Mathematics
Data Processing	Welding
Drafting Technology	X-Ray Technology

**Figure D. INDIANA VOCATIONAL TECHNICAL COLLEGE
REGIONAL ORGANIZATION**

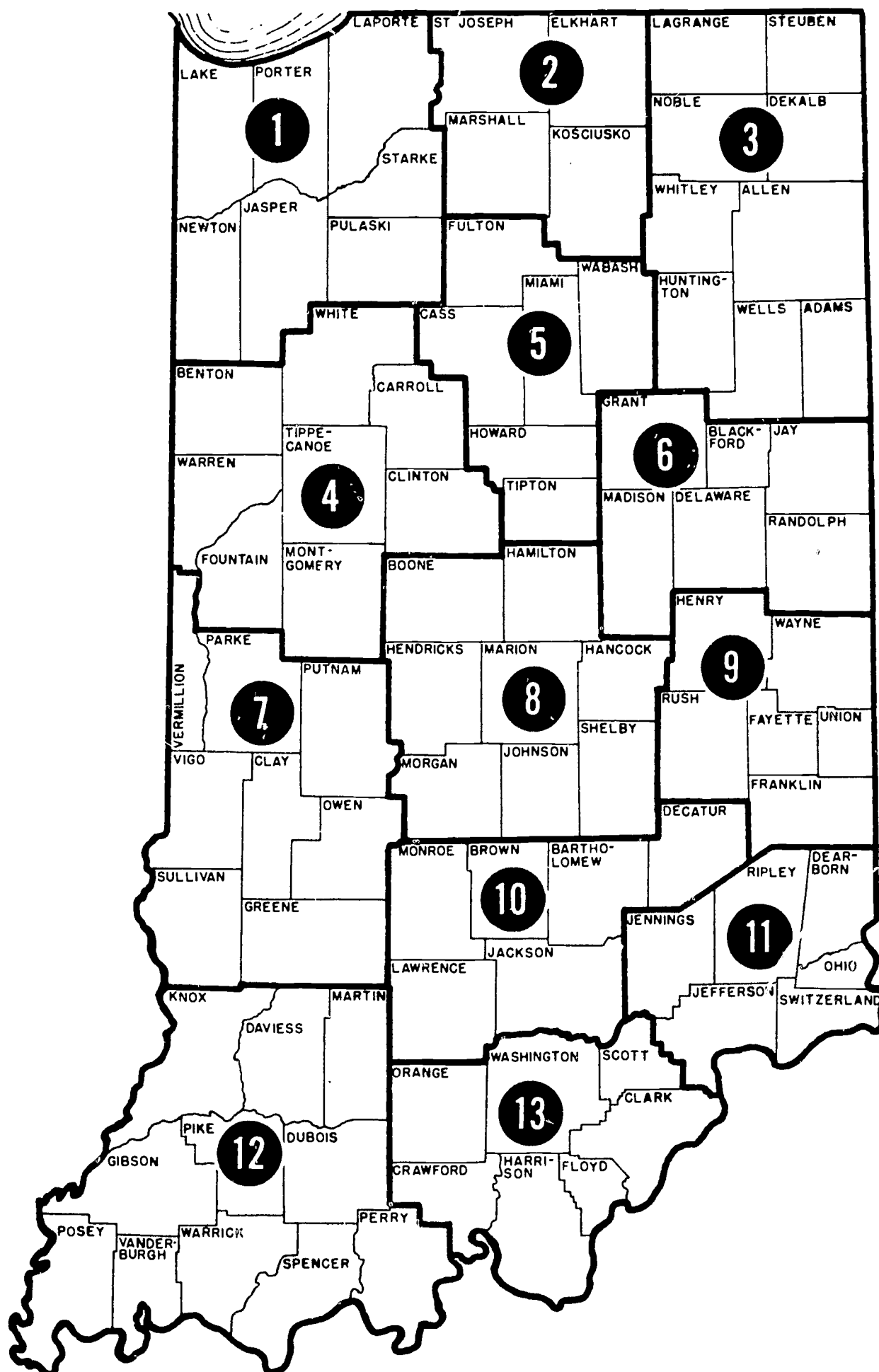


Table VII. Indiana Vocational Technical College Enrolments, 1967 and 1968

Region and Institute	1967 Enrolments			1968 Enrolments		
	Part-Time	Full-Time	Total	Full-Time	Part-Time	Total
I—Northwest Regional Institute, Michigan City				31		31
II—St. Joseph Valley Regional Institute, South Bend				349	398	747
III—Northeast Regional Institute						
IV—Tippewa Regional Institute, Lafayette	9	20	29	19		19
V—North Central Regional Institute, Kokomo	239		239		8	8
VI—East Central Regional Institute, Muncie						
VII—Wabash Valley Regional Institute, Terre Haute	215		215	53		53
VIII—Part 1, Mallory Regional Institute, Indianapolis	1034	118	1152	237	123	360
Part 2, Weir Cook Division, Indianapolis		362	362	236		236
IX—Whitewater Regional Institute, Richmond	219		219	7	49	56
X—White River Valley Regional Institute, Columbus				25	25	50
XI—Part 1—Ohio Valley Regional Institute						
Part 2—Southeastern Indiana Vocational School, Versailles				155	6	161
XII—Lincolnland Regional Institute, Evansville				110		110
XIII—George Rogers Clark Regional Institute						
TOTAL	1716	500	2216	1222	609	1831

Non-credit also in 1968 as follows:

Region II— 551
 V— 169
 VII— 231
 VIII-1— 896
 X— 17
 XI-2— 28
 XII— 105
 Ind. Restaurant Assoc.— 424
TOTAL **2421**

IVTC Has: 13 Regions

9 Regions with One Institute (I, II, IV, V, VI, VII, IX, X, and XII)
 1 Region with two Divisions located (VIII)
 1 Region with two parts, one of which is located (XI)
 2 Regions with no institutes located as yet (III and XIII)
 12 institutes have been established, 11 which reported enrolments for 1968 (I, II, IV, V, VII, VIII, IX, X, XI, AND XII) and one (VI) which did not.

Data concerning the enrolments in the various regions of Indiana Vocational Technical College are given in Table VII.

Regional Centers of Indiana and Purdue Universities¹

In addition to the Indiana Vocational Technical College, the Regional Centers of Purdue University and Indiana University offer two-year certificates and some career programs.

Indiana University offers the Associate of Arts in Nursing and Certificates in Humanities, Science, Social Science, Accounting, and Management and Administration at six of its Centers (Fort Wayne, Indianapolis, Kokomo, Northwest, South Bend, and Southeastern) except that there is no Nursing or Office Management at South Bend, and at Fort Wayne there is, in addition to those fields indicated above, Medical Technology and Dental Hygiene. Purdue offers a range of sixteen Technology programs and also a program in Nursing at its four Regional Centers.

Students at the regional campuses must meet the same admission requirements as they do at the respective residential campuses and can transfer freely from the regional campus to the residential campus. At the same time the academic limitation or restriction in admission to most programs at the residential campus applies equally to the same programs at the regional campuses. Students below the middle of their high school graduating class, and who want a general liberal arts course, whether it be for two years or four years, are therefore no better off because of the geographic availability of a regional campus than they are at the residential campuses of the four State Universities. And furthermore, as shown in Table XXI on page 91, the costs to a student attending a regional campus are higher than those charged at the respective residential campuses.

Vincennes University

Vincennes University is the only public two-year college in the State of Indiana. Its extensive offerings are listed in Table VIII. Admission standards at Vincennes are considerably lower than for the State Universities with the consequence that Vincennes has a rapidly increasing enrolment, literally from all parts of the State, and a program which is expanding in a wide variety of areas with its broad scope of offerings in both terminal programs and in programs designed for students planning to transfer for additional college work beyond the first two years. Vincennes University constitutes an excellent example of a comprehensive community college.

Table VIII. Two-Year Programs at Vincennes University

<u>Transfer Programs</u>	<u>Terminal Programs</u>
Liberal Arts	Electronics Technology
Elementary Education	Drafting Technology
Secondary Education	Secretarial Data Processing
Nursing Program (A.S. Degree)	Science Data Processing

¹These Regional Centers are discussed at greater length in Chapter VII.

Table VIII. (Continued)

<u>Transfer Programs</u>	<u>Terminal Programs</u>
Practical Nursing	Industrial Data Processing
Agriculture	General Business
Pre-Engineering	Clerk-Typist
Pre-Medical	Two-Year Accounting
Pre-Dental	Secretarial, Two-Year
Pre-Optometry	Secretarial, One-Year
Pre-Veterinary	Laboratory Technician
Pre-Pharmacy	Aviation Mechanics
Home Economics	Graphic Reproduction
Pre-Law	Linotype
Business Administration	Distributive Education
Pre-Medical Record Librarian	Journalism
Pre-Forestry	Aviation Flight Technology
Medical Technology	Recreation Leadership
Distributive Education	Food Service Technology
Journalism	Machine Technology

Although the public post high school educational institutions have made some efforts to provide two-year programs, as described above, the range of offerings in the general education, liberal arts, and vocational fields, outside of the purely technical areas, is limited in scope, and is greatly restricted in terms of geographic accessibility to large proportions of the State's high school graduates. Illinois, with more than 100 different two-year programs, many of which are offered in several locations in the State, and a large number of other states that have already developed state-wide systems of two-year institutions have demonstrated what could be accomplished in Indiana with a similar approach.

The Private Colleges

In an effort to help fill a need, the private colleges of Indiana also offer a variety of less than four-year programs. Table IX lists these programs.

Thus all branches of post high school education in Indiana are attempting to provide courses of study to meet the needs of industry, communities, and individual citizens, but without any effective state-wide planning or coordination.

School Districts

At the present time the local school districts take the lead in adult education in most urban areas of the State. They sometimes operate vocational high schools or coordinate the efforts of other agencies with their own and usually house the programs in their facilities. Adult education responsibility needs to be defined for the post high school educational institutions of the State to insure systematic and comprehensive coverage. Technical and comprehensive two-year institutions seem best suited to coordinate this activity with the public school districts.

Table IX. Less than four-year programs in Indiana Private Colleges

Anderson College—Medical Technology in cooperation with local hospital
Pre-Nursing (1 year)

Bethel College—Medical Technology

University of Evansville—A.A. degree—General Ed; Art, Journalism, Music, Religion,
Business Administration, Office Management, Home Economics,
and Applied Science

Fort Wayne Bible College—Three-year diploma program in Bible

Goshen College—One-year Theology program

Indiana Central College—A.A. in science (includes two-year nursing degree)

Indiana Institute of Technology—Two-year General Education program

Manchester College—Secretarial Science program

Oakland City College—One and two-year programs in Accounting and Secretarial
Science

Tri-State College—Two-year certification program in Information Processing Computer
Technology

In Indiana there is a definite lack of facilities and programs to serve:

1. Students who would like to study while living at home and who would like to pursue non-technical fields, particularly service-oriented occupations. There are now no opportunities to balance the technical training with liberal arts training in less than four-year institutions in Indiana.
2. A vast number of high school graduates in Indiana who are not in the top half of their classes. Vincennes University cannot take all the students who wish to go to college but are ineligible because of the admissions standards of the four State Universities. The technical programs of Indiana Vocational Technical College and some of the regional campuses which do not have the high admission standards are not appropriate to many of these post high school students who desire and can profit from post high school education.
3. The potentially productive student who has failed in a four-year institution in Indiana. Those individuals who attempt college at a four-year private or public institution and find that they are unable to succeed but are still potentially productive and interested in a liberal arts or non-technical field have a difficult time finding an opportunity to continue their education in Indiana.
4. Those students who prefer a genuinely collegiate atmosphere, for study of less than four years, as opposed to a technical trade school.
5. Many students interested in job areas for which there is a great need for trained manpower throughout the State and no programs at present. Although Indiana Vocational Technical College is beginning some of these programs they are not uniformly available nor comprehensive enough in scope to meet the needs of a State as diversified as Indiana.
6. Those who start an Indiana Vocational Technical College program and wish

to transfer to liberal arts programs or vice versa. They must now change institutions and cannot transfer easily from one program to another.

7. Students who are capable and wish a quality education but who cannot afford the tuition and living expenses of public post high school institutions or the private colleges. Community colleges with high quality arts and science programs for transfer students would enable a considerable number of this group to commence their college careers in an economic fashion.

8. Those who want some higher education to enhance their lives as individuals and citizens of the State but are not interested in pursuing a degree program. Accessible community colleges with general education programs developed for this purpose might prove both productive and effective for many of these persons who may not wish four years of expensive college education.

9. Those who lack the ability for professional education, or the interest to undertake four years of collegiate arts and sciences, yet who can qualify for a related profession requiring less training if they had community college education focused on career preparation which is not technical in nature and which is accompanied by general education suited to their interests.

10. Adults who need readily accessible opportunities for continuing education as a means of increasing their enjoyment of life, as citizens wishing to understand fully the problems of the society in which they live, or as workers trying to advance in their callings or who are forced to prepare themselves for new occupations because of the changes which are occurring with increasing rapidity in our economic and social life.

THE COMMUNITY COLLEGE IDEA

The junior, or community, college has had a spectacular growth in the United States. They have grown most rapidly in California, Florida, New York, and Texas, and in the midwestern states of Illinois, Iowa, Michigan and Wisconsin. Junior colleges sprang up rapidly in states which were predominantly rural, committed to publicly supported higher education, and in favor of using educational institutions as a means of social and civic improvement. Most of the states now have, or have started action to develop, public junior colleges as a part of their systems of higher education.

The diversity with respect to organization and control of the public community colleges can be briefly highlighted. There are several basic types of sponsorship and control: state, city or county, local school district, or community college district. As the community colleges of the country have become larger in size—California has more than 15 junior college campuses with 10,000 or more students each—and more complex in their problems of support and governance, the community college district has become increasingly preferred because of its flexibility and its stable support. Since it represents an entity devoted solely to developing and maintaining the college for its unique purposes, it is generally felt to be a more effective governing instrument and more responsive to the needs of the community as well as the college.

To attain community college status, an institution must first of all be accessible geographically. This has come to mean more and more commonly a college within reasonable commuting distance of a majority of the citizens to be served.

In Figure E the locations of all public and private colleges in Indiana, including Indiana Vocational Technical College, and their institutes and centers are indicated. While it can be shown that most of the high school graduates of Indiana live within a twenty-five mile radius of some post high school educational institution many of these institutions are private colleges and universities with relatively high tuition and high admission requirements. Even though a majority of the high school graduates may live within a twenty-five mile commuting distance of a public university or a regional campus of such a university the fact remains, as indicated above, that the offerings of the regional campuses are frequently restricted in scope. To be admitted to the kinds of programs many high school graduates may need and desire to follow and still live at home they might very well need to commute fifty, seventy-five, or one hundred miles or more to where such courses are offered.

Cost is an essential matter as well. Community colleges can generally offer more economical higher education to students than do many other types of colleges. First of all, some are tuition free; all tend to charge considerably lower tuition than do their sister institutions, especially the private colleges. To fulfill their mission, community colleges must keep their tuition quite low, and provide for loans, scholarships, and other forms of financial aid so that no serious student is denied the opportunity for post high school education for financial reasons. Another major cost of college attendance is frequently that of room and board away from home. The locally accessible college enables many to attend while living at home; this frequently represents the difference between going and not going to college. Furthermore, community college students tend to be working students. A high proportion work part time while attending college, and an even greater number work during the summer and other vacations.

Finally, community colleges are accessible academically to a wide range of students. They are non-selective or "open door" in philosophy because it is their function to provide an appropriate variety of educational opportunities and programs to increasing numbers of students. Students with poor admissions credentials will have to earn their admission to some programs by demonstrating capabilities in developmental, preparatory programs. Just as is true in four-year colleges, community colleges cannot afford to squander limited resources on demonstrably poor risks. The community college is no panacea for academic difficulties; it can only offer reasonable opportunities to overcome them through remedial instruction.

The necessity for being comprehensive is easily perceived in relation to being accessible. If a community college is going to serve a large proportion of the citizens of the community, it has to embrace a wide range of purposes, provide the breadth of program essential to meet their needs, and develop the ability to deal with the wide range of students thus attracted. A variety of purposes is commonly ascribed to community colleges—general education, transfer courses, career programs, adult opportunities, developmental or remedial instruction, guidance services and community service. While each institution cannot hope to fulfill all such functions equally well, it must show the willingness to venture in new directions. Frequently this means developing new programs for specific ends, and the comprehensiveness of the community college curriculum results.

A final characteristic flows of necessity out of the others. If the community college is accessible, people will bring to it their changing educational needs. If the community college is comprehensive, it will adapt to embrace new programs. As communities change new problems develop and many of these problems will merit the attention of an institution centered on community needs. As adults move through life encountering new and changing demands, the institution dedicated to fulfilling the life-long needs of community residents will have to initiate new programs and services.

RELATIONSHIP OF COMMUNITY COLLEGES TO OTHER EDUCATIONAL INSTITUTIONS IN THE STATE

In order to examine the relationships between community colleges and other institutions, it is necessary to make certain assumptions regarding the nature of those institutions. This section examines the primary role of other institutions in order to anticipate some of the problems that might arise if an expanded type of collegiate institution, the community college, is introduced into the present system.

Private Institutions

Indiana has depended heavily on its heritage of private institutions to offer a very substantial part of its higher education. It is assumed that they will continue to fulfill their previous roles; they will probably expand somewhat in order to serve an increasing number but a decreasing proportion of Indiana's youth. The need for community colleges would not be diminished by the expansion of the private institutions. Neither would the establishment of community colleges have any deleterious effect on the private colleges, since the need for facilities will greatly exceed the combined resources of the present and expanded public and private institutions.

One relationship with the private colleges is of potential importance: the possibility of community college graduates seeking to transfer to private institutions for upper-division work. It would be advantageous to private and community colleges alike to establish satisfactory relationships regarding the transfer of students. Certainly it would be of benefit to many community college students to have this avenue of further higher education open to them.

State Universities

Certain assumptions regarding the Universities are necessary in order to understand the relationships between them and potential community colleges that may develop. The four Universities should probably assume increasingly specialized educational roles in Indiana in the future. This development would appear advantageous both for the State and for the Universities. By concentrating the substantial public resources devoted to the Universities on tasks for which they are uniquely fitted, the State will stand to benefit much more fully from its investment than if the Universities are allowed to expend resources on tasks which other institutions can perform as adequately and perhaps more economically. For the Universities, it would appear advantageous to address themselves primarily to those functions which are characteristic of the great state universities of our land: the prosecution of research in the arts, the sciences, and the pro-

can perform; the preparation of leaders, scholars, scientists, and other professionals; the provision of high quality education for a small proportion of undergraduate students, those unusually capable persons who are interested in the type of instruction which only the university can offer; and the service function through which the university, taking advantage of its special and unusual competence, offers its services to institutions and groups in the community, the state, the nation, and the world. It would probably be better if those students who enter one of the State Universities and leave by the end of their second year or before had originally pursued their post high school education in a two-year institution like a community college.

A state-wide system of post high school education, comprehensive enough to perform the breadth of functions demanded, appears to be essential if the State is to progress. In such a system the State Universities perform their special roles while other institutions perform theirs. This means that a growing number of state colleges and community colleges take on the function of educating an increasing proportion of students while the State Universities concentrate largely on the specialized functions outlined above.

It is important to note that in many of the other states which have developed community college systems, the state university has been an important contributor to the development of these colleges. This reflects both enlightened self-interest and a genuine concern for the good of the state. The self-interest comes from the realization that a university, to be great, must be relieved of some of the responsibility for educating the very large numbers demanding post high school education. It must be free to set admissions requirements in harmony with its educational purposes and programs. To enable the university to do so, however, other public institutions must be developed to meet the great and increasing demand for higher education. These institutions will be different from the State Universities, for they will perform somewhat different functions, but they are just as essential to the welfare of the State. Hence, both the State Universities' self-interests and their concern for the welfare of the State provide substantial reasons for them to support the other elements in the State's system of higher education.

Regional Campuses

The regional centers of Indiana State University, Indiana University, and Purdue University, after a period of indeterminate status, have recently been designated Regional Campuses and, policy-wise, ascribed an important part in the development of the three Universities. They are envisioned as approximately doubling in enrolment of full-time students between 1968 and 1973. They offer, in various combinations on different campuses, transfer arts and sciences courses for selected students, and semi-professional career preparation for others.

To a limited extent these programs and functions overlap with those of the potential community colleges—limited, that is, because the community college would offer arts and sciences opportunities to a wider range of students, general education programs for a still greater range, and occupational preparation in a broader range of technical and semi-professional fields than those found in the extension centers.

With respect to adult activities, the same comparison seems to hold: the community college would normally perform activities essentially similar to those of the Regional Campuses, but it would serve a wider range of adults because of its fundamental commitment to the community and, consequently, its responsibility to provide community services. In some cases, the Regional Campus might become an autonomous four-year college offering the usual curricula in arts and sciences for those who are qualified to undertake such work, interested in doing so, and able to afford it financially. It would, in all probability, continue with any professional offerings already developed, such as the technical curricula of the Purdue Centers.

Other State Institutions and Agencies

There are a number of overlappings and conflicts among the agencies in the State concerned with technical and vocational education. Occupational preparation is so crucial a matter that it may be necessary to allow different institutions to perform similar tasks. Hopefully, however, these tasks will be performed in different geographic areas, so that undesirable duplication of efforts and programs will be avoided. To this end it would seem advisable that where area vocational-technical schools are being launched, community colleges, as they become established, should not develop any skill programs that the vocational school is capable of operating. Conversely, any "technical" programs operated by these schools which would be better programs if translated into full-fledged associate degree programs within a community college should be relinquished to a community college when one develops and is capable of operating a high quality program. Careful coordination of planning at the local level should be a primary ingredient. The Board of Regents may have to see that such a policy is adopted, and Department of Public Instruction leadership should be exerted in accordance with it.

If comprehensive high schools and comprehensive community colleges are the patterns to be developed, relationships between high schools and local community colleges will be close; for many students the local college would be the logical, economic mode of obtaining education beyond the high school, no matter what their ultimate academic or vocational objective might be. If area vocational-technical schools are the pattern selected, the problem becomes one of coordination between separate institutions rather than vertical articulation of closely related institutions. Hopefully the area vocational-technical school might bring vocational opportunities to students in sparsely settled areas where small high schools alone cannot provide such opportunity.

The development of community colleges and area vocational schools would also complicate the problem of articulating programs for adults. If the full range of programs is offered in a single institution, the problem is much simpler. Again, cooperative planning among the various institutions in the same geographic area will be called for.

A second major policy issue has to do with the organization of the Department of Public Instruction with respect to vocational education. Community college leadership would have responsibility for occupational programs just as it has for arts and sciences, general education and the like. On the other hand, the Department of Public Instruction is also concerned with the nature of occupational programs developed in the State. The answer would seem to lie in the cooperative development of a plan by members of the various agencies.

CONCLUSIONS AND RECOMMENDATIONS

Certain conclusions, leading to definite recommendations, can be arrived at from this study of two-year post high school programs and needs:

1. Current and projected post high school programs less than four years in length do not fully coincide with employment trends in Indiana, particularly in non-industrial fields such as business, retail trade, transportation, community and government services, and the health and related fields.

2. Present and projected offerings appear to be too narrow to affect unemployment in the wide range of occupational fields involved.

3. The range and numbers of present and projected programs are too limited to provide diversification sufficient to attract to the State business and industry outside the traditional technical fields.

4. The present system of post high school education in Indiana limits the 18-25 year old in the bottom half of his high school class to a very narrow range of vocational technical programs.

5. The present system of post high school education in Indiana greatly limits those adults who desire retraining, leisure time, and cultural opportunities.

6. There are both financial and geographic barriers to attending college in Indiana.

7. There are relatively few developmental or remedial programs available to help students qualify for admission to college.

8. There are only very limited opportunities for students who fail or who drop out to continue post high school education at a different level, especially in general education or general education-related programs.

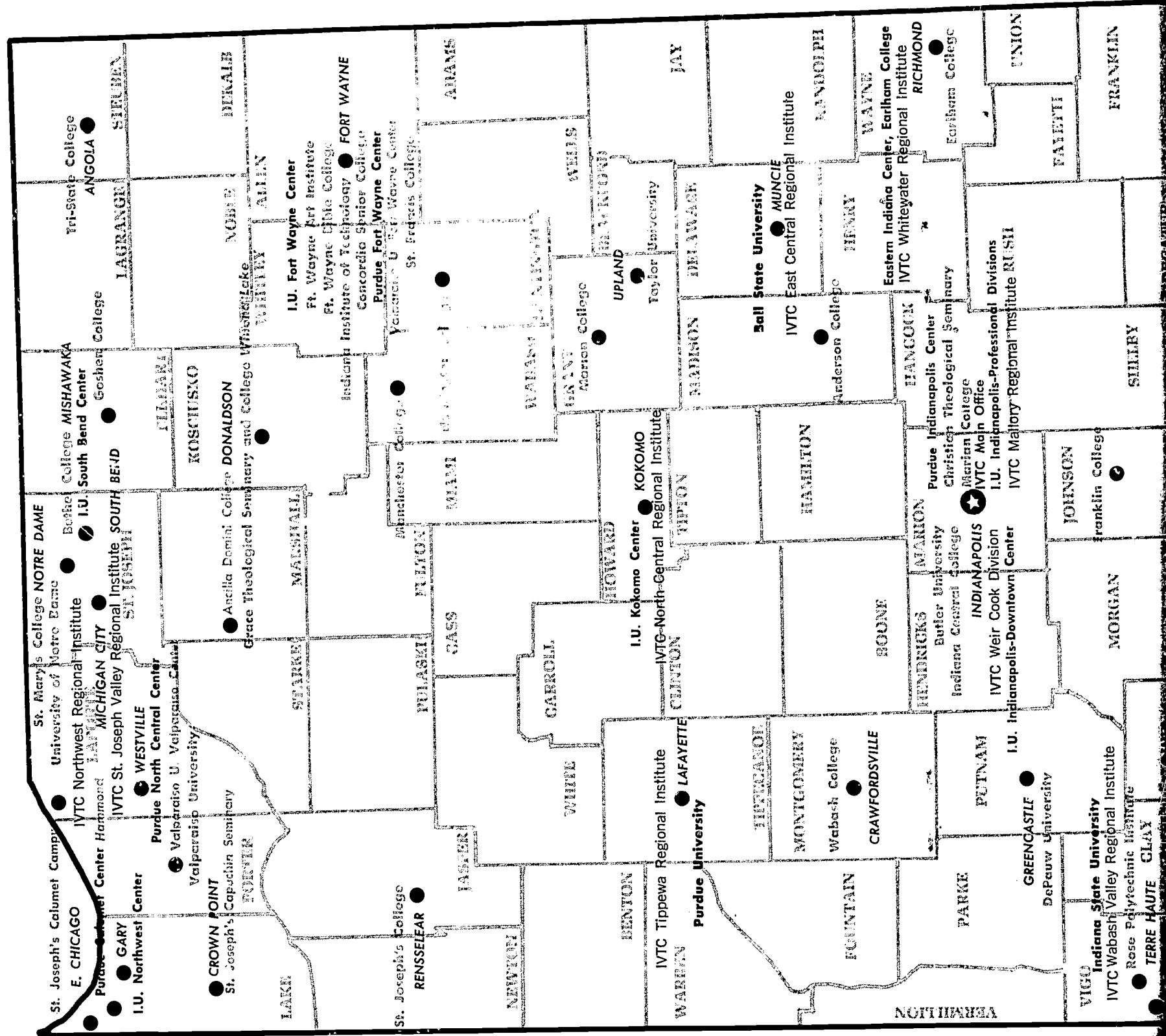
9. There is little state-wide coordination or planning among institutions offering two-year post high school programs.

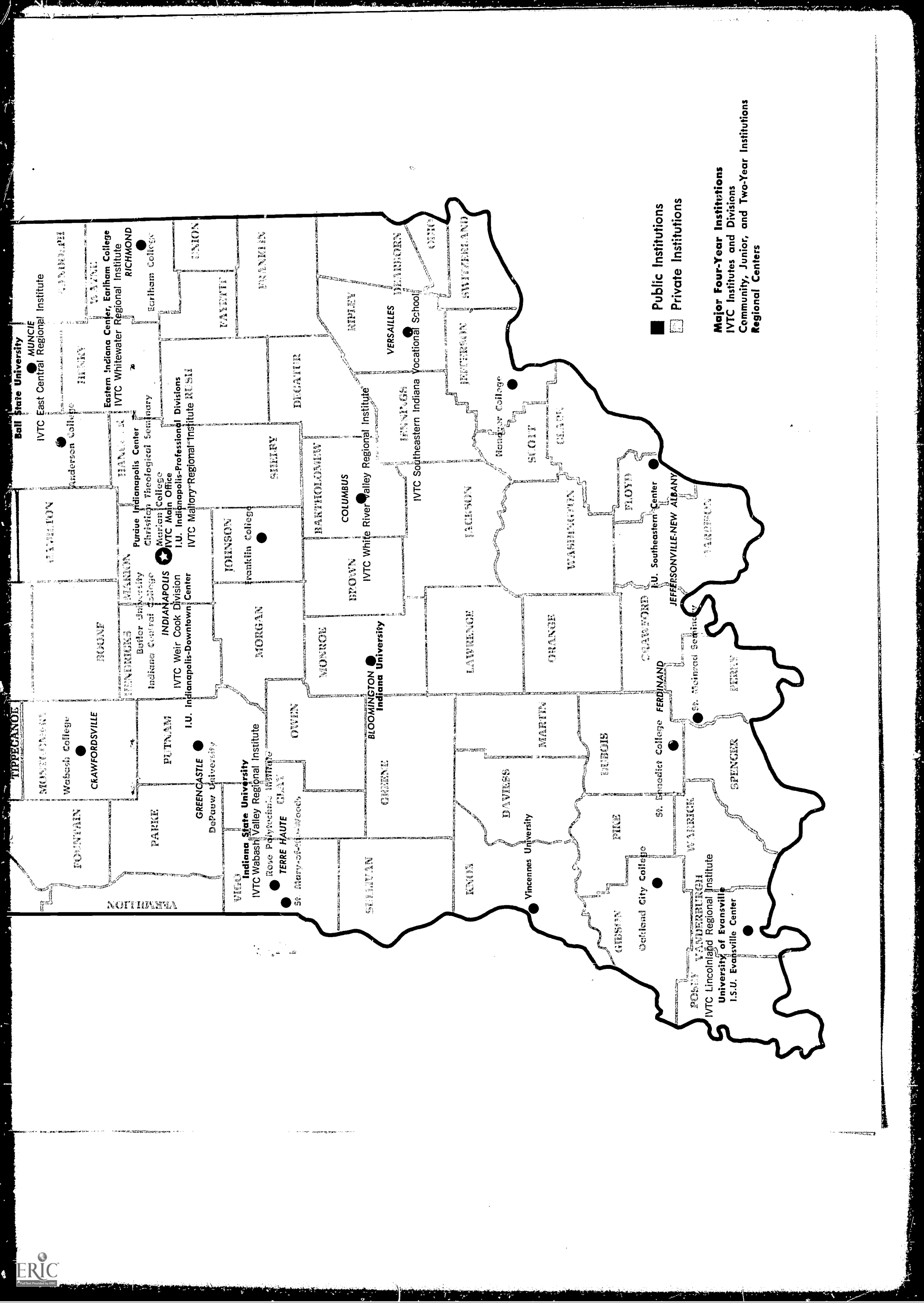
In light of these conclusions it seems clear that the full range of educational needs of the State of Indiana are not now being met. The Commission makes the following recommendations for the purpose of providing for the orderly development of two-year post high school programs and for the coordination needed so that such programs may be appropriately articulated into the whole plan for post high school education in the State:

4. **The General Assembly should authorize the Board of Regents to develop a system of comprehensive community colleges by expanding the Indiana Vocational Technical College. The present Board of the Indiana Vocational Technical College should be converted into a State Community College Board, which, with its staff, should be responsible to the Board of Regents. There should be local community college boards for each community college, or for groups of community colleges closely related geographically.**

2

Figure E **GEOGRAPHICAL LOCATION OF INDIANA INSTITUTIONS OF POST HIGH SCHOOL EDUCATION**





Public Institutions
Private Institutions

Major Four-Year Institutions
IVTC Institutes and Divisions
Community, Junior, and Two-Year Institutions
Regional Centers

This system should provide comprehensive educational programs below the baccalaureate degree level within reasonable driving range of all, or almost all, of the citizens of Indiana at a cost to the student which he is able to meet.

The community college system should be considered a part of the whole state-wide program of public post high school education of Indiana, under the Board of Regents.

Initially, the finances for community colleges should come largely from State revenues, and from student fees and tuition. It is desirable that a part of the financial support be secured from the local districts or regions, but the property tax should not be used for this purpose unless and until there is a reorganization of the tax structure.

The educational programs of these community colleges should be designed to meet the needs of various groups of high school graduates and the needs of industry and other segments and sectors of the population. Each vocational and technical program should include a portion of general education. Some programs may be wholly general or college transfer programs.

Programs should be developed with these guidelines in mind:

- (1) the widest possible opportunity of program choice for each individual should be provided;
- (2) program planning should be coordinated to avoid unnecessary duplication;
- (3) diverse program opportunities leading to associate degrees, certificates, diplomas and other awards should be offered;
- (4) programs should be offered at the lowest possible cost to the student;
- (5) quality education should be demanded in all programs;
- (6) first priority should be given to the development of programs to serve the citizens in the regions in which the community colleges are located.

High priority should be given to the immediate expansion of the types of vocational technical programs now offered and proposed by Indiana Vocational Technical College. Additional programs should be added when and if local regional studies show that they are needed.

Regional programs should take into account programs offered by secondary schools as well as other colleges and universities (public and private) located in the region to avoid unnecessary duplication and to encourage cooperative planning.

There should be a State Community College Board, composed entirely of lay citizens, for the community college system, responsible to the Board of Regents, with the present Indiana Vocational Technical College Board serving during an interim period, in accordance with policies and procedures determined by the Board of Regents.

The legislation expanding Indiana Vocational Technical College into a comprehensive community college system should expand the composition of the state-wide

board to include persons representing other than technical and vocational fields, the manner of appointing board members shifting from gubernatorial appointment to appointment by the Board of Regents.

An administrative officer and staff should be appointed by the State Community College Board, with the approval of and in accordance with policies of the Board of Regents. The present administration and staff of Indiana Vocational Technical College should serve during an interim period.

Initially the community colleges should be organized in accordance with the Indiana Vocational Technical College regions. One of the first responsibilities of the State Community College Board and the Board of Regents will be to review the present regional arrangement, and make such changes, possibly including a new geographical plan, as may be appropriate.

There should be boards for each community college, or for each district, to organize and plan the institutional programs. These local boards should be responsible to the State Community College Board, in accordance with the policies and procedures of the Board of Regents. The regional boards of Indiana Vocational Technical College should serve during an interim period.

The Board of Regents should determine the organizational structure involving the State Community College Board, the local community college boards, the state-wide administrative organization, including the qualifications, terms, responsibilities of the persons involved, and the relationships of one group to the other and to the Board of Regents.

Adoption of this plan will expand those opportunities for vocational and technical education, the need for which has long been recognized and which led to the establishment of Indiana Vocational Technical College in the first place; and will also provide opportunities for post high school education of other kinds for large numbers of Indiana youth who, today, do not qualify for admission to the State's four-year colleges, public and private, and/or do not have the financial resources to pay the current costs of attending college away from home.

EDUCATION FOR THE HEALTH PROFESSIONS

One of the most urgent and complex problems of post high school education in Indiana is that of education for those professions which look after the health of the citizens and the conditions in the communities and in the State that affect their health.

While this problem is particularly acute in Indiana, it is, like other major problems, a matter of serious national concern as well. At the annual meetings of the Association of American Medical Colleges in November, 1968, a far reaching report was presented and endorsed suggesting drastic changes in the pattern of medical education in the United States.

The report strongly urged that medical schools "must now actively revise the content and methods used in the total span of the education of the physician so that his professional competence will be most relevant to meeting the changing health needs of the people." It went on to urge medical schools to: (1) increase their output of physicians by admitting larger numbers from "geographic areas, economic backgrounds, and ethnic groups" that are not adequately represented in the medical profession today; (2) individualize the teaching of medical school students; (3) improve the procedures for revising the curriculum by involving students and the entire faculty; and (4) assume a responsibility for continuing education of the physician and for the way medical services are organized in the community.

The advances in medical science, knowledge, and technology, the philosophy of adequate and universal medical care with its concomitant state and national programs, the shortage of adequately prepared personnel in all types of health professions, and the rapidly rising costs of medical and hospital service have all served to focus public attention on this major problem.

The period following World War II has witnessed many changes in the effectiveness of health care and the ways in which it is provided, such as:

1. The hospital has increasingly become the focus for diagnostic and definitive treatment.
2. The doctor has at his command new skill, knowledge, and treatment procedures that make him far more effective than his colleague of only 25 years ago.
3. The demands for the physician's skills and upon his time and energy have grown.

4. Other members of the health team—laboratory technicians, dental hygienists, dental assistants, physiotherapists, X-ray technicians, inhalation therapists, operation room technicians—have been trained to assist physicians and to give specific care and treatment under supervision.

5. The nursing profession has accepted new and added responsibilities in the hospital and in the physicians' offices, as well as in public health nursing and home care. In the hospital setting the professional nurse is the leader of an expanded patient care team that includes the licensed practical nurse, nursing aide, orderly, ward secretary, and many others.

6. The medical social worker has become a significant resource to many patients in making a post-hospital adjustment to their illnesses and a return to an active and self-sustaining life.

7. The Medicare and Medicaid Legislation, as well as private "third-party" financial mechanisms, have made health care available to people who had previously been unable to use fully the resources of our health care system.

8. This country, and the world, have experienced a population growth which by sheer numbers seriously taxes our existing health care system.

In the health fields the number of trained practitioners for a given segment of the population is one basic measure of the effectiveness of health care. On such measures Indiana does not compare favorably even with the smaller or less affluent states. The following figures indicate where Indiana ranks among the fifty states on certain pertinent indices:

Table X. Standing of Indiana, Among the 50 States, on Population, Per Capita Income, and Various Measures Related to the Health Professions (as of 1965-66)

	Rank of Indiana Among the 50 States	Basis for Indiana's Rank
Population	11th	4,877,000 persons
Per Capita Income	15th	\$3,061/person
Medical Students	25th ¹	15.6/100,000 persons
Interns	38th	3.7/100,000 persons
Physicians	35th	105/100,000 persons
Dentists	28th	45/100,000 persons
Registered Nurses	35th	248/100,000 persons
Licensed Practical Nurses	44th	84/100,000 persons

Health services for the people of Indiana will be adequate in future years only to the extent that there are a sufficient number of health professionals and that they are adequately educated and trained. The health care system will only be as effective and economical as its educational base allows it to be.

¹ A subsequent increase in the student body at Indiana University Medical Center has raised Indiana's rank to 21st in number of medical students per 100,000 population.

MEDICAL EDUCATION

There is only one medical school in Indiana, located at the Indiana University Medical Center in Indianapolis. Those responsible for medical education at that center and some of their colleagues at the main campus of Indiana University at Bloomington have been concerned for several years about the relative shortage of physicians in Indiana and have done several things to counteract the trend. The facilities and the staff of the Medical School have been gradually expanded to permit larger entering classes with a consequent increase in the number of M.D. degrees awarded. This trend, for the last ten years, is shown in Table XI. These figures, when compared with those of other medical schools, show that the School of Medicine in Indianapolis is the largest, in terms of enrolment, of any medical school in the United States. Since there is only this one medical school in the State and since Indiana ranks among the most populous states of the Union, the State of Indiana remains proportionately low in the relation of the number of its medical students to its population or its per capita income.

Table XI. Enrolment, Indiana University School of Medicine, 1957-58 to 1967-68

<u>YEAR</u>	<u>FRESHMEN</u>	<u>SOPHOMORES</u>	<u>JUNIORS</u>	<u>SENIORS</u>	<u>TOTALS</u>
1957-58	158	146	139	140	583
1958-59	160	148	138	139	585
1959-60	182	142	144	133	601
1960-61	188	155	138	143	630
1961-62	196	170	152	137	663
1962-63	202	170	164	153	698
1963-64	216	181	165	162	737
1964-65	216	195	174	164	759
1965-66	215	216	186	171	791
1966-67	216	210	209	181	826
1967-68	221	227	184	209	841

The opportunity for internship training offered in any state, however, has a closer relationship to the number of physicians available to serve its people than do the numbers of opportunities for medical education. The many reports that have been made on the subject of medical education in Indiana in recent years have, almost without exception, emphasized the deficiency, both quantitatively and, to a lesser degree, qualitatively, in internship opportunities. Table X shows that, in 1966, Indiana ranked 38th in the nation in the number of internship opportunities per 100,000 population. It is even more significant that Indiana has been relatively unsuccessful in filling the internship opportunities that have been made available. This latter situation has posed a problem for several states and medical schools, but Indiana has been less successful than most. Of the twenty-eight states with one or more long established medical schools in the United States, i.e., those that maintained accredited four-year programs of medical education prior to the end of World War II, twenty-five had a better record than Indiana in filling their internships.

The internship year is a most important and crucial period in the professional life of the young physician. For the first time, after long years of college and medical school study—and even though medical students are usually encouraged to have patient contacts earlier in their medical education programs today—the student takes patient responsibility as a doctor.

He wants and needs further teaching and supervision from older and experienced colleagues.

A good internship program is costly in dollars and effort on the part of the co-operating hospitals. It requires a heavy investment of time and the personal attention of the medical staff. It needs leadership from a physician who makes teaching and the organization and planning of the teaching efforts of the medical staff his primary professional responsibility, often as a full-time paid member of the hospital staff.

The internship and residency years are a period in which the young physician makes his early professional associations and when he begins to know the community or area in which he serves as a doctor. These are frequently determining events in the choice of where he will practice medicine in the future—more important, probably, than where and what school awarded him his M.D. degree. More than half of physicians of the country have settled in the state or area in which they received their internship and residency experience.

If Indiana is to recruit and retain doctors to serve its people, there must be internship and specialty or advanced training opportunities—first of quality, and second, adequate in number. At the present time, one-half of Indiana University Medical School graduates must or do leave Indiana in order to complete their education as physicians. These students often fail to return to Indiana for the practice of medicine. This is a problem of great concern, especially when 35 per cent of the internships offered in Indiana are not filled. The internships offered in Indiana may not be as attractive, on a competitive basis, as those offered in other states. The municipal hospitals of New York City have recently announced that their internships will carry an annual stipend of \$7,750 and the annual salary of sixth-year residents will be increased to \$10,750. Of equal importance in filling internships and residencies is the quality of the educational opportunity provided.

As a result of the general concern about this problem and on the recommendation of Indiana University's medical faculty and supported by the medical profession and by community hospitals, the General Assembly, in 1967, established and appropriated funds for the Medical Education Board. The purpose of this Legislative Act was to create a system of internship and residency training programs in cooperation with the faculty of the Indiana University Medical Center and participating hospitals in the larger population centers of Indiana.

The first group of interns appointed under the new Clinical Teaching Centers program started their education and service to patients on July 1, 1968. The full impact and significance of this program will not be known for another three to five years.

The results for this initial year, i.e., the increase in the number of interns serving in Indiana hospitals, is very encouraging as indicated in Table XII.

Table XII. Medical Interns and Residents in Indiana Hospitals in 1967 and Under the New Internship and Residency Training Program of 1968

	Interns		Residents	
	1967	1968	1967	1968
INDIANAPOLIS				
Indiana University Medical Center	38	47	225	253 ¹
Marion County General Hospital	28	31	11	18
Methodist Hospital	26	46	44	44
St. Vincent's Hospital	3	5	13	11
SOUTH BEND				
Memorial Hospital	12	12	0	1
St. Joseph's Hospital	10	5	0	5
South Bend Medical Foundation	0	3	10	7
FORT WAYNE				
Lutheran Hospital	0	0	4	5
MUNCIE				
Ball Memorial Hospital	0	8	3	1
GARY				
Methodist Hospital	0	1	0	3
EVANSVILLE				
St. Mary's Hospital	0	1	1	0
Totals	117	139	311	348

Increase in interns (1967-68—1968-69)—22 (18.8%)

Increase in residents (1967-68—1968-69)—37 (11.9%)

Increase in total (1967-68—1968-69)—59 (13.7%)

The establishment of the Clinical Teaching Center program under the Board of Medical Education and the funding of this program to enable the twelve community hospitals to enlarge and improve their internship programs in six major population centers in Indiana has been a truly significant development. It gives promise of some relief from the shortage of physicians in Indiana. It is important that these programs be developed beyond the internship so as to provide, within Indiana, increased opportunity for specialty training of young physician graduates. Today more than 70 percent of medical school graduates pursue two to five years of specialty training. If Indiana is to hold the graduates of its medical school, it must offer ample opportunity for residency training.

A statistical analysis of Indiana's need for new physicians, by 1985, reveals the following picture:

If Indiana is to maintain its present ratio of 105 physicians to 100,000 population, and given the normal attrition by death and retirement of practicing physicians, and the predicted increase in population, the number of new physicians needed by 1985 will be .2906

If Indiana desires to reach the ratio of the median state (120 physicians

¹ 117 on Indiana University Payroll. Residents rotate through the Veterans Administration Hospital, Marion County General Hospital, and other hospitals (including Carter, Methodist, St. Vincent's).

to 100,000 population), the number of new physicians needed by 1985 will be3804

The average percentage of M.D.'s who remain each year in Indiana is55%

The Indiana University Medical School at its present class size may graduate an average of 220 M.D.'s annually during the 17 years between 1968 and 1985 or a total of 3470 of whom 55% may stay in Indiana or a total of2057

Thus the number of additional physicians needed in Indiana between 1968 and 1985, in addition to those turned out by the medical center in Indianapolis, assuming a ratio of 105/100,000 population, is849

Or, if the ratio should approach the ratio in the median state (120 physicians per 100,000 population), Indiana would need additional physicians during the next 17 years in the number of1747

Whether the number be 849 or 1747, the additional practitioners will have to be persons who will immigrate into Indiana, already fully prepared to practice, and satisfy the requirements for practice in Indiana, or they will need to be prepared in Indiana by new medical education facilities beyond anything now existing. Since immigration of physicians appears to offer only a token possibility, the urgent need to provide greater facilities and opportunities for medical education is obvious.

The Commission considered several alternatives for the expansion of education for medicine and the other health professions. Four of these alternatives are:

- A. Further Expansion of the Indiana University Medical Center;
- B. The Establishment of a Two-year Medical School;
- C. The Establishment of a New Four-year Medical School; and
- D. Integration of Senior Universities in a State-wide System of Medical Education.

It should be noted these various plans are, to some extent, compatible with each other and elements of one plan might be combined with elements of another.

The principal features of each of these plans are described in the following paragraphs.

A. Further Expansion of the Indiana University Medical Center ("The Indiana Plan for Medical Education")

The School of Medicine of Indiana University now enrolls more than 840 students per year and is thus the largest medical school in the country. The Medical center also comprises Schools of Dentistry and of Nursing, and programs in many of the allied health professions.

Expansion of the Medical School by increasing the entering class by 100 students per year (and possibly later by a second addition of 100 students) has been proposed by a major study conducted by a national consulting firm. In making this proposal it was suggested that the large student body be divided into three or four functionally separate units or colleges within this single institution in order to provide more effective teaching units and to minimize the impersonal atmosphere of a massive institution.

The faculty of the Medical School has undertaken an extensive and challenging reorganization of its teaching program for the undergraduate medical student. The principal features and purposes are:

1. Providing a core curriculum during the first year of study in the several disciplines basic to the understanding of normal human biology. Instruction in anatomy, biochemistry and physiology will impart enough basic information and principles to give a foundation for the students continuing medical education. Further elective and specialized study in the basic sciences will occur in the latter part of the third year.

Most students would be enrolled for the first year at the Indianapolis campus. A smaller group of first-year students could, however, take the core curriculum in the basic sciences at one of several major universities with strong graduate faculties in the life sciences. This arrangement would make possible the entrance of more students to the study of medicine than could be accommodated in the first year at the Medical Center.

2. The first year core curriculum in the basic sciences would be followed by a year and one half of intensive study of disease processes and the introduction to clinical medicine during which the student learns the essential concepts and diagnostic skills of medicine. Elective and specialized study in basic areas of interest completes the third year.

3. The last year of study involves at least six months of advanced clinical instruction and experience either at the Medical Center or at one of the Clinical Teaching Centers associated with a community hospital. Special areas of interest may be explored more deeply through elective study.

This final year is designed to mesh closely with the developing internship and residency program at the Clinical Teaching Centers and to provide the student experience with and instruction by the practicing physician.

4. In addition to increasing provisions for undergraduate medical education, the Indiana Plan envisages:

- a) the development of a state-wide, cooperative network of educational institutions for the health professions.
- b) the strengthening of the present activities in continuing education for the practicing physician including, for some, participation in the teaching of the undergraduate medical student, the intern, and the resident at the Clinical Teaching Centers.
- c) The extensive use of the state-wide communication network (Indiana

Higher Education Telecommunication System) for instruction at various levels of education and for extending service to physicians, patients, and hospitals as available time and station facilities make feasible.

Elements of the Indiana Plan are already established and functional. Instruction in the sciences basic to medicine has taken place on the Bloomington campus for some years, and similar instruction is being arranged on an experimental basis with one or more of the universities in Indiana. Reference to and recommendations for continuing the Clinical Teaching Centers at the intern and resident levels have already been discussed.

The Indiana Plan provides a vigorous and desirable change from the traditional pattern of medical education. It offers immediate, although possibly limited, means for increasing the number of graduates in medicine. If this plan is to be followed, either alone or in conjunction with other alternatives, greatly increased financial support for strengthening and enlarging the Indiana University medical faculty will need to be given during the next several biennia. The plan for further expansion of the teaching and hospital facilities at Indianapolis must likewise be assured before any other proposal for expansion of educational resources in medicine is undertaken by the new Board of Regents.

B. The Establishment of a Two-year Medical School

A two-year medical school would offer instruction in the several scientific disciplines that are basic to the clinical practice of medicine. The dominant subjects taught in the traditional two-year school of medicine are: anatomy, biochemistry, microbiology, pharmacology, and psychology. The student is also given instruction in the beginning techniques for the physical, psychological, and social examinations of patients.

When the student has completed this basic instruction in medicine he must then transfer to a different school for the clinical teaching that will enable him to become a Doctor of Medicine.

The two-year school does not offer a full and comprehensive educational program since it lacks instruction in clinical medicine, i.e., the diagnosis, treatment, and management of illness and disease. It does not provide a strong base for internship and residency training nor for continuing education.

Under the two-year program, the student must transfer to a new and different school at the close of his second year. In Indiana it is possible that some students could transfer to Indiana University Medical Center to complete their medical education. It is quite likely, however, that a number of them would transfer to out-of-state schools often at a considerable distance from Indiana. The prospect of losing these students from the future physician corps of Indiana would thereby be increased.

One of the presumed advantages of a two-year school is the lower cost of instruction during the first two years. While it is acknowledged that per student cost for instruction in the basic science years is less than the cost in the clinical years, it must be recognized that a two-year school merely shifts these higher educational costs to some other institution. If the student is to remain in Indiana, this added cost would

be carried at the Indianapolis Medical Center or at another State-supported medical school.

A number of states through the late 1940's provided medical education in two-year medical schools after which their students transferred to distant comprehensive medical centers for the completion of their education. Eight states among eleven have expanded their former two-year schools of medicine into comprehensive medical education centers. These states are: Alabama, Georgia, Mississippi, Missouri, North Carolina, South Carolina, Utah, and West Virginia. Only three states continue to depend on two-year schools, namely, North Dakota, South Dakota, and New Hampshire.

With the exception of Utah (population 986,000) the eight states which abandoned the two-year plan have populations ranging from 1,811,000 to 4,821,000. It is interesting to note also that six of these states have physician population ratios less favorable than that of Indiana. These states with low per capita income and high populations apparently found that the two-year medical education program did not effectively meet the state's need for physicians. It will, of course, be some years before the full effect of the transition to four-year medical schools will be seen in these states.

New two-year programs in medical education have been established in two states (Rhode Island—private, and Hawaii—public). Each of these communities has population of less than 1,000,000 although they enjoy relatively high per capita incomes and a physician-patient ratio more favorable than that in Indiana. It is significant that at least one of these existing five two-year schools anticipates becoming a full-fledged four-year medical program.

The three states (North and South Dakota and New Hampshire) which continue to depend on two-year programs have population bases of less than 700,000 people.

C. The Establishment of a New Four-Year Medical School

The establishment of a second four-year medical school in Indiana has been advocated by numerous community and professional groups and by many individuals as the most desirable means to alleviate the shortage of health personnel in Indiana. In considering the advantages of a four-year school, it should be recognized that a modern medical center provides to the citizens of its area of primary influence (an area with a radius of 75 to 100 miles) more significant services than merely the education of students for the M.D. degree.

A modern medical center provides physicians who often have unique skills and knowledge. It also provides highly specialized equipment and facilities which even the larger community hospitals cannot economically offer. It thus gives to a large surrounding area a resource to care for patients with complex and sometimes unusual diagnostic and treatment problems. It does so without unnecessary duplication of resources by the community hospitals.

The comprehensive four-year medical center also provides a broadly based post-graduate education program at the internship and residency levels. It provides specialty training in many areas of medicine that cannot be economically provided through the Clinical Teaching Center programs at community hospitals.

The comprehensive four-year medical center becomes a focus for the continuing education of the practicing physician and other health professionals within the area. Much of the effective continuing education of the physician takes place through consultation with faculty members, most often on an individual basis concerning the problems of a particular patient. While the television and communication network will facilitate the continuing education of the doctor, it cannot completely replace the individual conferences between physicians.

Initial planning for a second major medical education center, if that alternative is chosen, should make provision for later development of teaching in dentistry, nursing, and the allied health professions.

If this alternative is to be followed, alone or in conjunction with other plans, the determination of the location, size, and schedule for establishment of facilities should be a responsibility of the Board of Regents, assisted by the proposed Advisory Council on Education for the Health Professions.

In making a decision on location of a possible new medical education center, three considerations should be carefully weighed:

1. The new facility should be located in an area of population density.
2. The facility should be developed in association with an existing or new institution offering graduate study at the doctoral level. A new facility for medicine could well become an important influence in the development of a new university center.
3. Initial planning should make provision for later development of teaching in dentistry, nursing, and the allied health professions.

D. Integration of Senior Universities in a State-wide System of Medical Education.

An alternative plan for expanding opportunities for medical education in Indiana was proposed to the Commission by one of its members, Mr. Beurt SerVaas, and, with the approval of the Commission, is set forth in full in Appendix 3. This plan should be read in connection with other proposals in this Report.

DENTAL EDUCATION

The people of Indiana have been well served by the Indiana University School of Dentistry, whose graduates now comprise a large portion of the dentists serving the citizens of the State. The personnel resources for dental service are relatively more adequate than those for either medicine or nursing. Plans for further expansion of the School of Dentistry to provide for a growing population are well advanced. It can be reasonably anticipated that the present level of service can be maintained during the next ten-year period. Indiana ranks at about the middle of the states with respect to the number of dentists available to serve its people.

It is worthy of note that the manpower resources of all the neighboring states, except Kentucky, are above the median in ratio of dentists to population for the nation. In comparison to its neighboring states, however, Indiana has a less favorable ratio (45) of dentists per 100,000 residents than any except Kentucky (37). The ratios

for other neighboring states are: Illinois, 60; Iowa, 56; Michigan, 52; Minnesota, 69; Ohio, 48; and Wisconsin, 61.

Future requirements for dentists will increase as the population of Indiana grows in the next two decades. Replacements for dentists who die, retire, leave Indiana will be needed.

The State of Indiana is highly dependent on the graduates of the Indiana University School of Dentistry for its future dentists. Since 1955, nearly eighty-five percent of the new dentists entering practice in Indiana have been graduates of the State's own dental school. There is a strong tendency for Indiana University graduates to remain in Indiana (approximately 75 percent remain).

The first-year-student admissions to the Dental School have steadily increased from 65 in 1954 to 104 in 1968 with an attendant growth in number of graduates.

The teaching resources of the School of Dentistry will be expanded upon completion of the currently planned and approved addition to the School. The estimated completion date for this construction is 1971, after which time enrolments can be further expanded to 125 per class.

It is reasonable to anticipate that with the planned growth of the School of Dentistry, the present level of dental service can be maintained during the decade of the 1970's. In order to achieve these goals, it is essential that the school be adequately financed to enable it to recruit new, well-trained faculty for the enlarged facilities.

The faculty of the School of Dentistry has actively worked with practicing dentists in the development of continuing educational opportunities for dentists in Indiana. There is recognition also for the need for further expansion of the specialty training programs, such as orthodontics and oral surgery.

The effective use of the time, skill, and knowledge of the Doctor of Dental Surgery is enhanced when trained assistants are available to him. The "team" approach to dental care is much more frequently used by the more recent graduates in dentistry. Indiana dentists report current shortages of dental hygienists and dental assistants. The need for auxiliary dental personnel will increase in the next two decades.

Plans for development of training programs for dental auxiliary personnel have been made by the School of Dentistry and other educational institutions in Indiana.

NURSING EDUCATION

Indiana nursing resources in both major nursing groups (Registered Nurse and Licensed Practical Nurse) are lower than those of the nation as a whole and those of the surrounding states. It must be further observed that Indiana has also done less well with respect to the number of graduates produced from its schools than its neighbors. (See Tables XIII and XIV.)

Two studies of nursing service, manpower, and education in Indiana have been made during the past several years. The magnitude of the need for additional nursing personnel in Indiana is indicated in the report "Nurses for Indiana", published in 1967.¹ At that time there were 11,819 registered nurses employed in Indiana. Employers

¹ Sponsored by: The Indiana League for Nursing, Inc.; the Indiana State Board of Nurses' Registration and Nursing Education; and the Indiana State Nurses' Association, Inc.

of nursing personnel indicated a need for more than 1,400 additional nurses in 1966, and a projected need of nearly 2,200 by 1970. The estimated need by 1975 was set at 16,000 nurses in contrast to the 1966 work force of 11,819 practicing nurses.

Table XIII. Standing of Indiana and Nearby States on Various Measures Relating to Registered Nurses¹

	No. of Reg. Nurses	Nurses Per 100,000	No. of Schools	No. of Graduates	Grads. Per 100,000
National	550,000	298	1,153	35,259	18.4
Indiana	11,575	248	27	810	16.6
Illinois	29,371	291	70	2,212	20.9
Iowa	8,874	320	25	735	26.6
Kentucky	5,382	175	20	301	9.6
Michigan	21,322	266	32	1,301	15.7
Minnesota	13,285	384	27	1,251	35.2
Ohio	29,569	295	58	2,336	22.8
Wisconsin	13,333	332	23	923	22.3

Table XIV. Standing of Indiana and Nearby States on Various Measures Relating to Licensed Practical Nurses²

	No. of L.P.N.'s	L.P.N.s Per 100,000	No. of Schools	No. of Graduates	Grads. Per 100,000
National	205,974	115	901	22,510	11.7
Indiana	3,896	84	11	379	7.8
Illinois	8,440	84	29	846	8.0
Iowa	2,863	104	14	349	12.6
Kentucky	2,775	91	12	325	10.4
Michigan	11,864	152	28	1,251	15.3
Minnesota	3,948	116	23	716	20.2
Ohio	11,615	120	29	1,098	10.7
Wisconsin	3,503	89	8	402	9.7

¹ The information contained in this Table was derived from the publication of the U. S. Department of Health, Education and Welfare, P.H.S. publication No. 1509. National Center for Health Statistics, entitled "Health Resources Statistics—1965".

² Ibid.

There are today four avenues through which a student prepares for and enters the nursing work force.

1. The hospital school of nursing leading to a diploma and eligibility to take the State Board qualifying examination for designation as a Registered Nurse. These programs have in the past provided most of the nurses now practicing in the nation. The hospital diploma program is two or three years in duration and may involve some college credit in the sciences and social sciences as a part of the training program. These schools sometimes constitute a financial burden to the hospitals conducting them, but this is a burden they willingly bear because of the nursing personnel thus made available to them. Although the proportion of the total nursing corps coming

from these schools has dropped substantially since 1960 care should be taken not to eliminate them until adequate facilities for Associate and Baccalaureate degree programs for nurses have been put into full operation.

2. The Associate degree program is two years in length and is conducted in two-year colleges, four-year colleges, and medical centers of universities. This educational program has been developed largely during the past fifteen years and provides the student both general education at the college level and basic training in the skills and knowledge for bedside nursing. The graduate is eligible for the designation as a Registered Nurse and receives an Associate in Science degree.

3. Under the Bachelor of Science program offering general and scientific education and advanced professional education for the nursing student, the graduate is eligible for designation as a Registered Nurse. This kind of educational program is conducted by colleges and universities across the country using the teaching resources of community hospitals. The graduates of these programs, relatively small in number, often become the leaders of the "nursing team" and are also sought as public health and school nurses. They can, in addition, effectively fill the role of the physician's assistant.

4. Licensed Practical Nurse programs are offered at the secondary school level or at post high school institutions such as the Indiana Vocational Technical College Centers. Graduates of these programs in Indiana are designated as Licensed Practical Nurses, after passing a State qualifying examination. The Licensed Practical Nurse serves primarily as a bedside nurse.

Nursing education depends very heavily on small local teaching facilities (40 schools in Indiana producing less than 1200 graduates versus 200 medical graduates from a single school in Indiana). The planning for expansion of these educational resources either as growth of existing schools or by establishment of new programs, will require extended study of teaching resources of hospitals and of educational institutions.

It may be desirable to provide financial assistance to hospitals in order to bring about the needed expansion of nursing education. These matters should be given high priority consideration by the Board of Regents, assisted by the Advisory Council on Education for the Health Professions.

EDUCATION FOR ALLIED HEALTH PROFESSIONS

The education of the allied health professional ranges from brief in-service training for hospital orderlies through university education at the Master's or Doctoral degree level. It can be anticipated that requests for new teaching programs at the post high school level will be presented in the years immediately ahead.

There is, in some instances, no reliable information concerning the present numbers of auxiliary workers now employed and no basis for making even the crudest projection of future need for trained workers. It is essential that standards should be set and implemented for the education of these various vocations allied to health professions and that responsibility for overseeing such educational programs be assigned to some office on a continuing basis. More adequate information is available for some groups whose employment requires certification or registration.

A comparison of the number of graduates per 100,000 of population in each of several allied health fields for 1967, the most recent year for which comparable in-

formation is available, reveals that Indiana ranks below the national average in production of dental assistants, dental hygienists, occupational therapists, and social workers. The State ranked higher than the national average in production of X-ray technologists, pharmacists, veterinarians, and physical therapists.

The better identification of areas of need and the planning of educational resources to provide more personnel should be undertaken at an early time by the Board of Regents with assistance of the Advisory Council on Education for the Health Professions and the State Community College Board.

PREPARING FACULTY FOR MEDICAL AND HEALTH EDUCATION PROGRAMS

The shortage of well-prepared teachers in medicine, dentistry, and nursing as well as in the developing allied health professions will slow the expansion of existing schools and retard the establishment of new teaching programs. The Indianapolis Medical Center is the main resource for the preparation of qualified teachers in the health professions. It should be urged to extend its present activities in teacher training to the extent necessary, and the necessary financial support to achieve that goal should be provided through regularly appropriated State funds.

Because of the long-range importance attached to the solving of Indiana's problems of medical education and the need to involve interested representatives of the public-at-large as well as persons engaged in the practice of the health professions and those directly working in the field of medical education, the Commission makes the following recommendation:

- 5. The Board of Regents should establish and appoint an Advisory Council on Education for the Health Professions, composed of citizens-at-large, representatives of the health professions, and persons involved in education for the health professions, which would advise the Board with regard to the expansion and coordination of facilities and programs of education for the health professions.**

A suggestion has been made, and is concurred in by the Commission, that this Council should consist of not less than six nor more than fifteen persons, with more than half of the membership coming from the citizens-at-large category.

The Commission cannot urge too strongly that the Advisory Council be established at the very earliest possible time. The urgency of final consideration and determination of which of the alternatives for the expansion of education for the health professions should be followed is strong justification for early action.

Since the program of Clinical Teaching Centers under The Medical Education Board is already underway and since the very first indications are that the program may help in increasing the number of physicians in Indiana, the Commission recommends that:

- 6. The New Clinical Teaching Center Program for interns and residents should be continued until the Advisory Council on Education for the Health Professions and the Board of Regents have had time to evaluate its effectiveness.**

REGIONAL CAMPUSES

As early as 1912 the administrators of Indiana University saw the need for offering the advantages of higher education to youth who could not reside in Bloomington. The development of the present regional campuses of the State universities in Indiana began in that year. Purdue University's regional campuses are primarily outgrowths of the Engineering, Science, and Management War Training programs (ESMWT), of World War II in which Purdue University cooperated with the national government. The State universities now operate twelve regional campuses, seven under the sponsorship of Indiana University, four under Purdue University, and one under Indiana State University. Their locations are indicated in Table IV and in Figure E. An additional center at Earlham College is sponsored by the four State universities, making a total of thirteen.

The thirteen regional campuses serve more than 30,000 students. These centers constitute a striking reflection of the early recognition of the educational needs of Indiana youth on the part of the leaders of Indiana University, Purdue University, and, more recently, Indiana State University. With little more than faith in their ability to meet a challenge and take advantage of an opportunity, these leaders gradually built up a series of centers which have provided educational opportunities for thousands of young people. If these centers had not existed close to their homes, these young people could not have continued their education beyond high school, and they would have been deprived of the additional education essential for personal and professional competence and public leadership. The Commission here records its recognition of the early vision and continuing efforts of those responsible for founding and nurturing these regional campuses and for the contributions they have made to the State and its citizens.

Some conception of the range of services which the existing centers offer is provided in the following brief descriptions:

INDIANA STATE UNIVERSITY (Total Students: 922)

Evansville

Founded: 1967

Students, Fall, 1967: 922

Note: This Campus is presently in a very old former public high school building. New buildings are to be placed on a 250-acre site.

INDIANA UNIVERSITY REGIONAL CAMPUSES

(Total Students: 21,377)

Fort Wayne

Founded: 1917

Students, Fall, 1968: 2,717

Note: This Center shares with Purdue University's Regional Center a new 5.5 million dollar building on a 400-acre site on an excellent access roadway in Fort Wayne. Another 9 million dollar building is planned for immediate construction and joint use.

Indianapolis—Downtown Campus

Founded: 1916

Students, Spring, 1968: 4,239

Note: The Campus is spread throughout the midtown section of Indianapolis in rather old classroom-laboratory-office buildings. Ground was broken September 4, 1968, for three new buildings located near the Medical Center of Indiana University in Indianapolis. This Campus now includes instruction in Education, Arts and Science, Business Administration, and Nursing (2-year program).

Indianapolis—Professional Divisions

This Campus has three Schools, one College, and a Medical Center which includes three professional Schools and a Division in the health fields, as follows:

Law School

Founded: 1944

Students, Fall, 1967: 535

John Herron School of Art

Founded: Many years ago; 1967 General Assembly made it part of Indiana University.

Students: 395

Normal College of American Gymnastics Union (Graduate)

Founded: Many years ago; 1967 General Assembly made it part of Indiana University's School of Health, Physical Education and Recreation at Bloomington.

Students, Fall, 1967: 89

School of Social Work

Founded: 1965

Students, Fall, 1967: 135

Medical Center

Founded: 1903

Students, Fall, 1967

	73
School of Medicine, including 27 interns and residents	1,255
Division of Allied Health Services	193
School of Dentistry	581
School of Nursing	637
Total	<u>2,666</u>

Total Students, Both Indiana University Campuses at Indianapolis: 8,059

Kokomo

Founded: 1945

Students, Fall, 1968: 1,223

Note: Indiana University was asked in 1945 to absorb a junior college in Kokomo. There is now a new classroom-auditorium-office building on a rather small campus.

Northwest (Gary)

Founded: 1948

Students, Fall, 1968: 3,837

Note: This Regional Campus developed by taking over the Junior College of Gary and an operation of Indiana University in Calumet. It has a refurbished classroom-auditorium-office building; a new office extension building; two "transitional" classroom-office buildings; a new library building which is attached to the original Gary College building; several apartment buildings; and a student union-classroom building under construction. All of these buildings are on a small campus site near a large municipal golf course in a residential-business area on good access roadways in Gary.

South Bend

Founded: 1940

Students, Fall, 1968: 3,440

Note: This Campus has a new classroom-auditorium-office building and another converted classroom building on a rather small campus on the outskirts of South Bend.

Southeastern (Jeffersonville and New Albany)

Founded: 1941

Students, Fall, 1968: 2,101

Note: This Campus has a fairly old classroom-office building; an old converted post office building with a bookstore, offices and classrooms; and two temporary faculty office buildings on a very small campus in Warder Park in downtown Jeffersonville. A new, large campus located in New Albany is being developed. Two new buildings are in the planning stage. An adequate roadway gives access to the new campus. An enlarged roadway is planned.

PURDUE UNIVERSITY REGIONAL CAMPUSES

(Total Students: 11,123)

Calumet Campus (Hammond)

Founded: 1946

Students, Fall, 1968: 3,506

Note: This present Campus was occupied in 1951. It has an excellent physical plant located on an adequate site.

Fort Wayne

Founded: 1943

Students, Fall, 1968: 2,678

Note: This Campus shares a new 5.5 million dollar building on a 400-acre site on an excellent access roadway in Fort Wayne with Indiana University's Regional Center. Another 9 million dollar building is planned for immediate construction and joint use.

Indianapolis

Founded: 1946

Students, Fall, 1968: 3,746

Note: This Campus has two excellent buildings on East 38th Street, Indianapolis. Construction on another building is being delayed pending a decision concerning joint Indiana University-Purdue University arrangements for co-operation in Indianapolis.

North Central (Westville)

Founded: 1946

Students, Fall, 1968: 1,193

Note: This Campus has a new classroom-office building on a large site near the Indiana Tollway.

SPECIAL CATEGORY (Total Students: 904)

Eastern Indiana Center at Earlham College (Richmond)

Founded: 1946

Students, Fall, 1968: 824

Note: Classes are held in Earlham College classrooms. Faculty and directors' offices are also in the College. Under discussion is the possibility of a site on a piece of Earlham's property for the construction of Center buildings with Indiana Vocational Technical College building on the same property. At the present time Indiana Vocational Technical College operates through contract with Earlham and is housed in a factory building in downtown Richmond. The Eastern Indiana Center at Earlham College is now sponsored by Indiana University, Purdue University, Indiana State University, Ball State University, and Indiana Vocational Technical College.

Table XV. Regional Campus Enrolment Recapitulation

	Total Students
Indiana State University Regional Campus	922
Indiana University Regional Campuses	21,377
Purdue University Regional Campuses	11,123
Eastern Indiana Regional Campus at Earlham College	824
TOTAL—All REGIONAL CAMPUSES	34,246
Indianapolis Area	
Indiana University Regional Campuses	8,059
Purdue University Regional Campus	3,746
TOTAL—INDIANAPOLIS AREA	11,805
Northwest Regional Area	
Indiana University Regional Campus	3,837
Purdue University Regional Campuses	4,699
TOTAL—NORTHWEST REGIONAL AREA	8,536
Fort Wayne Area	
Indiana University Regional Campus	2,717
Purdue University Regional Campus	2,678
TOTAL—FORT WAYNE AREA	5,395

During the course of its study, some members of the staff visited all of the regional campuses. In these visits they talked with administrative officers and other persons on the staff. They also interviewed persons in the communities such as representatives of the local school systems and the Chamber of Commerce. Available printed materials were also examined. After this review of the services of the regional centers, the Commission came to these conclusions:

1. The regional campuses, generally located in the larger urban areas, serve over 30,000 students. They are commuter campuses administered through local campus officers responsible to Vice Presidents of the home campuses at Bloomington and Lafayette, and to the President at Terre Haute.

2. The general policies for the operation of these campuses are based upon the recommendations of the three University Presidents to "The Trustees Joint Policy Council for Regional Campuses." A "Regional Campus Coordinating Committee" consisting of professional officers from the three Universities is responsible for program development and for the prevention of duplication of effort.

3. Local campus administrators work with local lay advisory committees appointed by the Presidents of the Universities. These committees are not legally constituted.

4. The regional campus budgets are made by the local administrators and processed through the budget officers of the Universities. The financial support for the

campuses comes largely from student fees and contracts with local industries, with modest help recently from the General Assembly.

5. With the exception of certain technical programs, admission requirements are the same as those on the main campuses. Hence, the centers, largely serve the upper 50% of high school graduates, but the upper two-thirds may be admitted to the technical programs when space is available.

6. The personnel policies for the faculty at the main campuses apply to the staff of the regional campuses. The officers (usually department heads) of the home campuses must approve all faculty appointments at the regional campuses.

7. Some students indicated that without these centers they would not have been able to go to college. An analysis of the actual costs to students of attending the regional centers, however, shows that the fees and regular charges paid by students attending a regional campus run almost 20% higher than comparable costs at the main campuses.

8. Considering the very limited financial resources provided by the State, the Universities and regional campuses have acquired reasonably good to excellent physical facilities and sites. But most of the capital construction has been made possible by the foundations connected with the regional campuses and the Universities.

9. Generally the library holdings are far from adequate. The inter-library loan system does not seem to fill the gaps.

10. Many local citizens, including business and school men, indicated the need for more vocational and technical education in the regional centers.

11. Many students seem to prefer, indeed find it necessary, to remain at regional campuses to complete their studies rather than transfer to the main campuses. They state that they need to remain at home where they can find local employment to carry the cost of their higher education.

12. Students would like more "campus life"—extra-curricular activities and perhaps intercollegiate athletics and other relationships with other institutions. Since eleven of these thirteen regional campuses already serve more than 1,000 students, and seven over 2,000, a rich program of student activities could be developed.

13. There is a definite feeling upon the part of representatives of the students and the communities, and some faculty and administrators as well, that these campuses should have a large degree of autonomy, including their own legally constituted boards of trustees.

The Commission believes that the time has come to give these regional campuses full autonomy with their own local boards of trustees, their own faculties, their own student bodies, and their own budgets. This institutional autonomy would also justify placing them directly under the Board of Regents, from whom they could expect larger financial support and consideration of their separate, individual needs. This arrangement would eliminate one "level" of administration at these campuses and enable them to recruit their own faculties and develop their own curriculums and programs and facilities—in short, to do those things that self-respecting colleges do everywhere in the nation.

After reviewing all the factors involved, the Commission recommends that:

- 7. The Board of Regents should plan for the conversion of the regional campuses of the State Universities to autonomous institutions, with their own Boards of Trustees; and the General Assembly should authorize the Board of Regents to effectuate such conversions at such locations and at such times as, in the judgment of the Board, would be in the best interests of the citizens of the State.**

As this recommendation indicates, it is not contemplated that all of these regional campuses would immediately become independent. The process will take longer in some locations than in others. Local regional factors will be important in some locations. However, the Commission believes that in several locations, after early and intensive study by the Board of Regents, a determination can be made for immediate autonomy.

As these regional campuses become autonomous institutions, a very few might become community colleges and a part of the new community college system recommended earlier in this Report. In some cases they may become multipurpose State colleges with graduate work to the Master's degree level. In two or three regions of the State where there are two or more campuses operated by more than one institution, those campuses could appropriately be brought together to form the nucleus of a new State university.

To implement Recommendation 7, the Commission makes the following specific proposals for consideration by the new Board of Regents:

- 1. A multipurpose state university should be immediately established in Indianapolis bringing together all the existing units of Indiana and Purdue Universities. This new university should be given the same autonomy as the present state universities under the Board of Regents.**
- 2. The regional campuses at Gary, Hammond, and Westville should be consolidated and a new state university formed in the northwestern part of the state with the same degree of autonomy as the present State Universities under the Board of Regents.**
- 3. The regional campus at South Bend should be developed into an autonomous state college under the Board of Regents with some Master's Degree work.**
- 4. The Indiana-Purdue campus at Fort Wayne should be developed into an autonomous state college under the Board of Regents with some Master's Degree work.**
- 5. The Kokomo campus should be developed into a comprehensive community college within the community college system recommended by the Commission.**
- 6. The regional campus at Jeffersonville-New Albany should be developed into an autonomous state college under the Board of Regents with some Master's Degree work.**

The regional campus at Evansville should be developed into an autonomous state college under the Board of Regents with some Master's Degree work.

- 8. The Eastern Indiana Center at Richmond should be continued experimentally pending an evaluation of its effectiveness and the extent to which it fills a definite need.**

The Commission has full confidence that a Board of Regents as envisaged in this Report, working with the local administrators and faculties of the regional campuses and the regional community leaders can bring about the conversion of the regional campuses to autonomous institutions with benefit to all concerned and with improved possibilities for developing a sound system of post high school education for the State of Indiana.

As reported in Chapter I, a consultant to the Commission met with representatives of business and industry in the Indianapolis area to discuss the adequacy of post high school education in the capital area. Among the outcomes of that meeting were the following statements:

1. Such corporations were not able to employ the persons with the variety and kinds of vocational and professional preparation needed. This included many levels and types of educational preparation, from certain kinds of two-year vocational training to post doctoral programs in the sciences.
2. There needs to be a much closer liaison between the employers of metropolitan areas and the post high school educational institutions in those areas.
3. A strong feeling was expressed that an autonomous multipurpose state university should be developed in the Indianapolis area, a university which would lay particular stress on research and advanced professional and graduate work.

The same points made here with respect to the Indianapolis area and its public educational institutions are equally applicable to the northwestern or Lake County area and perhaps to others as well.

FISCAL PROBLEMS AND FINANCIAL MANAGEMENT

The support that a state provides for its public programs such as post high school education depends upon its resources and its determination to provide that support at a particular level.

INDIANA'S ECONOMIC BASE

Indiana enjoys a comparatively high level of economic activity and well being as contrasted with most of its sister states. The following facts serve to provide a picture, in terms of specific factors, as to where Indiana ranks, among the states, on economic and general indices.

INDIANA

1. Ranks 38th in geographic size, with 36,291 square miles.
2. Ranks 11th in population, with 4,662,498 persons in 1960.
3. Ranks 29th in number of State residents attending college, in or outside of the State of Indiana—1963.
4. Ranks 39th on the basis of the number of persons per 100 in the population 25 years or older who have completed four or more years of college education—1963.
5. Ranks 3rd in production of corn (1st in corn production per acre), soybeans and pigs.
6. Ranks 8th in manufacturing (based on value of finished products less the cost of raw materials).
7. Ranks 3rd in production of steel.
8. Ranks 1st in production of mobile homes, color television sets, travel trailers, cut stone and stone products, brick and structural tile, and storage batteries.
9. Ranks 3rd in production of electric motors and generators, pharmaceutical preparations, wooden household furniture, aircraft engines and parts, motor vehicles and parts.
10. Is a major producer of office furniture, veneer and plywood, electronics equipment (which now outranks steel as Indiana's largest employer), transportation equipment, refrigeration machinery, trucks and truck engines, and glass and clay products.

11. Ranks 15th in per capita personal income—1966; 20th in 1960; 22nd in 1950.
12. Has a lower sales tax than 37 other states.
13. Has a lower cigarette tax than 38 other states.
14. Has a lower gasoline tax than 34 other states.

(These three taxes—sales, cigarette, and gasoline—account for 44 per cent of the revenue of the State of Indiana.)

While the demands on the public treasury of every state far exceed available funds, it is nevertheless true that Indiana is in a more favored position than many states to provide the services its citizens determine to be essential.

An index of the relative effort Indiana is making to obtain the resources to support higher education and other State services, as compared with other states, is indicated by the actual amount of general revenue secured from State and local taxes per one thousand dollars of personal income. These figures as shown in Table XVI indicate a range among the several states of something less than \$110 per \$1,000 to more than \$170, with a national average of \$131.38 and a figure for Indiana of \$125. In the rank order of the states, Indiana stands relatively low. Thirty-six states obtain more per capita of personal income from state and local taxes than does Indiana and only 14 states less. When Indiana's fifteenth rank on per capita income as shown in Item 11 above is compared with its rank of thirty-seventh on income from state and local taxes, it is clear that relative to its resources Indiana is making a relatively poor effort to obtain the resources to pay for higher education and other State services.

Table XVI. Amounts of General Revenue from State and Local Taxes per \$1,000 of Personal Income, by States, 1966.

Categories of Amounts Per \$1,000 Personal Income	Number of States in Category
\$100 - 109	4
\$110 - 119	7
\$120 - 129	14
\$130 - 139	2
\$140 - 149	10
\$150 - 159	8
\$160 - 169	3
\$170 - 179	3
Total Number of States (Includes District of Columbia) ^a	51
United States Average	\$131
Indiana	\$125
Indiana Rank	37
Unweighted Average of 17 States (top 1/3) with highest revenue per \$1,000 personal income	\$158

COSTS OF PUBLIC POST HIGH SCHOOL EDUCATION

Although the public institutions derive their finances from several sources, their main source is, of course, the biennial appropriations made by the General Assembly. In the years since World War II these appropriations have been, for all of the public post high school institutions, including Vincennes University and Indiana Vocational Technical College, as follows:

Table XVII. Total Appropriations Made to All Public Institutions of Post High School Education in Indiana for Selected Years Since 1945-46

Year for Which Appropriation is Made	Amount of Appropriation or Request		
	Operating	Capitol	Total
1945-46	\$ 7,165,500	\$ 301,568	\$ 7,467,068
1949-50	17,264,117	2,300,000	19,564,117
1953-54	25,353,525	9,167,672	34,521,197
1957-58	35,976,466	11,741,549	47,718,015
1961-62	55,315,795	9,159,998	64,475,793
1965-66	91,321,102	29,857,700	121,178,802*
1966-67	106,317,528	29,857,700	136,175,228*
1967-68	129,057,946	38,875,000	167,932,946*
1968-69	141,182,054	38,875,000	180,057,054*
1969-70 (Current Request)	213,586,849	125,217,487	338,804,336
1970-71 (Current Request)	256,241,872	125,217,487	381,479,349

*Includes bonding authority for Ball State, Indiana State, Indiana University, and Purdue University.

These figures give some idea of the magnitude of the State's involvement in post high school education. They show how the annual cost of that involvement has risen from the post World War II year of 1945-46 when it was about \$7.5 million to the current fiscal year, 1968-69, when it had multiplied 24 times to \$180 million. The request for next year, 1969-70, over this year, which involves a requested increase of 88 per cent in one year to \$338.8 million, and a 111 per cent increase for 1970-71 over 1968-69 to a requested total of \$381,479,349, illustrates dramatically the challenge that is posed to those who must consider these large requests for State funds, analyze them in terms of their relative merits and priorities, compare the needs of institutions with each other, and weigh the ultimate values of different programs to the citizens affected—of all ages and from all sectors of society and all regions of the State.

Some idea of the actual institutional appropriations and requests for recent years and for 1970 is given in Table XVIII.

Table XVIII. Appropriations to and Appropriation Requests from Indiana Public Post High School Institutions for Selected Years

Institution	1955-56	1960-61	1965-66	1970-71 ¹	Percentage Increase 1955-1970
Ball State University	\$ 2,885,618	\$ 5,274,225	\$ 11,794,524	\$ 35,927,398	1145%
Indiana State University ²	2,276,374	4,186,916	9,578,109	50,862,274	2134%
Indiana University ²	16,717,536	25,931,290	54,721,991	148,949,145	797%
Purdue University ²	14,673,411	25,973,666	43,603,028	122,466,880	735%
Vincennes University ³			253,000	1,228,114	
Ind. Vocational Technical College ⁴			1,228,150	22,045,538	
TOTAL	\$36,552,939	\$61,366,097	\$121,178,802	\$381,479,349	944%

¹Request²Includes regional campuses³First State appropriation, \$113,000 in 1963-64⁴First State appropriation, \$25,000 in 1963-64

These figures do not, however, tell the whole story of the scope of the current operations of the colleges as there are substantial amounts from sources other than State appropriations in some cases. Table XIX provides the best available data on total income and expenditures for educational expenditures—instruction, research, and extension and public services.

The following presentation is limited to current educational and general income and expenditures. In 1968-69, the public institutions of post high school education of Indiana plan to spend more than \$244 million. Of this amount, \$191.9 million of income is available for general purposes, and \$52.2 million is restricted as to use by the terms of gifts, grants, or contracts. Included in the \$52.2 million of restricted income is \$1.8 million of State funds for defined objects, including \$910,430 for county agricultural agents, \$400,000 for the mental retardation clinic, \$131,000 for animal disease diagnosis, and other worthy objects.

Table XIX. Current Educational and General Income and Expenditures of Public Colleges and Universities of Indiana—1968-69

Institution	Expenditures		
	General	Restricted	Total
Ball State Univ.	\$ 21,161,374	\$ —	\$ 21,161,374
Indiana State Univ.	19,419,526	3,671,919	23,091,445
Indiana Univ.—Main	55,083,828	14,741,046	69,824,874
Purdue Univ.	57,117,179	25,221,185	82,338,364
Indiana Univ., Indpls.	15,515,747	7,609,156	23,124,903
I.U. Reg. Centers	9,122,549	393,512	9,516,061
Purdue Univ. Reg. Centers	10,941,064	501,125	11,442,189
Indiana State Univ.—Evansville	853,692	66,255	919,947
Vincennes Univ.	2,229,534	—	2,229,534
Indiana Vocational Tech. College	NA	NA	NA
Indiana U.-Gen. & Tech. Studies	416,226	—	416,226
Totals	\$191,860,719	\$52,204,198	\$244,064,917

Institution	INCOME				
	General Other Than State	General State	General Total	Restricted	Total
Indiana Univ.—					
Ball State Univ.	\$ 6,032,848	\$ 15,128,526	\$ 21,161,374	\$ —	\$ 21,161,374
Ind. State Univ.	5,115,854	14,303,672	19,419,526	3,617,919	23,091,445
Main	14,018,552	41,065,276	55,083,828	14,741,046 ¹	69,824,874
Purdue Univ.	15,022,882	42,094,297	57,117,179	25,221,185 ²	82,338,364
Ind. U.—Indpls.	3,791,657	11,724,090	15,515,747	7,609,156 ¹	23,124,903
I.U. Reg. Centers	3,515,298	5,607,251	9,122,549	393,512	9,516,061
Purdue Reg. Cent.	2,913,073	8,027,991	10,941,064	501,125	11,442,189
I.S.U.—Evansville	409,510	477,309	886,819	33,128	919,947
Vincennes Univ.	1,755,534	474,000	2,229,534	—	2,229,534
IVTC	NA	4,541,691	NA	NA	NA
I.U.-Gen. & Tech Studies	125,384	290,842	416,226	—	416,226
Totals	\$52,700,592	\$143,734,945	\$191,893,846	\$52,171,071	\$244,064,917

545,000¹
 1,226,438²
 \$145,506,383

¹Included in restricted funds are State appropriations for Public Health Training, \$40,000; Toxicology, \$30,000; Psychiatric Research, \$400,000; Mental Retardation, 75,000.

²Included in restricted funds are State appropriations for \$8 for Agricultural Association; \$910,430 for County Agricultural Agents; \$90,000 for utilization of agricultural products; \$131,000 for animal disease diagnosis; 30,000 for Bangs disease testing; \$15,000 for eradication of Johnson grass; and \$50,000 for Agricultural Marketing Research.

Of the \$191.9 million of general or unrestricted income, the State provided \$143.7 million, and the remaining \$52.7 million came from other sources, including \$33.7 million from student fees and \$7.1 million from sales and services.

Estimates of costs for post high school education in Indiana, based on past trends, on per student costs for different kinds and levels of instruction, and on enrolment estimates and on the various recommendations contained in this Report are shown in Table XX.

Table XX. Estimated Educational and General Costs for Public Post High School Education for 1975, 1980, and 1985

Year	EDUCATIONAL AND GENERAL ESTIMATED COSTS		
	Instruction	Research and Public Service	Total
1975	\$270,439,000	\$29,000,000	\$299,439,000
1980	\$312,456,000	\$34,320,000	\$346,776,000
1985	\$311,866,000	\$36,240,000	\$348,106,000

FINANCIAL PROCEDURES

As indicated in Chapters II and IV, it is expected that the Board of Regents, in exercising its planning and coordinating function, will "prescribe uniform budgetary and accounting procedures."

Since there must be continuity in the work of educational institutions, their financial support must be based on long-range plans for both current and capital purposes. Because needs and programs and methods change, as does the value of money, states are increasingly moving away from support formulas to program budgeting, which is currently the basis in Indiana for allocating the State's scarce resources to its institutions. This method permits recognition of those variations in personnel, programs, and facilities that give the institutions a degree of individuality and autonomy.

Effective program budgeting requires: (1) well defined objectives and long-range and current operational plans to achieve them; (2) a process of weighing alternatives of action in terms of benefits and costs; and (3) an information system that permits comprehensive review, evaluation, and modification of plans.

Consistent with this philosophy the following suggestions are made for consideration by the Board of Regents:

(1) Accounting classifications and accounting practices in public post high school educational institutions should be uniform. The accounting classification in general use in Indiana is wholly appropriate and is that recommended by the National Association of College and University Business Officers and the American Council on Education. There are, however, some variations in practice. Examples include accounting and reporting of student fees, tuition remissions, staff welfare payments, and overhead on research, public service, and extension services.

2) In so far as feasible, the budget submitted for review in justification of support should be on the budget employed in internal administration.

(3) In so far as feasible, the expenditures relating to the three primary functions of higher education—instruction, research, and public service—should be segregated to those functions. Separately budgeted departmental research should be classified as organized research. If departmental administrative expenses relating to instruction serve other functions, such situations should be indicated.

(4) In the budget for resident instruction three areas should be recognized: (a) lower level (freshman and sophomore), (b) upper level (junior and senior), and (c) the graduate level. Such distinctions will permit a careful examination of programs in relation to costs.

(5) In the budget for resident instruction, the per student credit hour value for each course should be provided. This will permit equating programs to full-time student equivalents, securing student-faculty ratios, and direct costs per full-time equivalent student at the several levels.

(6) The rank, teaching loads, and class sizes assigned teaching personnel should be considered in each of the three levels of instruction. The assignment of the equivalent values of a full-time teacher to the graduate or other students that are assigned professional responsibilities as teachers should be reviewed and made comparable for similar services among the different institutions.

(7) Subject to modifications recommended above, the present format now in use appears appropriate.

(8) Policies should be adopted concerning income. It is recommended that student educational fees, including tuition, be applied in full to finance educational expenditures, excepting only deductions to cover agreed upon debt services. Tuition remissions should be governed by Board of Regents' policies. Through the efforts of foundations it is anticipated that increasing income for educational purposes will be provided by philanthropists through gifts and through income from endowments.

(9) Policies should be adopted by the Board of Regents to guide the making of contracts for teaching, research, service, or construction. Overhead funds included in and such contracts should be used to finance overhead costs. If the overhead component of a contract is insufficient, the necessary balance to finance the needed overhead costs should be designated from available institutional funds at the time the contract is agreed to.

FOUNDATIONS ASSOCIATED WITH PUBLIC COLLEGES AND UNIVERSITIES

Foundations associated with the public colleges and universities of the United States have played an increasingly major role in enabling those institutions to exercise a degree of flexibility in meeting their objectives and purposes. They have been established in order to receive and encourage gifts and grants of money, income from patent holdings and from many types of activities associated with post high school educational institutions. They supplement the state tax funds which provide basic and continuing financial support for the public institutions. In some outstanding examples they have built up very substantial endowment funds, rivalling those of many of the great private universities and colleges. With government and private contracts included as a major source of income to these non-profit corporations (many do not actually use the word "foundation" in their names) some of the larger public institutions have been reporting in recent years that income from tax sources has become a smaller component of total income, ranging down to less than half in some cases.

The Commission is firm in its conviction that such foundations should be encouraged and strengthened in their ability to secure funds and to use them wisely for the best interests of the colleges and universities with which they are associated. It is recognized that the timely providing of non-public funds for the support of a public institution may provide that "vital margin of excellence" which distinguishes the great university or college from those not so great. The Commission is also well aware of and calls attention to the need to assure prospective donors and benefactors that gifts and grants received from them will be used strictly in accordance with the purposes of the foundation on the one hand and the wishes of the donor or benefactor on the other; and also that such funds will be kept and accounted for entirely separate from state and other tax funds; and further, will not revert to the state treasury.

As a word of caution it should be noted that the situation might easily arise, and it seems to have arisen on occasion in Indiana, where a project, program, activity, unit of instruction or research center, or building has been inaugurated with funds from a non-profit corporation, or corporations, and developed to the point where they become a seemingly essential part of the operation of an institution which may, because the original source of funds has disappeared or is desired for another purpose, look to State Government and to the tax funds to maintain the activity, whatever it may be. As the Commission has pointed out earlier, this practice is completely at variance with the goal and philosophy of long-range planning for post high school education

and, if continued, would render impossible the effectiveness of the work of the Board of Regents recommended by the Commission. The General Assembly, the Governor, and the Board of Regents should never be placed in the position of eventually being morally or politically or legally required to support enterprises over the establishment of which they have had no control.

Although such non-profit corporations are required to make full reports to the Federal Internal Revenue Service and to the Indiana Department of State in the case of organizations incorporated in Indiana, there sometimes develops an air of mystery and uncertainty as to the nature of such corporations and what they are doing. The Commission feels it is important to clear the air on this matter and that to merit the strong public support and cooperation such corporations deserve there should be complete public reporting of their financial status and operations, the various enterprises they are involved in and the relation of these enterprises to the purposes and programs of the institutions with which they are associated.

Some of the foundations and other non-profit corporations associated with Indiana public institutions of post high school education are included in the following list:

SOME FOUNDATIONS ASSOCIATED WITH THE PUBLIC COLLEGES AND UNIVERSITIES IN INDIANA AND DATES OF THEIR INCORPORATION

Ball State University

Ball State University Foundation—1951

Indiana State University

Indiana State University Foundation—1928

Indiana University

Foundation for the School of Business of Indiana University—1957

Hoosier Realty Development Corporation—1962

Indiana Alpha Student Scholarship Foundation of Indiana University—1953

Indiana-Purdue Foundation at Fort Wayne—1958

Indiana University Foundation—1964

Purdue University

The Agricultural Alumni Seed Improvement Association—1938

Indiana Crop Improvement Association—1907

The Indiana 4-H Foundation—1961

Indiana-Purdue Foundation at Fort Wayne—1958

Purdue Academic Facilities Foundation—1964

Purdue Aeronautics Corporation—1942

The Purdue Agricultural Alumni Association, Inc.—1938

Purdue Alumni Association, Inc.—1928

Purdue-Calumet Development Foundation—1954

Purdue Farmhouse Association, Inc.—1950
Purdue Pilots, Inc.—1956
Purdue Research Foundation—1964
Purdue Staff Aero Club, Inc.—1962
Purdue Student Housing Corporation—1938
Ross Ade Foundation—1923

Vincennes University

The Vincennes University Foundation, Inc.—1961

An analysis of the articles of incorporation of these organizations shows that they are generally closely associated with their institutions, some in terms of the institutions broad overall purposes and in other cases restricted to a specific function or activity.

An analysis of the financial reports of these corporations shows that they range, in magnitude of their annual operations, from a few thousand to several million dollars.

With respect to these foundations and other non-profit corporations the Commission feels that the following recommendation will help to clarify the present somewhat confused situation and also provide the method whereby the Board of Regents may fulfill its mission to develop long-range plans for and to coordinate all aspects of post high school education.

- 8. All expenditures made by or in behalf of the state institutions from whatever sources (public or private) should be reported to The Board of Regents and should conform to the activities, programs, and purposes of the respective institutions, as approved by the Board of Regents and The General Assembly.**

chapter X

STUDENT FINANCIAL AIDS

The Indiana Scholarship Act of 1965 established a State Scholarship Commission for the first time, outlined its purposes, duties, and responsibilities, and appropriated \$500,000 for the biennium ending June 30, 1967. An appropriation of \$3,862,856 was made for the biennium ending June 30, 1969. Since the first Commission of twelve members was appointed by the Governor in September, 1965, the Commission and its staff have operated the programs as described by the Act and have made a careful study of the costs of going to college in Indiana and the citizens' ability to pay those costs.

The costs of post high school education have been rising in recent years and it appears they will continue to rise in the years ahead. The National Center for Educational Statistics, in its 1967 Edition, reports that in the decade from 1956 to 1966 the average cost of tuition in public institutions across the country rose from \$883 to \$1,071 and is expected to continue up to \$1,285 in 1976. The corresponding figures for private institutions are \$1,504 in 1956, \$2,164 in 1966, and \$2,828 in 1976.

The current figures for Indiana institutions are shown in Table XXI along with the amount of the average maximum of the State scholarships awarded to students attending each type of institution.

Table XXI. The Cost of Going to College in Indiana¹

	Average ² Cost of Tuition & Regularly Assessed Fees	Average Estimated Total Cost		Average ² State Scholarship Award
		Resident	Commuter	
Public Institutions	\$ 489	\$2,063	\$1,271	\$490
Main Campuses	431	1,857	1,195	430
Regional Centers	514	2,352	1,302	514
Private Institutions	1,175	2,471	1,975	751
Pub. & Private Institutions	905	2,369	1,666	652

¹Compiled from information given in **College and University Handbook of Indiana, 1968-69** Edition.

²Averages include all curricula and facilities except General Aviation Flight Technology at Purdue University, Student Religious program at St. Mary-of-the-Woods College, and the Eastern Indiana Center of Earlham.

In examining the ability of Indiana families to pay the average total student costs in 1966, which were \$1,650 for students in public institutions and \$2,270 for students in private institutions, the Commission found that only 21 per cent of Indiana families had incomes which would enable them to meet these total costs for one son or daughter in a public institution and only 9 per cent of the families could afford to pay the total cost of one son or daughter in a private college. Fifty-four per cent of the families were unable to meet even half the cost of sending one son or daughter to a public college and two-thirds were unable to afford even half of the student costs in a private institution.

The Scholarship Commission, rating students first on their academic records, has granted both honorary awards without stipend when there was not clear evidence of

80/91

financial need on the part of the parents, and scholarships with stipends (from \$100 to \$800) when financial need was demonstrated.

The actual awards made by the Scholarship Commission during its first three years of operation are shown in Table XXII.

Table XXII. Distribution of Hoosier Scholar Awards¹

	1966		1967		1968		Three Year Total	
	Number	%	Number	%	Number	%	Number	%
Nos. of Awards:								
Public Institutions	1,358	74.3	3,550	70.2	4,612	73.4	9,520	72.3
Private Institutions	470	25.7	1,507	29.8	1,671	26.6	3,648	27.7
Dollars Awarded:								
Public Institutions	\$173,282	41.4	\$466,531	44.6	\$608,460	45.6	\$1,248,273	45.0
Private Institutions	\$219,648	55.9	\$579,576	55.4	\$724,030	54.4	\$1,523,254	55.0

¹ From Report of the State Scholarship Commission of Indiana with Recommendations to The Honorable Roger D. Branigin, Governor of the State of Indiana, October, 1968, p. 26.

This Table shows that while more than 70 per cent of the scholarships awarded go to students attending public institutions more than half of the money awarded goes to students attending private institutions. This is generally explained by the fact that more than three and one-half times as many Indiana students attend public institutions as those attending private institutions (Appendix 1) and at the same time the costs of attending private colleges in Indiana are considerably higher than the costs of attending public institutions.

The problem of paying for the opportunity to attend college in Indiana is an acute one. The Scholarship Commission is studying the problem and making recommendations for the improvement of the scholarship program and the loan programs which the Scholarship Commission also hopes to expand.

The State Policy Commission on Post High School Education recommends that:

15. The Board of Regents should cooperate with the State Scholarship Commission in order to expand and make more flexible present state scholarship programs, so that Indiana youth will not be denied the opportunity to go to college for financial reasons. More state scholarship funds should be made available and should be distributed more on the basis of the financial needs of the students than solely on the basis of academic records. Loan funds should be acquired by the State Scholarship Commission and made widely available to qualified and needy students.

RELATIONS OF PUBLIC POST HIGH SCHOOL INSTITUTIONS AND THE BOARD OF REGENTS TO STATE AGENCIES, BOARDS, AND COMMISSIONS

In a system as large and varied as the total program of post high school education in Indiana is becoming, with its activities touching the lives of both youth and adults at many points, it is natural that some of these activities will be closely related to, or indeed may overlap, those of other organizations. With the inauguration of a Board of Regents which is assigned the task of planning for and coordinating the whole range of post high school educational activities, it is inevitable that the work of that Board will touch or impinge on the work of others at several points.

The problem of coordination involving the Board of Regents and the post high school institutions on the one hand and the Federal Government and several State agencies on the other is just as important as the problem of coordination within post high school education.

Several State agencies will be immediately involved in this problem of coordination as soon as the Board of Regents is established. They are:

THE BOARD OF VOCATIONAL AND TECHNICAL EDUCATION

This Board was created by the 1965 General Assembly (Chapter 244) to receive federal funds for vocational education and to distribute such funds between the Department of Public Instruction which is responsible for vocational education at the secondary level and the Indiana Vocational Technical College which was just beginning to plan for vocational education at the post high school level. This Board also has responsibility for designing and supervising the administration of a State plan for vocational education. Pursuant to the earlier recommendations concerning the establishment of a Board of Regents to coordinate all post high school education and the recommendation to convert the Indiana Vocational Technical College to a community college system, the Commission recommends that:

9. The General Assembly should provide that funds which come from The Federal Government through the Board of Vocational and Technical Education, for public post high school education, should be under the control of the Board of Regents and that The Board of Vocational and Technical Education should coordinate its activities with the

Board of Regents on all matters affecting post high school vocational education.

THE INDIANA ADVISORY COMMISSION ON ACADEMIC FACILITIES

This Commission was established and appointed by the Governor to administer Title I of the Higher Education Act of 1963 and Title VI, Part A, of the Higher Education Act of 1965. Its headquarters are in the Indiana Memorial Union at Indiana University.

Under these federal laws, every state in the Union has established a higher education facilities agency to administer three separate titles: (1) Undergraduate Facilities, (2) Construction Equipment Grants and, (3) Comprehensive Planning. The title covering Comprehensive Planning makes grants to the administering agencies for planning purposes which, in theory at least, are related to facilities. The program covering undergraduate facilities and construction equipment grants makes possible direct federal grants to institutions whose applications for funds are established on a priority basis by the State agency.

During the past four fiscal years (1965-1968) grants totalling \$37,488,707 have been distributed to Indiana colleges and universities under the Acts of 1963 and 1965 by the Advisory Commission. These grants have covered 64 construction projects at 28 campuses and 33 allocations for equipment and closed-circuit television at 28 campuses. These grants are listed in Table XXIII.

It should be pointed out that \$36,367,823 for the 64 construction projects does not cover their total costs. The actual costs of these projects was \$110,552,442, the difference between the two amounts being derived from other sources.

The Commission believes that the proposed Board of Regents and the State agency established under the federal acts should be the same agency. Precedent for this kind of merger of the two functions has already been established in several other states where the State agency for higher education facilities has been abolished and its functions transferred to the coordinating agency. The Board of Regents, under this plan, will obviously have direct dealings with private institutions in the allotment of federal funds. Through this device the Board may be able to effect a coordination of both private and public post high school education within the State which would otherwise be impossible. Properly administered, such a program could be of real advantage to the private institutions by assuring them that their programs and facilities would be sympathetically considered by an overall State agency like the Board of Regents. It is therefore recommended that:

- 10. The Governor be urged to transfer the functions of the Indiana Advisory Commission on Academic facilities to the new Board of Regents and to designate the Board of Regents as the agency in Indiana to carry out, at the state level, the provisions of the Federal Higher Education Acts of 1963 and 1965, and any other similar acts.**

Table XXIII. Grants Recommended for Construction Projects, Equipment and Closed-circuit Television on Indiana College and University Campuses by the Indiana Advisory Commission on Academic Facilities, 1965-1968¹

INSTITUTION	1963 Act-Construction Projects	1965 Act-Equipment	Total
PUBLIC INSTITUTIONS			
Ball State University	\$ 3,707,726	\$ 86,733	\$ 3,794,459
Indiana State University—Terre Haute	963,705	61,124	1,024,829
Evansville	1,750,600	88,000	1,838,600
Indiana University—Bloomington	4,165,819	29,850	4,195,669
Fort Wayne		17,739	17,739
Gary	833,927	48,933	882,860
Indianapolis	3,569,632	36,352	3,605,984
Kokomo		48,950	48,950
Jeffersonville		44,895	44,895
South Bend	172,000	47,929	219,929
Purdue University—Lafayette	1,566,060	97,605	1,663,665
Fort Wayne		42,016	42,016
Hammond	3,350,498	80,867	3,431,365
Indianapolis	418,800	72,293	496,093
Westville	1,540,761	39,139	1,579,900
Vincennes	1,370,600	75,980	1,446,580
TOTAL PUBLIC INSTITUTIONS	(\$23,410,128)	(\$ 923,405)	(\$24,333,533)
PRIVATE INSTITUTIONS			
Anderson College	\$ 1,176,251	\$ 11,269	\$ 1,187,520
DePauw University	2,396,454		2,396,454
Earlham College	1,125,345		1,125,345
Fort Wayne Art Institute	513,041		513,041
Franklin College		950	950
Indiana Institute of Technology	634,007		634,007
Marian College	573,720	42,719	616,439
Marion College	390,000	10,775	400,775
Oakland City College		6,179	6,179
Rose Polytechnic Institute	284,510	17,385	301,895
St. Benedict College	96,805	26,098	122,903
St. Francis College	1,069,108	9,895	1,079,003
St. Mary-of-the-Woods College	820,206	7,756	827,962
St. Mary's College	629,713		629,713
Taylor University	410,371	18,827	429,198
Tri-State College	1,381,469		1,381,469
University of Notre Dame	132,000		132,000
Valparaiso University	1,324,695	45,626	1,370,321
TOTAL PRIVATE INSTITUTIONS	(\$12,957,695)	(\$ 197,479)	(\$13,155,174)
GRAND TOTAL—ALL INSTITUTIONS	\$36,367,823	\$1,120,884	\$37,488,707

¹ Information from *Finances* by Harry L. Keith and M. M. Chambers, *Current Status Report 1* in the *Higher Education in Indiana* series, Bureau of Business Research, Indiana University, for the Indiana Advisory Commission on Academic Facilities in cooperation with The Indiana Conference of Higher Education, 1968.

THE MEDICAL EDUCATION BOARD

This Board was established by the 1967 General Assembly in an Act (Chapter 286) which also established the cooperative internship-residency program between participating hospitals in some of the more populated regions of the State and the faculty of the Medical Center in Indianapolis, as described earlier in this Report. The Act also refers to "a plan for state-wide medical education" and the use of the "state-wide communications network for television, audio, and computer library service".

Since this Report assumes the establishment of the Board of Regents and also the Advisory Council on Education for the Health Professions, the Commission recommends that:

11. **The General Assembly should dissolve The Medical Education Board and transfer its legal functions to the Board of Regents.**

This recommendation is consistent with the others made in this Report and will help the Board of Regents, with the assistance and advice of the Advisory Council, to better plan and coordinate all aspects of education for the health professions.

THE INDIANA HIGHER EDUCATION TELECOMMUNICATION SYSTEM

This system is "a complex of interrelated telephone lines, microwave channels, and associated equipment forming networks which interconnect centers of higher education in Indiana; these inter-city networks are leased from the telephone industries of the State. The 'System' is also an organization for determining educational needs and shaping the use of various media (telephone, teletype, television, radio, computers, etc.) to attain valid educational objectives."¹

Chapter 358 of the Acts of the 95th General Assembly of Indiana authorized the Trustees of Indiana University, the Trustees of Purdue University, and the Boards of Trustees of Ball State University and Indiana State University "to jointly arrange from time to time for a period not exceeding ten years for the use of a multi-purpose, multi-media, closed circuit, state-wide telecommunication system furnished by Communications Common Carriers subject to the jurisdiction of the Public Service Commission of Indiana . . . " The Act specified that such a system will "interconnect the main campuses and the regional campuses of the State Universities, and centers of medical education and services." The State Universities are also granted power in the Act to permit "any other institution of higher education, or any other governmental or public corporation or body, or any other corporation, individual, partnership, association, trust or other person to use the telecommunication system or any portion thereof for educational purposes, subject to such rules, regulations, fees and charges as such State Universities, committee or other body may prescribe."²

¹ This information is from a memorandum entitled **Indiana Higher Education Telecommunication System** written by Mr. Hugh Green, Executive Director of the System.

² Ibid.

The Act specifically charges the four State Universities with adapting this program to medical education, vocational and technical training, continuing education, retraining in the professions, and on-the-job training in business and industry. This appears to be a well thought out and well planned program. It will very likely involve the coordination of the activities of all post high school institutions, public and private, and the possibility is suggested in the Act that this system may ultimately provide a network "over which a full schedule of educational broadcast services could be brought into the houses, factories, businesses, and schools of Indiana." Again because of the need for overall planning and coordination of this program, responsibility for which will fall largely on the public post high school institutions, the Commission recommends that:

- 12. The General Assembly should amend the act creating the Indiana Higher Education Telecommunication System to place that system under the jurisdiction of the Board of Regents.**

THE INDIANA EDUCATIONAL SERVICES FOUNDATION

Chapter 254 of the Laws of 1967 established this Foundation "to prepare, coordinate and administer educational and research programs, activities and services on a state-wide basis, and to receive and disburse state, federal, and other funds available for the purposes of the Act. This Foundation was set up so that it might administer, plan, and coordinate programs in various fields supported with federal money authorized under various Federal Acts. The coordinating responsibilities of the Board of Regents are so pertinent to this function that the Commission recommends that:

- 13. The General Assembly should transfer the functions of the Indiana Educational Services Foundation to the Board of Regents and the Foundation should be dissolved, or, through some other means, the functions of the Foundation should be brought under the General Supervision of the Board of Regents.**

THE EDUCATION COUNCIL

This Council is a group of seven persons, including the Governor and one member each of the Senate and the House of Representatives, and four persons appointed by the Governor "representing professional and lay interests in educational matters", which represents the State of Indiana on the national "Education Commission of the States." This Commission deals with matters coming within the purview of the Interstate Education Compact, including post high school education. Because of the importance of post high school education in this program, the Commission recommends that:

- 14. The General Assembly should provide that the Chairman, or another representative of the Board of Regents, should become an ex-officio member of the Indiana Education Council.**

There are other agencies where cooperation and coordination with the Board of Regents are very important but can likely be arranged on a less formal basis than in the cases cited above.

The Civil Rights Commission has been concerned about the status of minority groups on college campuses in Indiana and has worked with the public colleges to discover what difficulties may exist and how such difficulties may be overcome. The Commission would like to encourage the Civil Rights Commission in their efforts and would recommend that the Board of Regents should cooperate with the Civil Rights Commission and should take any steps that may help to equalize educational opportunity at the post high school level. The Commission recommends that:

- 16. The Board of Regents should cooperate with the State's Civil Rights Commission in its efforts to study the opportunities for post high school education for minority groups and should participate in such cooperative measures as will help to equalize educational opportunity at the post high school level for all Indiana citizens.**

THE PRIVATE COLLEGES

In the overall long-range planning of post high school education in Indiana serious attention should be given to the future of the private colleges and universities of the State. They now enroll approximately 40 per cent of the undergraduate students participating in degree programs. While that percentage of the total will undoubtedly shrink in the coming years, it must be assumed that a substantial number of Indiana youth will continue to obtain their education in these institutions.

This Commission has not interpreted its mandate as including the making of specific recommendations on the relations which should exist between the State and the private sector of Indiana's higher education system. However, we do call to the attention of the Governor and the General Assembly certain facts about this question:

First, the operation of these colleges and universities provides education for more than 25,000 Indiana young people each year without appreciable cost to the State. If these students should have to be provided for in tax-supported institutions, the additional operating costs for educational programs, not counting capital investments, would add to Indiana tax burdens at least \$25,000,000 per year.

Second, the private colleges and universities in Indiana, in common with similar institutions across the country, are facing a mounting financial crisis. Their salary scales continue to lag behind the salary scales of the public institutions, despite sharply and steadily rising tuition charges, and many of them are experiencing increasing deficits which are not being covered by current gifts and current income. In some states this financial crisis has already led to the complete absorption of previously private or church-related institutions into the state tax-supported systems.

Third, in a growing number of states a variety of programs for state scholarships, tuition equalization grants, institutional contract support, and tax credits are being adopted or are being considered. The General Assembly of Indiana may be asked to act upon similar proposals in the coming year. Careful, disinterested examination of these proposals should be undertaken by some appropriate and responsible body, hopefully in advance of crisis situations developing to the point at which hasty solutions may be attempted.

Accordingly this Commission recommends that:

- 17. The General Assembly should authorize the Governor to appoint a select committee of informed lay individuals not connected with any Indiana institution of post high school education to study and prepare proposals concerning the future role and financing of the private sector of Indiana's system of post high school education.**

Appendix 1. Geographic Origins of Students Enrolled in Indiana Colleges and Universities, Fall, 1967

STATES AND REGIONS	ALL INSTITUTIONS			PUBLIC INSTITUTIONS			PRIVATE INSTITUTIONS					
	Total	%	Under-grad.	%	Grad.	%	Total	%	Under-grad.	%	Grad.	%
INDIANA	115,932	71.1	97,773	72.5	18,159	64.6	90,788	81.8	76,026	86.7	14,762	63.4
Nearby States	22,296	13.1	19,210	14.3	3,086	11.0	8,974	8.1	6,499	7.4	2,525	10.9
Illinois	9,780	6.0	8,585	6.4	1,195	4.3	4,166	3.8	3,127	3.6	1,039	4.5
Kentucky	1,669	1.5	1,303	1.0	336	1.3	963	.9	664	.8	299	1.3
Michigan	2,616	2.4	2,235	1.7	381	1.4	751	.7	461	.5	290	1.2
Ohio	6,928	4.3	6,048	4.5	880	3.1	2,582	2.3	190	2.2	631	2.9
Wisconsin	1,303	.8	1,039	.8	264	.9	512	.5	296	.3	216	.9
New England	2,044	1.3	1,526	1.1	518	1.8	830	.7	387	.4	443	1.9
Connecticut	774		635		139		274		154		120	
Maine	89		51		38		41		10		31	
Massachusetts	879		630		249		383		172		211	
New Hampshire	96		63		33		48		18		30	
Rhode Island	134		98		36		55		23		32	
Vermont	72		49		23		29		10		19	
Mid-Atlantic	10,458	6.4	8,500	6.3	1,958	7.0	3,916	3.5	2,246	2.6	1,670	7.2
Delaware	117		93		24		53		33		20	
Dist. of Columbia	178		155		23		49		29		20	
Maryland	663		536		127		260		147		113	
New Jersey	2,132		1,799		333		692		404		288	
New York	4,384		3,420		964		1,834		982		852	
Pennsylvania	2,984		2,497		487		1,028		651		377	
Southeast	2,854	1.8	1,998	1.5	856	3.0	1,512	1.4	749	.9	763	3.3
							1,342	2.6	1,249	2.7	93	1.9
							6,542	12.6	6,254	13.3	288	6.0
							64		60		4	
							129		126		3	
							403		389		14	
							1,440		1,395		45	
							2,550		2,438		112	
							1,956		1,846		110	

STATES AND REGIONS	ALL INSTITUTIONS				PUBLIC INSTITUTIONS				PRIVATE INSTITUTIONS			
	Total	%	Under-grad.	%	Grad.	%	Total	%	Under-grad.	%	Grad.	%
Alabama	189		118		71		111		48		63	
Florida	591		433		158		274		132		142	
Georgia	187		124		63		102		48		54	
Louisiana	197		130		67		106		46		60	
Mississippi	107		64		43		62		28		34	
North Carolina	234		131		103		148		57		91	
South Carolina	118		67		51		69		22		47	
Tennessee	376		277		99		215		124		91	
Virginia	588		466		122		284		174		110	
West Virginia	267		188		79		141		70		71	
Plains States	3,172	1.9	2,391	1.8	781	2.8	1,324	1.2	658	.8	666	2.9
Iowa	602		435		167		206		59		147	
Kansas	344		231		113		157		61		90	
Minnesota	547		386		161		219		81		138	
Missouri	1,235		1,035		200		572		395		177	
Nebraska	248		181		67		89		34		55	
North Dakota	96		60		36		46		20		26	
South Dakota	100		63		37		41		8		33	
Southwest	1,140	.7	719	.5	421	1.5	600	.5	223	.3	377	1.6
Arizona	122		93		29		51		25		26	
Arkansas	144		92		52		88		38		50	
New Mexico	78		43		35		47		15		32	
Oklahoma	217		137		80		107		39		68	
Texas	579		354		225		307		106		201	
Rocky Mountain	579	.4	343	.3	236	.8	305	.3	99	.1	206	.9

STATES AND REGIONS	ALL INSTITUTIONS			PUBLIC INSTITUTIONS			PRIVATE INSTITUTIONS					
	Total	%	Under-grad.	%	Grad.	%	Total	%	Under-grad.	%	Grad.	%
Colorado	280		188		92		122		47		75	
Idaho	56		32		24		31		9		22	
Montana	109		75		34		48		20		28	
Utah	90		23		67		72		8		64	
Wyoming	44		25		19		32		15		17	
Far West	1,424	.9	904	.7	520	1.9	659	.6	205	.2	454	2.0
California	993		646		347		451		146		305	
Nevada	21		15		6		10		5		5	
Oregon	165		100		65		82		25		57	
Washington	245		143		102		116		29		87	
Alaska	19		8		11		13		2		11	
Hawaii	150		111		39		104		69		35	
U. S. Territories	31		31		0		2		2		0	
Foreign	2,796	1.7	1,282	1.0	1,514	5.4	1,919	1.7	565	.6	1,354	5.8
TOTAL	162,895		134,796		28,099		110,946		87,680		23,266	

Appendix 2. Earned Degrees conferred by Indiana Institutions, Public and Private, 1966-1967 and 1967 summer¹

Major Field of Study	4-Year Bachelor's and First Professional Degrees	First Professional Degrees Requiring 5 or More Years	Master's Degrees (Except First Professional)	Specialist (2-Year Graduate)	Doctor's Degrees	Associate Arts Degrees (2-Year)
Agriculture	161 ²	(1) ³	44	(1)	46	(1)
Agriculture, General	27	(1)				
Agriculture, Business	24	(1)				
Agronomy, Field Crops	32	(1)	10	(1)	17	(1)
Animal Science	22	(1)	24	(1)	19	(1)
Wildlife Management	13	(1)				
Food Science	5	(1)				
Horticulture	9	(1)				
All Other	29	(1)	10	(1)	10	(1)
Architecture	25	(1)				
Biological Sciences	721	(27)	229	(9)	78	(3)
Biology, General	466.5	(25)	85	(7)	3	(1)
Botany, General	17	(4)	9	(2)	6	(2)
Zoology, General	142	(6)	16	(2)	6	(2)
Anatomy	7	(1)	5	(1)	1.5	(1)
Bacteriology and/or Microbiology	15	(4)	3	(2)	12	(2)
Biochemistry	7	(2)	15	(3)	16	(2)
Physiology	7	(1)	2	(1)	1.5	(1)
All Other	59.5	(5)	94	(4)	32	(2)
Business and Commerce	2163	(20)	600	(6)	44	(2)
Industrial Management	16	(2)	1	(1)		

Major Field of Study	4-Year Bachelor's and First Professional Degrees	First Professional Degrees Requiring 5 or More Years	Master's Degrees (Except First Professional)	Specialist (2-Year Graduate)	Doctor's Degrees	Associate Arts Degrees (2-Year)
Education	3520.5 (28)		3246.5 (10)	53	198 (5)	
Business Ed.	213.5 (10)		106.5 (4)		11 (1)	
Counseling & Guid.			333 (5)	1 (1)	7 (3)	
Ed. Admin. & Supervision			282 (4)	52 (1)	25 (2)	
Elementary Ed.	2126.5 (26)		984 (6)		28 (3)	
Industrial Ed.	154 (3)		121 (3)		14 (1)	
Physical Ed.	551.5 (20)		376.5 (6)		3 (1)	
Music Ed.	185 (18)		86 (7)		19 (2)	
Secondary Ed.	45 (2)		227 (3)		12 (2)	
Special Ed.	131 (4)		192 (6)		79 (4)	
All Other	114 (8)		538.5 (5)		84 (1)	7 (1)
Engineering	1550 (7)		446 (2)		10 (1)	
Aeronautic	113 (4)		60 (2)		3 (1)	
Agricultural	10 (1)		4 (1)		3 (2)	
Chemical	131 (5)		27 (2)		12 (2)	
Civil	211 (6)		96 (3)		20 (2)	
Electrical	539 (7)		151 (3)		3 (1)	
Engineering Sci.	24 (1)		18 (1)		18 (2)	
Industrial	49 (2)		60 (2)		2 (1)	
Mechanical	441 (7)		15 (1)		13 (2)	
Metallurgical	18 (1)		15 (2)		23 (2)	
All Other	14 (2)		365 (10)		7 (1)	
English & Literature	1078 (29)		11 (2)			
Journalism	47.5 (9)					

Major Field of Study	4-Year Bachelor's and First Professional Degrees	First Professional Degrees Requiring 5 or More Years	Master's Degrees (Except First Professional)	Specialist (2-Year Graduate)	Degrees Doctor's	Associate Arts Degrees (2-Year)
Fine & Applied Arts	524 (26)		367.5 (8)		30 (3)	21 (1)
Fine Arts	163 (16)		92 (5)			
Folklore			5 (1)		3 (1)	
Music	103 (21)		137 (6)		13 (1)	
Speech & Drama	224 (10)		83.5 (6)		14 (2)	
All Other	34 (8)		50 (2)			21 (1)
Foreign Lang. & Lit.	535 (24)		226.5 (6)		12 (1)	
French	178 (23)		66 (5)		4 (1)	
German	76 (17)		36 (3)		3 (1)	
Latin or Greek	34.5 (8)		24 (5)			
Russian	22.5 (7)		36 (1)		3 (1)	
Spanish	212 (20)		59.5 (5)		2 (1)	
All Other	12 (3)		45 (2)			
Forestry	25 (1)		12 (1)		2 (1)	
Gen. Ed. & Lib. Arts						
Geography	36 (4)		23		5 (1)	47 (3)
Health Profession	495 (8)	465	117 (4)		20 (1)	187 (4)
Dentistry	27 (2)	85 (1)	32 (1)			
Dental Technician						
Medicine	46 (3)	182 (1)				39 (1)
Med. Tech. & Hygiene	53 (9)					
Nursing & Pub. Health	260 (6)		28 (1)			1 (1)
Optometry	26 (1)		30 (1)			147 (3)
Pharmacy (Program A)		149 (2)	7 (2)		8 (1)	
(Program B)		49 (1)	13 (1)		7 (1)	

Major Field of Study	4-Year Bachelor's and First Professional Degrees	First Professional Degrees Requiring 5 or More Years	Master's Degrees (Except First Professional)	Specialist (2-Year Graduate)	Doctor's Degrees	Associate Arts Degrees (2-Year)
All Other	83 (3)		7 (3)		5 (1)	
History & Phil. of Sc.					3 (1)	
Home Economics	259.5 (13)		88 (6)			
Law (LLB or Higher)		301 (3)	3 (1)			
Library Science	10 (3)		113 (3)			
Linguistics	2 (1)		31 (1)		7 (1)	
Mathematics	547.5 (29)		257 (9)		33 (3)	
Philosophy	130 (21)		18 (3)		11 (2)	
Physical Sciences	502 (27)		285 (8)		130 (3)	
Astronomy	1 (1)		8 (1)		4 (1)	
Chemistry	330 (27)		126 (8)		88 (3)	
Geology	40 (17)		24 (1)		7 (1)	
Physics	106 (20)		85 (6)		31 (3)	
All Other	25 (6)		42 (3)			
Police Administration	11 (1)					
Psychology	411.5 (21)		68.5 (6)		41 (2)	
Radio & TV	36 (4)		4 (1)		1 (1)	
Religion & Theology	149.5 (16)	67 (5)	87 (6)		8 (2)	
Social Sciences	2428.5 (28)		597 (9)		76	
Anthropology	15 (2)		5 (1)		2 (1)	
Economics	424 (17)		80 (5)		21 (3)	
History	621 (28)		265 (9)		20 (2)	
Pol. Sci. or Gov.	464 (18)		88 (6)		9 (2)	

Major Field of Study	4-Year Bachelor's and First Professional Degrees	First Professional Degrees Requiring 5 or More Years	Master's Degrees (Except First Professional)	Specialist (2-Year Graduate)	Doctor's Degrees	Associate Arts Degrees (2-Year)
Sociology	323.5 (18)		54.5 (7)		10 (3)	
Criminology			1 (1)			
Social Work & Social Admin.	91 (7)					
All Other	490 (14)		103.5 (6)		14 (2)	
Technology						299 (1)
Aeronautical						49 (1)
Architectural						32 (1)
Chemical						5 (1)
Civil						22 (1)
Data Processing						25 (1)
Drafting						3 (1)
Electrical						74 (1)
Industrial						24 (1)
Mechanical						65 (1)
Other Miscellaneous Fields	286.5 (9)		117 (4)	2 (1)	12 (2)	10
TOTALS	15,607		7,373	55	862	646

¹ From **Higher Education in Indiana, Programs and Personnel**, by Curtis L. Borton and Raleigh Holmstedt for the Indiana Advisory Commission on Academic Facilities in cooperation with the Indiana Conference of Higher Education, 1968.

² Fractions, i.e., .5, indicate half of a double major for a degree.

³ Numbers in parentheses indicate the numbers of institutions awarding the degree.

APPENDIX 3.**INTEGRATION OF SENIOR UNIVERSITIES IN A
STATE-WIDE SYSTEM OF MEDICAL EDUCATION¹****Premises:**

1. There is now a chronic shortage of personnel in the health professions throughout the United States.
2. Unless dramatic changes are implemented in the methods of health education, this deficiency will accelerate to critical proportions.
3. Nationally, this deficiency of medical personnel can be attributed to the lack of educational facilities, generally outmoded curricula, and unnecessarily protracted professional and apprentice training requirements.
4. The deficiency in medical personal is particularly acute in Indiana, as we are far below the national average of physicians per population.
5. A major factor contributing to the abnormal Indiana deficiency has been the quantitative and qualitative inadequacies in postgraduate and continuing medical education programs available in Indiana, which deficiencies have caused graduates of our medical school to go elsewhere for postgraduate training and have failed to attract graduates of medical schools from other states to Indiana.
6. Indiana's only medical school, presently the nation's largest, concentrates in Indianapolis too large a group of beginning medical students to allow adequate individual introductory instruction. The present school cannot make optimum use of its advanced scientific and clinical faculty unless further increases in total enrolment are made primarily by increasing the number of advanced students.
7. Nevertheless, the cost of constructing and staffing one or more additional unitary medical schools in Indiana is far beyond the limited resources of the State at this time. Even if sufficient funds were made immediately available, as much as a decade would be needed to construct such a facility in order to meet minimum permissible standards, to staff the school, to become accredited, and to shepherd a beginning class through their education.
8. The 1967 Indiana General Assembly authorized support for a state-wide, hospital affiliated, internship and residency program and also a telecommunication facility to link Indiana's teaching hospitals as first steps in retention of our graduates,

¹ This alternative plan for expanding opportunities for medical education in Indiana was proposed to the Commission by one of its members, Mr. Beurt SerVaas.

attraction of young physicians from other states, and upgrading continuing medical education.

9. The Indiana University School of Medicine has already developed new concepts of medical curricula which prove that the goal of education of professional physicians may be accomplished by following new paths.

10. Several of our private and state universities and their enthusiastic lay supporters have repeatedly offered to incorporate their already established and functioning elements for advanced biological and clinical training into a state-wide plan for medical education, and Indiana University School of Medicine has implemented pilot programs utilizing those university resources in the education of physicians.

11. The success of these forward looking programs in curricula and utilization of other university resources indicates that the facilities, faculty, and hospitals available in the communities of our private and State universities, and with reasonable State support, in conjunction with the advanced thinking in medical education being done at the present School of Medicine, offer a potential for the dramatic changes in medical education that may turn the tide on the immediate critical needs for Indiana and may light the way for medical education throughout the United States.

Recommendations:

1. The new Board of Regents, in cooperation with the recommended Advisory Council on Education for the Health Professions, should inventory, immediately, those facilities now existing throughout the State, which are now providing instruction, or are capable of providing instruction, in advanced biology and clinical practices.

2. The new Board of Regents in concert with the faculty and staff of the present Indiana University School of Medicine, could develop an integrated, yet decentralized medical education system for Indiana.

3. As a part of that new decentralized medical education system, the facility now known as the Indiana University School of Medicine could be designated the Senior Medical Facility and developed primarily as the facility for instruction in the terminal years of medical curricula leading to a doctoral degree and for postdoctoral education, in order that the present accreditation of the Indiana University School of Medicine be continued as the accreditation of the new educational system.

4. Entering classes of medical students at the Indianapolis Medical Center should be maintained at an optimum size.

5. The separate facilities now operating at the Medical Center in Indianapolis, providing instruction in the allied health sciences, should be continued and expanded.

6. Those facilities at the Indianapolis Medical Center now serving for the education of interns, residents, dentists, and nurses should likewise be augmented.

7. The Senior Medical Facility should be given the authority to designate those basic elements of instruction at the decentralized medical education centers necessary to provide the foundation for entry into the Senior Medical Facility.

8. The Senior Medical Facility should be instructed to recast the curricula and educational prerequisites leading to its M.D. degree so that a student could receive the degree with no more than six years of post high school study.

9. A student receiving the M.D. degree from the Senior Medical Facility should have sufficient credits and education that he or she is educationally qualified and legally permitted to do any of the following:

- (a) Practice medicine in the State of Indiana by passing Indiana's licensing requirements;
- (b) Pursue postdoctoral degrees in health science fields such as bioengineering and biophysics;
- (c) Pursue advanced study necessary to qualify for medical specialty boards;
- (d) Pursue further training in public health and medical administration;
- (e) Qualify for the teaching of medicine and public health in high schools, colleges, and technical schools; and
- (f) Serve on hospital staffs and other health institutions and engage in any medical activities for which they qualify.