

THE *Needs* OF
Higher Education
IN *Maryland*

THE REPORT OF THE COMMISSION
APPOINTED BY

Governor Theodore R. McKeldin

TO STUDY THE NEEDS OF
HIGHER EDUCATION IN MARYLAND

1955

MEMBERSHIP OF THE *COMMISSION TO STUDY*
THE NEEDS OF HIGHER EDUCATION IN MARYLAND

H. C. Byrd, President, The University of Maryland

REPRESENTED BY: Wilbur Devilbiss, Dean, College of Education, University of Maryland, College Park, Maryland

Lowell S. Ensor, President, Western Maryland College, Westminster, Maryland

Earle T. Hawkins, President, Maryland State Teachers College, Towson 4, Maryland

Martin D. Jenkins, President, Morgan State College, Baltimore 12, Maryland

Otto F. Kraushaar, President, Goucher College, Towson 4, Maryland

Very Rev. Thomas J. Murray, S. J., President, Loyola College

REPRESENTED BY : Rev. John E. Wise, S. J.

ASSISTED BY: Charles H. Tietjen, Loyola College, Baltimore 10, Maryland

Lowell J. Reed,* President, The Johns Hopkins University

REPRESENTED BY: P. Stewart Macaulay, Provost, The Johns Hopkins University, Baltimore 18, Maryland

Roszel C. Thomsen, Chief Judge, U. S. District Court, Formerly President of the Board of School Commissioners of Baltimore City

ASSISTED BY: John H. Fischer, Superintendent, Baltimore City Schools, Baltimore City Board of Education, Baltimore 18, Maryland

Thomas G. Pullen, Jr., State Superintendent of Schools and Chairman of the Commission, Department of Education, 2 West Redwood Street, Baltimore 1, Maryland

* Dr. Detlev W. Bronk was originally appointed to membership on the Commission. Dr. Reed was appointed as his successor on the Commission after his appointment as successor to Dr. Bronk as president of the University.

LETTER OF *TRANSMITTAL*

TO THE GOVERNOR OF MARYLAND:

The report of the Commission to Study the Needs of Higher Education in Maryland is submitted herewith. Your Commission held its organization meeting on Tuesday, April 7, 1953. It was decided that the members of the Commission should work as a group in securing the information necessary for the discovery of the facts concerning educational needs in the State. Committees were appointed to secure pertinent data in reference to the various phases of the Study. A staff member of the Maryland State Department of Education was assigned as Secretary to each of these committees, and an additional staff member was assigned to serve as Secretary to the Commission. Proceeding on the belief that such a study should be a professional one made by professional people familiar with the problems of the State of Maryland, no consultants from other areas were employed by the Commission. All initial work was done by persons engaged in educational activities within the State and was carried on in addition to full-time employment in their respective positions in the colleges of the State and the Maryland State Department of Education. Proceeding in this fashion, the study has consumed more time than would have been the case if outside experts had been employed. By the same token, your Commission believes that the study is a more thorough one than would have been possible had other procedures been followed. Much research into population statistics, building facilities available, instructional personnel to be required, and financial conditions of the institutions of Maryland has gone into this study.

In the final organization and editing of the report, the services of

Dr. Guy E. Snavelly, formerly Executive Director, Association of American Colleges, were secured for a brief period.

Your Commission presents these recommendations as representing the considered judgment of the Commission. With the exception of two areas, every item included has received the unanimous endorsement of all Commission members. We hope that this report will make a contribution to the educational program of Maryland which will prove to be of lasting value.

<i>Wilbur Devilbiss</i>	<i>Lowell S. Ensor</i>
<i>Earle T. Hawkins</i>	<i>Martin Jenkins</i>
<i>Otto Kraushaar</i>	<i>John E. Wise</i>
<i>Lowell J. Reed</i>	<i>Roszel C. Thomsen</i>
<i>Thomas G. Pullen, Jr.</i>	

ACKNOWLEDGMENTS

This study has been made by the members of the Commission and staff members of the Maryland State Department of Education with no outside assistance other than that of an editor. For this reason the study has required a considerable period of time, but by the same token has been conducted on a very thorough basis. It has been a professional study carried on by professional individuals. The report is intended to serve, not only as a source of information for the Governor of Maryland and the Maryland State Legislature, but also as a professional source of reference for the colleges and universities of the State in considering plans for expansion.

Acknowledgment is hereby given to the valuable service rendered by members of the staff of the Maryland State Department of Education who collected vast amounts of data used as a background information for the members of the Commission, and who drafted preliminary statements which were used as a basis for the final development of the report.

Members of the State Department of Education staff who participated in this work are as follows:

Paul E. Huffington, State Supervisor of High Schools
William S. Sartorius, Assistant Director of Finance and Research
John J. Seidel, Assistant State Superintendent for Vocational Education
James E. Spitznas, Director of Instruction
Willis H. White, State Supervisor of High Schools
D. W. Zimmerman, Assistant State Superintendent of Finance and Research

and W. Theodore Boston, Assistant Director of Accreditation and Certification, who has served as Secretary to the Commission.

Because of the way in which this study was made, through the use of professional people employed in educational positions in the State, the cost to Maryland has been negligible; the major unit of cost being that for printing and publication of the report.

CONTENTS

CHAPTER I	
THE ORIGIN AND THE PROBLEM OF THE COMMISSION, 3	
CHAPTER II	
THE COMMISSION'S PHILOSOPHY OF HIGHER EDUCATION, 9	
CHAPTER III	
OPPORTUNITIES MARYLAND OFFERS	
IN THE FIELD OF HIGHER EDUCATION, 15	
CHAPTER IV	
FINANCIAL SUPPORT OF HIGHER EDUCATION IN MARYLAND, 25	
CHAPTER V	
STUDENTS WHO NOW ATTEND MARYLAND COLLEGES, 30	
CHAPTER VI	
FACTORS AFFECTING THE NUMBERS ATTENDING COLLEGE, 39	
CHAPTER VII	
THE NEED FOR SPECIALIZED PREPARATION IN MARYLAND, 66	
CHAPTER VIII	
THE IMPACT OF INCREASING POPULATION	
ON COLLEGE ENROLLMENTS IN MARYLAND, <i>JJ</i>	
CHAPTER IX	
WHO IS LIKELY TO ATTEND COLLEGE IN MARYLAND, 1955-70, 90	
CHAPTER X	
RECOMMENDATIONS, 98	
APPENDIX A	
MINORITY REPORT ON PROPOSAL	
FOR SYSTEM OF GENERAL SCHOLARSHIPS, 120	
APPENDIX B	
BIBLIOGRAPHY, 126	

LIST OF TABLES

- i. Type of Institution, 16-17
2. Student Enrollment, Number of Teachers, Teacher-Student Ratio, 18
3. Admission Requirements, 19-20
4. Basic Costs, 21
5. Miscellaneous Data, 22
6. Enrollment and Adequate Dormitory Facilities, 23
7. Types of Programs Offered, 24
8. Current Per Capita Income, 27-28
9. Per Cent of Total Revenue for Current Expenditures by Source and College, 29
10. Enrollments, Year Ending June, 1953, 33-34
11. Undergraduate Students Living on the Campus of the Various Maryland Colleges as of October, 1953, 35
12. The Number of Graduates of Public High Schools of the School Year 1950-51 Who Continued Education the Year Following Graduation, i.e. 1951-52, 36
13. High-School Graduates of 1951-52 Going to College (from Questionnaire), 37
14. High-School Graduates of 1951-52 Going to College (not from Questionnaire), 37
15. A Distribution of 12,879 of the High-School Graduates of 1951-52 According to I. Q. Scores, 38
16. College Attendance Rates of Graduates, by Parents' Income and Rank in Class, New York State, 1940, 43
17. Effect on College Enrollment of the Establishment of Junior Colleges in California, 48
18. Maryland State Teachers Colleges, Geographical Distribution of Students, 51
19. Public Junior Colleges, Geographical Distribution of Students, 52
20. Universities and State Colleges, Geographical Distribution of Students, 54
21. Liberal Arts Catholic Colleges, Geographical Distribution of Students, 55

22. Other Liberal Arts Colleges, Geographical Distribution of Students, 57
23. General Geographical Distribution of Students, 58
24. Maryland College Enrollment, by County, 60
25. Effect of Proximity on Enrollment, 61
26. Population by Decade, United States and Maryland, 1900-1970, 78
27. Comparison of 1940 and 1950 Census, Maryland Population, by County, 79
28. Negro Population Trends, State of Maryland and Baltimore City, 1890-1950, 81
29. School Enrollment of High-School Age Groups, 14-17 Years, State of Maryland, 1910—50, 82
30. Secondary-School Enrollment by Decade, United States and Maryland, 1900-50, 83
31. Estimated Enrollment, Grades 9-12, State of Maryland, 1953-68, 84
32. Estimated Population of College Age (18-21), State of Maryland, 1954-69, 86
33. Estimated White Population of College Age (18-21), State of Maryland, 1954-69, 86
34. Estimated Negro Population of College Age (18-21), State of Maryland, 1954-69, 87
35. Estimated Enrollment of Maryland Residents in Maryland Colleges, 1954-69, 88
36. Enrollment Predictions, 1952-70, 94
37. Maryland Students in Maryland Colleges, 1952-70, 95
38. Out-of-State Enrollment in Maryland Colleges, 1952-70, 96
39. Grand Total Enrollments in Maryland Colleges, 1952-70, 97

THE NEEDS OF HIGHER EDUCATION IN MARYLAND

CHAPTER I *THE ORIGIN*
AND THE PROBLEM OF THE COMMISSION

The original request for a co-operative study of the needs in higher education in Baltimore and environs was addressed to the State Superintendent of Schools and the Superintendent of Public Instruction in Baltimore City by the presidents of six nonpublic, nonprofit degree-granting colleges and universities in or near Baltimore City. Both Superintendents agreed to co-operate in the study, but due to the untimely death of Dr. William H. Lemmel, Superintendent of Schools of Baltimore City, there was a delay in proceeding. A request was made then of Governor McKeldin for the appointment of a Commission to make a study of the needs of higher education in the metropolitan area of Baltimore.

Subsequent to the sending of this request to Governor McKeldin, a conference was called of representatives of all institutions of higher learning in the State, and the proposal of the six nonpublic institutions of higher learning for the study was approved by the larger group with the understanding that the study include the entire State rather than be limited to Baltimore City and environs, although it was agreed that emphasis in the study be given to this particular area. A committee from the group was appointed to discuss the request with Governor McKeldin. Following this conference Governor McKeldin appointed a Commission composed of seven representatives of public and private institutions of higher learning, the President of the Baltimore City Board of School Commissioners, and the State Superintendent of Schools, the last named being designated as Chairman.

The purpose of the study, according to the statement expressed in the Committee's letter dated February 13, 1953, to Governor McKeldin, was " to discover what additional needs (higher education) there are likely to be, whether they will probably be adequately met

by existing institutions, and, if not, how they can best be met. This is the professional method of approaching every educational problem—discover all pertinent facts, objectively interpret the facts, and professionally determine how best to meet discovered needs."

One of the reasons for this request to Governor McKeldin for the appointment of a Commission of Higher Education was the proposed expansion (or so it was understood;— of the University of Maryland into the City of Baltimore. In commenting upon this point, the committee of presidents stated in its letter of request: " We do so [request the study] not because we are opposed to the expansion of the State University. We can neither oppose nor favor such expansion until we have reliable data on which to form an intelligent opinion. We ask that such data not only be discovered but also interpreted by an impartial group."

The presidents' request to Governor McKeldin stated further that the independent institutions of higher learning did not wish to undertake a survey alone, as they considered the problem one of concern to all institutions of higher and secondary levels, public and private. This statement was as follows:

The institutions of higher education in a given locality owe it to the people of that community to evolve a plan for co-operatively serving the higher educational needs of youth and adults efficiently, economically, and without unnecessary duplication of programs and facilities. It is not a question of how many students any one institution can induce to enroll. It is rather a question of whether all institutions together are meeting the exceedingly varied educational needs of all persons who need, desire, and are able to profit by post-secondary educational opportunities. This calls for a professional attitude of co-operation on the part of all local institutions,

The request concluded:

. . . we believe that the higher educational needs of Baltimore and nearby counties should be surveyed and recommendations should be made not by any one institution, not by any small group of institutions, but in a statesmanlike manner by *all* institutions—public and private, secondary and post-secondary.

The taxpayers of Maryland have a right to know the facts and to have the benefit of the combined judgment of all institutions which are

erving the higher educational needs of the people before they are rushed into any commitment to bear the cost of additional tax-supported higher educational facilities anywhere in the State.

We, the undersigned, therefore respectfully request you as the Governor of the State of Maryland to take such steps as may be necessary to protect the people of the State against any expansion of tax-supported higher educational facilities either in the Baltimore area or elsewhere in the State until the need has been established by an impartial survey. As previously indicated, we believe this survey should be made co-operatively by the State Department of Education, the Baltimore City School System, and all public and private nonprofit degree-granting institutions of higher learning.

The first step taken by the Commission was to delineate the nature and scope of the survey, which had been set forth with some degree of clarity in the request for the appointment of the Commission. In simple language, it was agreed that its purpose was to determine the needs in the field of higher education, the extent to which those needs are being met now, and the way in which probable future needs may be met. This statement may be an oversimplification of the problem, but it serves as a point from which a more detailed analysis can start.

The next step of the Commission was to define needs. Obviously needs of any nature are predicated upon a philosophy. What may seem a luxury to one individual may be a necessity for another. The first practical task of the Commission then was to agree upon a philosophy of higher education. The statement of that philosophy is set forth in the succeeding chapter.

The Commission was next faced with the necessity of deciding upon the specific scope of its deliberations. Should it confine itself to a consideration of the needs in higher education in the conventional sense or should it concern itself with the larger problem of post-high-school education in all types of degree-granting colleges, with professional and semiprofessional education, and with graduate education? The conclusion of the Commission was that it must consider all education given in higher degree-granting institutions, undergraduate, professional and graduate, and that it must give special consideration to those post-high-school institutions whose purpose for the moment may be primarily vocational or avocational in nature **but**

which are rapidly developing programs in general education as preparation for specialized training. Music, art, business, and industry are fields in which this type of post-high-school education is rapidly expanding.

At this point it may be well to mention a specific problem in connection with professional and semiprofessional education, the latter a new development in the field of specialized education. The Commission was reminded quite definitely by certain professional, business, and industrial leaders that it should discover not only if the present facilities of the institutions of higher learning, both on the undergraduate and professional levels, are adequate to train all the youth who wish to prepare for the professions and semiprofessions and who are able to attend such institutions, but also to discover if: (i) there are those who desire this type of education and cannot secure it for one reason or another, and (2) existing institutions are preparing enough persons to meet the needs of the professions, business, industry, and, of course, the general public for such trained individuals. Specifically, the questions related to such professions as medicine, dentistry, teaching, engineering, library, and social service work. Other suggestions made by representatives of the professions were (1) a study of the extent to which semiprofessional education (between vocational on the one hand and professional on the other—admittedly a difficult distinction, but one that is needed today, particularly in the technical fields) can and should be offered and the facilities available, and (2) the extent to which professional education beyond the present level required for admission to a profession can be offered. In view of the unprecedented advances made in professional education during the past three decades, the Commission was constrained to accept these suggestions as part of the problem to be studied.

The Commission is composed of representatives of both public and private institutions of higher learning and committed to a co-operative study of the problems of all higher education in the State. It had, therefore, to come to some definite conclusion as to the place of public and private education and the part that both should play in providing higher education to the youth of Maryland. It had to recognize clearly the place of each existing and proposed institution in the total

program of higher education, its reason for being, its purpose, its philosophy, its peculiar nature, and the possibility of its expansion. It might be remarked at this point that the Commission did not consider it within the scope of its purpose to study the internal organization and operation of each institution of higher learning in the State; its purpose was broader. This study is not an analysis of, and report on, each institution of higher learning; it is a study of over-all needs in higher education and the extent to which those needs can be met by existing and possible future institutions of higher learning.

In order to evolve a sound and workable set of recommendations, the Commission was faced with the necessity of accumulating and analyzing data. It was necessary to study elementary and high-school enrollment figures for years past and to project these figures into the future as far as 1970, which could be done with reasonable accuracy. Data on high-school graduates entering college, the kind and quality of students entering, the probable number entering in the future were collected and analyzed. A special study was made of the type of student who now enters institutions of higher learning and the reasons given for attending. Likewise a study was made of high-school graduates who in terms of intelligence and scholarship are college material but do not continue their education. Data were secured on the geographical location of students entering and not entering, and the geographical location of institutions with respect to those who entered and those who did not.

It was necessary to collect and analyze data concerning facilities made available in the various institutions of higher education and the possibilities of expanding these facilities without interfering with the major purpose of any institution, and to recommend additional facilities or institutions if necessary.

There is the insistent problem of finance. The Commission was not concerned with one type of institution only, that is, public or private, but with both. Three patterns of financing are now followed in Maryland: public institutions supported mainly by public funds; some nonpublic institutions receiving both private and public funds; and some nonpublic institutions receiving private funds only. Recognizing the fact that both public and private institutions have a place in the scheme of higher education and that both would have to re-

ceive additional funds if they were to expand to meet additional needs, the financial aspect of the total problem could not be disregarded.

The Commission made its analysis of the problem and its recommendations in the light of these considerations.

CHAPTER II THE COMMISSION'S
PHILOSOPHY OF HIGHER EDUCATION

The Function of Higher Education in a Democracy

Education is one of the basic tools of democracy in the United States. From the beginning of our national history we have had a stout faith in the personal and civic benefits of education. In no other place or time have men accepted so widely, as presently in the United States, the axiomatic birthright of each person to as much education as he can assimilate and use. The ideal of educational opportunity for all is the root of our national strength and has helped the nation rise to its present stature.

The reasons for our sustained and expanding faith in the benefits of education are evident. The founding fathers, who were themselves well-educated men, believed that education is an indispensable bulwark of republican institutions. It was plain to them, as it is to thinking citizens today, that democracy, more than any other form of government, stands in need of enlightened public opinion, an electorate capable of distinguishing between fact and fiction, between truth and buncombe, between policies based on reason and policies based on passion. As Thomas Jefferson observed, " Learning must be generally diffused that our liberties may be secure."

Of equal importance with the civic and social benefits of education are the advantages which education offers to the individual man or woman. In the American philosophy of individualism and opportunity each person is considered to have an inherent right—if not an obligation—to develop his powers and capacities to the fullest. Only in so doing can he best serve both his own happiness and the good of the community. The right to life, liberty, and the pursuit of happiness entails the individual's right to partake of as good an education as the community can provide and the individual can assimilate.

Although our dreams are admittedly better than our practice, American education reflects the humane aim to perpetuate a fluid social structure, permitting each person to rise by virtue of demonstrated merit and ability instead of relying on inherited social or economic status. In the United States, "equality" does not mean parity of status for all adults, but the goal of equal opportunity, the open door for those who wish to cultivate their powers for useful ends of their own choosing. The nearer we approach this goal, the greater is the likelihood of forwarding personal liberty.

In the mid-twentieth century the realization of the civic and individual goals of education is complicated by the growing significance of two problems. The first centers in the mounting complexity of life in modern highly industrialized society and the enormously enlarged scope of the personal and national responsibilities stemming from our emergence as a historic world power. These complementary aspects of contemporary life have not only generated heavy new demands on the discernment and understanding of the rank and file of citizens who are the ultimate judges of local as well as of national policies, they have also altered drastically the requirements and standards of education in the learned professions, in statesmanship, and for leadership in business and in community welfare. In order to fulfill his normal functions in life intelligently, the citizen must now be much better informed about many more things, must be in possession of wider sympathies and a broader understanding than his grandfather needed to be.

The second problem is occasioned by the rapid and accelerating increase in the numbers of young people attending school and college and the progressive lengthening of the course of study.¹

The increase in total enrollment, present and prospective, presents the staggering task of doubling plant facilities and recruitment of a host of new teachers. And in this respect the State of Maryland is no exception. Of even greater significance for the character and quality of education in the years to come is the growing percentage of the school- and college-age groups who are pursuing an education. The objective of universal education through the twelfth grade is

¹ See the statistics in Chapter VIII of this Report.

n > w at the point of virtual fulfillment. This means that many young people of high-school age who formerly would have dropped out of school for lack of interest, ability, or for economic reasons now complete twelve grades, and the schools have had to adjust their curricula to the needs of an evermore heterogeneous group in regard to abilities, interests, and vocational needs.

The same social pressures which encourage more and more young people to complete at least twelve grades of schooling also cause a growing percentage of high-school graduates to matriculate in the colleges. To be sure, by no means all those who have the ability to profit by a post-high-school education now go to college; but those who do go constitute a group which is becoming steadily more heterogeneous in ability, interests, and life expectations. The drive for more and more education raises in urgent form the broad question of the scope and functions of post-high-school education as well as the special problem of what should be the place of the four-year college in the future of higher education. What should be its scope and character and whom shall it be designed to serve? The experience of the past and the original ideal of the American college do not afford an adequate answer. We are in a period of transition and the conception of the purposes of higher education is undergoing a steady transformation. The American college, like its English model, was intended originally to develop intellectual talent, to serve the education of young men "of worth and genius," in Jefferson's words, in whatever condition of life they may be found. And to this end it undertook to provide training for learned professions and a liberal education as well for those who could afford it. More recently, since the expanding frontiers of knowledge led to the founding of graduate schools and universities, the college has been called upon to provide pre-professional, semiprofessional, and other types of vocational education, as well as a broad cultural or general education for a growing number of matriculants.

But the problem is not simply one of numbers. The young people who will seek admission to college will present a greater diversity not only of interests and aptitudes but also of motives and ambitions as these are stimulated by the changing needs of a complex industrial society. The solution is not to be found in merely enlarging existing

institutions to serve the mounting numbers as well as the growing diversity of functions. This way lies educational chaos. Planning for the future entails a clear differentiation of the functions of institutions of higher education so that each may concentrate on serving as expertly as possible the end or ends for which it exists.

It is timely, therefore, to raise two questions. First, what should be the range and amount of professional and semiprofessional education offered by the colleges and universities of this State in the foreseeable future? This *Report* undertakes to answer that question by the analysis of the estimated need in Maryland for trained professional and semiprofessional talents of all sorts. Naturally, this approach to the problem is fraught with uncertainties, but there is no other way than to work from the expected needs to the planning of the necessary specialized facilities and types of instruction, taking into account also the *regional* resources for instruction in technical subjects.

The second question is an even thornier one. How much post-high-school education is needed to give the average capable boy or girl that "certain degree of instruction," in Jefferson's words, which will help them to find a satisfying vocation as well as to become intelligent judges of public policy? If we were to encourage all young people of medium aptitude or better to enroll in four-year colleges, we would be faced with the truly gigantic task of hastily doubling college facilities. The uniqueness and excellence of some colleges rests on their small size and the individualized instruction that is offered, and their identity and mission would be lost if they were to be persuaded to double in size. Moreover, it does not follow that four years of college work is either a good or a necessary thing for young people of medium all-around ability.

A clear differentiation of function among different institutions is the only practicable way in which mounting numbers and a more diverse college population can be served without impairing high standards. It would be disastrous, for example, to flood the established colleges with students whose abilities warrant a general and vocational post-high-school education but who are not of college or university caliber. It is of the greatest importance for the future welfare of the State and nation that in the zeal to serve the many we do not neglect

to provide the fullest opportunity for those of superior endowments to develop their talents to the utmost.

A better way out of this difficulty is to increase the number of two-year community colleges. This has the advantage of making educational opportunity both more accessible and economical, while permitting the four-year colleges to concentrate on the task of cultivating the special talents which are needed for the professions, for scientific research, and for leadership in business, civic and community affairs. It is of the utmost importance, however, that no obstacles of race, creed, social, or economic conditions should bar the way of a gifted youth to an advanced education. "In the conditions of modern life," wrote the late Alfred North Whitehead, "the rule is absolute, the race that does not value trained intelligence is doomed. . . . Tomorrow science will have moved forward yet one more step, and there will be no appeal from the judgment which will then be pronounced on the uneducated." ²

The first and continuing task, therefore, is to provide opportunities sufficiently accessible and varied to develop the great diversity of talents which our young people bring into the world. Success in this endeavor will be the best assurance of happiness for individuals and security for the nation in peace as in war. No one type of educational institution alone can serve this end. The interests of diverse groups have led to the creation of colleges and universities devoted to both broad and limited aims under public as well as under private control. The strength of our system of higher education in America derives from its rich and active diversity. It not only multiplies the range of opportunities for the student, but provides a basis of qualitative comparison among colleges, a vigorous spur to self-improvement.

The State of Maryland is fortunate in having a well-diversified group of four-year colleges and universities serving the State and the nation. Their stature, qualitatively considered, is indicated by extensive immigration into the State for higher education. It is questionable, however, whether the opportunities in Maryland for the post-high-school education, even of its own citizens, are adequate even now, either in accessibility or variety, to serve those who have the

* *The Aims of Education* (New York: Macmillan, 1952), p. 26.

ability to profit from such an education. And it is a foregone conclusion that when the aspiring wave of young people now crowding the schools reaches college age, the present facilities in this State will be entirely inadequate. We must meet the challenge now, while there is still time, and meet it wisely and effectively.

The Commission is interested in the post-high-school educational needs of all its citizens. Which types of education are most essential and to what extent they should be supported are vexing problems. While recognizing the value of every type of apprenticeship and training, the Commission has understood its mandate as limited to exploring the type of work usually done in our two- and four-year colleges and universities with their varying fields of general and special education. It records the unanimous opinion that professional and vocational training should be based upon and complemented by general, liberal education, but it does not deal with the specific problems of curriculum content, since these are best solved by the initiative and character of individual institutions.

The studies of the Commission have taken into account the role of publicly and privately supported institutions of higher education in Maryland. To obtain a clear picture of future needs and how they may be filled we must consider the part played now and in the future by both types of institutions. The different types of control result in many advantages of freedom and in special resources which are useful in developing educational programs.

The future of the State of Maryland depends in large measure on the kinds and quality of education readily available to the young people of this State in the years ahead. This Commission records its unanimous conviction that the interests of the State are well served when educational opportunity, public or private, is offered to every youth of our State, limited only by the ability and desire of the individual to make good use of the opportunity and by the ability of the community to maintain it. No question before the State is deserving of more earnest consideration, or more in need of generous sympathy and magnanimous support.

CHAPTER III *OPPORTUNITIES MARYLAND OFFERS IN THE FIELD OF HIGHER EDUCATION*

A first step in the Commission's range of study was to ascertain, by means of a survey, the opportunities and services now offered by institutions of higher learning in Maryland. Because of the special program of education offered in some of these institutions, it was decided to exclude from the study the following: Ner Israel Rabbinical College; St. Mary's Seminary and University; Westminster Theological Seminary; Woodstock College of the Sacred Heart; United States Naval Academy; and Xaverian College. This chapter presents summary data of thirty-one schools of higher education in the State which have had an important influence upon the cultural, intellectual, and economic development of Maryland.

Only three institutions of higher learning in Maryland are for men only, while six are available to women only. There are six junior colleges located in Maryland—four receive state and local funds, one is supported by the State, and one is a private junior college. Three of the State teachers colleges also offer a junior-college program. There are five teachers colleges, all supported and controlled by the State. Of the thirteen liberal-arts colleges situated in Maryland, two are State supported and controlled, three¹ are State aided and privately controlled, and eight are privately supported and controlled. Nine of the schools included in the study are church connected—six Roman Catholic, one Evangelical and Reformed, one Methodist, and one Seventh Day Adventist. Twelve of the schools offer an associate-of-arts-degree program, twenty-five offer the bachelor's program, eight offer master's degree work, and only the University of Maryland and The Johns Hopkins University provide educational opportunities for a doctorate.

¹ Since these figures were compiled, State aid has been granted to Hood College.

TABLE i Type of Institution

Institution	1	V /omen only	u	3 Ph	RU	w a 8 ri. with partici a 8	13 0)	o u	Governing Board
Baltimore Jr. College		X	X						Balto. City Bd. of Education appointed by Mayor and Council.
Carver Jr. College		X	X						Montg. County Bd. of Education.
Hagerstown Jr. College		X	X						Wash. County Bd. of Education.
Montgomery Jr. College		X	X						Montg. County Bd. of Education.
St. Mary's Seminary Jr. College.		X	X						Bd. or Trustees app'td by Gov.
Villa Julie Jr. College		X		X		RC			Sisters of Notre Dame (Balto. Prov.).
State Teachers College, Bowie .		X	X					B	Board of Trustees composed of the seven members of the State Board of Education and the State Superintendent of Schools.
State Teachers College, Coppin		X	X					B	
State Teachers College, Frostburg		X	X					A,B	
State Teachers College, Salisbury		X	X					A,B	
State Teachers College, Towson		X	X					A,B	
College of Notre Dame		X		X		RC			Bd. of Directors (7) app'td by Prov. Superior from congregation of School Sisters of N. D.
Goucher College		X		X				B,M	Self-perpetuating Bd. of Trustees (33).
Hood College .						X	Evan. & Ref.		Bd. of Trustees (30) 7 elected by Synods of Evan. & Ref. Ch., 6 by Alumnae, 17 by Bd.
Loyola College. X*				X			RC	B,M,	Bd. of Trustees (9) elected by members of Society of Jesus.
Md. State College (Pr. Anne).		X	X					B	Bd. of Trustees (9) app'td by Governor and confirmed by State Legislature.
Morgan State College.		X	X					B	

OK
H
W
S3

Mt. St. Agnes College			X	RC	B	Bd. of 7 elected
Mt. St. Mary's College (Emmitsburg) X			X	RC	B	Self-perpetuating Council (16)
St. John's College	X	X		X	B	Elected board—self-perpetuating.
St. Joseph's College	X		X	RC	B	Bd. of Trustees (5) Daughters of Charity of St. Vincent de Paul.
Washington College		X				Bd. of Visitors and Governor (25). 12 elected by alumni & Pres., ia appointed by Governor.**
Washington Missionary College		X	X		7th Day Adv.	Board appointed by 7th Day Ad- ventist Conference.
Western Maryland College		X		X	Meth.	B,M Self-perpetuatio Bd. of Trustees (33).
Johns Hopkins University		X		X		B,M, D Self-perpetuating Bd. of Trustees (30) plus four trustees selected by alumni for 4 yr. terms.
University of Maryland		X	X			B,M, D Bd. of Regents (11) appointed by Governor and approved by Legislature.
Baltimore College of Commerce		X	X			A, B ¹ Bd. of Managers: YMCA
Eastern College of Commerce & Law		X	X			B Board of Trustees (15)
Maryland Institute		X	X			B Board of Managers as provided in Charter.
Peabody Conservatory of Music		X		X		B,M Board of Trustees
University of Baltimore		X	X			A, B,M Self-perpetuating Board of Trustees.

* College of arts and sciences for men; evening school coeducational.

** 12 may be elected by Board; total potential of 36.

t A—Associate, B—Bachelor's, M—Master's, D—Doctor's.

¹ Women admitted to summer and extension programs.

³ Undergraduate day school for men only. McCoy College, graduate and professional coeducational.

TABLE 3 (Cont.)

Institution	English	Mathematics	Science	Foreign Language	Physical Education	Art	Music	Other
Washington College	X							
Washington Missionary College	X					X		15 units, av. of C or higher
Western Maryland College	X		X			X		
Johns Hopkins University	X		X		X	X	X	College Bd. exam, recomm.
University of Maryland	X					X		Varies with college & dept.
Baltimore College of Commerce								Graduation from approved high school
Eastern College of Commerce & Law	X					X		High school grad. ³
Maryland Institute						X	#	High school grad. or equivalent
Peabody Conservatory of Music		Pea-body				X	X	X
University of Baltimore	X					X		X High school grad. or equivalent

* Desired or recommended.

t College of Liberal Arts and Sciences.

+ College of Liberal Arts and Sciences and Evening College.

¹ Tests: Reading vocational interests, mental ability.

² English, 2 Social Science, 1 Mathematics, 1 Science.

³ In Law School must have had 2 years of college or pre-law,

⁴ Special achievement examination.

It should be pointed out that ten institutions of higher education in Maryland require an achievement and/or aptitude examination for admission. Seven colleges require foreign language, and twelve of the schools, including the seven requiring language, insist upon specific units in mathematics. Class standing in the upper 50 per cent to 75 per cent is the requisite for admission to ten of the institutions of higher learning surveyed. Principals' recommendations and health certificates are essential for admission to most of the colleges in Maryland.

Tuition costs for Maryland residents to attend Maryland colleges range from no charge in the State teachers colleges to \$850 at St. John's, and the total cost for tuition and board ranges from \$216 to \$1,725.

TABLE 4 Basic Costs (in \$)

Institution	Tuition		Av. room and board	
	Maryland resident	Out-of-State	Maryland resident	Out-of-State
Baltimore Jr. College	150*,250**	350	§	§
Carver Jr. College	150!, 300+	400	§	§
Hagerstown Jr. College	200	300	§	§
Montgomery Jr. College	150!, 300+	400	§	§
St. Mary's Seminary Jr. College . .	200	300	600	600
Villa Julie Jr. College	450	450	§	§
State Teachers College, Bowie . . .	None	200	216	216
State Teachers College, Coppin . .	None	200	§	§
State Teachers College, Frostburg	None	200	216	216
State Teachers College, Salisbury	None	200	216	216
State Teachers College, Towson . .	None	200	216	216
College of Notre Dame	400	400	725	725
Goucher College	750	750	975	975
Hood College	600	600	800	800
Loyola College	500	500	§	§
Maryland State College (Pr. Anne)	135	160	343	343
Morgan State College	150	250	397	397
Mt. St. Agnes College	350	350	650	650
Mt. St. Mary's College	380	380	550	550
St. John's College	850	850	650	650
St. Joseph's College	350	350	540	540
Washington College	450	450	440	440
Washington Missionary College . .	399	399	396	396
Western Maryland College	450	450	500	500
Johns Hopkins University	800	800	725	725
University of Maryland	165	310	500	550
Baltimore College of Commerce . .	363	363	§	§
Eastern College of Commerce & Law	330	330	§	§
Maryland Institute	385	385	§	§
Peabody Conservatory of Music. . .	600	600	§	§
University of Baltimore	350	350	§	§

* City. State, f Montgomery County resident. X Other counties. § Non-residential.

TABLE 5 Miscellaneous Data

Institution	Date founded	No. acres in site	Est. value (present day) bldgs., equip., and grounds	Total endowment
Baltimore Junior College . . . . .	.1947	34	\$ 3,000,000.00	
Carver Jr. College . . . . .	.1950	30	Use Carver H. S.	
Hagerstown Jr. College . . . . .	.1946	5.5	Use Hagers. H. S.	
Montgomery Jr. College . . . . .	.1946	7	410,000.00	
St. Mary's Seminary Jr. College	1840	11	1,493,300.00	12,900.00
Villa Julie Jr. College . . . . .	.1952	80	584,000.00	
State Teachers College, Bowie . . . . .	.1867	187	1,720,844.00	
State Teachers College, Coppin . . . . .	.1900	21	920,216.00	
State Teachers College, Frostburg	1889	43	2,000,000.00	
State Teachers College, Salisbury	1925	60	2,000,000.00	
State Teachers College, Towson . . . . .	.1866	70	3,500,000.00	
College of Notre Dame . . . . .	.1873	64	2,360,000.00	230,000.00
Goucher College . . . . .	.1885	421	7,319,190.00	2,311,814.00
Hood College	'893	115	2,500,000.00	1,250,000.00
Loyola College . . . . .	.1852	r8	3,500,000.00	112,829.00
Md. State College (Pr. Anne) . . . . .	.1886	302.8	4,500,000.00	
Morgan State College . . . . .	.1867	91.3	9,300,000.00	
Mt. St. Agnes College . . . . .	.1867	120	1,488,131.83	87,000.00 ¹
Mt. St. Mary's College . . . . .	.1808	1,637	2,948,256.77	232,210.52
St. John's College . . . . .	.1696	34	1,466,975.80	705,841.96
St. Joseph's College . . . . .	.1809	28	2,500,000.00	225,000.00
Washington College . . . . .	.1782	50	2,500,000.00	101,013.00
Washington Missionary College . . . . .	.1904	15	1,447,000.00	
Western Maryland College . . . . .	.1868	95	3,513,000.00	1,109,307.00
Johns Hopkins University	1876	116	17,605,263.00	42,299,764.00
University of Maryland . . . . .	.1807	2,503	39,142,888.00	3,216,315.00
Baltimore College of Commerce	1909	-	Share YMCA fac.	Share through YMCA end.
Eastern College of Commerce & Law	1928	-	25,000.00	
Maryland Institute . . . . .	.1826	-	2,095,000.00	148,000.00
Peabody Conservatory of Music . . . . .	.1868	-	1,500,000.00	4,901,219:32
University of Baltimore . . . . .	.1925	45	750,000.00	
Grand total		6,203.6	122,089,066.40	56,943,213.80

¹ None except living endowment; contributed services \$27,000.² Contributed services of Sisters.⁸ Trustees are now raising a sustaining fund of \$25,000.

* Unexpended surplus about \$500,000,

Table 5' indicates that the estimated present-day value of the buildings, grounds, and equipment of private institutions of higher learn-

TABLE 6 Enrollment and Adequate Dormitory Facilities

Institution	Enrollment, June, 1953 (Full-time students)	Adequate dormitory facilities, June, 1954		
		Men	Women	Total
Baltimore Jr. College	441			t
Carver Jr. College	25			t
Hagerstown Jr. College	96			t
Montgomery Jr. College	341			t
St. Mary's Seminary Jr. College	39		9°	9°
Villa Julie Jr. College	38			t
State Teachers College, Bowie	348	50	190	240
State Teachers College, Coppin	206			t
State Teachers College, Frostburg	357		82	82
State Teachers College, Salisbury	251	102	150	252
State Teachers College, Towson	865	112	300	412
College of Notre Dame	282		136	136
Goucher College	556		475	475
Hood College	445		480	480
Loyola College	534			t
Maryland State College (Pr. Anne)	319	232	68	300
Morgan State College	1,718	200	300	500
Mt. St. Agnes College	179		104	104
Mt. St. Mary's College	484	450		450
St. John's College	133	105	70	175
St. Joseph's College	220		200	200
Washington College	367	200	128	328
Washington Missionary College	443	200	200	400
Western Maryland College	666	300	300	600
Johns Hopkins University	1,775 *	335t		335 "
University of Maryland	10,732	1,800	559	2,359
Baltimore College of Commerce	45			t
Eastern College of Commerce & Law	25			t
Maryland Institute	200			t
Peabody Conservatory of Music	195			t
University of Baltimore	345			t
Grand total	22,671	4,086	3,832	7,918

t Nonresidential.

¹ Homewood campus only; other schools excluded.

"As of Sept. 1, 1954 this figure was increased to 650.

ing in Maryland is \$54,851,818, as compared to a total of \$67,987,248 in public colleges. On the other hand, the total endowment funds of

the private institutions equals \$53,713,998 as compared to only \$3,229,215 of endowment funds for use of public institutions.

Enrollment of full-time students as of June, 1953, in the Maryland

TABLE 7 Types of Programs Offered

Institution	Junior college	Liberal arts	Teacher education	Graduate professional
Baltimore Jr. College	X			
Carver Jr. College	X			
Hagerstown Jr. College	X			
Montgomery Jr. College	X			
St. Mary's Seminary Jr. College	X			
Villa Julie Jr. College	X			
State Teachers College, Bowie			X	
State Teachers College, Coppin			X	
State Teachers College, Frostburg	X		X	
State Teachers College, Salisbury	X		X	
State Teachers College, Towson	X		X	
College of Notre Dame		X	X	
Goucher College		X	X	X
Hood College		X	X	
Loyola College		X	X	X
Maryland State College (Pr. Anne)		X	X	
Morgan State College		X	X	
Mt. St. Agnes College		X	X	
Mt. St. Mary's College (Emmitsburg)		X	X	
St. John's College		X		
St. Joseph's College		X	X	
Washington College		X	X	
Washington Missionary College		X	X	
Western Maryland College		X	X	X
Johns Hopkins University		X	X	X
University of Maryland		X	X	X
Baltimore College of Commerce				
Eastern College of Commerce & Law				
Maryland Institute				
Peabody Conservatory of Music		CO	C2)	X
University of Baltimore	X	CO		X

¹ Fine arts. ² Some teacher-training courses.

colleges included in this survey show a total of 22,671 students. However, these institutions had adequate dormitory facilities for only 7,918—4,086 men and 3,832 women.

CHAPTER IV *FINANCIAL SUPPORT*
OF HIGHER EDUCATION IN MARYLAND

A study of the most recent data from the United States Office of Education shows that financial support of higher education in Maryland was slightly above average when compared with the other states of the nation. In current receipts per capita of the total population from private benefactions, Maryland ranked sixth among the states. Only Utah, Massachusetts, New Hampshire, Connecticut, and Illinois, in the order named, outrank Maryland in private support. This reflects the large endowments at a number of the nonpublic institutions of higher learning, The Johns Hopkins University having the highest, with an endowment of \$42,299,764.

In support from public sources, namely local, state, and federal government, Maryland ranked below average in the first two categories and well above the average in the third. In local support Maryland ranked twenty-fourth among the states. This fact reflects the lack of development of community junior colleges in the eastern and southern states. California, Kansas, and New York, in the order named, are far ahead of the rest of the states in this endeavor.

The State of Maryland supported higher education to the extent of \$3.87 per capita in 1952, with a rank of twenty-seventh among the forty-eight states. In the Southern region Maryland ranked sixth among sixteen states. The support provided by these sixteen states ranged from \$6.15 for the highest to \$1.97 for the lowest of the group. The State provides financial support for the nine State-owned and operated institutions: University of Maryland; Maryland State College; Morgan State College; Towson State Teachers College; Frostburg State Teachers College; Bowie State Teachers College; Salisbury State Teachers College; Coppin State Teachers College; and St. Mary's Seminary Junior College. In addition, the following institu-

tions receive financial support through scholarship grants authorized and mandated by the General Assembly: Washington College; St. John's College; Western Maryland College; The Johns Hopkins University; The Maryland Institute; Peabody Conservatory; Hood College; and the four junior colleges in Montgomery County, Washington County, and Baltimore City. Peabody Conservatory and Hood College were included in the list of private institutions receiving scholarship grants through action of the 1955 session of the Maryland State Legislature. The State has also been providing financial aid since 1935 to qualified Negro students to pursue certain courses of study which were not available to them within the State.

What should be the level of financial support of higher education by the state government? There is no one answer to this problem. Comparative statistics of different states must be studied carefully to understand the extent to which higher education in a given state is provided by private and public institutions. Where there is a large proportion of private or nonpublic institutions of higher learning within a state, the per capita contribution from the state government will be low in comparison with a state where there is a small proportion of nonpublic institutions. Other things being equal, the level of financial support will depend upon the considered judgment of the citizenry as to the responsibility of the state for the further development and extension of higher education.

During recent years an increasing proportion of the per capita revenue for current expenses has been received from the federal government. This has been due to the educational benefits provided to veterans of World War II and the Korean conflict and certain grants to selected institutions for research purposes. The Johns Hopkins University receives funds each year for this latter purpose. Through the years the land-grant colleges have received the major portion of the federal funds for higher education.

TABLE 8 Current Per Capita Income from Public Sources and from Private Benefactions in Institutions of Higher Education, Exclusive of Federal Service Academies, in Continental United States, 1951-52

(by region and State)

Region and State	Current receipts per capita of total population						
	Total	Public sources					Private benefactions per student enrolled
		Federal Government for				Local government	
		Veterans tuition and fees	Other current purposes	State government	Private benefactions		
Continental United States	\$ 7-27	\$0.96	\$1.86	\$ 3-99	\$0.47	\$0.98	\$ 65.34
	5.22	1.22	1.59	1.98	.43	1.21	74.00
Connecticut	5.16	1.03	.76	3-11	.27	1-75	114.50
	3.07	.47	.56	1.95	.08	.18	20.89
Massachusetts	10.00	1.63	6.95	1.31	.10	2.22	107.66
New Hampshire	5-73	.90	1.03	3.61	.20	1.78	in. 86
New Jersey	3.26	.85	.69	1.66	.06	.78	93.68
New York	5.25	1.49	.86	1.87	1.03	1.24	59-37
Pennsylvania	4.14	.96	.97	2.21	.01	.98	71.08
Rhode Island	4.94	1.14	1.33	2.47	.00	.86	65.50
Vermont	5.68	.82	1.32	3-34	.20	.88	45.70
North Central	7.92	.79	1.89	4.82	.42	1.17	78.93
Illinois	11.08	.89	5.06	4-79	.36	1.51	100.93
Indiana	7-75	1.13	.86	5.65	.11	1.08	68.50
Iowa	10.43	.61	2.32	7.41	.09	1.00	7-33
Kansas	9.08	.88	1.21	5.61	1.38	.90	56-43
Michigan	8.51	.68	1.44	5.40	.98	.94	65.91
Minnesota	8.95	.64	1.51	6.54	.26	1.34	92.20
Missouri	4.71	1.01	.92	2.51	.21	.89	61.80
Nebraska	7.61	.49	.86	5.70	.58	.86	64.22
North Dakota	10.81	.67	1.29	8-73	.12	.20	16.16
Ohio	4.44	.63	.71	2.71	.40	1.25	79.03
South Dakota	8.16	.63	1.12	6.40	.00	.50	48.59
Wisconsin	6-93	.86	.78	5.23	.05	i-33	106.08
South	5.72	.76	1.13	3.65	.18	.71	56.94
Alabama	5.28	.84	.77	3-5°	.17	.47	47.29
Arkansas	5-15	.51	.97	3.64	.02	.52	55.83
Delaware	6.02	.84	1.43	3.72	.02	.74	75-88
Florida	7-73	1.28	.46	5.85	.14	.6r	52-54

TABLE 8 (Cont.)

(by region and State)

Current receipts per capita of total population							
Public sources							
Region and State	Total	Federal Government for				Private benefactions	Private benefactions per student enrolled
		Veterans tuition and fees	Other current purposes	State government	Local government		
Georgia	4.02	.61		2.43	.10	.78	73-84
Kentucky	3.45	.60	.60	1.97	.08	.69	69.51
Louisiana	6.82	.56	.96	5.21	.09	.66	52.31
Maryland	U-4.3	.81	6.62	3.87	.13	1.46	104.67
Mississippi	4.61	.42	.81	2.64	.74	.39	42.61
North Carolina	4.62	.43	.91	3.45	.03	.75	72.37
Oklahoma	8.36	1.27	.92	6.15	.02	.22	13.00
South Carolina	4.18	.41	.71	3.00	.05	.63	64.89
Tennessee	4.21	.71	.64	2.84	.03	1.07	89.88
Texas	6.18	.96	.79	3.96	.48	.60	36.61
Virginia	3.86	.37	.68	2.80	.01	.59	61.79
West Virginia	6.63	.53	.47	5.61	.02	.12	12.-73
District of Columbia	> 9-36	\$3.61	\$4-95		\$0.80	\$4.04	\$ 87.61
West	13-54	1.28	4.05	6.87	1.34	.72	39-38
Arizona	7.90	1.61	.96	4-97	37	.19	11.99
California	15.96	1.34	6.26	6.15	2.21	.73	37-24
Colorado	11.42	2.04	2.19	6.75	.44	.71	32.36
Idaho	8.91	.87	.96	6-54	55	.51	43-79
Montana	9-53	.91	.99	7.58	.05	.26	20.24
Nevada	9.92	.90	1.84	6.86	33	.00	0.00
New Mexico	10.81	.88	2.58	6.94	41	.06	4-74
Oregon	10.31	1.24	.68	8.16	23	.88	53-24
Utah	13.52	1.80	2-93	8.72	06	2-74	95.52
Washington	10.88	.78	.93	8.94	23	.67	43.92
Wyoming	12.83	.70	i-57	10.20	36	.00	0.00
Range:							
Highest	15-96	3.61	6.93	10.20	2.21	4.04	114.50
Lowest	3.07	.37	.46	1.31	.00	.00	.00
Median	7.61	.85	.96	4.88	.14	.75	61.79

SOURCE: Population data used in computations are from U. S. Bureau of the Census, *Estimates of the Population of States, July 1, 1950 to 1952*. Includes persons in the Armed Forces stationed in each State and excludes members of the Armed Forces overseas.

Educational and general income

Institution	Federal Government									Total	Auxiliary enterprises and activities	Other non-educational income
	Student fees	For veterans' education	For other purposes	State governments	Local governments	Endowment earnings	Private gifts & grants	Sales and services of related activities	Miscellaneous services			
Baltimore College of Commerce	44.6	37-8	0	0	0	.2	0	i.7	0	84.3	15-7	0
College of Notre Dame	37-2	0	0	0	0	.8	33-3	0	0	71-3	28.7	0
Goucher College	44-7	0	0	0	0	6-3	6.8	.1	0	57.9	39.3	2.8
Hood College	35.6	.1	0	0	0	3.3	2.9	0	0	41.9	52,6	5.5
Johns Hopkins University * . .	13.2	3-0	33-8	2.1	0	11.9	21.2	.3	7.8	93-3	5.8	.9
Loyola College	54-3	14.8	0	0	0	0	15.2	0	0	84.3	13-5	2.2
Loyola College (Evening) . . .	55-7	44-3	0	0	0	0	0	0	0	100.0	0	0
Md. State College (Pr. Anne)	4.9	2.6	2-3	73-4	0	0	.1	4-5	.3	88.1	11.9	0
Morgan State College	16.1	1.6	0	60.4	0	0	0	0	.4	78.5	21.5	t
Mt. St. Agnes College	20.7	0	0	0	0	0	61.5	0	.5	82.7	17.2	.1
Mt. St. Mary's College	23.5	7-6	0	0	0	3.t	8.9	0	.2	43-3	56.7	0
St. John's College	32.0	4.4	0	14.5	0	2.0	35.9	1.2	.6	90.6	9-4	t
St. Joseph's College	22.6	0	0	0	0	1.9	26.9	0	4-5	55-9	38.3	t.8
University of Maryland	14.4	5-6	9-7	38.6	1-3	.5	i.7	14.3	.1	86.2	13-4	.4
Washington College	33-4	5-5	0	3.6	0	0	0	0	.4	42.9	49-3	16.8
Western Maryland College . . .	3i-9	2.1	0	9.1	0	4.6	.9	0	1.0	49.6	50.4	0
State Teachers College, Bowie	2.2	t	0	74-8	0	0	0	0	.7	77-7	22.2	.1
State Teachers Coll., Coppin .	0	0	0	100.0	0	0	0	0	0	100.0	0	0
State Teachers Coll., Frostburg	2.4	2.4	0	83.7	0	0	0	0	0	88.5	11.1	.4
State Teachers Coll., Salisbury	3-4	0	0	87.2	0	0	0	0	2.1	92.7	7-3	0
State Teachers Coll., Towson.	1.6	.1	0	81.7	0	0	0	0	.2	83.6	16.4	0
Baltimore Jr. College	26.4	7-4	0	15.4	38.5	0	0	0	0	87.7	12.1	.2
Hagerstown Jr. College	29.9	11.1	0	13-1	41.8	0	0	0	0	95-9	4.1	0
Montgomery Jr. College	38.x	19.3	0	18.7	21.1	0	0	.2	0	97-4	2.1	.5
St. Mary's Seminary Jr. College	26.2	0	0	70.0	0	.3	0	0	0	96.5	2.8	.7
University of Baltimore	43-7	52.3	0	0	0	0	0	0	0	96.0	3-1	.9
Maryland Institute	46.3	14.4	0	11.1	16.3	3-7	3-4	0	3-1	98.3	0	i-7
Peabody Institute	61.1	5.2	0	0	0	33-7	0	0	0	100.0	0	0

¹ An additional sum of \$14,683,113 was made available to this University by the Federal Government for research in defense projects, and has not been included in the calculation.

NOTE: There are fewer colleges than in the other chapters because: (a) Villa Julie Junior College was not in existence in 1951-52 and (b) Carver Junior College, Eastern College of Commerce and Law, and Washington Missionary College did not report to the U. S. Office of Education.

SOURCE: U. S. Office of Education, unpublished reports checked by the individual colleges.

H
I
N
A
2
0
>
8
C
S
*
O
x
H
O
H
S
E
W
o
o
A
T
T
O

CHAPTER V *STUDENTS WHO NOW ATTEND
MARYLAND COLLEGES*

No two sets of figures on school enrollments, or any other population statistics, ever seem to agree. There are a number of reasonable causes. Among them are:

- i. Data secured at different times, by different enumerators, or from different sources.
2. A difference in understanding of the meanings of the various tables of figures.
3. Some data are taken from a complete count; other data are often estimated from an incomplete count.

All of the data used in this chapter are taken from the records of the schools involved. The data cover every school of higher education in Maryland, with the following exception: The United States Naval Academy. (While we are fortunate in having the Naval Academy located in Maryland, it is, of course, a national institution; and its enrollment is not included in our State totals. The enrollment of the Academy as of January 4, 1955, was 3,602 midshipmen.)

At this point we give a brief description of the ten major summaries of the six tables in this chapter:

1. *Total Enrollment.* There would seem to be a grand total of 40,666 students who, in the school year 1952-53, attended schools of higher education in Maryland. See Table 10.
2. *Residents—Nonresidents.* Of the total students, 28,138, or 69.2 per cent, are Marylanders; while 12,518, or 30.8 per cent, are from outside of Maryland. Full-time undergraduate day students from Maryland number 13,792, or 67.7 per cent. Of the full-time graduate students, 47.4 per cent are from Maryland. See Table 10 for many other totals, distributions, and percentages.

3. *Part-Time—Full-Time.* Of the total 40,666 students, 24,716 are full-time students, and 15,950 are part-time or evening students. Table 10 gives other distributions in this area.
4. *Graduate—Undergraduate.* Of the total 40,666 students, 20,361 are listed as undergraduate and 4,355 as graduate students. It would be fairly accurate to say that one-third of the 15,950 evening and part-time students are undergraduate, and two-thirds are graduate students. This estimate added to the full-time day enrollments would distribute the total of 40,666 students as 25,678 undergraduate and 14,988 graduate students. See Table 10.
5. *Resident—Day.* There are relatively few graduate students living on the campus in Maryland. Graduate students who live on the campus are enrolled mainly in the theological seminaries. There are approximately 8,875 undergraduate students living on-campus at Maryland colleges and universities. See Table 11.
6. *Public—Private.* Of the 40,666 students, 22,221 attend public colleges, and 18,445 attend private colleges. Of the 20,361 listed as full-time undergraduate day students, 13,122 attend public and 7,239 attend private colleges. The 4,455 listed as full-time graduate students include 2,552 in public and 1,803^m private colleges. The 15,950 listed as part-time and evening students include 6,547ⁱ public and 9,403 in private colleges. See Table 10 for other distributions.
7. *County—City.* The only data we offer here shows the distribution of high-school graduates of Maryland in the school year 1951-52. Of these pupils, 4,677 went on to a degree-granting institution, not necessarily in Maryland. Of these, 4,677 going on to college, 2,256 came from the county public high schools, 1,292 from the Baltimore City public high schools, and 1,129 from the private high schools all over the State. See Tables 13 and 14.
8. *Negro—White.* Of the 40,666 college enrollments in Maryland, 37,328 are in white colleges and 3,338 in Negro colleges. Of the 20,361 full-time undergraduates, 17,770 are in white colleges and 2,591 in Negro colleges. While there are Negroes in

graduate schools in Maryland, there are no Negro graduate schools. See Tables 10, 12, 13, and 14.

9. *Men—Women.* The only data offered here are in the graduates of the high schools, school year 1950-51. Table 12 shows that, of these pupils, 3,799 went on to some type of "continued education." Of these 3,799, 1,755 ^{were} boys and 2,044 were girls. See Table 12 for details.
10. *I. Q. Distribution.* From the results of the questionnaires returned by the high schools of Maryland, information was summarized concerning 86.8 per cent of the graduates of 1951-52. See Table 15 for a partial summary of this. Other data are shown elsewhere in this report.

TABLE IO (Cont.)

Colleges and Universities	Full-time day students							
	Und<u>graduate		Graduate		Part-time students		Total students	
	Total	Md.	Total	Md.	Total	Md.	Total	Md.
Baltimore College of Commerce	45	45	0	0	674	674	719	719
Eastern College of Commerce & Law	25	25	0	0	425	425	450	450
Baltimore Lutheran Deaconess School	21	0	0	0	41	41	62	41
Baltimore Hebrew College & Teacher Training School	0	0	23	23	155	140	178	163
Maryland Institute	200	180	0	0	825	780	1,025	960
Peabody Institute	351	229	0	0	0	0	351	229
St. Mary's Seminary & University. . .	220	25	425	32	0	0	645	57
Ner Israel College	126	11	12	3	0	0	138	14
Westminster Theological Seminary . .	0	0	158	38	0	0	158	38
Woodstock College	0	0	198	40	0	0	198	40
Xaverian College	55	5	0	0	0	0	55	5
White colleges	17,770	11,920	4,355	2,063	15,203	11,688	37,328	25,671
Negro colleges*	2,591	1,872	0	0	747	595	3,338	2,467
Total	20,361	13,792	4,355	2,063	15,950	12,283	40,666	28,138
White colleges, %	100.0	67.1	100.0	47.4	100.0	76.9	100.0	68.8
Negro colleges, %	100.0	72.3			100.0	79.7	100.0	73.9
Totals, %	100.0	67.7	100.0	47.4	100.0	77.0	100.0	69.2
Public colleges (P).	13,122	9,781	2,552	1,700	6,547	3,490	22,221	14,971
Private colleges	7,239	4,011	1,803	363	9,403	8,793	18,445	13,167
Total	20,361	13,792	4,355	2,063	15,950	12,283	40,666	28,138
Public colleges, % (P).	100.0	74.5	100.0	66.6	100.0	53.3	100.0	67.4
Private colleges, %	100.0	55.4	100.0	20.1	100.0	93.5	100.0	71.4
Total, %	100.0	67.7		47.4		77.0		69.2

CP-) Denotes public schools. * Denotes Negro schools.

TABLE 11 Undergraduate Students Living on the Campus of the Various Maryland Colleges as of October, 1953

This information is also from questionnaires returned by the schools and dated October, 1953. The table concerns only those undergraduate students living on-campus.

School	Approximate number living on-campus
Johns Hopkins University.	567
University of Baltimore.	o
University of Maryland (P).	2,800
College of Notre Dame. . . . .	.180
Goucher College.	431
Hood College.	436
Loyola College. . . . .	.74
Maryland State College (Pr. Anne) * (P).	350
Morgan State College * (P).	551
Mt. St. Agnes College.	210
Mt. St. Mary's College.	443
St. Joseph's College. . . . .	.17;
Washington College.	345
Washington Missionary College.	401
St. John's College. . . . .	.122
Western Maryland College.	543
Frostburg State Teachers College (P). . . . .	.175
Salisbury State Teachers College (P).	240
Towson State Teachers College (P).	469
Bowie State Teachers College * (P).	324
Coppin State Teachers College * (P).	o
Baltimore Jr. College (P).	o
Hagerstown Jr. College (P).	o
Montgomery Jr. College (P).	o
Carver Jr. College * (P).	o
St. Mary's Seminary Jr. College (P). . . . .	.39
Villa Julie Jr. College.	o
Peabody Institute.	o
Maryland Institute.	o
Baltimore College of Commerce.	o
Eastern College of Commerce & Law.	o
White colleges.	7,650
Negro colleges *.	1,225
Total.	8,875
Public colleges (P).	4,909
Private colleges.	3,966
Total.	8,875

(P) Public schools. * Negro schools.

TABLE 12 Number of Graduates of Public High Schools of the School Year 1950-51 Who Continued Education the Year Following Graduation: i. e. in 1951-52 (Table includes Baltimore City and the 23 Counties)

This information is taken from the annual report of the State Department of Education from data supplied by the public schools of Maryland: the twenty-three counties and Baltimore City. It reveals the "continued education" patterns of the public school graduates of 1950-51 in the college year 1951-52. The table does not cover the private-high-school graduates. Of the 12,101 high-school graduates, 3,799, or 31.4 per cent, continued their education in the types of schools listed in the table.

	White		Negro		Total	
	Boys	Girls	Boys	Girls	Boys	Girls
Colleges and universities.	1,320	808	149	202	1,469	1,010
Teachers colleges.	94	189	14	106	108	295
Art, drama, and music schools.	26	47	2	0	28	47
Vocation, commercial, and evening schools.	97	289	12	50	109	339
College preparatory and post-graduate schools.	41	35	0	5	41	40
Nursing schools.	0	308	0	5	0	313
Totals.	1,758	1,676	177	368	1,755	2,044
	3,254		545		3,799	
High-school graduates of year 1950-51.	4,905	5,473	691	1,032	5,596	6,505
	10,378		1,723		12,101	
Per cent continuing education.	32.2	30.2	25.6	35.7	31.4	31.4
	31.3		31.6		31.4	

Tables 13, 14, and 15 cover items selected from the questionnaires returned from practically all of the secondary schools of Maryland: the twenty-three counties, Baltimore City, White, Negro, Public, Private.

Table 13 sets forth the exact totals from the returned questionnaires, and represents 86.8 per cent of all the high-school graduates of that school year, 1951-52.

Table 14 sets forth an estimated 100 per cent distribution of the 1951-52 high-school graduates. This is accomplished by expanding the numbers in Table 13 by 13.2 percentage points and is probably very accurate.

Table 15 lists the same students as in Table 13, but distributes them as to intelligence quotient scores.

TABLE 13 High-School Graduates of 1951-52 Going to College, Based on 12,879 Graduates

Directly from the questionnaire answered by 185 schools, we find that there were 12,879 graduates, of whom 3,985 went to college in the fall of 1952.

	Graduates	Went to college	Per cent
23 counties, public white	7,825	1,961	25.1
23 counties, public Negro	852	276	32.4
Baltimore City, public white	1,923	696	36.2
Baltimore City, public Negro	515	200	38.8
State-wide, independent, white	1,764	852	48.3
Total	12,879	3,985	30.9

However, there were 1,701 other graduates of 1951-52 not covered by the questionnaire. If the same percentages in Table 13 are applied to these graduates, we arrive at the distribution in Table 14, which is probably quite accurate.

TABLE 14 High-School Graduates of 1951-52 Going to College, Based on 14,580 Graduates

	Graduates	Went to college	Per cent
23 counties, public white	7,825	1,961	25.1
23 counties, public Negro	909	295	32.4
Baltimore City, public white	2,696	976	36.2
Baltimore City, public Negro	813	316	38.9
State-wide, independent, white	2,337	1,129	48.3
Total	14,580	4,677	32.0

What is the situation concerning student enrollment in Maryland? Of the 12,879 high-school graduates—which is the number actually

analyzed in the questionnaire—3,985, or 30.9 per cent actually entered college. What are their I. Q. levels?

TABLE 15 A Distribution of 12,879 of the High-School Graduates of 1951-52 According to I. Q. Scores

I. Q.	High School graduates	Number who entered college	Per cent to college	Number who did not go to college
120 and above	1,247	901	72.3	346
110-119	2,642	1,217	46.1	1,425
90-109	7,611	1,731	22.8	5,880
Below 90	1,379	136	10.0	1,243
Total	12,879	3,985	30.9	8,894

Less than three-fourths of those in the "120" bracket went to college; and less than one-half of those from 110-119 went to college.

Moreover, nearly one-fourth of those in the 90-109 group entered college, while 10.0 per cent of those with an I. Q. of below 90 went on.

CHAPTER VI *FACTORS AFFECTING*
THE NUMBERS ATTENDING COLLEGE

Robert J. Havighurst and Robert R. Rodgers studied "The Role of Motivation in Attendance at Post-High-School Educational Institutions." They identified five factors which, in the case of any individual, determine whether or not education shall be continued beyond the high school level: "mental ability; social expectation, or what the family and society expects of him; individual motivation, or his own life goals; financial ability, in relation to the cost of continued education; propinquity to an educational institution." * It is evident that it is impossible to determine the relative weights of each of these considerations in any particular case. The establishment of a public college close at hand, which is one index of the educational effort being put forth by the people of the State, may bring the possibility of this program realistically within the plans of individuals who otherwise would not have considered it. In contrast to the effect in these cases, it is possible to find in this same community individuals, the sons and daughters, it may be, of professional people with relatively low incomes, who are determined to continue education beyond high-school graduation and will, even though no college exists in the vicinity. The educational efforts put forth by these individuals will compensate for other shortages and, within limits, create the conditions necessary for continued education.

The weight of each of the factors and combinations of the factors identified by Havighurst and Rodgers vary in particular cases. In any given case, it is difficult, perhaps impossible, to establish with finality which of the five factors is determinative.

¹ Robert J. Havighurst and Robert R. Rodgers, "The Role of Motivation in Attendance at Post-High-School Educational Institutions," *Who Should Go to College*, Byron S. Hollinshead, ed. (New York: Columbia University Press, 1952), P- 137-

Financial ability alone is not determinative. This is evident from the fact that more people can pay for a college education today than was the case in 1941; and the ability to pay has advanced more rapidly than the desire to take advantage of this opportunity. The Commission on Financing Higher Education in the United States points out that the level of family income necessary to finance higher education for one young person advanced 76 per cent between 1941 and 1950, whereas the percentage of advance in youths 18 to 21 attending college was 20 per cent in this same period. "This would suggest that our society has actually increased the capacity of families to pay for higher education more rapidly than young people have been motivated to go to college."² These estimates are based upon the assumption that \$3,000 a year represented the minimum family income necessary to support one member in college in 1941 and that \$5,000 was the equivalent sum in 1950.

In other words, purpose and drive are important. Among the factors affecting college attendance which were identified by Havighurst and Rodgers, drive and determination are of paramount importance. They not only compensate, within limits, for lack of adequate and readily available financial means; they compensate also, and again within limits, for intellectual capacity as measured by the standard tests now in use. The National Manpower Council in its report of *A Policy for Scientific and Professional Manpower*³ presents analyses of the scores made by college-age youth on the Army General Classification Tests. These scores provide, probably for the first time, reliable and readily available data on the abilities of the college-going population and on the untapped reservoir of these abilities in the population of college age.

If admission to college depends upon high test scores, 120 and above, the reservoir of students eligible for college but not now attending is 8 per cent of the college-age group. When this per cent is expressed in numbers of eligible college students in Maryland not

² John D. Millett, *Financing Higher Education in the United States*, The Staff Report of the Commission on Financing Higher Education (New York: Columbia University Press, 1952), p. 391.

³ National Manpower Council, *A Policy for Scientific and Professional Manpower* (New York: Columbia University Press, 1953), p. 80.

now in college, the figure is approximately 11,000. Actually, however, the untapped reservoir of students eligible for college admission is much larger than this. Evidently, "over 60 per cent of those who enter college and half of those who graduate achieve scores on scholastic aptitude tests which are the equivalent of an AGCT score of less than 120."⁴ Drive and determination compensate, in certain instances more than compensate, for lack of native abilities. The importance of this factor is recognized in the report on *Nature and Needs of Higher Education*, made by the Commission on Financing Higher Education, in the following words:

To be sure, our colleges and universities now enroll many students who fall below the general level of intelligence indicated by the Army test of 115. A large number of these attend junior colleges. The special justification for the terminal educational program of the junior colleges is the work they offer to this group of students. Many state universities admit any high school graduate. Other institutions also have students who are below the standard of the top 25 per cent. Most of these students drop out of college by the end of the second year. Some are graduated because determination overcomes their lack of native abilities.

There is a place in higher education for students below the equivalent of an Army test score of 115. Test scores, though statistically reliable for large numbers of persons, are not an infallible guide in judging the promise of any particular individual. . . . Unusual motivation and determination may indeed lead to exceptional performance.⁵

Several observations are pertinent at this point: (1) Nationwide, about one-half of the young people 18 to 21 years of age of highest intellectual endowment are not going on from high school to college. Some of them are not completing their high-school courses. A study in Maryland indicates a similar situation. This, taken in conjunction with the fact that the whole labor force in our technological society is shifting away from the so-called "common-labor" level toward the skilled, the service occupations, the technical, the professional, and the scientific, calls attention to importance of effective guidance-counseling programs in our schools. The needs of a dynamic techno-

⁴ *Ibid.*, p. 80.

⁶ The Commission on Financing Higher Education, *Nature and Needs of Higher Education* (New York: Columbia University Press, 1952), p. 52.

logical society emphasize the importance of early identification of able students and the incorporation into their plans of vocational goals commensurate with their abilities. (2) Favorable shifts in the economic climate—increase in family income, establishment of college opportunities close at hand, scholarships—do not in themselves immediately assure the college attendance of those who are qualified. They may not affect the decisions of individuals who are well qualified for work beyond high school. Other factors which enter into the determination of life goals also must be considered. A major function of education is to help young people discover talents and aptitudes of which they might otherwise remain unaware. It is of special importance that schools should serve this function well for able young people who, because of cultural or economic background, might be predisposed to end their education prematurely. Since both the individual and society benefit when every person is prepared to function at the highest level of performance possible for him, the desirability of a strong and comprehensive guidance program in this connection is obvious.

The various factors affecting attendance at college—the individual's purpose and drive, mental capacity, financial ability, the life patterns of the family and of the economic group, and the nearness and availability of a college—form a complex of interrelated causes. This is reflected in the fact that in the top and near-top ranges of the economic and social scale, representing 10 per cent of all the children, 80 per cent go to college.

The group next on the economic and social scale is made up of white-collar workers, people in semiprofessional occupations, small business owners, highly skilled artisans, foremen, and owners of "good" farms. They produce 30 per cent of the children. Of these, 25 per cent go on with post-high-school education. On the lower rungs of the income scale are the unskilled and semiskilled workers, farm tenants, and sharecroppers. They produce 60 per cent of the children. But of these, less than 5 per cent go beyond high school in their education.⁶

These figures should be read in the light of data given earlier on

⁶Robert J. Havighurst and Robert R. Rodgers, *op. cit.*, pp. 139-40.

the effects on college attendance of the wider diffusion of family income adequate for the support of one member in college. These reveal that purpose and drive, the life patterns of the family and of economic groups do not inevitably move to the support of college attendance when financial means become available.

The influences of the five factors we have considered are seen in Table 16, prepared in connection with the work of the Temporary Commission on the Establishment of a University in New York State.

TABLE 16 College Attendance Rates of Graduates, by Parents' Income and Rank in Class, New York State, 1940^x

Rank in class	Percentage of graduates who attended college				
	Total of all income groups	No tax return	\$2,500 to 4,999	\$5,000 to 8,999	\$9,000 and over
Total, all ranks	23	21	26	37	62
Highest quarter	43	41	41	60	76
Second quarter	21	19	26	27	56
Lower half of class	12	11	13	27	44

¹ Floyd W. Reeves, Algo D. Henderson, and Philip A. Cowen, *Matching Needs and Facilities in Higher Education*, Albany, N. Y., 1948, Legislative Document No. 31, p. 116. The data may not be altogether reliable, because 1940 graduation records are used with 1943 tax returns to form the basis.

Study in Maryland of the High School Graduating Class of 1952

The Commission to Study the Needs of Higher Education in Maryland made a study⁷ of the high-school graduates of this state, public and independent, for the year 1951-52, to determine the number and percentage which went on to college, the I. Q. distributions of the total group of graduates, the number who could have been recommended to college, and the opinions of high-school principals on why some did not go to college. In that year, there were 14,580 graduates from all the secondary schools of Maryland. Of

¹ Commission to Study the Needs of Higher Education in Maryland, *A Report Concerning the High School Graduates of the Maryland Schools for the Year 1951-52* (Baltimore: Maryland State Department of Education, 1954).

these, 4,677, or 32.0 per cent, went to college in the fall of 1952. The word "college," as used in this study, includes junior colleges and teachers colleges, but does not include schools of nursing, business schools, apprentice schools, and schools of this type. The college-going group included 72.3 per cent of those who had I. Q.'s ranging from no through 119; 22.8 per cent of those with I. Q.'s from 90 through 109; and 10 per cent of those who had I. Q.'s below 90.

Of the 14,580 graduates with I. Q.'s of no and above, 54.5 per cent went to college; 45.5 per cent did not go. Even in this rather select group, only about half of the graduates, in the years studied, went on from high school immediately into college. The study points out that not all of the 1,771 who had I. Q.'s of no and above and did not go to college actually wanted to go. However, they do represent a reservoir of capacity that was not tapped for higher education. In this same graduating class, there were 1,731 graduates with I. Q.'s of 90 to 109 who did enter college, together with 10 per cent of the graduates of this class with I. Q.'s below 90.

In the questionnaire relative to this graduating class which was sent to high-school principals in the State, each principal was asked to check the permanent record of each graduate of 1951-52 and on the basis of the complete record answer the following question:

If this pupil had applied for admission to college, and had filled out an entrance form and placed on your desk a request for recommendation to college, would you

- i. Have recommended him to enter college?
2. Have recommended him on trial, or probation, or for examination?
3. Have declined to recommend him?

(In Maryland, the principal of the public school has this responsibility. He may recommend for admission without examination if the graduate meets standards clearly spelled out in policy.)

Of the 14,580 graduates of this year, 8,894 did not enter college. Of these, the principals state that they would have recommended 2,242 and that they would have recommended for a trial, or probation, or entrance examinations another 1,899. The complete results are given in the following table:

Would have recommended	2,242
On trial, probation, or examination	1,999
Not recommended	4,753
 Total who did not enter college	 8,994

The principals were also asked to respond to the following question listed on the questionnaire:

Which of the following factors are involved when pupils *in this school* could do college work and yet do not go to college? *Please double check the most important factors, and single check any other factors which are pertinent.*

- _____ 1. Lack of student interest
- _____ 2. Lack of family incentive
- _____ 3. Lack of money
- _____ 4. Lack of nearby college
- _____ 5. Poor achievement in high school
- _____ 6. Armed Services
- _____ 7. Other_____

The principals' opinions rank "lack of money" as the chief causative factor when pupils of college ability do not attend college. When the opinions from all the principals replying are combined, "lack of family incentive" comes out a rather close second in causative factors and "lack of student interest" a less close third. When the replies of Negro principals are considered alone, "lack of family incentive" and "lack of student interest" appear as less important causative factors. Actually, in this study, as in the more direct attempts to relate failure to attend college precisely to one or two factors, there is revealed the impossibility of determining the effects of one factor in separation from the others. The factors taken together form a cultural complex. It is rather well established now that group intelligence tests reflect the cultural context and along with intelligence measure cultural advantage and disadvantage.

Proximity of College and College Attendance

Mention has already been made of the fact that the provision of junior-college opportunities close at hand will not in itself lead inevitably and immediately to substantial increases in college attendance in the particular locality. Apparently, other causative factors must be identified and controlled to this end also. The experience of those public junior colleges in Maryland which have been in existence more than a decade supports this general conclusion. However, where college facilities are available and where effective measures are taken to relate programs to community needs, considerable increase in percentage of high-school graduates attending college does result.

The following significant statements taken from recent studies of residence and migration of college students illustrate this relationship between the size of the total college-going group in a given area and the existence of college opportunities in that area:

One might logically ask the question: "Why should the two relatively poor States of Oklahoma and Kansas rank so high in the proportion of population attending college?" If per capita income were used as the criterion, both States would rank well below the U. S. average. Could it be that in these States the higher institutions receive relatively greater degree of public support than the institutions of other States thereby reducing the financial burden to its students? The facts show that there are 14 States in which the per capita institutional income from public (State or municipal) sources exceeds that of Kansas, and 18 States in which that of Oklahoma is exceeded.

It seems then that the question must be answered by an examination of two elements: (1) supply of potential college students, and (2) the distribution of college facilities throughout the 2 States. On the first point there is evidence to show that both States consistently rank high in terms of the proportions of their populations to graduate from high school. In 1947-48 Kansas and Oklahoma ranked fourth and seventh, respectively, on this item. On the second point it would appear that the higher institutions in these 2 States are dispersed throughout the State in such a manner as to make opportunities for higher education widely available in many local communities. Both States maintain the State university separate from the land-grant college, and have a larger than average number of State colleges and teacher-

training institutions. Each maintains a Statewide system of junior colleges.

It would appear that those States which rank highest in terms of the student-population ratio tend to distribute their educational facilities throughout the State and to make wide use of their junior or community college.⁸

Effects on College Enrollments in California of the Establishment of Junior Colleges

Of all the states, California has had the longest and most extensive experience with junior colleges. (The first junior college was established in Illinois in 1896.) In 1948 a Liaison Committee of the Regents of the University of California and the State Board of Education reported the ratio at that time between attendance in grades thirteen and fourteen and attendance in grades eleven and twelve, state-wide. There was one student in junior college grades to 2.55 students in grades eleven and twelve of the high school. In 1948 Alameda and Contra Costa counties in California were without junior colleges. The Liaison Committee reported, "using present attendance figures and population estimates and projecting them forward to 1960, indicate that Alameda and Contra Costa counties will have 7,700 students in the 13th and 14th grades if junior colleges are provided in the area. Without junior colleges, in October, 1947, there were 1,170 students from these counties enrolled in the San Francisco Junior College. Many attended the lower division at the University of Berkeley."⁹

The relationship between the existence locally of a junior college and the size of the total college-going group in that locality, with

⁸ Robert C. Story, *Residence & Migration of College Students*, 1949-50, Office of Education Misc. No. 14 (Washington, 1951), p. 4. See also U. S. Office of Education, Federal Security Agency, *Biennial Survey of Education 1946-48; Statistics of Higher Education, 1947-48*, Table XX, for information on per capita institutional income from public sources.

⁹ Liaison Committee of the Regents of the University of California and the State Department of Education, *Report of a Survey of the Needs of California in Higher Education* (Berkeley: University of California Press, 1948), p. 75.

some indication of the effect of junior college enrollment on enrollments in senior colleges, is reflected in Table XVI of the report of the Liaison Committee in California.¹⁰ This table shows the per cent of graduates of 28 high schools in junior college districts going to junior colleges, state colleges, University of California, private colleges, and other educational institutions, as compared with per cents of graduates going to such institutions from 28 high schools outside junior college districts. The table in part is reproduced in our Table 17.

TABLE 17 Effect on College Enrollment of the Establishment of Junior Colleges in California

	High schools within junior- college districts	High schools outside junior- college districts
Number of high schools	28	28
Per cent continuing	54.36	45>9°
Of those continuing, per cent in		
Junior colleges	70.3	41.9
State colleges	8.4	19.5
University of California	8.3	13.6
Private colleges	9.1	14.6
Other education	4.1	10.6
Of all graduates, per cent in		
Junior colleges	38.1	19.2
State colleges	4.6	8.9
University of California	4.5	6.2
Private colleges	4.9	6.7
Other education	2.2	4.9
Not continuing	45.7	54.1

Coleman R. Griffith reports the study of the junior college made in Illinois. A review of the 12,000 high-school graduates who "continued their education under various conditions revealed that 19.7 per cent of graduates attended college when there was no junior college in the community; 31.8 per cent when there was a tuition-charging junior college in the community; and 53.5 per cent when there was a tuition-free junior college in the community."

¹⁰ *Ibid.*, p. 76.

*Proximity of College and College Attendance
in the Counties of Maryland and Baltimore City*

The relationship of college attendance to the factor of propinquity to an educational institution is highlighted in the following tables. It would seem that the existence of college opportunities in the immediate vicinity, particularly a public institution with low tuition rates, increases attendance from the area. Even though this is predominantly true, it is apparently not the whole truth. The existence of the college is to those in the immediate area a visible stimulus causing those who might otherwise not have considered college, to include this possibility among their plans. It gradually incorporates itself into community mores as an integral part of the way of life of that community. It affects life goals and family plans and patterns to a much larger extent than is true in areas where colleges do not exist. This is evident in the tables referred to.

Relationship of College Attendance by Residents of Maryland Counties and Baltimore City to the Proximity of College Opportunities

For the purposes of this study, the University of Maryland is treated as two schools, one with a "home county" in Prince George's, and one with a "home county" in Baltimore City.

The enrollment figures show the number enrolled as of October, 1952.

In the succeeding tables the columns show where students who attend the colleges come from.

Asterisks indicate a county adjoining the county in which an institution is located.

Parentheses are drawn around numbers showing students who come from the same county in which the college is located.

The left-hand column lists the twenty-three counties separately, the total for the twenty-three counties, Baltimore City, the total students from the State of Maryland, the students from out-of-state, and the total enrollment of the college.

The left-hand column also indicates three lines giving the total

number of students from the home county, the adjoining counties, and from nonadjoining counties, as well as the percentages of these three categories.

Table 18 gives the distribution showing where the Maryland students at our State teachers colleges come from. It shows that:

40.3% of all of the students come from the county in which the college is situated.

36.6% come from an immediately adjoining county.

76.9% come from either the home county or an adjoining county.

Only 23.1% come from counties which are not immediately adjoining.

Of the 347 Maryland students attending Frostburg, 306 come from the home county of Allegany.

Of the 202 students attending Coppin, 201 come from Baltimore City.

At Towson almost as many students (145) attended from the "home"

Baltimore County as the number (158) attending from the other twenty-two counties. In addition, at Towson, 423 students are enrolled from the adjoining Baltimore City.

Of the total enrollment of 1,973, 1,882 or 95.4% are from Maryland, and only 4.6% are from out of the State.

Table 19 seeks an answer to the question: Who attends our public junior colleges?

86.7% of all Maryland students come from the counties in which the colleges are located.

9.7% come from the adjoining counties.

Only 3.6% of the students come from counties which are not adjoining.

Example: Of the total enrollment of 358 at Baltimore Junior College, 313 come from Baltimore City and 40 more from adjoining Baltimore County. Only 5 others attend.

Of the 125 Maryland students attending Hagerstown Junior College, 123 come from the "home" Washington County.

TABLE 18 Maryland State Teachers Colleges, Geographical Distribution of Students, Fall of 1952

County	Frostburg State Teachers College	Towson State Teachers College	Salisbury State Teachers College	Bowie State Teachers College	Coppin State Teachers College	Total	Per cent
Allegany .	(306)	2	-	4	-	312	
Anne Arundel	-	37*	1	35*	-*	73	
Baltimore .	1	C14J)	2	23	-*	171	
Calvert . . .	1	7	1	5*	-	14	
Caroline	-	2	15	13	-	3 ^o	
Carroll . .	1	29*	-	-	1	31	
Cecil	-	8	8	5	-	21	
Charles	-	5	3	10*	-	18	
Dorchester	-	2	23*	12	-	37	
Frederick .	2	33	1	11	-	47	
Garrett . .	19*	3	-	-	-	22	
Harford	-	20*	n	15	-	46	
Howard .	-	6*	-	5*	-	11	
Kent	-	2	i	5	-	8	
Montgomery	1	22	-	13*	-	36	
Prince George's	-	23	-	(35)	-	58	
Queen Annt's	-	2	6	7	-	15	
St. Mary's	-	6	-	5	-	11	
Somerset	1	1	31*	20	-	53	
Talbot	-	1	8	7	-	16	
Washington	14*	39	-	5	-	58	
Wicomico	-	-	(72)	36	-	108	
Worcester	-	-	18*	10	-	28	
Total, 23 counties	346	395	201	281	1	1,224	
Baltimore City		423*	1	32	(201)	658	
From hoirle county	306	145	72	35	201	759	40.3
From adjoining comity	33	515	72	58	-	688	36.6
From non adjoinin g county	8	158	58	210	1	45	23.1
Total, State	347	818	202	313	202	1,882	100.0
From out-of- State	19	18	42	10	2	91	
Total en- rollm«.nt	366	836	244	323	204	1,973	

52. CHAPTER VI

TABLE 19 Public Junior Colleges, Geographical Distribution of Students, Fall of 1952

County	Carver Jr. College	Hagers-town Jr. College	Mont-gomery Jr. College	St. Mary's Sem. Jr. College	Balto. Jr. College	Total	Per cent
Allegany . . .	—	—*	—	1	—	1	
Anne Arundel	—	—	1	3	1*	5	
Baltimore	—	—	—	1	40*	4 ¹	
Calvert	—	—	—	—	—	—	
Caroline . . .	—	—	—	1	—	1	
Carroll	—	—	1	—	1	2	
Cecil	—	—	—	1	—	1	
Charles	—	—	—	—*	—	—	
Dorchester . .	—	—	—	—	—	—	
Frederick	—*	1*	—*	1	1	3	
Garrett . . .	—	—	—	1	—	1	
Harford . . .	—	—	—	2	2	4	
Howard	—*	—	1*	1	—	2	
Kent	—	—	—	1	—	1	
Montgomery	(33)	—	(256)	2	—	291	
Prince George's	2*	—	39*	1	—	42	
Queen Anne's	—	—	—	2	—	2	
St. Mary's . .	—	—	—	(22)	—	22	
Somerset . . .	—	—	—	1	—	1	
Talbot	—	—	—	1	—	1	
Washington .	1	(123)	—	—	—	124	
Wicomico	—	—	—	—	—	—	
Worcester	—	—	—	—	—	—	
<hr/>							
Total, 23 counties	36	124	298	42	45	545	
Baltimore City	—	1	—	3	(313)	317	
<hr/>							
From home county .	33	123	256	22	313	747	86.7
From adjoining county	2	1	40	—	41	84	9.7
From non-adjoining county .	1	1	2	23	4	31	3.6
<hr/>							
Total, State	36	125	298	45	358	862	100.0
From out-of-State	2	7	129	2	—	140	
<hr/>							
Total enrollment	38	132	427	47	358	1,002	

Table 20 sets forth the same facts concerning our large universities and State colleges:

43.6% of all the students come from the home county.

25.7% come from adjoining counties.

30.7% come from counties not adjoining.

Of the 1,019 Maryland students at Morgan State, 830 come from the " home " Baltimore City.

At the University of Maryland, at College Park, more students, 2,130, attend from the home county of Prince George's than from all of Baltimore City, 1,338. At College Park more students, 1,655, attend from the adjoining Montgomery County than from all of Baltimore City, 1,338. Of all the Maryland students, 7,249, attending College Park, more attend, 3,785, from just two Maryland counties, the " home " Prince George's, and the " adjoining " Montgomery, than from all the other twenty-two units combined! This is 52.2% against 47.8%.

Table 21 concerns the source of enrollment in the five liberal arts Catholic colleges:

78.3% of the students come from the home county.

12.9% from the adjoining county.

8.8% from counties not adjoining.

Of the 512 Maryland students at Loyola College, 439 come from the " home " unit of Baltimore City, 59 others from adjoining counties, and only 14 from nonadjoining counties.

TABLE 20 Universities and State Colleges, Geographical Distribution of Students, Fall of 1952

County	Johns Hopkins Univ.	Univ. of Balto.	Morgan State College	Univ. of Maryland, College Park	Univ. of Maryland, Balto. City	Princess Anne College	Total	cent Per
Allegany . . .	7	-	5	169	—	1	182	
Anne Arundel	35*	6*	21*	260*	210*	16	548	
Baltimore . .	202*	43*	30*	462*	621*	3	1,361	
Calvert . . .	2	-	7	43*	2*	2	56	
Caroline	2	-	8	46	1	2	59	
Carroll	11	-	2	56	3i	—	100	
Cecil	3	-	3	35	32	3	76	
Charles . . .	2	-	9	54*	3	10	78	
Dorchester	7	—	10	74	10	9	n o	
Frederick . .	9	1	6	303	17	9	345	
Garrett . . .	3	-	-	15	4	—	22	
Harford . .	27	5	11	102	225	4	374	
Howard . .	6	-	10	72*	20	6	114	
Kent	3	-	3	28	4	7	45	
Montgomery Prince George's .	32	-	9	1,655*	37	2	1,735	
Queen Anne's	23	—	14	(2,130)	35	13	2,215	
St. Mary's .	-	-	3	20	3	3	29	
Somerset	2	-	4	71	3	2	82	
Talbot	2	-	9	42	3	(40)	96	
Washington	7	-	5	36	5	12	65	
Wicomico	16	-	4	140	15	-	175	
Worcester	5	—	11	70	10	40*	136	
	3	-	5	28	3	10*	49	
Total, 23 counties	409	55	189	5,9H	1,294	194	8,052	
Baltimore City (973)	(973)	(249)	(83°)	1,338	(i,378)	16	4,784	
From home county . .	973	249	830	2,130	1,378	40	5,600	43.6
From adjoining county	137	49	5i	2,084	831	5°	3,302	25.7
From non-adjoining county . .	172	6	138	3,035	4"3	120	3,934	30.7
Total, State	1,382	304	1,019	7,249	2,672	210	12,836	100.0
From out-of-State .	1,178	4	502	3,552	518	174	5,928	
Total enrollment	2,560	308	1,521	10,801	3,190	384	18,764	

TABLE 21 Liberal Arts Catholic Colleges, Geographical Distribution of Students, Fall of 1952

County	Mt. St. Mary's College	St. Joseph's College	College of Notre Dame	Loyola College	Mt. St. Agnes College	Total	Per cent
Allegany						9	
Anne Arundel			3*	7*		13	
Baltimore			34*	52*		98	
Calvert							
Caroline							
Carroll	4"						
Cecil							
Charles	3					7	
Dorchester							
Frederick	(19)	OO				31	
Garrett							
Harford						14	
Howard						7	
Kent							
Montgomery	15*					29	
Prince George's	2					4	
Queen Anne's							
St. Mary's							
Somerset							
Talbot							
Washington							
Wicomico							
Worcester							
Total, 23 counties	60	29	52	73	19	233	
Baltimore City	23		(298)	(439)	(83)	852	
From home county .	19	11	298	439	83	850	78.3
From adjoining county	22	10	37	59	12	140	12.9
From non-adjoining county . .	42	17	15	14		95	
Total, State	83	38	350	512	102	1,085	100.0
From out-of-State	403	144	161	16	58	782	
Total enrollment	486	182	511	528	160	1,867	

Table 22 considers the source of enrollment at six liberal-arts colleges:

27.3% come from the home county.

29.3% come from the adjoining counties.

56.6% come from either the home county or the adjoining counties.

43.4% come from counties not adjoining.

At St. John's, almost a third of the students, 22 out of 77, come from the "home" Anne Arundel County. At Western Maryland, 68 come from the "home" Carroll County. This is larger than the number from any unit other than Baltimore County or City. Hood College draws more from its "home" Frederick County than from any unit except Baltimore City. Likewise Washington College draws more from its "home" county, Kent, than from any unit except Baltimore City. Of the 192 Maryland students attending Washington Missionary College, 155 come from the "home" Montgomery County. Of the 207 Maryland students attending Goucher, 194 come from either the "home" county or adjoining county.

Table 23 contains a summary of the preceding five tables. All of the data presented are available in the five tables and are assembled here for convenience and ease of reference.

TABLE 22 Other Liberal Arts Colleges, Geographical Distribution of Students, Fall of 1952

County	Western Maryland College	St. John's College	Goucher College	Hood College	Washington College	Missionary College	Total	Per cent
Allegheny . . . . .	.13	2	1	-	2	-	18	
Anne Arundel	19	(22)	4*	4	10	1	60	
Baltimore	75*	2*	(30)	4	22	-	133	
Calvert	3	1*	-	1	2	-	7	
Caroline	5	1	-	-	4	-	10	
Carroll	(68)	1	1*	2*	5	1	78	
Cecil	2	2	-	-	8*	1	13	
Charles	3	1	-	-	1	-	5	
Dorchester . . . . .	.7	1	-	-	6	-	14	
Frederick	13*	2	4	(15)	2	2*	38	
Garrett	4	1	-	-	2	1	8	
Harford . . . . .	.14	1	5*	3	5	-	28	
Howard . . . . .	.6*	1*	-*	-	-	-*	7	
Kent	2	-	-	-	(24)	-	26	
Montgomery	3 2	2	5	-*	16	(155)	210	
Prince George's	14	1*	1	-	5	19*	40	
Queen Anne's	5	1	-	-	8*	2	16	
St. Mary's	2	2	-	-	-	-	4	
Somerset	5	-	-	-	5	-	10	
Talbot	3	2	1	-	6	-	12	
Washington	10	2	-	10*	2	6	30	
Wicomico	13	2	1	-	3	-	19	
Worcester	4	2	-	-	5	-	n	
Total, 23 Counties	322	52	53	39	143	188	797	
Baltimore City	100	25*	154*	24	46	4	353	
From home county	6 8	22	30	15	24	155	314	27.3
From adjoining county	94	30	164	12	16	21	337	29.3
From non-adjoining county	260	25	13	36	149	16	499	43.4
Total, State	422	77	207	63	189	192	1,150	100.0
From out-of-State	226	56	365	382	161	475	1,665	
Total enrollment	648	133	572	445	350	667	2,815	

TABLE 23 General Geographical Distribution of Students,
Fall of 1952

County	Five State teachers colleges	Five jr. colleges	Six univ. & State colleges	Five Catholic colleges	Six colleges	Total	Per cent
Allegany . .	312	1	182	9	18	522	
Anne Arundel	73	5	548	13	60	699	
Baltimore	171	41	1,361	98	133	1,804	
Calvert . . .	14	-	56	-	7	77	
Caroline . .	30	1	59	-	10	100	
Carroll	31	2	100	8	78	219	
Cecil	21	1	76	1	13	112	
Charles . .	18	-	78	7	5	108	
Dorchester	37	-	no	-	14	161	
Frederick	47	3	345	31	38	464	
Garrett	22	1	22	-	8	53	
Harford	46	4	374	14	28	466	
Howard	11	2	114	7	7	141	
Kent	8	1	45	-	26	80	
Montgomery	36	291	1,735	29	210	2,301	
Prince George's	58	42	2,211	4	40	2,359	
Queen Amy's	15	2	29	-	16	62	
St. Mary's . .	11	22	82	7	4	126	
Somerset . .	53	1	96	-	10	160	
Talbot	16	1	65	-	12	94	
Washington	58	124	175	4	30	391	
Wicomico . .	108	-	136	1	19	264	
Worcester . .	28	-	49	-	11	83	
Total, 23 counties	1,224	545	8,052	233	797	10,851	
Baltimore City	658	317	4,784	852	353	6,964	
From home county	759	747	5,600	850	314	8,270	46.4
From adjoining county	688	84	3,302	140	337	4,551	25.6
From non- adjoining county	435	31	3,934	95	499	4,994	28.0
Total State	1,882	862	12,836	1,085	1,150	17,815	100.0
From out- of-State	91	140	5,928	782	1,665	8,606	
Total en- rollment	1,973	1,002	18,764	1,867	2,815	26,421	

Table 24 is designed to show where the students from each county go in terms of home county, adjoining county, or nonadjoining county.

Example: Of the 522 students from Allegany County attending Maryland colleges, 58.6% attend the one college located in the county, none attend the one college in an adjoining county, and 41.4% attend the 25 colleges in nonadjoining counties.

91.7% of the students from Prince George's County, who attend a Maryland college, attend the two colleges in the home county.

73.5% of the students from Montgomery County, who attend a Maryland college, attend one of the five in an adjoining county.

68.4% of the Baltimore City students, who attend a Maryland college, attend one of the nine located in that city.

Table 25 lists the enrollments of the five types of colleges with respect to our three categories of home, adjoining, and nonadjoining.

For the totals of the 27 colleges:

Of all the Maryland students who attend Maryland colleges:

46.4% attend a college in the home county.

25.6% attend a college in an adjoining county.

72.0% attend in either the home or an adjoining county.

28.0% attend in a nonadjoining county.

The total enrollment, 26,441, covers the 27 schools listed in Tables 18 to 22. It does not include the U. S. Naval Academy nor several smaller special schools.

TABLE 24 Maryland College Enrollment *by County*, Fall of 1952

County	T/t M : pupils attending college in Md.	Attending college in home county		Attending college in adjoining county		Attending college in county not adjoining		Number of colleges in : in : : in : home adjoining county county	
		#	%	#	%	#	%		
Allegany	522	306	58.6	-	-	216	41.4	1	1
Anne Arundel	699	22	3.2	621	88.8	56	8.0	1	13
Baltimore	1,804	175	9.7	1,109	61.5	520	28.8	2	11
Calvert	77	-	-	49	63.6	28	36.4	-	3
Caroline	100	-	-	-	-	100	100.0	-	-
Carroll	219	68	31.1	37	16.9	114	52.0	1	5
Cecil	112	-	-	8	7.1	104	92.9	—	1
Charles	108	-	-	64	59.3	44	40.7	-	3
Dorchester	161	-	-	23	14.3	138	85.7	-	1
Frederick	464	45	9.7	16	3.4	403	86.9	3	5
Garrett	53	-	-	19	35.8	34	64.2	-	1
Harford	466	-	-	25	5.4	441	94.6	—	a
Howard	141	-	-	91	64.5	50	35.5	-	8
Kent	80	24	30.0	-	-	56	70.0	1	-
Montgomery	2,301	444	19.3	1,692	73.5	165	7.2	3	5
Prince George's	2,359	2,165	91.7	51	2.2	143	6.1	%	4
Queen Anne's	62	-	-	8	12.9	54	87.1	-	1
St. Mary's	126	22	17.5	-	-	104	82.5	1	-
Somerset	160	40	25.0	31	19.4	89	55.6	1	1
Talbot	94	-	-	-	-	94	100.0	—	-
Washington	391	123	31.5	27	6.9	241	61.6	1	4
Wicomico	264	72	27.3	40	15.1	152	57.6	1	1
Worcester	88	-	-	28	31.8	60	68.2	-	2
Total, 23 counties	10,851	3,506	32.3	3,949	36.4	3,396	31.3	18	
Baltimore City	6,964	4,764	68.4	602	8.7	1,598	22.9	9	3
Total, State	17,815	8,270	46.4	4,551	25.6	4,994	28.0	27	-

TABLE 25 Effect of Proximity on Enrollment, Fall of 1952

Number; per cent	Five State teachers colleges	Five Jr. colleges	Six univ. & State colleges	Five Catholic colleges	Six colleges	Total for the 27 colleges
Attending college						
in home county						
Number . . . . .	.759	747	5,600	850	314	8,270
Per cent	40.3	86.7	43.6	78.3	27.3	46.4
Attending college in						
adjoining county						
Number . . . . .	.688	84	3,303	140	337	4,551
Per cent	36.6	9.7	25.7	12.9	29.3	25.6
The two above added						
together						
Number	1,447	831	8,902	990	651	12,821
Per cent	76.9	96.4	69.3	91.2	56.6	72.0
Attending college						
not in adjoining						
county						
Number . . . . .	.435	31	3,934	95	499	4,994
Per cent	23.1	3.6	30.7	8.8	43.4	28.0
Maryland pupils at-						
tending Maryland						
colleges						
	1,882	862	12,836	1,085	1,150	17,815
Out-of-State pupils at-						
tending Maryland						
colleges						
	91	140	5,928	782	1,665	8,606
Total enrollment	1,973	1,002	18,764	1,867	2,815	26,421
From the 23						
counties						
	1,214	545	8,052	233	797	10,851
From Baltimore						
City						
	.658	317	4,784	852	353	6,964

The Junior College as a Community College

The junior college may be regarded as an effective means our society has invented for adjusting educational costs and services to the financial ability, the educational potential, and the occupational objectives of those aiming at service on the technical and semiprofessional levels.

In addition to the courses aimed at educating high-school graduates for technical and semiprofessional occupations, the junior college will offer courses that will permit a student to enter a four-year accredited college without loss of time or credit if his scholastic work is satisfactory. To achieve these ends, the junior college must be thought of as essentially a part of the local school system, grades one through twelve. The administrative unit expresses this continuity of grades. It should also be large enough to comprehend the resources and the population sufficient for its support. For these reasons, the unit is sometimes a municipality, sometimes a county, and sometimes a joint county district. Since the junior college is an expression of local educational needs and is a means of making readily and inexpensively available training for semiprofessional and technical work, the administrative unit should be conceived so as to command, first of all, local resources necessary to the continuance of the institution; second, and as a supplementary source, the state; and, finally, the resources of the individual.

So far, the attempt to determine the effects of the existence of junior colleges upon enrollments in senior colleges has been based upon a consideration of the transfer and terminal curricula alone. At this point mention should be made of special and adult students in junior colleges. They represent a rapidly expanding function of junior colleges and their attendance affects little, if at all, enrollments in senior colleges. The first edition of *American Junior Colleges*, 1940, reported that there were approximately 52,000 special and adult students during the year 1939-40. An increase from that number to more than 300,000 within the space of eleven years certainly identifies a definite trend in junior college interest and work.¹¹

This rapid increase in number of special and adult students in junior colleges reflects quick shifts in the training required of the

¹¹ Jesse P. Bogue, ed., *American junior Colleges, Third Edition* (Washington: American Council on Education, 1952), p. 36.

labor force and may, therefore, be regarded as **inevitable response to** real and pressing educational needs.

Under normal conditions the labor market is unable to absorb the supply of untrained workers. Moreover, the very nature of present-day business and industrial practices requires a higher degree of technical skills and understanding than was true before assembly-line production came into general use. . . . The nature of large-scale production demands more and better-trained supervisors and foremen. In short, it is common knowledge that greater skill, increased maturity, backgrounds of technical know-how and know-why, and more intelligent supervision have changed the basic pattern of present day business and industrial life. . . . Closely allied with vocational-technical education " of junior college grade " is another trend in the direction for cooperative programs of work-study. It is realized that all knowledge and skills are not required for job entry. Many of the skills can be learned better on the job than they can in schools. However, as employees wish to advance in their work they have the privilege in many communities where junior colleges are located to return to the college for more education when they need it and as they continue to be employed. In this respect the junior college is becoming an essential partner with management and labor in the progress of business and industry.¹²

In summary, it may be said that the junior college adds to the total number of the college-going group by serving the unique purpose of providing collegiate education for adults on the technical and semi-professional levels. It adds also to the total group by conserving for service on the professional and scientific levels those who would not continue their education beyond high school were collegiate education not available inexpensively near home. It does a third unique service for the community in the occupational retraining of adults as technological changes require new skills and understandings. Some states are thinking of requiring of junior colleges that they take care of the general education of all students who would otherwise be enrolled in the university in grades thirteen and fourteen and that the university be left relatively free for the specialization of the upper college years, for graduate work, and **for research.**

¹² *Ibid.*, p. 36.

Summary

1. Havighurst and Rodgers identified five factors which determine whether or not particular individuals will attend college following high-school graduation: mental ability; social expectation, or what the family and society expect of the individual; individual motivation, or life goals; financial ability, in relation to the costs of continued education; and propinquity to an educational institution. These five factors form a complex of interrelated causes. The relative weight of each as a determinative factor varies with individual cases.

2. Purpose and drive compensate, within limits, for financial disabilities and even for relatively low intellectual capacity as measured by standard mental ability tests now available.

3. Evidently the selective process which operates to move certain individuals from high-school graduation on to college is at present too much a hit-or-miss affair. Nationwide—and the data presented indicate that the ratio holds approximately for Maryland also—almost one-half of those of highest intellectual capacity do not go to college. This should be considered in relationship to the fact that the whole labor force in this country is shifting toward the skilled, the service, the technical, the semiprofessional, and the professional levels, and there are at present serious shortages at these levels.

4. In relation to this selective process, effective guidance and counseling services in the schools of the state are important. They should, among other responsibilities, help in the early identification of students with intellectual capacity and promote the incorporation into family plans and the life goals of individuals of vocational objectives which are commensurate with abilities.

5. Effective guidance and counseling cannot confine itself to financial considerations. Family patterns and orientations are involved. Guidance personnel must understand the values and the motivations of various cultural groups.

6. High socioeconomic level coupled with high motivation make it almost certain that a youth will go to college. Low socioeconomic level coupled with low motivation make it almost certain that a youth will not go to college. Between these two extremes are the

levels at which probability of college attendance is affected by favorable changes in the economic factor and by programs designed to motivate boys and girls to want higher education.

7. Evidently, relatively high percentages of high-school graduates attending college, state-wide, are achieved when institutions of collegiate level are distributed evenly, widely, and equitably over the State. This result apparently does not follow inevitably and immediately but is affected by the relationship of the programs offered to community needs and by the procedures which are used in establishing this relationship.

CHAPTER VII THE NEED FOR
SPECIALIZED PREPARATION IN MARYLAND
(*Professional, Technical and Vocational*)

In view of the unprecedented rise in population now taking place in Maryland it is logical to assume that the demand for services in all areas that contribute to the welfare of the State will mount rapidly. The question is, how great will be the rising need for specialized training at the college and post-graduate levels, and how may it be met?

There are two broad and controlling assumptions in this connection. First, it is inherent in the American philosophy that individuals should have access to opportunities which can help them to develop their abilities and interests so that they may qualify for the profession or occupation of their choice; in this way they may help themselves attain economic security and, at the same time, prepare to serve the community effectively. Second, it is socially wasteful as well as frustrating to individuals to educate persons for occupations in numbers far in excess of the jobs or places available. Any plan for a long-range program of education and training dares not lose sight of these assumptions.

It is necessary, therefore, to consider both the present economic status of the country and to estimate probable economic developments. The following considerations are germane:

- i. The astounding rate of increase in population will increase the need for production and services of many kinds. The year 1953 set a record of \$365 billion in the value of production and services.
2. There are more new families, more people are marrying, they are marrying younger and having more children.
3. People are living longer. By 1960 the population over 65 will number 15,500,000—a million more than the total population of Canada in 1950.

4. More money is being earned. In 1952 there were 9 times more Americans in the \$5,000-plus income group than in 1941, and the average middle income family earned \$3,981 as compared with \$1,460 in 1940.
5. Farms are more highly mechanized and more efficient. Although there has been a net population loss of almost 6,000,000 in the farm population since 1940, there has been a 52 per cent increase of farm output per man-hour in the same period.
6. There are more high school graduates—80 per cent more in the adult population than in 1940, and more students in college—55 per cent more than in 1940.
7. People are saving more and borrowing more. Individual savings rose from \$68,500,000,000 in 1940 to \$234,000,000,000 in 1952.
8. People are moving to the suburbs at an unprecedented rate, decentralizing not only homes but businesses.
9. Technological progress is accelerating. Today only approximately 5 per cent of the total work done in this country is manual; 95 per cent is done by machinery and power.
10. The standard of living is rising steadily. People are eating more and better food, are healthier, have more time for leisure and travel, are better informed and better entertained, and enjoy the fruits of great cultural progress. There is also a renewed interest in the things of the spirit as is evident from statistics concerning church attendance, ministers, and the circulation of Bibles and other books on religion.

In conducting this part of the study, the Commission worked with a number of special groups and agencies in order to obtain opinions and factual data concerning new developments and future requirements. The Maryland State Employment Service supplied very helpful statistical information and leaders of various semiprofessional groups, who were invited to appear before the Commission, set forth their requirements in terms both of the number of future practitioners needed and the standards to be observed in their training. The State Welfare Association, the Medical and Chirurgical Faculty of Maryland, the engineering associations, the Maryland Library Commission, the Practical Nurse's Association, the Maryland Dental Association, the deans of the engineering colleges of the University of Maryland and The Johns Hopkins University all gave invaluable assistance in this connection. The opinions and data thus gathered form the basis

of the Commission's conclusions and recommendations concerning specialized education.

As the study proceeded, the need for reasonably precise definitions of certain key terms became evident. The following were adopted:

- i. Professional courses: those preparing for medicine, dentistry, law, engineering, teaching, and similar occupations requiring at least four years of undergraduate study leading to a bachelor's degree, and in some cases, e. g., medicine, law, college-teaching, etc., requiring post-graduate work leading to an advanced degree.
2. Technical courses: those offered in the first two years of post-high-school education but not normally a part of a four-year college program.
3. Vocational courses: those below college grade, dealing primarily with training producers in industry, especially skilled mechanics and operators.

The Maryland State Employment Service lists three types of occupations: those requiring college graduation; those requiring high-school graduation with additional technical training on a college level; and those vocational occupations listing high-school graduation either as necessary or desirable.

The types of post-high-school programs needed in a comprehensive plan of education to meet the needs of the State of Maryland are the following:

1. Courses preparing for employment in agriculture and industrial production.
2. Courses preparing for employment in business, commerce, and the service occupations.
3. Full four-year college and graduate programs.

Before the expansion of industrial and commercial employment (including service occupations) during the early phases of World War II the pattern of developing engineering and technical programs in industry more or less followed the plan of utilizing college-graduate engineers even in minor professional positions now classified as " junior technicians." Certain developments in this pattern prompted employment managers and executives of large establishments to question the advisability of employing graduate engineers for this type of work. It was found that the turnover of highly trained persons employed at

this level was exceedingly high because young men and women of advanced attainments employed in such positions became dissatisfied and impatient and sought frequent changes in places of employment. Moreover, employees discovered that in many cases the type of services rendered did not justify the salary of a graduate engineer.

Training directors and employment managers in industry studying the situation found that many occupations in large industrial and commercial organizations formerly filled by graduate engineers could be filled ably and effectively by junior technicians, that is, those with some post-high-school technical training, but without a four-year college degree.

Western Electric, General Electric, and several of the large steel companies were the first to recognize this fact; they began to employ persons with two years of post-high-school preparation as assistants in laboratories, testers, maintenance technicians, draftsmen, engineering aides, specification writers, technical assistants, technical salesmen, production control men, and special equipment technicians. More recently, nationwide studies have disclosed that a balanced and profitable employment pattern of industry in the technical and engineering services may permit of the employment of from three to ten junior technicians for each graduate engineer.

In response to requests from industrial and commercial establishments, two-year courses of post-high-school technical instruction were established in junior colleges and technical institutes. The ratio of junior technicians to engineers is presently increasing. Communities in Maryland should study local situations carefully and determine how the two-year post-high-school program can prepare young people for occupations and employment opportunities calling for junior technicians.

Some programs should be established to enable the student to take three or four years to complete the equivalent of a two-year college course so that he may fill a job while attending courses in a technical institute or junior college.

Social Service Needs

A study made by the Baltimore Council of Social Agencies in 1950, outlining the needs and including recommendations for training workers in this field, was presented to the Commission. In this study 90 agencies were approached by means of a questionnaire, and 60 replies were received. They brought to light that, of the approximately 364 positions which are filled by social workers in the agencies studied, about two-thirds, or approximately 200, had had some kind of training in social work in professional social-service schools, while the rest had no special training whatever. All agencies involved in the study indicated a keen interest in the establishment of a school of social work in Maryland, since positions cannot be filled with qualified personnel because of the lack of training facilities in Maryland for this purpose. Many agencies are now giving leaves of absence for professional study to workers who are not yet fully qualified. These agencies are interested in the possibility of organizing a work-study plan providing a program of in-service training at the college level. The nearest centers offering such courses are Philadelphia and Washington, where some of the employees of the Baltimore agencies have studied. Present as well as potential employees have evinced a strong interest in having a school in Maryland. As noted in *Social Work Education in the United States*,¹ Baltimore is one of only two large cities in the country that has no school for training social workers.

The 1950 study referred to above concluded that Maryland needs a school for the preparation of social workers, a conclusion which is confirmed by a study made more than twenty years earlier. About 299 graduates of professional social workers' schools are now employed in the Baltimore area. The absence of a social-service school in Maryland helps to account for the large turnover in Maryland social-service agencies. It is so large that it is impossible to establish a normal turnover figure. The need is balanced equally between public and private agencies.

To make available the proper type of leadership needed in this

¹ Ernest V. Hollis and Alice L. Taylor, *Social Work Education in the United States* (New York: Columbia University Press, 1951).

important field of service professional training beyond a bachelor's degree is necessary. Also, field work experience under expert supervision is one of the growing needs of social work in Maryland. In sum, there is solid evidence of the great need for a large number of additional well trained social-service workers, and for a professional school equipped to provide the required training.

Needs in the Field of Engineering

Engineering college administrators have expressed concern ever since 1953 over the reduction in the number of freshmen enrolling in engineering courses. The Manpower Committee of the Engineering Society in 1950 undertook a survey of freshmen enrollment. Thirty-four institutions were consulted and classified as to type and location. The following table gives the result of that survey. Figures for previous years were taken from the data published by the American Society for Engineering Education.²

Freshman Enrollment	1940	1947	1948	1949	1950
34 Institutions	16,407	27,124	2-2,735	19,189	14,057
Entire Country (estimated). •	33,175	57,507	47,672	36,508	26,500
Former as % of latter.	49.5	47.2	47.7	52.4	53.0

The Manpower Committee stated that: "The engineering profession needs about 20,000 engineering graduates annually for civilian peacetime needs alone. The present emergency will convert many of the peace-time needs to emergency needs of industry; and in addition the military needs are to be added to civilian requirements. It is estimated that a minimum of 30,000 graduates from engineering schools will be required each year to supply the total needs.

" In view of the fact that industry has absorbed nearly 50,000 graduates this year, the estimate of a combined need (annual) for both industry and the armed forces of 30,000 is probably conservative. It appears therefore, in the national interest to assure the country of a continuing supply of at least 30,000 graduates annually."

² *Journal of Engineering Education* (February 1941, 1948, 1949, and 1951).

Five factors should be taken into account in weighing the need of facilities for training engineers in the State:

- i. The supply of engineering graduates is now wholly inadequate to meet the ultraconservative estimate of the 30,000 per year needed for the nation as a whole.
2. Engineering graduates as a rule do not remain in the community or state where they receive their education. They are a mobile group and migrate to various parts of the country, regardless of the place of birth or training.
3. With present enrollments, and making no allowance for withdrawals for military service, there will not be enough graduates after 1953, at least until 1961, to meet the peacetime need as conservatively estimated by the Bureau of Labor Statistics. The shortage is estimated to be at least 20 to 30 per cent.
4. The military requirements for engineers may be filled only by taking men from industry, thus further aggravating the need of industry.

A possible step toward bringing need and supply more nearly into balance is to change the pattern of utilization by spreading each engineer's work over a greater range and thereby lessening the need. While this would be of substantial help, it does not now appear that this step alone can bring the need and supply into congruence during the next decade.

We cannot escape the conclusion that the enrollments and facilities in engineering in the universities and colleges of Maryland are woefully inadequate. If the State is to make its contribution to the needed supply of professional engineering manpower, facilities and faculties must be increased and enrollments in courses must be expanded.

Medical Education in Maryland

The existence of two strong medical schools in Maryland—at The Johns Hopkins University and the University of Maryland—suggests that this State is better equipped than many of its neighbors with respect to this area of professional training. Because of these schools, Baltimore has become one of the great medical centers of the nation. The schools themselves and their affiliated hospitals guarantee that

this position will be maintained. However, the existence of such a medical center in Baltimore does not solve the total State problem of medical care. There remains a need to provide physicians—both general practitioners and specialists—for other parts of the State and a further need to staff hospitals in outlying areas.

It is evident that Maryland's ability to supply trained medical personnel in sufficient numbers depends in part upon the number of doctors graduated by the two schools, and especially upon the number who remain to practice their professions within the State. When this situation is examined, Maryland's position becomes less favorable. As a matter of policy since its founding, the School of Medicine of The Johns Hopkins University has attracted students from all parts of the country; many of its graduates, therefore, do not practice in Maryland but return to their homes. Of the substantial number who do remain in the State, most are concentrated in Baltimore City where they contribute materially to the total demand for specialized medical service but relatively little to those needs which must be met at community level.

The School of Medicine of the University of Maryland makes a much more direct contribution in terms of trained physicians. Its graduates are scattered widely throughout the State, in both urban and rural communities. Yet it is reported that many of the graduates of the University of Maryland School of Medicine move to other states to practice their profession.

There is no evidence to show that Maryland's supply of physicians in terms of its population is much greater or less than the country's average, but this statement simply implies that Maryland shares in what is asserted to be a nationwide shortage of doctors.

As a special State problem, it appears to the Commission that there is need for a continuing study of the supply of, and demand for, physicians within the State; and that the results of such a study should be implemented by plans for increasing the production of physicians when and if such an increase is found desirable. Since the policies of The Johns Hopkins University School of Medicine are not likely to change in respect to the number enrolled or increased production of physicians who will practice in the State, the burden of any ex-

pansion of training facilities in medicine would seem to fall primarily upon the University of Maryland.

Dental Education in Maryland

The total number of dentists currently practicing in Maryland is reported as 932. Since the population of Maryland (1950 census) was 2,343,000, the ratio is 2,513 persons for each dentist. This, it is reported, is an unusually high ratio and indicates a substantial shortage of members of the dental profession in the State.

As in the case of medical education, it appears desirable that a careful study be made of the supply of dentists as related to the demand, and that plans be laid for training a larger number of graduates if the results of the study justify such a step. Since there is at present only one dental school in the State—at the University of Maryland—it appears that any increase would have to be provided through this institution, although the possibility of an additional dental school should not be dismissed if the burden on the University of Maryland should prove too heavy and if another qualified institution should be willing to enter the field.

Need for a School for Training Librarians

Maryland has no professional library school. While approximately 500 individuals are employed in library service in the State, with a turnover of approximately 10 per cent, there are anywhere from 40 to 60 new librarians employed in the school, college, and public libraries each year.

On a national basis, there is evidence that there is a great need for facilities for training librarians. Representatives of the Library Association have pointed out that, in the country as a whole, there are approximately 25 vacancies for every qualified person available.

Needs in the Preparation of Teachers

In general the courses offered in preparing teachers for the elementary public schools in the State of Maryland have been stabilized. While there are some changes in courses year by year, we find the greatest constant need is heavier enrollment. Recent studies show that school population growth in Maryland will mean the employment of 20,000 teachers in 1959-60 as against approximately 14,000 in 1952-53. At least 1,000 new teachers should therefore qualify each year for teaching positions as they develop during that six-year period. By 1959-60, therefore, it will be necessary to enroll in teacher education curricula enough students to provide 6,000 additional qualified teachers for the public school system in the State.

In addition to this increase in the number of teachers to be employed, as mentioned above, because of the expanded population and increase in enrollment, we have at the present time a qualified teacher deficit as follows. During 1952-53, 2,250 teachers in service in the Maryland counties held emergency teacher certificates. That is, they were not fully qualified elementary- or high-school teachers. Twelve hundred additional qualified teachers are needed to reduce the size of classes to an enrollment of 30 per teacher, as now authorized by law. Another additional 1,000 qualified teachers will be needed annually for the next six years to meet the increased enrollment caused by the increased number of births. The teacher turnover amounts to approximately 1,295 per year, due to retirement, death, acceptance of teaching positions in other states, marriage, and acceptance of employment other than teaching.

Summarizing this situation, and allowing a six-year period to liquidate the deficit of qualified teachers, the annual number of new qualified teachers should be 2,874 distributed as follows:

Teachers Per Year for 6 Years

- (i) Normal turnover. 1,295
- (2) Increased enrollment 1,000
- (3) Reduced size of classes. 187
- (4) Replacing emergency certificated teachers 392

Total

2,874

When we compare this annual need with the total number of graduates from the State teachers colleges and all other colleges in the State offering teacher education programs, it is evident that the annual need is more than three times the total annual production of college graduates now being prepared for teaching by the colleges of the State.

The colleges and universities of the State likewise face the acute problem of increasing their faculties to accommodate the rapidly expanding enrollment.

Summary

The information obtained and set forth in this chapter does not constitute a complete listing of "needs" in every area of activity. In no case was an exhaustive study made of the areas which are included in this discussion. The facts set forth indicate the necessity for additional and continued study of problems relating to the need for trained men and women in professional fields.

Recommendations to this effect are made in Chapter X of this report.

CHAPTER VIII THE IMPACT OF INCREASING POPULATION *ON COLLEGE* ENROLLMENTS IN *MARYLAND*

The most challenging problems facing institutions of higher education in Maryland and throughout the nation arise from the greatly increased number of students to be accommodated in the immediate future. Preceding chapters have dealt with some of these problems. The present chapter is concerned with some general population factors related to the growth in the college population.

No attempt is made to analyze the population in terms of sex composition or socioeconomic status, although these have some bearing on college attendance. Data relating to whites and Negroes are presented in the hope that they may be helpful in this transition period when Maryland is abandoning its former policy of racially segregated schools.

The General Population

The United States has experienced a population growth hardly paralleled among the nations of the world. The population increased by 127,505,485 during the past century, 1850-1950—a growth of 550 per cent. During the second half of this period, 1900-1950, there was an increase of 74,702,786.

The population of the State increased at a fairly constant rate from 1900-40. There was normal growth with a relatively small amount of in-migration. During the decade 1940-50 the rate of increase more than doubled the rate of increase for each of the three previous decades. The defense activities in the State during World War II attracted many thousands of workers and their families from other states. The Baltimore area, in particular, received an impact of major

proportion. The cities of Hagerstown and Salisbury also received a large influx of defense workers. At the war's end these families did not return to their former residences in other states; instead they elected to make their permanent homes here because of the economic and educational opportunities in Maryland. In addition, many thousands of residents of Washington, D. C., moved into adjacent Montgomery and Prince George's counties. It is estimated that there was a net in-migration of 270,000 to Maryland during this period.

A second factor which has contributed to this unprecedented growth in population is the sharp rise in birth rate. This is not a characteristic peculiar to Maryland; rather it is a nationwide and worldwide phenomenon. There were 463,280 resident births in the State during the decade 1940-50. This is 30 per cent in excess of the total number of pupils enrolled in the public and nonpublic elementary and secondary schools within the State in the school year 1944-45. The number of resident births in 1949, (54,048) showed an increase of 66.7 per cent over the births for 1940. Even more important is the fact that the birth rate continues to remain high. In 1952 there were recorded 63,165 resident births for Maryland, the highest number on record.

The increase in population since 1900 by decades for the United States and Maryland is shown in Table 26:

TABLE 26 Population by Decade, United States and Maryland, 1900-1970

Census year	United States		Maryland	
	Population	Per-cent increase over preceding date	Population	Per-cent increase over preceding
1900 .	75,994,757		1,188,044	
1910 .	91,972,266		1,295,346	
1920 .	105,710,620	14.9	1,449,661	11.9
1930 .	122,775,046	16.1	1,631,526	12.5
1940 .	131,669,275	7.2	1,821,244	11.6
1950 .	150,697,361	14.5	2,343,001	28.6
1960 .	177,426,000	17.7	2,750,000	17.4
1970 .	204,222,000	15.1	3,163,000	15.0

SOURCE: United States Census Bureau reports from Baltimore field office.

How is our population distributed with reference to rural and urban areas? Maryland is predominantly an urban state. Eighty per cent of the people live in urban areas. Of this number, 1,770,857 or 75 per cent live in metropolitan Baltimore and the areas surrounding Washington, D. C. An additional 117,573 or 5 per cent live in the larger cities outside the metropolitan areas.

TABLE 27 Comparison of 1940 and 1950 Census, Maryland Population by County

	Population		Increase in population, 1940—1950	
	1940	1950	Number	Per cent
State of Maryland	1,821,244	2,343,001	521,757	28.6
Baltimore City.	859,100	949,708	90,608	10.5
Total counties.	962,144	1,393,293	431,149	44.8
Allegany.	86,973	89,556	2,583	3.0
Anne Arundel.	68,375	117,892	49,517	71.7
Baltimore.	155,825	270,273	114,448	73.4
Calvert.	10,484	12,100	1,616	15.4
Caroline.	17,549	18,234	685	3.9
Carroll.	39,054	44,907	5,853	15.0
Cecil.	26,407	33,356	6,949	26.3
Charles.	17,612	23,415	5,803	32.9
Dorchester.	28,006	27,815	-191	-0.7
Frederick.	57,312	62,287	4,975	8.7
Garrett.	21,981	21,259	-722	-3.3
Harford.	35,060	51,782	16,722	47.7
Howard.	17,175	23,119	5,944	34.6
Kent.	13,465	13,677	212	1.6
Montgomery.	83,912	164,401	80,489	95.9
Prince George's.	89,490	194,182	104,692	117.0
Queen Anne's.	14,476	14,579	103	0.7
St. Mary's.	14,626	29,111	14,485	99.0
Somerset.	20,965	20,745	-220	-1.0
Talbot.	18,784	19,428	644	3.4
Washington.	68,838	78,886	10,048	14.6
Wicomico.	34,530	39,641	5,111	14.8
Worcester.	21,245	23,148	1,903	9.0

The most rapid growth in population during the past decade (Table 27) occurred in the following counties: Prince George's (117.0%), St. Mary's (99.0%), Montgomery (95.9%), Baltimore (73.4%), Anne Arundel (71.7%), Harford (47.7%), Howard (34.6%), Charles (32.9%), and Cecil (26.3%). The rural counties

with no cities in excess of 15,000 population showed a relatively small increase in population. Baltimore City, due to a high rate of out-migration to the adjacent metropolitan areas, had a population increase during the decade of only 10.5 per cent. This out-migration trend in the City of Baltimore is characteristic of what is happening in many of the larger cities throughout the nation. There is a definite trend to move to the less densely populated suburban areas. Modern rapid transportation has brought about great changes in our mode of living.

According to the estimates of the Maryland State Planning Commission,¹ the population growth trends during the past decade will continue through the next two decades (1950-70). Out-migration from Washington, D. C. and the City of Baltimore into the adjacent metropolitan areas will continue but at a slightly reduced rate. Adverse economic conditions would slow down this trend to a considerable degree. In-migration and the continued high birth rate will result in a continuing rapid rate of growth in the metropolitan areas.

The United States Bureau of the Census has prepared estimates showing that the population of Maryland will increase by 820,000 during the next two decades (Table 26). This represents an increase of 35 per cent. A similar rate of increase is predicted for the nation as a whole.

Trends in Negro Population

The proportion of Negroes in the total national population is constantly decreasing. In 1790 every fifth person in the United States was Negro; in 1950 fewer than one person in ten made up this group. This is approximately 50 per cent decrease in 160 years. For the last two decades, Negroes have made up 9.8 per cent of the total United States population. The Negro and white populations follow the same patterns of fluctuation and change as influenced by changing economic conditions.

¹ *Maryland Population Forecast Through 1970*: Publication No. 78, Maryland State Planning Commission, April, 1953.

In 1880, Negroes constituted 22.5 per cent of the population of Maryland; whereas in 1950 the percentage had dropped to 16.5, a decrease of 6 per cent in relation to the total population. Although the birth rate in the Negro population is somewhat higher, there has been no appreciable change in the population ratio in the past three decades, since in 1920 the percentage of Negroes was 16.9. However, this constant ratio does not mean that the size of the population has not changed. On the contrary, Maryland's total population has increased significantly, especially during the 1940-50 decade; hence, if the ratio of Negro to white population remains static, it follows that there has been a significant increase in both Negro and white populations. The increase in Negro population for the State and for Baltimore City since 1890 is shown in the following table.

TABLE 28 Negro Population Trends, State of Maryland and Baltimore City, 1890-1950

Year	Total State		Baltimore City	
	Number	Per cent of total population	Number	Per cent of total population
1890	215,657	20.7	67,104	15.3
1910	232,250	17.9	85,749	15.2
1930	276,379	16.9	142,106	17.7
1950	385,972	16.5	225,099	23.6

It should be noted that the Negro population shift from rural to urban areas in Maryland follows the similar trend in the nation as a whole. In some ways this trend is accentuated because of the varying population patterns in the State. For example, the northern and western counties have a very small Negro population; on the Eastern Shore, in southern Maryland, and in Baltimore City, however, the Negro population is relatively large.

Increased School Enrollment of Youth of High-School-Age Years

There has been a marked rise since 1910 in the number and per cent of youth 14 to 17 years of age who are attending some type of

school in Maryland (Table 29). The percentage has risen from 47.6 in 1910 to 79.8 in 1950.

TABLE 29 School Enrollment of High-School Age Groups, 14-17 Years, State of Maryland, 1910-50

Year	Population	Enrolled in school	
		Number	Per cent
1910.	102,791	48,968	47.6
1920.	105,403	55,337	52.5
1930.	116,836	71,558	61.2
1940.	129,815	94,616	72.5
1950.	122,285	97,655	79.9

Several factors are responsible for the rapid growth in school attendance by this age group. In the first place, in 1944 the Maryland compulsory school attendance laws, which were enacted originally in 1916, were strengthened to make school attendance mandatory up to age 16, with certain minor exceptions. Secondly, it has become increasingly difficult for this age group to secure full-time permanent employment. The federal wage-and-hour laws regulating employment for interstate commerce and our child labor laws for Maryland have for all practical purposes prohibited the full-time employment of youth under 16 years of age and have placed certain restrictions upon the employment of youth 16 and 17 years of age. Unemployment among adults, except during wartime periods of full employment, also has tended to limit the employment of youth under 18 years of age. In the third place, the educational program for this age group has been reorganized to stress adjustment to actual life situations. In brief, the educational program has been enriched and broadened. As a consequence youth are finding their educational experiences more meaningful and satisfying.

It is not possible to secure a valid comparison between the age group 14-17 and high-school enrollment (the last four years) for the period prior to 1953. This is due to the fact that there were both eleven- and twelve-year school systems in the State. The City of Baltimore, Allegany, Montgomery, and Washington counties were the only school systems operating on a full twelve-year basis prior to

1950. Thus, in eleven-year school systems the majority of the youth entered high school before age 14 and were graduated before reaching age 17. There is a small amount of overlap of enrollment in the age interval 14-17 even in a twelve-year system. However, the differences tend to cancel one another.

Growth in High-School Enrollment

Since the turn of the century there has been a steady but rapid increase in the number of youth who attend successively higher grades in school (Table 30). High-school enrollment in the United States rose very rapidly during each of the first four decades, and declined during the decade 1940-50 due to the low birth rate during the early nineteen-thirties. The growth in high-school enrollment was more rapid than that of the high-school-age group 14-17, thus indicating an increasing ratio of high-school enrollment to population. In 1900 approximately 11 per cent of the eligible youth were enrolled in the last four years of high school; in 1910 the percentage had risen to 15; in 1920 to 32; in 1930 to 51; in 1940 to 73; and in 1950 to 75. Whereas a common school education was regarded as adequate at the turn of the century, high-school graduation became the standard requirement at mid-century.

TABLE 30 Secondary-School Enrollment by Decade, United States and Maryland, 1900-50

Year	United States		Maryland	
	Enrollment ^x	Percent increase over preceding decade	Enrollment ²	Per-cent increase over preceding decade
1900	699,403		12,502	
1910	1,115,389	59.5	12,286	-1.7
1920	2,500,176	124.1	16,528	34.5
1930	4,804,255	92.1	39,929	141.6
1940	7,123,009	48.3	67,110	68.1
1950	6,427,042	-9.8	63,953	-4.7

SOURCE: U. S. Office of Education, *Statistical Summary of Education*, 1949-50; Annual Reports of Maryland State Department of Education.

¹ Includes enrollments in grades 9 through 12 in public and nonpublic high schools.

³ Includes enrollments in last four years of public high schools.

For Maryland complete data are available only for the public high schools. Here the increase in enrollments did not show a rapid growth until after 1920. This is due primarily to two factors: the establishment of public high schools in Maryland at an earlier date than in many states, and secondly, the early development of private and parochial schools. Subsequent to 1920 the increase in the enrollment in the public high schools reveals approximately the same growth pattern as those existing at the national level. In 1953 the public and nonpublic high schools in Maryland enrolled 67 per cent of the potential age group. This may be compared with the national average of 75 per cent.

TABLE 31 Estimated Enrollment,¹ Grades 9-12, State of Maryland, 1953-68

Year	Enrollment			Increase	
	White	Negro	Total	Number	Per cent
1952-53	77,100	12,700	89,800		
1953-54	81,600	14,000	95,600	5,800	6.1
1954-55	86,800	15,400	102,200	6,600	6.9
1955-56	92,400	16,900	109,300	7,100	6.9
1956-57	100,500	18,100	118,600	9,300	8.5
1957-58	110,000	19,200	129,200	10,600	8.9
1958-59	117,200	20,000	137,200	8,000	6.2
1959-60	124,100	21,100	145,200	8,000	5.8
1960-61	130,000	22,100	152,100	6,900	4.7
1961-62	141,400	23,800	165,200	13,100	8.6
1962-63	152,200	26,100	178,300	13,100	7.9
1963-64	159,900	28,300	188,200	9,900	5.5
1964-65	166,300	30,500	196,800	8,600	4.6
1965-66	164,600	31,600	196,200	-600	-0.3
1966-67	164,800	32,300	197,100	900	0.5
1967-68	168,400	33,100	201,500	4,400	2.2

¹ Includes public and nonpublic.

Predicted enrollments in grades 9-12 are shown in Table 31. During the next fifteen years (1953-68) the high-school enrollment in Maryland public and nonpublic schools will increase by 111,700 or 124.4 per cent.

These are estimates as prepared by the Southern Regional Education Board for the public schools together with the estimates for the the nonpublic schools as prepared by the Maryland State Department

of Education. For the nonpublic schools the projections were made by using the average ratio of high-school enrollment to high-school-age population for the past three school years 1950-51, 1951-52, and 1952-53. For the public schools the enrollments are an average of ratio and cohort estimates with an increased persistence rate for the Negroes.

The greatest numerical increase in enrollment will occur in 1961-62 and 1962-63 when the " record 1947 group " reaches high school. The lower number of resident births in 1948, 1949, and 1950 is reflected in the smaller amount of growth subsequent to 1962-63. If the rate of in-migration should decline due to economic trends and there is no appreciable change in the ratio of high-school enrollment to the high-school-age group, then these estimates will be too high. On the other hand, periods of economic recession usually result in increased high-school attendance. Other factors such as an improved educational program to meet the needs of youth and greater emphasis on high-school graduation for employment will undoubtedly cause a rise in the high-school enrollment.

In 1953 there were 15,382 graduates. If the same ratio of graduates to enrollment continues, there will be 24,858 graduates in 1960, and 34,497 in 1968.

Increase in the Population of College Age

During the period 1954-69 there will be an increase of 156,805 in the number of students of college age (18-21) in the State of Maryland (Table 32). This represents a gain of 112.4 per cent. In other words, the college-age population will more than double during this period. The rate of growth becomes more rapid during each five-year period. During the period 1954-59 there will be an increase of 24,296; during 1959-64 an increase of 57,793; and during 1964-69 an increase of 74,716. These estimates have been prepared by the Southern Regional Education Board. They are projected on the basis of U. S. Mortality Experience during 1949-51 and continuation of net migration rates that occurred during the 1940-50 decade. The actual population was adjusted for census undercount.

TABLE 32 Estimated Population of College Age (18-21), State of Maryland, 1954-69

Year	Population	Increase
1954	139,506	
1959	163,802	24,296
1964	221,595	57,793
1969	296,311	74,716

A comparison of the data for the Negro and white population within this age group shows that the white population will increase at a higher rate for the fifteen-year period (Tables 33 and 34). The respective rates of increase are 113.9 per cent and 103.1 per cent. However, there are significant variations between the two racial groups during the last two five-year periods. During the first period, 1954-59, both races will increase at the same rate—17.4 per cent. The Negro group will continue to increase at approximately the same rate, 17.5 per cent, during 1959-64. The white group on the other hand will show an increase of 39.8 per cent; more than double that for the preceding five-year period. During 1964-69 the Negro group will show a very rapid increase of 47.4 per cent, while the white group will show a lower rate of increase, 30.8 per cent. These variations are due to fluctuations in the birth rate.

TABLE 33 Estimated White Population of College Age (18-21), State of Maryland, 1954-69

Year	Population	Annual change	Per-cent change
1954	111,145		
1955	112,674	1,529	1.4
1956	116,351	3,677	3-3
1957	120,716	4,365	3-7
1958	125,448	4,732	3-9
1959	130,517	5,069	4.0
1960	137,026	6,509	5.0
1961	149,251	12,225	8.9
1962	161,821	12,570	8.4
1963	175,069	13,248	8.2
1964	182,497	7,428	4.2
1965	199,293	16,796	9.2
1966	216,789	17,496	8.8
1967	229,628	12,839	5-9
1968	243,936	14,308	6.2
1969	238,700	-5,236	-2.1

SOURCE: Southern Regional Education Board, Dec. 8, 1953.

TABLE 34 Estimated Negro Population of College Age (18-21), State of Maryland, 1954-69

Year	Population	Annual change	Per-cent increase
1954	28,361		
1955	28,706	345	1.2
1956	29,104	398	1.4
1957	30,376	1,272	4.4
1958	31,726	1,350	4.4
1959	33,285	1,559	4.9
1960	34,359	1,074	3.2
1961	35,486	1,127	3.3
1962	36,654	1,168	3.3
1963	38,083	1,429	3.9
1964	39,098	1,015	2.7
1965	42,031	2,933	7.5
1966	45,955	3,924	9.3
1967	50,053	4,098	8.9
1968	55,309	5,256	10.5
1969	57,6n	2,302	4.2

SOURCE: Southern Regional Education Board, Dec. 8, 1953.

Increase in College Enrollment in Maryland

A study of the undergraduate enrollments of Maryland colleges for 1953 shows that 7 per cent of the Negroes of college age (18-21) are enrolled in these institutions of higher education. Ten per cent of the white college-age group are attending Maryland colleges. Tentative enrollment data for 1954 show the same percentage trends for both groups. These two years are representative of the postwar trends in college enrollments and can be used with reasonable accuracy in projecting enrollments for the period 1954-69. Any increase in these ratios due to greater persistence to graduation or a significant upward trend in college attendance will tend to offset any losses due to a decline in in-migration.

Considering these ratios of the college-age population in Maryland who are attending institutions of higher education within the State on a full-time undergraduate basis, it is estimated that there will be an increase of 14,803 in the undergraduate enrollments of Maryland residents in Maryland colleges and universities during the next fifteen

CHAPTER VIII

years (Table 35). This is an average increase of approximately 1,000 per year. It represents an increase of 113 per cent. In addition, an increase of at least 7,000 out-of-State students may be expected to enroll in Maryland during this period (1954-69). This presents an impact of almost unbelievable proportions upon existing college enrollments.

TABLE 35 Estimated Enrollment of Maryland Residents in Maryland Colleges, 1954-69

Year	Enrollment			Increase	
	White	Negro	Total	Number	Per cent
1954	" , " 5	1,985	13,10°		
1955	11,267	2,009	13,276	176	1.3
1956	" , 635	2,037	13,672	396	3.0
1957	12,072	2,126	14,198	526	3.8
1958	12,545	2,221	14,766	568	4.0
1959	13,052	2,330	15,382	616	4.2
i960	13,703	2,405	16,108	726	4.7
1961	14,925	2,484	i7,4 ⁰ 9	1,301	8.1
1962	16,182	2,566	18,748	i,339	7.7
1963	17,507	2,666	20,173	1,425	7.6
1964	18,250	2,737	20,987	814	4.0
1965	19,929	2,942	22,871	1,884	9.0
1966	21,679	3,217	24,896	2,025	8.9
19 ^o 7	22,963	3,504	26,467	1,571	6.3
1968	24,394	3,872	28,266	i,799	6.8
1969	23,870	4,033	27,903	-363	-1.3

During the five-year period 1954-59, there will be an increase of 2,282 or 17.4 per cent. Of this number 345 will be Negro and 1,937 will be white. During 1959-64, there will be a much larger increase—5,605 or 36.4 per cent. Of this number 407 will be Negro, and 5,198 will be white. During the five-year period 1964-69, the increase will reach 6,916. Of this number 1,291 will be Negro and 5,625 white. It will be noted that the white race shows the most rapid increase during the second five-year period, 1959-64, while the Negroes will increase at a rate of 47.2 per cent. These extreme variations in the rate of increase reflect the same variations in the age group.

A further examination of the data in Table 35 shows that there will be a gradual annual increase in the enrollment of Maryland resident

students in Maryland colleges and universities until 1961, when the increase will be almost twice that of the previous years. The rate of increase will remain fairly constant during the three years 1961, 1962, and 1963, then show a noticeable decline of 600 in the annual increase, representing a decrease of 3.6 per cent in the annual per cent change. In 1965 there will be a second sharp rise in the enrollment—an increase of 1,884. This trend will continue for four years with a peak enrollment of 28,266 in 1968. During the following year the first evidences of a stabilized college enrollment begins to appear.

The secondary-school population, the college-age population, and the conservatively projected enrollments of Maryland and non-Maryland students in Maryland colleges for the next 15 years show a doubled educational task facing the State in the field of education.

CHAPTER IX *WHO IS LIKELY
TO ATTEND COLLEGE IN MARYLAND, 1955-70*

There are two distinct phases in the problem of attempting predictions as to the future enrollments: (1) the numerical, or statistical, approach; (2) the effect of other factors, extremely variable, which would tend to change the expected numbers.

This report attempts to make statistical predictions of college enrollments in Maryland up to 1970.

These predictions are based on:

- a. The fact that the students who will enter college in September, 1969 are already born. In fact, they are now about four years old.
- b. Past percentages of enrollments in high schools.
- c. Past percentages of high-school students who are graduated from high schools.
- d. Past percentages of high-school graduates who go on to college.
- e. Past percentages dealing with the relationships between outof-State and in-State enrollments, between the numbers of full-time undergraduate and full-time graduate students and part-time and evening students.
- f. Other studies which have staked out key positions on predictions of future enrollments in Maryland colleges.

Before going on to the statistical tables, ten factors may be noted which would be most likely to change the course of numerical answers. These factors would tend to increase or decrease the size of future enrollments, and one guess is as good as another as to how each is to be weighed.

Factor 1. Future economic conditions. Will there be depressions, recessions, harder money? Less money might mean that fewer students could afford to pay for college. Yet fewer job opportunities might tend to increase enrollments.

Will there be greater prosperity, even significant inflation, or "easy" money? More money might enable more students to pay for college, yet easier job opportunities might cause more potential students to seek employment rather than go to college.

Factor 2. Possibility of war conditions. Will there be a major war, or a series of small wars, or a constant threat of "near-war"?

Wars and near-wars demand more soldiers, at the expense of numbers of students, yet more veterans also mean more students after discharge from service. Also more soldiers, before the shooting war, would mean more students in selected colleges at government expense.

Factor 3. Migrations. For some time we have seen a steady migration from the South to the North, with many migrants settling down in Maryland. Also there is the usual suburban migration from Washington, D. C., to Prince George's and Montgomery counties. Will this continue, decrease, or increase?

Factor 4. Population growth. In the age group 18—21 the increase for the nation of 1920-60 will be 26.0 per cent, while the increase for Maryland will be 47.2 per cent. A similar analysis for practically all age groups indicates that Maryland will, in the years ahead, encounter far greater problems in providing educational opportunity for its youth than will be encountered by the nation as a whole.

Factor 5. Child labor laws. In the years ahead, as industry is more and more mechanized, will these laws be changed? Will the changes cause more children to continue in school, or will the laws be eased to permit more to stop school earlier?

Factor 6. Facilities and curricula. Will more high schools and wider offerings attract more students and keep them longer? Will more be graduated from high school? Will this mean a larger potential for further education?

". . . there has been a steady increase in the percentage of children attending successively higher grades throughout the 34-year period for which data are available. Of the group in grade 5 in 1906-7, for example, only 34 pupils per 100 entered the ninth grade in 1910-11, and only 14 were graduated in 1914. Thirty-four years later, 78 per 100 of the pupils enrolled in the fifth grade in 1940-41 entered the ninth grade in 1944-45, and 48 were graduated in 1948. **This means**

not only that about 2% times as many pupils per 100 were entering the high schools in 1944-45 as in 1910-11, but that nearly 3% times as many per 100 continued in high school and were graduated." ¹

Factor 7. Trends in high-school enrollment. The percentage of Maryland youth attending high school is lower than the national average—67 per cent as compared to 75 per cent. Will our percentage rise or fall? In 1950, 54.7 per cent of the white children of the age group 14—17 were in public school. In the same period 46.0 per cent of the Negro children of this age group were in public school. Will these percentages increase? Of course many other children were in private schools.

In 1952—a normal year—white girl high-school graduates slightly outnumbered the boys. Negro girl graduates were 50 per cent higher than the number of boys graduating. Will this change?

Factor 8. Trends in numbers migrating to out-of-State colleges and into Maryland colleges. In 1952 approximately 25 per cent of the public-school graduates who went to college went outside of Maryland. Will this increase or decrease?

Will the number of out-of-State students going to Maryland colleges increase or decrease? In the year ending June, 1953, approximately 31.1 per cent of the students attending Maryland colleges were from out of the State.

Factor 9. Increase or decrease in percentage of students going to college. Will a higher percentage of our "potential" students go to college? While we recognize that the so-called I. Q. is of course not the only determining factor in college success, it is at least one criterion of possible potential.

Of the high-school graduates in Maryland for the year ending June, 1952:

1. Less than ¹/_A of those with I. Q. 120 and above entered college.
2. Less than ¹/₆ of those with I. Q. no and above entered college.
3. Yet nearly ³/_A of the 90-109 group entered college.
4. And approximately 10 percent of those below 90 entered college.

Factor 10. Establishment of junior and other colleges. Will there

¹ U. S. Office of Education, Federal Security Agency, *Vitalizing Secondary Education* (Washington: U. S. Government Printing Office, 1951), p. 5.

be a substantial increase in the number and distribution of junior colleges, indeed of other colleges as well? There is substantial evidence that residential nearness to a college tends to increase the possibility of college attendance. Chapter VII treats this at some length.

Statistical Predictions

The American Council on Education recently issued a pamphlet, "A Call for Action—to meet the impending increase in college and university enrollment." Mr. Ronald B. Thompson, Registrar of Ohio State University, discusses the enrollment increases and, on page 9, gives this prediction for Maryland: The number of youngsters of college age in Maryland in 1970 will be 208,411, which is an increase of 101 per cent over 1953.

Maryland—Year	No. of College Age
1953	103,711
1960	132,872
1965	181,314
1970	208,411

The Southern Regional Education Board, in its preliminary report of March 31, 1954, devotes a chapter to Maryland.²

Excerpts: "College enrollment will move upward slowly in Maryland until 1960, when it will begin to rise very rapidly. We expect Maryland to have about 75,000 in college by 1970 or some 35,000 above the present enrollment. For every student on Maryland campuses today, there will be nearly two in 1970.

"Most of the growth in college enrollment in Maryland will result from an increase of 100-110 per cent in the college-age group and of 125-130 per cent in the number of high school graduates."

Table 36 gives estimated enrollments in grades 9-12 for the State of Maryland. This includes both the public and nonpublic schools.

² John K. Folger, "Future School and College Enrollments in the Southern Region" Southern Regional Education Board, Atlanta, Georgia, 1954. Table 14 and pp. 26 and 27.

Also there is some prediction of the number of high-school graduates. That study indicates a ratio of graduates to enrollment of 17.13 per cent. Another study in Chapter VI indicates that 32 per cent of the high-school graduates go on to college in the September following their graduation. Also the best estimates that we can assemble seem to indicate that approximately 70 per cent of the Maryland graduates who attend college, go to Maryland colleges. Using all this information, we have formulated a table indicating certain predictions.

TABLE 36 Enrollment Predictions, Maryland, 1952-70

School year	High-school enrollments, public and nonpublic, grades 9-12	High-school graduates	Number entering	
			All Colleges*	Maryland Colleges*
1951-52	85,496	14,583	4,677	3,274
1952-53	89,800	15,382	4,922	3,445
1953-54	95,600	16,376	5,240	3,668
1954-55	102,200	17,507	5,602	3,921
1955-56	109,300	18,723	5,991	4,194
1956-57	118,600	20,316	6,501	4,551
1957-58	129,200	22,132	7,082	4,957
1958-59	137,200	23,502	7,521	5,265
1959-60	145,200	24,872	7,959	5,571
1960-61	152,100	26,055	8,338	5,837
1961-62	165,200	28,299	9,056	6,339
1962-63	178,300	30,543	9,774	6,842
1963-64	188,200	32,239	10,316	7,221
1964-65	196,800	33,712	10,788	7,552
1965-66	196,200	33,609	10,755	7,528
1966-67	197,100	33,763	10,804	7,563
1967-68	201,500	34,517	11,045	7,732
1968-69	201,500	34,517	11,045	7,732
1969-70	201,500	34,517	11,045	7,732

* Degree-granting colleges and universities, including all teachers colleges and junior colleges.

Maryland Students Enrolled in Maryland Colleges

Table 37 shows an estimated enrollment of Maryland residents in Maryland colleges 1952-70. The number in 1970 is more than double that of 1954. This is not difficult to understand when Table

36 shows that the 18-21 age group of 1970 is 212 per cent of the 1954 group.

We are using Table 37 as the basis for some treatment. In the college enrollment study in Chapter V there seem to be definite percentage relationships among the Maryland students attending Maryland colleges:

1. The number of full-time graduate students is 14.9 per cent of the number of full-time undergraduates.
2. The number of evening and part-time students is 89.1 per cent of the number of full-time undergraduates.

By using all of these data and relationships we arrive at Table 37, which shows that the total number of Maryland students attending Maryland colleges in 1969-70 will be slightly more than double that of 1953-54. This is what we have been told, by other predictions, to expect.

TABLE 37 Maryland Students in Maryland Colleges, 1952-70

School year	Full-time day undergraduates	Full-time day graduate students	Evening and part-time students	Total enrollment
1952-53	••• 13,792	2,063	12,283	28,138
1953-54	• 13,792	1,952	10,163	25,215
1954-55	••• 13,276	1,978	10,300	25,554
1955-56	• 13,672	2,037	10,606	26,315
1956-57	14,198	2,115	11,015	27,328
1957-58	••• 14,766	2,200	11,455	28,421
1958-59	... 15,382	2,292	11,933	29,607
1959-60	. . . . . 16,108	2,400	12,496	31,004
1960-61	. . . • 17,409	2,594	13,505	33,508
1961-62	. . . . . 18,748	2,793	14,545	36,086
1961-63	• • 20,173	3,006	15,650	38,829
1963-64	20,987	3,127	16,408	40,522
1964-65	. . . . . 22,871	3,408	17,743	44,022
1965-66	. . . . . 24,896	3,710	19,314	47,920
1966-67	. . . . . 26,467	3,944	20,533	50,944
1967-68	. . . 28,266	4,212	21,928	54,406
1968-69	. . . 27,903	4,158	21,647	53,708
1969-70	. . . • 27,903	4,158	21,647	53,708

Out-of-State Enrollment in Maryland Colleges

A study of enrollment figures in Chapter VI indicates:

1. That the number of out-of-State full-time undergraduates is about 47 per cent of the number of Maryland students who are full-time undergraduates. We are using 45 per cent as a ratio.
2. That the number of out-of-State full-time graduates is about 36 per cent of the number of out-of-State full-time undergraduates. We are using 30 per cent as a ratio.
3. That the number of out-of-State evening and part-time students is about 57 per cent of the number of out-of-State full-time undergraduates. We are using 45 per cent as a ratio.

Using these ratios we arrive at Table 38.

In this table the increase in full-time undergraduates in 1969-70 is 6,003 over 1952-53- This seems conservative in light of the statement in Chapter VIII, page 88: "an increase of at least 7,000 out-of-State [undergraduate] students may be expected to enroll in Maryland during this period (1954-69)."

TABLE 38 Out-of-State Enrollment in Maryland Colleges, 1952-70

School year	Full-time day undergraduates	Full-time day graduate students	Evening and part-time students	Total enrollment
'952-53	6,569	2,292	3,667	12,528
1953-54	5,895	1,7 ⁶⁹	2,653	10,317
1954-55.	5,974	1,792	2,688	10,454
'955-56	6,152	1,846	2,767	10,765
1956-57	6,389	1,917	2,875	11,181
1957-58.	6,645	1,994	2,990	11,629
1958-59.	6,922	2,077	3,115	12,114
1959-60.	7,249	2,175	3,262	12,686
1960-61.	7,834	2,350	3,525	13,709
1961-62.	8,437	2,531	3,797	14,765
1962-63.	9,078	2,723	4,085	15,886
1963-64.	9,444	2,833	4,250	16,527
1964-65.	10,292	3,088	4,631	18,011
1965-66.	11,203	3,361	5,041	19,605
1966-67	n, 910	3,573	5,360	20,843
1967-68.	12,719	3,815	5,724	22,258
1968-69.	12,556	3,768	5,650	21,974
1969-70.	12,556	3,768	5,650	21,974

Total Enrollment in Maryland Colleges, 1952—1970

Table 39 is simply the totals from adding together the numbers in Tables 37 and 38.

TABLE 39 Grand Total Enrollments in Maryland Colleges, 1952-70

School year	Full-time undergraduates	Full-time graduate students	Evening and part-time students	Grand total enrollment
1952-53	20,361	4,355	15,950	40,666
1953-54	18,995	3,721	12,816	35,532
1954-55	19,250	3,770	12,988	36,008
1955-56	19,824	3,883	13,373	37,080
1956-57	20,587	4,032	13,890	38,509
1957-58	21,411	4,194	14,445	40,050
1958-59	22,305	4,369	15,048	41,721
1959-60	23,357	4,575	15,758	43,690
1960-61	25,243	4,944	17,030	47,217
1961-62	27,185	5,324	18,342	50,851
1962-63	29,251	5,729	19,735	54,715
1963-64	30,431	5,960	20,658	57,049
1964-65	33,163	6,496	22,374	62,033
1965-66	35,099	7,071	24,355	67,525
1966-67	38,377	7,517	25,893	71,787
1967-68	40,985	8,027	27,652	76,664
1968-69	40,459	7,926	27,297	75,682
1969-70	40,459	7,926	27,297	75,682

CHAPTER X RECOMMENDATIONS

When we consider that Maryland, one of the fastest growing states on the Eastern seaboard, faces a doubling of the college-age population within the next fifteen years we realize that the State confronts a tremendous task in providing adequate educational opportunity for its youth.

As the preceding chapter showed on the basis of the statistics for the college-age population in Maryland for 1954 and 1969, and assuming that the percentage of this population enrolling in college will continue at the present rate, we arrive at the following predictions:

- (1) The number of full-time undergraduate students in all Maryland colleges will increase from 20,000 in 1952-53 to over 40,000 in 1969-70.
- (2) The total number of undergraduate, graduate, evening, and part-time students in all Maryland colleges will increase from nearly 40,000 in 1952-53 to approximately 75,000 in 1969-70.

Reference has also been made to the estimates prepared by the Committee on Special Projects for The American Association of Collegiate Registrars and Admission Officers, according to which the increase in college-age students in Maryland by 1970 will be 201 per cent of the number of young people of college age in the year 1953. The same source found the number of young people in Maryland between the ages of 18 and 21 in 1953 to be 103,711, and estimates that by 1970 this figure will rise to 208,411.

The need for an informed citizenry and for suitable and productive career outlets for our young people points up the task of making available to every young person an opportunity to continue his formal education as long as his ability warrants. Since the records show that at present only 50 per cent of the best qualified high-school graduates go to college, there is every reason to expect that the percentage of

the college-age group who go to college will rise at the same time that the total number of the age group increases rapidly.¹ Therefore, **the** prediction of a doubling of enrollment by 1970 is a conservative estimate.

Other sections of this report have pointed out that existing institutional facilities cannot accommodate the approaching wave of additional students. Nonpublic institutions can admittedly care for only a part of this increase. It becomes necessary, therefore, for the State to assume the major responsibility for providing added educational opportunities in higher education.

J. *Facilities*

In view of the fact that college enrollment in Maryland will double between now and 1970, it is a foregone conclusion that there must be a rapid and vast expansion of facilities for higher education. The question is where, how, and at what levels.

RECOMMENDATION I

That all institutions of higher education in the State study and review requirements in light of the changing character of the high-school population and that they consider plans for expanding their facilities as far as possible, consistent with their basic policies and aims, in order to accommodate the expected increase in enrollment.

It is estimated that the independent colleges could accommodate at least 1,500 additional students without expanding facilities. The State-controlled colleges could serve as many more on a like basis.

Furthermore, both publicly and privately-controlled colleges indicate that, if facilities they hope to add materialize, they can care for 7,000 more students *within the next decade*. The various institutions

¹ Statistics show that the number of college-age youth attending college has increased, on the average, 3 per cent every decade. Favorable economic conditions and social demand may well accelerate the rate of increase.

of higher learning in the State have expansion plans which visualize the eventual accommodation of 10,000 more students than were enrolled in 1953-54- (F^or tⁿe predicted cost of this expansion, see Recommendation 7.)

RECOMMENDATION 2

That existing institutions continue to strengthen and improve their existing programs, operating at their present geographical locations.

The Commission at present sees no need for the extension of, or the establishment of branches of any existing institution in another part of the State. In the Baltimore metropolitan area, for example, it is believed that existing institutions of higher education, public and private, along with the community junior colleges that should be established, can for the foreseeable future absorb the expected influx of added students.

RECOMMENDATION 3

That the establishment of community junior colleges be the first step of the program for meeting the demands that cannot be met by expanding existing institutions.

The community college is typically a local center for higher education, serving commuting students of varying ages, with day and evening programs adapted to individual and community needs. It has proved its value in many states as an economical and effective way of meeting the rising demand for post-high-school education.

The curriculum should include courses in general education as well as elective vocational courses and semitechnical and specialized courses. It should be designed to serve both the student whose goal is a one- or two-year terminal college program and the student who plans to transfer to a senior college. It should also serve the part-time student who desires to combine work experience with his program of college studies.

RECOMMENDATION 4

That the community junior colleges be located geographically and regionally where sufficient students would make the size of the school practicable and economical to operate.

This would entail the identification of centers that could now begin a program comparable to those now in operation—Baltimore Junior College, Montgomery Junior College, Hagerstown Junior College, Carver Junior College, and the junior college divisions of the State teachers colleges. Future growth and expansion should be provided for as the need arises.

The administration of these junior colleges should be under the jurisdiction of the local boards of education.

It is evident that immediate consideration should be given: (i) to the establishment of additional community junior colleges in Baltimore County, Montgomery County, and possibly Anne Arundel County, as well as in Baltimore City; (2) also to the most appropriate centers for such colleges in southern Maryland, the Eastern Shore, and western Maryland.

For the next few years it would be expedient:

1. To house these schools in the existing high-school buildings.
2. To continue the junior-college programs in the several teachers colleges until other provisions can be made.

But these are expedients only. Planning for the provision of adequate facilities and staffs for an expanded system of junior colleges should proceed without delay.

RECOMMENDATION 5

That semitechnical courses be developed and sponsored by community junior colleges as a part of the higher education program of the State.

In addition to the program of general education which would approximate the work of the first two years in a liberal arts college, the junior college should be prepared to offer appropriate courses of a

semitechnical or vocational nature. These should be considered generally as terminal in nature but planned so as to permit a degree of flexibility for the individual student.

While the curricula of community colleges should be designed to prepare young people for semitechnical occupations in local industry, agriculture, and commerce, the Commission considers it ill advised to focus programs of studies too closely on jobs or job requirements presently existing in a given community. The speed of technological change and the rapid transformation of the economic basis of Maryland communities suggests that our young people are best served when they are encouraged to pursue a program that is based on broad vocational fields so that they are equipped to adapt themselves to changing job-opportunities.

RECOMMENDATION 6

That the State continue to utilize the resources of privately controlled institutions in meeting recognized needs for trained personnel in specialized fields.

For three quarters of a century the State of Maryland has supported, in varying and increasing amounts, a rather unique plan whereby selected high-school graduates from each county and the City of Baltimore receive financial assistance to attend certain private colleges and universities in the State. In some cases, the students selected have practically the full cost of their college education paid by the State; in others the payment is partial and the student must supplement the grant by a sizable payment of his own. In some cases the student pledges himself to return to the State at least two years of public service in the field of teaching.

Three important facts should be noted about this plan. In the first place, these scholarships, which constitute agreements between the State and these nonpublic educational institutions (incidentally, historically, the State of Maryland has maintained similar relationship with other kinds of institutions), were provided before the State had established the present State University and when it was supporting only a small land-grant college and one small normal school. In the second place, this relationship was arranged to provide, in most instances,

qualified persons for public service, such as teaching or engineering; and, in the third place, to provide training not then available in the existing public institutions or too expensive to provide. As a parallel of this principle, attention is called to the fact that the State of Maryland is "buying" similar service from certain out-of-State institutions of higher education through Southern Regional Education Board contracts in lieu of establishing small, expensive, and possibly inferior divisions of the State University or other institutions of higher learning.

The Commission accepts this system as a policy so firmly established that it is not likely to be abandoned. Through the years it has had three distinct and wholesome effects:

1. It has encouraged many able young people to go into important professions where they are needed (particularly high-school teaching and engineering) for the public good.
2. It has enabled many thousands of young people to receive a college education.
3. It has enabled several of the State's institutions of higher education to maintain well-established schools and departments training for public service.

While accepting the policy of utilizing the resources and services of private institutions within the State for meeting specialized needs, the Commission does not approve in detail the present program under which State funds are distributed.

The Commission is fully convinced that a careful and systematic review of the entire system is called for—is, in fact, long overdue. During the several decades that the system, involving largely individual scholarships to certain private institutions, has been in effect, the State University has been formed and gone through a period of significant development. Other colleges have been started or have risen to considerable prominence without the assistance of State scholarships. The University of Maryland and Morgan State College have developed their own scholarship plans which have no relationship to those mentioned above.

The Commission believes that any system of this kind needs constant review, and that such a review should be undertaken as

one of the first functions of the permanent Commission proposed later in this report. Such questions as the following merit careful consideration:

Are there institutions not now included in the plan which should be included?

Does the program need further extension in institutions where it now exists?

Are there other types of service or professional preparation which the State would do well to include in the plan?

Are provisions adequate to insure that both the institution involved and the student receiving financial aid fulfill any obligations to the State that were a condition of the grant?

Should such a grant provide tuition only or tuition, room and board? Should the method of administration be reviewed?

A dissenting opinion of the representative from Loyola College, here quoted, emphasized:

- i. The need for basic revision of the existing State scholarship laws, which are obsolete and in practice discriminatory. The present scholarships are inordinately costly, though inadequate in number.
- i. The lack of equal or proportionate State financial aid to all approved institutions providing a special and needed service to the State, such as teacher-training.

The American Council on Education in its 1947 study *Higher Education in Maryland* spelled out many of the ills of the present system of state scholarships. Until the present time little or no attempt has been made to correct these ills. A recent study of existing scholarship legislation, resulting in scholarship recommendations, is available in a report prepared for this opinion.

11. *Financing the Program*

RECOMMENDATION J

That the new junior colleges be financed from three sources in accordance with present practice: State funds; funds from the student's home county (or Baltimore City); and tuition fees.

This recommendation merely re-emphasizes the principle that was accepted by the State and local school jurisdictions when the present public junior colleges were begun about a decade ago.

RECOMMENDATION 8

That sufficient State financial aid be given to all publicly operated institutions of higher education so that present public institutions and those to be established may maintain an effective level of operation, strengthen existing programs, and develop new ones required to meet emergent needs.

The expansion of higher education facilities and opportunities in Maryland necessitates additional expenditures of both public and private funds. The number of students, the breadth of service and facilities to be provided, and the quality of the program are the most important factors to be considered in determining the funds needed.

The study made by this Commission reveals that private institutions plan some expansion of facilities during the next decade, but that a large share of expansion and cost of expansion will of necessity be borne by institutions publicly controlled.

In order to meet the needs for post-high-school education by 1960 and thereafter, it will be essential to place expenditures for higher education upon a level commensurate with the responsibilities of higher education in a democracy.

The study of this Commission indicates that there will be a need to provide physical facilities in institutions of higher learning in Maryland for an additional 25,000 full-time students by 1970. As was indicated above, existing colleges can, by crowding present facilities, accommodate a maximum of 3,000 additional students. The

results of a survey made during the summer of 1954 indicate that existing four-year colleges and universities, both private and public, are willing to add an additional 7,000 students, but for this they will need substantial added funds both for capital outlay and annual operating costs. Assuming that this expansion takes place, there will remain still the need of providing facilities for an additional 15,000 full-time students. The estimated cost of providing college facilities for this anticipated increase of 15,000 is as follows:

1. If the recommendation of this Commission concerning junior colleges is adopted, it seems reasonable to assume that at least one-third of the 15,000, or 5,000 additional students, will be enrolled in existing and new regional junior colleges in the State by 1970. The cost of building classroom facilities for college students is estimated to be approximately \$3,000 per student. *Therefore the total capital outlay cost for the junior-college facilities will amount to approximately \$15,000,000.*
2. To provide classroom facilities for an additional 10,000 students in either present or new colleges, on the basis of \$3,000 per student, the cost will be \$30,000,000.
3. It is estimated that about one-fourth of the increase of 10,000 in anticipated enrollment in colleges and universities will require dormitory accommodations. Using recent experience as a guide, \$3,000 per student will be required for dormitory facilities, or a total, for 2,500 students, of \$7,500,000.

In other words, the total *capital* outlay for providing facilities for the 15,000 increase in college students, *not including the financing of planned expansion for 10,000 additional students in existing institutions of higher learning*, will be \$52,500,000, or an average annual expenditure of \$3,500,000 for the next fifteen years.

It is difficult to estimate the annual operational or current expense cost for an estimated additional 15,000 college students. If we use \$600 a year for the annual per-student cost in junior colleges and \$1,000 per student per year in four-year colleges and universities, the total annual operating cost for 15,000 students would be \$13,000,000. At the present time it is planned that about one-third of the operating cost of public junior colleges will be contributed by the student, a third by the City or county operating the school, and a third by the

State. If this method of dividing the cost of junior college programs is continued, it would cost the State approximately \$1,000,000 a year to educate the additional 5,000 junior college students expected to be enrolled. If the State were to share on the same basis the cost of educating the remaining 10,000 college students attending four-year colleges, the cost would be an additional annual expenditure of \$333,000.

111. *Provision for Specialized Training*

Chapter VII of this *Report* has outlined and projected the needs for technically trained, scientific, and professional manpower in the State. In order to provide the economic, social and educational services required, the Commission recommends the following:

RECOMMENDATION 9

That colleges of liberal arts be encouraged to establish or expand programs of teacher education in full co-operation with the Maryland State Department of Education.

As was pointed out in Chapter VII, the number of public elementary and secondary teachers employed, approximately 15,000 in 1953—54, should reach 20,000 in 1959-60.

Because of the expanded population and consequent increase in enrollment, the number of vacancies occurring each year because of teachers retiring or leaving the profession, and the present large deficit in qualified teachers at both elementary and secondary levels, there will be a need of approximately 2,600 teachers each year for at least the next six years. *This need is more than three times the total annual production of college graduates now being prepared for teaching by all the colleges of the State.*

The problem of supplying teachers for the college and university level is of the same magnitude. Additional years of training are necessary, the cost is greater, and such training is available only in the graduate centers of large universities. The college teaching staff must be increased in proportion to the student body increase. *Immediate*

attention should be given to increasing the number of instructors required and to resolving the related question of scholarship aid that should be provided for the preparation of college instructors.

RECOMMENDATION 10

That an accredited college or university in Maryland which can assure proper support be encouraged to add a professional program for training librarians.

RECOMMENDATION 11

That an accredited college or university in Maryland which can assure proper support be encouraged to add a professional program for training social workers.

To stimulate an interest in advanced study and to prepare a reservoir of nonprofessional assistants, the colleges can render a distinct service by offering pre-professional courses in one or the other of these fields and should be encouraged to do so.

RECOMMENDATION 12

That colleges of the State co-operate with hospitals in their vicinity which are preparing nurses, through provision of instruction in the related sciences and academic subjects.

Examples of co-operation of this type may be found in the relationship now existing between the Memorial Hospital at Cumberland and the Frostburg State Teachers College as well as Franklin Square Hospital and the Baltimore City Junior College. Other examples could probably be cited but the point to be stressed is that this kind of arrangement can be beneficial to both institutions concerned.

RECOMMENDATION 13

That the professional schools already maintained in the State of Maryland be urged to expand consistent with good academic standards.

The continually expanding population of the State will call increasingly for a larger number of persons in the professions of law,

pharmacy, medicine, dentistry, and engineering for which institutional programs of preparation are now available in the State. There would seem to be no need for additional schools in the State, but existing schools should plan for needed expansion involving both additional staff and facilities. (Professions of nursing, library science, social work, and teaching are covered in previous recommendations.)

RECOMMENDATION 14

That liberal arts colleges and teachers colleges consider the possibility of offering graduate programs in their major areas of study.

As the over-all number of college students increases, the demand and the need for graduate courses will increase. It is likely that some of the colleges in the State which are now solely undergraduate in character can be of service within their geographical area by offering programs of graduate study, at least on the master's level. Before making such a move, however, it is important that any institution examine itself carefully to see that teaching and administrative staff, library resources, facilities, and finances are adequate to justify the inauguration and maintenance of a program of graduate work. It is particularly important to make sure that the addition of graduate courses to the institution's program shall in no way decrease the effectiveness in quantity or quality of the existing offerings for undergraduate students.

RECOMMENDATION 15

That existing institutions proceed with due caution in adding new programs and fields of study.

In the establishment of new fields of study for which there may be a limited demand, it is urged that institutions exercise caution, proceeding only if such extensions can be clearly justified and adequately supported. It is important that care should be taken to see (i) that the demand is real, (2) that the new programs can be added without jeopardizing already existing programs, (3) that they can be of such quality as to merit the support, and (4) that unnecessary duplication of programs be avoided.

IV. *Student Selection, Guidance and Scholarships*

RECOMMENDATION 16

That the secondary schools intensify their efforts to identify and encourage those students who could go to college with -profit to themselves and to society.

There is no one reliable prediction or measure of ability to do college work. The intelligence quotient (I. Q.) is one device used to measure ability. Generally, an I. Q. score of no or above is taken as evidence of ability to do college work. Yet the record reveals that of the students who were graduated from Maryland high schools in June, 1952:

Less than $\frac{3}{4}$ of those having I. Q.'s of 120 and above entered college the following September.

Slightly more than $\frac{1}{2}$ of those having I. Q.'s of no and above entered college.

Less than $\frac{1}{3}$ of those with I. Q.'s of 110-119 entered college.

Nearly $\frac{1}{4}$ of the 90-109 group entered college.

Approximately 10% of those below 90 entered college.

Of the 8,894 who did not go to college, approximately one half, or 4,141, would have been recommended by the principals as warranting an opportunity to undertake college work. The number virtually equals the number of those who entered college.

The identification of prospective college students could well begin in junior high school. It should not be an attempt to "screen out" and deny opportunity, but a positive effort to spot and encourage students having:

1. Natural abilities and talents
2. High scholastic achievements
3. Developed aptitudes and interests
4. Willingness and desire to work and study

Information regarding these traits should be available to the student, parents, and teachers so that the opportunities for further education may be explored. Attention should be directed to:

RECOMMENDATIONS III

- i. Advanced high-school programs
2. Possibilities of various post-high-school programs
3. Scholarships and other ways of financing further education

RECOMMENDATION 17

That the secondary school and college intensify programs of counseling and strive for a closer co-ordination of secondary-school and college programs in the identification of aptitudes, achievements, interests, motivations, and financial resources.

Specifically the colleges should:

1. Begin to counsel the student before college entrance in the selection and planning of the college program.
2. Follow the student closely in his first year to observe growth, needs, and misplacements.
3. Offer expert counseling at the point where the student confronts alternatives, such as the selection of a field of specialization, or where a change of, or withdrawal from a program is indicated.

A successful program of guidance and counseling should rely on the observations and judgments of all who are concerned with the student's program including teachers, administrators, and parents, as well as guidance specialists. Counseling and guidance is not a function of specialists only, but a responsibility of all who work together in the program of education.

RECOMMENDATION 18

That since many patterns of education are required to meet the diversity of student needs both as to offerings and levels, institutions of higher education in Maryland be encouraged to:

1. *Examine their programs as to the diversity of offerings.*
2. *Analyze their student body as to heterogeneity and range in abilities and objectives.*
3. *Review their enrollment policies in the light of their offerings and student body.*

The students coming to institutions of higher learning are char-

acterized not by uniformity but by diversity in abilities and in needs. If institutions adhere rigidly to traditional programs of education they may find themselves poorly adapted to serve student needs as greater numbers seek admission to our colleges and universities. Studies in the liberal arts, in business, in engineering, and in all the accepted professional and graduate fields may be mutually strengthened by the existence of a variety of educational opportunities. For the future not only more two-year programs, but one-year and three-year programs as well should be considered. Although many of these programs may be terminal, they should, nevertheless, enable the able student to progress further, if his record warrants. The goal is to assist each student to obtain the kind and level of educational opportunity in Maryland from which he can profit the most.

Colleges exist to fill specific and general needs. Although each was established to perform a particular function or functions, time and changing needs have, in many cases, modified original aims as well as the programs offered. Today there is a need for the colleges to assist young people not only in acquiring a general education but also in making informed choices and preparing for careers. They need to understand the requirements and responsibilities of various professions and occupations, and they need to know more about their own strengths and limitations.

The following are, in effect, corollaries of the above recommendations:

- i. High standards should be maintained by institutions offering training in advanced technical and professional fields.
2. Different standards might well be defined for admission to programs in general education and in semi technical specialization.
3. Part-time, evening, and specific semitechnical instruction should be available to any young adult or adult with the ability and desire to engage in such study.

RECOMMENDATION 19

That degree-granting institutions of higher education be encouraged to apply qualitative standards in their admissions practices.

Institutions equipped to train students properly for the bachelor's degree or advanced degrees require faculties and facilities which are much more elaborate than those necessary for one or two-year post-high-school programs. It is simple economy, therefore, that the best students should be directed, insofar as possible, to those institutions which offer facilities and faculties for advanced work. Conversely, it is wasteful to provide the faculty and personnel needs of an advanced program for those who cannot profit from them. The proper application of qualitative standards in four-year institutions is the only economical and efficient way of assuring the objective of providing every Maryland student with an educational opportunity commensurate with his or her ability.

RECOMMENDATION 10

That all publicly supported institutions of higher education in Maryland be required to give reasonable priority to residents of the State in their admissions practices.

It is not proposed that out-of-State students be banned, for the Commission recognizes that some interchange among states is both necessary and educationally desirable. However, under the pressures which can be foreseen, and in view of the cost factor, it is clear that Maryland cannot care for its own student citizens and at the same time offer places to substantial numbers from outside the State. Specifically, the Commission believes that qualified State residents should have a prior claim on admission to publicly supported institutions within the State. This restriction need not, and should not, apply to postgraduate students in the arts and sciences. These students pose no problem of numbers and should be free to seek an advanced education where the best resources exist.

RECOMMENDATION 21

That the State establish a system of scholarship awards available to exceptionally worthy students: that the recipients of these awards be permitted to attend any accredited collegiate institution within the State and to pursue any program of study leading to the bachelor's degree.²

Since this recommendation was adopted by the Commission on the basis of a divided vote, it has been agreed to present both the majority and minority positions in detail so that those who later will be responsible for the implementation of this report may be fully informed as to the nature of the differences of opinion. The statement in support of the recommendation follows:

It was not the intention of the Commission to set down all the details of a scholarship program. In fact, it specifically recommends that the detailed planning be referred to the permanent Commission referred to elsewhere in this report. However, in order properly to support the proposal, it seems necessary to suggest its broad outlines. The plan contemplated by the Commission includes the following elements:

- i. Scholarships would be available only to *exceptional* high-school students, possibly limited to the upper 5 or 10 per cent of the graduating classes.
2. Awards would be made to eligibles (as defined above) on the basis of outstanding ability and financial need.
3. Awards would vary in dollar amount depending upon costs chargeable to the student at any accredited four-year Maryland institution which

² This recommendation was adopted by a six to three vote of the **Commission** (See appendix for minority opinion).

Voting in the affirmative were:

Lowell S. Ensor
Martin D. Jenkins
Otto F. **Kraushaar**

P. Stewart Macaulay
Roszel C. Thomsen
John E. Wise, S. J.

Voting in the negative were:

Wilbur Devilbiss
Earle T. Hawkins
Thomas G. Pullen, Jr.

he elects and to which he has been admitted. Examples: The student electing a college in his neighborhood might receive an award covering tuition and fees to a maximum of \$400 per year; the student electing an institution at which he would have to pay room and board might receive an award covering tuition fees, room, and board to a maximum of \$800 per year.

The Commission believes that a program such as that outlined above is necessary in order to fulfill the State's total obligation for higher education of its youth. Elsewhere in this report the emphasis has been upon numbers. It has been recommended that a system of junior colleges be set up to take care of the increasing college-age population, and that existing institutions, both public and private, re-examine their plans with a view to such expansion as may be necessary and feasible within the framework of institutional policy.

Having thus made what appears to be reasonable provision for numbers, a Commission such as this would be remiss if it were to ignore the qualitative elements which are inherent in any program of higher education. Throughout this report there is explicit recognition of the fact that individual talents and capacities vary. Members of the Commission have endorsed unanimously the statement of philosophy in Chapter II of this report in which occurs the following sentence:

It is of the utmost importance, however, that no obstacles of race, creed, or social or economic condition should bar the way of a gifted youth to an advanced education.

It appears obvious that implementation of this statement requires some mechanism whereby "gifted youth" may be assured of the very best kind of post-high-school education available within the State and suited to the talents of the students as individuals. It is obvious, also, from the statistical studies contained in this report that many of the most talented young people are not now going to college. It is the main purpose of the scholarship recommendation above to make provision for this limited and exceptional group.

The plan proposed seems to be the best method of accomplishing this end. In fact, no other plan was brought forward in the discussions of the Commission. The program outlined above would give

these superior students the greatest possible freedom to select the college or university best suited to them, whether that institution be public or private. There is no reason to believe that the plan would favor one kind of institution as against the other, for the diversity of interests, talents, and backgrounds represented by the student group would assure a more or less normal distribution. In any event, this plan is not designed to aid any institution but specifically and directly to aid the student.

Objections to this kind of scholarship program may be based on the conviction held by some that State funds should not be used—even indirectly—in private institutions. However, it will be noted that the Commission approved in principle the use of State funds to support specialized training programs in certain private institutions.

It will be noted, further, that the only dissent was based on the argument that this kind of "State aid" should be spread more equitably among all qualified private institutions and not restricted to a few. It may be said, therefore, that the principle of utilizing State funds to meet recognized State objectives through the use of private institutions is not in itself unacceptable to any member of the Commission.

A specific argument against a general scholarship program at the collegiate level is that a similar plan might be advanced with equal logic at any level in the educational system—resulting, for example, in the establishment of scholarships in high schools.

While this argument has a certain logic, it appears to ignore the realities of educational progression. High schools are free and are available in any locality. Attendance in high school is mandatory to the statutory age limit of sixteen.

Degree-granting colleges—whether they be supported by the State or by private funds—involve costs not associated with high schools. These costs increase, of course, if the student has to leave home to seek his collegiate training, as is frequently the case. Moreover, the transition between high school and college is a time of decision for students whose families are in moderate circumstances. The students have reached an age and a degree of training which force upon them the alternatives of taking jobs and earning money or continuing education with a consequent drain upon family resources.

The Commission believes that a scholarship program such as that

proposed will have the effect of turning the decision in favor of continued education by providing just the amount of financial assistance which many young people require.

The costs of this program are remarkably small in view of the results likely to be attained. Individual awards will be low when the student selects a State institution whose fees are low and whose principal costs already are borne by public funds. While the awards to students electing private institutions may run higher, they cannot exceed the tuition and fees paid by other students in the same institution. In the private colleges, the difference between what the student pays and the actual cost of his education is made up not by tax funds but by endowment income and gifts. It would be of advantage to the State to utilize this existing resource.

The only apparent alternative to the proposed plan, if one accepts the obligation of the State to make it possible for each individual " to develop his powers and capacities to the fullest," is a system of student aid administered wholly within the State system of higher education. Such a plan, applied to the especially gifted students, would deprive them of the freedom of choice which in many cases is so important to the individual. Moreover, it would be in direct conflict with the statement of philosophy to which all members of the Commission have subscribed and which includes the following:

The interests of diverse groups have led to the creation of colleges and universities devoted to both broad and limited aims under public as well as under private control. The strength of our system of higher education in America derives from its rich and active plurality. It not only multiplies the range of opportunities for the student, but provides a basis of qualitative comparison among colleges, a vigorous spur to self-improvement. . . . The future of the State of Maryland depends in large measure on the kinds and quality of education readily available to the young people of this State in the years ahead. This Commission records its unanimous conviction that the interests of the State are well served when educational opportunity, public or private, is offered to every youth of our State, limited only by the ability and desire of the individual to make good use of the opportunity, and the ability of the community to maintain it.

No question before the State is deserving of more earnest consideration, or more in need of generous sympathy and magnanimous support.

To sum up, the Commission believes that a scholarship plan is necessary to insure the education of exceptional students; and that the program described above provides for these students in the best possible way, at the same time perpetuating a desirable balance between public and private institutions by allowing all an equal opportunity to attract the superior students who will be benefited by the plan.

V. *A Permanent Advisory Commission on Higher Education*

It is recognized by this Commission that the task of providing post-secondary programs of study for the huge increase in the number of college-age youth in the years ahead is a tremendous undertaking. There are many problems and issues which the limitation of time will not permit the present Commission to explore. It is evident, moreover, that needs in education change in the light of technological and other advances. The appointment of a permanent Advisory Commission on Higher Education is, therefore, recommended.

Such a Commission should be representative of the various types of institutions existing within the State.

RECOMMENDATION 22

That a 'permanent Advisory Commission on Higher Education in Maryland be established through appointment by the Governor of Maryland by and with the advice of the institutions of higher learning. This Commission should consist of nine persons: The Presidents of three State institutions, one of whom shall be the President of the University of Maryland; the presidents of four independent institutions, one of whom shall be the President of Johns Hopkins University; the Superintendent of Schools of Baltimore City; and the State Superintendent of Schools.

This advisory Commission should have as its function the continuing study of the State's problems of higher education and serve as a clearing-house for informing the public of the changing needs for

educational opportunity in Maryland. In a broad sense " the public " would include the legislature, the current State administration, and the various State boards dealing with affairs related to education.

Since continuity of policy is of paramount importance, the terms of the non ex-officio members of the Commission should be staggered.

The Commission should be as far removed from the influence of changes in political administrations as is feasible and by the same token entrusted to an individual or group sensitive to the problems of education. In brief, it should be a professional body entrusted with the responsibility of rendering a professional service.

APPENDIX A *MINORITY REPORT ON PROPOSAL
FOR SYSTEM OF GENERAL SCHOLARSHIPS*

The members of the Commission who are not in agreement with the proposal to establish a system of general scholarships at public expense—the awarding of scholarships to individuals with the right to attend the college of their choice, public or nonpublic—base their opposition in part upon the conviction that such practice would be simply an indirect public subsidy to nonpublic institutions of higher learning, to which they are opposed in principle. They acknowledge a bit of persuasiveness in the argument that financial aid to the individual is not the same as financial aid to the institution, but insist that it is a distinction without a difference. They contend that, while the particular proposal is limited to the field of higher education, acceptance of the general principle logically would necessitate acceptance of the principle at all levels of education. They argue further that practical application of the principle would create the anomaly of public support of a dual system of education, and open the door to the possible elimination of the public school system and the establishment of a system of public support of nonpublic educational institutions only. They cite as a current example of their distrust of this procedure the recent legally approved plans for the elimination of the public school systems and for public support of nonpublic education in the states of South Carolina, Georgia, and Mississippi on the elementary and secondary level.

The dissidents believe that universal education to an extended degree is essential to the welfare and perpetuation of a free society and that it is the responsibility of the public to meet this obligation through the simple device of public educational institutions, sufficiently comprehensive in nature to satisfy the needs, interests, and abilities of all who wish and are able to avail themselves of these opportunities.

So important has the American public considered universal education, it has established free public educational institutions for the realization of this ideal through the secondary school, partially free institutions beyond the secondary school, and through the years gradually has raised the compulsory education level. When the public has established academically and professionally adequate institutions available to all who can profit, it has met its obligation.

The minority members subscribe completely to the belief that nonpublic institutions should play an important part in the educational program of the country, but in specific fields; that is, for a particular purpose, educational and other. They do not hold to the belief that any nonpublic educational institution should exist merely for the purpose of providing a better education than public educational institutions; to accept this principle would imply approval of an eleemosynary nature of public education, a position that is not tenable in a democracy. The public, in their opinion, has no moral right to provide inferior education for the students in the public educational institutions, any more than it has the right to provide inferior medical care in the public hospitals.

Further, they hold that the integrity of the nonpublic educational institution is dependent upon its freedom from control from any body except that which maintains and supports it and that it is neither realistic nor logical to believe that the public will give freely of its funds to such institutions, directly or indirectly, and not demand control of the manner in which they are spent. They hold that the greatest blow that any government can give to the free enterprise system is to subsidize business and nonpublic education, thereby reducing them to dependencies of the State. And they hold that no institution can be free, independent, and private unless it receives its support from private sources only.

Lest it be argued that those disagreeing with the proposal for general scholarships are inconsistent in agreeing to the continuance and expansion of the present system of State aid to certain nonpublic educational institutions, they acknowledge that they are inconsistent technically; they do not approve in principle of the present system, which they feel, however, is more of a contractual relationship than public aid. By their position they merely accept a practice which has

been in effect in the State for several generations, in some cases originated by the State, and which is not likely to be changed. Their vote was not so much approval of the present system as approval of a plan to make the system equitable by extending it to other institutions that could qualify for and that might wish to avail themselves of this contractual relationship. They feel very strongly that where such aid is given, a very definite function of the State—such as the preparation of teachers—must be served.

There was also the feeling among the dissenting members of the Commission that any system of scholarships is at best a temporizing device, undemocratic in nature, inequitable in practice, and of doubtful value in results. For a long time many educators have considered scholarships an educational anachronism. Favoritism frequently enters into the awarding, the measures of selection are neither valid nor reliable, the purposes for which they are given are not always academically justifiable, and the achievements in and out of colleges and universities of the holders have never been proved conclusively to be comparatively greater than those of the students without scholarships.

A treatise could be written on the inequities in the awarding of scholarships; a simple comment will suffice here. Should colleges and universities require or permit adults of twenty-two or more to compete with children of sixteen for scholarships? They do! In the opinion of the minority this practice is as indefensible as the practice in many, if not most, institutions of higher learning of permitting physically mature men of twenty-five or more to play college football against children in their teens! Parenthetically, it might be remarked at this point that in the minds of many, it is questionable whether the public should subsidize in any fashion adults in college (except in cases such as veterans), until it has taken care of its youth properly.

Rather than to approve any system of scholarships, the minority commission members advocate that the cost of higher education in both public and nonpublic institutions should be so reduced that all, regardless of their economic status, who give reasonable evidence of ability to profit from higher education may secure it. This proposal does not necessarily mean the elimination of all cost of higher education, but it does mean the elimination of the eleemosynary nature inherent in all scholarships as exemplified in Jefferson's scholarship

plan, whereby "Twenty of the best geniuses will be raked from the rubbish annually and be instructed at public expense so far as the grammar schools go. At the end of six years one-half of these shall go to William and Mary," etc. Upon what principle does the State justify the selection of only a few of its youth to receive financial assistance toward their education when many times more are qualified except financially?

Relieved by low-cost education from the responsibility of determining relative degrees of intellectual promise, financial need, and the exact amount needed to induce a promising student (or football player) to select it for attendance, the college can take into consideration every important fact bearing upon the qualifications of all prospective students and the way they will fit into the pattern of the student body. The competition by colleges for students by the present scholarship route is removed and better care and deliberation can be exercised in the selection and admission of students.

Apparently the proponents of the general scholarship program are interested mainly in the so-called "brighter pupil"—the upper 10 or 15 per cent. Although the dissidents have grave doubts that the present methods of determining intelligence really isolate the truly bright, for the sake of argument they will assume that such students can be discovered. According to figures given elsewhere in this report, in Maryland about as many youth of equal ability do not go to college as go. Let us see what happens to these youth in respect to scholarships—currently awarded.

Five hundred and seventy-three graduates of the June (and February) 1955 classes in the public high schools of Baltimore City and Baltimore County were given scholarships amounting in value to \$524,079. Additional scholarships were given after these figures were collected. There were 5,763 graduates; the 573 receiving scholarships represent 9.9 per cent of the group. Presumably the scholarships were awarded to the highest ranking students. These scholarships were for the greater part awarded by nonpublic institutions and represented only part of the cost of attendance of the recipients at the colleges and universities. If the average value of each scholarship amounted to only half the actual fees and expenses of each individual, which is a liberal estimate, it is obvious that a fair number of scholarships were

awarded to youths whose parents were capable of bearing a good part of the cost. If the purpose of scholarships is to enable worthy and indigent students to attend college, it is not consistent to award them to students whose parents are able to pay so much. If the purpose of scholarships is to secure students with special abilities (athletic or other) without regard to financial need, the whole scholarship procedure then becomes a system of bidding for certain students. Such a procedure is unjustifiable from the prospective student's standpoint, regardless of the qualities in the student a particular institution may wish to secure. It is more important for the prospective student to be able to select his college without any pressures, than for the college to select the student. Only in this way will the student be able to follow his own inclinations, intellectual or other, and this is not possible unless institutions of higher learning adequate to meet his peculiar needs are within his reach. The public should not be a financial part in any scheme of bidding for students.

A practical consideration of the general scholarship proposal for Maryland indicates that—assuming that 50 per cent of the graduates in the upper 5 per cent of their classes will show need for the scholarship, half will be day and half boarding students, and the average scholarship for a day student will be \$400 and for a boarding student \$800—the cost in 1955 would be \$262,800, and \$1,051,200 at the end of four years when in full effect; \$373,200 and \$1,492,800 respectively, in 1960; and \$505,200 and \$2,020,800, respectively, in 1965. If this program were applied to the upper 10 per cent indicated as a possibility in the majority recommendation, this figure could conceivably be doubled. The ultimate amounts required would be sufficient to remove all present tuition fees at the State-owned institutions of higher learning, to raise faculty salaries to a respectable degree, and to benefit thousands instead of a few hundred youth through scholarships. It should be obvious that so far as the public is concerned the scholarship way is not the most economical way.

Finally, the minority believes very strongly that the State has no moral or legal right to maintain a public educational institution that is not accessible financially to any prospective Maryland student who meets the institution's admission requirements. And they contend that the State has no moral right to aid or assist any youth to go to

any educational institution that is not equally accessible to all qualified youth (a \$1,000 scholarship, for example, to an institution that costs \$2,000 more or less, or any scholarship to an institution restrictive other than academically in its admission policies). The public has met its responsibility when it has provided comprehensive and competent public institutions of higher learning in adequate numbers. In a democracy every individual should have the right to attend the educational institution of his choice, but the public has no obligation to make it financially possible for him to do so; in a democracy no individual should be taxed to provide special opportunities to particular individuals which neither he nor his own is financially able to enjoy.

The position of the minority members is taken out of deep conviction and concern and with high personal and professional regard for the members of the majority.

Wilbur Devilbiss

Earle T. Hawkins

Thomas G. Pullen, Jr.

APPENDIX B BIBLIOGRAPHY

- American Council on Education. *A Call for Action to Meet the Impending Increase in College and University Enrollment*. 29 pp. An excerpt from an address before the Pacific Northwest Conference on Higher Education, March, 1953, and is reprinted, by permission, from the *Proceedings*.
- American Council on Education. *Factors Affecting the Admission of High School Seniors to College*. The American Council on Education, 744 Jackson Place, N. W., Washington 6, D. C. 1949. 312 pp.
- American Council on Education. *Higher Education in Maryland, 1947*. (Marbury Report.) A Report of a Survey by the American Council on Education with Recommendations of the Maryland Commission on Higher Education (Washington, 1947), 384 pp-
- Association of Colleges and Universities, The State Education Department, State University of New York. *Facilities for Four-Year College Education in the State of New York, Report of the Joint Survey of 1950* (Albany: Fort Orange Press, Inc., 1951), 77 pp.
- College Age Population Trends 1940-1970*. A Service of the Committee on Special Projects for The American Association of Collegiate Registrars and Admissions Officers, 1953. 68 pp. Prepared by Ronald B. Thompson, The Ohio State University, President of the Association.
- The Council of State Governments. *Higher Education in the Forty-Eight States* (Chicago, 1951) 317 pp-
- Fine, Benjamin. *Admission to American Colleges, A Study of Current Policy and Practice* (New York: Harper & Brothers, 1946), 225 pp.
- Griffith, Coleman R., *The Junior College in Illinois* (University of Illinois Press, 1945), 252 pp.
- Hollinshead, Byron S., ed., *Who Should Go To College*. Published for the Commission on Financing Higher Education (New York: Columbia University Press, 1952), 190 pp.
- Loeb, Martin B., Robert J. Havighurst, and William Lloyd Warner. *Who Shall Be Educated? The Challenge of Unequal Opportunities* (New York: Harper & Brothers, 1944), 190 pp.
- Maryland State Planning Commission. *Maryland Population Forecasts through 1970*. April, 1953. Baltimore 2, Maryland, 100 Equitable Building: Publication No. 78, 35 pp.
- Minnesota Commission on Higher Education. *Higher Education in Minnesota* (Minneapolis: University of Minnesota Press, 1950), 419 pp.

- National Manpower Council. *A Policy for Scientific and Professional Manpower* (New York: Columbia University Press, 1953), 263 pp.
- Proceedings of a Conference on the Utilization of Scientific and Professional Manpower*. Held October 11-17, 1953, at Arden House, Harriman Campus of Columbia University (New York: Columbia University Press, 1954), 197 pp.
- Russell, James Earl. *Federal Activities in Higher Education After The Second World War* (New York: King's Crown Press, 1951), 257 pp.
- Southern Regional Education Board. *Future School and College Enrollments in the Southern Region*. (Preliminary Report.) Atlanta, Georgia: Southern Regional Education Board, 830 West Peachtree Street. March 31, 1954. 42 pp.
- Southern Regional Education Board. *The Southern Regional Education Program*. Atlanta, Georgia: Southern Regional Education Board, 1953. 28 pp.
- State of New York. *Report of the Temporary Commission on the Need for a State University*. February 16, 1948 (Albany: Williams Press, Inc., 1948), 56 pp.
- United States Government Printing Office. *Scholarships and Fellowships Available at Institutions of Higher Education*. By Theresa Birch Wilkins, Research Assistant, Division of Higher Education, Office of Education, 1951. 248 pp.
- White, Reuel Clyde. *These Will Go To College* (Cleveland: The Press of Western Reserve University, 1952), 108 pp.