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ABSTRACT

This document provides information on financial aid programs and needs of Alabama institutions of higher education. Emphasis is placed on the correlation method--the case for the existence of financial barriers are in Alabama; sources and amounts of financial aid available to meet financial need in Alabama; recipients of financial aid at Alabama colleges and universities; estimates of additional financial aid needed; and estimates of financial barriers in 1972-73. Appendices include a brief description of the College Scholarship Service theory of need analysis, an example of the Alabama Commission on higher education, survey on student financial aid problem of colleges included in this study, alternate measures of financial need, and the independent students. (MJM)

A STUDY OF UNDERGRADUATE STUDENT FINANCIAL AID IN ALABAMA 1972-73

SEPTEMBER, 1972

ALABAMA COMMISSION ON HIGHER EDUCATION

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A STUDY OF
UNDERGRADUATE STUDENT
FINANCIAL AID IN ALABAMA
1970-71

STATE OF ALABAMA

ALABAMA COMMISSION ON HIGHER EDUCATION

September, 1972

CONTENTS

FOREWORD

The Alabama Commission on Higher Education was authorized on May 14, 1969 for "the general purpose of promoting an educational system that will provide the highest possible quality of collegiate and university education to all persons in the State able and willing to profit from it." The Act which created the Commission directed the Commission "to cause to be made such surveys and evaluations of higher education as is believed necessary for the purpose of providing appropriate information to carry out its powers and duties...." It is in accordance with this provision that this, the seventh in a series of studies, is presented.

This study provides the Commission, members of the Legislature, and the higher education community with information on financial aid programs and needs of Alabama Institutions of Higher Education. This information should be helpful in planning for the needs of Alabama college students. However, the impact of the Higher Education Act of 1972 remains unknown.

The Commission expresses appreciation to Dr. Jerry S. Davis, the major research analyst who prepared the original text of the study; the personnel of the Southern Regional Office of the College Entrance Examination Board, particularly Messrs. Kingston Johns and Joe Creech, who provided computer assistance and advice; the Alabama Association of Student Financial Aid Administrators for their assistance; Mrs. Kay Staub, who provided editorial support; and to Dr. Joseph T. Sutton, who supervised the production of this study.

G. Sage Lyons, Chairman
Alabama Commission on Higher Education

Clanton W. Williams
Executive Director

LIST OF TABLES

LIST OF TABLES (CONTINUED)

LIST OF TABLES (CONTINUED)

LIST OF TABLES (CONTINUED)

INTRODUCTION

The 1960's saw the articulation of a new goal for our nation's system of higher education: equality of opportunity for all able students to continue their education beyond high school. While there are many complex and interacting, humanitarian, social, economic, political and educational reasons why this goal has now come to the foreground, it is abundantly clear that an educated populace is a necessity in our modern industrial-technological society.

However, there are many barriers to the higher education of many of our citizens. There are academic barriers, as some students do not have the quality or quantity of education to gain admittance to or succeed in higher education as it is organized today; motivational barriers, as some students do not see higher education as relevant in itself or in comparison to other alternatives; geographic barriers, as post-secondary institutions are frequently located in areas which inhibit the possibility of many students commuting to them; and, financial barriers, as some students and their families simply do not have access to the monetary resources needed to pursue advanced education.

The purpose of this study is to bring attention to the financial barriers to post-secondary education in Alabama and to examine the efforts of students, parents, institutions of higher education and State and Federal governments to help lower these barriers.

Specifically, the report seeks to provide information which can lead to answers to the following questions:

1. Are there financial barriers to higher education for Alabama students?
2. What are the average costs to students attending college in Alabama?
3. What are the family income characteristics and capabilities of currently enrolled college students? For example, how much money can the students and their families reasonably be expected to contribute toward defrayal of the costs of college?
4. What is the average financial need of currently enrolled college students?
5. What types and amounts of student financial aid are currently available to enrolled college students?
6. What is the amount of unmet financial need of currently enrolled college students?

Data for this study were drawn from published reports, a brief survey of the financial aid administrators of Alabama colleges and universities, institutional reports submitted to the United States Office of Education, and communication with a variety of public and private agencies.

Due to limits of time and resources, it was necessary to make assumptions, approximations, and estimations both in the development and in the interpretation of the data. However, such assumptions, approximations and estimates as were made were the product of careful deliberation by the study staff, consultants, and some financial aid officers. In general, where alternative assumptions, approximations, or estimates were considered, the more conservative were accepted. Assumptions, approximations, and estimates are spelled out at the appropriate places in the report. It should be noted that modification of these assumptions or estimates may result in interpretations different from those in this report.

Much of the data and analyses in the study are based upon the academic year 1970-71. This period was used because of the completeness and

availability of data for this period. However, in the concluding analysis chapter projective techniques are used to speculate about the academic year 1972-73.

There were two feasible methods for studying financial barriers to higher education in Alabama--the "Correlation Method" and the "Standard Method". The Correlation Method utilizes (1) county by county median family incomes in Alabama and (2) the proportions of high school graduates from each Alabama county entering Alabama colleges and universities. A positive relationship between family income and college attendance may be argued to infer the existence of financial barriers to higher education in Alabama. While the Correlation Method may suggest that financial barriers exist, it is not well suited to providing an estimate of the extent or magnitude of the financial barriers. The Standard Method will provide such a measure. The Standard Method establishes a standard or norm for financial contributions by Alabama parents and students toward college expenses. This contribution is then used in conjunction with data describing out-of-pocket expenses for attending college in Alabama and applied to the income distributions of Alabama families of college students. The result, aggregated across college students, determines the total financial need of the Alabama college student population. The total financial need is compared to the total available financial aid to determine the extent of continuing financial barriers to higher education in Alabama.

It should be noted that the study is concerned with financial barriers to undergraduate education. Although the importance of graduate education to the State is recognized, the focus on undergraduate needs was chosen because of the completeness of the data, data definitions, and related information for this area of concern. Undergraduates constituted approximately 85 percent of college students in Alabama in 1970-71.

THE CORRELATION METHOD: THE CASE FOR THE EXISTENCE OF FINANCIAL BARRIERS IN ALABAMA

While it would be desirable to have information about the numbers of high school graduates who clearly do not go to college because of limited financial resources, no such data for Alabama students are available. It can be shown, however, that within a large group of Alabama families failure to attend college is correlated with low incomes.

The primary data for this analysis are the county by county median family incomes of Alabama families from the 1970 U.S. Census, the number of high school graduates from each Alabama county in 1970, and the number of students entering Alabama colleges and universities from each county in the fall, 1970.

An approximation of the relationship between family income and college attendance can be found by ranking the counties in Alabama in two separate arrays. The first array is the median income in each county; the second array is the proportional relationship between the number of public high school graduates in each county and the number of beginning freshmen who entered Alabama colleges and universities from each county in the fall, 1970. The concordance between the two rankings indicates the degree of relationship between county median family income and county college attendance rates.

Table 1 displays the median incomes of each county, the county's rank in the State, the county ratio of number of entering freshmen to the number of public high school graduates and the county's rank on that variable.

In one case, Houston County, the ratio listed in Column 3 of Table 1 is larger than 1.0, and in other cases the ratio is unusually large. This

TABLE 1

COUNTY RANKS IN MEDIAN FAMILY INCOME AND

ESTIMATED RATE OF COLLEGE GOING, 1970

County	Median Income	Rank	Rate of College Going	Rank
Autauga	$7,530	10	.432	36
Baldwin	7,338	15	.484	23
Barbour	5,133	56	.387	44
Bibb	5,559	47	.332	50
Blount	6,170	32	.532	21
Bullock	3,737	66	.205	65
Butler	5,331	50	.402	40
Calhoun	7,401	13	.547	18
Chambers	7,106	17	.473	26
Cherokee	6,137	33	.399	41
Chilton	5,691	45	.317	54
Choctaw	5,319	51	.373	45
Clarke	5,900	40	.391	43
Clay	5,756	44	.444	32
Cliburne	6,448	25	.308	56
Coffee	6,776	21	.696	6
Colbert	7,735	6	.440	33.5
Conecuh	4,729	59	.319	53
Coosa	6,238	30	.311	55
Covington	5,930	39	.592	12
Crenshaw	4,527	60	.540	19.5
Cullman	6,207	31	.398	42
Dale	7,402	12	.751	4
Dallas	5,828	41	.354	48
DeKalb	5,316	52	.452	30
Elmore	6,891	19	.449	31
Escambia	6,321	27	.556	16
Etowah	7,645	7	.656	9
Fayette	5,501	48	.667	8
Franklin	6,049	35	.568	15
Geneva	5,787	43	.728	5
Greene	3,034	67	.270	61
Hale	3,852	64	.270	61
Henry	5,139	55	.861	2
Houston	7,376	14	1.164	1
Jackson	6,372	26	.323	52
Jefferson	8,562	2	.549	17
Lamar	5,247	54	.349	49
Lauderdale	7,608	8	.481	25
Lawrence	6,083	34	.326	51
Lee	7,593	9	.416	37
Limestone	6,820	20	.472	27
Loundes	3,823	65	.179	66
Macon	5,058	57	.071	67
Madison	10,439	1	.540	19.5
Masengo	4,909	58	.291	58
Marion	5,964	38	.624	10
Marshall	6,596	22	.680	7
Mobile	7,811	5	.433	35
Monroe	5,442	49	.482	24
Montgomery	8,220	4	.623	11
Morgan	8,360	3	.570	14
Perry	4,258	61	.270	61
Pickens	5,293	53	.368	46
Pike	5,644	46	.463	28
Randolph	5,800	42	.579	13
Russell	5,996	37	.236	64
St. Clair	6,461	24	.405	39
Shelby	7,155	16	.361	47
Sumter	3,938	62	.281	59
Talladega	7,071	18	.453	29
Tallapoosa	6,591	23	.440	33.5
Tuscaloosa	7,435	11	.407	38
Walker	6,317	28	.823	3
Washington	6,041	36	.256	63
Wilcox	3,917	63	.293	57
Winston	6,268	29	.490	22

SOURCES: 1970 U.S. Census, Social and Economic Characteristics; Alabama State Department of Education, 1970 Annual Report of Statistical and Financial Data and Sources of Entering Freshmen in Alabama Institutions of Higher Education, 1970

is probably because some students entered college in fall, 1970 one or more years after graduation from high school. No data is available to indicate the number of such students.

A typical measure of concordance is the Spearman rank order correlation coefficient. This coefficient can vary from -1.0 when there is a perfect negative correlation to +1.0 when there is a perfect positive correlation. The coefficient is 0 when there is no relationship between the rankings.

The Spearman rank correlation coefficient between the two arrays displayed in Table 1 is +.52. While not perfect, the correlation between county median family income and county college attendance rate is sufficiently large to reliably indicate a relationship between college going and family income for Alabama students.

These data measure only the differences in median family incomes among counties and the differences in college attendance rates among counties. The analysis indicates that there is a greater likelihood that a student from a family in a high income county will attend college than a student from a family in a low income county. However, there are many families in all Alabama counties with incomes below the median county income. This analysis does not describe the probable income effect upon college attendance that operates within counties.

THE STANDARD METHOD: HOW LARGE ARE THE FINANCIAL BARRIERS IN ALABAMA?

To determine the extent of the financial barriers to higher education in Alabama it is necessary to compare the costs of higher education and the ability of students to pay these costs. The difference between the costs and ability to pay represents the financial need of the college student population.

To calculate the financial need of the college student population, it is necessary to determine four factors:

1. Expected student contribution or self-help
2. Expected parental contribution toward defrayal of college expenses
3. Income distribution data for the families of relevant groups of students, and
4. Expected out-of-pocket expenses or costs for the relevant institutions, i.e., direct money costs (tuition, fees, books and supplies) and living expenses (room, board, clothing and other personal expenses).

To determine items 3 and 4, the most recent data available are used for the undergraduates enrolled in Alabama colleges and universities during the academic year 1970-71.

Student Self-Help. A considerable amount of research has been devoted to the matter of what might be reasonably expected as a typical student's contribution from summer and term-time employment toward meeting college expenses. The College Scholarship Service has devoloped a standard scal of expectations which averages $450 per year for freshman and sophomore men, $350 per year for freshman and sophomore women, $550 per year for junior and senior men, and $450 per year for junior and senior women. For purposes of

this study, it was assumed that the average two-year college male would contribute $450 toward his education. Females would be expected to contribute $350 per year. The average four-year college male was assumed to contribute $525 toward his education each year. The average female was assumed to contribute $425 per year. These figures closely correspond to the estimates provided by the Alabama student financial aid administrators in their 1972 Institutional Application(s) to Participate in Federal Student Financial Aid Program (APPLCN) forms. Obviously, individual students will be able to contribute considerably more or less than these amounts because of employment opportunities depending upon their individual circumstances, e.g., family income, race, educational level, etc. Generally students from families with larger incomes, students who are upperclassmen and white students can contribute more than students who are from families with smaller incomes, students who are lowerclassmen, and black students.[1]

Expected Parental Contributions. The College Scholarship Service has developed a standard for calculating total expected parental contributions from families of ordinary financial circumstances with no unusual financial burdens and with only one child in college. This expected contribution decreases as family size increases. The amounts expected from parents at the various income levels are presented in Table A-1 of Appendix A. For example, Table A-1 indicates that a family earning $7000 net income and three dependent children is expected to contribute only $210 toward their child's college education.

Information from the College Scholarship Service indicates that of Alabama students who applied for financial aid the average family is comprised of two parents and three dependent children. Therefore, the parental contribution standard applied to each income level in this study is the CSS standard with three dependent children, one of whom is in college.

Income Distributions. The financial aid administrators of Alabama colleges were required when filing their 1972 APPLCN's to provide evidence and data concerning the distribution of family incomes of all enrolled undergraduates. These distributions, by seven groupings* of colleges are shown in Table 2.

TABLE 2

DISTRIBUTION OF FAMILY INCOMES, 1970-71, BY COLLEGE TYPES

	White 4-Year Publics	Black 4-Year Publics	White 4-Year Non-Publics	Black 4-Year Non-Publics	White 2-Year Publics	Black 2-Year Publics	White 2-Year Non-Publics	All Colleges
Less than $3,000	6.8%	39.6%	5.2%	32.7%	12.0%	35.6%	4.0%	11.7%
$3,000 to $5,999	14.1	37.4	12.1	33.8	20.5	35.5	11.2	18.0
$6,000 to $7,499	8.5	11.2	8.2	12.6	19.5	13.7	8.3	10.6
$7,500 to $8,999	12.8	6.4	9.6	8.9	15.2	8.6	7.8	12.0
$9,000 to $11,999	20.2	3.9	19.5	7.7	16.3	4.8	23.4	17.5
More than $12,000	37.6	1.5	45.4	4.3	16.6	1.8	45.3	30.2
Median Annual Income	$10,158	$3,834	$11,351	$4,534	$7,346	$4,216	$11,397	$8,712

It is readily apparent that the income distributions by college types are quire different. Since the estimation of financial need is dependent upon family income distributions and since the distributions among college types are so different, financial need at the seven groups of colleges is analyzed in order to obtain a more accurate picture of the total statewide need.

Student Expenses. The financial aid administrators of Alabama colleges were surveyed and asked "to estimate the expenditures of a typical full-time

*The colleges in the study are collapsed into seven rather than eight possible groupings by considering the single black two-year non-public college in the State as a black four-year non-public institution. This grouping is necessary to insure a sufficient number of cases for analysis and to maintain the confidentiality of institutional data.

undergraduate" at their institutions in 1970-71 and 1972-73. The survey instrument appears in Appendix B.

From these estimates, weighted average budgets for a typical commuter and resident student at each of the seven types of colleges were obtained. (A commuter student is one who lives at home and generally has room and board provided at little or no charge from his parents. However, since the cost of housing and boarding the student at home is a real cost to parents, financial aid administrators do consider an amount equivalent to or slightly below the cost of room and board outside the home as a part of the commuter student's budget. The resident student is one who lives away from home and must purchase meals and housing as a portion of total educational expenses, regardless of whether he lives in a residence hall, fraternity, rooming house or apartment.) The weighted averages were obtained by multiplying the typical student budget at each college by the number of students paying those costs, summing those totals, and dividing by the total number of students in each of the seven types of institutions. Table 3 presents the weighted average budgets for resident and commuter students at each of the seven types of colleges in 1970-71.

TABLE 3

WEIGHTED AVERAGE COSTS FOR RESIDENT AND COMMUTER STUDENTS, BY COLLEGE TYPES, 1970-71

College Type	Resident	Commuter
White 4-year Publics	$1,884	$1,631
Black 4-year Publics	$1,460	$1,186
White 4-year Non-Publics	$2,665	$2,138
Black 4-year Non-Publics	$2,373	$1,915
White 2-year Publics	$1,749	$1,206
Black 2-year Publics	$1,326	$ 945
White 2-year Non-Publics	$2,261	$1,711

It will be noted that the costs in 1970 ranged from $945 for the typical commuter student at a black two-year public college to $2,665 for the typical resident student at a white four-year private college. These estimates are probably slightly lower than the real costs to students and their parents. They are based, for the most part, on financial aid administrators' estimates of costs to students who apply for financial aid. Therefore, they are likely to be minimum costs since aid administrators typically assume a lower level of expenditure by financial aid recipients than by unaided students for unfixed costs, e.g., social activities, clothing, etc.

Calculation of Financial Aid Needs. We now have the four elements which are required to estimate the magnitude of the financial barriers to higher education within each of the seven types of colleges. The procedures for conducting these analyses and the resulting estimates of financial need are presented in Tables 4 through 10.

The seven tables indicate a total estimated financial need for Alabama college students in 1970-71 included in this study of $47,001,412.

TABLE 4

ESTIMATED FINANCIAL NEED AT

WHITE FOUR-YEAR PUBLIC COLLEGES

1970-71

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total[2]	Per Student	Total
Less than $3,000	7	2,672	$ 4,817,733			$ 1,293,200	$ 1,319	$ 3,524,533
$3,000 to $5,999	14	5,344	9,635,466			2,586,500	1,319	7,048,966
$6,000 to $7,499	9	3,435	6,193,493			1,662,575	1,319	4,530,913
$7,500 to $8,999	13	4,962	8,946,644	$ 440	$ 2,183,280	2,401,650	879	4,361,714
$9,000 to $11,999	20	7,634	13,764,377	860	6,565,240	3,694,850	459	3,504,287
$12,000 and up	37	14,123	25,464,425	1,840	25,986,320	6,835,575	-520[3]	-7,357,470[3]
Total	100	38,170	$68,822,138		$34,734,840	$18,474,350	$ 601	$24,049,553[4]

[1] 32% commuters, 68% residents

[2] 59% male, 41% female

[3] Not included in total, contributions exceed costs at this interval

[4] An additional $1,079,140 is included in total for out-of-state fees

TABLE 5

ESTIMATED FINANCIAL NEED AT

BLACK FOUR-YEAR PUBLIC COLLEGES

1970-71

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total[2]	Per Student	Total
Less than $3,000	40	1,468	$ 2,018,610			$ 687,000	$ 907	$ 1,331,610
$3,000 to $5,999	37	1,358	1,867,326			635,550	907	1,231,776
$6,000 to $7,499	11	404	555,590			189,100	907	366,490
$7,500 to $8,999	6	220	302,568	$ 440	$ 96,800	103,000	467	102,768
$9,000 to $11,999	4	147	202,016	860	126,420	68,775	46	6,821
$12,000 and up	2	73	101,738	1,640	119,720	34,125	-713[3]	-52,107[3]
Total	100	3,670	$ 5,047,848		$ 342,940	$ 1,717,550	$ 828	$ 3,051,225[4]

[1] 31% commuters, 69% residents

[2] 43% male, 57% female

[3] Not included in total, contributions exceed costs at this interval

[4] An additional $11,760 is included in total for out-of-state fees

TABLE 6

ESTIMATED FINANCIAL NEED AT

WHITE FOUR-YEAR NON-PUBLIC COLLEGES

1970-71

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total[2]	Per Student	Total
Less than $3,000	5	296	$ 709,263			$ 142,100	$ 1,916	$ 567,163
$3,000 to $5,999	12	711	1,703,514			341,275	1,915	1,362,239
$6,000 to $7,499	8	474	1,135,676	---		227,550	1,915	908,126
$7,500 to $8,999	10	592	1,421,191	$ 440	$ 260,480	284,200	1,480	876,511
$9,000 to $11,999	20	1,184	2,837,052	860	1,018,240	568,300	1,056	1,250,512
$12,000 and up	45	2,664	6,383,367	1,840	4,901,760	1,278,700	76	202,907
Total	100	5,921	$ 14,190,063		$ 6,180,480	$ 2,842,125	$ 872	$ 5,167,458

[1] 51% commuters, 49% residents

[2] 55% male, 45% female

TABLE 7

ESTIMATED FINANCIAL NEED AT

BLACK FOUR-YEAR NON-PUBLIC COLLEGES

1970-71

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total[2]	Per Student	Total
Less than $3,000	33	1,833	$ 4,165,135			$ 863,325	$ 1,801	$ 3,301,810
$3,000 to $5,999	34	1,889	4,292,069			889,725	1,801	3,402,344
$6,000 to $7,499	13	722	1,640,484			340,050	1,801	1,300,434
$7,500 to $8,999	9	500	1,136,120	$ 440	$ 220,000	235,500	1,361	680,620
$9,000 to $11,999	8	444	1,008,728	860	381,840	209,100	940	417,788
$12,000 and up	3	167	379,345	1,640	273,880	78,675	160	26,790
Total	100	5,555	$ 12,621,881		$ 875,720	$ 2,616,375	$ 1,643	$ 9,129,786

[1] 22% commuters, 78% residents

[2] 46% male, 54% female

TABLE 8

ESTIMATED FINANCIAL NEED AT

WHITE TWO-YEAR PUBLIC COLLEGES

1970-71

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total[2]	Per Student	Total
Less than $3,000	12	1,041	$ 1,283,366			$ 435,150	$ 814	$ 848,216
$3,000 to $5,999	20	1,736	2,140,329			725,600	814	1,414,729
$6,000 to $7,499	20	1,736	2,140,329			725,600	814	1,414,729
$7,500 to $8,999	15	1,302	1,605,111	$ 440	$ 572,880	544,200	374	488,031
$9,000 to $11,999	16	1,388	1,710,973	860	1,193,680	580,200	-45[3]	-62,907[3]
$12,000 and up	17	1,475	1,818,584	1,730	2,551,750	616,550	-915[3]	-1,349,716[3]
Total	100	8,678	$ 10,698,692		$ 4,318,310	$ 3,627,300	$ 480	$ 4,165,705

[1] 95% commuters, 5% residents

[2] 68% male, 32% female

[3] Not included in total, contributions exceed costs at this interval

TABLE 9

ESTIMATED FINANCIAL NEED AT

BLACK TWO-YEAR PUBLIC COLLEGES

1970-71

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total[2]	Per Student	Total
Less than $3,000	36	482	$ 472,620			$ 192,800	$ 580	$ 279,820
$3,000 to $5,999	35	469	458,628			187,650	577	270,978
$6,000 to $7,499	14	188	185,646			75,200	587	110,446
$7,500 to $8,999	9	121	119,100	$ 440	$ 53,240	48,450	143	17,410
$9,000 to $11,999	5	67	66,546	860	57,620	26,850	-267[3]	-17,924[3]
$12,000 and up	1	13	13,992	1,640	21,320	5,250	-967[3]	-12,578[3]
Total	100	1,340	$ 1,316,532		$ 132,180	$ 536,200	$ 506	$ 678,654

[1] 92% commuters, 8% residents

[2] 50% male, 50% female

[3] Not included in total, contributions exceed costs at this level

TABLE 10

ESTIMATED FINANCIAL NEED AT

WHITE TWO-YEAR NON-PUBLIC COLLEGES

1970-71

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total[2]	Per Student	Total
Less than $3,000	4	49	$ 99,300			$ 20,450	$ 1,609	$ 78,850
$3,000 to $5,999	11	135	270,096			56,450	1,582	213,646
$6,000 to $7,499	8	98	194,628			41,000	1,567	153,628
$7,500 to $8,999	8	98	194,628	$ 440	$ 43,120	41,000	1,127	110,508
$9,000 to $11,999	23	283	564,024	860	243,380	118,250	715	202,394
$12,000 and up	46	565	1,124,076	1,840	1,039,600	236,150	-268[3]	-151,674[3]
Total	100	1,228	$ 2,446,752		$ 1,326,100	$ 513,300	$ 618	$ 759,026

[1] 50% commuters, 50% residents

[2] 68% males, 32% females

[3] Not included in total, contributions exceed costs at this interval

Table 11 summarizes the total financial need by college types presented in the seven tables on the preceding pages. Table 12 summarizes the total need by income intervals.

TABLE 11

ESTIMATED TOTAL FINANCIAL NEED, 1970-71, BY COLLEGE TYPES

College Type	Total Need	% of Total Need	% of Total Enrollment
White 4-year Publics	$24,049,558	51.2	59.1
Black 4-year Publics	3,051,225	6.5	5.7
White 4-year Non-Publics	5,167,458	11.0	9.2
Black 4-year Non-Publics	9,129,786	19.4	8.6
White 2-year Publics	4,165,705	8.9	13.4
Black 2-year Publics	678,654	1.4	2.1
White 2-year Non-Publics	759,026	1.6	1.9
	$47,001,412	100%	100%

TABLE 12

ESTIMATED TOTAL FINANCIAL NEED, 1970-71, BY INCOME INTERVALS, ALL COLLEGES COMBINED

Income Interval	Total Need	% of Total Need	% of Total Enrollment
Less than $3,000	$10,056,706	21.4	11.7
$3,000 to $5,999	15,188,927	32.3	18.0
$6,000 to $7,499	8,940,254	19.0	10.6
$7,500 to $8,999	6,860,962	14.6	12.0
$9,000 to $11,999	5,724,866	12.2	17.5
	$47,001,412	100%	100%

Some striking differences between college types appear in Table 11. While the black colleges enroll only 16.4 percent of all students, these students' financial needs represent 27.3 percent of the total financial need. The public colleges enroll 80.3 percent of all the students in the study, but these students' needs represent only 68.0 percent of the total financial need. In Table 12, we note that only 19.7 percent of all enrolled students have family incomes below $6,000, but these students' financial needs represent 53.7 percent of the total financial need. It should

be clear that where students enroll in college makes a significant difference in the financial aid needs because of differing college costs.

In a study of financial aid needs, the costs of education, financial capabilities and financial need of the independent student should be considered. An independent student is one who has not during the calendar year prior to the date he expects to receive financial aid resided with, been claimed as a dependent for Federal income tax purposes by, or been the recipient of an amount in excess of $200 from one or both parents or any other person acting in loco parentis. From data on enrollments in Alabama colleges for the fall, 1970 term[2] and the survey of the financial aid administrators, 8773 independent students are estimated enrolled in colleges included in this study. A reasonable estimate of the magnitude of the financial aid needs of independent students in Alabama would be something in excess of 2 million dollars. Details of the estimate are described in Appendix E.

Total College Financial Needs. The estimates of financial need in this chapter are estimates of what needs were not met by what the students themselves together with what their parents could be expected to contribute toward their education expenses. These estimates do not include part-time students. The problems of assessment of the part-time students' need is briefly discussed in Appendix D.

The total financial need of undergraduate students in 1970-71 is estimated at roughly 49 million dollars. In the next chapter we examine sources and amounts of financial aid available to meet this financial need.

SOURCES AND AMOUNTS OF FINANCIAL AID AVAILABLE TO MEET FINANCIAL NEED IN ALABAMA

To assist in alleviation of the costs of higher education borne by students and their parents, a variety of financial aid programs have developed. However, it is difficult to obtain precise estimates of the amounts of financial aid available from these programs. There are several reasons for this difficulty. 1) Financial aid is available from many sources, e.g., the institutions of higher education, local banks, private lenders, community groups such as Parent-Teacher Associations and church auxilaries, independent loan agencies such as the Pickett and Hatcher Educational Fund and Educational Funds, Inc., the Alabama Department of Veterans Affairs, the U.S. Veterans Administration, the U.S. Social Security Administration, and a variety of on-campus and off-campus sources of part-time employment. 2) No central state or Federal agency is charged with collecting and collating all of the data related to grants, loans and work available to college students. For example, information about the College Work-Study Program (CWS), Educational Opportunity Grants Program (EOG), and National Defense Student Loan Program (NDSL) are available from the regional office of the U.S. Office of Education, but information concerning Federal Health Professions Grants and Loans, Federal Nursing Scholarships and Loans, and Law Enforcement Education Grants and Loans are not available from that agency. The record-keeping procedures of the U.S. Veterans Administration and the Social Security Administration are not readily amenable to attachment of monetary values of aid to students with student enrollment in a particular college or group of colleges. And 3) the record-keeping systems of individual colleges vary in consistency

of data definitions and comprehensiveness. On some campuses, all financial aid to students is coordinated through one office, such as the office of student financial aid, but on other campuses students may receive aid through directors or deans of divisions or individual academic departments as well as a student aid office. It is, therefore, necessary to rely on several diverse sources of information to make estimates of the amounts of financial aid available to students in the seven types of colleges. If the estimates are in error, it is likely that they represent a larger amount of aid than is actually available.

Categories of Financial Aid. Student financial aid may be categorized by the degree of availability of funds. Many loans or awards are available to students on bases other than those of financial need, i.e., some special academic ability or athletic ability, relationship to a veteran or being a veteran, residence in a particular area, membership in a particular religious faith, or enrollment in certain pre-professional curricula. Degrees of availability include: 1) general--unrestricted funds generally based upon need for which the largest number of applicants can qualify and from which the largest number may receive assistance; 2) limited--funds typically awarded or assigned to recipients primarily on the basis of specific characteristics or educational goals with consideration of financial need but not necessarily on the basis of financial need; and, 3) restricted--funds which are highly restricted by geography, curriculum, secondary school preparation, institutional matriculation, donor preferences or choices, or special and unusual recipient characteristics where need may or may not be a qualification for the award.

Maintenance of Level of Support. The 1972 Institutional Application to Participate in Federal Student Financial Aid Programs (APPLCN) required the aid administrators to provide the U.S. Office of Education with data concerning

their institution's maintenance of level of support to students in 1970-71 or an average for the fiscal years 1969 through 1971 depending upon previous participation in the CWS, EOG and NDSL Programs.

The Higher Education Amendments of 1968 require that institutions spend the amounts listed on the APPLCN in support of students in order to participate in the three Federal programs. Funds which are identified in the institutions' maintenance of level of support include: the institutional grants-in-aid and scholarships, including state scholarships which are controlled and administered by the institution; institutional waivers of tuition or fees; institutional student loans; loans made under the Federally Insured Student Loan Program, Title IV, if the institution acts as lender; the institutional shares of the United Student Aid Funds, Inc, College Reserve Program, nursing and health professions financial aid programs, NDSL Program, and CWS Program (limited to on-campus institutional share, unless the institution has provided off-campus matching shares from its own funds); institutional employment (exclusive of Federal share of CWS Program); and student wages from employment contracted by an institution with a private concern, such as food services, laundry and dry-cleaning, etc.

The total dollars reported by each type of college as maintenance of level of support on APPLCN forms are shown in Table 13.

TABLE 13

1970-71 MAINTENANCE OF LEVEL OF SUPPORT, BY COLLEGE TYPES

College Type	Total Dollars
White 4-year Publics	$6,284,759
Black 4-year Publics	514,926
White 4-year Non-Publics	1,705,744
Black 4-year Non-Publics	1,841,992
White 2-year Publics	321,328
Black 2-year Publics	53,448
White 2-year Non-Publics	180,047
Total, State	$10,902,244

General Aid. The largest programs of financial assistance available to needy undergraduates are the CWS, NDSL and EOG Programs. The amounts of Federal capital contributions to the colleges through these programs in 1970-71 are provided in Table 14. These data were gathered from the 1970-71 Fiscal Operations Report(s) submitted by Alabama aid administrators to the U.S. Office of Education. These funds represent those which may be categorized as "general" with regard to degree of availability.

TABLE 14

1970-71 FEDERAL CAPITAL CONTRIBUTIONS,

BY COLLEGE TYPES

College Type	CWS	NDSL	EOG
White 4-year Publics	$2,144,800	$2,408,822	$1,214,197
Black 4-year Publics	340,597	436,196	189,210
White 4-year Non-Publics	234,323	504,407	239,654
Black 4-year Non-Publics	1,534,325	800,014	1,206,238
White 2-year Publics	669,369	125,457	118,550
Black 2-year Publics	132,115	5,608	44,199
White 2-year Non-Publics	46,602	49,348	27,888
Total, State	$5,102,131	$4,329,852	$3,039,936

Limited Aid. There are a variety of programs or sources of student aid funds which are in the "limited" category of degree of availability. These would include such funds as those available from institutionally administered non-Federal student aid funds from scholarship, loan, and part-time employment programs, Federal aid available to undergraduates from the Health Professions and Nursing Student Assistance Programs and the Law Enforcement Program, and funds available under the Federally Insured Student Loan Program.

In 1970-71, Alabama college students received a total of $1,656,081 in scholarships and loans under the Federal Health Professions Act, the Nurses Training Act, and the Law Enforcement Education Program.[1] Table 15 displays a distribution of these funds by college type.

TABLE 15

ESTIMATED AVAILABLE AID TO UNDERGRADUATES FROM FEDERAL HEALTH PROFESSIONS ACT GRANTS AND LOANS, NURSE'S TRAINING ACT GRANTS AND LOANS, AND LAW ENFORCEMENT EDUCATION PROGRAM GRANTS AND LOANS, 1970-71, BY COLLEGE TYPES

College Type	FHPA	NTA	LEEP	TOTAL
White 4-year Publics	$509,067	$193,673	$384,000*	$1,086,740
Black 4-year Publics	--- ---	--- ---	6,294*	6,294
White 4-year Non-Publics	68,625	--- ---	14,927*	83,552
Black 4-year Non-Publics	61,020	75,670	16,000*	152,690
White 2-year Publics	-- ---	56,381	201,173*	257,554
Black 2-year Publics	-- ---	65,501	--- ---	65,501
White 2-year Non-Publics	-- ---	-- ---	3,750*	3,750
Total, State	$638,712	$391,225	$626,144	$1,656,081

*Estimates, exact distributions were unavailable

In 1970-71, 14,660 Alabama students received loans under the Federally Insured Student Loan Program. The total amount of loan dollars advanced to these students was $13,610,000.[2] There was no readily feasible way to determine where these students were enrolled, therefore, the monies were distributed among college types in Table 16 on the basis of total enrollment proportions. For example, 60.4 percent of all students in the colleges included in this study were enrolled in four-year white public institutions; 60.4 percent of the FISL Funds were "assigned" to this group. This procedure is likely to mean that the actual available dollars to students at colleges where students are from higher family income levels are more than estimated. And, conversely, actual dollars available to students at colleges with lower family income levels are less than estimated. Lenders in the FISL Program are frequently banks or trust companies which lend monies to students from families with long-term acquaintance and credit standing with them. Students from financially handicapped families are less likely to have established this credit standing and, therefore, are less likely to have funds available to them under the FISL Program.

TABLE 16

ESTIMATED AVAILABLE AID TO STUDENTS UNDER THE FEDERAL INSURED STUDENT LOAN PROGRAM, 1970-71 BY COLLEGE TYPES

College Type	Total Dollars
White 4-year Publics	$8,220,440
Black 4-year Publics	734,940
White 4-year Non-Publics	1,197,680
Black 4-year Non-Publics	1,047,970
White 2-year Publics	1,905,400
Black 2-year Publics	258,590
White 2-year Non-Publics	244,980
Total, State	$13,610,000

Restricted Aid. Student aid in the "restricted" category of availability would include non-Federal institutionally administered scholarship, loan, and employment programs which were indicated by institutions to be restrictive in degree of availability, educational benefits under the Alabama State Department of Veterans Affairs, the United States Veterans Administration and the Social Security Administration.

The U.S. Veterans Administration awarded $30,438,334 to 27,553 Alabama students in post-secondary educational programs in 1970-71.[3] However, only 55 percent of these students were enrolled in two-year or four-year colleges. No data for the actual dollars awarded to students at colleges included in this study were available, therefore 55 percent of the total dollars awarded was considered as that available to students at these colleges. The dollar amounts were apportioned in the same procedure as the FISL monies and reported in Table 17.

The Social Security Administration awarded an estimated total of $12,304,490 to Alabama college students in 1970-71.[4] As with VA benefits there was no way to determine where these students were enrolled. The benefits were apportioned in Table 17 among college types according to total enrollments. It should be noted that Social Security benefits generally go

to lower income families and consequently may not be available to help defray the costs of higher education but rather be used by the families of the recipients for other than educational purposes.

The Alabama State Department of Veterans Affairs awarded $503,789 to students in the form of tuition remission grants in 1970-71.[5] These awards are available only to students at public colleges and universities. The distribution of these awards is shown in Table 17.

TABLE 17

ESTIMATED AVAILABLE AID TO STUDENTS UNDER VA EDUCATIONAL BENEFITS, DEPARTMENT OF VETERANS AFFAIRS BENEFITS, AND SOCIAL SECURITY EDUCATIONAL BENEFITS, 1970-71, BY COLLEGE TYPES

College Type	VA Benefits	DVA BENEFITS	SS BENEFITS	TOTAL
White 4-year Publics	$10,111,615	$418,392	$7,431,912	$17,961,919
Black 4-year Publics	904,019	29,304	664,442	1,597,765
White 4-year Non-Publics	1,473,215	-- ---	1,070,491	2,543,706
Black 4-year Non-Publics	1,289,063	-- ---	959,750	2,248,813
White 2-year Publics	2,343,752	54,208	1,722,629	4,120,589
Black 2-year Publics	318,080	1,885	233,785	553,750
White 2-year Non-Publics	301,340	- ---	221,481	522,821
Total, State	$16,741,084	$503,789	$12,304,490	$29,549,363

Not accounted for among the institutions' maintenance of level of support; Federal capital contributions to CWSP, NDSLP, and EOGP; the FISL Program, grants and loans from the Health Professions Act, Nurses Training Act and Law Enforcement Education Program; and aid available under VA Educational Benefits, Department of Veterans Affairs Benefits and Social Security Benefits; are other financial aid awards available from vocational-rehabilitation programs, church or community organizations, and independent donors. However, it has been estimated in other statewide studies that the amount of aid from these unidentified sources is equal to 2 percent of the identified aid. This would mean in this study approximately $1,363,792.

Total Financial Aid Available. The estimates of financial aid in this chapter are estimates of the funds available from public and private sources to supplement the contributions of students and parents toward the costs of higher education. Tables 18 and 19 summarize these estimates by college types and by sources or availability of funds.

TABLE 18

1970-71 TOTAL FINANCIAL AID AVAILABLE, BY COLLEGE TYPES

College Type	Total Dollars
White 4-year Publics	$39,321,677
Black 4-year Publics	3,819,928
White 4-year Non-Publics	6,509,066
Black 4-year Non-Publics	8,832,042
White 2-year Publics	7,518,247
Black 2-year Publics	1,113,211
White 2-year Non-Publics	1,075,436
Total, State	$69,553,399*

*Total includes $1,363,792 of aid from unidentified sources

TABLE 19

1970-71 TOTAL FINANCIAL AID AVAILABLE, BY SOURCE OR AVAILABILITY

Source/Availability	Total Dollars
Institutional Maintenace of Level of Support	$10,902,244
General Availability	12,471,919
Limited Availability	15,266,081
Restricted Availability	29,549,363
Unidentified Sources	1,363,792
Total, State	$69,553,399

However, only the amounts included in the general availability category and those generally available from colleges' maintenance of level of support funds may be considered as being exclusively distributed on the

basis of need. While some needy students may be presumed to receive awards from the limited and restricted categories, the funds from these categories are not generally available and awards are not necessarily based on demonstrated financial need. Thus, the amounts included in the limited and restricted categories cannot be considered as being maximally utilized to meet the financial needs of needy students.

RECIPIENTS OF FINANCIAL AID AT ALABAMA COLLEGES AND UNIVERSITIES

In the previous section, sources and amounts of financial aid were discussed according to type of institution. A discussion of financial aid--need and resources--would be incomplete without some attempt to address the question of who are the students being reached through existing financial aid programs. The purpose of this chapter is to identify the distribution of financial aid according to family income of recipient.

As in earlier chapters, the full development of this subject is limited by the availability of data. The only financial aid funds for which income information about the recipient is available are those categorized as "general". Eighty-five percent of the funds available to students from this category are awarded through the CWS, EOG, and NDSL Programs and the distribution of these funds must be accounted for on the annual Fiscal Operations Reports to the U.S. Office of Education. Using the FISCOP reports for 1970-71, it was possible to describe the distribution of these aids to needy college students.

The total dollars awarded to students under these three programs in 1970-71 were $14,843,338 or approximately 22 percent of <u>all</u> available aid identified in the preceding chapter. Tables 20 through 22 display these amounts by type of award and type of college.

TABLE 20

CWSP AWARDS, 1970-71, BY COLLEGE TYPES

College Type	Total Dollars
White 4-year Publics	$2,516,681
Black 4-year Publics	425,746
White 4-year Non-Publics	292,903
Black 4-year Non-Publics	1,884,960
White 2-year Publics	838,594
Black 2-year Publics	166,339
White 2-year Non-Publics	58,230
Total, State	$6,183,453

TABLE 21

NDSL AWARDS, 1970-71, BY COLLEGE TYPES

College Type	Total Dollars
White 4-year Publics	$2,676,469
Black 4-year Publics	484,662
White 4-year Non-Publics	560,452
Black 4-year Non-Publics	888,904
White 2-year Publics	139,397
Black 2-year Publics	6,231
White 2-year Non-Publics	54,831
Total, State	$4,810,946

TABLE 22

EOGP AWARDS, 1970-71, BY COLLEGE TYPES

College Type	Total Dollars
White 4-year Publics	$1,400,305
Black 4-year Publics	219,659
White 4-year Non-Publics	345,611
Black 4-year Non-Publics	1,653,923
White 2-year Publics	128,428
Black 2-year Publics	70,104
White 2-year Non-Publics	30,909
Total, State	$3,848,939

The FISCOP report requires the financial aid administrators to list the number of students aided under the CWS, EOG, and NDSL Programs by income intervals. Table 23 displays these distributions by college type.

TABLE 23

FAMILY INCOME DISTRIBUTION OF DEPENDENT STUDENTS RECEIVING FEDERAL FINANCIAL AID, 1970-71, BY COLLEGE TYPES

College Type	Less than $3000	$3000 to $5999	$6000 to $7499	$7500 to $8999	$9000 to $11,999	More than $12,000
White 4-year Publics	21.2%	28.1%	15.6%	14.0%	15.5%	5.6%
Black 4-year Publics	47.4	43.2	6.7	1.4	1.2	0.1
White 4-year Non-Publics	12.0	26.0	19.9	14.1	19.8	8.2
Black 4-year Non-Publics	38.7	42.5	10.4	6.1	2.1	0.2
White 2-year Publics	33.8	39.4	13.8	7.0	5.2	0.8
Black 2-year Publics	36.2	53.1	8.5	1.1	1.1	N/A
White 2-year Non-Publics	28.9	26.8	15.5	14.8	12.0	2.1

Table 23 shows that the majority of students who receive aid are from families with incomes of less than $\$$,000, with the exception of students at the white four-year public and non-public colleges. Only slightly less than half of the aided students at the white four-year public colleges and approximately 38 percent of the aided students at white four-year non-public colleges are from families with incomes below $6,000. On the other hand, approximately 90 percent of the needy aid recipients at the black two-year and four-year colleges are from families with incomes below $6,000.

It will be recalled that the income distributions of all students at each type of college varied considerably. Therefore, it should be expected that the income distributions of aided students should vary. Table 24 combines the distributions of students receiving aid with those of all enrolled students by college types.

TABLE 24

FAMILY INCOME DISTRIBUTIONS OF DEPENDENT STUDENTS RECEIVING FEDERAL FINANCIAL AID AND INCOME DISTRIBUTIONS OF ENROLLED UNDERGRADUATES, 1970-71, BY COLLEGE TYPES

College Type	Less than $3000	$3000 to $5999	$6000 to $7499	$7500 to $8999	$9000 to $11,999	More than $12,000
White 4-year Publics	21.2%	28.1%	15.6%	14.0%	15.5%	5.6%
Enrolled	6.8	14.1	8.5	12.8	20.2	37.6
Black 4-year Publics	47.4	43.2	6.7	1.4	1.2	0.1
Enrolled	39.6	37.4	11.2	6.4	3.9	1.5
White 4-year Non-Publics	12.0	26.0	19.9	14.1	19.8	8.2
Enrolled	5.2	12.1	8.2	9.6	19.5	45.4
Black 4-year Non-Publics	38.7	42.5	10.4	6.1	2.1	0.2
Enrolled	32.7	33.8	12.6	8.9	7.7	4.3
White 2-year Publics	33.8	39.4	13.8	7.0	5.2	0.8
Enrolled	12.0	20.5	19.5	15.2	16.3	16.6
Black 2-year Publics	36.2	53.1	8.5	1.1	1.1	---
Enrolled	35.2	35.5	13.7	8.6	4.8	1.8
White 2-year Non-Publics	28.9	26.8	15.5	14.8	12.0	2.1
Enrolled	4.0	11.2	8.3	7.8	23.4	45.2

The comparisons of aided to all enrolled students yield some interesting contrasts. In general, students with higher income appear more likely to receive aid at the white four-year public, four-year non-public and two-year public institutions than at the four other types of colleges. For example, approximately 58 percent of all enrolled students at white four-year public colleges came from families with incomes of $9,000 or above. Approximately 21 percent of the aid recipients at these colleges were from families with incomes at or above $9,000, or a ratio of one aided student to 2.7 enrolled students. By contrast, at the black four-year public colleges approximately 5 percent of all enrolled students came from families with incomes of $9,000

or above, but only slightly over 1 percent of the aided students were from families in these income intervals--a ratio of one aided student to 5 enrolled students. These ratios indicate that an enrolled student at a white four-year public college with a family income of in excess of $9,000 was almost twice as likely to have received aid as a student with similar financial circumstances enrolled at a black four-year public college. One possible explanation for these differences is that black colleges historically have had fewer financial aid dollars, greater needs, and, therefore, have focused their aid monies on students from lower income families.

Table A-1 in Appendix A indicates that families with three dependent children and incomes below $7,000 are not expected to contribute funds toward their college student child's education under the CSS standard. Families with one dependent child (the college student) and incomes below $4,800 are not expected to contribute funds toward their child's education. Table 25 shows the percentages of students at each type of college with family incomes below these levels, who received awards under the EOG, CWS, or NDSL Programs.

TABLE 25

PERCENTAGE OF STUDENTS WHO RECEIVED
FEDERAL AID AND WERE FROM FAMILIES
BELOW $4800 and $7000, 1970-71, BY COLLEGE TYPES

College Type	Percent Below $4800	Percent Below $7000
White 4-year Publics	38.1	59.7
Black 4-year Publics	73.3	95.1
White 4-year Non-Publics	27.6	51.3
Black 4-year Non-Publics	64.2	85.1
White 2-year Publics	57.4	82.4
Black 2-year Publics	68.1	95.0
White 2-year Non-Publics	45.0	66.0

The kinds of awards given to students vary by college type. The FISCOP report requires the aid administrator to list the number of students who receive specific kinds of awards and combinations of awards under the CWS, EOG, and NDSL Programs. Table 26 presents the percentage of aided students who received the various kinds of awards at each type of institution.

TABLE 26

PERCENTAGES OF FEDERALLY AIDED STUDENTS RECEIVING SELECTED AWARDS, BY TYPES OF COLLEGES

College Type	CWSP only	EOGP only	NDSL only	CWSP/ EOG	CWSP/ NDSL	EOG/ NDSL	All Three
White 4-year Publics	28.2	10.0	25.8	5.8	18.5	11.6	9.1
Black 4-year Publics	40.2	0.0	28.6	3.8	8.6	15.0	3.8
White 4-year Non-Publics	17.6	1.7	33.0	3.6	16.6	9.5	18.0
Black 4-year Non-Publics	21.1	8.4	11.4	15.9	14.4	11.8	16.5
White 2-year Publics	64.6	1.2	10.2	12.4	5.0	2.5	4.1
Black 2-year Publics	45.1	24.1	5.2	23.1	0.8	1.8	0.0
White 2-year Non-Publics	27.3	5.2	14.0	8.7	18.0	7.6	19.2

Over half of the students who received aid under one of these three programs received awards which required them to work part-time while enrolled in college. Over half of all aid recipients at all but the white two-year colleges received a loan as part or all of their financial assistance. Less than 22 percent of the aided students at the white two-year public colleges received loans. Only six of the fifteen white two-year public colleges included in this study participate in the NDSL Program in 1972-73. (See Appendix C for a list of colleges included in this study and their participation in the Federal programs.)

Only two types of colleges, the black four-year non-public and white two-year non-publics, awarded over half of their aid recipients assistance which involved two or more of the three aid programs. This represents one of the ways financial aid administrators maximally utilize limited aid resources, by combining awards from different programs or the "packaging" of awards. In the black four-year and two-year public colleges, less than 30 percent of all aid recipients receive "packaged" awards.

ESTIMATES OF ADDITIONAL FINANCIAL AID NEEDED

In the preceding chapters we have shown evidence of the existence of financial barriers to higher education in Alabama, the estimated extent of these barriers (the costs of higher education for the Alabama college population above what the students and their parents may reasonably be expected to contribute), and the efforts of institutions of higher education and State and Federal governments to reduce these barriers and meet the financial needs of the undergraduates enrolled in Alabama colleges and universities. The purpose of this chapter is to complete the final step in the progression and determine the extent of the gap between financial need and available financial aid.

To make this estimate of the gap between financial need and available financial aid, the amounts of financial aid which are generally available must be determined. These are the funds which colleges can maximally utilize to assist financially needy students. The funds from the "limited" and "restricted" categories of availability cannot be maximally utilized to meet the financial needs of needy students because of limitations or restrictions on who can receive these funds.

From the 1972 APPLCN's filed by the financial aid administrators, it is possible to estimate the amount of college maintenance of level of support funds which can be classified as generally available. On their 1972 APPLCN's, financial aid officers were required to estimate the average amount of institutional funds per student which would be provided to students who need and apply for aid. These funds include those institutional

scholarships, loans, etc. awarded on the basis of need and the institutional shares of the NDSL, CWS, or EOG programs.

These institutional estimates for 1972-73, used in conjunction with 1970-71 Federal capital contributions to the NDSL, CWS, and EOG programs discussed in the chapter on sources and amounts of financial aid produces an estimate of generally available aid from Alabama colleges in 1970-71. Table 27 shows the amounts of generally available aid to undergraduate students derived from the APPLCN estimates and the amounts of Federal capital contributions.

TABLE 27

ESTIMATED FINANCIAL NEED AND GENERALLY AVAILABLE AID FROM COLLEGES, 1970-71, BY COLLEGE TYPES (IN MILLIONS OF DOLLARS)

College Type	Financial Need	Available Aid	Difference
White 4-yr Publics	24.0	8.2	-15.8
Black 4-yr Publics	3.1	1.2	-1.9
White 4-yr Non-Publics	5.2	1.5	-3.7
Black 4-yr Non-Publics	9.1	5.1	-4.0
White 2-yr Publics	4.2	1.0	-3.2
Black 2-yr Publics	0.7	0.2	-0.5
White 2-yr Non-Publics	0.8	0.2	-0.6
	47.1	17.4	-29.7

Comparison of the estimates of generally available funds over which colleges exercise control and the estimated financial needs of college students shows a total unmet need of 29.7 million dollars for undergraduate students at the colleges in this study. While the procedure for determining the estimates of generally available aid has some problems (e.g., time differential between institutional estimates and Federal contributions, and the purpose for which the institutional estimates were made, i.e., to apply for Federal assistance), it does permit comparison of estimated aid available and estimated financial need to reveal the general magnitude of the financial aid problem in the State and by college type.

To illustrate the dimensions of the financial aid problem further, if, in addition to the generally available funds, it were assumed that some proportion of the known limited or restricted funds reaches the hands of needy students whom the colleges would wish to assist, an unmet financial need would still exist within the State. For example, if half of the known limited and restricted funds were assumed to be awarded to students demonstrating financial need, the unmet financial need of undergraduates would still reach 4.6 million dollars. If as much as two-thirds of these limited and restricted funds were assumed to reach needy students, an unmet financial need would still persist at some colleges. Table 28 shows the effects of these two assumptions on the estimates of unmet financial need by college types. Additional research is needed to determine the proportions of limited and restricted funds actually reaching needy students.

TABLE 28

ESTIMATED FINANCIAL AID AND NEED UNDER TWO CONDITIONS OF AVAILABILITY OF GENERAL, LIMITED, AND RESTRICTED AID FUNDS, BY COLLEGE TYPES, 1970-71, (IN MILLIONS OF DOLLARS)

College Type	(A)	(B)	(C)	(D)	(E)
White 4-Year Publics	24.0	23.8	-0.2	28.6	+4.6
Black 4-Year Publics	3.1	2.5	-0.6	3.0	-0.1
White 4-Year Non-Publics	5.2	4.0	-1.2	4.9	-0.3
Black 4-Year Non-Publics	9.1	7.0	-2.1	7.5	-1.6
White 2-Year Publics	4.2	4.3	+0.1	5.4	+1.2
Black 2-Year Publics	0.7	0.7	0.0	0.8	+0.1
White 2-Year Non-Publics	0.8	0.2	-0.6	0.8	0.0
	47.1	42.5	-4.6	51.0	+3.9

Column A - Financial need
Column B - Available aid when generally available aid and half of known limited and restricted funds are available to needy students.
Column C - Need under Condition Column A - Column B.
Column D - Available aid when generally available aid and two-thirds of known limited and restricted funds are available to needy students.
Column E - Need under Condition Column A - Column D.

ESTIMATES OF FINANCIAL BARRIERS IN 1972-73

To further suggest the dimensions of the financial aid problem in Alabama, it is appropriate to project into the academic year 1972-73. Using estimates of the expected undergraduate enrollments and anticipated student budgets for this year obtained from the survey of financial aid administrators, two estimates of the projected total financial need of college students in 1972-73 are made. The methods for performing these calculations are contained in Appendix D. Table 29 shows the anticipated student budgets for resident and commuter students in 1972-73 by college types. The best calculations produce a projected estimated total need of $65,769,752, an increase of 14 percent from 1970-71.

TABLE 29

WEIGHTED AVERAGE COSTS FOR RESIDENT AND COMMUTER STUDENTS, BY COLLEGE TYPES, 1972-73

College Type	Resident	Commuter
White 4-year Publics	$2,085	$1,763
Black 4-year Publics	$1,604	$1,334
White 4-year Non-Publics	$2,886	$2,322
Black 4-year Non-Publics	$2,649	$2,430
White 2-year Publics	$1,805	$1,259
Black 2-year Publics	$1,326	$1,028
White 2-year Non-Publics	$2,330	$1,815

To calculate financial need of students in 1972, the College Scholarship Service has altered its standards for parental contribution. The revised CSS standards take into account certain shifts in the economy from 1970 to 1972. If these new CSS standards are included in the input data for the 1972-73 projection, the total financial need reaches $68,126,517.

These need figures for 1972 are slightly inflated by the assumption that students in each income interval in 1970 will remain constant. Although this assumption is made necessary by the available data, it is unlikely that equal percentages of the increased enrollments in 1972 will come from lower income intervals. While enrollments are expected to increase by 20.7 percent from 1970 to 1972, it is unknown whether the actual increase of enrollments from lower income intervals will equal that percentage of increase. The greater proportion of the increase in enrollments should be expected from the middle and upper income intervals. However, the projection does illustrate the effect on the financial aid needs in the State if increases in enrollments were proportionate among income intervals. Although no estimate is attempted here, even more instructive of the dimensions of the financial aid problem would be a consideration of the total financial needs in the State if enrollments were to increase at the lower income levels until college attendance rates were commensurate with those at the higher income levels.

SUMMARY

In this study the effort has been to indicate the presence of financial barriers to higher education in Alabama and to estimate the extent of these barriers. The product of this effort should be viewed as illustrative rather than definitive. The 1970-71 data, accompanying assumptions, and derived totals of need, aid and unmet need describe the conditions of a population that was able to overcome the barriers to higher education and attend college. At what hidden costs, e.g., taking of second jobs or "moonlighting" by parents, delay of purchases of many necessities, expenditures of savings, borrowing against future retirement or life insurance benefits is unknown. Nor will the consequences of some of these costs be known, e.g., how many students will be forced to drop out later before graduation, how many will have to take longer to complete their graduation, how many will not be able to achieve their maximum level and receive the same full measure of quality available to students who are not pressed to work while pursuing their formal education. The projections of need in 1972-73 continue this similar population into the future with some constant increase among the income intervals.

It should be emphasized that still unaccounted for are all those potential students (and their needs) who did not or will not attend college because of financial barriers. While this study did not grapple with the conceptual issues or develop any proposals for the study of this group, it is hoped that the information and method of analysis provided will add to the body of evidence that is requisite to examination of these important areas.

APPENDIX A

A BRIEF DESCRIPTION OF THE COLLEGE SCHOLARSHIP SERVICE THEORY OF NEED ANALYSIS AND THE CSS STANDARD USED IN THE STUDY

In determining the contribution expected from a family toward college expenses, the College Scholarship Service begins with the concept that any determination of ability to pay must relate to the total financial strength of the family. The CSS recognizes that a certain level of income and assets is necessary to maintain the family. Income and assets above this level are, to varying degrees, available for the expense of sending a child to college.

Effective Income. The financial strength of a family is determined by subtracting from the total income the unreimbursed business expenses reported by the parents. This "net" income is then adjusted to allow for Federal and and state income tax payments and unusual expenses expected by the family. After these adjustments, the amount that remains is considered "effective income" available to the family for food, housing, clothing, support of children, participation in social and community activities and discretionary purchases. Education is considered to be the most important discretionary purchase that a family with college-age children can make.

Unusual expenses for which the CSS makes adjustments to "net" income include:

Housekeeping expenses for a working mother. If both parents work, an allowance for the expenses of a working mother is made because it costs more for a family to have two people earn a given income than to have one person earn the same income.

Medical and dental expenses. When the family's medical and dental expenses (including the cost of medical insurance) exceed normal expenditures for a moderate level of income, an allowance is made.

Emergency expenses. Allowances are also provided for certain expenditures that are not normal family expenses and do reduce the available income.

Indebtedness. An allowance for debt is subtracted from the family's assets. In cases where a family has personal indebtedness in excess of the assets, the CSS, recognizing the normal 36-month maximum repayment on consumer debt, provides an allowance against the family's "net" income equal to one-third of the excess.

Expenses for dependents other than children. Some parents must provide total or partial support for their own parents or other relatives. An allowance of $600 is made for each of these dependents.

Institutional allowance. Information is collected, but not deducted from the family's income, for tuition and fees of children attending independent or parochial schools. However, the financial aid officer may make an allowance in such cases based on the institution's philosophy.

Moderate Living Level. The CSS conceives of a "moderate" level of living as a level of living which is neither luxurious nor poverty-stricken A moderate living level is considered as similar to the standard of living of the middle-income third of the population of the United States. This level allows adequate funds for food and housing, for health and nurture of children, and for reasonable participation in social and community activities.

The moderate levels of living established by the CSS have been derived from the spring 1967 cost estimates (adjusted to the February 1971 Consumer Price Index) by the Bureau of Labor Statistics for a moderate standard, adjusted to provide for a college-age child and families of differing sizes.

For families with after-tax incomes below these levels, all income is considered applied to the maintenance of the family. Income above these levels is considered discretionary and available to the family for purchasing goods and services, one of which could be higher education.

Expected Contribution from Effective Income. The CSS assumes that parents will continue to provide, as well as they are able, the basic essentials of life whether the student lives at home or on the college campus. Thus the expected parental contribution to higher education from the effective income includes funds from the "maintenance" level of income and from the discretionary income, if such is present.

Analysis of the changes in the moderate-standard budget indicates that as family size increases, the added cost to provide a moderate standard of living decreases. In order to provide a standard contribution for equivalent incomes representative of continuation provision of the basic necessities of life, the CSS has developed a weighted average budget charge using CSS families in 1968-69 as the population weights. The weighted average budget charge for a nine-month period amounts to approximately $1,050, excluding taxes. Consequently, at the moderate income level, the family would be expected to contribute $1,050 from income to maintenance of the child.

Contributions from Below the Moderate Level. Below the moderate income level, expectations decrease from about $1,050 to $250 at the level at which families are considered to be just emerging from subsistence living. These lowered expectations were derived from Bureau of Labor Statistics consumption data for a family living at a lower standard than that provided at a moderate level. These data, based on February, 1971 price levels, have been adjusted to provide for a college-age child and for families of differing sizes.

The contributions from family income recommended by the CSS are under continual study and are revised as often as necessary to reflect changes in the general economy of the country. Table A-1 shows the present levels of expected contribution from a typical family in which one of the two parents

is working, only one child is in college, there are no heavy medical expenses or other dependents outside the immediate family. The expectations from income for families with complications would, of course, be lower than the amounts shown in the table. In this study the amounts listed in the column under three dependents were used as the standard of parental contribution.

TABLE A-1

TOTAL EXPECTED PARENTS' CONTRIBUTION

FROM NET INCOME BY SIZE OF FAMILY, 1970-71

Net Income (before Federal tax)	Number of Dependent Children							
	1	2	3	4	5	6	7	8
$ 4,800	$ 250							
$ 5,000	260							
$ 5,500	410							
$ 6,000	550	$ 210						
$ 6,500	690	320						
$ 7,000	820	430	$ 210					
$ 7,500	970	550	300					
$ 8,000	1,120	650	400	$ 240				
$ 8,500	1,270	760	490	320	$ 250			
$ 9,000	1,420	870	580	410	330	$ 270	$ 220	
$ 9,500	1,570	990	670	490	410	340	290	$ 260
$10,000	1,720	1,110	770	570	490	420	360	330
$10,500	1,880	1,230	860	660	570	490	440	400
$11,000	2,090	1,340	960	740	650	570	510	470
$11,500	2,290	1,460	1,060	820	720	640	580	540
$12,000	2,490	1,580	1,160	900	800	710	650	610
$12,500	2,680	1,690	1,260	990	880	780	720	670
$13,000	2,870	1,810	1,350	1,080	960	860	790	740
$13,500	3,060	1,960	1,450	1,160	1,050	930	850	810
$14,000	3,260	2,120	1,540	1,250	1,130	1,010	930	870
$14,500	3,450	2,270	1,640	1,330	1,210	1,090	1,010	940
$15,000	3,640	2,420	1,730	1,420	1,290	1,170	1,090	1,020

APPENDIX B

EXAMPLE OF

ALABAMA COMMISSION ON HIGHER EDUCATION

SURVEY OF STUDENT FINANCIAL AID
IN ALABAMA COLLEGES AND UNIVERSITIES

Name and Address of Institution _____

_____

Name and Title of Respondent _____

Tel. # _____

Directions. Please answer each item in accordance with its specific instructions. All answers will be treated as confidential. The study report will contain no data references to individual institutions. In cases where exact figures are unavailable, give your best estimate. If your estimate is highly speculative, place an asterisk (*) next to it. If you wish you may explain any answer in the "Comments" space on the last page. Please return the completed questionnaire to the Commission by no later than April 15, 1972.

Please estimate the percentage of your institution's full-time undergraduate students who:

Live at home (commuters)	_____%
Live away from home (dormitories, apartments, etc.)	_____%
Pay out-of-state (district) fees	_____%
Are female	_____%
Are considered independent students (for financial aid purposes)	_____%

UNDERGRADUATE EXPENSES

Directions: Using your professional judgment (and not necessarily published budget figures), please estimate the expenditures of a typical full-time under-graduate at your institution for 1970-71 (FY 1971) and for 1972-73 (FY 1973). You may choose to use the figures submitted to the College Scholarship Service or the American College Testing Program in completing these items.

	1970-71	1972-73
A. Tuition and/or fees required of all students	_____	_____
B. Additional out-of-state (district) fees, if any	_____	_____
C. Books and supplies	_____	_____
For Students Living at Home (Commuters):		
D. Meals/housing	_____	_____
E. Transportation	_____	_____
F. Usual personal living expenses	_____	_____
For Students Living away from Home:		
G. Meals/housing	_____	_____
H. Transportation	_____	_____
I. Usual personal living expenses	_____	_____
If you would add to this budget to reflect a typical male's or female's expenditures how much would you add? Male /_/ Female /_/	_____	_____
If you would add to this budget to reflect a typical independent student's expenditures, how much would you add?	_____	_____

FINANCIAL AID TO UNDERGRADUATE STUDENTS IN 1970-71 (FISCAL YEAR 1971)

Directions: Please list the number of individuals who received student aid administered by your college and the total dollar amounts of that aid by the categories identified below. We have obtained the number of students and total dollars awarded under the NDSL, College Work-Study, and/or Educational Opportunity Grant programs from your 1971 Fiscal Operations Report. Therefore, we ask that you NOT list these awards or awards or monies used to match them. We are interested in obtaining data on the additional funds your college might have awarded to students in FY 1971.

GRANTS/SCHOLARSHIPS	NUMBER OF STUDENTS	TOTAL DOLLARS
Federal Health Professions Grants	_____	_____
Federal Nursing Scholarships	_____	_____
Law Enforcement Education Grants	_____	_____
Scholarships or Grants-in-Aid based primarily upon a "performance" rather than a "need" criteria	_____	_____
Scholarships based primarily upon financial need	_____	_____
LOANS		
Federal Health Professions Loans	_____	_____
Nurses Training Act Loans	_____	_____
Law Enforcement Education Loans	_____	_____
Institutional Loans (exclude short-term and deferred payment plans)	_____	_____
WORK		
Student jobs not administered by the financial aid office but paid from institutional funds. (Included here would be jobs in departments and administrative offices which are paid from institutional funds but are NOT part of the CWSP effort.)	_____	_____

Please provide your best professional estimate of the dollar amounts of aid available to your undergraduate students from each of the following sources in 1970-71 (FY 1971).

GRANTS/SCHOLARSHIPS

Aid paid and controlled by off-campus sources (Included here would be such things as PTA and church scholarships.) $ _____

LOANS

Federally Insured Student Loans $ _____

Other Non-Institutional Loan Programs (Include funds from independent programs such as Picket and Hatcher Educational Fund, etc.) $ _____

WORK

Student jobs paid by on-campus contractors (Included here would be such things as food service enterprises, laundry, etc.) $ _____

Student jobs paid by off-campus agencies or employers (Included here would be part-time jobs "downtown" and off-campus.) $ _____

Note: Do not include work which is part of the CWSP effort.

COMMENTS:

Please return to: State of Alabama
Commission on Higher Education
24 South Hull Street
Montgomery, Alabama 36104

APPENDIX C

COLLEGES INCLUDED IN THIS STUDY, PARTICIPATION IN THREE MAJOR AID PROGRAMS, 1970 and 1972

White Four-Year Public Colleges

Name	1970-71 NDSLP	EOGP	CWSP	1972-73 NDSLP	EOGP	CWSP
Florence State University	X	X	X	X	X	X
Jacksonville State University	X	X	X	X	X	X
Livingston State University	X	X	X	X	X	X
Troy State University-Troy	X	X	X	X	X	X
University of South Alabama	X	X	X	X	X	X
Auburn University-Auburn	X	X	X	X	X	X
Auburn University-Montgomery	O	O	O	X	X	X
The University of Alabama	X	X	X	X	X	X
University of Alabama in Birmingham	X	X	X	X	X	X
University of Alabama in Huntsville	X	X	X	X	X	X

Black Four-Year Public Colleges

Alabama A & M University	X	X	X	X	X	X
Alabama State University	X	X	X	X	X	X

White Four-Year Non-Public Colleges

Athens College	X	X	X	X	X	X
Birmingham-Southern College	X	X	X	X	X	X
Huntingdon College	X	X	X	X	X	X
Judson College	X	X	X	X	X	X
Mobile College	X	X	X	X	X	X
Samford University	X	X	X	X	X	X
Spring Hill College	X	X	X	X	X	X
St. Bernard College	X	X	X	X	X	X

Black Four-Year Non-Public Colleges

Daniel Payne College	X	X	X	X	X	X
Oakwood College	X	X	X	X	X	X
Miles College	X	X	X	X	X	X
Selma University*	O	X	X	X	X	X
Stillman College	X	X	X	X	X	X
Talladega College	X	X	X	X	X	X
Tuskegee Institute	X	X	X	X	X	X

*For the purposes of this study, Selma University is included in the black four-year non-public colleges. This grouping is necessary to insure a sufficient number of colleges within each grouping for analysis and to maintain the confidentiality of institutional data.

Black Two-Year Public Colleges

Name	1970-71 NDSLP	1970-71 EOGP	1970-71 CWSP	1972-73 NDSLP	1972-73 EOGP	1972-73 CWSP
S.D. Bishop State JC	0	X	X	0	X	X
T.A. Lawson State JC	X	X	X	X	X	X

White Two-Year Public Colleges

Alexander City State JC	X	X	X	X	X	X
A.P. Brewer State JC	0	X	X	0	X	X
J.C. Calhoun State Technical JC	0	X	X	0	X	X
J. Davis State JC	0	0	X	0	0	X
Enterprise State JC	X	X	X	X	X	X
J.H. Faulkner State JC	0	0	X	0	X	X
Gadsden State JC	X	X	X	X	X	X
P. Henry State JC	0	X	X	0	X	X
Jefferson State JC	X	X	X	X	X	X
Northeast Alabama State JC	X	X	X	X	X	X
Northwest Alabama State JC	0	X	X	0	X	X
Snead State JC	X	0	0	0	X	X
Southern Union State JC	X	X	X	X	X	X
G.C. Wallace State Technical JC	0	0	X	0	0	X
L.B. Wallace State JC	0	X	X	0	X	X

White Two-Year Non-Public Colleges

Alabama Christian College	X	X	X	X	X	X
Cullman College	X	X	X	X	X	X
Marion Institute	0	0	0	X	X	X
Walker College	0	0	X	0	0	X

APPENDIX D
ALTERNATIVE MEASUREMENTS OF FINANCIAL NEED

Measured financial need is a function of family incomes and sizes, the CSS expected parental contribution standard, student and family choices between high and low expense budget colleges, and the way these elements are combined. Changes in average family income, the distribution of family incomes, college expense budgets, the expected family contribution, the ways students and families choose between high and low budget colleges, or the procedure for combining these elements will change the indicated financial need.

For example, consider ten hypothetical families such as those presented in Table D-1. The families are divided into two groups, Group X and Group Y. Group X contains four families and Group Y, six. The average income of the Group X families is $5,250. Average income for the Group Y families is $4,667. One child in each family in each group attends college. The college attending children in Group X families attend colleges which have budgeted expenses of $2,000. The college attending children in Group Y families attend colleges with budgeted expenses of $1,000. With the exceptions of family income and the family choice of a high or low budget college, all other features of Group X and Group Y families are assumed equal. They have identical numbers of non-college attending children, identical extraordinary expenses, etc. An additional assumption underlying Table D-1 is that high income families will, on the average, choose colleges with higher student expense budgets.

One can now impose a contribution standard upon the income, choice and budget figures presented in Table D-1. The procedure is in principle analogous to that procedure used in the text. The contribution standard is that

families whose incomes are $4,000 or less can contribute nothing toward budgeted college expenses; families whose incomes are $5,000 can contribute $1,000 toward budgeted college expenses for one child in college; and families whose incomes are $6,000 or greater can meet total budgeted college expenses. It must be emphasized that this particular contribution standard is purely hypothetical, as are the income and budget figures in the examples in this discussion. They are presented only to illustrate the difference in results that arise when different procedures for combining the same data are used to estimate financial need.

TABLE D-1

AN ILLUSTRATION OF THE EFFECTS OF ALTERNATIVE ESTIMATION PROCEDURES UPON TOTAL INDICATED FINANCIAL ASSISTANCE REQUIREMENTS

Col. 1 Family Group	Col. 2 Family	Col. 3 Family Income Before Taxes	Col. 4 Expected College Expense Budget	Col. 5 Expected Family Contribution	Col. 6 Need N Col. 4 Less Col. 5	Col. 7 Total Need For Family Group	Col. 8 Weighted Average Budget	Col. 9 Need N* Col. 8 Less Col. 5	Col. 10 Total Need For Family Group
		Y	B	C	N		$\overline{B}$	N*	
X	1	$4,000	$2,000	$ 0	$2,000	$3,000	$1,400	$1,400	$1,800
	2	$5,000	$2,000	$1,000	$1,000		$1,400	$ 400	
	3	$6,000	$2,000	$2,000	$ 0		$1,400	$ 0	
	4	$6,000	$2,000	$2,000	$ 0		$1,400	$ 0	
Y	5	$3,000	$1,000	$ 0	$1,000	$2,000	$1,400	$1,400	$4,000
	6	$4,000	$1,000	$ 0	$1,000		$1,400	$1,400	
	7	$5,000	$1,000	$1,000	$ 0		$1,400	$ 400	
	8	$5,000	$1,000	$1,000	$ 0		$1,400	$ 400	
	9	$5,000	$1,000	$1,000	$ 0		$1,400	$ 400	
	10	$6,000	$1,000	$1,000	$ 0		$1,400	$ 0	
					ΣN = $5,000			ΣN^* = $5,800	

The estimated financial need of each family in each group is indicated in column 6 of Table D-1. The financial need figures in column 6 are calculated on the basis of the particular budgets at the particular colleges to which the families in each group actually choose to send their children.

The example presented assumes only two kinds of colleges, high budget colleges for Group X and low budget colleges for Group Y. In a real situation there might be as many as seven different types of colleges to which Group X families choose to send children, but in this illustration each college is assumed to have a budget equal to $2,000. (Relaxing this assumption and treating the budgeted college expenses for Group X families as a weighted average of various different budgets would needlessly complicate the example. The complication arises because it would then be necessary to consider the effect upon total estimated financial need of choice patterns of Group X families among higher and lower expense colleges within the group of high budget colleges.) Similarly, all of the colleges to which Group Y families choose to send children are assumed to have expense budgets exactly equal to $1,000.

The sum of the individual family financial needs calculated on the basis of the particular budgets at the particular colleges to which the families actually choose to send their children is the sum of either column 6 or 7 and equals $5,000. This procedure for calculating financial need is symbolically defined as follows:

$$\sum N = \sum_{i=1}^{n} (B\text{-}C)_i$$

where (B-C) is the financial need of the ith family and there are n families. In Table D-1, n=10, B_i is column 4, C_i is column 5, and $(B\text{-}C)_i$ is column 6. We will call this procedure the disaggregated procedure.

Consider now a different procedure for calculating total financial need. The average budgeted college expense, weighted by the proportions of college students attending high and low budget colleges is as follows:

$$\overline{B} = (.4 \times \$2,000) + (.6 \times \$1,000) = \$1,400$$

The weighted average college expense budget of $1,400 appears everywhere in column 8. Estimated financial need for each family is now the difference between standard family contribution (C) in column 5 and the weighted average expense budget ($\overline{B}$) in column 8. This procedure for calculating financial need is symbolically defined as follows:

$$\sum N^* = \sum_{n} \overline{/}(xB_X - yB_Y) - \underline{C}\overline{/}_i$$

where x equals the fraction of families in Group X, y equals the fraction of families in Group Y, B_X equals the budgeted expenses at high budget colleges and B_Y equals budgeted expenses at low budget colleges. In Table D-1, $\overline{/}(xB_X - yB_Y) - \underline{C}\overline{/}_i$ is column 9. We will call this procedure the weighted average budget procedure.

Estimated family financial need calculated with this procedure is indicated in column 9 of Table D-1. This second procedure of calculating financial need yields a total financial need equal to $5,800. This is a 16 percent difference.

The difference arises largely because of some inherent characteristics of averages. As can be seen in Table D-1, column 7, the total financial need for Group X families under the first procedure of calculation equals $3,000. The total financial need for Group Y families equals $2,000 under the first procedure of calculation. Under the second procedure of calculation, the total financial need of Group X families equals $1,800 in Table D-1, column 10. Similarly, the total financial need of Group Y families equals $4,000. Calculating financial needs upon the basis of the weighted average budget procedure raises the total financial need of Group Y families more than it lowers the total financial need of Group X families. Hence the difference in the totals of column 7 and 10. But the relative magnitudes of the two estimates of total financial need are not fixed by the calculation procedure. If the

magnitude of the college expense budget is changed to $500 for Group Y families, the relative magnitudes of the two estimates of financial need are reversed. This calculation is presented in Table D-2.

TABLE D-2

A SECOND ILLUSTRATION OF THE EFFECTS OF ALTERNATIVE ESTIMATION PROCEDURES UPON TOTAL INDICATED FINANCIAL ASSISTANCE REQUIREMENTS

Col. 1 Family Group	Col. 2 Family	Col. 3 Family Income Before Taxes	Col. 4 Expected College Expense Budget	Col. 5 Expected Family Contribution	Col. 6 Need N Col. 4 Less Col. 5	Col. 7 Total Need For Family Group	Col. 8 Weighted Average Budget	Col. 9 Need N* Col. 8 Less Col. 5	Col. 10 Total Need For Family Group
		Y	B	C	N		$\bar{B}$	N*	
X	1	$4,000	$2,000	$ 0	$2,000	$3,000	$1,100	$1,100	$1,200
	2	$5,000	$2,000	$1,000	$1,000		$1,100	$ 100	
	3	$6,000	$2,000	$2,000	$ 0		$1,100	$ 0	
	4	$6,000	$2,000	$2,000	$ 0		$1,100	$ 0	
Y	5	$3,000	$ 500	$ 0	$ 500	$1,000	$1,100	$1,100	$2,500
	6	$4,000	$ 500	$ 0	$ 500		$1,100	$1,100	
	7	$5,000	$ 500[1]	$ 500	$ 0		$1,100	$ 100	
	8	$5,000	$ 500[1]	$ 500	$ 0		$1,100	$ 100	
	9	$5,000	$ 500[1]	$ 500	$ 0		$1,100	$ 100	
	10	$6,000	$ 500[2]	$ 500	$ 0		$1,100	$ 0	
					$\sum N$ = $4,000			$\sum N^*$ = $3,700	

[1] These figures can be as much as $1,000, but only $500 is needed to meet the budget in column 4. The $1,000 figure is used in the calculation of column 9.

[2] This figure is $1,100 when used in the calculation of column 9.

The relative magnitude of the two estimates are also sensitive to changes in average family incomes, changes in income distributions, changes in the contribution standard and changes in the choice pattern between high and low budget colleges.

The differences in the relative magnitudes of $\sum N$ and $\sum N^*$ in Tables D-1 and D-2 illustrate that the procedure of calculating financial need which

uses weighted average college expense budgets does not always produce a higher estimate than the alternative procedure. Nor does the procedure which uses weighted average budgets always produce a lower estimate. Thus, one cannot say that one procedure is an underestimate of the other, or that each is respectively an over and underestimate of some "true" total financial need. Neither can one say that one procedure is somehow intrinsically better or worse than the other. Which procedure is best in a particular situation depends upon what question is being asked.

The weighted average procedure provides an answer to a question which might be framed as follows:

> If we were to provide direct financial assistance to enable Alabama students to attend college, if the rationale for providing any assistance to any financial aid recipient is primarily and basically that he is a resident who exhibits need, and if the basis for determining need for each potential aid recipient is the average income and expense experience of all Alabamians in all colleges, then how much total financial assistance is required to meet estimated aid needs?

The disaggregated procedure provides an answer to an alternative question which might be framed as follows:

> If we are to provide direct financial assistance to enable Alabamians to attend college, if the rationale for providing any assistance to each financial aid recipient takes into account that the need of any student depends upon his choice of a high or low expense college, and if the financial system is to be a 'neutral' factor in students' choices among schools, then how much total financial assistance is required to meet estimated aid needs?

The disaggregated procedure was used in calculating financial needs in this study. There were two reasons for using this procedure. One, it was assumed that some of the students' reasons for attending a particular college or type of college were independent of financial costs and/or available financial aid and that these reasons would continue to influence the decisions to enroll in a particular college or type of college. Put another way, college-choice patterns are likely to remain relatively stable, in the short run, in

the presence or absence of increased available aid. Generally, black students are likely to continue to choose black colleges, white students are likely to continue to choose white colleges, vocationally-oriented students are likely to choose community colleges, and liberal arts-oriented students are likely to continue to choose four-year colleges. A picture of student aid needs that were, for the most part, based on the assumption of stable patterns of college choices was desirable.

Two, the disaggregated procedure is appropriate for considering financial needs according to one of the College Financial Aid Principles subscribed to by more than 1,200 college and high school members of the College Scholarship Service Assembly. "The primary purpose of a collegiate financial aid program should be to provide financial assistance to accepted students who, without such aid, would be unable to attend that college."[1] In other words, this study considers the financial needs of, and aid to, Alabama students according to their choices of colleges for other than financial reasons.

In the short run, the difference between these methods of analysis and the answers they provide to the question of financial need results in differences in estimated total financial assistance requirements. But in the long run, the difference affects student choices among high and low out-of-pocket expense colleges and consequently the allocation of resources between private sector and public sector undergraduate higher education. The way this potential for financial aid to affect student choices among colleges is realized depends upon the way aid administration procedures reflect the rationale underlying one or the other methods for estimating need.

For example, consider families #1 and #6 in Table D-1. Each of these families has the same income. Each family has one child in college. Each family is assumed to have the same number of dependents, non-college attending

children, and each family is assumed to have the same extraordinary expense load. Let us assume that financial aid is available to meet the total measured need of each family, or some fraction of need which is constant for all families regardless of college choice, total need, or other factors. Let us also assume that initially students base their preferences between low expense (i.e., public) and high expense (i.e., private) colleges on some criterion other than expected budgets and the existence of financial aid. This criterion could be curriculum (e.g., engineering vs. liberal arts), or admissibility of the student to the institution. If the measured need of each family is totally met, and if need is determined by the disaggregated procedure, family #1 receives financial aid in the amount of $2,000 and family #6 in the amount of $1,000 (column 5, Table D-2), or each receives some equal fraction of these amounts. In this case, the provision of financial aid has a neutral effect upon college choice. Each family can indulge its preference for type of college without resorting to sources of financing not included in the "standard". To the extent that families have preferences among colleges which are of a non-financial nature, an aid program which administers assistance on the basis of need as estimated by the disaggregated procedure will not affect college choice. To this extent aid is neutral. (This idea of "neutrality" will subsequently be modified.)

Consider now an aid program which administers assistance on the basis of need as calculated by the weighted average procedure. Because the weighted average budget is an imperfect substitute for the actual budgets facing families #1 and #6, the actual need of family #1 is not completely met if financial aid is granted on the basis of estimated need. Similarly, the actual need of family #6 is more than met if financial aid is granted on the basis of estimated need. Thus, there is a financial incentive for students'

families to choose to send them to low expense (i.e., public) rather than high expense (i.e., private) colleges. Given the original preferences of students, a financial aid program which calculates and administers financial assistance requirements upon the basis of the weighted average estimation procedure can be expected to alter choice patterns between private and public colleges. Examination of the situations of families #1 and #6 and #2 and #7 in Table D-2 illustrates that the alternative ways of defining and meeting aid needs affect the financial incentives to enroll in public versus private colleges regardless of the relative magnitudes of total financial assistance requirements calculated with the alternative methods.

Calculating and administering aid needs across the board upon the basis of the weighted average budget procedure creates a financial incentive to enroll in public rather than private colleges. The above discussion of this potential outcome, however, relied upon the assumption that families' initial college choices were unaffected by financial considerations. This is clearly not the case. Although the effect of relaxing this assumption cannot be readily illustrated in terms of Tables D-1 and D-2, it is nevertheless fairly obvious. The financial aid deficits in the text were calculated upon the basis of estimated enrollments, educational costs, and available financial aid. But all of the students involved in these calculations were actually attending college. So even in the absence of additional aid, the deficits were somehow being met. In terms of the CSS Standard, families are contributing more than expected, students are borrowing more than is reasonable, or students are working more than what is considered feasible. In this sense, available financial aid is considered inadequate. There can be no doubt that some students who, in the absence of financial constraints, would have preferred to attend private colleges were in fact attending public colleges

because of the lower out-of-pocket costs to them. Implementation of an aid program which is not tied to particular colleges will enable some students to react to their preferences and choose to attend private rather than public colleges. Administration of such an aid program through the financial aid offices of the colleges at which students are enrolled would tend to limit the incentive for students already in college to transfer from one type of school to another. But this limiting effect would be absent in the calculations of high school graduates applying for admission as freshmen to various institutions. The mere existence of an aid program that is not tied to a particular college will affect student choice.

In terms of the numerical examples offered above, an aid program in which the calculations and administration of aid needs were based upon the disaggregated procedure, the net effect would be to encourage an enrollment shift toward private colleges. This effect, however, is dependent upon financial aid being available to those students who would have attended college anyway, even in its absence. To the extent that initial choices among colleges are made on financial as well as curricular grounds, an aid program administered on a weighted average basis will also have a positive effect upon private college enrollments. If a financial aid program is effective in reducing the absolute as well as the relative financial barriers to attending college, it will extend the opportunity to attend to qualified children of families who would otherwise have been unable to enroll in college because of the money costs. It is reasonable to assume that the majority of these additional students would attend public colleges. The outcome of such an extension of enrollment would be to enlarge public college attendance relative to private college attendance. Similarly, extension of college opportunities to children of families who are currently financially

excluded would aggravate the effect of an aid program calculated and administered on a weighted average budget procedure to swing the enrollment balance toward public colleges.

How the effect of these various forces would ultimately work out is a topic beyond the scope of the discussion here. But it is clear that any aid program, however need is calculated and aid administered, is unlikely to have a truly neutral influence upon the structure of college enrollments, private versus public, high cost versus low cost. This is an important outcome which must be taken into account in an adequate long-range plan. The importance of this effect arises because any tendency for a financial aid program to swing enrollments toward public rather than private colleges carries with it an implied commitment to increase the absolute level of state support for public institutions. Likewise, an aid program which tends to swing the enrollment balance toward private colleges will place severe strains upon their traditional modes of finance. Failure to account for these effects and failure to plan to meet the contingencies they create would result in chaos.

The estimated weighted budgets for resident and commuter students at all colleges combined in 1970-71 were, $1968 and $1520, respectively. When these budgets are used, when the income distribution for all dependent students at all colleges are combined, and when an average expected parental contribution for each interval is used, the total financial need for the State is estimated to be $44,792,368. The calculations appear in Table D-3. The average student contribution was estimated at $500 per student.

When the dependent college students were grouped by college types, when separate income distributions and separate budgets were used for each college type, the total financial need for the State was estimated to be $47,001,412 in 1970-71. The calculations appear in the text.

TABLE D-3

ESTIMATED FINANCIAL NEEDS OF DEPENDENT ALABAMA COLLEGE STUDENTS

AGGREGATE OF ALL COLLEGE TYPES, WEIGHTED AVERAGE BUDGET PROCEDURE, 1970-71

Enrollment Distribution By Parental Income			Student Costs			
Income Level	% Dist.	# of Students	Total Cost for This Interval[1]	Total Parental Contribution	Total Student Self-Help	Total Additional Aid Required
Less than $3,000	12	7,748	$13,755,328	$---	$3,874,000	$9,881,328
$3,000 to $5,999	18	11,622	$20,633,440	$---	$5,811,000	$14,822,440
$6,000 to $7,499	11	7,102	$12,608,544	$---	$3,551,000	$9,057,544
$7,500 to $8,999	12	7,748	$13,755,328	$3,409,120	$3,874,000	$6,472,208
$9,000 to $11,999	17	10,976	$19,486,208	$9,439,360	$5,488,000	$4,558,848
$12,000 and up	30	19,369	$34,386,800	$33,508,370	$9,684,500	-$8,806,070[2]
Total	100	64,565	$114,625,648	$46,356,850	$32,282,500	$44,792,368

[1] 43% commuters, 57% residents

[2] Not included in total, contributions exceed costs at this interval.

Estimates of student financial need by types of colleges in 1972-73 using weighted average budgets can be made from expected enrollments obtained from the survey of aid administrators. It is assumed that the percentage of college students who are commuters or residents, who pay out-of-state fees, who are considered independent for financial aid purposes, and who come from families in particular income intervals will remain constant from 1970 to 1972. Student and parental contributions are assumed to remain the same as they were in 1970. Only the enrollments and budgets are changed. The estimated need for the State for 1972 is $65,769,752. Tables D-4 through D-10 show who these estimates are derived for each college type.

Since the CSS Standard for expected parental contributions changed from 1970 to 1972, this factor is also considered in estimating financial needs in 1972-73. The change in the standard, in connection with the changes in enrollments and budgets yield an estimated need for 1972-73 of $68,126,517. Tables D-11 through D-17 show how these estimates are derived for each college type.

TABLE D-4

ESTIMATED FINANCIAL NEED AT

WHITE FOUR-YEAR PUBLIC COLLEGES

1972-73

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total	Per Student	Total
Less than $3,000	7	3,194	$ 6,330,547			$ 1,545,850	$ 1,498	$ 4,784,612
$3,000 to $5,999	14	6,389	12,662,742			3,092,325	1,498	9,570,722
$6,000 to $7,499	9	4,107	8,230,065			1,987,775	1,498	6,152,286
$7,500 to $8,999	13	5,932	11,758,326	$ 440	$ 2,610,080	2,871,100	1,058	6,277,147
$9,000 to $11,999	20	9,127	18,089,348	860	7,849,220	4,417,475	637	5,822,653
$12,000 and up	37	16,884	33,463,412	1,840	31,066,560	8,171,900	-342[2]	-5,775,048[2]
Total	100	45,633	$ 90,534,440		$ 41,525,860	$ 22,086,425	$ 715	$ 33,925,320[3]

[1] 32% commuters, 68% residents

[2] Not included in total, contributions exceed costs for this interval

[3] Included in total, $1,317,900 for out-of-state fees

TABLE D-5

ESTIMATED FINANCIAL NEED AT

BLACK FOUR-YEAR PUBLIC COLLEGES

1972-73

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total	Per Student	Total
Less than $3,000	40	1,764	$ 2,683,602			$ 825,600	$ 1,053	$ 1,858,002
$3,000 to $5,999	37	1,632	2,482,804			763,800	1,053	1,719,004
$6,000 to $7,499	11	485	739,278			227,025	1,056	512,253
$7,500 to $8,999	6	265	403,196	$ 440	$ 116,600	124,025	613	162,571
$9,000 to $11,999	4	176	267,634	860	151,360	82,400	192	33,874
$12,000 and up	2	88	133,954	1,640	144,320	41,200	-585[2]	-51,566[2]
Total	100	4,410	$ 6 710,468		$ 412,280	$ 2,064,050	$ 971	$ 4,298,604[3]

[1] 31% commuters, 69% residents

[2] Not included in total, contributions exceed costs for this interval

[3] Included in total, $12,900 for out-of-state fees

TABLE D-6

ESTIMATED FINANCIAL NEED AT

WHITE FOUR-YEAR NON-PUBLIC COLLEGES

1972-73

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total	Per Student	Total
Less than $3,000	5	296	$ 769,114			$ 142,100	$ 2,118	$ 627 014
$3,000 to $5,999	12	710	1,844,836			340,850	2,118	1,503,986
$6,000 to $7,499	8	473	1,229,024			227,025	2,118	1.001,999
$7,500 to $8,999	10	591	1,535,631	$ 440	$ 260,040	283,675	1,678	991,916
$9,000 to $11,999	20	1,183	3,073,860	860	1,017,380	567,875	1,258	1,488,605
$12,000 and up	45	2,661	6,914,236	1,840	4,896,240	1,277,325	278	740,671
Total	100	5,914	$ 15,366,701		$ 6,173,660	2,838,850	$ 1,074	$ 6,354,191

[1] 51% commuters, 49% residents

TABLE D-7

ESTIMATED FINANCIAL NEED AT

BLACK FOUR-YEAR NON-PUBLIC COLLEGES

1972-73

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total	Per Student	Total
Less than $3,000	33	2,182	$ 5,674,989			$ 1.027.750	$ 2,130	$ 4,647,239
$3,000 to $5,999	34	2,248	5,846,643			1,058,800	2,130	4,787.843
$6,000 to $7,499	13	860	2,236,705			405,100	2,130	1,831,605
$7,500 to $8,999	9	595	1,547,488	$ 440	$ 261,800	280,275	1,690	1,005,413
$9,000 to $11,999	8	529	1,375,834	860	454,940	249,125	1,270	671,769
$12,000 and up	3	198	514,962	1,640	324,720	93,250	490	96,992
Total	100	6,612	$ 17,196,621		$ 1,041,460	$ 3,114,300	$ 1,972	$ 13,040,861

[1] 22% commuters, 78% residents

TABLE D-8

ESTIMATED FINANCIAL NEED AT

WHITE TWO-YEAR PUBLIC COLLEGES 1972-73

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total	Per Student	Total
Less than $3,000	12	1,413	$ 1,819,974			$ 590,650	$ 870	$ 1,229,324
$3,000 to $5,999	20	2,355	3,033,106			984,350	869	2,048,756
$6,000 to $7,499	20	2,355	3,033,106			984,350	869	2,048,756
$7,500 to $8,999	15	1,766	2,274,244	$ 440	$ 777,040	738,200	429	759,004
$9,000 to $11,999	16	1,884	2,426,268	860	1,620,240	787,500	9	18,528
$12,000 and up	17	2,001	2,577,034	1,730	3,461,730	836,450	-860[2]	-1,721,146[2]
Total	100	11,774	$ 15,163,732		$ 5,859,010	$ 4,921,500	518	6,104,368

[1] 95% commuters, 5% resident

[2] Not included in total, contributions exceed costs for this interval

TABLE D-9

ESTIMATED FINANCIAL NEED AT

BLACK TWO-YEAR PUBLIC COLLEGES

1972-73

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total	Per Student	Total
Less than $3,000	36	809	$ 850,939			$ 323,650	$ 652	$ 527,289
$3,000 to $5,999	35	786	826,748			314,400	652	512,348
$6,000 to $7,499	14	315	331,330			126,050	652	205,280
$7,500 to $8,999	9	202	212,472	$ 440	$ 88,880	80,800	212	42,792
$9,000 to $11,999	5	112	117,806	860	96,320	44,800	208	-23,314[2]
$12,000 and up	1	22	23,140	1,640	36,080	8,800	- 988	-21,740[2]
Total	100	2,246	$ 2,362,435		$ 221,280	$ 898,500	$ 573	$ 1,287,709

[1] 92% commuters, 8% residents

[2] Not included in total, contributions exceed costs at these intervals

TABLE D-10

ESTIMATED FINANCIAL NEED AT

WHITE TWO-YEAR NON-PUBLIC COLLEGES

1972-73

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total	Per Student	Total
Less than $3,000	4	52	$ 107,420			$ 21,700	$ 1,648	$ 85,720
$3,000 to $5,999	11	144	297,530			60,700	1,648	237,330
$6,000 to $7,499	8	105	219,020			43,850	1,668	175,170
$7,500 to $8,999	8	105	219,020	$ 440	$ 46,200	43,850	1,228	128,970
$9,000 to $11,999	23	301	623,970	860	258,860	125,850	794	239,260
$12,000 and up	46	601	1,243,830	1,840	1,105,840	251,250	-188[2]	-113,260[2]
Total	100	1,308	$ 2,710,790		$ 1,410,900	$ 546,700	$ 580	$ 758,699

[1] 50% commuters, 50% residents

[2] Not included in total, contributions exceed costs at this interval

TABLE D-11

ESTIMATED FINANCIAL NEED AT

WHITE FOUR-YEAR PUBLIC COLLEGES, 1972-73

1972 CCS STANDARD

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total	Per Student	Total
Less than $3,000	7	3,194	$ 6,330,406			$ 1,545.850	$ 1.497	$ 4,784,556
$3,000 to $5,999	14	6,389	12,662,897			3,092,325	1,497	9,570,572
$6,000 to $7,499	9	4,107	8,139,987			1,987.775	1,497.	6,152.212
$7,500 to $8,999	13	5,932	11,757,064	$ 330	$ 1,957,560	2,871,100	1,167	6,928,404
$9,000 to $11,999	20	9,127	18,089,233	760	6,936,520	4,417.475	737	6,735,238
$12,000 and up	37	16,884	33,463,374	1,880	31,741,920	8,171.900	-382[2]	-6,450,446[2]
Total	100	45,633	$ 90,442,961		$ 40,636,000	$ 22,086.425	$ 748	$35,488,882[3]

[1]32% commuters, 68% residents

[2]Not included in total, contributions exceed costs for this interval

[3]Included in total, $1,317,900 for out-of-state fees

TABLE D-12

ESTIMATED FINANCIAL NEED AT

BLACK FOUR-YEAR PUBLIC COLLEGES, 1972-73

1972 CSS STANDARD

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total	Per Student	Total
Less than $3,000	40	1,764	$ 2,681,766			$ 825,600	$ 1,052	$ 1,856,166
$3,000 to $5,999	37	1,632	2,481,108			763,800	1,052	1,717,308
$6,000 to $7,499	11	485	738,774			227,025	1,055	511,749
$7,500 to $8,999	6	265	402,920	$ 330	$ 87,450	124,025	722	191,445
$9,000 to $11,999	4	176	267,454	760	133,760	82,400	291	51,294
$12,000 and up	2	88	133,862	1,620	142,560	41,200	-567[2]	-49,898[2]
Total	100	4,410	$ 6,705,884		$ 363,770	$ 2,064,050	$ 981	$ 4,340,862[3]

[1] 31% commuters, 69% residents

[2] Not included in total, contributions exceed costs for this interval

[3] Included in total, $12,900 for out-of-state fees

TABLE D-13

ESTIMATED FINANCIAL NEED AT

WHITE FOUR-YEAR NON-PUBLIC COLLEGES, 1972-73

1972 CSS STANDARD

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total	Per Student	Total
Less than $3,000	5	296	$ 769,092			$ 142.100	$ 2.118	$ 626.992
$3,000 to $5,999	12	710	1,844,892			340.850	2.118	1.504.042
$6,000 to $7,499	8	473	1,229,154			227.025	2.118	1.002.129
$7,500 to $8,999	10	591	1,538,748	$ 330	$ 195,030	283.675	1 793	1.060 043
$9,000 to $11,999	20	1,183	3,074,046	760	899,080	567.875	1.358	1.607.091
$12,000 and up	45	2.661	6,914,298	1,880	5.002,680	1.277,325	238	634.293
Total	100	5,914	$ 15,370,230		$ 6,096,790	$ 2,838,850	$ 1.058	$ 6.434 590

[1] 51% commuters, 49% residents

TABLE D-14

ESTIMATED FINANCIAL NEED AT

BLACK FOUR-YEAR NON-PUBLIC COLLEGES, 1972-73

1972 CSS STANDARD

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total	Per Student	Total
Less than $3,000	33	2,182	$ 5,674,998			$ 1,027.750	$ 2,129	$ 4.647.248
$3,000 to $5,999	34	2,248	5,846,547			1.058,800	2.129	4,787.747
$6,000 to $7,499	13	860	2,236,749			405,100	2,129.	1,831.649
$7,500 to $8,999	9	595	1,547,466	$ 330	$ 196,350	280,275	1.799	1.070.841
$9,000 to $11,999	8	529	1,375,917	760	402,040	249.125	1,370	724,732
$12,000 and up	3	198	514,866	1,620	320,760	93,250	509	100,856
Total	100	6,612	$ 17,196,543		$ 919,150	$ 3,114.300	$ 1,990	$ 13,163,093

[1] 22% commuters, 78% residents

TABLE D-15

ESTIMATED FINANCIAL NEED AT

WHITE TWO-YEAR PUBLIC COLLEGES, 1972-73

1972 CSS STANDARD

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total	Per Student	Total
Less than $3,000	12	1,413	$ 1,817,733			$ 590,650	$ 868	$ 1,227,083
$3,000 to $5,999	20	2,355	3,029,373			984,350	868	2,045,023
$6,000 to $7,499	20	2,355	3,029,373			984,350	868	2,045,023
$7,500 to $8,999	15	1,766	2,271,442	$ 330	$ 582,780	738,200	538	950,462
$9,000 to $11,999	16	1,884	2,423,280	760	1,431,840	787,500	108	203,940
$12,000 and up	17	2,001	2,573,859	1,750	3,501,750	836,450	-881[2]	-1,764,331[2]
Total	100	11,774	$ 15,145,060		$ 5,516 370	$ 4,921,500	$ 549	$ 6,471,531

[1]95% commuters, 5% residents

[2]Not included in total, contributions exceed costs for this interval

TABLE D-16

ESTIMATED FINANCIAL NEED AT

BLACK TWO-YEAR PUBLIC COLLEGES, 1972-73

1972 CSS STANDARD

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total	Per Student	Total
Less than $3,000	36	809	$ 852,348			$ 323,650	$ 653	$ 528,698
$3,000 to $5,999	35	786	829,136			314,400	654	514,736
$6,000 to $7,499	14	315	332,596			126,050	655	206,546
$7,500 to $8,999	9	202	212,424	$ 330	$ 66,660	80,800	321	64,964
$9,000 to $11,999	5	112	120,172	760	85,120	44,800	-87	- 9,748
$12,000 and up	1	22	23,212	1,620	35,640	8,800	-964	-21,228
Total	100	2,246	$ 2,369,888		$ 187,420	$ 898,500	$ 585	$ 1,314,944

[1] 92% commuters, 8% residents

Not included in total, contributions exceed costs at these intervals

TABLE D-17

ESTIMATED FINANCIAL NEED AT

WHITE TWO-YEAR NON-PUBLIC COLLEGES. 1972-73

1972 CSS STANDARD

Enrollment Distribution By Parental Income			Student Costs	Parental Contribution		Student Self-Help	Additional Aid Required	
Income Level	% Dist.	# of Students	Total for Commuters & Residents[1]	Per Student	Total	Total	Per Student	Total
Less than $3,000	4	52	$ 107,770			$ 21,700	$ 1,655	$ 86,070
$3,000 to $5,999	11	144	298,440			60,200	1,654	238,240
$6,000 to $7,499	8	105	219,685			43,850	1,674	175,835
$7,500 to $8,999	8	105	219,685	$ 330	$ 34,650	43,850	1,344	141,185
$9,000 to $11,999	23	301	625,895	760	228,760	125,850	901	271,285
$12,000 and up	46	601	1,247,645	1,880	1,129,880	251,250	-222[2]	-133,485[2]
Total	100	1,308	$ 2,719,120		$ 1,393,290	$ 546,700	$ 697	$ 912,615

[1] 50% commuters, 50% residents

[2] Not included in total, contributions exceed costs at this interval

Part-time Students. From enrollment data prepared by the U. S. Office of Education[2] it is estimated that 14,807 part-time students were enrolled in colleges included in this study in 1970-71. They represent approximately 12 percent of all enrolled undergraduate students. Some of these students undoubtedly have financial need and some have received financial aid. However, there are no data available to adequately estimate their need or the amounts of aid allowed them. Moreover, there are no data available to estimate the costs of education to these students or the circumstances under which they are enrolled as part-time students. Therefore, they have been excluded in this study. For future planning purposes, however, a study should focus attention on these students as they represent a source of more full-time students for colleges and universities in Alabama.

APPENDIX E

THE INDEPENDENT STUDENTS--A SPECIAL PROBLEM

The costs of education to, and financial capabilities of, the independent students should be considered in a study of financial aid needs. An independent student is one who has not, during the calendar year prior to the date he expects to receive financial aid, resided with, been claimed as a dependent for Federal income tax purposes by, or been the recipient of an amount in excess of $200 from one or both parents or any other person acting as in loco parentis.

From data on enrollments in Alabama colleges for the fall, 1970 term and the survey of financial aid administrators, it is possible to estimate that 8,773 independent students were enrolled in colleges included in this study. Of these, 7,960 were enrolled in public colleges and 813 were enrolled in non-public colleges.

There are no data available to support the kind of precise estimates of financial circumstances of these students that can be made with dependent students. It is difficult to determine what amounts of resources are available to these students for educational purposes and the costs of education to independent students. However, with evidence from Alabama aid administrators and national studies of independent students, the following estimates have been constructed to indicate the magnitude of this financial need area for the State.

The first matter to be considered is the cost of education to the independent student. The financial aid administrators' estimates of costs incurred by typical independent students ranged from $100 to $3855 in addition to those incurred by typical dependent students. There was no

consistency of estimates within or among college types. Alternative estimates used here are provided by a CSS-sponsored study of independent students' expenses throughout the nation.[1] Their research indicated that a typical single, independent student at a southern college or university spends $2,435 per calendar year for maintenance. A married, childless independent student spends $4,460 per year. A married student with one child spends $5,175 per year. These estimates are moderate budget standards. "Maintenance" is defined as the sum of expenses for rent or mortgage, food and household supplies, child care, debt repayment, and other expenses. "Maintenance" does not include expenses associated with education, i.e., tuition and fees, books and supplies. When the maintenance expenses are added to the costs of education, it is possible to obtain estimated budgets for the three categories of independent students.

However, there are no data available on the number of independent students in each of these categories. Neither are there income distributions for all independent students at each college type.

Income distributions of independent students who are expected to apply for financial aid in 1972-73 are available from the 1972 APPLCN's. These may be used to estimate the financial capabilities of independent students. The estimated number of students who will apply for aid is 2,941 for colleges included in this study. This number is consistent with the figures on the FISCOP reports regarding the number of students who did apply for aid in 1970-71. Of these 2,941 students, 2,040 were anticipated to enroll in the white four-year colleges. Since most of the independent students were anticipated to enroll in public colleges (2,484 of 2,941), since there is no way to accurately determine the marital or parental status of these students, and since the income distributions of applicants at each type of

college proved to be similar, the following calculations have been performed to yield an estimate of the total need for independent students at all college types in the aggregate. (See Appendix D for a discussion of the implications of this procedure.)

The weighted average budget for independent students' tuition and fees, books and supplies was $582 in 1970-71. This total, added to the moderate maintenance budgets, yields budgets for single, independent students, $3,017; for married, childless independent students, $5,042; and, for married students with one child, $5,757.

The combined income distributions of students who are expected to apply for aid are shown in Table E-1 below. It should be noted that using only the number of students who will apply for aid will likely underestimate the total need since some students who need aid may not apply for it.

TABLE E-1

INCOME DISTRIBUTIONS OF INDEPENDENT STUDENTS WHO ARE EXPECTED TO APPLY FOR FINANCIAL AID, 1972-73

Income Interval	Number	Percent
Less than $3,000	1,131	38.5
$3,000 to $5,999	955	32.5
$6,000 to $7,499	296	10.0
$7,500 to $8,999	209	7.1
$9,000 to $11,999	224	7.6
$12,000 and up	126	4.3
	2,941	100

The financial need of the independent student is the difference between available resources (income) and the costs of college plus maintenance. It is now possible to make some estimates of the financial need of independent students based upon the income distributions in Table E-1 and estimates of marital and parental status. Table E-2 presents these estimates under a

variety of conditions. Since the income of intervals over $6,000 exceeds the total budget of married students with one child, it is not necessary to deal with those intervals in this estimate.

TABLE E-2

ESTIMATES OF FINANCIAL NEED FOR INDEPENDENT STUDENTS UNDER VARIOUS CONDITIONS

	Income Interval	Number	Average Budget	Total Need
(A)	Less than $3,000	1,131	$3,017	$1,704,417
	$3,000 to $5,999	955	$3,614	59,865
				$1,764,282

In the first example we assume that no students in the first interval are married, that only one-fourth of the students in the second interval are married and only half of these have one child.

	Income Interval	Number	Average Budget	Total Need
(B)	Less than $3,000	1,131	$3,220	$1,945,320
	$3,000 to $5,999	955	$3,614	59,865
				$1,205,185

In the second example we assume that 90% of the students in the first interval are single and 10% are married; that 25% of the students in the second interval are married, and only half of these have one child.

	Income Interval	Number	Average Budget	Total Need
(C)	Less than $3,000	1,131	$3,220	$1,945,320
	$3,000 to $5,999	955	$4,715	468,195
				$2,413,515

In the third example we assume that 90% of the students in the first interval are single and 10% are married; that 25% of the students in the second interval are single, 50% are married, childless, and that 25% are married with one child.

	Income Interval	Number	Average Budget	Total Need
(D)	Less than $3,000	1,131	$3,220	$1,945,320
	$3,000 to $5,999	955	$5,400	535,200
				$2,480,520

In the fourth example we assume that 90% of the students in the first interval are single and 10% are married and that one-half of the students in the second interval are married, childless and one-half are married with one child.

The total need figures are derived as follows. In example (A) there are 1,131 students with incomes below $3,000, all assumed to be single, independent students. Their average income is assumed to be $1,500. The budget for an independent student is estimated at $3,017. The difference between $3,017 and $1,500 is $1,507. This figure represents the average financial need for the single, independent student. This average multiplied by the number of students in this interval produces $1,704,417 as the financial need.

The average budget for interval two was obtained by the formula $/(75 \times 3017) + (12.5 \times 5042) + (12.5 \times 5757)/ \div 100$. This dollar amount is at the 20th percentile of the distribution within that interval. There are 195 students (20% of 955) below that level of income. The difference between costs and income equals financial need. We assume the average income of those students with incomes below $3,614 is $3,307. The difference between $3,614 and $3,307 is $307. Then $307 times 195 equals $59,865, the total need for that interval. The amounts for intervals in the other examples were obtained in a similar manner.

It should be apparent that variations in the marital and parental status of the independent students will cause the total need to vary.

Returning to the financial needs of students with incomes above $6,000, who represent 29 percent of the estimated sample of anticipated applicants, undoubtedly many of these students will have financial need because of larger families and/or special family circumstances. Furthermore, financial aid administrators' methods of determining need for independent students vary from campus to campus and this can affect the amount of need and aid awarded in the State.

NOTES

Chapter 2

[1]North Carolina Financial Aid Studies, 1970, Study III, "A Report of the Senior Follow-Up Study, Fall, 1970", (Atlanta: Southern Regional Office, College Entrance Examination Board, 1971).

[2]Opening Fall Enrollment in Higher Education, 1970, (Washington: U. S. Office of Education, 1970).

Chapter 3

[1]National Institutes of Health, Bureau of Health Manpower Education, Regional Office, Atlanta Georgia; United States Department of Justice, Law Enforcement Assistance Administration, Regional Office, Atlanta, Georgia.

[2]Federally Insured Student Loan Program, Higher Education Division, United States Office of Education, Region Four, Atlanta, Georgia.

[3]United States Veterans Administration, Regional Office, Montgomery, Alabama.

[4]United States Social Security Administration, Regional Office, Atlanta, Georgia.

[5]Alabama State Department of Veterans Affairs, Montgomery, Alabama.

Appendix A

[1]Adapted from Manual for Financial Aid Officers, 1971 Edition, College Scholarship Service, (New York: College Entrance Examination Board, 1971).

Appendix D

[1]College Scholarship Service Assembly, Principles of Student Financial Aid Administration, (New York: College Entrance Examination Board, 1972).

[2]Opening Fall Enrollment in Higher Education, 1970, (Washington: U. S. Office of Education, 1970).

Appendix E

[1]Horch, Dwight H., Expense Budgets of Self-Supporting Students: 1967-68 and 1968-69, (New York: College Scholarship Service, College Entrance Examination Board, 1971).