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ABSTRACT

Data summaries illustrated by charts and graphs are presented with some commentary for the years 1970-71, 1972-73, and 1973-74 for the approximately 3,000 postsecondary institutions, including branch campuses, in the U.S. enrolling about 9 million students. Statistics include enrollment (total enrollment and full-time equivalent enrollment and the relationship between the two, full-time and part-time relationship, and the ratio of enrollment by level of student); basic student charges (tuition, fees, board and room); and institutional financial data (revenues, expenditures, student tuition and fee revenue, student aid grants, and changes in assets). Data were drawn from the Higher Education General Information Surveys (HEGIS) for fiscal years 1971, 1972, and 1973, and the publically available data from the National Center for Educational Statistics (NCES). (JT)

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DATA SUMMARIES, 1970-1974  
ON POSTSECONDARY EDUCATION INSTITUTIONS

A Technical Paper by Systems Research Inc.  
Los Angeles, California

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NOTE: This technical paper was prepared as background material for the National Conference on Postsecondary Financing, January 15-17, 1975, Washington, D.C.

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## FOREWORD

Throughout the regional conference series on postsecondary financing, from San Francisco to Boston, conference participants were often confronted with questions and issues about which there seemed to be a need for better information. At the regional conference held on the campus of the University of Notre Dame, U.S. Congressman John Brademas urged the development of better bases of information on postsecondary education. Similar pleas were heard from state budget officers, state legislators and other state-level officials, as well as representatives of the postsecondary education sectors.

Accordingly, the policy analysts at Systems Research Inc., Los Angeles, California, were asked to update the data base compiled by the National Commission on the Financing of Postsecondary Education; and, data were drawn from the Higher Education General Information Surveys (HEGIS) for fiscal years 1971, 1972 and 1973, and the publically available data from the National Center for Educational Statistics (NCES) were also used. From this updated data, explained in the Appendix on page 53, data summaries illustrated by charts and graphs were developed, with some commentary, for the technical paper which follows.

Information about current issues and questions underlying trends and variations over the last three years are available with this technical paper. Interpretation remains for the analysts, educators and governmental representatives with responsibility in policy development and decision making in postsecondary financing. Thereby, one purpose of the paper would

be accomplished, that of updating some of the existing information bases. The second purpose, illustrating a process for data collection and update is also served by the paper.

In such spirit we distribute this paper to the participants at the National Conference on Postsecondary Financing, January 15-17, 1975, in Washington, D.C.

---Robert F. Corcoran  
Education Commission of  
the States

## INTRODUCTION

### Participant Needs

As issues were discussed at the Regional Conference on Financing Postsecondary Education, it became apparent that the published information was based on data now many years old, or from more recent summary publications reporting on the higher education sector. The conference participants expressed interest in information which might show some of the changes taking place in higher education and, wanted to be able to see statistics by type of institution. This report has attempted to meet some of these needs with the available Higher Education General Information Surveys (HEGIS) data.

This report only provides information on selected issues related to institutional data. That is, some of the fundamental questions about student characteristics, student decisions and proprietary institutions and other educational opportunities are not addressed by the HEGIS data base.

### The Carnegie Classification

The Carnegie Commission found that a classification of institutions of higher education would assist analyses and developed such a classification. The Carnegie classification was extensively used by the National Commission on the Financing of Postsecondary Education for its analysis and initiated the use of Carnegie classifications for HEGIS data. The institutional types and the number and enrollment is given in Table 1. There are about 3,000 institutions, including separate branch campuses, in the United States enrolling about 9 million students.

Table 1 - The Carnegie Classification

<u>Code</u>	<u>Type of Institution</u>	<u>Number of Institutions*</u>
1.1	Leading Research Universities	46
1.2	Other Research Universities	48
1.3	Large Doctorate Granting Institutions	35
1.4	Small Doctorate Granting Institutions	36
2.1	Comprehensive Colleges with Substantial Program Offerings	306
2.2	Comprehensive Colleges with Limited Program Offerings	171
3.1	Highly Selective Liberal Arts Colleges	145
3.2	Other Liberal Arts Colleges	568
4.1	Two-year Colleges and Institutions	1,133
5.1	Theological Seminaries, Bible Colleges and Other Institutions Offering Degrees in Religion	219
5.2	Medical Schools and Centers	45
5.3	Other Separate Health Professional Schools	27
5.4	Schools of Engineering and Technology	39
5.5	Schools of Business and Management	27
5.6	Schools of Art, Music and Design	52
5.7	Schools of Law	11
5.8	Teachers Colleges	8
5.9	Other Specialized Institutions	32
		<u>2,948</u>

\* 1972-1973

The use of the Carnegie classification permits enrollment trends for such disparate institutions as research universities, liberal arts colleges and two-year colleges to be identified and reported separately. The changes in the past few years have not similarly effected such diverse types of institutions as can be seen from the data for the various types. This report aggregates the Carnegie classifications and reports separately on the research universities, doctorate granting institutions, comprehensive colleges, liberal arts colleges and two-year colleges and institutions. This is shown in Table 2.

#### Type of Control

In financing postsecondary education, there remains significant differences between private and public institutions. Because many of the current financing programs affect institutions differently, data are reported separately here for public and private institutions.

#### Type of Data Reported

The statistics include enrollment, basic student charges and institutional financial data, with focus from the questions offered by conference participants. These include the total enrollment and full-time equivalent enrollment and the trend of the relationship between these two types, full-time and part-time and the relationship, and the ratio of enrollment by level of student. Basic student charges include reports by institutions of tuition and fees and board and room charges at the college or university. The finance data includes revenues, expenditures, student tuition and fee revenue and student aid grants and changes in assets.

Table 2 - Aggregations of the Carnegie Classifications

Research Universities

1.1 Leading Research Universities

1.2 Other Research Universities

Doctorate Granting Institutions

1.3 Large Doctorate Granting Institutions

1.4 Small Doctorate Granting Institutions

Comprehensive Colleges and Universities

2.1 Comprehensive Colleges with Substantial Program Offerings

2.2 Comprehensive Colleges with Limited Program Offerings

Liberal Arts Colleges

3.1 Highly Selective Liberal Arts Colleges

3.2 Other Liberal Arts Colleges

Two-Year Colleges and Institutions

4.1 Two-year Colleges and Institutions

Other

5.1 All of the Specialized Institutions



### Sources of the Data

All of the data were taken from EDSTAT I, the publically available machine readable data base maintained by the National Center for Educational Statistics (NCES). The files used include TRINST71, TRINST72, TRINST73 and TRINST75, and TRNST71B, TRNST72B and TRNST73B. These files were developed by either the National Commission on the Financing of Postsecondary Education for their work and retained by NCES on EDSTAT I, or were installed by NCES or its contractors on EDSTAT during 1974. EDSTAT II was not available nor would it have been used because of limitations on the software in creating summary tables like those used in this report.

## SECTION I

### DATA SUMMARIES ON BASIC STUDENT CHARGES

#### Basic Student Charges

The basic student charges collected by HEGIS include tuition and required fees and room and board. These charges are reported by the institution separately for men and women and undergraduate and graduate. In 1970-71, these data were collected as part of the annual Financial Statistics report. In subsequent years, they were reported separately.

For purposes of display, the room and board charges were averaged between men and women. Usually the charges were identical and when different, the differences were small. If the institution had accommodations only for men or women, those charges were used for that institution. Since some institutions may not complete a specific item on a HEGIS questionnaire, only institutions with responses were included in the summary.

Public in-state tuition for undergraduates and graduates is given in Table I-1. Because of a significant increase in community colleges reporting in 1971-72 as contrasted to 1970-71, some of the increases are less than otherwise would be reported. Since many of these institutions were new, or recently operating, they were included. Thus the averages are always for all those institutions reporting during that year. The result is the average tuition for the institution. Because some institutions are considerably larger than others, this is different from the tuition that an average student pays. (Data on this will be provided in Section III, Finances.) For community colleges, the in-district tuition was used.

Table I-1A - Tuition and Required Fees, Public In-state, Undergraduate\*

	<u>1970-71</u>	<u>1971-72</u>	<u>1972-73</u>
All Institutions	\$266	\$312	\$435
Research Universities	437	511	565
Doctorate Granting Institutions	529	539	549
Comprehensive Colleges and Universities	326	392	451
Liberal Arts Colleges	225	419	508
Two-year Colleges and Institutions	230	238	403

Table I-1B - Tuition and Required Fees, Public In-state, Graduate

All Institutions	\$418	\$504	\$587
Research Universities	482	565	618
Doctorate Granting Institutions	496	529	587
Comprehensive Colleges and Universities	411	463	536
Liberal Arts Colleges	n/a	538	486
Two-year Colleges and Institutions	n/a	160	587

\*In-state and In-district

Year-to-year increases were computed for these tuitions. The percent increases were summarized in Table I-2.

Similar data were given for public out-of-state tuitions in Table I-3 with the increases summarized in Table I-4. Tuitions for private institutions are summarized in Tables I-5 and I-6.

To see the differences in tuition between the types of institutions and the rate of increase, the average for all reporting institutions is given in Figure I-1. However, the gross averages conceal some of the counter-trends and delays in increases shown individually by the various segments of higher education.

Room charges are given as charges for the academic year for a single male or female. Board charges are similarly given with a qualification for the number of days meals included in the board charge. These charges, for reporting institutions, are summarized for public and private institutions in Tables I-7 and I-8. Without regard to the number of days for the room charges, the average year-to-year increases are given in Table I-9 for the sum of room charges and board charges. The annual charges are shown in Figure 2.

#### Data Validity

Because of the change in reporting between 1971 and subsequent years, the basic student charges were taken from the original EDSTAT I files rather than the files of combined years. The number of institutions reporting each year were different with approximately 200 community colleges added in 1972. Since the basic student charges are averages of institutions,

Table I-2A - Tuition Increases, Public In-State, Undergraduate

	<u>1971-1972</u>	<u>1972-1973*</u>
All Institutions	7.3%	39.4%
Research Universities	16.9	10.6
Doctorate Granting Institutions	1.8	1.9
Comprehensive Colleges and Universities	20.2	15.1
Liberal Arts Colleges	86.2	21.2
Two-year Colleges and Institutions	3.8	69.3

Table I-2B - Tuition Increases, Public In-State, Graduate

All Institutions	20.6	16.5
Research Universities	17.2	9.4
Doctorate Granting Institutions	6.7	11.0
Comprehensive Colleges and Universities	12.6	15.8
Liberal Arts Colleges	n/a	-9.7
Two-year Colleges and Institutions	n/a	n/a

\*Fiscal years.

the impact of community colleges on the average may be larger than statistics weighed by enrollments.

There were a number of individual data items which were omitted, or which fell outside the range of consideration (e.g. tuitions more than \$10,000).

These were omitted in the averages. Usually the large values could be attributed to data entry errors. There appeared to be from 2 to 5 institutions for each file, with such discrepancies an error rate of 0.1 to 0.2%.

Table I-3A - Tuition and Required Fees, Public Out-of-State, Undergraduate

	<u>1970-71</u>	<u>1971-72</u>	<u>1972-73</u>
All Institutions	\$ 863	\$1,043*	\$1,249
Research Universities	1,192	1,296	1,485
Doctorate Granting Institutions	1,023	1,253	1,475
Comprehensive Colleges and Universities	825	980	1,146
Liberal Arts Colleges	874	948	1,153
Two-year Colleges and Universities	646	727	858

Table I-3B - Tuition and Required Fees, Public Out-of-State, Graduate

All Institutions	852	1,041	1,223
Research Universities	1,138	1,276	1,440
Doctorate Granting Institutions	975	1,251	1,474
Comprehensive Colleges and Universities	792	956	1,134
Liberal Arts Colleges	788	1,044	1,191
Two-year Colleges and Institutions	n/a	n/a	n/a

\*Weighted to be comparable to 1970-71 and 1972-73. Several hundred more community colleges reported in 1971-72 lowering the average to \$852, yet all institutional categories were showing increases.

Table I-4A - Tuition Increases, Public Out-of-State, Undergraduate

	<u>1971-1972</u>	<u>1972-1973*</u>
All Institutions	20.8%	19.8%
Research Universities	8.7	14.6
Doctorate Granting Institutions	22.5	17.7
Comprehensive Colleges and Universities	18.8	16.9
Liberal Arts Colleges	8.5	21.6
Two-year Colleges and Institutions	12.5	18.0

Table I-4B - Tuition Increases, Public Out-of-State, Graduate

All Institutions	22.2	17.5
Research Universities	12.1	12.9
Doctorate Granting Institutions	28.3	17.8
Comprehensive Colleges and Universities	20.7	18.6
Liberal Arts Colleges	32.5	14.0
Two-year Colleges and Institutions	n/a	n/a

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\*Fiscal years,



Table I-5A - Tuition and Required Fees, Private, Undergraduate\*

	<u>1970-71</u>	<u>1971-72</u>	<u>1972-73</u>
All Institutions	\$1,386	\$1,498	\$1,607
Research Universities	2,209	2,423	2,665
Doctorate Granting Institutions	1,845	1,946	2,075
Comprehensive Colleges and Universities	1,529	1,675	1,815
Liberal Arts Colleges	1,705	1,616	1,725
Two-year Colleges and Institutions	1,057	1,134	1,232

Table I-5B - Tuition and Required Fees, Private, Graduate

All Institutions	1,341	1,413	1,585
Research Universities	2,109	2,261	2,552
Doctorate Granting Institutions	1,611	1,691	1,858
Comprehensive Colleges and Universities	1,292	1,408	1,541
Liberal Arts Colleges	1,355	1,466	1,710
Two-year Colleges and Institutions	n/a	1,375	n/a

\*Average institution. Because of different institutional sizes, this is not the tuition the average student pays.

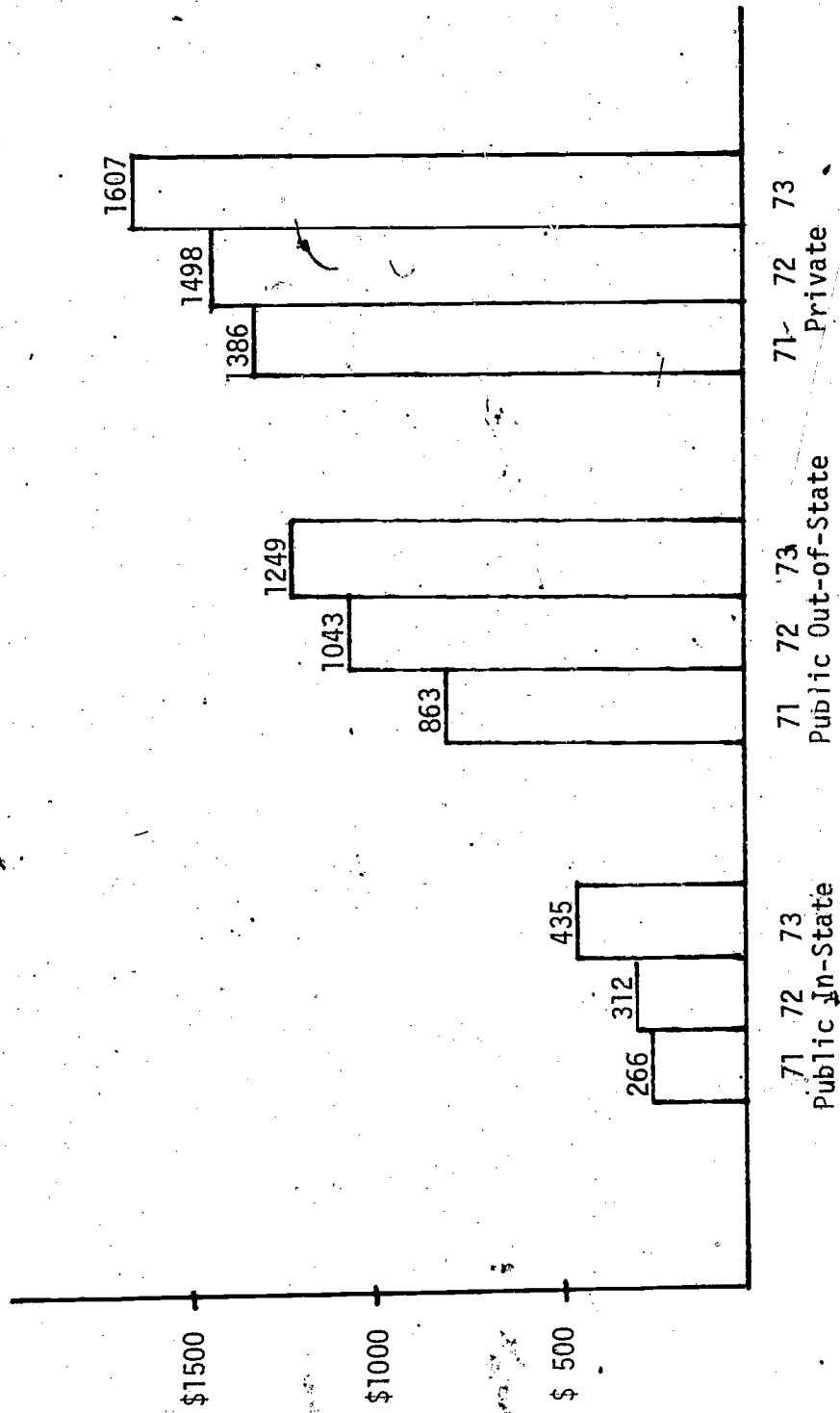


Figure I-1 - Tuition and Required Fees, Undergraduate

Table I-6A - Tuition Increases, Private, Undergraduate

	<u>1971-1972</u>	<u>1972-1973*</u>
All Institutions	8.0%	7.3%
Research Universities	9.7	10.0
Doctorate Granting Institutions	5.5	6.6
Comprehensive Colleges and Universities	9.5	8.3
Liberal Arts Colleges	-5.2	6.7
Two-year Colleges and Universities	7.3	8.6

Table I-6B - Tuition Increases, Private, Graduate

All Institutions	5.4	12.2
Research Universities	7.2	12.9
Doctorate Granting Institutions	5.0	9.9
Comprehensive Colleges and Universities	9.0	9.4
Liberal Arts Colleges	8.2	16.6
Two-year Colleges and Institutions	n/a	n/a

\*Fiscal years are used to be consistent with federal use.

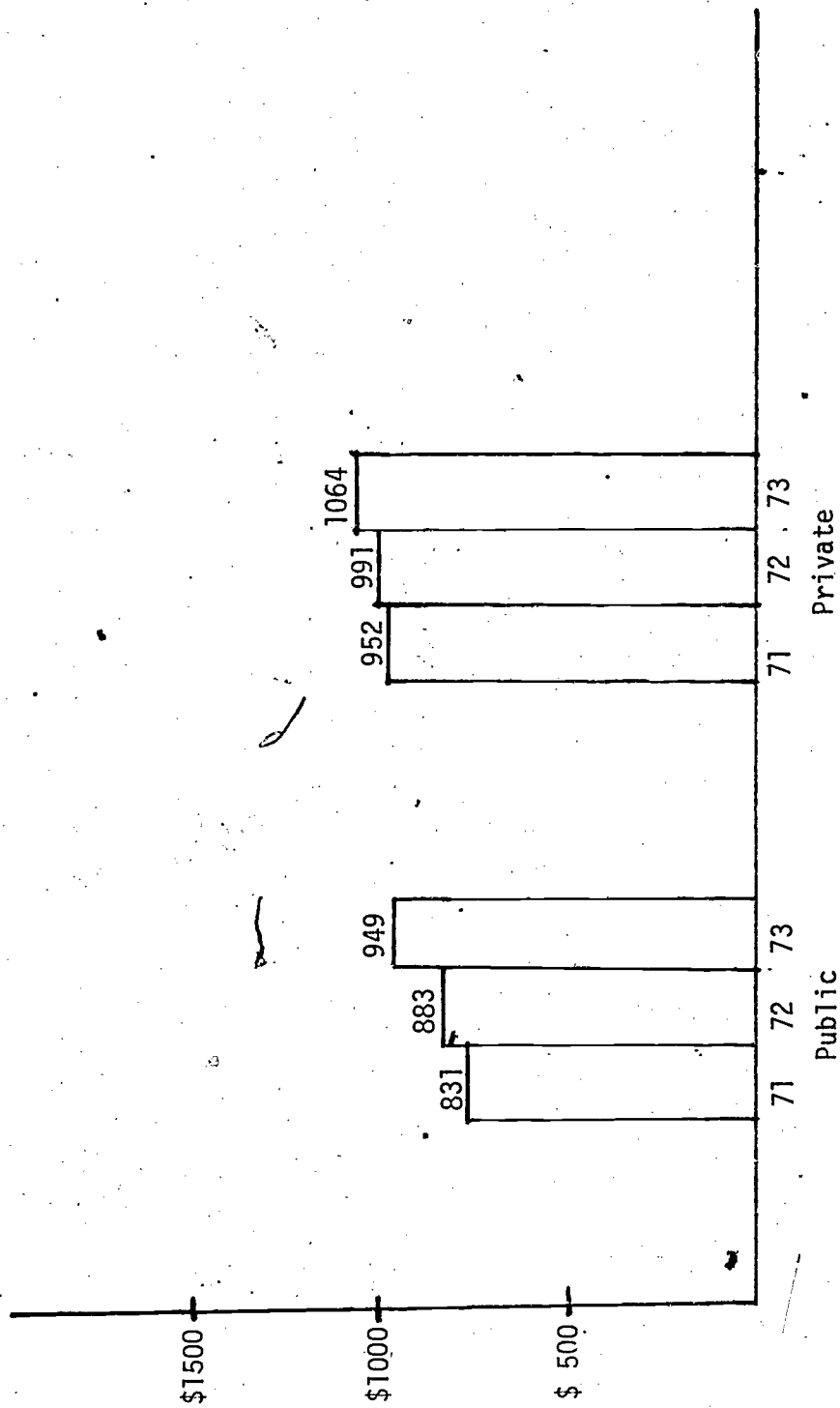


Figure I-2 - Room and Board Charges

Table I-7A - Board Charges, Public Institutions

	<u>1970-71</u>	<u>1971-72</u>	<u>1972-73</u>
All Institutions	\$469	\$499	\$528
Research Universities	524	586	576
Doctorate Granting Institutions	474	518	545
Comprehensive Colleges and Universities	452	484	511
Liberal Arts Colleges	516	506	542
Two-year Colleges and Institutions	472	474	511

Table I-7B - Board Charges, Private Institutions

All Institutions	\$536	\$558	\$590
Research Universities	640	654	688
Doctorate Granting Institutions	584	608	615
Comprehensive Colleges and Universities	542	562	585
Liberal Arts Colleges	532	547	586
Two-year Colleges and Institutions	500	535	599

Table I-8A - Room Charges, Public Institutions

	<u>1970-71</u>	<u>1971-72</u>	<u>1972-73</u>
All Institutions	\$362	\$384	\$421
Research Universities	418	452	501
Doctorate Granting Institutions	406	423	487
Comprehensive Colleges and Universities	364	384	419
Liberal Arts Colleges	392	386	481
Two-year Colleges and Institutions	320	341	354

Table I-8B - Room Charges, Private Institutions

All Institutions	\$416	\$433	\$454
Research Universities	555	625	634
Doctorate Granting Institutions	501	520	598
Comprehensive Colleges and Universities	447	476	501
Liberal Arts Colleges	408	413	444
Two-year Colleges and Institutions	346	418	452

Table I-9A - Room and Board Charge Increases, Public Institutions

	<u>1971-1972</u>	<u>1972-1973*</u>
All Institutions	6.3%	7.4%
Research Universities	9.0	3.7
Doctorate Granting Institutions	6.9	9.7
Comprehensive Colleges and Universities	6.4	7.1
Liberal Arts Colleges	-1.7	14.7
Two-year Colleges and Institutions	2.9	6.7

Table I-9B - Room and Board Charge Increases, Private Institutions

All Institutions	4.1	5.3
Research Universities	7.0	3.4
Doctorate Granting Institutions	4.0	7.5
Comprehensive Colleges and Universities	4.9	4.6
Liberal Arts Colleges	2.1	7.3
Two-year Colleges and Institutions	12.6	10.3

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\*Fiscal years.

## SECTION II

### DATA SUMMARIES RELATING TO ENROLLMENTS

#### The Sample

While the selection of institutions which have trend data provides the most accurate information on these changes, the sample is less accurate in estimating actual enrollments. Table II-1 shows that the 2,240 institutions with enrollments for all three years represented 8,274,626 of the total 9,064,000 students estimated for all institutions. The distribution of total enrollments of the sample is given in Table II-1 and for public and private institutions in Table II-2. These enrollment data are particularly useful since they identify enrollment trends within institutional categories, but should not be cited as actual enrollments for the segment.

#### Total Enrollments

In order to estimate total enrollments, the enrollments were compared to those for Fall 1972 which had been specifically developed for Carnegie classifications and reported by the National Commission on the Financing of Postsecondary Education. Using ratio techniques, the sample was inflated for Fall 1970 and Fall 1971 to give estimates to the total enrollment, including both degree and non-degree, resident and extension enrollments. The resulting estimates are given in Table II-3 and II-4 and are shown in the chart of Figure II-1. The year-to-year change in enrollments is summarized in Table II-5.

#### Full-Time Equivalency

The U.S. Office of Education (USOE) computes full-time equivalent (FTE)



Table II-1 - Reported Total Enrollment, by Sector

	<u>Institutions Reporting</u>	<u>Fall 1970</u>	<u>Fall 1971</u>	<u>Fall 1972</u>
All Institutions	2,240	8,274,626	8,548,339	8,752,737
Research Universities	89	1,688,057	1,643,568	1,677,598
Doctorate Granting Institutions	69	795,316	803,759	814,141
Comprehensive Colleges and Universities	453	2,624,789	2,710,521	2,716,286
Liberal Arts Colleges	681	668,982	686,061	694,443
Two-year Colleges and Institutions	948	2,210,574	2,406,902	2,527,428
Other		286,908	297,528	322,841

Table II-2A - Reported Total Enrollment by Sector for the Sample, Public\*

	Fall 1970	Fall 1971	Fall 1972
All Institutions	6,176,976	6,427,490	6,614,559
Research Universities	1,278,445	1,258,500	1,239,773
Doctorate Granting Institutions	582,523	553,983	559,606
Comprehensive Colleges and Universities	2,090,211	2,176,719	2,185,009
Liberal Arts Colleges	36,753	46,775	55,615
Two-year Colleges and Universities	2,087,584	2,242,932	2,400,066

Table II-2B - Reported Total Enrollment by Sector for the Sample, Private\*

All Institutions	2,131,294	2,123,823	2,117,783
Research Universities	409,612	395,069	386,826
Doctorate Granting Institutions	242,433	214,776	244,536
Comprehensive Colleges and Universities	530,768	534,863	531,277
Liberal Arts Colleges	632,621	639,229	639,629
Two-year Colleges and Institutions	126,202	129,294	119,362

\*These are totals for the sample only and should not be used in lieu of the estimated totals for all institutions.

Table II-3 - Estimated Total Enrollment by Sector (in thousands)

	<u>Fall 1970</u>	<u>Fall 1971</u>	<u>Fall 1972*</u>
All Institutions	8,872	9,134	9,334
Research Universities	1,809	1,762	1,799
Doctorate Granting Institutions	805	813	824
Comprehensive Colleges and Universities	2,710	2,804	2,809
Liberal Arts Colleges	691	708	717
Two-year Colleges and Institutions	2,452	2,667	2,800
Other	405	380	385

Table II-4 - Estimated Total Enrollment by Sector (in thousands)

<u>Public</u>	<u>Fall 1970</u>	<u>Fall 1971</u>	<u>Fall 1972*</u>
All Institutions	6,651	6,921	7,127
Research Universities	1,399	1,377	1,412
Doctorate Granting Institutions	562	568	579
Comprehensive Colleges and Universities	2,160	2,249	2,258
Liberal Arts Colleges	40	51	60
Two-year Colleges and Institutions	2,316	2,532	2,671
Other	174	144	147
 <u>Private</u>			
All Institutions	2,221	2,213	2,207
Research Universities	410	385	387
Doctorate Granting Institutions	243	245	245
Comprehensive Colleges and Universities	550	555	551
Liberal Arts Colleges	651	657	657
Two-year Colleges and Institutions	136	135	129
Other	231	236	238
Total, Public and Private	8,872	9,134	9,334

\*Taken from Ref. L, p. 15. The totals are somewhat higher than those reported by NCES in subsequent documents. NCES does not provide enrollments by Carnegie classification.

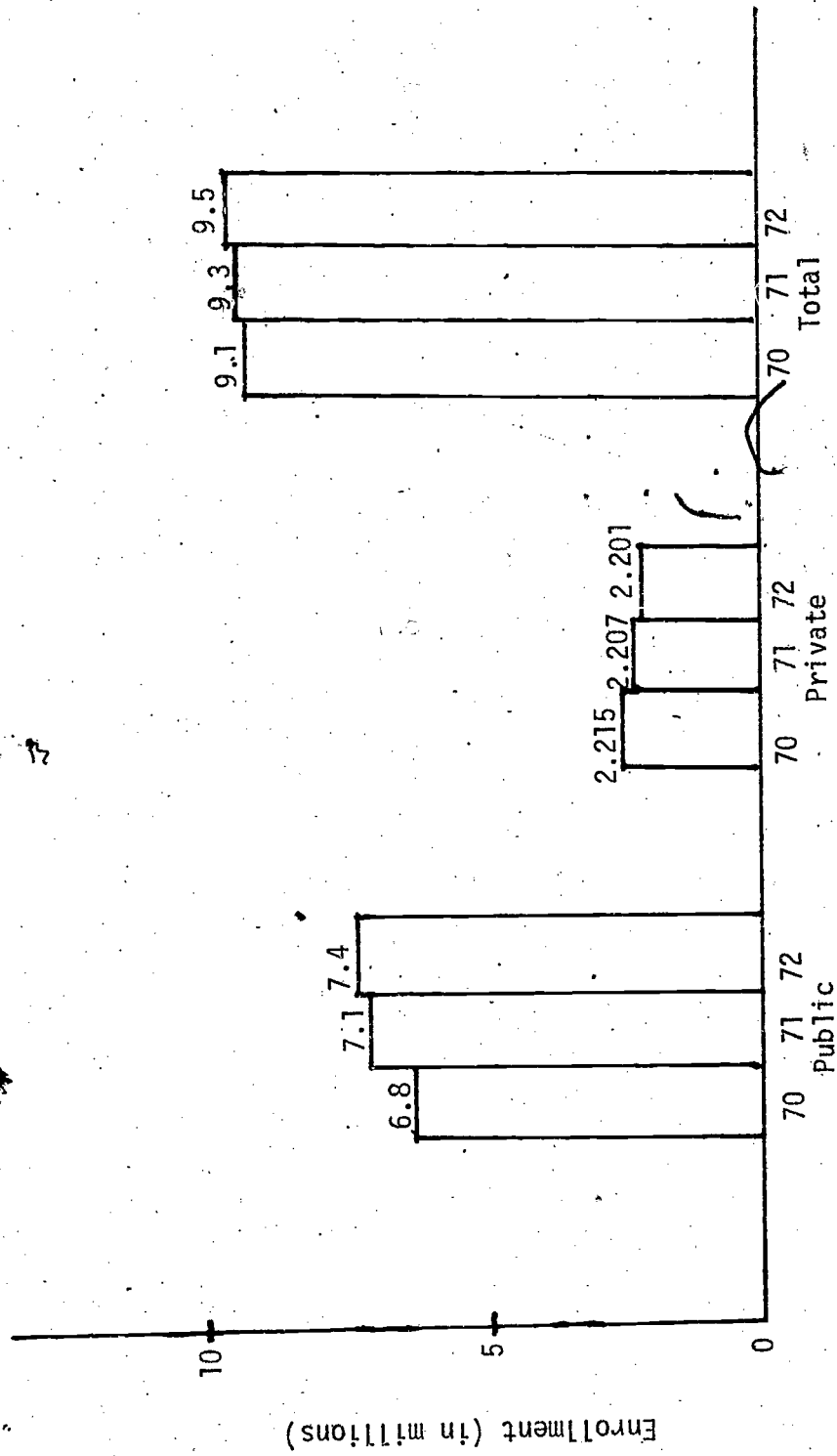


Figure II-1 - Fall Enrollment

Table II-5A - Enrollment Changes by Sector, Public

	<u>1970-1971</u>	<u>1971-1972</u>
All Institutions	4.0%	3.0%
Research Universities	-1.6	2.5
Doctorate Granting Institutions	1.1	1.9
Comprehensive Colleges and Universities	4.1	0.4
Liberal Arts Colleges	27.5	17.6
Two-year Colleges and Institutions	9.3	5.5

Table II-5B - Enrollment Changes by Sector, Private

All Institutions	-0.4	-0.3
Research Universities	-6.1	0.5
Doctorate Granting Institutions	0.8	0.0
Comprehensive Colleges and Universities	0.9	-0.7
Liberal Arts Colleges	0.9	0.0
Two-year Colleges and Institutions	-0.7	-4.4

students as the number of full-time students plus one-third of the number of part-time students. In Fall 1970 the institutions provided the full-time equivalency of their enrollments, and the USOE definition was substantially higher than computed by the institutions. Since the institution provided FTE is not available, the USOE computed values were used recognizing the difficulty in using such data. The ratio of FTE to headcount enrollments are given in Table II-6 and shown graphically in Figure II-2. Overall the ratio declined for the public institutions in 1972. Since 1% means approximately 90,000 students nationally, or as many as 300 students at a large institution, this ratio is particularly important for the large number of states where institutional revenue from the state is determined by full-time equivalent students rather than headcount students.

The community colleges present problems in reporting both headcount and FTE enrollments since they continue to enroll students throughout the year. Many community colleges have large instructional programs which begin after the fall enrollment census. Thus, community college HEGIS data should be used recognizing its inherent limitations.

#### First Time Students

One of the leading indicators for future enrollment trends is the number of first time students in the institution. This number declined throughout the period for all public institutions and most of the private institutions. The ratios are given, by institutional category, in Table II-7 and are shown in Figure II-3. The USOE full-time equivalency is given in Table II-8 with no consistent trends across types of institutions.

Table II-6A - Enrollment, USOE Full-Time Equivalent per Headcount, Public Institutions\*

	<u>Fall 1970</u>	<u>Fall 1971</u>	<u>Fall 1972</u>
All Institutions	.7716	.7729	.7564
Research Universities	.8455	.8668	.8546
Doctorate Granting Institutions	.8281	.8372	.8232
Comprehensive Colleges and Universities	.8055	.8053	.7964
Liberal Arts Colleges	.8552	.8339	.8232
Two-year Colleges and Institutions	.6746	.6709	.6467

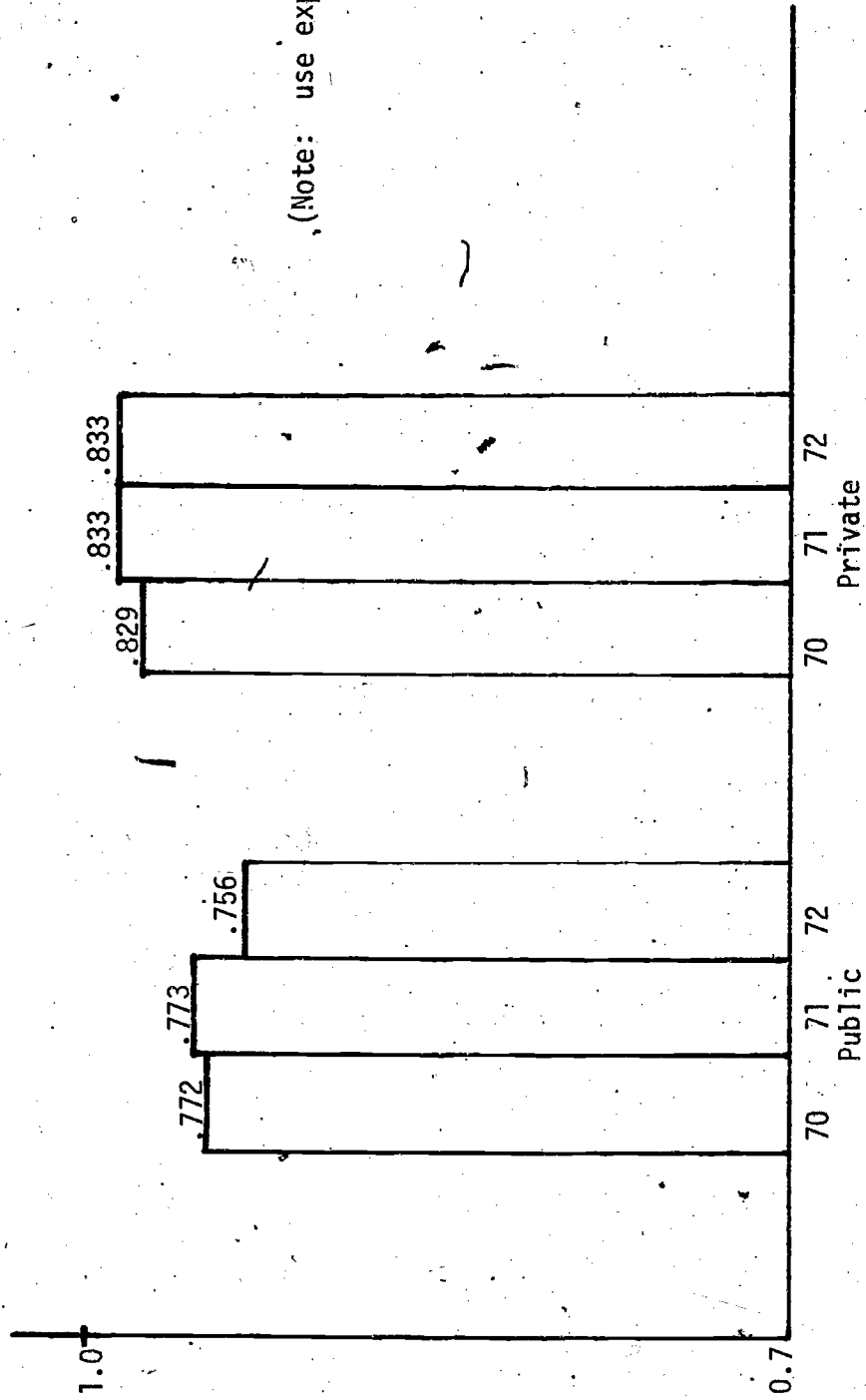
Table II-6B - Enrollment, USOE Full-Time Equivalent per Headcount, Private Institutions\*

All Institutions	.8290	.8334	.8316
Research Universities	.8075	.8235	.8289
Doctorate Granting Institutions	.7655	.7733	.7760
Comprehensive Colleges and Universities	.7686	.7718	.7704
Liberal Arts Colleges	.9062	.9039	.8977
Two-year Colleges and Institutions	.8736	.8680	.9378

\*The USOE full-time equivalent student is defined as the number of full-time students plus one-third of the part-time students.



Ratio of Full-time Equivalents to Headcount Enrollments



(Note: use expanded scale)

Figure II-2 - Ratio of Full-time Equivalents to Headcount Enrollments

Table II-7A - Enrollment, Percent of First-Time Degree Credit of Total Degree Enrollment, Public Institutions

	Fall 1970	Fall 1971	Fall 1972
All Institutions	22.9%	22.0%	21.2%
Research Universities	14.5	14.2	14.2
Doctorate Granting Institutions	16.5	16.0	15.5
Comprehensive Colleges and Universities	18.3	16.9	15.8
Liberal Arts Colleges	23.3	22.8	24.1
Two-year Colleges and Institutions	39.1	37.2	35.7

Table II-7B - Enrollment, Percent of First-Time Degree Credit of Total Degree Enrollment, Private Institutions

All Institutions	20.9%	20.3%	19.9%
Research Universities	11.7	12.1	12.4
Doctorate Granting Institutions	15.9	15.4	15.4
Comprehensive Colleges and Universities	19.6	18.3	18.0
Liberal Arts Colleges	26.1	25.5	24.9
Two-year Colleges and Institutions	48.3	47.7	45.9

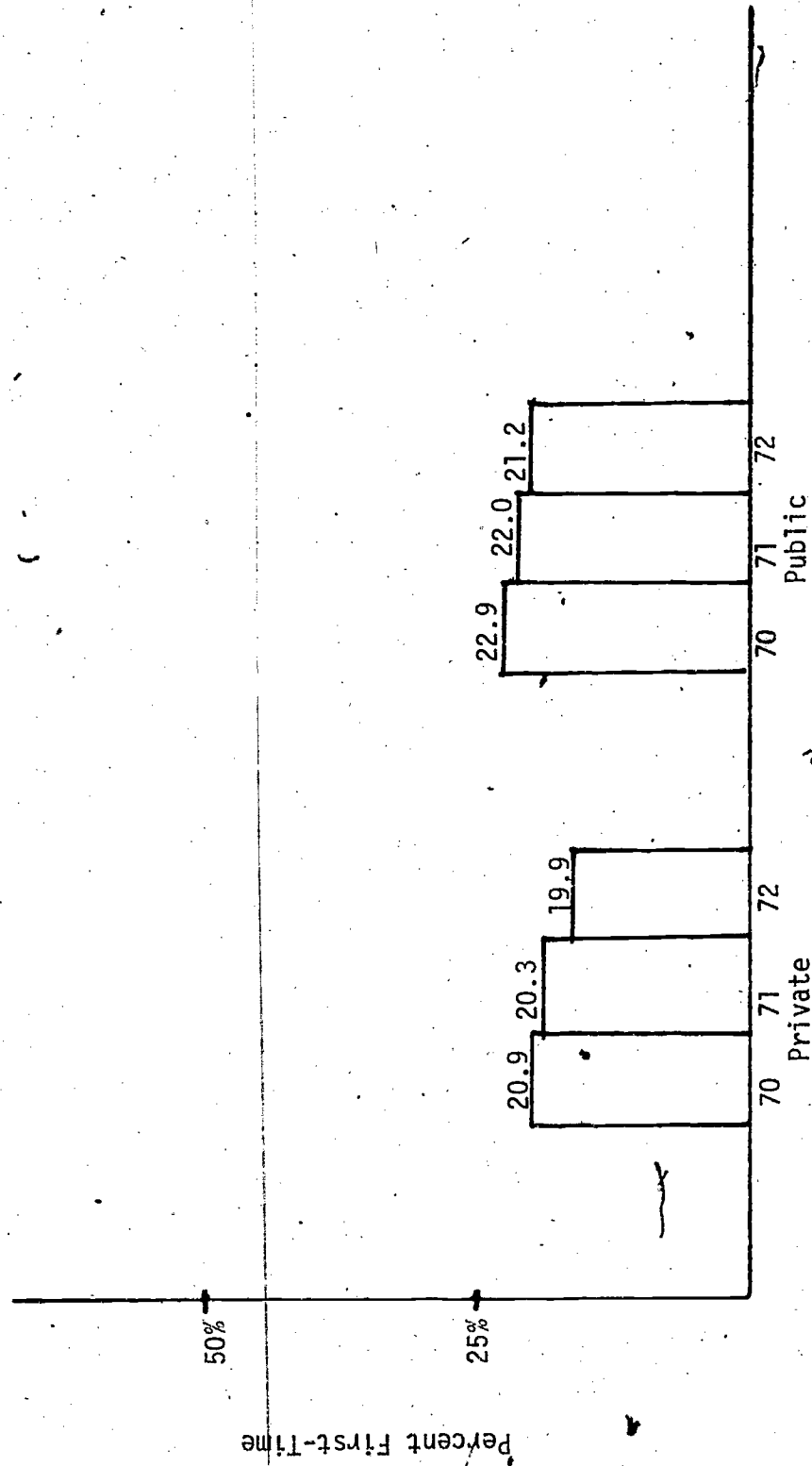


Figure II-3 - Percent of First-time Degree Credit of Total Degree Enrollment

Percent First-Time

Table II-8A - First Time Enrollment, USOE Full-Time Equivalent per Headcount, Public Institutions

	Fall 1970	Fall 1971	Fall 1972
All Institutions	.8476	.8448	.8353
Research Universities	.9589	.9604	.9546
Doctorate Granting Institutions	.9531	.9496	.9406
Comprehensive Colleges and Universities	.9327	.9278	.9373
Liberal Arts Colleges	.9430	.9344	.9430
Two-year Colleges and Institutions	.7449	.7505	.7367

Table II-8B - First Time Enrollment, USOE Full-Time Equivalent per Headcount, Private Institutions

All Institutions	.9396	.9422	.9405
Research Universities	.9698	.9711	.9507
Doctorate Granting Institutions	.8983	.8987	.9045
Comprehensive Colleges and Universities	.8890	.9070	.9052
Liberal Arts Colleges	.9749	.9758	.9767
Two-year Colleges and Institutions	.9479	.9309	.94

### Extension Enrollments

Off-campus learning has been discussed by many institutions. Yet the HEGIS data shows relatively little degree/credit extension activity. Table II-9 provides the extension degree enrollment as a percent of the total enrollment of these institutions. The data for the institutional categories are for all institutions, while a special total for those institutions which reported extension enrollments. This provides a comparison which may better serve planners.

Table II-9A - Degree Enrollment, Percent of Extension to Total, Public Institutions

	<u>Fall 1970</u>	<u>Fall 1971</u>	<u>Fall 1972</u>
All Institutions with Extension Enrollment	11.9%*	9.5%*	9.2%*
Research Universities	7.5	5.2	6.5
Doctorate Granting Institutions	8.9	6.4	7.1
Comprehensive Colleges and Universities	10.3	9.4	8.0
Liberal Arts Colleges	4.4	4.6	3.1
Two-year Colleges and Institutions	n/a	n/a	n/a

Table II-9B - Degree Enrollment, Percent of Extension to Total, Private Institution\*\*

All Institutions	2.4%	2.2%	2.5%
Research Universities	4.4	3.9	4.3
Doctorate Granting Institutions	1.5	1.4	1.6
Comprehensive Colleges and Universities	5.5	5.7	6.8
Liberal Arts Colleges	2.2	2.2	2.4
Two-year Colleges and Institutions	n/a	n/a	n/a

\*For those institutions reporting extension enrollments. Following percents are for all institutions

\*\*Only 78 private colleges reported extension enrollment for all three years. For these 11.6% of the total headcount enrollment is extension.

## SECTION III

### DATA SUMMARIES RELATING TO FINANCES

#### Use of Financial Data

In discussing financing policy, there are a number of variables which may be useful to the policy-maker. Usually these are the relationship of revenues and expenditures to the student. This section attempts to organize financial data relating to some of those variables which effect policy such as endowment income, gross and net tuition, expenditures for instruction, research, physical plant operation and increase in physical assets.

#### Endowment

Table III-1 shows the available endowment per student by type of institution and Table III-2 gives the endowment earnings and growth (due to investment) per student. There are significant differences by type of institution. A year-to-year increase in earnings and growth which could be available to the institution are given in Table III-3. There appears to be no general pattern in endowment earnings and growth.

#### Tuition as a Source of Revenue

Gross tuition as a source of education and general revenue, is given in Table III-4. Viewed another way, Table III-5 gives gross tuition per student. Tuition remissions and tuition waivers should be included in gross tuition by institutions in reporting tuition, even if tuitions must be appropriated by the legislature. Net tuition--defined as gross

Table III-1A - Endowment per Student, Public Institutions

	<u>Fiscal 71</u>	<u>Fiscal 72</u>	<u>Fiscal 73</u>
All Institutions	\$ 593	\$ 640	\$ 645
Research Universities	1,091	1,181	1,230
Doctorate Granting Institutions	753	798	820
Comprehensive Colleges and Universities	93	125	73
Liberal Arts Colleges	337	353	349
Two-year Colleges and Institutions	87	91	89

Table III-1B - Endowment per Student, Private Institutions

All Institutions	5,046	5,661	6,201
Research Universities	11,606	13,966	16,502
Doctorate Granting Institutions	2,403	2,509	2,583
Comprehensive Colleges and Universities	1,796	2,044	2,016
Liberal Arts Colleges	4,502	4,969	5,002
Two-year Colleges and Institutions	1,030	1,154	1,215



Table III-2A - Endowment Earnings and Growth per Student, Public Institutions

	<u>Fiscal 71</u>	<u>Fiscal 72</u>	<u>Fiscal 73</u>
All Institutions	\$ 15	\$ 12	\$ 14
Research Universities	59	42	56
Doctorate Granting Institutions	55	56	63
Comprehensive Colleges and Universities	1	2	2
Liberal Arts Colleges	17	22	25
Two-year Colleges and Institutions	0.5	0.5	0.7

Table III-2B - Endowment Earnings and Growth per Student, Private Institutions

All Institutions	314	348	357
Research Universities	918	1002	993
Doctorate Granting Institutions	124	153	110
Comprehensive Colleges and Universities	112	133	114
Liberal Arts Colleges	236	284	327
Two-year Colleges and Institutions	45	53	42

Table III-3A - Change in Endowment Earnings and Growth per Student,  
Public Institutions

	<u>1971-1972</u>	<u>1972-1973</u>
All Institutions	-24.3%	23.1%
Research Universities	-29.6	35.2
Doctorate Granting Institutions	2.7	11.9
Comprehensive Colleges and Universities	41.8	31.2
Liberal Arts Colleges	29.4	13.6
Two-year Colleges and Institutions	6.0	22.6

Table III-3B - Change in Endowment Earnings and Growth per Student,  
Private Institutions

All Institutions	11.0	2.5
Research Universities	9.2	- 0.9
Doctorate Granting Institutions	23.2	-28.4
Comprehensive Colleges and Universities	18.6	-14.9
Liberal Arts Colleges	20.3	15.1
Two-year Colleges and Institutions	17.8	-20.8

Table III-4A - Gross Tuition as a Source of Revenue, Public Institutions

	<u>Fiscal 71</u>	<u>Fiscal 72</u>	<u>Fiscal 73</u>
All Institutions	17.2%	18.0%	17.4%
Research Universities	15.8	16.8	16.0
Doctorate Granting Institutions	19.5	20.8	20.4
Comprehensive Colleges and Universities	21.9	22.7	22.0
Liberal Arts Colleges	15.4	17.1	17.2
Two-year Colleges and Institutions	14.9	15.4	15.1

Table III-4B - Gross Tuition as a Source of Revenue, Private Institutions

All Institutions	51.3%	51.4%	50.8%
Research Universities	30.3	30.1	30.9
Doctorate Granting Institutions	60.2	59.6	59.3
Comprehensive Colleges and Universities	73.4	72.7	70.5
Liberal Arts Colleges	68.2	68.4	67.4
Two-year Colleges and Institutions	71.8	70.6	67.6

Table III-5A - Gross Tuition per Student, Public Institutions

	<u>Fiscal 71</u>	<u>Fiscal 72</u>	<u>Fiscal 73</u>
All Institutions	\$ 311	\$ 334	\$ 346
Research Universities	542	597	615
Doctorate Granting Institutions	431	474	496
Comprehensive Colleges and Universities	315	345	370
Liberal Arts Colleges	335	354	377
Two-year Colleges and Institutions	149	157	161

Table III-5B - Gross Tuition per Student, Private Institutions

All Institutions	\$1,409	\$1,541	\$1,651
Research Universities	1,745	1,997	2,155
Doctorate Granting Institutions	1,259	1,362	1,499
Comprehensive Colleges and Universities	1,281	1,396	1,483
Liberal Arts Colleges	1,493	1,617	1,712
Two-year Colleges and Institutions	1,022	1,058	1,138

tuition less student aid--is given in Table III-6 and the year-to-year increases are given in Table III-7.

### Total Revenue

Total education and general revenue, from all sources, per student is given in Table III-8. Source of this revenue is available from HEGIS, but was not included here because of its volume. The year-to-year changes are given in Table III-9. The education and general revenue per student for all institutions is shown graphically in Figure III-1.

Total revenues including auxiliary enterprises, were compared to expenditures, and Table III-10 gives the resulting net revenues. Deficits for institutional categories are identified by minus signs. Note that these data are totals for the institutions contained in the updated data base for this paper referred to in the Appendix, not an estimate for all institutions.

### Expenditures

Table III-11 gives the ratio of expenditures for instruction and departmental research as a total of the education and general expenditures of the institution. While these differ significantly by type of institution, the changes within the institution category over time are usually small.

The expenditures for sponsored and organized research per graduate student are given in Table III-12. Departmental research is not included in these totals. The expenditures per student for physical plant operation and maintenance are given in Table III-13. These data provide some of the current cost components and their growth during a period of limited fund availability.

Table III-6A - Net Tuition per Student, Public

	<u>Fiscal 71</u>	<u>Fiscal 72</u>	<u>Fiscal 73</u>
All Institutions	\$ 256	\$ 276	\$ 287
Research Universities	428	483	508
Doctorate Granting Institutions	366	411	429
Comprehensive Colleges and Universities	268	287	310
Liberal Arts Colleges	262	269	319
Two-year Colleges and Institutions	126	131	133

Table III-6B - Net Tuition per Student, Private

All Institutions	\$1,258	\$1,374	\$1,474
Research Universities	1,462	1,690	1,838
Doctorate Granting Institutions	1,118	1,218	1,360
Comprehensive Colleges and Universities	1,206	1,307	1,384
Liberal Arts Colleges	1,339	1,442	1,522
Two-year Colleges and Institutions	954	954	1,026

Table III-7A - Increases in Net Tuition per Student, Public Institutions

	<u>1971-1972</u>	<u>1972-1973</u>
All Institutions	7.7%	4.2%
Research Universities	13.0	5.0
Doctorate Granting Institutions	12.2	4.2
Comprehensive Colleges and Universities	7.3	7.9
Liberal Arts Colleges	2.6	18.6
Two-year Colleges and Institutions	3.9	1.4

Table III-7B - Increases in Net Tuition per Student, Private Institutions

All Institutions	9.2	7.3
Research Universities	15.6	8.8
Doctorate Granting Institutions	8.9	11.6
Comprehensive Colleges and Universities	8.3	5.9
Liberal Arts Colleges	7.7	5.5
Two-year Colleges and Institutions	0.0	7.5

Table III-8A - Total Revenue per Student, Public Institutions

	<u>Fiscal 71</u>	<u>Fiscal 72</u>	<u>Fiscal 73</u>
All Institutions	\$1,804	\$1,861	\$1,987
Research Universities	3,423	3,553	3,838
Doctorate Granting Institutions	2,205	2,280	2,435
Comprehensive Colleges and Universities	1,440	1,522	1,681
Liberal Arts Colleges	2,144	2,065	2,190
Two-year Colleges and Institutions	999	1,025	1,068

Table III-8B - Total Revenue per Student, Private Institutions

All Institutions	2,748	2,999	3,250
Research Universities	5,760	6,625	6,982
Doctorate Granting Institutions	2,091	2,283	2,529
Comprehensive Colleges and Universities	1,746	1,921	2,103
Liberal Arts Colleges	2,191	2,365	2,541
Two-year Colleges and Institutions	1,424	1,499	1,683



Table III-9A - Increases in Total Revenue per Student, Public Institutions

	<u>1971-1972</u>	<u>1972-1973</u>
All Institutions	3.2%	6.8%
Research Universities	3.8	8.0
Doctorate Granting Institutions	3.4	6.8
Comprehensive Colleges and Universities	5.7	10.4
Liberal Arts Colleges	-3.7	6.0
Two-year Colleges and Institutions	2.6	4.2

Table III-9B - Increases in Total Revenue per Student, Private Institutions

All Institutions	9.1%	8.4%
Research Universities	15.8	5.4
Doctorate Granting Institutions	9.2	10.8
Comprehensive Colleges and Universities	10.0	9.5
Liberal Arts Colleges	7.9	7.4
Two-year Colleges and Institutions	5.3	12.3

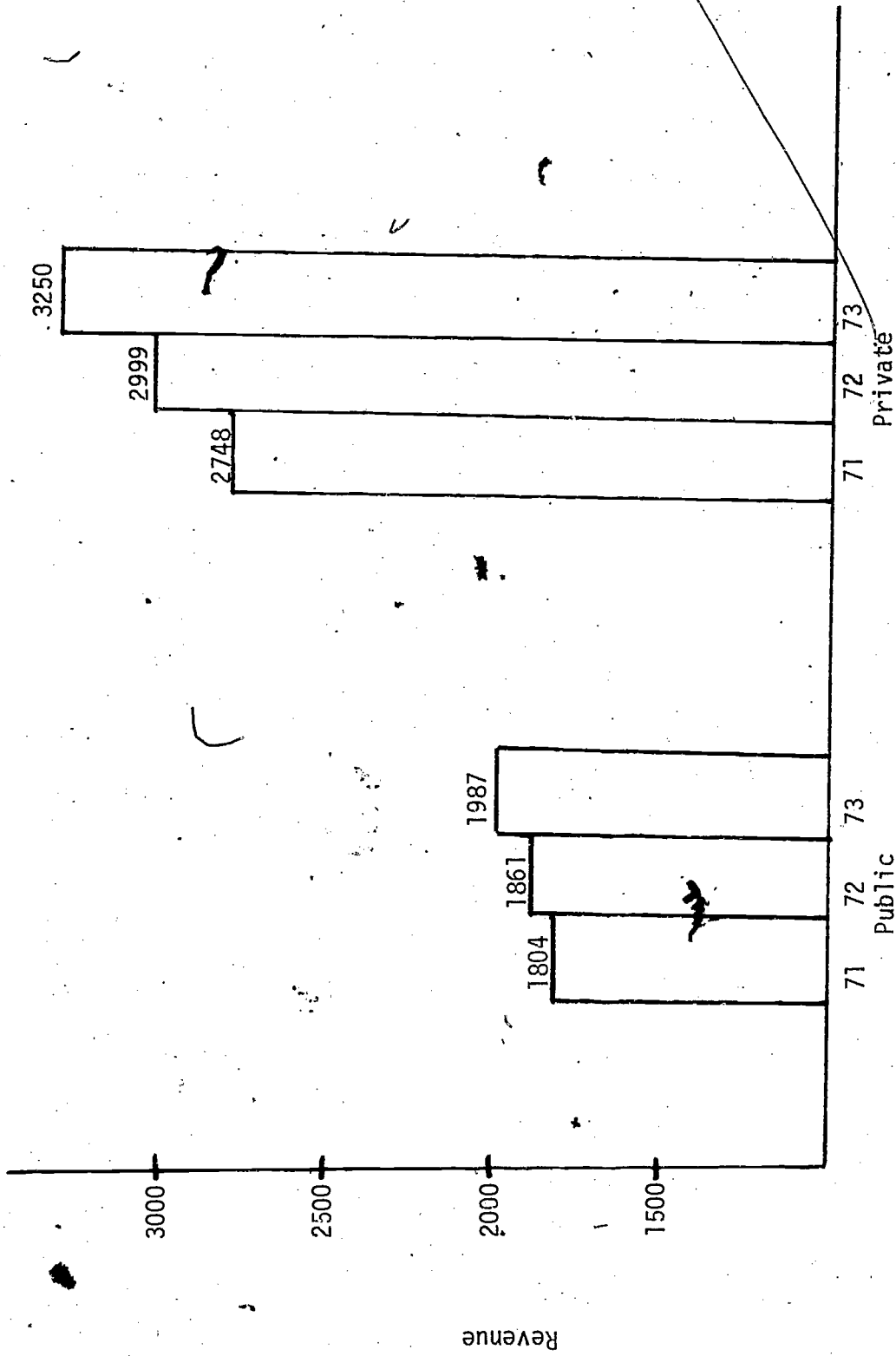


Figure III-1 - Revenue per Student (data from A11, Table III-8)

Table III-10A - Revenues less Expenditures, Public Institutions

	<u>Fiscal 71</u>	<u>Fiscal 72</u>	<u>Fiscal 73</u>
All Institutions	\$430,503,410	\$479,939,557	\$466,707,282
Research Universities	88,328,371	130,121,028	122,684,428
Doctorate Granting Institutions	35,027,798	47,628,696	40,612,922
Comprehensive Colleges and Universities	93,917,867	111,986,310	122,039,366
Liberal Arts Colleges	2,918,634	4,298,284	5,046,533
Two-year Colleges and Institutions	190,165,417	167,947,274	179,834,619

Table III-10B - Revenues less Expenditures, Private Institutions\*

All Institutions	- 27,476,193	71,288,605	72,432,975
Research Universities	- 38,556,202	9,861,480	- 4,823,702
Doctorate Granting Institutions	- 2,397,144	1,208,349	- 847,619
Comprehensive Colleges and Universities	16,724,174	23,325,188	32,075,624
Liberal Arts Colleges	- 13,193,041	20,573,024	27,490,212
Two-year Colleges and Institutions	6,140,150	4,568,776	6,346,421

\*For institutions in the sample only.

Table III-11A - Expenditures for Instruction and Departmental Research as a Proportion of Total Education and General Expenditures, Public Institutions

	<u>Fiscal 71</u>	<u>Fiscal 72</u>	<u>Fiscal 73</u>
All Institutions	48.4%	47.8%	47.3%
Research Universities	38.4	39.0	38.6
Doctorate Granting Institutions	44.9	45.5	45.4
Comprehensive Colleges and Universities	57.0	55.8	54.8
Liberal Arts Colleges	51.3	46.2	47.3
Two-year Colleges and Institutions	59.4	58.1	57.3

Table III-11B - Expenditures for Instruction and Departmental Research as a Proportion of Total Education and General Expenditures, Private Institutions

All Institutions	40.0%	39.6%	38.9%
Research Universities	34.0	33.3	32.3
Doctorate Granting Institutions	46.4	47.2	46.7
Comprehensive Colleges and Universities	46.0	45.2	44.6
Liberal Arts Colleges	45.1	44.4	43.9
Two-year Colleges and Institutions	39.5	38.9	39.0

Table III-12A - Sponsored and Organized Research per Graduate Student,  
Public Institutions

	<u>Fiscal 71</u>	<u>Fiscal 72</u>	<u>Fiscal 73</u>
All Institutions	\$ 2,200	\$ 2,115	\$ 2,407
Research Universities	3,536	3,762	4,162
Doctorate Granting Institutions	1,882	1,860	2,048
Comprehensive Colleges and Universities	337	317	348
Liberal Arts Colleges	15,751	13,848	11,744
Two-year Colleges and Institutions	1,160	476	347

Table III-12B - Sponsored and Organized Research per Graduate Student,  
Private Institutions

All Institutions	\$ 3,168	\$ 3,390	\$ 3,347
Research Universities	5,049	5,743	5,554
Doctorate Granting Institutions	1,282	1,114	1,358
Comprehensive Colleges and Universities	469	512	563
Liberal Arts Colleges	2,277	2,515	1,965
Two-year Colleges and Institutions	n/a	n/a	n/a

Table III-13A - Physical Plant Operation and Maintenance per Student,  
Public Institutions

	<u>Fiscal 71</u>	<u>Fiscal 72</u>	<u>Fiscal 73</u>
All Institutions	\$175	\$178	\$201
Research Universities	276	285	312
Doctorate Granting Institutions	216	229	242
Comprehensive Colleges and Universities	160	165	190
Liberal Arts Colleges	328	296	314
Two-year Colleges and Institutions	100	104	112

Table III-13B - Physical Plant Operation and Maintenance per Student,  
Private Institutions

All Institutions	275	296	324
Research Universities	423	502	533
Doctorate Granting Institutions	230	227	266
Comprehensive Colleges and Universities	183	204	215
Liberal Arts Colleges	279	299	315
Two-year Colleges and Institutions	223	221	249

Table III-14A gives the amount reported by the institution for buildings, land and equipment per student. Most institutions carry these items at cost rather than current market value. Older buildings may be seriously undervalued by today's replacement costs. Many institutions use equipment owned by some other institution or agency. Although there are serious limitations to such general data, these data do illustrate the extent of capital formation by the institution.

Table III-14A - Buildings, Land and Equipment per Student, Public Institutions

	<u>Fiscal 71</u>	<u>Fiscal 72</u>	<u>Fiscal 73</u>
All Institutions	\$ 4,627	\$ 4,598	\$ 4,761
Research Universities	7,642	8,263	8,531
Doctorate Granting Institutions	6,038	6,269	6,718
Comprehensive Colleges and Universities	4,278	4,300	4,316
Liberal Arts Colleges	6,632	6,641	5,674
Two-year Colleges and Institutions	2,259	2,212	2,280

Table III-14B - Buildings, Land and Equipment per Student, Private Institutions

All Institutions	7,597	8,004	8,232
Research Universities	11,709	13,403	12,425
Doctorate Granting Institutions	4,719	4,795	5,494
Comprehensive Colleges and Universities	4,849	5,129	5,419
Liberal Arts Colleges	8,530	8,787	9,264
Two-year Colleges and Institutions	5,479	5,484	6,062



## APPENDIX -- THE UPDATED DATA BASE

### Source

The file for these data summaries was developed from the machine readable versions of the Higher Education General Information Surveys (HEGIS). The National Commission on the Financing of Postsecondary Education took the separate magnetic tape files representing each of the HEGIS surveys and merged these to provide a file for each year with one (or two) records for each institution. These files were used to develop the data base used by the National Commission on the Financing of Postsecondary Education for its work. This on-line data base was continued, from January 1974 to January 1975, by the National Center for Educational Statistics (NCES) which called it EDSTAT I. Some additional files were added. Financial Statistics for 1972-73 and Opening Fall Enrollments for 1973 were added in March 1974 as separate files. These were used in constructing the updated data base.

### Building the Trend File

In order to have consistent data from year to year, a file was constructed using records from only those institutions which had responded to the HEGIS instruments for 1970-71, 1971-72 and 1972-73. Of the some 3,000 institutions which respond to HEGIS, about 2,600 had responded to all three years. This was the basis for the updated data base file which was used to prepare the statistics for this report. Thus no data on enrollments or finance was used unless the institutions had responded for all three years. However, some institutions failed to respond on some

items so that not all data items are available for all three years for all institutions. Typically, only two to five institutions would be missing for any specific data item.

The file was documented using the same data base directory format as EDSTAT I and the National Commission on the Financing of Postsecondary Education data base.