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## ABSTRACT

Comparative financial information derived from a national sample of 405 two-year colleges is presented in this report for fiscal year 1994-95, including data for the national sample and for 6 groups of peer institutions. The first section provides introductory information on the annual study, discussing the study sample and the use of study findings, while the second describes limitations of the study with respect to data extrapolation and institutional comparability and explains calculations and definitions. The next section provides a table of institutional participation by state and region, followed by guidelines for developing comparative analyses related to institutional revenues, expenditures, staffing, outcomes ratios, and student characteristics. The next two sections provide data on revenues by source and expenditures by function for the national sample, multi-campus districts, and single-college districts by size (i.e., peer group), presenting tables for credit full-time equivalent (FTE) students and credit and noncredit FTE students. Staffing is then addressed, presenting data on credit FTE students per FTE staff, unduplicated student headcount per FTE staff, and FTE staff and part-time staff as a percentage of FTE staff. Next, selected ratios showing staffing patterns, service areas, appropriations, space and scholarships per student, and budgetary and physical plant information are provided. Finally, data are provided on student characteristics for the national sample, multi-campus districts, and peer groups. Appendixes provide additional information on methodology, the questionnaire, and a list of participating colleges/peer groups. (BCY)

**for Public  
Two-Year  
Colleges:  
FY 1995  
PEER GROUPS  
SAMPLE**

# COMPARATIVE FINANCIAL STATISTICS

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**Comparative Financial Statistics  
For Public Two-Year Colleges:**

**FY 1995 Peer Groups Sample**

By  
Bradley Meeker  
NACUBO

May 1997  
Washington, DC

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## PREFACE

This report is the 18th in an annual series of comparative data studies of public two-year colleges. It is the result of an intensive six-month study involving three national education associations--the National Association of College and University Business Officers (NACUBO), the Association of Community College Trustees (ACCT), and the American Association of Community Colleges (AACC)--as well as the National Center for Education Statistics (NCES) and 405 community colleges. The study is intended to provide information to community college administrators, representatives of state and local agencies, and federal policy makers.

This report provides comparative information derived from a national sample of 405 public two-year colleges. It contains financial statistics for fiscal year 1994-95 and explanations derived from two surveys of public two-year colleges from across the nation. For the purpose of this study, colleges are defined at the highest district level. Included are multi-college districts and single-college districts. A single-college district may be multi-campus. (For example, Yosemite Community College is a multi-college district comprising Columbia College and Modesto College. Miami-Dade Community College, which is made up of multiple campuses, is treated as a single entity, a multi-campus single-college district.) This report includes:

- statistics for the national sample and six peer groups,
- space for colleges to compare their institutional statistics with national and peer group medians, and
- statistics presented in a variety of formats--tables, bar graphs, and pie charts.

## ACKNOWLEDGMENTS

The continuation of this project through an 18th year was made possible by funding from NACUBO. Over the years, AACCC and ACCT have provided cooperative support and NCES has contributed technical assistance.

Guidance and support were once again provided by the NACUBO Two-Year Colleges Council, whose members include L.T. (Pete) Parker (chair), Paul D. Camp Community College; Robert J. Blood, Miami-Dade Community College; Kevin McElroy, Coastline Community College; Barbara Gittins, Utah System of Higher Education; Thomas R. Hawk, Community College of Philadelphia; Therese Sampson, Atlantic Community College; Morris Beverage, Lakeland Community College; and Margaret Kircher, Cambridge Community College. William M. Dixon, Wytheville Community College, is the NACUBO board liaison. These individuals were instrumental in facilitating the project's progress by actively encouraging their colleagues to participate in the study.

A Redesign Task Force was formed in February 1991 to assess and restructure the project. This task force provided invaluable guidance and included Dale H. Miller (chair), Harrisburg Area Community College; Ralph Alterowitz, Venture Tech Corporation; Stanton Calvert, Texas Public Community/Junior College Association; Judith Eaton, American Council on Education; Thomas G. Estes Jr., Mercer University; John E. Harper, The Robinson Group; and Robert W. Jensen, Metropolitan Community Colleges. K. Scott Hughes and Laura Faulk Willson, consultants to the task force, provided excellent analysis and recommendations for restructuring the study and its reports. This restructured report is the result of the task force and the consultants' work, as well as the input provided by more than 300 business officers. In addition, the National Council of Community College Business Officials (now CCBO) provided help.

Various individuals devoted both energy and resources to the successful conduct of the study, particularly the data collection and analysis. The staff at John Minter Associates was responsible for the computer analysis. Anna Marie Cirino and Carla Balakgie of NACUBO are acknowledged for their cooperation and support.

A debt of gratitude is owed to K. Scott Hughes, formerly of NACUBO, and Norman Brandt, U.S. Department of Education, who acted as a liaison to NACUBO. They dedicated a great deal of effort and cooperation in the developmental years of this project. Enid B. Jones, AACCC, and Raymond Taylor, ACCT, are also acknowledged.

Financial support for the assessment of the study in 1991 was generously provided by Information Associates. Valuable support and input for the 1991 restructuring of the project were also provided by the Massachusetts Community College Association, Inc.; the South Carolina State Board for Technical and Comprehensive Education; the Texas Public Community/Junior College Association; the Washington State Board for Community College Education; and the Washington State Higher Education Coordinating Board.

## INTRODUCTION

**Background.** In 1977, members of NACUBO's Two-Year Colleges Committee decided to undertake a comparative data study of public community colleges. (The term "community colleges" includes all postsecondary institutions offering up to the first two years of higher education.) Members of the committee, now a council, were frustrated by the lack of information available to governing boards, presidents, and taxpayers who requested comparative data. The committee members thought that these data could be an important part of the information necessary for decisions such as appropriation requests, salary increases, and proposed expenditures by function (instruction, institutional support, plant operation and maintenance). Further, "current" information, rather than historical summary, was needed. Because the committee members were also concerned about potential problems involved in trying to establish comparative data for community colleges, they approached the task cautiously.

Throughout the first 17 years of the project, comments from community college presidents and business officers were used to determine the usefulness of the data and the additional information needed, as well as to make necessary changes. Sample size doubled steadily throughout the first three years, from 97 to 184 to 403; leveled off at 420 and 442 the next two years; and increased to more than 500 since then. This year, the number of participants fell to 405.

This report reflects the assessment that occurred in 1991. A task force was formed to assess the study and to consider its restructuring to improve its utility. This group comprised business officers, an accrediting agency official, a state agency administrator, a representative from private industry, a former community college president, and higher education consultants. Through the guidance of these people, several surveys were conducted and analyzed. This report is one result of that process, which included input from more than 300 business officers and representatives of state agencies.

The following summary of important financial characteristics is based on the financial data section of the Integrated Postsecondary Education Data System (IPEDS), conducted by NCES, and a supplemental survey, conducted by NACUBO. Analysis performed by NACUBO, Laura Faulk Willson, and K. Scott Hughes in 1992 provided the foundation for the FY 1991, 1992, 1993, and 1994 reports, as well as the current one.

**Objectives.** One of the study's primary objectives is to learn how comparative information can be used to improve community college decision making. The project also seeks to shed light on the financial and operational aspects of community colleges. The report format is designed to facilitate comparing the operational and financial statistics of an individual community college to national medians.

**National Sample.** A less detailed report, *Comparative Financial Statistics for Public Two-Year Colleges: FY 1995 National Sample* is also available. Complimentary copies of this report, containing quartiles for the national sample, were distributed to the chief business officers of the participating colleges.

**Special Analysis Service.** A service providing analyses of special groupings of the database is available for a modest fee. Selections available include groupings on the basis of credit FTE enrollment, current fund expenditures, state, region, or special group as specified by purchaser (for example, California colleges with credit FTE enrollment greater than 10,000). Call the NACUBO Center for Institutional Accounting, Finance, and Management at (202) 861-2535 for more information (\$80 for members; \$110 for nonmembers).

**How to Order.** Additional copies of this report or copies of the *FY 1995 National Sample* report may be obtained by calling the NACUBO Order Desk at 202-861-2560. *FY 1995 National Sample* (NC1175) is \$25 for members; \$30 for nonmembers. *FY 1995 Peer Groups Sample* (NC1180) is \$40 for members; \$50 for nonmembers. Information from the *Peer Groups Sample* is also available on disk in a menu-driven, Lotus

spreadsheet format (NC1185, 3 1/2" disk format; NC1190, 5 1/4" disk format) and is \$30 for members; \$45 for nonmembers.

**User Feedback.** Comments from readers regarding the need for and improvements to this report are encouraged. Without adequate feedback, NACUBO has no way of ensuring that future editions of *Comparative Financial Statistics* are as responsive as possible to the needs and wants of the community college decision makers that it seeks to serve.

**Potential Uses.** The primary purpose of this report is to assist a college in preparing a meaningful analysis of how its financial and operational performance relates to peer group norms. Accreditation agencies have also found this study to be a useful tool in assessing institutional effectiveness, and increased application of the study by these agencies for reaccreditation purposes is anticipated.

Unlike internal institutional analysis, where performance in terms of revenue and expenditure patterns is related to goals, this analysis compares certain data from one college with data from other colleges. Comparison is useful only to the extent that the comparison group is similar and that data on revenue and expenditure performance are based on common understandings. Comparative data may be used to define high standards for assessing institutional financial success or to justify average performance, depending on the aspirations of a college with respect to the norms of the comparison group. Both types of comparison can lead to meaningful analysis of a college's financial data. Such analysis could, in turn, affect the college's financial policies in cases where a college appears significantly out of line with its peers.

The unique characteristics of a college may be revealed by comparison. A college may have relatively high- or low-cost areas, such as utilities and faculty salaries, or high- or low-quality (and cost) programs, such as instruction and student services. Unique characteristics are reflected in the differences between the cost structure of a college and the norms for all colleges surveyed. Comparison of a college's cost structure to those of other colleges serves to highlight these differences. Depending on goals

and other perceptions, comparison can reassure, or concern, governing boards and others who want to know if a college is monitoring and managing itself in a fashion appropriate to its singular character.

Comparisons are useful for confirming and challenging perceptions. If a college has high-cost areas, are they perceived to be of high priority? For example, if student services costs are above the median, is the institutional priority for these services the cause?

Comparisons also help a college set performance goals, which may be planned in terms of budget proportions for various functions, revenue proportions, expenditures per student by various functional categories, staff patterns, or class-size distribution. In areas where a college has revised an internal priority, the median or high quartile scores might provide a reasonable goal. The soundness of a goal, or an issue any board member may raise, can, at least in part, be established with reference to the performance of other colleges.

In addition to its primary purpose of providing meaningful comparisons, this report may serve as an internal management document for self-review and self-analysis. Comparisons provide a starting point for finding institutional strengths and weaknesses. For example, costs per student that are far above the median, as well as staff-to-faculty ratios that appear high when compared with others, may indicate problems in institutional management.

These comparisons may suggest new ways for a college to record data to monitor potential trouble points; they may also suggest areas in which more detailed study is required. Thus, the analysis in this workbook allows can indicate areas where new policies or new methods of monitoring performance may be required.

## LIMITATIONS AND EXPLANATIONS

The results of a comparative data study of this nature must be used with care. Discussion of some of the more obvious concerns follows.

**Extrapolation.** The 405 public community colleges in this study may not reflect the financial and operational patterns of their 369 sister colleges (counting systems of branch campuses as single colleges). Care was taken to include colleges that are geographically representative, as well as representative of enrollment levels. However, because of the need to use data only from those cooperating colleges that filed both timely and complete reports, the sample is not random.

No great significance is attached to any changes that occurred from year to year for any of the statistics: the survey populations differed and most changes are smaller than the confidence limits for the statistics.

**Original Data.** Lack of well-established definitions for such terms as "full-time-equivalent student" and lack of consistency in reporting such expenditure functions as "academic support," "institutional support," and "student services" create difficulties in generating accurate comparative data. Moreover, some survey responses are estimates because some colleges do not keep precise data in all the areas surveyed. All these factors affect the quality of the results.

**Institutional Comparability.** There is no way to establish truly homogeneous peer groups for community colleges. Major factors, such as mission, location, academic preparation of entering students, local area salary levels, local nonsalary costs, and methods of financing, create unique financial and operating patterns. Peer group comparisons that lead to administrative financial policy changes require sensitivity to many factors not readily apparent from the statistics.

**The Myth of the "Typical" College.** There is no typical college. Colleges should use this report only to find what makes them unique--not

to pressure a college toward some nonexistent "median" performance. This study has found a great diversity of expenditure, revenue, and staffing patterns. Diversity is clearly a characteristic--and a great strength --of community and junior colleges.

**Calculations.** The statistics in this report are medians for the entire sample of 405 colleges, excluding unusable or blank responses for specific data elements. N is the number of colleges that provided the data necessary to calculate the statistic, and it is the number of values computed to find the median. N varies with each statistic. The total number of usable responses for each statistic is shown in the columns labeled "N."

The median represents the value that will split the group of colleges in half for a given statistic: one-half the colleges will be above the median, while one-half will be below. For that reason, the "median college" is different for each statistic, and the proportions may not add up to 100 percent.

The values in the pie charts and bar graphs depict student population characteristics and are means rather than medians.

Pell Grants are excluded from both the revenue and the expenditure bases, including federal restricted grants and restricted scholarships. All revenue and expenditure figures exclude auxiliaries unless specifically noted.

**Interpretation of Proportions.** Careful interpretation of expenditure and revenue proportions is urged. High costs in any area, such as utilities, will naturally push the expenditure proportion for other areas, such as instruction, below the sample median--even if the budget support for instruction is adequate.

**Important Note.** Because each statistic has a different college at its median value, proportions will not add up to 100 percent. A college with a low instructional budget proportion has a high administrative budget proportion.

**Definitions.** For the purposes of this study, the following terms are defined as follows:

**Single-college district:** A community/junior college district organized as a single college with one or more campuses and/or satellite locations.

**Multi-college district:** A community/junior college district organized as two or more separate colleges, each of which may have one or more campuses and/or satellite locations.

**Full-time-equivalent (FTE) enrollment:** Survey respondents were urged to report figures that *accurately represent* their colleges. For those colleges that required a formula, the following were recommended: **Credit FTE enrollment** is annual credit hours divided by 30 if a college is on a semester basis; divided by 45 if a college is on a quarter basis. **Noncredit FTE enrollment** is annual noncredit course hours divided by 60.

**Instructional expenditures:** Expenditures for credit and noncredit courses; academic, occupational, and technical instruction; remedial and tutorial instruction; and regular, special, and extension sessions.

**Service area population:** The population included in the area the district is mandated to serve (i.e., as designated by ZIP codes, county boundaries, political boundaries).

**Credit units enrolled:** Includes three categories (under 6 credit units, 6 to 11.9 credit units, and 12 or more credit units) as of the official fall reporting date (the date in the fall on which a college must report fall enrollment data to the state, its board of trustees, or an external governing board; e.g., census date, mid-term as assigned by state).

**Hours enrolled:** The percentage of credit students that attended classes during four categories of time periods: day only, evening only, weekend only, and day/evening/weekend (a combination of classes). Classification is according to the published starting time, as defined by the college.

**Class level:** Defined in three categories, this includes freshman (less than 30 units), sophomore (30 units or more), or AA/AS or higher degree.

**Staffing:** Includes regular, temporary, and part-time staff. Excludes student assistants, both regular and work-study. See *Financial Accounting and Reporting Manual for Higher Education* [1332-338] (NACUBO) for definitions of categories.

**Total educational and general expenditures:** Excludes E&G mandatory transfers, E&G nonmandatory transfers, auxiliary enterprises, hospitals, and independent operations.

**Total revenues:** Excludes sales and services of auxiliary enterprises, sales and services of hospitals, and independent operations.

**Other income:** Includes endowment income, sales and services of educational activities, and other sources.

**Academic expenditures:** Includes instruction (and research), public service, and academic support.

**Support expenditures:** Includes student services, institutional support, and plant operation and maintenance.

**FY 1995  
Participation by State and Region**

N = 405

T = Total in Region or State R = Responses

Regional Summary		
Region	T	R
Central	199	120
Eastern	128	57
Southern	278	171
Western	169	57
<b>Total</b>	<b>774</b>	<b>405</b>
Percent of Total		52%

Central		
ST	T	R
IL	40	38
IN	2	2
IA	15	6
KS	19	7
MI	29	24
MN	23	4
MO	12	6
NE	6	5
ND	2	1
OH	22	13
OK	13	6
SD	N/A	N/A
WI	16	8
<b>Total</b>	<b>199</b>	<b>120</b>
Percent		60%

Eastern		
ST	T	R
CT	12	1
DE	1	0
ME	6	3
MD	18	13
MA	15	6
NH	2	0
NJ	19	7
NY	38	20
PA	14	6
RI	1	1
VT	2	0
<b>Total</b>	<b>128</b>	<b>57</b>
Percent		45%

Southern		
ST	T	R
AL	35	32
AR	8	4
FL	28	15
GA	23	9
KY	1	0
LA	2	0
MS	15	8
NC	58	19
SC	16	14
TN	14	9
TX	50	37
VA	24	24
WV	4	0
<b>Total</b>	<b>278</b>	<b>171</b>
Percent		62%

Western		
ST	T	R
AK	N/A	N/A
AZ	10	5
CA	71	12
CO	15	7
HI	N/A	N/A
ID	3	0
MT	8	6
NV	4	2
NM	8	3
OR	13	6
UT	5	1
WA	25	10
WY	7	5
<b>Total</b>	<b>169</b>	<b>57</b>
Percent		34%

## COMPARATIVE ANALYSIS

Grants may be for student aid or for special programs, such as Title III. These variations make comparison difficult.

### Revenues

Of interest to some analysts is the range of tuition and fee revenues per noncredit headcount student discovered by this survey. Being lower than the median, for example, may indicate a preponderance of inexpensive courses, subsidized noncredit courses, or a hasty estimate of the split between credit and noncredit tuition revenues.

### Meaning and Explanations

Total revenues exclude sales and services of auxiliary enterprises, hospitals, and independent operations as defined on the IPEDS finance form for lines A-12, A-13, and A-15. Pell Grants are also excluded. All revenue sources include both restricted and unrestricted funds. Each revenue source is shown three ways: as the ratio of the revenue to credit FTE students, as the ratio of the revenue to credit and noncredit FTE students, and as a proportion of total revenues (as defined above).

Tuition and fees were split into credit and noncredit portions using the estimated percentage breakdown given by each survey respondent.

Appropriations (all government) include federal, state, and local appropriations. State and local appropriations combined are shown to improve state-by-state comparisons where the only variance in funding is the state or local portion provided.

Gifts, grants, and contracts (all sources) include restricted and unrestricted revenues from federal, state, local, and private sources. Federal grants and contracts exclude Pell Grants.

Other revenues include unrestricted and restricted endowment income, sales and services of educational activities, and "other sources" as defined on the IPEDS finance form for lines A-10, A-11, and A-14.

### Possible Interpretations

Interinstitutional revenue-mix comparisons are difficult to make and have limited uses. States and localities finance their colleges in many ways.

Most of the other figures can be useful for pinpointing how differently the college is financed compared to national sample medians. Given the lack of control most administrators have over setting tuition and appropriation levels, this is more "interesting" than useful for making policy.

State and local appropriation statistics are derived from financing characteristics and vary greatly from state to state.

### Limitations

In some states, colleges charge no tuition; revenues come from state and local sources only. This explains the great variability of these statistics.

Most revenue analyses would best be done on a state-by-state basis. Comparison is easiest among colleges within the same state or among colleges within states having similar financing for community colleges. Many colleges will want to rely on special home-state revenue analyses.

The large range of financing strategies makes median and quartiles of dubious statistical value.

Comparisons among colleges of budget proportions or revenues per student are more useful when data for a number of previous years are also examined.

The median for state and local appropriation financing is based on a large range of financing strategies and may be of limited analytical value.

## **Expenditures**

### Meaning and Explanations

Total expenditures include only current fund activities and exclude auxiliaries and transfers. Pell Grants are also excluded. Both restricted and unrestricted expenditures are shown. Each expenditure is shown three ways: as the ratio of the expenditure to credit FTE students; as the ratio of the expenditure to credit and noncredit FTE students; and as a proportion of total expenditures (as defined above).

Academic expenditures include instructional expenditures (for both credit and noncredit courses), research expenditures, public service expenditures, and academic support expenditures (including libraries, audiovisual centers, academic computing, and academic administration).

Support expenditures include student services, institutional support, and plant operation and maintenance.

Scholarships and fellowships include both restricted and unrestricted funds. Pell Grants are excluded.

In this display, academic expenditures are split into two categories: instruction (and research and public service) and academic support. Support expenditures are broken into student services, institutional support, and plant operation and maintenance.

Research and public service expenditures have been included with instruction because they constitute such a small percentage of total expenditures.

Two important breakdowns are given. Instructional expenditures are split into credit and noncredit categories, and plant operation and maintenance is broken into utilities- and nonutilities-maintenance costs. Utility expenditures include electricity, gas, oil, coal, steam, water, and waste disposal. Noncredit-instruction costs per student are calculated by

dividing the expenditures by noncredit headcount only. The breakdown between credit and noncredit is based on a percentage split estimated by each college.

### Possible Interpretations

Colleges above the median on the proportion of expenditures devoted to instruction may rate themselves as more efficient than other colleges. On the other hand, some colleges may have achieved this "efficiency" by deferring administrative costs (especially some building maintenance) that will inevitably have to be paid. Moreover, some colleges, especially those serving disadvantaged populations, must fund higher student support expenditures. To remain consistent with their goals and mission, this pushes down the instructional cost proportion.

Colleges that are above the median on costs per student may find several interpretations possible: higher regional costs, a concentration of higher cost programs, and an attempt to provide a higher level of service. Higher instructional costs per student are almost always the direct result of higher faculty salaries than the median, lower ratios of students to faculty (see staffing distributions), or both.

Governing boards will be most interested in these deviations from the norm and how accurately they correlate with their own perceptions of institutional quality, program efficiency, and overall level of program cost.

Scholarship funds per student give a measure of students' financial needs plus the effort expended by students and the institutional financial aid office in securing grants. It also reflects the college's commitment to serve lower income students.

Budget proportion statistics may clarify factors making a college different from other colleges. A college's unique qualities may stem from a strong commitment to instruction, with student services perhaps sacrificed somewhat to maintain the academic program. Alternately, a high plant maintenance commitment or a strong concern for academic support may

serve to differentiate the college from national norms. Analysts should examine data carefully to see if the unique characteristics revealed in the statistics are at variance with commonly held perceptions about the college on campus. For example, if the college prefers a low commitment to student services, while data reveal that the college is far above the norm, a case exists for re-examining the current efficiency of the delivery of student services.

Examining costs on a per-student basis adds another dimension to the analysis. Higher costs per student may be due to relatively higher costs in a geographic location, to falling enrollment, or to an inefficient educational delivery system--or to an institutional mission of providing high-quality services. At community colleges, fixed costs may be more predominant in administrative areas than in instructional areas because many colleges use varying proportions of part-time faculty to reduce instructional costs and to increase flexibility in adapting program costs to instructional needs. Colleges with enrollments below their physical capacity may have above-median costs per student in administrative areas because of fixed costs, coupled with median costs in the instructional areas.

Credit instruction costs per student reveal differences among colleges with regard to class size and faculty compensation. Interpretations of these costs should acknowledge differences in faculty ratios and pay levels.

#### Limitations

Certain differential practices make the comparability of these statistics somewhat limited. Colleges where certain costs, such as fringe benefits, are paid directly by the state and are not included in institutional figures will show an "incorrect" low-cost level.

In comparing expenditures per student for scholarships, numbers of needy students could justify above-median expenditures.

It must be emphasized that being above or below the median is not necessarily good or bad unless such information conflicts with the stated goals of the college.

In making comparisons, careful attention should be given to the college's special situation. Well-paid faculty, cold climates, age of buildings, and preventive-maintenance plans could easily justify above-median expenditures.

Comparison among colleges on these ratios for a single year yields only an idea of the variety of budget structures. Some colleges depend more heavily on personnel; others have high nonpersonnel costs.

#### **Staffing**

##### Meaning and Explanations

Colleges provided FTE staff counts according to the NACUBO functional categories. Instructional staff were further categorized as credit instruction and all other staff instruction. The final category was used for noncredit faculty as well as clerical, laboratory, or administrative staff (all nonteaching) who may be classified in the instruction function but not as faculty.

FTE staff statistics are calculated in four ways: median ratio of FTE staff in each category to FTE credit students; median ratio of FTE staff in each staff category to number of unduplicated credit headcount students (an estimate of all those enrolled as credit students during the year); proportion of staff in each category for the median college; and part-time FTE staff as a percentage of total FTE staff per each specific staffing category only.

Academic support is further split between staff for academic administration and staff for all other academic support. Student services is

split three ways: student services administration, counseling and career guidance, and all other student services staff.

#### Possible Interpretations

These ratios may provide a starting point for a college to judge whether it has too many or too few faculty or other staff. Comparison of administrative staffing must be made with care because of the wide range of administrative services provided by colleges; the median college may be providing a very different level of administrative support and services than any other college.

A college may want to use comparative data as a rough guide to "standard behavior in the industry," but alert management also requires careful year-to-year monitoring of trends in its own staffing patterns.

#### Limitations

Some colleges could not provide staffing ratios by functional categories because they maintained only exempt, nonexempt, and faculty breakdowns.

Many respondents had difficulty in determining whether an employee who did not teach but who worked exclusively in the instructional area was instructional or academic support. There is probably considerable overlap between these two categories. Some confusion may also exist over the difference between noncredit instructional faculty and public service personnel.

Some colleges also had difficulty converting part-time noncredit instructional faculty to FTE. Although class-hour conversions were suggested, some difficulty must be expected when the noncredit offerings might be for such extremes as one weekend or six months on an irregular schedule.

#### **Selected Ratios**

Ratio 1. The numerator is composed of credit faculty staff as well as counseling staff. The denominator is composed of staff for academic administration, student services administration, and institutional support.

Ratio 2. All other FTE staff includes the sum of all staff categories except credit instructional faculty. Dividing this figure by credit FTE faculty can lead to a comparison of administration staffing with faculty staffing.

Ratio 3. This ratio is calculated by dividing unduplicated credit student headcount by total FTE staff.

Ratio 4. Service area population per unduplicated credit student headcount is derived from the NACUBO survey responses. In previous years, this study made use of an unduplicated headcount figure that included both credit and noncredit students.

Service area population per unduplicated credit headcount gives the "market penetration" of the college. Being below the median may indicate good reception of the college's programs within the community. The statistic is also affected by the number and size of competing colleges and reflects the competitive strength of the college.

Unduplicated headcounts are not monitored by all colleges; thus, these figures are often estimates and may be in error.

Service area populations may vary in the proportion of people who are generally eligible for college (i.e., 18 years and over). This somewhat limits the comparability of the statistic among colleges. In addition, many of the students counted in the headcount may be drawn from outside the service area, weakening the "market penetration" interpretation of the statistic.

Ratio 5. Total appropriations per unduplicated credit student headcount adds federal, state, and local appropriations to arrive at the numerator.

Total appropriations per unduplicated headcount gives the dollar amount provided by appropriations per student served. The more a college is above the median, the more appropriation support the college receives per student served.

Ratio 6. Gross square feet of building space per unduplicated credit student headcount gives an indication of how much space has been "built" per student. This figure may reflect declining or rising student enrollment, availability of funding for this purpose, or both.

Ratio 7. The numerator includes Pell Grants and is divided by credit FTE students.

#### **More Selected Ratios**

Ratio 1. Salary ratios show the proportion of institutional expenditures composed of salaries and wages. The ratio of E&G salaries and wages is not a compensation figure; benefits are excluded.

Salary ratios are most useful when figures that show changes over time are examined. For individual colleges, an increase in this ratio may reflect the preliminary stages of budget stringency. Travel, supplies, telephone, and equipment budgets are often the first to be cut in anticipation of revenue shortfalls.

Ratios 2 through 4. Plant operation and maintenance, less utilities per square foot (gross area of building), is the cost of maintaining buildings, not including heating, cooling, and lighting per square foot of space. Utilities per square foot (gross area of building) includes the cost of heating, lighting, and cooling per gross square foot of space. Plant operation and maintenance, excluding utilities, per estimated building-replacement value is the cost of maintaining the plant in terms of its replacement value.

These statistics expand the analysis of plant operation and maintenance expenditures. A variance from the national sample median in overall costs may be due to high utility costs or to high energy consumption per square foot and may be driven by low space-to-student ratios.

Ratio 5. This ratio is the unrestricted current fund balance divided by total E&G expenditures. Unrestricted current funds are those funds that the college's management may use for any purpose it deems necessary. Included are unrestricted funds that are designated by the college's governing board for a specific use.

Ratio 6. The amount of budget used to support debt service reduces funds for academic purposes. Debt service is usually regarded as a fixed cost. The higher the proportion of budget dedicated to debt service, the less flexibility the college may have to respond to financial changes.

The numerator for this ratio is composed of mandatory transfers for debt service and interest payments listed as current fund expenditures. The denominator is unrestricted current fund revenues. Some portion of mandatory transfers may not be for debt service. (Loan fund matching payments are an example.)

Debt service ratios are seldom above 5 percent. Higher ratios decrease flexibility and may put the college at a competitive disadvantage with colleges that have an expenditure distribution favoring instructional expenditures.

While flexibility may be decreased, colleges that have borrowed to build or to improve facilities usually do so from a position of strength. These colleges are optimistic about the future and usually have some basis for taking slightly greater risks.

Many public colleges have plant expenditures funded by specific, designated appropriations. In such cases, increasing debt service may not indicate decreasing flexibility.

Ratio 7. This ratio is calculated by dividing total E&G benefits by total E&G salaries and wages. Employee fringe benefits are all benefits paid, whether from institutional accounts or from noninstitutional accounts. E&G salaries and wages include those of all personnel, full- and part-time, paid through each account. Expenditures for college work-study or for employee fringe benefits are **not** included in salaries and wages.

Ratio 8. This is calculated by dividing instructional salaries--without benefits--by total E&G expenditures. Instructional salaries typically comprise a large proportion of a college's operating budget.

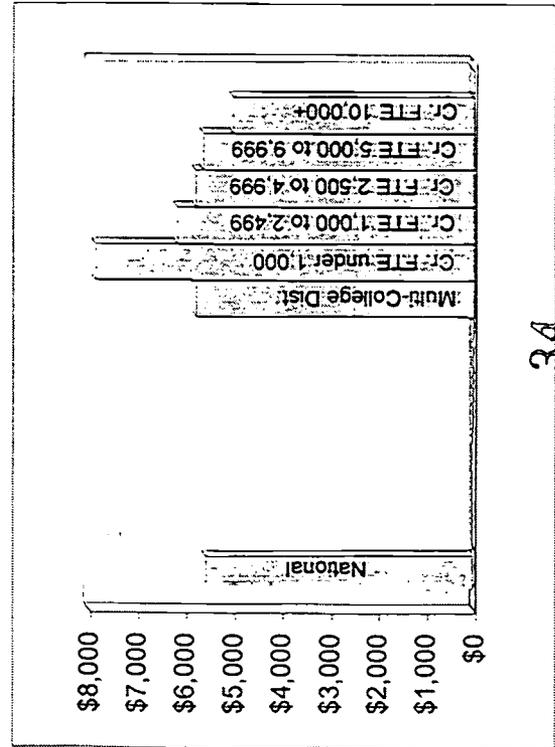
### **Student Characteristics**

The figures presented in this section are means rather than medians. Each is calculated by dividing the sum of the figures reported by each college by the sum of the totals reported by each college. As such, they are indicative of the student population as a whole rather than for a mean college.

Course-enrollment distributions are given for credit courses. Colleges that find their instructional costs per student above the median may wish to examine the course-size distribution to see if high costs are a result of their class-size distribution. A large proportion of small classes is costly. Some colleges may find that they have a predominance of very large and very small classes, with few in the mid-range when compared with the national sample. They may wish to re-evaluate methods of delivering instruction.

Revenues per Credit FTE Student (in \$\$\$)															
Revenues by Source	National		Multi-College Districts		Single-College Districts by Credit FTE Students										
	Median	N	Median	N	Under 1,000		1,000 - 2,499		2,500 - 4,999		5,000 - 9,999		10,000 or more		Year
					Median	N	Median	N	Median	N	Median	N	Median	N	
Total revenues	\$5,515	405	\$5,720	16	\$7,812	44	\$6,111	140	\$5,723	98	\$5,557	72	\$4,950	35	
Tuition and fees	1,286	405	1,351	16	1,371	44	1,329	140	1,406	98	1,489	72	1,126	35	
Credit tuition & fees	1,169	405	1,280	16	1,344	44	1,201	140	1,367	98	1,288	72	886	35	
Noncredit tuition & fees	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Appropriations	3,267	405	3,276	16	4,836	44	3,582	140	3,209	98	3,149	72	3,166	35	
Federal	0	405	0	16	0	44	0	140	0	98	0	72	0	35	
State	2,364	405	2,324	16	4,033	44	2,856	140	2,310	98	2,093	72	2,021	35	
Local	116	405	908	16	109	44	508	140	387	98	657	72	1,006	35	
State & local combined	3,015	405	2,757	16	5,005	44	3,658	140	2,880	98	2,763	72	3,444	35	
Gifts, grants, and contracts	505	405	479	16	960	44	662	140	542	98	459	72	427	35	
Federal	248	405	248	16	616	44	363	140	264	98	240	72	163	35	
State & local	101	405	103	16	208	44	120	140	178	98	133	72	163	35	
Private	12	405	5	16	23	44	24	140	26	98	31	72	10	35	
Other revenues	131	405	114	16	181	44	145	140	142	98	165	72	127	35	

Total Revenues per Credit FTE Student (in \$\$\$)



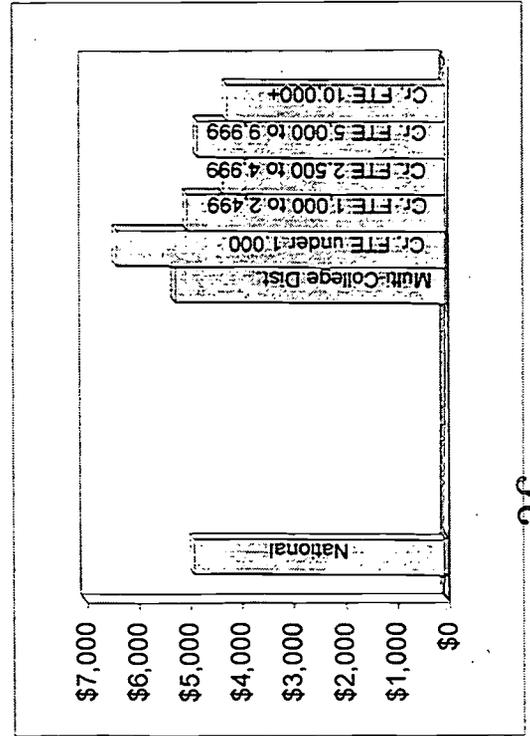
Within single-college districts, there is an inverse relationship between size of institution and revenues per student. Of single-college districts, those with fewer than 1,000 students reported the highest median revenues per student in almost all major categories; those with 10,000 or more students had the lowest median revenues per student in most major categories. Total revenues as well as tuition and fee revenue were lowest for these districts.

**Revenues per Credit Plus Noncredit FTE Student (in \$\$\$)**

Revenues by Source	National		Multi-College Districts		Single-College Districts by Credit FTE Students											
	Median	N	Median	N	Under 1,000		1,000 - 2,499		2,500 - 4,999		5,000 - 9,999		10,000 or more		Your College	
					Median	N	Median	N	Median	N	Median	N	Median	N		
<b>Total revenues</b>	\$4,847	267	\$5,186	13	\$6,306	23	\$4,955	85	\$4,268	68	\$4,751	49	\$4,188	29		
<b>Tuition and fees</b>	1,159	267	1,335	13	1,117	23	1,122	85	1,161	68	1,309	49	1,051	29		
Credit tuition & fees	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
Noncredit tuition & fees **	39	234	190	8	0	19	29	74	41	62	126	46	36	25		
<b>Appropriations</b>	2,879	267	3,137	13	3,824	23	2,960	85	2,653	68	2,696	49	2,679	29		
Federal	0	267	0	13	0	23	0	85	0	68	0	49	0	29		
State	1,979	267	2,093	13	3,287	23	2,261	85	1,927	68	1,878	49	1,522	29		
Local	315	267	653	13	439	23	338	85	168	68	648	49	751	29		
State & local combined	2,854	267	2,730	13	3,988	23	2,850	85	2,837	68	2,702	49	2,557	29		
<b>Gifts, grants, and contracts</b>	415	267	459	13	736	23	501	85	375	68	392	49	326	29		
Federal	214	267	274	13	478	23	306	85	163	68	183	49	131	29		
State & local	97	267	242	13	159	23	80	85	103	68	117	49	101	29		
Private	14	267	31	13	14	23	14	85	15	68	22	49	11	29		
<b>Other revenues</b>	123	267	110	13	152	23	124	85	116	68	135	49	108	29		

\*\* No credit FTE students included in denominator; only noncredit headcount enrollment used.

**Total Revenues per Credit Plus Noncredit FTE Student (in \$\$\$)**

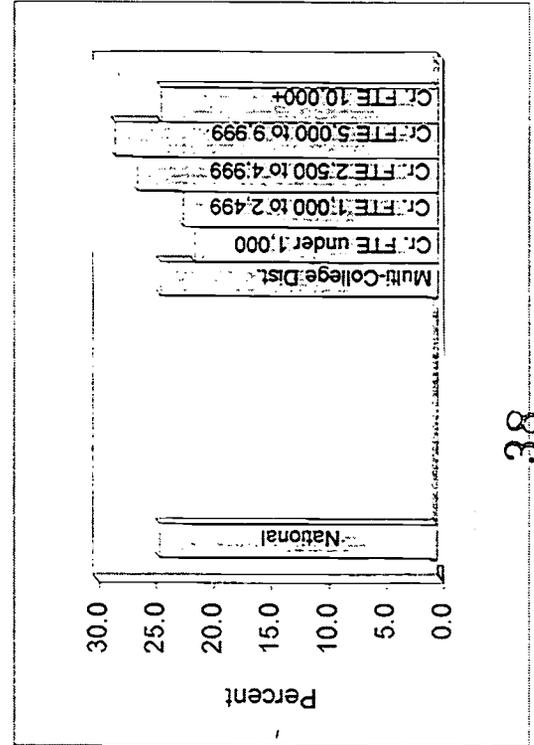


When noncredit students were included as the basis for calculating revenues per FTE, total revenues generally had the same relationship to size of institution as did credit FTE.

### Revenues as a Percentage of Total Revenues

Revenues by Source	National		Multi-College Districts		Single-College Districts by Credit FTE Students											
	Median	N	Median	N	Under 1,000		1,000 - 2,499		2,500 - 4,999		5,000 - 9,999		10,000 or more		Your College	
					Median	N	Median	N	Median	N	Median	N	Median	N		
Total revenues	100%	405	100%	16	44	100%	140	100%	98	100%	72	100%	35			
Tuition and fees	24	405	24	16	21	44	22	140	26	98	28	72	24	35		
Credit tuition & fees	22	405	23	16	18	44	19	140	24	98	24	72	21	35		
Noncredit tuition & fees	0	405	0	16	0	44	0	140	0	98	2	72	0	35		
Appropriations	59	405	56	16	61	44	60	140	58	98	58	72	61	35		
Federal	0	405	0	16	0	44	0	140	0	98	0	72	0	35		
State	46	405	41	16	57	44	51	140	49	98	41	72	39	35		
Local	10	405	13	16	0	44	8	140	9	98	12	72	21	35		
State & local combined	58	405	53	16	64	44	59	140	56	98	57	72	57	35		
Gifts, grants, and contracts	10	405	9	16	11	44	10	140	10	98	9	72	8	35		
Federal	5	405	5	16	7	44	6	140	4	98	5	72	4	35		
State & local	3	405	3	16	2	44	2	140	3	98	3	72	3	35		
Private	0	405	0	16	0	44	0	140	0	98	1	72	0	35		
Other revenues	3	405	3	16	2	44	2	140	3	98	3	72	3	35		

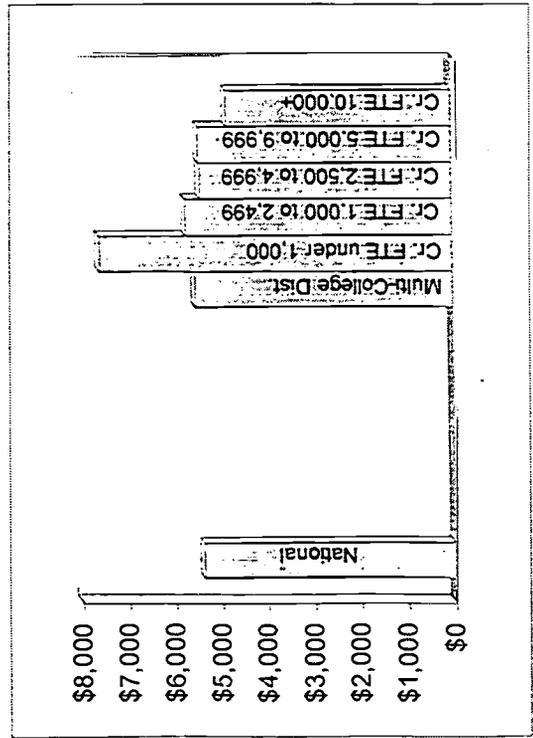
Tuition and Fees as a Percent of Total Revenues



State and local appropriations represented the major source of revenues for colleges of any size and structure. Single-college districts with 10,000 or more credit FTE students reported the highest proportion of revenues from local sources. However, this peer group also reported the lowest median percentage for state appropriations revenue.

Expenditures per Credit FTE Student (in \$\$\$)		Single-College Districts by Credit FTE Students												Your College			
		National		Multi-College Districts		Under 1,000		1,000 - 2,499		2,500 - 4,999		5,000 - 9,999			10,000 or more		
		Median	N	Median	N	Median	N	Median	N	Median	N	Median	N		Median	N	
<b>Expenditures by Function</b>																	
Total E&G expenditures		\$5,384	405	\$5,507	16	\$7,553	44	\$5,706	140	\$5,392	98	\$5,426	72	\$4,827	35		
Academic expenditures		3,248	405	3,060	16	4,299	44	3,469	140	3,351	98	3,351	72	2,938	35		
Instruction (incl research, pub serv)		2,643	405	2,420	16	3,521	44	2,830	140	2,792	98	2,745	72	2,413	35		
Credit instruction		2,409	405	2,213	16	3,228	44	2,637	140	2,559	98	2,381	72	2,190	35		
Noncredit instruction		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
Academic support		387	405	463	16	696	44	431	140	377	98	415	72	375	35		
Support expenditures		1,886	405	2,167	16	2,780	44	1,993	140	1,955	98	1,886	72	1,721	35		
Student services		491	405	609	16	777	44	528	140	492	98	495	72	508	35		
Institutional support		785	405	794	16	1,108	44	936	140	820	98	780	72	680	35		
Plant operation & maintenance		525	405	510	16	692	44	566	140	536	98	549	72	474	35		
Utilities expenditures		130	405	117	16	203	44	148	140	139	98	137	72	118	35		
Plant O&M without utilities		370	405	369	16	494	44	385	140	409	98	383	72	353	35		
Scholarships and fellowships		152	405	144	16	276	44	181	140	193	98	147	72	122	35		

**Expenditures per Credit FTE Student (in \$\$\$)**



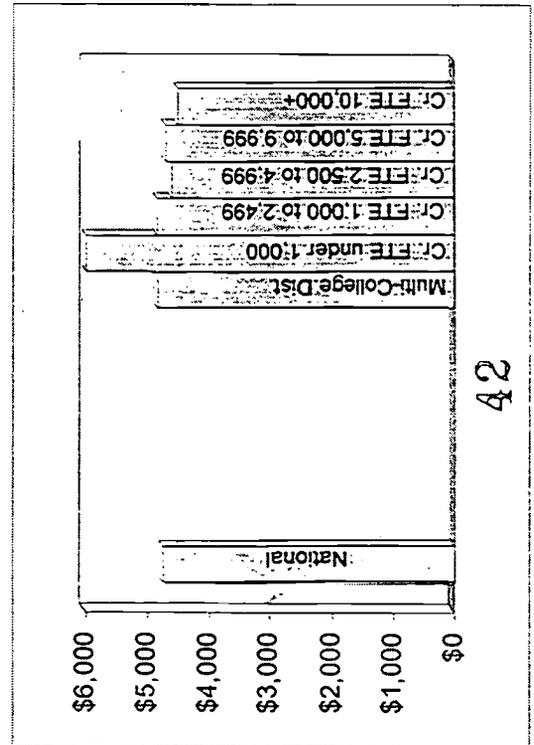
On a per-student basis, small single-college districts (fewer than 1,000 students) consistently reported a higher median expenditure in all categories than other single-college or multi-college districts. Districts with 10,000 students reported a lower median expenditure in most categories than the other single-college district size groupings. Smaller single-college districts (fewer than 5,000 students) expended a significantly greater amount per student on scholarships and fellowships than did larger single-college districts and multi-college districts.

**Expenditures per Credit Plus Noncredit FTE Student (in \$\$\$)**

Expenditures by Function	National		Multi-College Districts		Single-College Districts by Credit FTE Students										Your College
	Median	N	Median	N	Under 1,000		1,000 - 2,499		2,500 - 4,999		5,000 - 9,999		10,000 or more		
					Median	N	Median	N	Median	N	Median	N	Median	N	
Total E&G expenditures	\$4,697	267	\$4,768	13	\$5,928	23	\$4,772	85	\$4,531	68	\$4,635	49	\$4,433	29	
Academic expenditures	2,796	267	2,831	13	3,372	23	2,922	85	2,679	68	2,799	49	2,562	29	
Instruction (incl research, pub serv)	2,314	267	2,353	13	2,715	23	2,391	85	2,209	68	2,337	49	2,121	29	
Credit instruction	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Noncredit instruction **	438	234	234	8	0	19	289	74	460	62	333	46	188	25	
Academic support	336	267	387	13	604	23	345	85	316	68	321	49	320	29	
Support expenditures	1,616	267	1,855	13	2,238	23	1,759	85	1,470	68	1,592	49	1,562	29	
Student services	425	267	553	13	606	23	415	85	392	68	420	49	447	29	
Institutional support	706	267	844	13	1,091	23	789	85	641	68	675	49	577	29	
Plant operation & maintenance	447	267	454	13	497	23	441	85	444	68	428	49	434	29	
Utilities expenditures	113	267	114	13	137	23	118	85	113	68	110	49	100	29	
Plant O&M without utilities	311	267	341	13	403	23	273	85	316	68	336	49	330	29	
Scholarships and fellowships	126	267	181	13	194	23	140	85	143	68	102	49	98	29	

\*\* No credit FTE students included in denominator; only noncredit headcount enrollment used.

**Expenditures per Credit Plus Noncredit FTE Student (in \$\$\$)**



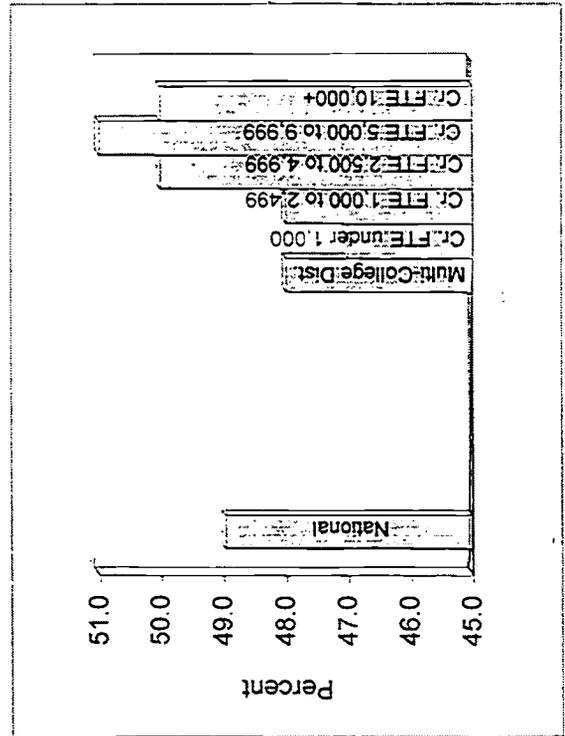
The relative distribution of medians did not materially change across size groupings when credit-plus-noncredit students were used as the basis for calculating an expenditure per FTE. In most categories, single-college districts with 10,000 or more credit FTE students reported lower median expenditures than any other group, while single-college districts with less than 1,000 credit FTE students reported the highest median expenditures.

### Expenditures as a Percentage of E&G Expenditures

Expenditures by Function	National		Multi-College Districts		Single-College Districts by Credit FTE Students										Your College
	Median	N	Median	N	Under 1,000		1,000 - 2,499		2,500 - 4,999		5,000 - 9,999		10,000 or more		
					Median	N	Median	N	Median	N	Median	N	Median	N	
Total E&G expenditures	100%	405	100%	16	100%	44	100%	140	100%	98	100%	72	100%	35	
Academic expenditures	60	405	58	16	58	44	60	140	60	98	62	72	61	35	
Instruction (incl research, pub serv)	49	405	48	16	47	44	48	140	50	98	51	72	50	35	
Credit instruction	45	405	44	16	45	44	45	140	46	98	45	72	45	35	
Noncredit instruction	0	405	1	16	0	44	0	140	1	98	3	72	1	35	
Academic support	8	405	8	16	10	44	7	140	7	98	8	72	8	35	
Support expenditures	35	405	37	16	36	44	35	140	36	98	35	72	36	35	
Student services	10	405	11	16	10	44	9	140	9	98	9	72	10	35	
Institutional support	15	405	15	16	15	44	15	140	15	98	15	72	15	35	
Plant operation & maintenance	10	405	9	16	9	44	9	140	10	98	10	72	10	35	
Utilities expenditures	3	405	2	16	3	44	3	140	3	98	3	72	2	35	
Plant O&M without utilities	7	405	7	16	7	44	6	140	7	98	7	72	7	35	
Scholarships and fellowships	3	405	2	16	3	44	3	140	4	98	3	72	3	35	

### Instructional Expenditures as a Percentage of E&G Expenditures

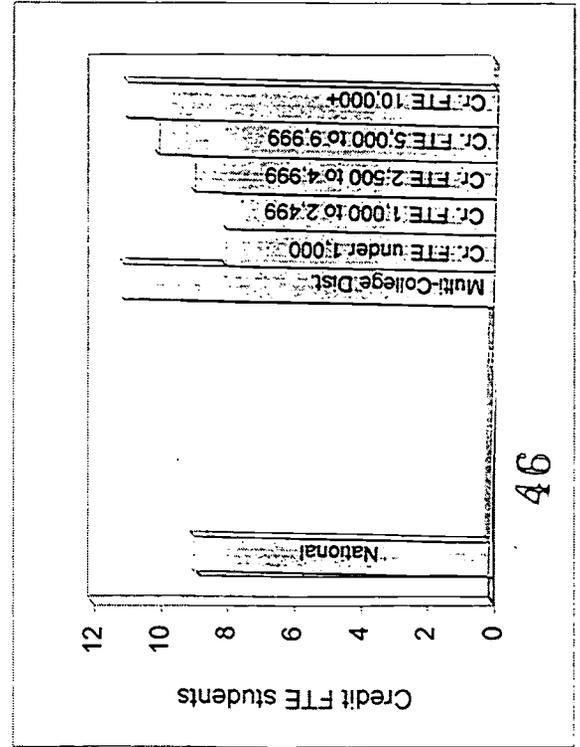
Between 58 and 62 percent of expenditures at the median college in each grouping were for academic purposes. Although the largest proportion of that amount went to instruction, median colleges varied in the amount expended for credit instruction, expending 44 to 46 percent. In academic support, the median colleges in the smallest group (fewer than 1,000 students) and in the largest groups (5,000 or more) indicated that a higher proportion of expenditures supported these activities than was true for other size groupings. Median support expenditures were relatively similar across groupings, with institutional support the same median value in all colleges.



**Credit FTE Students per FTE Staff**

Staff by Function	National		Multi-College Districts		Single-College Districts by Credit FTE Students												Your College
	Median	N	Median	N	Under 1,000		1,000 - 2,499		2,500 - 4,999		5,000 - 9,999		10,000 or more				
					Median	N	Median	N	Median	N	Median	N	Median	N			
Total staff	9	220	11	13	8	24	8	69	9	58	10	37	11	19			
Instruction																	
Credit instruction faculty	19	220	22	13	17	24	18	69	19	59	22	37	24	18			
All other (nonfac; noncredit instruc)	119	179	126	10	127	18	106	56	152	45	129	33	111	17			
Public service	582	106	823	8	684	6	335	31	551	31	840	21	1,021	9			
Academic support																	
Academic administration	374	207	443	10	202	20	331	66	397	58	498	37	586	16			
All other (faculty, nonfaculty)	154	197	152	11	105	20	149	62	161	52	182	35	166	17			
Student services																	
Student services administration	512	207	479	11	338	21	545	69	532	56	559	34	633	16			
Counseling & career guidance	390	203	432	10	402	22	357	66	421	55	446	34	389	16			
All other	160	191	214	11	130	20	146	64	144	50	199	30	198	16			
Institutional support	69	210	83	12	56	22	62	67	68	57	88	35	83	17			
Plant operation and maintenance	108	215	114	12	76	24	114	68	108	57	123	36	138	18			

**Credit FTE Students per FTE Staff**

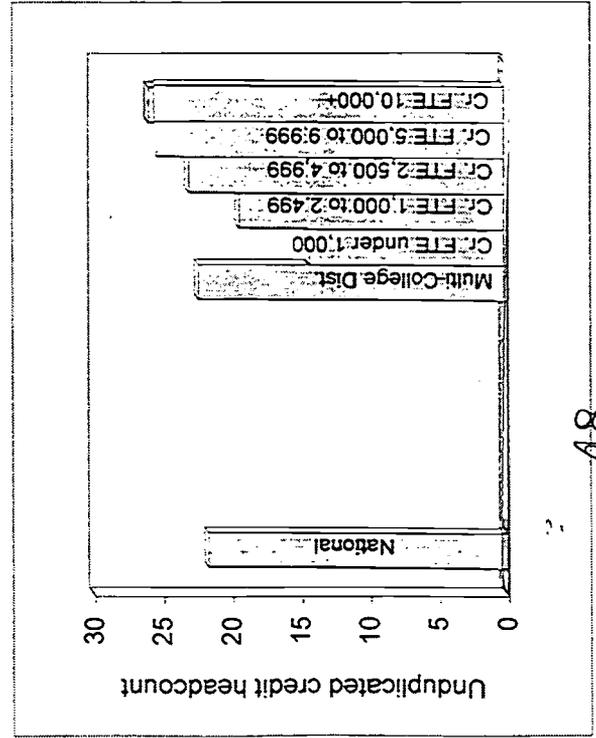


There was remarkable congruity among all size groupings in the number of staff members employed relative to students. The distribution of staff among services performed differed considerably among size groupings. For most categories, the median number of students per staff varied widely among size groupings and type of district. The lowest ratio of students to staff was credit instruction faculty, followed by institutional support.

### Unduplicated Credit Student Headcount per FTE Staff

Staff by Function	National		Multi-College Districts		Single-College Districts by Credit FTE Students										Your College
	Median	N	Median	N	Under 1,000		1,000 - 2,499		2,500 - 4,999		5,000 - 9,999		10,000 or more		
					Median	N	Median	N	Median	N	Median	N	Median	N	
<b>Total staff</b>	21	212	22	11	14	22	19	68	23	56	25	36	26	19	
<b>Instruction</b>															
Credit instruction faculty	45	212	49	11	34	22	41	68	47	57	63	36	53	18	
All other (nonfac; noncredit instruc)	265	172	178	8	202	17	237	55	305	43	294	32	273	17	
<b>Public service</b>	1,244	103	2,216	6	991	6	915	31	1,170	31	2,447	20	2,619	9	
<b>Academic support</b>															
Academic administration	953	199	846	8	535	18	764	65	909	56	1,037	36	1,315	16	
All other (faculty, nonfaculty)	350	189	429	9	167	18	326	61	329	50	441	34	434	17	
<b>Student services</b>															
Student services administration	1,210	199	987	9	785	19	1,384	68	1,299	54	1,290	33	1,545	16	
Counseling & career guidance	905	195	719	8	769	20	830	65	1,043	53	1,023	33	887	16	
All other	376	184	366	9	329	18	355	63	361	49	453	29	441	16	
<b>Institutional support</b>	164	202	183	10	96	20	145	66	163	55	212	34	183	17	
<b>Plant operation and maintenance</b>	258	207	269	10	147	22	254	67	265	55	287	35	326	18	

**Unduplicated Credit Student Headcount per FTE Staff**



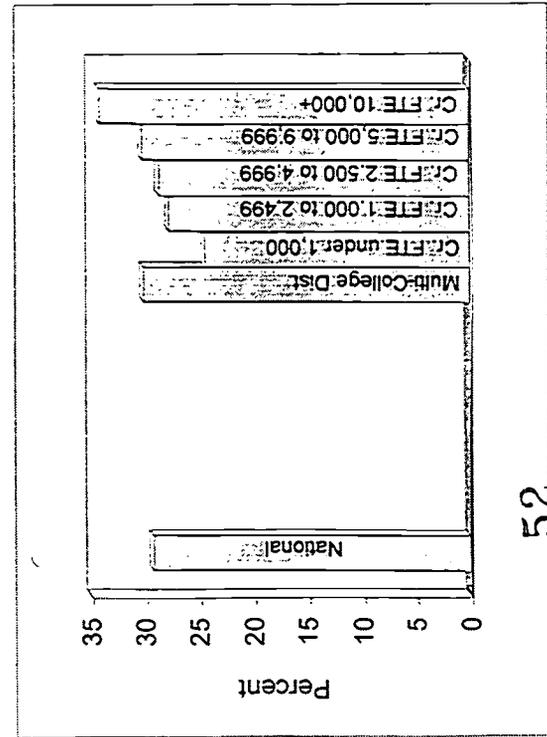
Total students enrolled for credit (unduplicated headcount) was used to analyze the number of students per staff. The number of students per credit instruction faculty at the median college in each size grouping ranged from 34 to 63, while the number of students per counseling and career guidance staff at the median college ranged from 719 to 1,043.



**Part-Time FTE Staff as a Percentage of Total FTE Staff in Each Specific Staffing Category Only**

Staff by Function	National		Multi-College Districts		Single-College Districts by Credit FTE Students												Your College
	Median	N	Median	N	Under 1,000		1,000 - 2,499		2,500 - 4,999		5,000 - 9,999		10,000 or more				
					Median	N	Median	N	Median	N	Median	N	Median	N			
<b>Total staff</b>	29.2%	203	30.0%	11	24.4%	22	27.7%	67	28.6%	49	30.1%	35	34.0%	19			
<b>Instruction</b>																	
Credit instruction faculty	39.8	201	40.7	11	41.3	21	37.3	67	42.7	49	42.2	35	41.2	18			
All other (nonfac; noncredit instruc)	28.9	171	28.8	10	50.3	18	28.5	50	37.5	45	35.3	32	46.8	16			
<b>Public service</b>	0.0	100	7.1	7	0.0	6	0.0	29	0.0	29	0.0	20	2.3	9			
<b>Academic support</b>																	
Academic administration	0.0	197	0.8	10	0.0	20	0.0	66	0.0	49	0.0	36	0.0	16			
All other (faculty, nonfaculty)	6.2	193	11.0	11	0.0	20	4.1	61	4.9	49	11.9	35	10.6	17			
<b>Student services</b>																	
Student services administration	0.0	198	0.0	11	0.0	21	0.0	66	0.0	50	0.0	34	0.0	16			
Counseling & career guidance	0.0	198	0.0	10	0.0	22	0.0	66	0.0	49	0.0	34	0.0	16			
All other	5.8	188	8.3	11	0.0	20	6.1	63	7.1	49	10.7	30	18.0	15			
<b>Institutional support</b>																	
Plant operation and maintenance	7.8	198	7.0	11	9.4	21	9.3	66	10.9	49	10.0	35	16.3	16			
	5.9	199	18.8	11	21.1	22	12.7	66	11.6	49	9.7	35	7.3	16			

**Part-Time FTE Staff as a Percentage of Total FTE Staff**



At the median colleges for the peer groupings, part-time staff represented 24 to 34 percent of total staff. The highest proportion of part-time staff was employed in credit instruction. The median colleges in all size groupings reported that between 37 and 43 percent of credit instruction faculty were part time. Part-time employees were used extensively (29 to 50 percent) in the category of all other staff instruction. This includes noncredit faculty as well as clerical, laboratory, or administrative staff (all nonteaching) who may be classified in the instruction function but not as faculty. Other areas that used part-time employees to a limited extent were institutional support and plant operation.

	Single-College Districts by Credit FTE Students													Your College		
	National		Multi-College Districts		Under 1,000		1,000 - 2,499		2,500 - 4,999		5,000 - 9,999		10,000 or more			
	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median		N	
<b>Selected Ratios</b>																
Credit faculty + counseling staff/ Academic+student serv admin+inst supp	2.7	217	2.6	12	2.3	24	2.7	69	2.7	58	2.7	37	2.8	17		
All other FTE staff/ Credit FTE faculty	1.2	219	1.3	12	1.3	24	1.2	69	1.2	59	1.0	37	1.2	18		
Unduplicated credit student headcount/ Total FTE staff	21.0	212	21.7	11	14.0	22	18.7	68	23.0	56	25.4	36	25.5	19		
Service area population/ Unduplicated credit student headcount	31.9	258	35.2	14	44.8	24	29.6	84	31.4	67	30.5	47	28.6	22		
Total appropriations/ Unduplicated credit student headcount	\$1,510	299	\$1,694	13	\$2,672	34	\$1,683	104	\$1,361	73	\$1,303	51	\$1,366	24		
Building gross square feet/ Total credit FTE students	124	264	99	15	188	22	136	85	121	70	99	50	87	22		
Total scholarships and Pell grants/ Total credit FTE students	\$761	340	\$766	16	\$1,055	35	\$853	116	\$731	86	\$573	56	\$672	31		

#1 The median college employed two to three FTE faculty and counseling staff for every one FTE academic and student services administrator and institutional support employee.

#2 Regardless of the size of peer grouping, the median college had one nonfaculty employee for every faculty member on staff.

#3 The median college in the selected size groupings employed one FTE staff member for every 14 to 25 students who enrolled for a credit course. Generally, the lower the enrollment of the median college, the fewer students per staff member.

#4 In colleges with fewer than 1,000 credit students, 1 out of 45 residents in the service area of the median college attended as a credit student. In colleges with 10,000 or more credit students, 1 out of 29 residents in the service area of the median college attended as a student. Thus, assuming students are drawn from the defined service area, there

appears to be a relationship between size of institution and participation rate.

#5 The median college reported appropriations from all levels of government as \$1,510 per student when comparing all students who enrolled for a credit class (unduplicated student headcount).

#6 The median college had 124 gross square feet (gsf) per credit FTE student. The gsf per student decreased for the median college as the size grouping of colleges increased.

#7 The median college for small colleges (fewer than 1,000 students) reported the highest value of scholarships and grants per credit FTE student of any median reported within the size groupings. The median value of scholarships and grants generally declined as institutional size increased.

More Selected Ratios	Single-College Districts by Credit FTE Students														
	National		Multi-College Districts		Under 1,000		1,000 - 2,499		2,500 - 4,999		5,000 - 9,999		10,000 or more		Year
	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	College
Total E&G salaries and wages/ Total E&G expenditures	60.0%	385	58.0%	15	59.0%	41	60.0%	135	59.0%	92	61.0%	69	62.0%	33	
Utilities expenditures/ Building gross square feet	\$1.23	246	\$1.17	14	\$1.06	21	\$1.21	72	\$1.17	69	\$1.36	48	\$1.49	22	
Plant O&M without utilities/ Building gross square feet	\$3.47	258	\$3.26	14	\$2.85	22	\$2.91	82	\$3.59	69	\$4.14	49	\$4.14	22	
Plant O&M without utilities/ Building-replacement value (estimated)	\$0.04	282	\$0.07	14	\$0.04	29	\$0.04	83	\$0.04	72	\$0.05	57	\$0.05	27	
Unrestricted current fund balance/ Total E&G expenditures	0.11	220	0.08	12	0.07	24	0.11	69	0.11	61	0.09	33	0.13	21	
Mand trans for debt + CF int payments/ Unrestricted current fund revenues	0.00	219	0.00	12	0.00	22	0.00	70	0.00	61	0.00	35	0.00	19	

#1 The median colleges in all size groupings reported that 58 to 62 percent of E&G expenditures were paid in salaries and wages (exclusive of benefits).

#2 At the median college, utilities ranged from \$1.06 to \$1.49 per gross square foot (gsf), with the cost per gsf tending to rise in direct relationship to the size of the enrollment.

#3 Expenditures for plant operation and maintenance (exclusive of utilities) ranged from a low of \$2.85 per gsf at the median college with fewer than 1,000 students to a high of \$4.14 per gsf at the median colleges with more than 5,000 students. The expenditures for multi-college districts (\$3.26 per gsf) was less than that of larger colleges (more than 2,500 credit FTE students).

#4 The median college had plant operation and maintenance expenditures (excluding utilities) that were \$0.04 of the building-replacement value. The median colleges in all groupings had expenditures that ranged from \$0.04 to \$0.07 of replacement value of buildings.

#5 The median college reported 0.11 for the ratio of unrestricted current fund balance to total E&G expenditures. The median was similar for most of the peer groupings.

#6 Median colleges in all peer groupings indicated that they incurred no debt service from unrestricted current fund revenues.

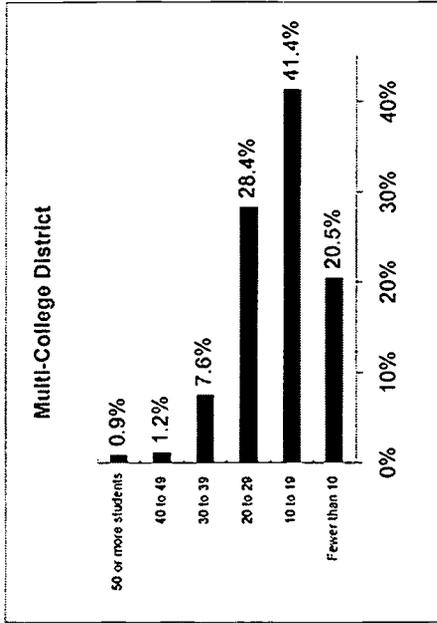
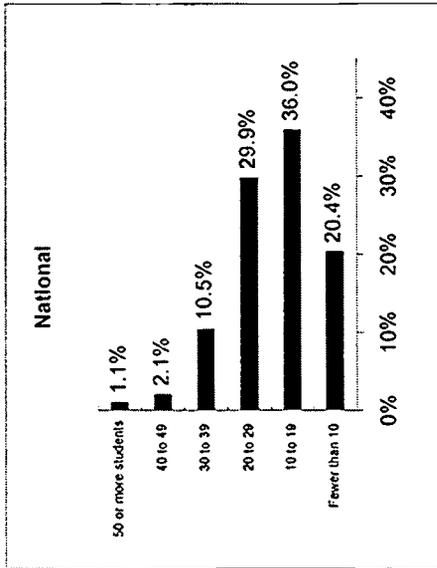
More Selected Ratios	Single-College Districts by Credit FTE Students														
	National		Multi-College Districts		Under 1,000		1,000 - 2,499		2,500 - 4,999		5,000 - 9,999		10,000 or more		Your College
	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	
Total E&G benefits/	0.24	389	0.22	14	0.23	42	0.23	136	0.22	95	0.25	69	0.25	33	
Total E&G salaries and wages															
Instructional salaries without benefits/	35.0%	390	36.4%	14	31.5%	41	35.0%	137	35.7%	95	37.2%	70	38.5%	33	
Total E&G expenditures															

#7 The median college had a ratio of 0.24 for E&G benefits to E&G salaries and wages. The median colleges for the peer groupings were almost identical, with the multi-college district the lowest at 0.22.

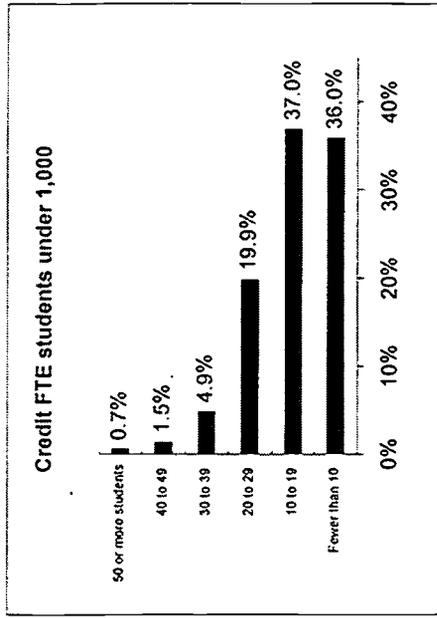
#8 The median college dedicated 35 percent of expenditures to instructional salaries (without benefits). The median colleges ranged from 31 to 39 percent for all peer groupings.

# Class Size Distributed by Class Size (mean)

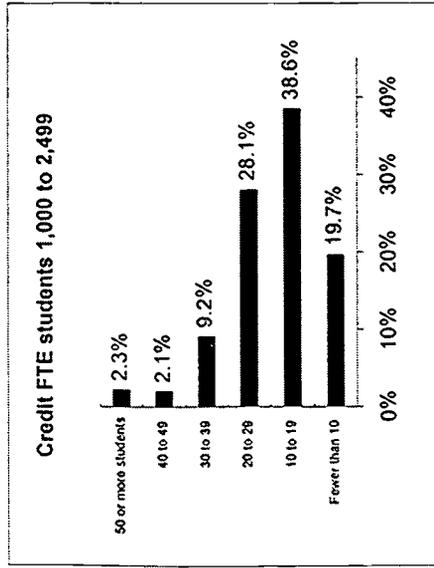
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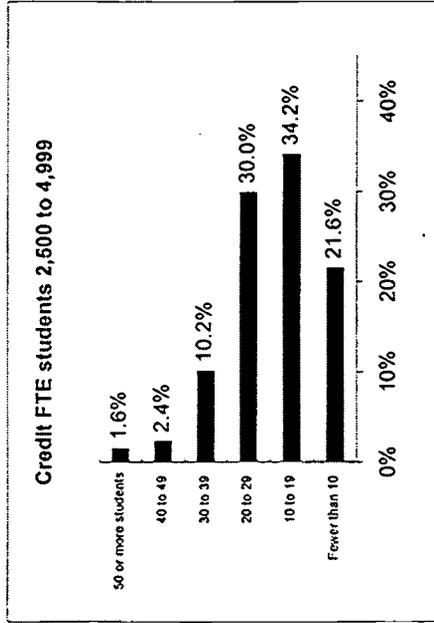
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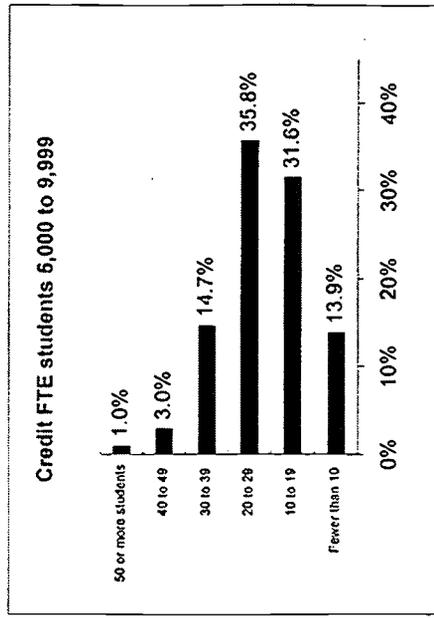
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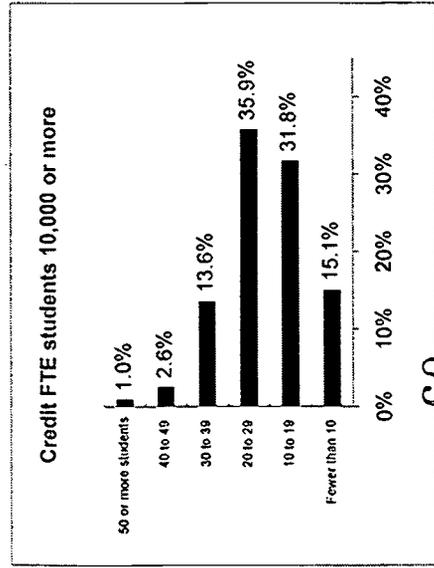
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N=44



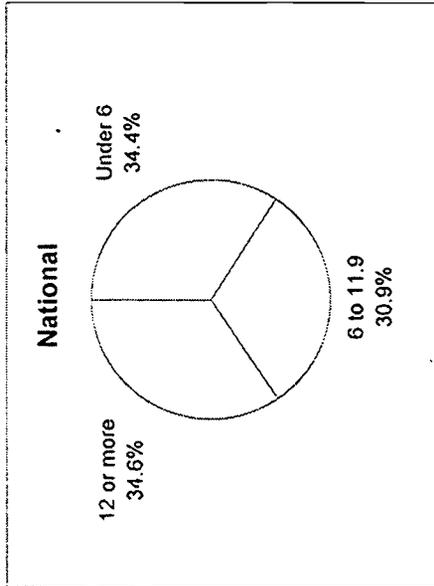
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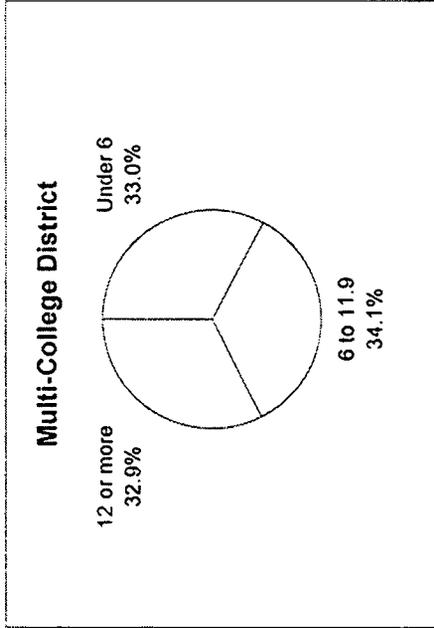
The proportion of classes enrolling fewer than 10 students tended to decrease as the size grouping increased. In districts of all sizes, the most prevalent class sizes were those with 10 to 29 students. Schools with FTE students between 1,000 students and 2,499 reported a larger proportion of classes with 50 or more students than other peer groupings.

it Units Enrolled (mean)

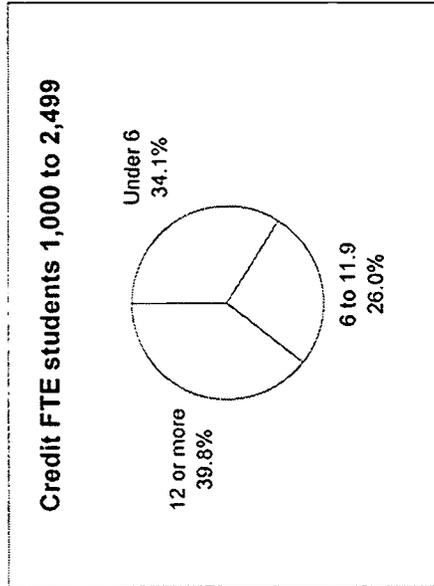
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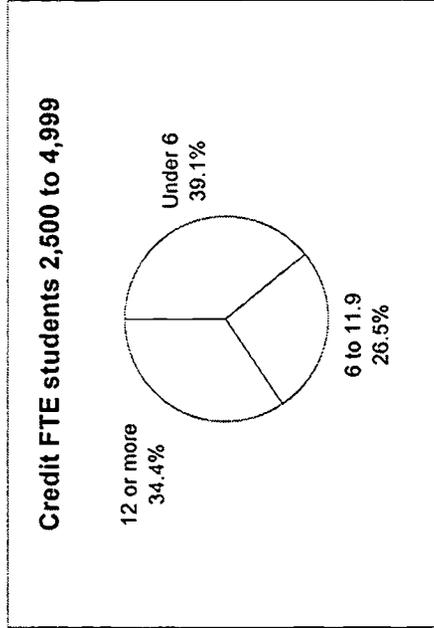
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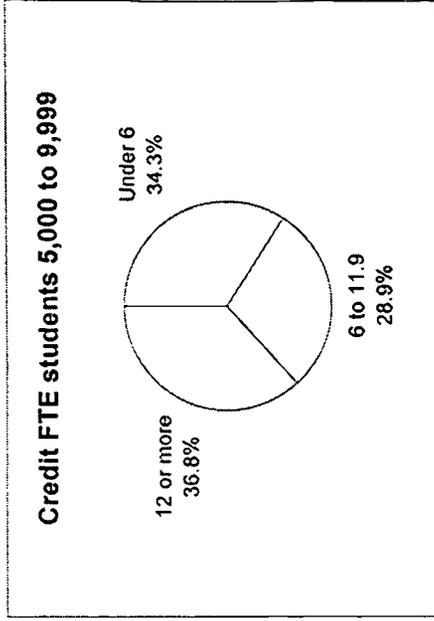
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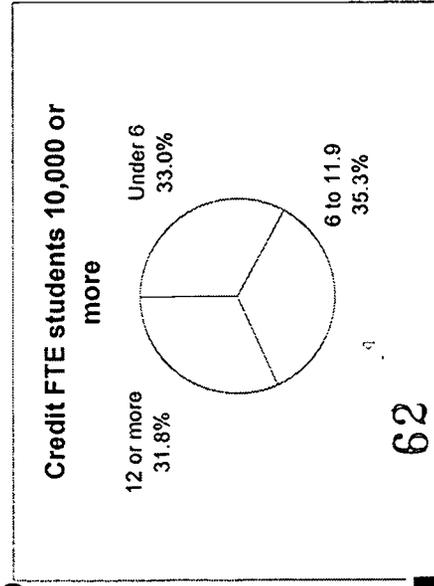
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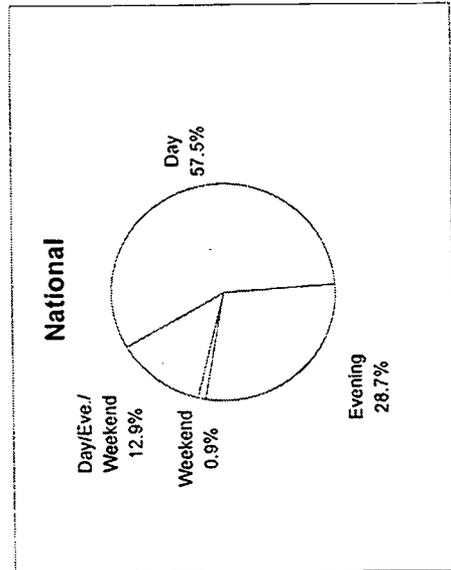


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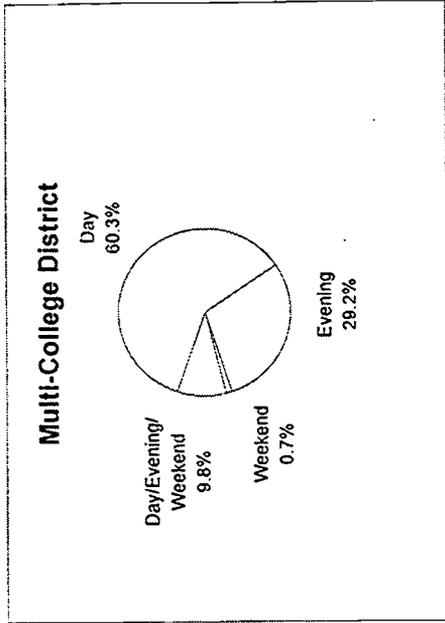


Each peer grouping reported different unit enrollment per student. On a national level the proportion of students enrolled for less than six units was equal to the proportion enrolled on a full-time basis. Small colleges (fewer than 2,500 students) reported the greatest proportions of students enrolled full time. Conversely, the largest colleges (10,000 or more) and multi-college districts reported the smallest proportions of students enrolled on a full-time basis as well as the largest proportions of students enrolled for 6 to 11.9 units.

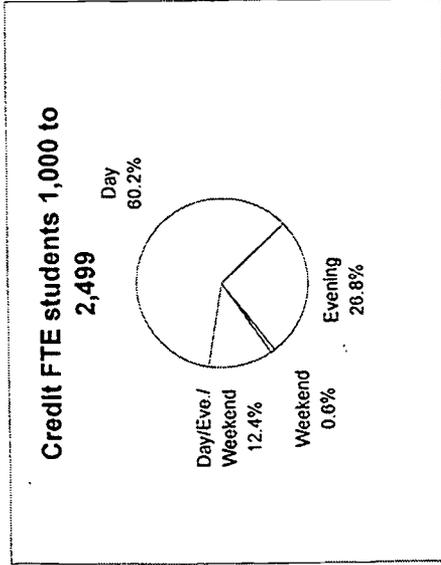
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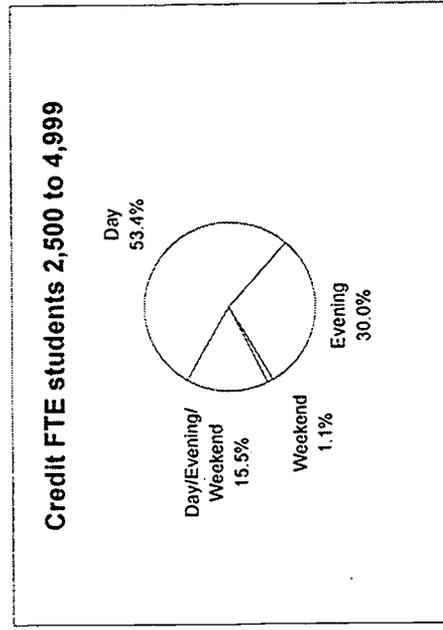
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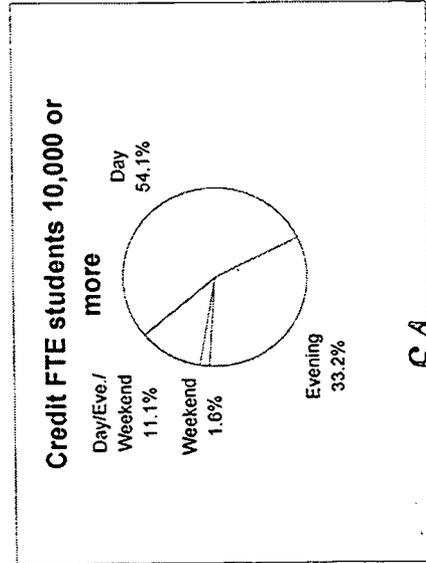
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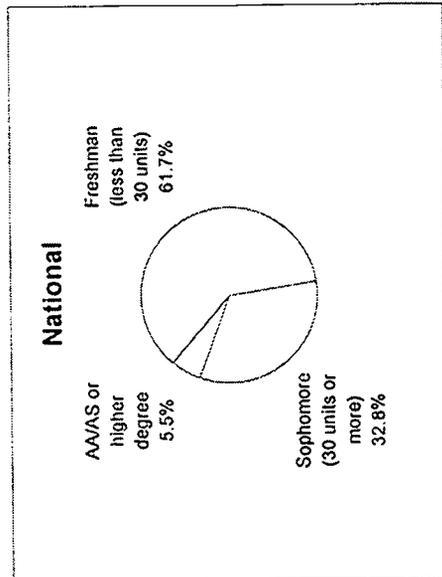


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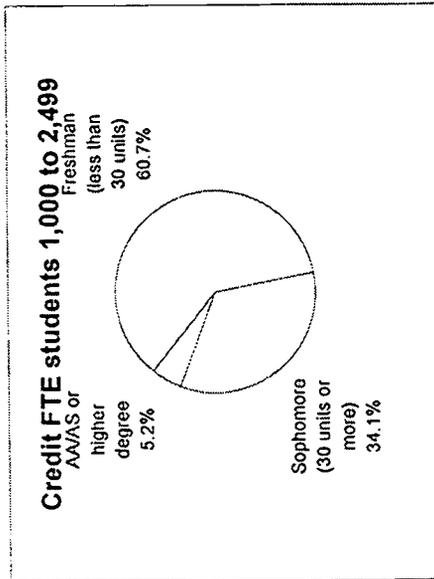


In general, the majority of community college students were enrolled in day classes, but a significant proportion in each peer group took evening courses or a combination program.

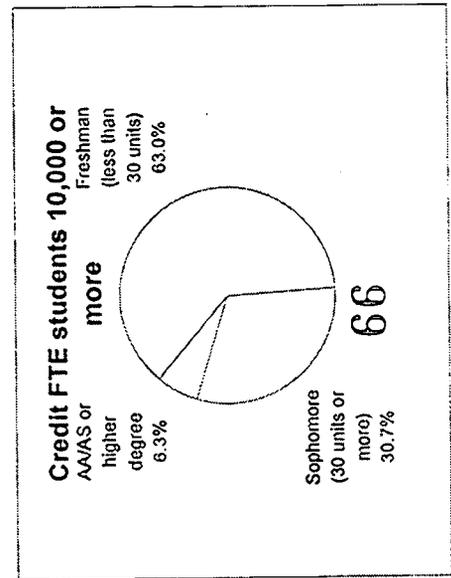
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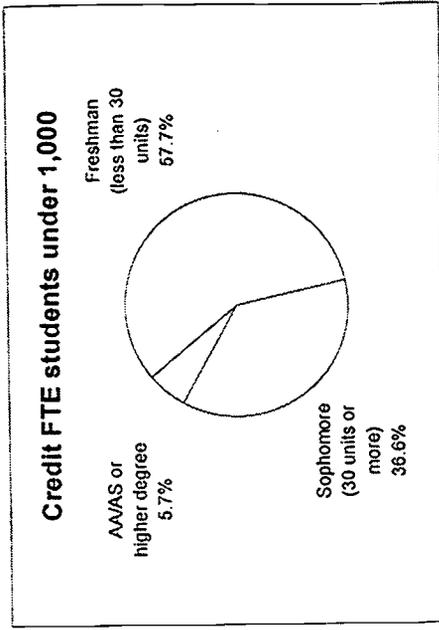
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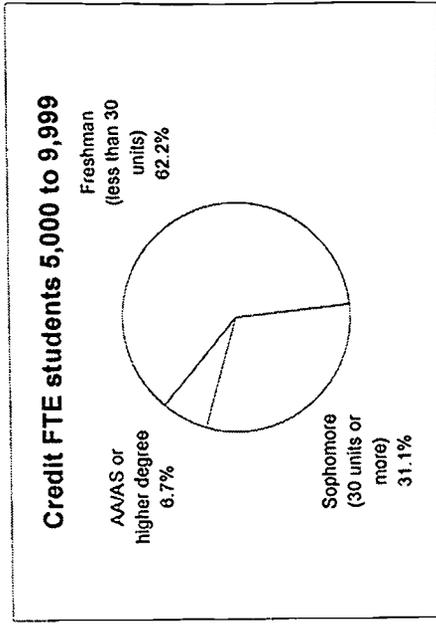
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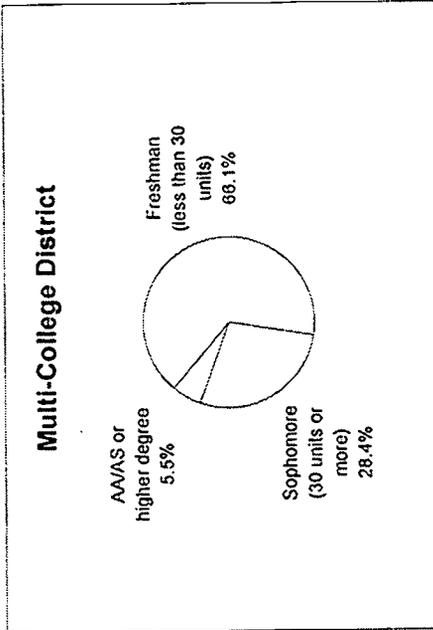
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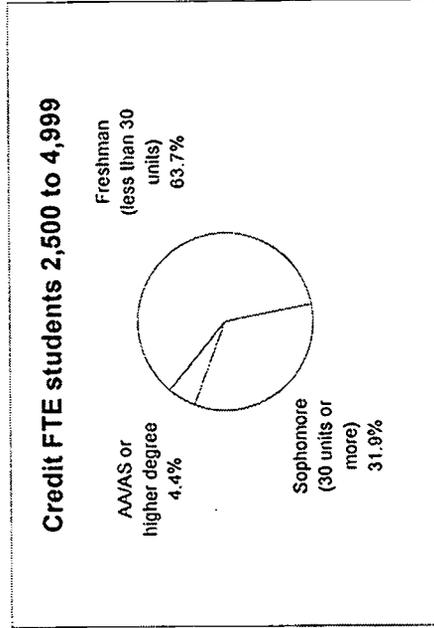
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N=11



N=64



Assuming that community college enrollment was approximately evenly split between first- and second-year students, the implication is that only 50 percent of freshmen achieved sophomore status in most of the colleges. Given that larger numbers of students enter for short-term training and other specific, nontransfer and nondegree goals, an alternative explanation could be that many of those students never intended to achieve sophomore status. The latter explanation is more in line with the high proportion of students having AA/AS or higher degrees at colleges enrolling 5,000 or more credit FTE students.

## APPENDIX A METHODOLOGY

In October 1978, staff members of NACUBO, AACCC, and the American Council on Education (ACE) met with a task force to identify information that might be useful to community and junior college administrators. The task force was composed of community and junior college business officers from various regions of the country, a community college president, and several consultants. They decided to emphasize the provision of basic comparative data for general use at community colleges and to create peer groups on the basis of institutional size.

A review and evaluation of the first year of the project in September 1979 served to streamline the method used in the second year. In the second year of the project, NCES agreed to provide computational support, a liaison, and copies of the Higher Education General Information Surveys' (HEGIS) finance survey from colleges as soon as the surveys were returned to NCES. NACUBO, ACE, and AACCC provided the remaining financial support, and NACUBO's Two-Year Colleges Committee assumed a guiding role in the project. Two members of the task force from the first year, Maurice P. Arth and W.L. Prather, provided continuity and made several trips to Washington to assist in designing the NACUBO survey and in preparing the second year's report.

Future years of the project emphasized expansion of the sample group rather than revision, although limited additions and changes were made. NACUBO's Two-Year Colleges Committee continued to provide project continuity and special support.

The project uses unedited Integrated Postsecondary Education Data System (IPEDS, formerly HEGIS) finance data. Each participating college was asked to complete the IPEDS finance survey carefully and submit it to NCES by November 15, 1995.

In addition to IPEDS finance data, a separate survey of 774 public colleges was conducted to gather information not currently available at the national level. Such information included data on:

1. Revenues and expenditures for noncredit institutional activities
2. Utilities expenditures
3. Student aid disbursements
4. Building space
5. Service area population
6. Unduplicated student headcounts
7. Staffing levels by function
8. Course enrollment distributions
9. Expenditures for salaries and wages

Nine of the previous years' studies incorporated information on computer-related expenditures (not included in this year's version). Gratitude is owed to Maurice P. Arth for his two previous studies of computer-related expenditures for community colleges.

Four hundred and five colleges provided usable responses; their data are utilized in this report. Appendices contain a sample questionnaire as well as a listing of all participating colleges.

The NACUBO Two-Year Colleges Committee approved the substance and format of the comparative data study report. This year's report reflects the project assessment that occurred in 1991. A task force was formed to assess the study and to consider its restructuring to improve its utility. This group comprised business officers, an accrediting agency official, a state agency administrator, a representative from private industry, a former community college president, and higher education finance consultants. Through the guidance of these people, several surveys were conducted and analyzed. This report is one result of that process, which included input from more than 300 business officers and representatives of state agencies. Examined were what kinds of information community college business officers find useful, how to best present such information, and how to define terms in constructing this information.

The information in this report is based on the financial data section of IPEDS, conducted by NCES, and a supplemental survey, conducted by NACUBO.

The first year of the study established peer groupings based on headcount enrollment. In the following years, these categories differed from the first year's breakdown only by the deletion of the branch campus category and the addition of an under-1,000 FTE student category.

Based on task force recommendations, the peer groups were redefined and the following groups were established for this report:

- National
- Multi-college districts
- Single-college district with credit FTE enrollment
  - less than 1,000
  - from 1,000 through 2,499
  - from 2,500 through 4,999
  - from 5,000 through 9,999
  - 10,000 or more

Because cost structures for branch campuses vary markedly from those of consolidated or single-campus colleges--therefore adding an element of noncomparability of data--and because the response rate from branch campuses was low in the initial year, only single colleges or systems were encouraged to provide data in the second year. Thus, data for branch campuses where fiscal records are kept at a central office are not included in this sample.

Colleges unable to obtain all the requested information were retained in the study; however, where individual pieces of data were missing, the college was not included for the calculation of that particular median.

According to the NACUBO database, there are 774 single- or multi-college districts of public community and junior colleges. Two-year branch campuses of universities were included in the sample only when they were not so closely affiliated with their universities that they had

difficulty in separating the financial statistics of each branch from those of its affiliate university.

Data were gathered and coded from November 1995 through May 1996. All financial statistics are for FY 1994-95; enrollments are annual figures.

Colleges participating in the study were sent a copy of their survey data and the statistics generated from the data. Colleges were asked to verify the data and check the reasonableness of the statistical calculations. In this way, statistics from individual colleges have been thoroughly reviewed, resulting in a reliable final report.

**FY 1994-95 NACUBO COMPARATIVE FINANCIAL STATISTICS**  
For Public Two-Year Colleges

National Association of College and University Business Officers (NACUBO)  
American Association of Community Colleges (AACCC)  
Association of Community College Trustees (ACCT)

**Instructions:** This is the comparative financial data survey form for FY 1994-95. Data should be drawn from the same records used to prepare the IPEDS Finance Survey for 1994-95. To be included in the study, it is essential that only the following be provided:

- \* Enrollment figures (question 1 on this survey)
  - \* Copy of the FY 1995 IPEDS Finance Survey (section I, pages 1-10)
- Supply other data only where available; a partially completed form is useful. Other data are drawn from the IPEDS Institutional Characteristics Survey (IC or IC-4) 1995-96. For questions relating to enrollment, use figures as of your institution's official reporting date for the designated reporting period. In completing this survey and the Finance Survey, please refer to NACUBO's *Financial Accounting and Reporting Manual for Higher Education* and the *AICPA Audit Guide for Colleges and Universities*. Please return this survey AND a copy of the FY 1995 IPEDS Finance Survey by January 8, 1996, to NACUBO c/o John Minter Associates, 2400 Central Avenue, Suite B-2, Boulder, CO 80301. Questions may be directed to Bradley Meeker at 202-861-2547.

Institution: \_\_\_\_\_ Title: \_\_\_\_\_  
 Contact: \_\_\_\_\_ City: \_\_\_\_\_  
 Address: \_\_\_\_\_ Phone: \_\_\_\_\_  
 State: \_\_\_\_\_ Zip: \_\_\_\_\_ FAX: \_\_\_\_\_

Please indicate whether your institution is a single college or a multi-college district:  
 \_\_\_\_\_ Single college (a community college district organized as a single college with one or more campus or satellite locations)  
 \_\_\_\_\_ Multi-college (a community college district organized as two or more separate colleges, each of which may have one or more campuses and/or satellite locations)

1. What is your institution's credit and noncredit FTE enrollment? The figures provided should be representative of your institution; they will be used to calculate revenues and expenditures per student. If the divisors below are not appropriate for your institution, please use whatever formulae result in figures that accurately approximate your institution's enrollment.

\_\_\_\_\_ Total annual credit FTE enrollment (Annual credit hours -- divided by 30 if your institution is on a semester basis; divided by 45 if it is on a quarter basis)

\_\_\_\_\_ Total annual noncredit FTE enrollment (noncredit course hours divided by 60)

\_\_\_\_\_ Total credit and noncredit FTE enrollment

2. \_\_\_\_\_ Unduplicated credit student headcount (Institutional Characteristics Survey 1995-96, part E, question 1)  
 \_\_\_\_\_ Unduplicated noncredit student headcount (estimate)
3. \_\_\_\_\_ % Estimate what percentage of instructional expenditures (FY 1995 IPEDS Finance Survey, line B-1, col 3) was used for credit teaching. (Include only faculty salaries if that is the only figure available.) The instructional expenditures category (IPEDS Finance Survey, line B-1, col 3) includes expenditures for all activities that are part of an institution's instructional program. Expenditures for credit and noncredit courses; academic, occupational and technical instruction; remedial instruction; and regular, special, and extension sessions should be included (see *FARM 332*).
4. \_\_\_\_\_ % Estimate the percentage of tuition and fees (FY 1995 IPEDS Finance Survey, line A-1, col 3) that was received as payment for credit instruction.
5. What percentage of credit course sections enrolled (100.00% Total):  
 \_\_\_\_\_ % Fewer than 10 students \_\_\_\_\_ % 30 to 39 students  
 \_\_\_\_\_ % 10 to 19 students \_\_\_\_\_ % 40 to 49 students  
 \_\_\_\_\_ % 20 to 29 students \_\_\_\_\_ % 50 or more students



6. Indicate the number of credit students that enrolled for the following categories as of the official fall reporting date (the date in the fall on which a college must report fall enrollment data to the state, its board of trustees, or an external governing board, e.g.: a census data, state-assigned mid-term).

- \_\_\_\_\_ Under 6 credit students
- \_\_\_\_\_ 6 to 11.9 credit units
- \_\_\_\_\_ 12 or more credit units
- \_\_\_\_\_ Total credit students

7. Estimate the percentage of credit students that attended classes during the following time periods (100.00% Total):

- \_\_\_\_\_ % Day (students enrolled only in classes whose published starting time is classified as day time, as defined by your institution)
- \_\_\_\_\_ % Evening (students enrolled only in classes whose published starting time is classified as evening, as defined by your institution)
- \_\_\_\_\_ % Weekend (students enrolled only in classes that occur over the weekend, as defined by your institution)
- \_\_\_\_\_ % Day/Evening/Weekend (students enrolled in a combination of day, evening, and weekend classes)

8. Estimate the percentage of students who fall in the following class levels (100.00% Total):

- \_\_\_\_\_ % Freshman (less than 30 units)
- \_\_\_\_\_ % Sophomore (30 units or more)
- \_\_\_\_\_ % AA/AS or higher degree

9. \_\_\_\_\_ Estimate the population of the area that your institution serves (i.e., the population included in the area the district is mandated to serve, as designated by zip codes, county/political boundaries).

10. \_\_\_\_\_ What is the total gross area of campus buildings (for all campuses) in square feet? Include leased space. Exclude parking garages and other ancillary space (e.g., rooftop recreation decks).

11. \_\_\_\_\_ What number of credit hours constitute a normal full-time load on an annual basis (including summer) for a student at your institution?

12. \$ \_\_\_\_\_ What were the unrestricted current fund balances?

13. Debt service ratio [(a+b) divided by unrestricted current fund revenues]

- a. \$ \_\_\_\_\_ Mandatory transfers from unrestricted current fund for debt service
- b. \$ \_\_\_\_\_ Interest payments listed as unrestricted current fund expenditures

14. How many full-time-equivalent (FTE) personnel were employed in the following educational and general functional categories? If significant services were performed by contract, enter the estimated FTE. Include regular, temporary, and part-time staff. Exclude student assistants, both regular and work-study. (See *Financial Accounting and Reporting Manual for Higher Education* citations [332-338] for definitions of categories.) If your institution's faculty and staff composition does not adhere to the below chart, or is incompatible with the definitions in FARM, please disregard this question.

Functional Category	# of Full-Time Personnel	# of Part-Time Personnel (FTE)	Total # of Full-Time Equivalent Personnel
Instruction (332)			
Credit instruction faculty			
All other (nonfaculty; noncredit instr. faculty)			
Public Service (334)			
Academic Support (335)			
Academic administration (335.6)			
All other (faculty, nonfaculty)			
Student Services (336)			
Student services administration (336.1)			
Counseling and career guidance (336.3)			
All other			
Institutional Support (337)			
Plant Operation and Maintenance (338)			
TOTAL			

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## APPENDIX C PARTICIPATING COLLEGES AND PEER GROUP COMPOSITION

Group 1: Single-college district with credit FTE enrollment less than 1,000  
 Group 2: Single-college district with credit FTE enrollment from 1,000 through 2,499  
 Group 3: Single-college district with credit FTE enrollment from 2,500 through 4,999

Group 4: Single-college district with credit FTE enrollment from 5,000 through 9,999  
 Group 5: Single-college district with credit FTE enrollment of 10,000 or more  
 Group 6: Multi-college district

### ALABAMA

Alabama Aviation & Technical College (1)  
 Alabama Southern Community College (2)  
 Athens State College (2)  
 Bessemer State Technical College (2)  
 Bevill State Community College (3)  
 Bishop State Community College (3)  
 CA Fredd State Technical College (1)  
 Chattahoochee Valley Community College (2)  
 Chauncey Sparks State Technical College (1)  
 Douglas MacArthur State Technical College (1)  
 Enterprise State Junior College (2)  
 Gadsden State Community College (4)  
 George C. Wallace State Community College (3)  
 Harry M. Ayers State Technical College (1)  
 J.F. Drake State Technical College (1)  
 J.F. Ingram State Community College (2)  
 J.M. Patterson State Technical College (2)  
 James H. Faulkner State Community College (3)  
 Jefferson Davis Community College (4)  
 Jefferson State Community College (3)  
 John C. Calhoun State Community College (4)  
 Lawson State Community College (2)  
 Lurleen B. Wallace State Junior College (2)  
 Northeast Alabama State Community College (2)  
 Northwest Shoals Community College (2)  
 Reid State Technical College (1)  
 Shelton State Community College (4)  
 Snead State Community College (2)  
 Southern Union State Community College (3)  
 Trenholm State Technical College (1)  
 Wallace Community College, Selma (2)  
 Wallace State Community College, Hanceville (3)

### ARIZONA

Arizona Western College (3)  
 Coconino County Community College (2)  
 Eastern Arizona College (2)  
 Maricopa County Community College District (6)  
 Mohave Community College (2)

### ARKANSAS

Mississippi County Community College (1)  
 Phillips County Community College (1)  
 Pulaski Technical College (1)  
 Westark Community College (3)

### CALIFORNIA

College of the Siskiyous (2)  
 Crafton Hills College (3)  
 Imperial Valley College (3)  
 Long Beach Community College (5)  
 Los Angeles Community College District (6)  
 Mount San Antonio College (5)  
 Napa Valley Community College (4)  
 Palomar Community College (5)  
 San Bernardino Community College (6)  
 San Joaquin Delta College (5)  
 State Center Community College District (6)  
 Yosemite Community College District (6)

### COLORADO

Aims Community College (3)  
 Arapahoe Community College (3)  
 Colorado Mountain College (3)  
 Community College of Aurora (3)  
 Front Range Community College (4)  
 Pikes Peak Community College (3)  
 Pueblo Community College (3)

### CONNECTICUT

Three Rivers Community Technical College (2)

### FLORIDA

Brevard Community College (4)  
 Broward Community College (5)  
 Central Florida Community College (4)

### FLORIDA (cont.)

Daytona Beach Community College (4)  
 Edison Community College (4)  
 Florida Community College of Jacksonville (5)  
 Hillsboro Community College (5)  
 Indian River Community College (3)  
 Lake Sumter Community College (2)  
 Miami-Dade Community College (5)  
 Okaloosa-Walton Community College (3)  
 Palm Beach Community College (4)  
 Polk Community College (3)  
 South Florida Community College (2)  
 Tallahassee Community College (4)

### GEORGIA

Atlanta Metropolitan College (2)  
 Bainbridge College (1)  
 Dalton College (2)  
 DeKalb College (5)  
 DeKalb Technical Institute (2)  
 Macon College (3)  
 Middle Georgia College (2)  
 South Georgia College (1)  
 Waycross College (1)

### ILLINOIS

Belleville Area College (4)  
 Black Hawk College (4)  
 City Colleges of Chicago (6)  
 College of DuPage (5)  
 College of Lake County (4)  
 Danville Area Community College (2)  
 Elgin Community College (4)  
 Heartland Community College (1)  
 Highland Community College (2)  
 Illinois Central College (4)  
 Illinois Eastern Community Colleges (6)  
 Illinois Valley Community College (2)  
 John A. Logan College (3)  
 John Wood Community College (2)

**ILLINOIS (cont.)**

- Joliet Junior College (4)
- Kankakee Community College (3)
- Kaskaskia College (3)
- Kishwaukee College (2)
- Lake Land College (3)
- Lewis and Clark Community College (3)
- Lincoln Land Community College (3)
- Moraine Valley Community College (4)
- Morton College (2)
- Oakton Community College (4)
- Parkland College (4)
- Prairie State College (3)
- Rend Lake College (2)
- Richland Community College (2)
- Rock Valley College (3)
- Sauk Valley Community College (2)
- Shawnee Community College (2)
- South Suburban College (3)
- Southeastern Illinois College (2)
- Spoon River College (2)
- State Community College (1)
- Triton College (4)
- Waubensee Community College (3)
- William Rainey Harper College (4)

**INDIANA**

- Indiana Vocational Technical College (5)
- Vincennes University (4)

**IOWA**

- Des Moines Area Community College (4)
- Hawkeye Community College (4)
- Iowa Valley Community College District (6)
- Iowa Western Community College (3)
- Southeastern Community College (2)
- Western Iowa Tech Community College (2)

**KANSAS**

- Allen County Community College (2)
- Barton County Community College (3)
- Butler County Community College (3)
- Cowley County Community College (2)
- Hutchinson Community College (2)
- Johnson County Community College (4)
- Kansas City Kansas Community College (3)

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**MAINE**

- Eastern Maine Technical College (1)
- Kennebec Valley Technical College (1)
- Northern Maine Technical College (1)

**MARYLAND**

- Allegany Community College (2)
- Anne Arundel Community College (4)
- Baltimore City Community College (3)
- Catonville Community College (4)
- Cecil Community College (1)
- Chesapeake College (1)
- Essex Community College (4)
- Frederick Community College (2)
- Garrett Community College (1)
- Harford Community College (2)
- Howard Community College (3)
- Montgomery Community College (5)
- Prince George's Community College (4)

**MASSACHUSETTS**

- Berkshire Community College (2)
- Holyoke Community College (3)
- Massasoit Community College (3)
- Middlesex Community College (3)
- Mount Wachusett Community College (2)
- North Shore Community College (3)

**MICHIGAN**

- Alpena Community College (2)
- Bay de Noc Community College (2)
- Charles S. Mott Community College (4)
- Delta College (4)
- Glen Oaks Community College (1)
- Gogebic Community College (1)
- Grand Rapids Community College (4)
- Henry Ford Community College (4)
- Highland Park Community College (2)
- Jackson Community College (3)
- Kalamazoo Valley Community College (4)
- Kellogg Community College (3)
- Lake Michigan College (2)
- Lansing Community College (5)
- Macomb Community College (5)
- Mid Michigan Community College (2)
- Monroe Community College (2)
- Montcalm Community College (1)
- Muskegon Community College (3)

**MICHIGAN (cont.)**

- North Central Michigan College (2)
- Northwestern Michigan College (3)
- Oakland Community College (5)
- Schoolcraft College (4)
- St. Clair County Community College (3)

**MINNESOTA**

- Anoka Ramsey Community College (3)
- Hibbing Community College (2)
- Minnesota Community Colleges (6)
- St. Cloud Technical College (2)

**MISSISSIPPI**

- Coahoma Community College (1)
- East Central Community College (2)
- Hinds Community College (6)
- Jones County Junior College (3)
- Meridian Community College (2)
- Mississippi Gulf Coast Community College (2)
- Northeast Mississippi Community College (4)
- Northwest Mississippi Community College (3)

**MISSOURI**

- East Central College (2)
- Jefferson College (3)
- Metropolitan Community Colleges (6)
- Ozarks Technical Community College (2)
- St. Charles County Community College (3)
- Three Rivers Community College (2)

**MONTANA**

- College of Technology, University of Montana - Missoula (1)
- College of Technology of Montana Tech (1)
- Dawson Community College (1)
- Flathead Valley Community College (2)
- Montana State University - Great Falls Coll. of Technology (1)
- Montana State University - Billings Coll. of Technology (1)

**NEBRASKA**

- Central Community College (3)
- Metropolitan Community College (4)
- Mid-Plains Community College Area (2)
- Southeast Community College (4)
- Western Nebraska Community College (2)

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**NEVADA**

Great Basin College (2)  
Truckee Meadows Community College (3)

**NEW JERSEY**

Atlantic Community College (3)  
Brookdale Community College (4)  
Burlington County College (3)  
County College of Morris (4)  
Cumberland County College (2)  
Mercer County Community College (3)  
Ocean County College (4)

**NEW MEXICO**

Albuquerque Technical-Vocational Institute (5)  
Clovis Community College (2)  
Santa Fe Community College (2)

**NEW YORK**

Adirondack Community College (2)  
Corning Community College (3)  
CUNY Borough of Manhattan Community College (6)  
CUNY Queensborough Community College (4)  
Dutchess Community College (3)  
Fashion Institute of Technology (4)  
Finger Lakes Community College (3)  
Genesee Community College (3)  
Hudson Valley Community College (4)  
Jamestown Community College (3)  
Jefferson Community College (2)  
Monroe Community College (4)  
Nassau Community College (5)  
North Country Community College (2)  
Onondaga Community College (4)  
Orange County Community College (3)  
Schenectady County Community College (2)  
Suffolk Community College (5)  
Sullivan County Community College (2)  
Westchester Community College (4)

**NORTH CAROLINA**

Alamance Community College (2)  
Beaufort County Community College (1)  
Cape Fear Community College (3)  
Catawba Valley Community College (2)  
Central Piedmont Community College (5)  
Coastal Carolina Community College (2)

**NORTH CAROLINA (cont.)**

Durham Technical Community College (3)  
Gaston College (3)  
Haywood Community College (2)  
James Sprunt Community College (1)  
Johnston Community College (2)  
Lenoir Community College (2)  
Mayland Community College (1)  
Rockingham Community College (2)  
Southeastern Community College (2)  
Surry Community College (2)  
Vance-Granville Community College (2)  
Wayne Community College (2)  
Wilkes Community College (2)

**NORTH DAKOTA**

North Dakota State College of Science (2)

**OHIO**

Central Ohio Technical College (2)  
Cincinnati State Technical and Community College (3)  
Clark State Community College (3)  
Columbus State Community College (5)  
Cuyahoga Community College (5)  
Hocking College (3)  
Lakeland Community College (3)  
Lorain County Community College (5)  
North Central Technical College (2)  
Owens Community College (4)  
Sinclair Community College (5)  
Southern State Community College (2)  
Stark Technical College (2)

**OKLAHOMA**

Carl Albert State College (2)  
Connors State College (2)  
Northeastern Oklahoma A&M College (2)  
Oklahoma City Community College (4)  
Rose State College (4)  
Western Oklahoma State College (1)

**OREGON**

Clackamas Community College (2)  
Clatsop Community College (1)  
Lane Community College (4)  
Linn-Benton Community College (3)  
Rogue Community College (2)

**OREGON (cont.)**

Umpqua Community College (2)

**PENNSYLVANIA**

Community College of Allegheny County (5)  
Community College of Philadelphia (5)  
Delaware County Community College (4)  
Harrisburg Area Community College (4)  
Northampton County Area Community College (3)  
Westmoreland County Community College (3)

**RHODE ISLAND**

Community College of Rhode Island (4)

**SOUTH CAROLINA**

Aiken Technical College (2)  
Central Carolina Technical College (2)  
Chesterfield-Marlboro Technical College (1)  
Florence-Darlington Technical College (2)  
Greenville Technical College (4)  
Horry-Georgetown Technical College (2)  
Midlands Technical College (4)  
Orangeburg-Calhoun Technical College (2)  
Spartanburg Technical College (3)  
Technical College of the Lowcountry (2)  
Tri-County Technical College (2)  
Trident Technical College (4)  
Williamsburg Technical College (1)  
York Technical College (2)

**TENNESSEE**

Chattanooga State Technical Community College (3)  
Dyersburg State Community College (2)  
Jackson State Community College (2)  
Motlow State Community College (2)  
Northeast State Technical Community College (2)  
Pellissippi State Technical Community College (4)  
Roane State Community College (3)  
State Technical Institute at Memphis (4)  
Walters State Community College (4)

**TEXAS**

Alamo Community College District (6)  
Amarillo College (3)  
Angelina College (2)  
Blinn College (5)



**TEXAS (cont.)**

Borger Junior College (1)  
 Brazosport College (2)  
 Central Texas College (5)  
 Cisco Junior College (2)  
 Clarendon College (1)  
 College of the Mainland (2)  
 Collin County Community College (4)  
 Dallas County Community College District (6)  
 Del Mar College (4)  
 El Paso County Community College (5)  
 Grayson County College (2)  
 Houston Community College System (5)  
 Kilgore College (3)  
 Laredo Community College (3)  
 Lee College (4)  
 McLennan Community College (3)  
 Midland Community College (2)  
 Navarro College (3)  
 North Central Texas College (3)  
 North Harris Montgomery Community College (6)  
 Odessa College (4)  
 San Jacinto College (5)  
 Southwest Texas Junior College (2)  
 Tarrant County Junior College (5)  
 Temple Junior College (2)  
 Texarkana College (3)  
 Texas Southmost College (3)  
 Texas State Technical College (4)  
 Trinity Valley Community College (3)  
 Vernon Regional Junior College (2)  
 Victoria College (2)  
 Weatherford College (2)  
 Western Texas College (1)

**UTAH**

Salt Lake Community College (5)

**VIRGINIA**

Blue Ridge Community College (2)  
 Central Virginia Community College (2)  
 Dabney S. Lancaster Community College (1)  
 Danville Community College (2)  
 Eastern Shore Community College (1)  
 Germanna Community College (2)  
 J. Sargeant Reynolds Community College (4)  
 John Tyler Community College (3)  
 Lord Fairfax Community College (2)  
 Mountain Empire Community College (2)

**VIRGINIA (cont.)**

New River Community College (2)  
 Northern Virginia Community College (5)  
 Patrick Henry Community College (2)  
 Paul D. Camp Community College (1)  
 Piedmont Virginia Community College (2)  
 Rappahannock Community College (2)  
 Richard Bland College (2)  
 Southside Virginia Community College (2)  
 Southwest Virginia Community College (3)  
 Thomas Nelson Community College (3)  
 Tidewater Community College (5)  
 Virginia Highlands Community College (2)  
 Virginia Western Community College (3)  
 Wytheville Community College (2)

**WASHINGTON**

Bellevue Community College (4)  
 Centralia College (2)  
 Clark College (3)  
 Community Colleges of Spokane (6)  
 Everett Community College (3)  
 Olympic College (3)  
 Pierce College (4)  
 Renton Technical College (3)  
 Shoreline Community College (4)  
 Tacoma Community College (3)

**WISCONSIN**

Blackhawk Technical College (2)  
 Fox Valley Technical College (3)  
 Gateway Technical College (3)  
 Lakeshore Technical College (2)  
 Madison Area Technical College (4)  
 Mid-State Technical College (2)  
 Milwaukee Area Technical College (5)  
 Wisconsin Indianhead Technical College (2)

**WYOMING**

Casper College (3)  
 Laramie County Community College (3)  
 Northern Wyoming Community College (2)  
 Northwest College (3)  
 Western Wyoming Community College (2)



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*Office of Educational Research and Improvement (OERI)*  
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