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ABSTRACT

A study of administrative growth and expenditures at Iowa State University (ISU) included comparisons with a group of 10 comparable universities for variables of administrative efficiency including administrative structures, administrative costs, administrative salaries, and administrative intensity. The comparison group of institutions was made up of land grant universities, all major research institutions considered reasonably comparable to ISU in enrollment mix, programs, and faculty. In administrative structures the study found considerable variation among institutions in numbers and titles of upper-level administrative positions. Comparison of administrative costs and salaries found that those at ISU are similar to or below those of peer universities and that ISU's administrative costs, as a share of general funds or of general and sponsored funds, have been relatively constant, even when adjusted for inflation. The study also found substantial variation among the universities in the percentage of expenditures that may be attributable to administration, and strong evidence of economies of scale. Findings from the study of administrative intensity also provided information about the distribution of administrative salaries among central administrative units, college or mid-level administrative units, and academic department or other operating units. (Contains 10 references.) (JB)

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Analyzing Administrative Costs and Structures

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Jean Endo  
Chair and Editor  
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### Abstract

Administrative growth and administrative expenditures are major issues for institutions of higher education. This paper reports on a study of administrative costs and structures at Iowa State University. Various indicators of administrative efficiency are examined, including those related to administrative structures, administrative costs, administrative salaries, and administrative intensity. For each of these aspects, the paper describes the methodology used, summarizes the findings, and provides comparisons to peer institutions when these are available. Conclusions and plans for the ongoing examination of administrative costs and structures at Iowa State University are presented. The final section discusses the adaptability of the methodologies used in this study to studies that could be conducted by other institutions of higher education.

### Analyzing Administrative Costs and Structures

The 1990s have begun with serious financial constraints for many colleges and universities in the United States. These constraints have prompted increasingly thorough reviews of programs and expenditures throughout the institutions. The general topic of cost containment was the focus of the November/December 1990 issue of Change, The Magazine of Higher Learning. Reductions in administrative costs were discussed (Langfitt, 1990), and it was suggested that new combinations of functions could reduce the number of administrators, particularly in small institutions (Zemsky and Massy, 1990; Chabotar and Honan, 1990).

Some authors have suggested that "administrative bloat" on American campuses is a major contributor to the financial problems faced by higher education. The November-December 1991 issue of Academe (the Bulletin of the American Association of University Professors), for example, was devoted to the topic of "Administrative Bloat" and urged that faculty study administrative expenditures at their institutions (Andersen, 1991; Bergmann, 1991; Halfond, 1991). Growth in the number of non-teaching staff members, including administrators, has been indicated by data collected by the U.S. Equal Employment Opportunity Commission (EEOC), with the highest percentage change, from 1985 to 1989, in the category of "other professionals" (Grassmuck, 1991). Zemsky and Massy (1990) discussed the "administrative lattice," defined as "the proliferation and entrenchment of administrative staff at American colleges and universities over the past two decades" (p. 22). They estimated that the increase in administrative staff between 1975 and 1985 had been 60% nationwide.

In Massachusetts, a Task Force appointed to examine the administrative organization and operation of the state's public higher education system examined state-wide data on staffing and instructional expenditures and found "no substantial evidence whatsoever to support the claim that the public higher education system is top heavy with overpaid administrators" (Task Force on Administrative Organization, 1991, p. v.).

In the state of Iowa, the State Board of Regents directed each of the Regent institutions (three public universities and two special schools) to conduct an intensive and comprehensive

review of its programs and services to determine ways in which efficiencies could be increased and to adjust programs and services to the level of available resources. Iowa State University conducted this review within the context of its ongoing strategic planning efforts, developed nearly 100 recommendations for action, and identified 70 proposals and issues for further study. Among these were four university-wide studies initiated by President Martin C. Jischke, one of which focused on administrative costs and structures. The President appointed an eleven-member committee in December 1991, and charged it to examine administrative costs and structures throughout the university, conduct analyses of levels and trends at Iowa State University, and, where possible, provide comparisons to peer institutions.

The joint faculty and administrative committee began by reviewing available institutional data bases for Iowa State University (ISU) and for peer universities, prior reports prepared by ISU's Office of Institutional Research, and a 1989 study of central administrative growth patterns conducted by a committee of ISU's Faculty Senate. In order to complete its report by the deadline of May 1992, the committee focused on selected aspects of administrative costs and structures for which data were available or could be obtained within the time frame of the study. These aspects, presented in the following sections, include administrative structures, administrative costs, administrative salaries, and administrative intensity.

Although the study described is specific to one institution, the methodologies employed can be adapted for use in other institutions of higher education. Other states and organizations are beginning to conduct similar studies, but there is not yet an accepted model for such analyses. The Massachusetts study cited earlier reported that "even the best available data on the subject of administrative efficiency and effectiveness are largely inadequate" (Task Force on Administrative Organization, 1991, p. 7). The Iowa State University study may help to suggest some of the ways in which administrative costs and structures can be examined.

#### Administrative Structures

Administrative structures and upper-level administrative positions at Iowa State University for 1990-91 were compared with those at ten comparison universities: University of Arizona,

University of California-Davis, University of Illinois, Michigan State University, University of Minnesota, North Carolina State University, Ohio State University, Purdue University, Texas A&M University, and University of Wisconsin. All are land grant institutions, all are major research universities, and all are considered to be reasonably comparable to Iowa State University in terms of enrollment mix, programs, and faculty. Because this peer comparison group is used regularly by ISU for a variety of analyses, it was not necessary to develop a peer group just for purposes of this study.

Organizational charts and summary listings of the 1990-91 presidential and vice presidential level administrative positions at each of the peer institutions were reviewed. U.S. Equal Employment Opportunity Commission (EEOC) data on the number of executive, administrative, and managerial employees were considered, but were not used because of known differences in reporting practices over time and between ISU and its peer universities.

Considerable variation was found among the peer universities in the number and titles of upper-level administrative positions. Iowa State University had four positions classified as provost, vice president, or vice chancellor. Three other peer universities had four such positions, and each of these three universities was part of a system that also had administrators at the system level. The number of titles at the vice presidential level at the other seven universities ranged from five to twelve. The data examined indicated that ISU had fewer administrative positions at the vice presidential level than did most of the universities in the peer group and none had fewer positions at that level than did Iowa State University.

#### Administrative Costs

##### Comparison of Administrative Costs at Peer Universities

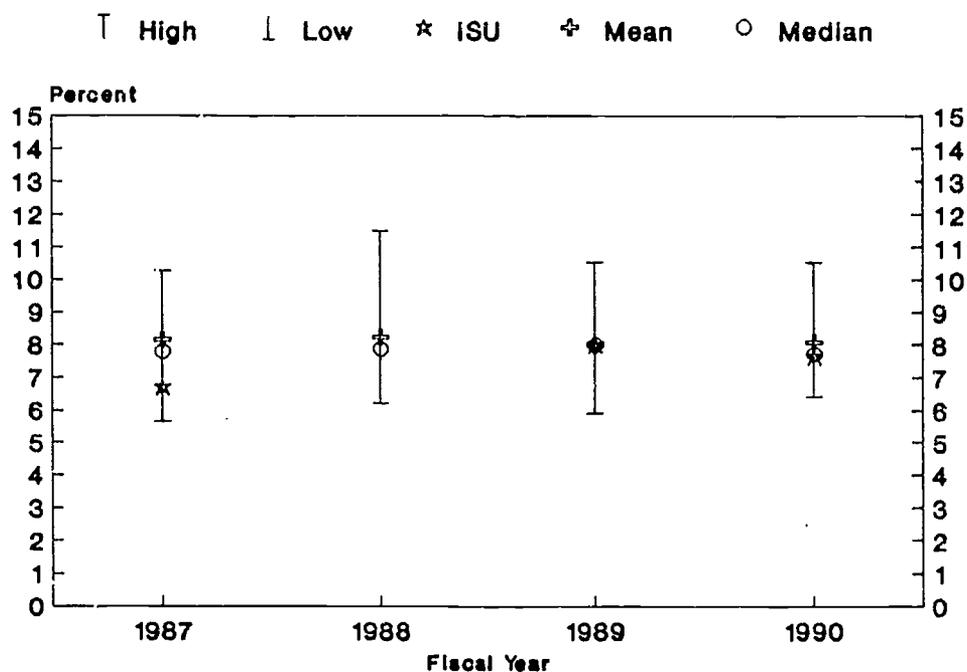
To compare administrative costs at ISU to those at ten peer universities, various categories of expenditure data for 1987-1990, submitted on the IPEDS (Integrated Postsecondary Education Data System) Finance Survey by these universities to the National Center for Education Statistics of the U.S. Department of Education, were examined. The IPEDS Finance data categories include (for unrestricted, restricted, and total funds) expenditures for instruction, research, public

service, academic support, libraries, student services, institutional support, operation and maintenance of plant, scholarships and fellowships, and transfers (mandatory and nonmandatory). The total of these categories, excluding transfers, is identified as total educational and general expenditures, which here is referred to as "total expenditures."

Expenditures for Academic Support and Institutional Support were analyzed because each of these categories includes some administrative expenditures. Academic Support is defined as "expenditures for the support services that are an integral part of the institution's primary mission of instruction, research, and public service." Included are expenditures for "museums, galleries, audio/visual services, academic computing support, ancillary support, academic administration, personnel development, and course and curriculum development." Institutional Support is defined as "expenditures for the day-to-day operational support of the institution, excluding expenditures for physical plant operations." Included are "expenditures for general administrative services, executive direction and planning, legal and fiscal operations, and public relations/development" (IPEDS Finance Survey, FY 1990).

IPEDS expenditure data for Academic Support and Institutional Support as percentages of total expenditures and per full-time-equivalent (FTE) student were used to compare administrative costs at Iowa State University to those at peer universities. Analysis of the Institutional Support figures was emphasized since Academic Support includes expenditures for a variety of academic support services as well as expenditures for academic administration. Unrestricted funds only were used for the indicators of administrative costs, since universities have more discretionary control over how these funds are allocated to the various functions of the institution.

Figure 1 shows Iowa State University's position relative to the peer universities for Institutional Support as a percentage of total expenditures. This figure shows that these expenditures at ISU were generally below or near the mean and median of the peer universities. Similar findings were obtained for Academic Support as a percentage of total expenditures and for Institutional Support or Academic Support on a per FTE student basis.



**Figure 1. Institutional Support as a Percent of Total Educational and General Expenditures (Unrestricted Funds Only). ISU data omitted for fiscal year 1988 due to reporting discrepancies.**  
**Sources: NCHEMS (National Center for Higher Education Management Systems) and IPEDS Finance and Enrollment Databases.**

In interpreting the findings, it should be noted that differences in accounting practices, in part reflecting differences in organization and management among the institutions, affect what is reported for the IPEDS expenditure categories. Furthermore, standard accounting rules have been changing, and most universities, including ISU, are trying to achieve more uniformity in accounting practices. Also, neither Academic Support nor Institutional Support includes any administrative expenditures of academic departments so that these categories do not reflect administrative expenditures at all levels of the university. Nevertheless, these data do allow for comparisons among universities and may serve as indicators of relative levels of administrative costs.

### Comparisons of Administrative Costs Over Time

To examine changes over time in Iowa State University's administrative costs, administrative account expenditure data for fiscal years 1987-91 were analyzed. Expenditures reported by college or unit were grouped within the general categories of instruction and research, public service, academic support, student services, institutional support, operation and maintenance of plant, financial aid and awards, and transfers to other funds. Expenditures were reported separately for general education funds and for sponsored funds. For purposes of comparison, expenditures for prior years were recalculated to conform to the 1991 organizational structure.

Administrative costs were measured as either the total expenditures of a unit (e.g., President's Office, Purchasing Office, Accounting Office) or as portions of the expenditures from administrative accounts when non-administrative activities could be identified separately and excluded (e.g., college Academic Support expenditures, excluding advising, exhibits, supplementals, teaching assistant funds, lectures, etc.). Administrative account expenditures were then compared to total general fund expenditures (excluding equipment) and to total general and sponsored fund expenditures (excluding equipment) for the unit. Comparisons were presented for actual dollars and for dollars adjusted by the Higher Education Price Index.

Figure 2 presents administrative account expenditures for fiscal years 1987-1991 as a percentage of total expenditures from general funds and from general and sponsored funds. Even though these data reflect one-time allocations and organizational differences as well as permanent resource allocation decisions, the administrative account expenditures as a percentage of either general funds expenditures or general and sponsored funds expenditures have not changed substantially at ISU over the five-year period since 1987.

Additional analyses show the differences among the colleges in administrative account expenditures as a percentage of general and sponsored funds expenditures over the five-year period. While caution should be used in comparing college costs because of differences among the colleges in the types of expenditures made from college administrative accounts and in the

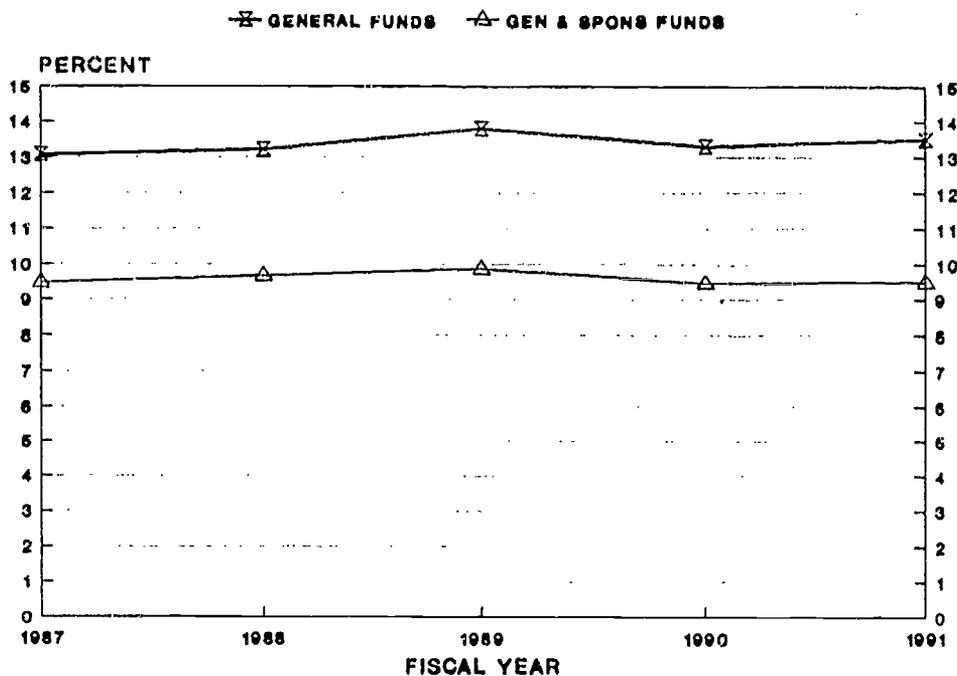


Figure 2. ISU Administrative Account Expenditures as Percent of General Funds and General and Sponsored Funds Expenditures, fiscal years 1987-1991.

services provided by the colleges, substantial variations were observed. For example, ISU college administrative account expenditures as a percentage of general and sponsored funds expenditures for fiscal year 1991 ranged from 1.88% to 8.79%. The percentage of total college expenditures paid from college administrative accounts was inversely related to college size. Figure 3, showing administrative account expenditures as a percentage of total expenditures for each college, demonstrates apparent economies of scale in administration. A similar relationship was found between the percentage of administrative account expenditures and general university full-time-equivalent employees by college.

These administrative cost data, like the IPEDS data, exclude administrative expenditures at the academic department level, and thus do not reflect administrative expenditures at all levels of the university. Although the identification of administrative expenditures by unit is imperfect, these data provide a more precise analysis for ISU than that using IPEDS financial data.

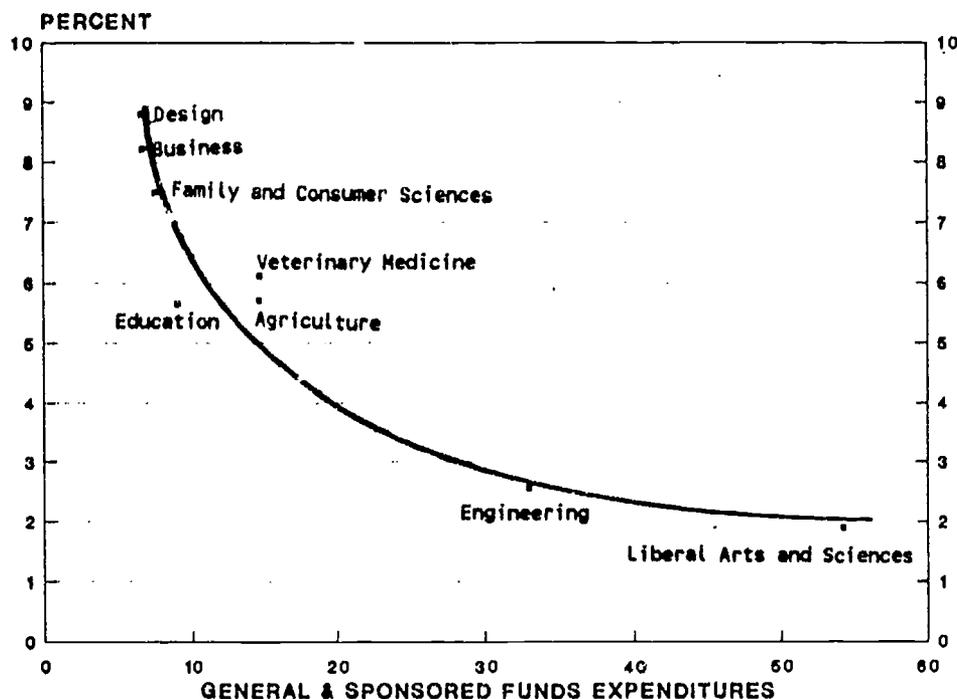


Figure 3. Fiscal year 1991 College Administrative Account Expenditures as Percent of Total College General and Sponsored Funds Expenditures (excluding equipment).

### Administrative Salaries

#### Comparison to Peer Universities

Salaries for major administrative positions (including President, Provost, Vice Presidents, Vice Provosts, and Deans) and for selected Professional and Scientific administrative positions (e.g., Controller, Directors, Assistant Directors, Managers) were compared to salaries at the peer institutions. Salaries for major administrative positions were compared for the years 1987-88 through 1990-91, with data obtained through the CUPA (College and University Personnel Association) Administrative Compensation Survey and the AAUDE (Association of American Universities Data Exchange) Survey of Selected Major Administrative Positions. Salary comparisons for selected Professional and Scientific positions were for the years 1986-87 and 1990-91 only and were based on the University of Missouri Higher Education Survey of Administrative/Professional Positions.

For each position, the ratio of the Iowa State University salary to the average salary at the peer land grant universities was calculated. Data on average faculty salaries at Iowa State University and the peer land grant universities were available from the AAUP (American Association of University Professors) Annual Salary Survey and were included for comparison purposes.

Iowa State University's major administrative salaries ranged from 80% to 115% of the means for the peer universities. Greater variation existed between ISU's salaries and the salaries for positions at the peer universities for the selected Professional and Scientific (P&S) administrative positions, with the ratios for individual P&S positions ranging from 54% to 132%.

Figure 4 shows the ratio of Iowa State University average salaries to comparable average salaries at the peer land grant universities. The figure presents the ratios of the average salaries for the major administrative positions (fiscal years 1988-1991), the selected Professional and Scientific positions (fiscal years 1987 and 1991), and faculty at each of the three professorial ranks (fiscal years 1987-1991). In addition, the major administrative positions are separated into two groups: the first group includes the President, Vice Presidents, Provost, and Vice Provosts; the second group is the deans.

For the years studied, Iowa State University's average salary for the major administrative positions was approximately the same as the average of the salaries for these positions at the peer institutions, and ISU's salaries for the positions of President, Provost, and Vice President exceeded the average salaries for comparable positions at the peer universities. The average salaries for Iowa State University's deans were below the average for the peer universities. Iowa State University's average salaries for the group of selected P&S administrative positions were substantially below the average for these positions at the peer universities.

In fiscal years 1988 and 1989, Iowa State University administrative salaries on average were higher relative to the peers than were faculty salaries at each professorial rank. Since fiscal year 1990, average faculty salaries at the ranks of Associate Professor and Professor have been higher relative to the peers than have administrative salaries. Nevertheless, the comparative

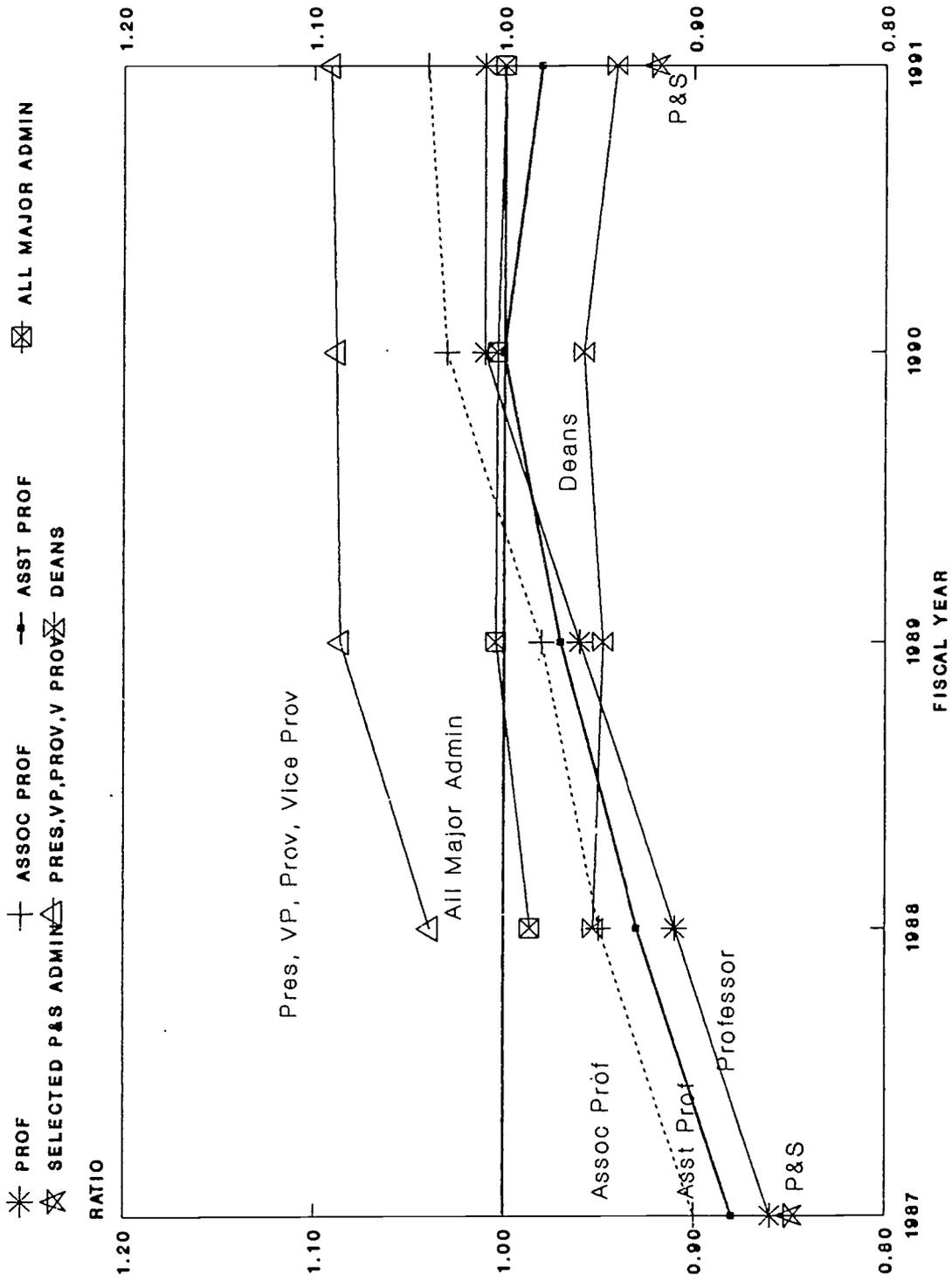


Figure 4. Ratios of Iowa State University Average Salaries to Comparable Average Salaries at Peer Land Grant Universities.

ratios of the average salary for the President, Vice Presidents, Provost, and Vice Provosts at Iowa State University continued to exceed the ratios for the other groupings of administrators and faculty.

#### Comparison to Non-Administrative Faculty and Staff

A list of Iowa State University administrators was prepared in order to compare the 1991-92 nine-month equivalent salaries of administrators to those of non-administrative faculty and staff. The list included line administrators and those with such titles as Associate or Assistant Provost or Dean, as well as Directors, Assistant Directors, and Managers of separate units. Those considered to be administrative support staff were not included. Bar graphs compared the salary distribution for administrators with faculty rank to the salary distribution of full professors; similar comparisons were made for Professional and Scientific administrators and comparable staff.

A comparison of the salary distribution for administrators to that for full professors revealed that the similarities in these distributions were more striking than the differences, and there was substantial overlap in the distribution of administrators' salaries relative to their non-administrative counterparts. The median salary of administrators exceeded that of full professors by about \$10,000 (17%). The median salary of Professional and Scientific administrators exceeded that of comparable Professional and Scientific staff by about \$8,000 (19%).

Salary increases for continuing administrators, faculty, and P&S staff also were compared for fiscal years 1988-1992. For fiscal years 1989 and 1990, deliberate efforts were made to keep average salary increases for administrators below those for faculty. Continuing faculty received the highest average salary increases, with lower average salary increases for administrators, and the lowest average salary increases for continuing P&S staff. All groups of continuing administrators, faculty, and P&S staff received similar salary increases for fiscal year 1991, and none of these groups received a general salary increase for fiscal year 1992.

### Administrative Intensity

As noted in previous sections of this paper, the readily available data on administrative costs were limited in two important aspects. First, those data exclude administrative expenditures at the academic department level, and focus on the costs associated with the central and college administration and university-wide support services. In particular, the IPEDS data pertaining to administrative expenditures are limited to the aggregate categories of Institutional Support and Academic Support. While the category of Academic Support includes college-level administrative costs, it does not include any administrative costs at the academic department level. The administrative account expenditure data similarly exclude expenditures for academic department administration. Second, the IPEDS data and ISU's administrative account expenditure data include costs associated with many support services units, rather than including only those costs that are administrative in nature and excluding costs that are incurred in providing services and programs for students, faculty, staff, or alumni. While adjustments were made where obvious, it was not possible to make all appropriate adjustments.

In order to overcome the limitations noted above, a survey procedure was designed to collect data that pertain exclusively to administrative FTEs and salary costs and include both academic and nonacademic departments. Two survey instruments were developed, one for academic departments and one for other units. The survey of academic departments requested estimates of the percentage of time individual department executive officers, faculty, and staff members of the department spent in Fall 1991 on departmental administrative activities, either as an administrator or in support of departmental administration. Excluded was the percentage of time spent in teaching and advising, research, and outreach. Similarly, the survey of units other than academic departments requested estimates of the percentage of time the administrators and staff of the unit spent administering the unit or providing administrative support for the unit. Excluded was the percentage of time spent providing direct services to the clientele of the unit (i.e., students, faculty, staff of other units, alumni, or other groups served by the unit). Also

excluded was the percentage of time staff members spent directly supporting or maintaining the infrastructure of the university.

All academic and nonacademic departments responded to the survey. Data from the surveys were used to determine the number of full-time equivalent (FTE) administrative staff of each unit. For example, an estimated 100% of a full-time appointment generated 1.00 administrative FTE. The percentages also were applied to the annual salary for each employee to determine administrative salary costs.

The term "administrative" was used to include both the administrators and the administrative support staff. "Administrators" were those included in the list of Iowa State University administrators prepared for the salary study described earlier. Administrative FTEs as a percent of total FTEs and administrative salaries as a percent of total salaries were used as measures of administrative intensity. The totals for the units included FTEs and salary dollars for administrators, faculty, professional and scientific staff, classified staff, graduate assistants, and post- and pre-doctoral research associates. All sources of funds (including the general fund, sponsored funds, and auxiliary funds) were used for these calculations. Comparisons among colleges were based on these measures as well as on analogous percentages for FTEs and salaries paid from the general university only.

Summary statistics were calculated for administrative employees at three levels of the university: central administration which includes the offices of the President, Provost and Vice Provosts, and the Vice Presidents; mid-level administration which includes units that report to the central administration and whose primary function is coordination of other units; and operating unit administration which includes both academic and nonacademic departments.

For the university as a whole, it was found that about 7% of administrator FTEs were at the central administration level, 27% were at the mid-level, and 66% were at the operating unit level. Administrator salary costs were similarly distributed among these three levels: 9% at the central administration level, 31% at the mid-level; and 60% at the operating unit level. Nearly half (48%) of all administrator FTEs were in operating units other than academic departments and

18% were at the operating unit level in academic departments.

Data from the surveys indicated that administrator FTEs constituted 3.2% of all university FTEs and 7.4% of total salary costs. Administrative support staff FTEs were 8.6% of all university FTEs and accounted for 7.7% of salary costs. Together, administrators and administrative support staff FTEs constituted 11.8% of all university FTEs and 15.1% of total salary costs. Classified employee FTEs constituted 58.5% of the administrative support staff FTEs, compared to 35.0% for P&S employees and 6.6% for faculty.

Figure 5 presents the FTE administrative intensity for administrators, administrative support staff, and total administration by college. Substantial variation is evident among the colleges, with the percent of administrative FTEs to total FTEs ranging from 6.9% for the College of Liberal Arts and Sciences to 18.0% for the College of Education. Similarly, the percents for total administrative salary costs range from 8.9% for the College of Liberal Arts and Sciences to 20.5% for the College of Education.

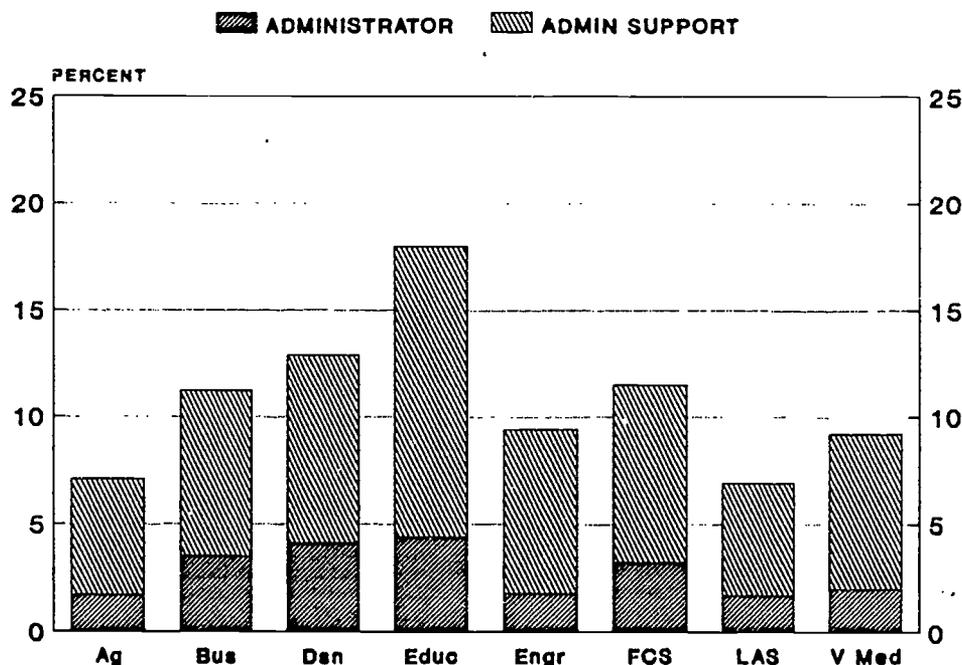


Figure 5. Fiscal year 1992 Administrator and Administrative Support FTEs as percent of Total FTEs. Colleges are Agriculture, Business, Design, Education, Engineering, Family and Consumer Sciences, Liberal Arts and Sciences and Veterinary Medicine.

Comparisons also were made, by college, for administrator and administrative support salary costs per student credit hour, per student major, and per degree granted. Rankings using these measures differed from those that do not consider indicators of instructional output.

These data and their analysis provide a number of interesting comparisons among colleges and other units at Iowa State University, but it is difficult to assess their significance on an absolute basis. The survey data are somewhat limited in that there may have been differences among the units in how the survey instructions were interpreted. Units may have varied in how they calculated the estimates of time spent on administration and administrative support. Also, salaries were the only administrative cost included in this analysis. Other administrative costs, such as those for supplies, travel, and equipment, were not included because many units could not readily estimate the percentages of these costs that are administrative.

#### Conclusions and Plans for Ongoing Study

##### Conclusions

This study examined several aspects of administrative costs and structures at Iowa State University, with comparisons to a group of ten peer land grant universities and analyses of levels and trends at Iowa State University. While each of the indicators of administrative costs and structures examined was imperfect in some respects, nevertheless, each indicator studied provided some useful information to help assess the overall level, and for some aspects, trends, in administrative costs and structures at Iowa State University. The various indicators do not support a conclusion (as some faculty and staff within the University had anticipated) that ISU's administrative costs or overall administrative salaries are high relative to peer universities or that such costs have been increasing rapidly in recent years. Rather, the study found that ISU's administrative costs and salaries are similar to or below those of peer universities and that ISU's administrative costs, as a share of general funds or of general and sponsored funds, have been relatively constant, even when they are not adjusted for inflation.

The study also found substantial variation among the colleges in the percentage of expenditures that may be attributable to administration, and strong evidence was found of

economies of scale in college-level administration. The findings from the study of administrative intensity also provided interesting information not previously available about the distribution of administrative FTEs and administrative salaries among central administrative units, college or mid-level administrative units, and academic department or other operating units.

### Ongoing Study

The committee's report included a number of recommendations that called for continuing study of administrative costs and structures at Iowa State University. These recommendations now are being implemented. Iowa State University will continue to analyze annual expenditure data and monitor changes in administrative account expenditures over time. The University will continue to collect and analyze data on the salaries of administrators at Iowa State University and at the peer universities. These analyses will be used in determining salary increases for administrators and in establishing salary levels when vacant administrative positions are being filled. Also, ISU will continue to compare the salary distributions and salary increases for Iowa State University administrators to those of non-administrative counterparts within the University. The IPEDS expenditure data for the categories of Academic Support and Institutional Support will be collected and analyzed on an annual basis for ISU and its peer universities. Continuing efforts to improve accounting practices to make them consistent with national practices will facilitate meaningful comparisons of Iowa State University's expenditures with those of its peers and will result in better data for trend analyses. Furthermore, the examination of Iowa State University's administrative structures and comparisons with those at peer universities will be incorporated into the periodic review process established for all programs and services.

Of particular significance, ongoing analyses of Iowa State University's administrative FTEs and administrative intensity are planned. A Personnel Activity Report has been redesigned to include the collection of administrative activity data and is being distributed annually to all university employees. Definitions have been developed to enable the collection of uniform data on administrative FTEs throughout the university. This will facilitate the analysis of administrative structures at Iowa State University and will provide a basis for the ongoing

analyses of administrative costs and structures. It also is anticipated that the nationwide interest in administrative costs and structures will prompt other universities to conduct similar studies, which should result in the availability of better comparative data.

#### Adaptability of This Study to Other Colleges and Universities

Most of the aspects of administrative costs and structures examined in the Iowa State University study can be replicated at other universities and colleges, especially by those institutions that have an established group of peers with which they compare themselves and for which they have been collecting organizational charts, salary information, and perhaps other data. The major exception is likely to be the analysis of administrative intensity which requires data that many institutions may not have been collecting.

Comparisons of administrative structures to those of peer institutions can be carried out relatively easily at the level done in the ISU study, namely, a comparison of the number of positions at the level of provost, vice president, and vice chancellor. An examination also can be done of the numbers of deans and assistant and associate deans, and these could be compared to the number of students, faculty, or some other measures of institutional or administrative unit size. If the college or university conducting such a study considers the EEOC data on the number of executive, administrative, and managerial employees to be comparable among the institutions in its peer group, those data also could be analyzed as an additional or alternative way to compare administrative structures. Furthermore, an institution could examine changes over time in the number of administrative positions to assess the extent to which its administrative structure and the number of comparable administrative positions have changed over time.

IPEDS data on administrative costs, as indicated by figures for Academic Support and Institutional Support as percentages of expenditures and per FTE student, are readily available to all colleges and universities and can be used as in the ISU study to compare levels of administrative costs among peer institutions and changes over time for particular institutions. In addition, as was done in the ISU study, administrative account expenditures as a percent of total

expenditures for various units within an institution can be compared among units or over time for selected units. For this to be useful, however, the accounting system must adequately differentiate between administrative and nonadministrative expenditures.

Through data exchanges and other sources, most public colleges and universities are able to compare the salary levels of administrators and faculty members to those of peers. Similarly, most higher education institutions can compare salary levels and salary increases for administrators relative to nonadministrative employees.

The most time-consuming part of the ISU study and the one that other colleges and universities may find difficult to replicate is the analysis of administrative intensity, since this necessitates identifying administrators and administrative staff and may require a special survey of all administrative units unless the data needed are available from other internal surveys. While an analysis of administrative intensity may be time-consuming to undertake, this type of analysis is likely to be very informative, since it identifies the units and administrative levels at which most administrative staff are located as well as the share of all employee FTEs that are devoted to administrative activities and the share of all salary expenditures that are spent on administration. If the institutional accounting system adequately differentiates administrative from nonadministrative expenditures for supplies, travel, equipment, and so forth, then these types of expenditures could be added to the salary data to analyze most of the administrative costs throughout the institution. Once a data base is established, comparisons can be made over time to detect changes in administrative intensity.

As more institutions of higher education try to deal with budget constraints and respond to internal and external pressures to reduce administrative costs, it will become increasingly important for colleges and universities to carefully examine and compare their administrative costs and structures. The ISU study may provide one model for other institutions.

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