

Following is the text of a report scheduled for discussion and action at the Fall Meeting of the Faculty Senate, to be held Wednesday, November 19, 3 to 5:30 p.m. in Room 200 College Hall. Starting on page III of this supplement is a dissenting statement by one member of the Committee on Administration, followed by a response from the Administration on page IV.

Report of the Senate Committee on Administration, 1985-86

September 5, 1986

Introduction

The Committee was charged with a general examination of "the trends and patterns of resource allocation at Penn." The concerns that engendered this charge are expressed in the Senate Chair's column in *Almanac* October 8, 1985. That article presented figures showing that, over the period FY73 through FY86, administrative (A-1) salary expenses had grown substantially more than faculty (A-2)* salary expenses in the total University budget, and further that this trend was still continuing.

The Committee concentrated on two main topics in response to this charge. It investigated the trends in salary expenses over the period FY74 through FY85. FY74 was chosen as the base year for this study since that was the first year in which Responsibility Center Accounting was fully operative. It also conducted a more detailed analysis of the costs of the Administrative Service Centers from FY83 through FY86. This period was chosen because a) a similar study was last conducted by the Committee on Administration in 1983-84, and b) it seemed doubtful whether truly comparable figures at a sufficient level of detail could be obtained for earlier years. The results of these studies are presented in separate sections below.

At an early stage the Committee asked the President and Provost to designate a person or persons with access to the appropriate data to respond to its questions and requests for information. They designated Glen Stine, Director of the Office of Budget Analysis. Mr. Stine met with the Committee chair on numerous occasions and with the Committee as a whole once. We are pleased to record that he was consistently generous with his time and considerable expertise, and uniformly responsive to our requests.

Findings—Salary Expense Trends

The Provost, in his response to the Senate Chair's column cited above, in *Almanac* October 15, 1985, suggested some factors that could explain the trends in the figures, and sounded a caveat that would loom large in the labors of the Committee: the necessity to ensure the comparability of

*The A-2 salary category presently comprises all of the academic staff listed in sections II.B.1-4 and Assistant Instructor from section II.B.5 on pp. 21-26 of the Handbook for Faculty and Academic Administrators. It thus includes, as well as the standing faculty, all associated faculty, such as research faculty, and the academic support staff, such as Lecturers and Postdoctoral Fellows. The A-1 category contains those other employees who spend a substantial fraction of their time in supervisory or decision-making roles and/or whose jobs require significant professional qualifications. Thus, as well as administrators, it includes such technical professionals as Research Specialists. Most other full-time employees are A-3. The latter two categories map respectively onto the Exempt and Non-exempt classes defined by the Fair Labor Standards Act of 1938. The crucial legal difference is that Non-exempt (A-3) employees must be paid for any overtime worked, Exempt (A-1) need not be.

Table 1
Responsibility Center Salary Expenses
Actual \$1000s

Unit	Line	Category	FY74	FY85	Change
All	1	A-2	44,888	149,007	232.0%
Responsibility	2	A-1	6,340	27,315	330.8%
Centers	3	A-3	15,164	24,481	61.4%
School	4	A-2	15,457	23,880	54.5%
of	5	A-1	2,282	8,940	291.8%
Medicine	6	A-3	6,461	6,253	-3.2%
Clinical Practices	7	A-2	—	50,839	—
Sch. of Med.	8	A-2	15,457	74,719	383.4%
and	9	A-1	2,282	9,350	309.7%
Clinical Practices	10	A-3	6,461	6,662	3.1%
Total less	11	A-2	29,431	74,288	152.4%
Medical	12	A-1	4,058	17,965	342.7%
Center	13	A-3	8,703	17,819	104.7%
General	14	—	6,293	15,566	147.3%
Administration					

the data used. Table 1 illustrates one factor that he mentioned in this context: the formation of the Clinical Practices at HUP. The figures are taken from the ten year compilations "University of Pennsylvania Financial and Related Data" published by the Office of the Comptroller. Lines 4 and 8 in that table show the faculty salary expenses in FY74 and FY85 for, respectively, the School of Medicine alone and the School of Medicine and the Clinical Practices combined. The former increased by 54.5%, the latter by 383.4%. Plainly neither figure is a true reflection of the change in compensation of the medical faculty. The Clinical Practices, since their formation in 1976, have assumed responsibility for the payment of some faculty formerly within the School of Medicine budget, and also for others, some or all of whose salary was not carried on the University books at all. It would be difficult, if not impossible, to determine the breakdown between these classes.

Clearly, to avoid false conclusions due to these uncertainties, the totals should be corrected to eliminate them. Lines 11, 12 and 13 in Table 1 show the breakdown of salary expenses for all responsibility centers combined,** less the contributions of the Medical Center, obtained as the

**This category includes the Health Service Centers, all Schools, and the Resource Centers (Annenberg, Intercollegiate Athletics, Interdisciplinary e.g. LRSM, Library and Museum). It does not encompass such units as the Administrative Service Centers (see next Section) or the Auxiliary Enterprises.

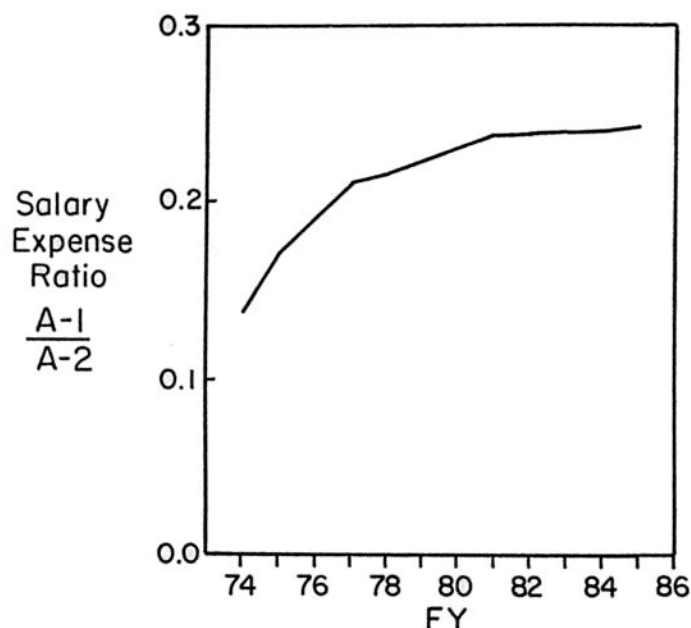


Fig. 1. Ratio of A-1 salary expense to A-2 salary expense incurred by all responsibility centers combined, less the Medical Center, for the period FY'74 through FY'85. For details see text and Table 1.

differences between lines 1, 2 and 3 and lines 8, 9 and 10 respectively. Figure 1 shows the variation of the ratio of A-1 to A-2 salary expenses for this grouping over the entire time period. Being the ratio of two numbers subject to inflation, this is of course inflation-independent. To illustrate the change of central administrative salary expenses over the same period the figures for General Administration Expense are shown in line 14 of Table 1. This is not strictly a pure salary expense, but typically comprises about 80% compensation. It should be noted that certain sectors that contribute to the University totals, such as the Auxiliary Enterprises (e.g. Bookstore, Dormitories, Parking), are not represented in Table 1.

It is quite clear from these data that there was a significantly greater increase of A-1 salary expenses (342.7%) than of A-2 salary expenses (152.4%). This occurred in the schools and is not accompanied by similar growth of central administrative costs (147.3%). The disparate growth was a phenomenon of the seventies: the trend ceased during the eighties, when the two expenses have tended to keep pace with one another. Study of the data for individual schools shows that all displayed qualitatively similar patterns, with two exceptions: Engineering and Applied Science, and Law. In these two schools the salary expense ratio was relatively constant over the entire period. In the other schools its changes showed little variation between types of activity (instruction, research and other) and sources of funding (unrestricted and restricted).

The persistence and widespread occurrence of this effect during the seventies indicate that no factor localized to a few schools or to a shorter time period can fully explain it; nor can it be ascribed to changes in activities supported by a particular funding source, such as sponsored research. Thus the increase of professional non-faculty employees due to the increase of clinical activities in the Schools of Dental Medicine and Veterinary Medicine, and the replacement of many Research Assistant positions with Research Specialists due to changes of federal cost accounting for tuition benefits, may have contributed, but are not the only cause. Three more general factors to be considered are decentralization of administration, professionalization of administration, and increases of administrative demand due to organizational complexity and external requirements.

Some aspects of administrative decentralization are readily apparent; for example, a number of schools—particularly larger ones—have assumed at least partial responsibility for their own personnel, benefits, development and research administration functions. This has largely been at the schools' initiative, sometimes against the wishes of the corresponding central unit. The motivation has been to improve the effectiveness of service, albeit at the risk of decreasing efficiency. The

extent of more subtle and less voluntary decentralization is less clear, though it seems reasonable to assume that responsibility center accounting itself must have placed a greater burden of budget development and administration on the centers.

Instances of administrative professionalization are also not hard to find. As an extreme example, in one school, not the smallest, the only A-1 salary expense in FY'74 was the Dean's administrative stipend. In most schools the delivery of major administrative functions by faculty with only clerical (A-3) assistance is a thing of the past. In many instances both the faculty administrator and the clerical assistant have been supplanted by A-1 personnel, as evidenced by the relatively small growth (104.7%) of A-3 salary expenses. At least part of this is a justifiable response to the third general factor: the requirement of more professional administration imposed by a more complex institution, and therefore procedures, and the reporting and accountability rules of external agencies.

It would be an impossible task to quantify the contributions of the various factors cited above to the changing pattern of compensation expense. Some of them are not amenable to objective measure, for others the necessary data would be unobtainable. Even today it is not readily possible to break down the A-1 salary expense by function: administration, educational support services, research support services, etc. Furthermore, since the time period at issue there has been an almost complete turnover in the central administration, adding to the difficulty of tracking down the information needed. The Committee therefore reluctantly concluded that no final judgment as to whether or not the changes in compensation expense patterns were justified could be made.

Findings—Administrative Service Centers

This aspect of the Committee's work in some respects represents continuation of investigations carried out by its predecessors in 1982-83 (*Almanac* April 8, 1983) and 1983-84 (*Almanac* May 22, 1984). Those studies, however, addressed contemporary concerns about the number of central administrative personnel. Ours, consonant with our charge, is more concerned with overall central administrative costs.

The Administrative Service Centers comprise the offices of the President, Provost, Senior Vice President and Vice President for Development and University Relations, and those units reporting directly to them. The figures displayed in Table 2 are taken from Schedule D of the budgets presented annually to the Trustees at their June meeting. Actual figures for the corresponding years are generally close to the budgeted targets, but show more variability, due to unfilled vacancies, windfalls and other chance perturbations. The published figures are subject to two problems of comparability: 1) changes, generally refinements, of accounting for uncontrollable expenditures, primarily for energy and debt service, and 2) frequent reorganizations, leading to the transfer of units from the budget of one administrator to that of another. In Table 2 the former was corrected by obtaining truly comparable figures, the latter by aggregation.

It should be noted that the figures in Table 2 represent net budgets; they have been obtained from total budgets by the addition of expense credit income and revenues. Expense credit describes charges that are credited to the unit for services rendered to other units, based on level of service; examples include mail and telephone service and computer line

Table 2
Administrative Service Center Net Budgets
Actual \$1000s

Line	Item	FY'83	FY'84	FY'85	FY'86
1	Total	62,899	65,263 (3.8%)	70,331 (7.8%)	74,462 (5.9%)
2	Uncontrollables	28,041	26,234 (-6.4%)	28,852 (10.0%)	30,561 (5.9%)
3	VP Develop.	4,791	6,043 (26.1%)	6,500 (7.6%)	7,143 (9.9%)
4	Oper. & Maint.	29,515	30,271 (2.6%)	32,189 (6.3%)	34,180 (6.2%)
5	Corrected Total	18,763	19,504 (3.9%)	19,567 (0.3%)	20,513 (4.8%)

Constant 1967 \$1000s

Line	Item	FY'83	FY'84	FY'85	FY'86
6	Total	21,343	21,404 (0.3%)	22,193 (3.7%)	22,855 (3.0%)
7	Uncontrollables	9,515	8,604 (-9.6%)	9,104 (5.8%)	9,380 (3.0%)
8	VP Develop.	1,625	1,981 (21.9%)	2,051 (3.5%)	2,192 (6.9%)
9	Oper. & Maint.	10,015	9,928 (-0.9%)	10,157 (2.3%)	10,491 (3.3%)
10	Corrected Total	6,366	6,396 (0.5%)	6,174 (-3.5%)	6,296 (2.0%)

charges. The largest components of revenues are student fees, that are applied to the support of student services, and income from the charges levied on funds utilized from investments; lesser items include gifts and service charges to external organizations. Although total budgets are available, they cannot correctly be aggregated, since services generating expense credits rendered by one central unit to another appear as a current expense in the budget of the latter, and thus these sums would be counted twice. The Committee were told that it would be difficult to obtain the information necessary to correct for this. The net budget of the Administrative Service Centers is covered by its inclusion in the allocated costs to other sectors of the University. As a consequence of the use of net budget figures two major activities are not represented: student services, because, as noted, they are covered by revenues from student fees; and construction management, which is charged to the budget of the relevant responsibility center. There it is treated as a capital cost, so this component does not appear in the University's operating budget at all.

Table 2 shows in lines 1 and 6 the total net budget of all of the Administrative Service Centers for FY'83 through FY'86 in actual dollars and in constant 1967 dollars respectively. The latter figures were obtained by correcting for the average monthly consumer price index for all urban consumers as published by the United States Bureau of Labor Statistics in their Monthly Labor Review; only the figures for the first nine months of FY'86 were available at the time of preparation of this report. The figures in each column of the table after the first are followed by their percentage change from the previous year in parentheses. The next three lines in each section of the table show the contributions made to this total by uncontrollable costs, for energy and debt service, the office of the Vice President for Development and University Relations, and the operation and maintenance of physical plant. While each of these items reflect administrative decisions that could be evaluated for prudence, none truly represents an administrative cost, and thus the Committee felt that the total should be corrected for them. It should be noted that the Vice President for Development and University Relations does discharge some functions that could be regarded as University administration, so the distinction in this case is not entirely clear cut. The correction is not a simple subtraction, because all of the energy cost and a portion of the debt service appear in both the uncontrollables and operation and maintenance entries. Account was taken of this in the calculation of the corrected totals in lines 5 and 10 of Table 2.

It can be seen from Table 2 that the growth of central administrative costs in real dollars from FY'83 through FY'86 has been quite modest, particularly when the budgets of the Administrative Service Centers are corrected by subtraction of those items that do not truly represent administration. When the effects of inflation are factored in, by representing the figures as constant 1967 dollars, the costs are found to have remained effectively constant over this period. Examination of the pattern of salary expense allocation over this period shows, as suggested by the data discussed in the previous section, no evidence of a shift of administrative burden or expense to the schools. It should be noted that a significant fraction of the increase from FY'85 to FY'86 is related to the continuing administrative costs of the University's initiative in computers and networking. This was to be expected and can be anticipated to grow further.

Findings—Data Management

Both of the reports of predecessors of this Committee (cited in the previous section) that addressed the issue, bewailed the lack of ready access to necessary data. Readers may have noted several instances in earlier sections of this report where desired information, some quite recent, would have been difficult to obtain. The Committee found that improvement of data retrieval capabilities is underway, but is progressing slowly. Some elements, such as an alumni data base for development, are already or will shortly be operational. Major visible improvements of the kind that would have eased the Committee's burden, and that of those who informed them, are still at least a year or two away. In the interim many individual administrative offices have improved their function by operation of specialized data management programs on personal computers. The Committee was disappointed at the slow pace of improvement in this area.

The programs that the University currently operates were developed, largely in the early seventies, to automate various types of transactions

then performed by manual or semi-automated procedures. The availability of management information from them is thus incidental to their intended function, and often difficult to achieve. Their replacement with programs having both capabilities requires a major design effort, some aspects of which are critically dependent on stability and detailed experience at the senior administrator level. Members of the Committee evinced varied opinions on the extent to which the magnitude of this task extenuates the slowness of progress.

Summary of Findings

- During the first half of the period FY'74 through FY'86 there was a substantial increase of administrative salary expenses relative to faculty compensation in the schools.
- Various special factors certainly contributed to this, but by no means supply the whole explanation.
- A complete explanation and accounting of this effect, and therefore judgment as to what extent it is justified, is unlikely to be possible.
- During the period FY'83 through FY'86 central administrative costs grew very modestly, and, when inflation is taken into account, the increases are negligible.
- During the same period there is no evidence of a shift of administrative burden or expenses to the schools.
- Improvements in the University's data management and retrieval capabilities are under way, but their pace is disappointingly slow.

Recommendations

- Future Committees on Administration should remain watchful for administrative expansion, both centrally and in the schools.
- Formal reviews of administrative costs of the extent of this one, but of a form and content determined by prevailing concerns, appropriately could be undertaken at least every three or four years.
- All deliberate speed should be maintained in the development of the University's management data storage and retrieval capabilities.
- The design of the programs for this should be clearly oriented towards the provision of management information, rather than emphasizing transaction automation.

C. Edwin Baker (law) *Anne P. Keane (nursing)*
David P. Balamuth (physics) *Sheldon Rovin (dent)*
John S. de Cani (statistics) *Rosemary A. Stevens (hist & soc sci)*
Martin Pring (physiol-med), Chair
ex officio: Roger D. Soloway, 1985-86 Senate Chair-elect
Anthony R. Tomazinis, 1985-86 Senate Chair

Dissent by Dr. Anthony R. Tomazinis

I have two major points which I would like to stress in this dissent. My first point is that the committee in spite of its efforts has not been able to satisfactorily decipher the pertinent financial statistics of the University. I do not believe the data as presented by the University officials makes it possible for anyone outside a small group in the University administration to follow up what is happening in the allocation of resources in the University. In this respect I dissent with the relative acquiescence of the committee's report in getting the data the committee needed for its work. My second point is that the available fragmentary data suggests indeed much concern about the disproportionate growth of the administrative budget and function at this university. Let me provide the evidence on which these two points are based.

(a) Table 1 indicates that the A-2 and A-1 budgets for 1985 were \$149.007 million and \$27.315 million correspondingly. However, these two numbers are produced from the comptroller's book for 1985 and supposedly are the sum total of the pertinent entries for the "Responsibility Centers" of Penn. That means that several other units of the University (i.e., Student Life, Auxiliary Enterprises, Construction, etc.) are excluded. In addition, it seems that some peculiar reclassification of budgets is done somewhere along the line. This is so because in the budget submitted to the Trustees in June 1985 the A-2 entry is \$138.260 million, not \$149.007 million, as reported in Table 1. In 1986 the report to the Trustees for 1985 operations did not change this number at all. How then can the Responsibility Centers (a subset of the total) have a budget larger than the total for A-2s? Interestingly enough, the reverse discrepancy is found in the budget for A-1s, reported in Table 1. In this case

Table 1, drawn from the comptroller's book, reports a number *smaller* by more than \$20 million from the budget of \$48.673 million reported and approved by the Trustees in June 1985. In my view the numbers in the budgets approved by the Trustees are more certain than the numbers produced in a routine fashion in the comptroller's office. Unfortunately we do not have the 1974 Trustee budgets in front of us to compare the two identical sets. Going, however, back to the numbers included in the comptroller's book is very unwise, in my view, given the discrepancies noted above. As a compromise one may compare the 1985 Trustee budget numbers with the 1974 comptroller's book numbers that refer to only the Responsibility Centers knowing fully well that these numbers may be bigger or smaller than the Trustee budget numbers of that year. If we do that the following growth rates emerge:

	1974	1985	Growth %
A-2	44.888	138.260	208%
A-1	6.340	48.673	667%

Of course one may complain that the comparison involves apples and oranges, but this is the best in my view that can be done at this moment.

It should be noticed also that even the employee benefits rate has changed dramatically between 1974 and 1985. For A-1 in 1974 the rate was 9.9% and for A-2 15.7%. In contrast in 1985 the rate for both groups was 29.9%. The rate became the same in 1982 for some reason that I do not know. In any case the change accentuates the remarkable growth of the administrative budgets by another 5.8%.

Line 14 of Table 1 really misdirects the attention because it refers to what is called "general administration" and which excludes several important University components such as Student Life (with \$11.263 million budget) Auxiliary Enterprises (with \$51.335 million budget), and Construction—with about \$350 million (?) budget—etc. Should all the missing components be included it will show that the administrative budget increased remarkably, and it did so, primarily, outside the Schools of the University.

(b) Table 2 of the committee's report is also helpful in making clearer my concerns. Line 2 of Table 2 refers to the "uncontrollables." Yet the budgets that the Trustees approved in June 1983 and June 1986 report that uncontrollables in 1983 were \$29.950 million (not \$28.041 million) and in 1986 were \$28.483 million (not \$30.561 million). The question is, of course, whether the "uncontrollables" include the appropriate items in each case. For 1986 the budget document states that it includes \$10.548 million for debt service, \$15.320 million for energy, and \$2.615 for another new debt service (presumably a new chilled water cooling system). For 1983 the document does not state the specific items but it includes \$9.830 million for financial obligations and \$20.120 million for operations (presumably for energy). If the Trustee budget numbers would be introduced in Table 2 then line 5 will indicate a growth of net budget for "administrative service centers" between 1983 and 1986 equivalent to 34% not 9.3% as it now shows. Moreover, as the committee's report makes it clear, these numbers do not include the growth of expenditures in Student Life or Construction Management. The importance of these two items is, of course, obvious to anyone who experiences the campus on a daily basis.

The committee is very well justified in calling for continuing attention to these matters and for better data inputs from the side of the administration. I believe, however, that a better system needs to be devised than an annual Senate committee which spends most of its time trying to find the data and understand the omissions and the significance of each table. By the time some familiarity has been established the committee's work is over. Perhaps some more experienced assistance from appropriate quarters will be most important when issues of such importance are explored by the Committee on Administration. As of this point in time, however, we are left with more concerns than explanations about resource allocation at Penn.

—Anthony Tomazinis, Director of Transportation Center,
Professor of City Planning
November 5, 1986

Administration's Response to Senate Report and Dissent

The Senate Committee on Administration report reviews a number of important resource allocation questions. Its conclusions, particularly about the relative growth of certain salary categories, point out the difficulty that all of us face in understanding the complex nature of this University. What does not seem extraordinary in the annual budgeting process may emerge as a major trend over time.

As the principal administrative liaison to the Committee, I am particularly appreciative of the Committee's commitment to obtain and study comparable data. As a person responsible for developing the University's budget and its presentation to the Trustees since the FY1984 budget process, I often face a dilemma whether to provide better categorization of data items for explanatory purposes or maintain less useful categorizations for historic comparability. In these cases, I have almost always opted for the improvements in explanation. The Committee's efforts to insure historic comparability were, therefore, even more important.

The problems in use of data and its comparability are evident in Dr. Tomazinis' dissent. A typical illustration of the problem is in his first table, which attempts to compare the growth of A-1 and A-2 salary components over time. Under A-1 salaries, he appears to have used in FY1974 only administrative and professional salaries paid by schools and resource centers; however, for the FY1985 figure, he has encompassed salaries from all University areas, including auxiliary enterprises, central administration activities and the Clinical Practices of the University. The Committee report provides an appropriate comparison in schools and centers alone. An appropriate comparison for administrative and professional salaries for the total University would

be \$14.8 million in FY1974 to \$42.9 million in FY1985, a growth of 190% over the period.

Similarly, the dissent attempts to compare budget book data with accounting data. The accounting data reduces the number of salary categories from five in the budget book to three in the accounting reports and the Clinical Practices data are reported differently. By using only comparable accounting data, the Senate Committee arrived at an appropriate comparison for schools and resource centers. Another comparison that uses all academic salary data, including certain faculty with central administrative appointments, shows \$47.1 million for academic salaries in FY1974 growing to \$151.2 million in FY1985, a growth of 221%.

Similar problems of data comparison arise in a number of other of Dr. Tomazinis' comments. The basic point, however, made by both the Committee and Dr. Tomazinis, is that continued vigilance and concern over administration cost and productive issues is essential in any resource allocation discussion. The University administration agrees. The difficulty, of course, as Provost Ehrlich frequently points out, is that resource allocation tradeoffs are not simply between administration and faculty salaries, or between uncontrollable and more controllable costs, but rather between all of the key University priorities and its many varied programs. To make the tradeoffs wisely, we must understand and use the best information available, and that process cannot be accomplished using incompatible data sources and incorrect comparisons within a single data source. I am grateful that the Committee took the time and effort to avoid this problem.

—Glen R. Stine, Executive Director, Resource Planning and Budget
November 7, 1986