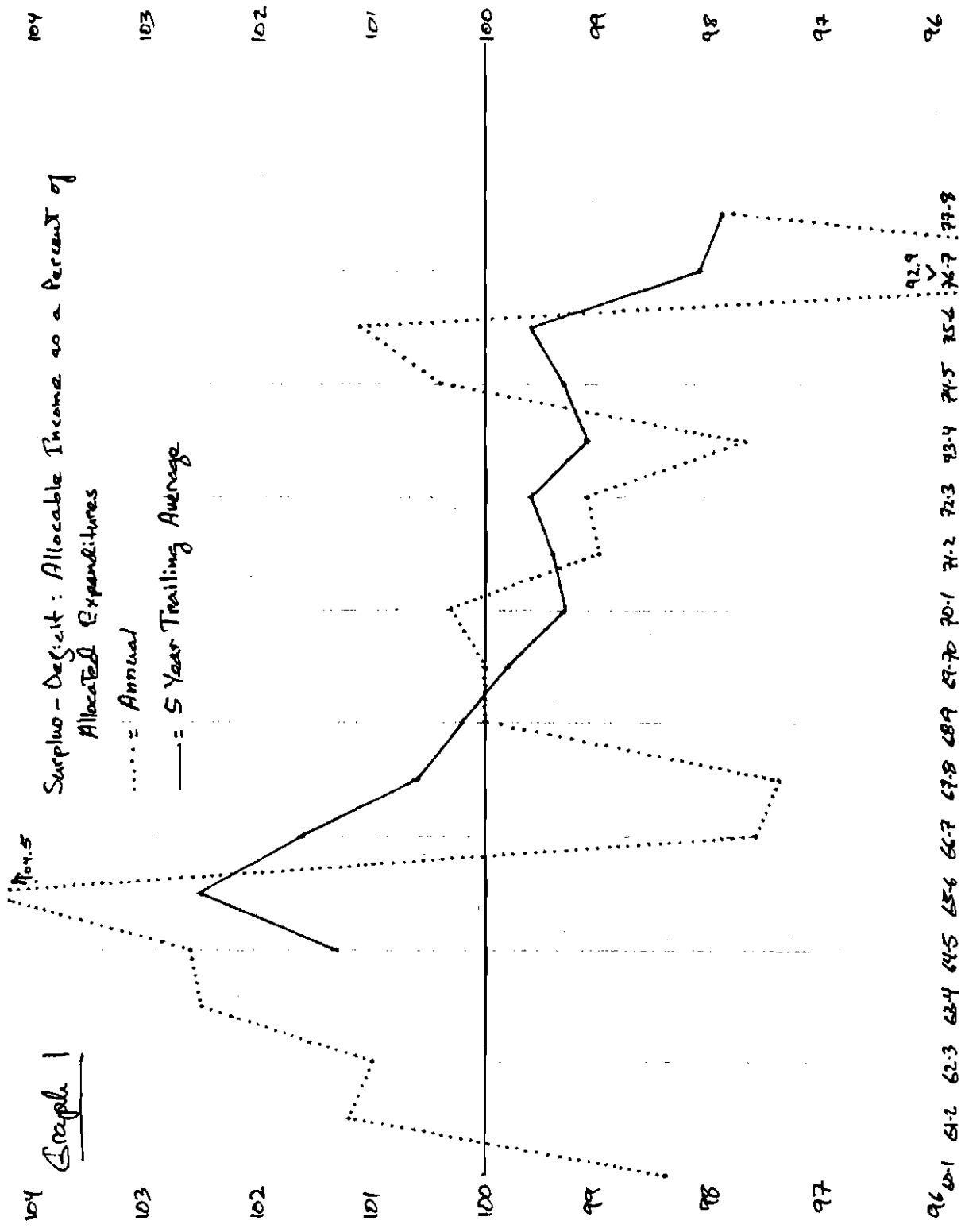
THINKING ABOUT THE BUDGET

An Informal Report on the College's Financial Condition

Robert McClintock

I thank my colleagues in the Faculty Caucus of the CPC for their stimulating interest in the work leading to this report. I thank also the administrators who have given time, data, and encouragement as I have pursued my inquiries. The data come almost entirely from official summaries. I bear responsibility for the accuracy with which I have transcribed that data, for the methods I have chosen and used for analyzing it, and for opinions and recommendations voiced in the report. Please note that not all the graphs are on the same scale. Those that deal with points are all on a scale of 3,000 points to an inch (on the originals prior to photographic reduction). Most of those that deal with percents are on a scale of 1 percent to an inch. Graph 5 is on a scale of 5% to an inch in order to get all the information on a single sheet. Likewise graph 9 is on a scale of 8% to an inch, again to accomodate the information. Graph 8, for the same reason, is on a scale of 2.5% to an inch; in comparing the slope for instruction with the slopes for other cost areas in later graphs this should be kept in mind--on the 1% scale the decline for instruction would be much steeper. Graphs 6 and 7, for no particularly good reason, were drawn to a scale of 2% to an inch; with more time I would have redrawn them to the 1% scale.

November 1977


Graph 1
Surplus - Deficit: Allocable Income as a Percent of Allocated Expenditures
..... = Annual
—— = 5 Year Trailing Average
104
103
102
101
100
99
98
97
96
104.5
92.9
96 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97

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What follows reports the results to date of an ongoing effort to understand the present serious financial condition of the College. The first question is simply: What is being referred to when one speaks of the serious financial condition of the College? Many of us see it as something that has suddenly come upon us--an unexpected loss of 500 students, an unexpected deficit on the order of a million dollars, with another, almost as large, looming. These are realities; these are important parts of the serious financial condition; but they are not the whole of it, and if concentrated on as if they were the whole, the real situation will be misunderstood. The serious financial condition has been a long-term condition, one that started in the late 1960's, one that, after a long gestation, recently deteriorated.

Graph 1 shows the bottom line for the Teachers College budget since 1960-61. Here the bottom line is expressed, not as a dollar amount, but as a percent--income as a percent of expenditures--for such a percent helps control against the deceptions of inflation. What is here called "allocable income" and "allocated expenditures" is roughly the same as what the Controller calls Education and General, Excluding Separately Financed Programs--whatever the name, it covers the heart of the Teachers College budget; the part of the budget that controls our academic and institutional lives, the part of the budget through which surpluses are generated or deficits incurred. The dotted line in the graph plots the annual results; the solid black line plots a "trailing average," which gives for each year the average for it and the preceeding four years. The function of the trailing average is to flatten out annual fluctuations and to display more effectively the underlying trends.

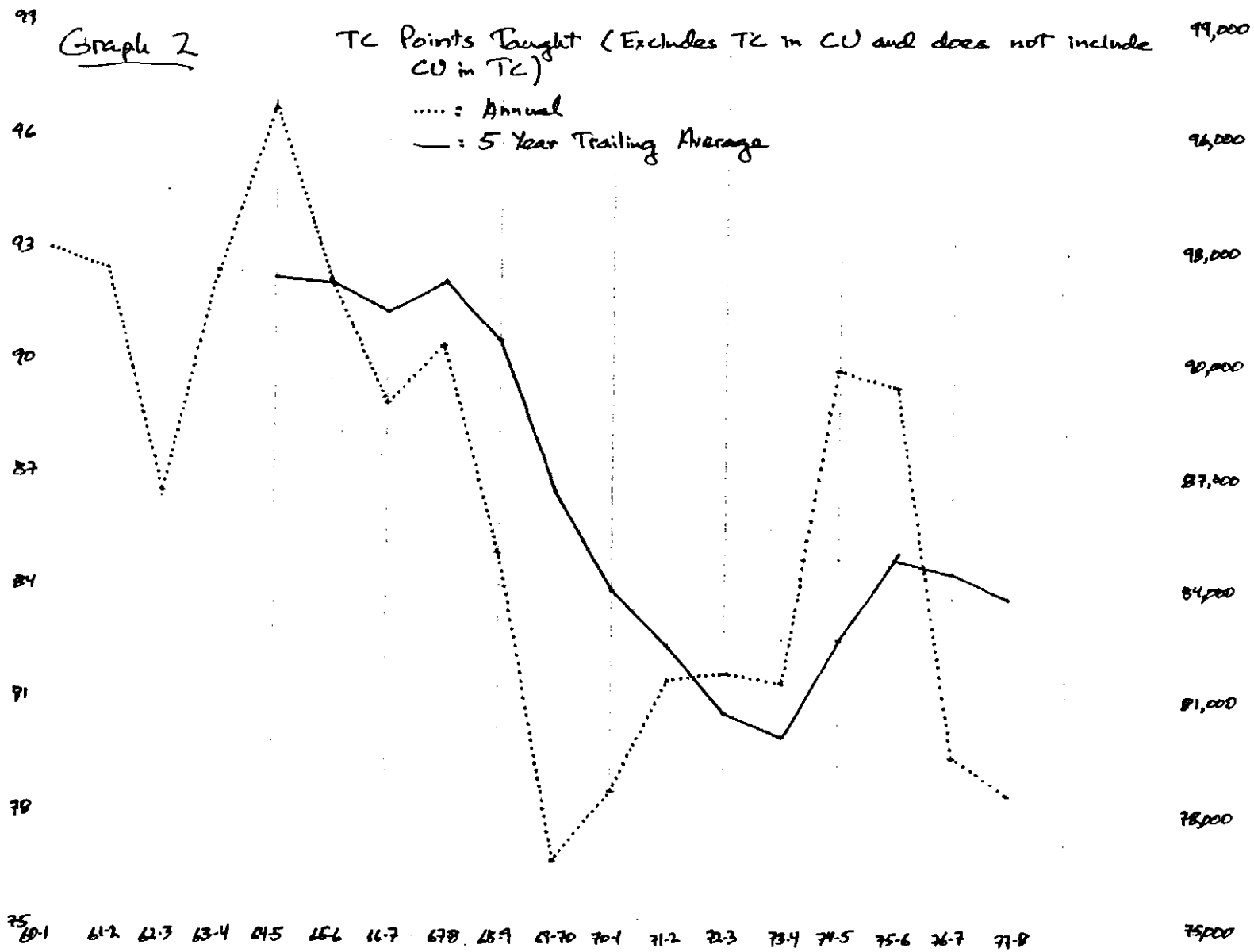
In 1966-67, the College plunged from what, the year before, was one of its largest surpluses of the post-war period, to what, up to then, was its largest deficit. The next year, the deficit worsened a little, giving the College its first consecutive deficits of the post-war period. In the ensuing three years, the budget was barely balanced, producing virtually no surpluses. In 1968-69, the trailing average got much closer to showing a deficit than it had ever before done, and the following year, for the first time, it went into the red, a condition from which it has yet to emerge. This is the long-term condition: since the late 1960's, despite occasional years with balanced budgets, Teachers College has been chronically running deficits; the present serious financial condition is not the advent of such deficits, but the worsening of them. Most likely, it will be the early to mid 1980's, at the soonest, that the trailing average can again show a surplus.

Graph 2

TC Points Taught (Excludes TC in CU and does not include CU in TC)

..... : Annual

—— : 5 Year Trailing Average



It is often said that our serious financial condition has resulted from problems with our enrollment, with the implication that the enrollment problems, like the financial situation, are sudden occurrences of the past year or so. Like the deficits, however, the real enrollment problem is a long-term problem that set in during the late 1960's.* Graphs 2, 3, and 4 show points taught in Teachers College to Teachers College students.** Graph 2 shows the over-all annual results. Indeed, there was a sharp drop in points between 1975-76 and 1976-77, but it was a drop back from a short-lived surge, and it was a drop considerably smaller than that which occurred between 1964-65 and 1969-70. That major slide, measured from the peak to the trough of the five-year trailing average for points taught, represents a loss of 13% of the College's points, a loss of points that the College has yet to securely recover.

Annual figures for points mask seasonal differences, as Graphs 3 and 4 show. The slide down started early for summer school; it was most substantial; the recovery from it has been the most significant and secure. Spring term has consistently lagged the Autumn, significantly so in the mid-1960's; hence the decline in points taught during Spring terms was not as sharp as the decline in those taught during Autumn. We shall return towards the end of this report to inquire into the implications embedded in the difference between Fall and Spring enrollments. For now, suffice it to observe that these seasonal differences reinforce a question Professor Ann Gentile has been asking: Does it make sense to be putting most stress on revising the summer school offerings now when enrollment problems are most serious in the regular academic year terms? Be that as it may, all together the different seasonal declines and surges aggregate into the curve shown in Graph 2. This

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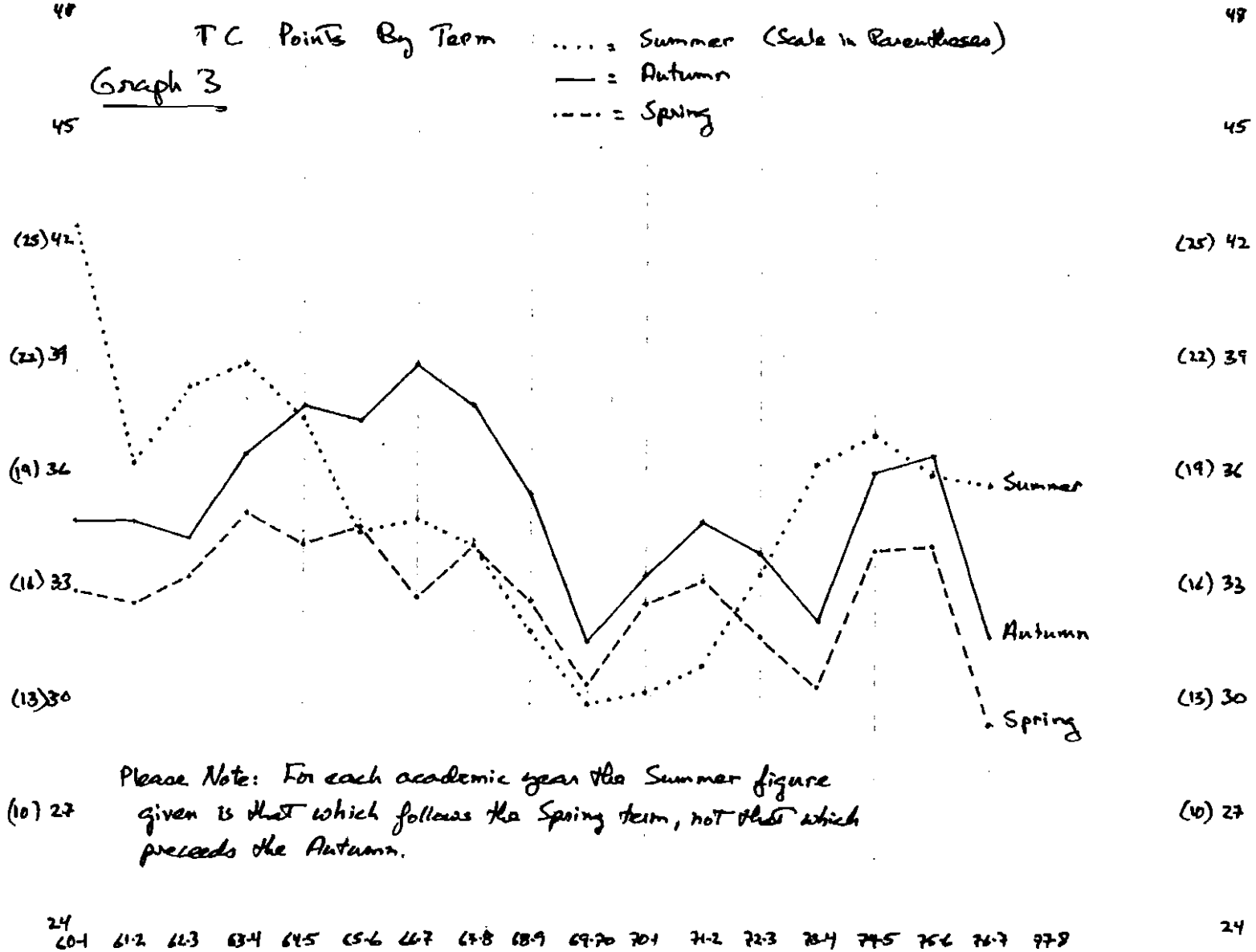
* For a long time we have been warned that the point situation was serious. Five years ago, the Budget Committee circulated an open letter concluding that "the single most important thing to do is to stop and reverse the slide in enrollment and points taught."

** There are problems with the figures as here reported. Usually the data is reported in the Registrar's analyses of enrollment for each term each year with TC points taken in Columbia segregated out. Analyses for the summer terms, however, do not do this. I have thought it more accurate to take them out than to leave them in and have done so by calculating, for the preceeding Spring and following Autumn, the percentage of TC points in Columbia and subtracting that amount for each Summer. I also had to do this for the full academic year in the early 1960's. The percentage has steadily declined from about 5% to about 3%, so the effect of this estimating has been to lower the totals for the early and mid 1960's a bit more than for later years. Also, the computer in which enrollment data is kept somehow swallowed, never again to regurgitate, data on the Summer of 1968, undoubtedly in electronic sympathy with the events of that May. I have estimated a figure for that Summer by taking the average of the preceeding and following summers. This I now think results in an underestimate owing to data from the Controller's office. The point total for last summer is also, I think, inaccurate, this time an overestimate. Despite these problems, the basic curve is essentially accurate.

Graph 3

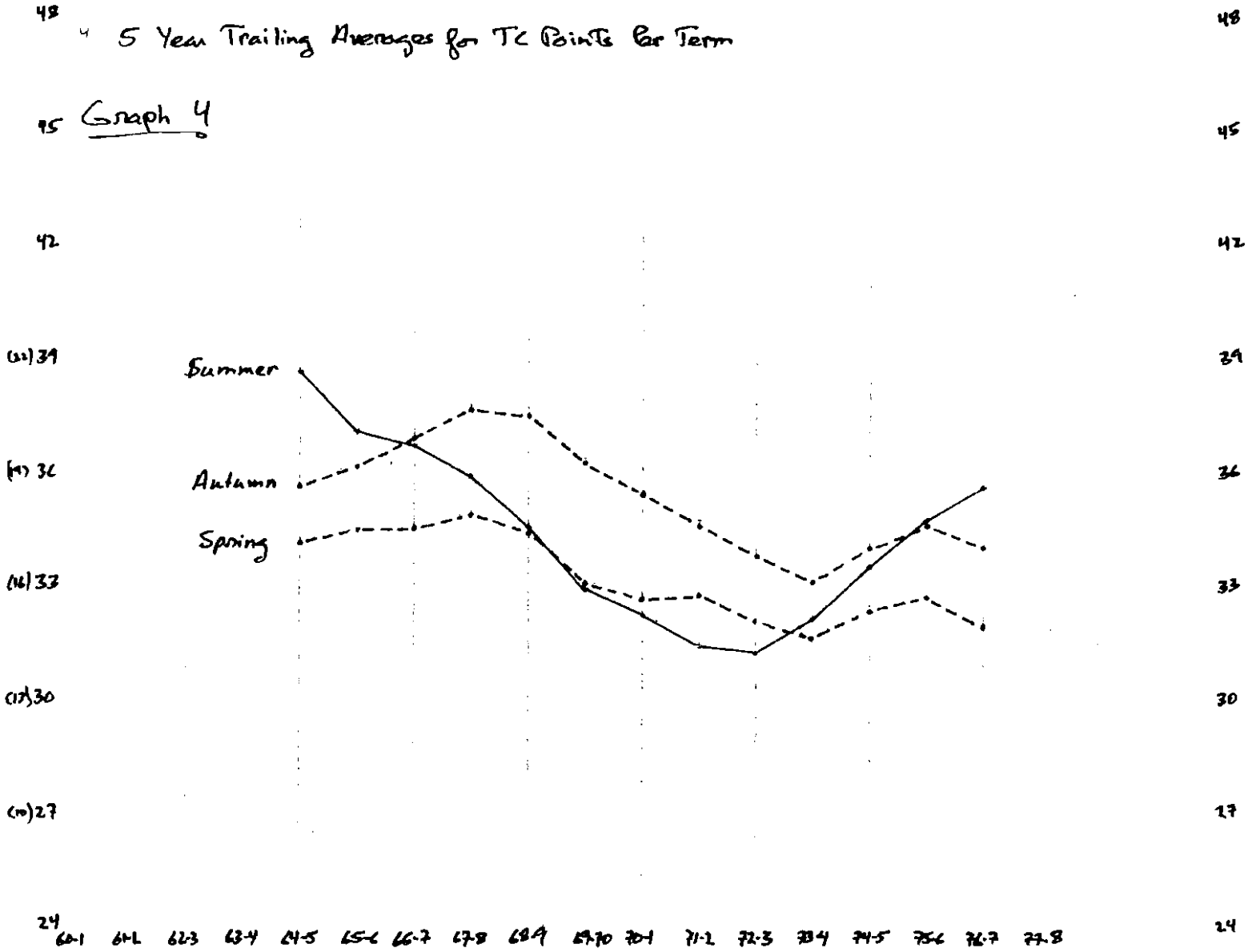
TC Points By Term .... = Summer (Scale in Parentheses)
— = Autumn
---- = Spring



Please Note: For each academic year the Summer figure given is that which follows the Spring term, not that which precedes the Autumn.

5 Year Trailing Averages for TC Points Per Term

Graph 4



curve reveals much about the serious financial condition of the College. During the late 1960's, as the College lost the 13%, plus or minus, of its points, it became unable to balance its budget securely; the bottom of the point slide, 1969-70, was the same year that the trailing average on the surplus became a trailing deficit. Together Graphs 1 and 2 show where our serious financial condition originated, in the crucial years from 1966-67 through 1969-70, when the ground work for our present plight was laid.

Why, then, if the present situation has been so long in the making, are we only now awakening to its seriousness? That is a question that requires a closer look at the Teachers College budget, and since budgets, like Janus, are always looking two ways, towards income and towards expense, our closer analysis will be in two parts, the income problem and the expenditure problem.

The Income Problem

Table 1 gives Allocable Income by source for the College since 1960-61, and Graphs 5, 6, and 7 help display some of the changes to be found in the income figures. The income difficulties facing the College are complicated and have been long in gestation. From 1969-70 on, the makings of a financial crisis were present, but until last year, on the income side, the College was able to luck it out. The great bulk of allocable income derives from the instructional program, primarily through tuition and fees, secondarily through New York State Aid. This aid is both hero and villain--hero in that several times it has saved the College from a really major deficit; villain in that it has probably induced a false sense of financial well-being. At any rate, to chart effectively the way tuition and fee income has performed for the College, it is helpful to pretend that Bundy Money does not exist, which is done in Graph 6, which shows tuition and fee income as a percent of total allocable income, excluding New York State Aid. This shows a significant decline during the late 1960's, as one would expect in light of the decline in points then going on. In 1963-64, 85.8% of allocable income came from tuition and fees, 1969-70, only 77.7%. The graph then shows a sudden, apparent recovery in the percent of allocable income coming from tuition and fees, followed by another decline bottoming in 1973-74. Then, in the last four years, there is another recovery, this time more substantial and seemingly solid. It is more apparent than real, however, at least for the last two years, for it is caused less by the strength of tuition and fees, than by weakness in income from indirect cost recoveries, which started in 1970-71, and in "Other Income," which hit hard in 1974-75. These problems are displayed in Graph 7. None of the traditional sources of income have done consistently well in the 1970's and were it not for the Bundy Money and a marked improvement in the "Offset Income Deficit," this decade would have been an unmitigated financial disaster for the College.

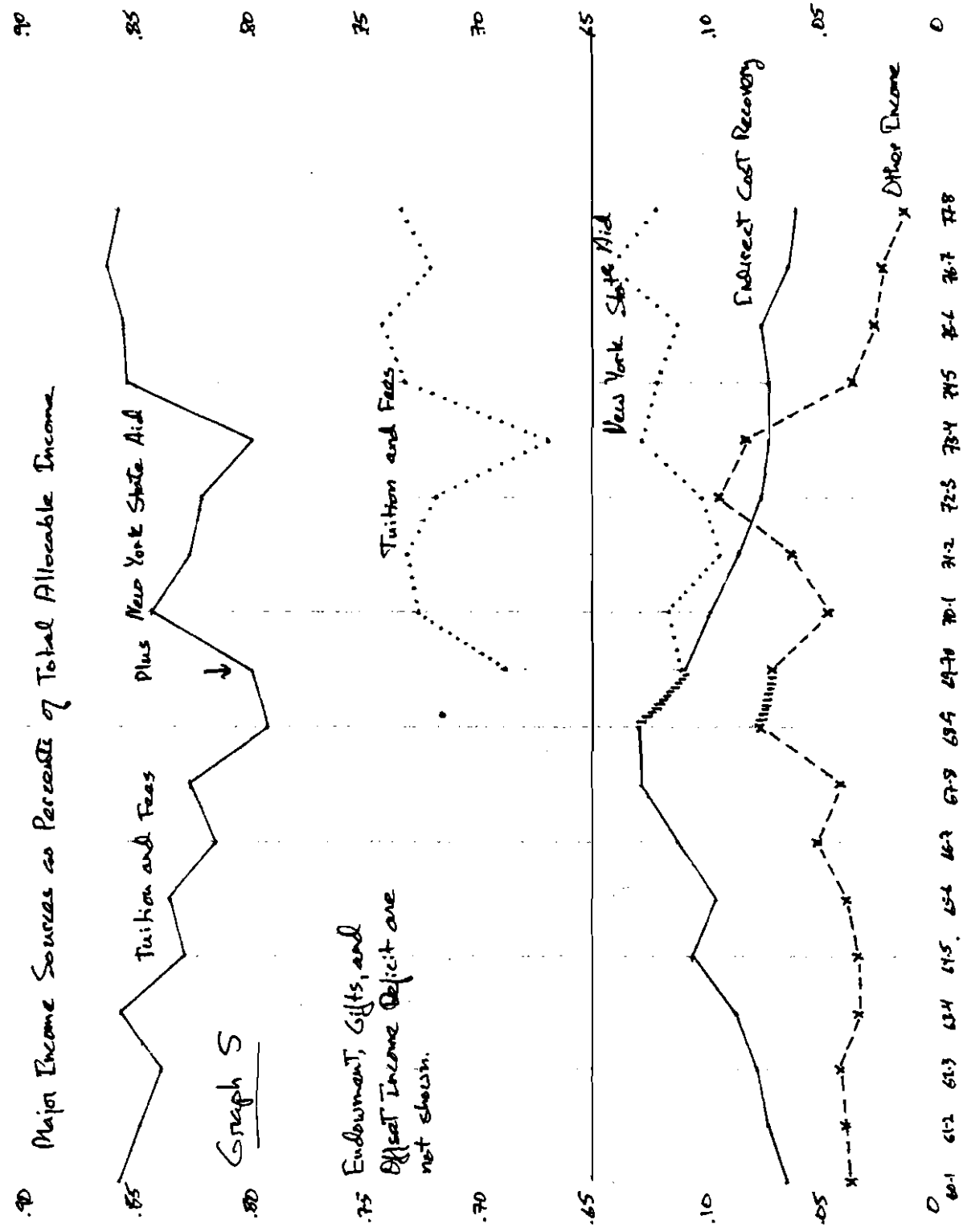
For instance, our present very serious situation, a million dollar deficit, would have occurred in 1969-70 were it not for the advent of the New York State Aid Program. That year tuition and fee income declined from the previous year, which itself had not been a good year. The decline was more in the absolute and as a percent than it has ever been in the post-war period. The Offset Income Deficit reached a high, and everything else except

Table 1

Sources of Allocable Income

	Tuition+Fees	NY State Aid	% for A + B	Endowment	Gifts	Indirect Cost Recovery	Other Income	Offset Income Deficit	Total Allocable Income
60-1	3,796 (85.7%)	0 (. %)	(85.7%)	210 (04.7%)	26 (00.6%)	289 (06.5%)	162 (03.7%)	(52)	4,431
61-2	4,082 (84.8%)	0 (. %)	(84.8%)	214 (04.4%)	137 (02.8%)	356 (07.4%)	189 (03.9%)	(164)	4,814
62-3	3,998 (83.9%)	0 (. %)	(83.9%)	235 (04.9%)	97 (02.0%)	371 (07.8%)	194 (04.1%)	(128)	4,767
63-4	4,551 (85.6%)	0 (. %)	(85.6%)	276 (05.2%)	33 (00.6%)	462 (08.7%)	179 (03.4%)	(185)	5,316
64-5	4,997 (82.8%)	0 (. %)	(82.8%)	299 (05.0%)	51 (00.8%)	637 (10.6%)	204 (03.4%)	(201)	6,037
65-6	5,866 (83.5%)	0 (. %)	(83.5%)	315 (04.5%)	74 (01.1%)	672 (09.6%)	276 (03.9%)	(176)	7,027
66-7	5,925 (81.5%)	0 (. %)	(81.5%)	303 (04.2%)	60 (00.8%)	824 (11.3%)	375 (05.2%)	(220)	7,267
67-8	6,811 (82.6%)	0 (. %)	(82.6%)	356 (04.3%)	167 (02.0%)	1,035 (12.9%)	347 (04.2%)	(467)	8,249
68-9	7,212 (79.2%)	0 (. %)	(79.2%)	355 (03.9%)	149 (01.6%)	1,182 (13.0%)	704 (07.7%)	(500)	9,102
69-70	6,823 (68.8%)	1,106 (11.1%)	(79.9%)	363 (03.7%)	492 (05.0%)	1,088 (11.0%)	718 (07.2%)	(668)	9,922
70-1	7,648 (72.6%)	1,237 (11.7%)	(84.3%)	395 (03.7%)	94 (00.9%)	1,044 (09.9%)	487 (04.6%)	(367)	10,538
70-1*	8,918 (73.7%)	1,237 (10.2%)	(83.9%)	419 (03.5%)	130 (01.1%)	1,187 (09.8%)	595 (04.9%)	(393)	12,093
71-2	8,360 (73.1%)	1,092 (09.5%)	(82.6%)	346 (03.0%)	122 (01.1%)	981 (08.6%)	716 (06.3%)	(174)	11,443
72-3	8,718 (71.9%)	1,239 (10.2%)	(82.1%)	331 (02.7%)	208 (01.7%)	918 (07.6%)	1,147 (09.5%)	(441)	12,120
73-4	8,633 (67.0%)	1,660 (12.9%)	(79.9%)	606 (04.7%)	302 (02.3%)	941 (07.3%)	1,070 (08.3%)	(323)	12,889
74-5	10,574 (73.2%)	1,761 (12.2%)	(85.4%)	569 (03.9%)	267 (01.8%)	1,062 (07.3%)	523 (03.6%)	(302)	14,454
75-6	11,440 (74.2%)	1,748 (11.3%)	(85.5%)	619 (04.0%)	293 (01.9%)	1,180 (07.6%)	394 (02.6%)	(246)	15,428
76-7	11,117 (72.1%)	2,178 (14.1%)	(86.2%)	428 (02.8%)	375 (02.4%)	1,000 (06.5%)	375 (02.4%)	(50)	15,423
77-8	11,609 (73.4%)	1,945 (12.3%)	(85.7%)	681 (04.3%)	377 (02.4%)	1,000 (06.3%)	296 (01.9%)	(86)	15,822

Column C shows the percentage A & B combined, as both derive directly from the instructional program.
Endowment Income for 1976-77 will in the actual, final figures be around 600.
Offset Income comprises the sum of Grant Support for Training and Conferences; Endowment--Research; Grant Contract--Research; Auxiliary Activities; and Student Aid. Offest Expenditures comprise the sum of Instruction--Training Programs and Work Conferences; Research and International Service; Student Aid; and Auxiliary Activities. The difference of Offset Expenditures subtracted from Offset Income is included in a separate Column in Table 1, which is deducted in calculating Allocable Income. One of the College's major accomplishments in reacting to recent budget problems has been the very significant reduction of this deficit.

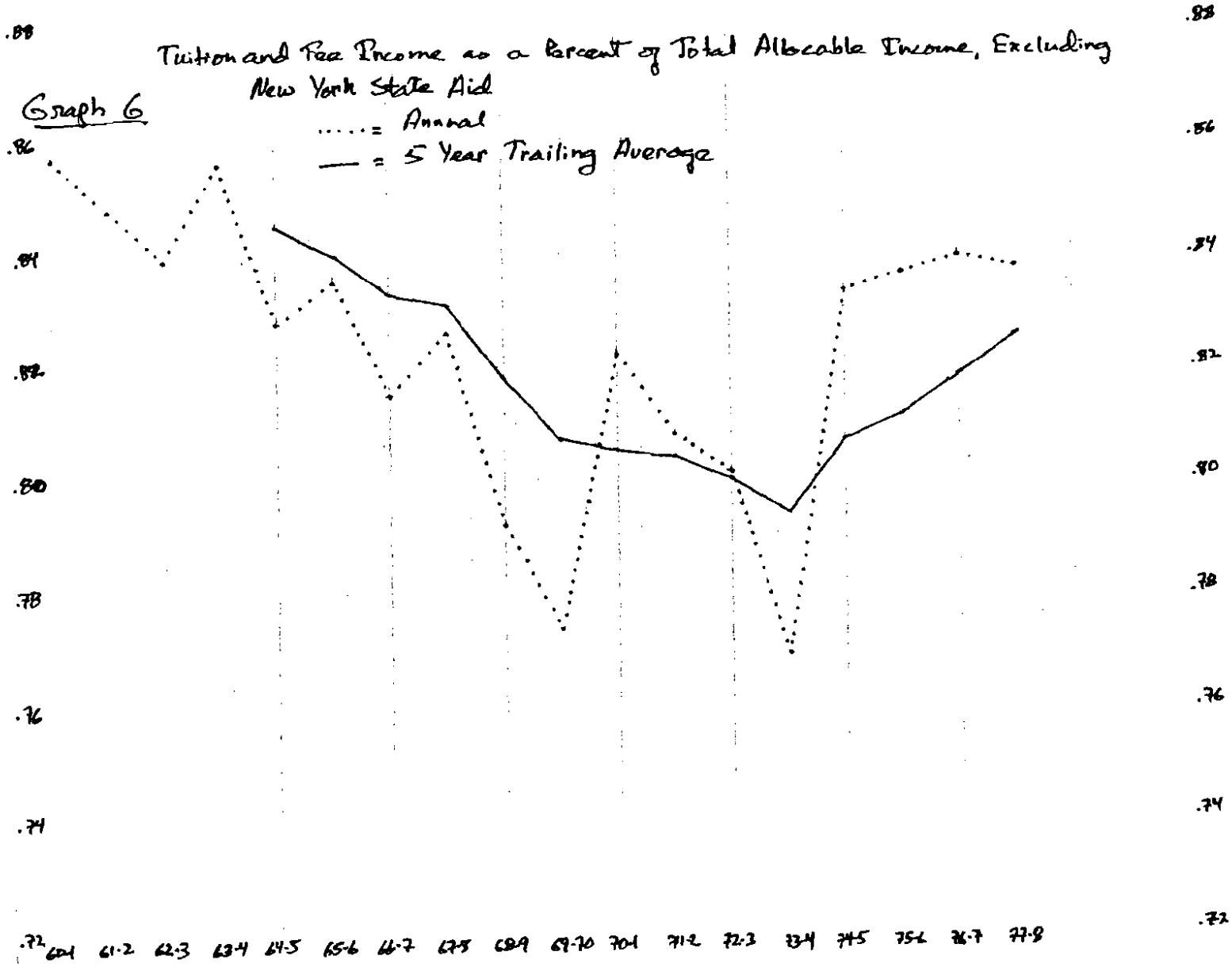

Major Income Sources as Percents of Total Allocable Income
Graph 5
Tuition and Fees
Plus New York State Aid
Tuition and Fees
Endowment, Gifts, and Offset Income Deficit are not shown.
New York State Aid
Indirect Cost Recovery
Other Income
.90
.85
.80
.75
.70
.65
.10
.05
0
60-1 61-2 61-3 62-4 63-5 64-6 65-7 66-8 67-9 68-0 69-1 70-2 71-3 72-4 73-5 74-6 75-7 76-8 77-9

Graph 6

Tuition and Fee Income as a Percent of Total Allocable Income, Excluding New York State Aid

..... = Annual

—— = 5 Year Trailing Average

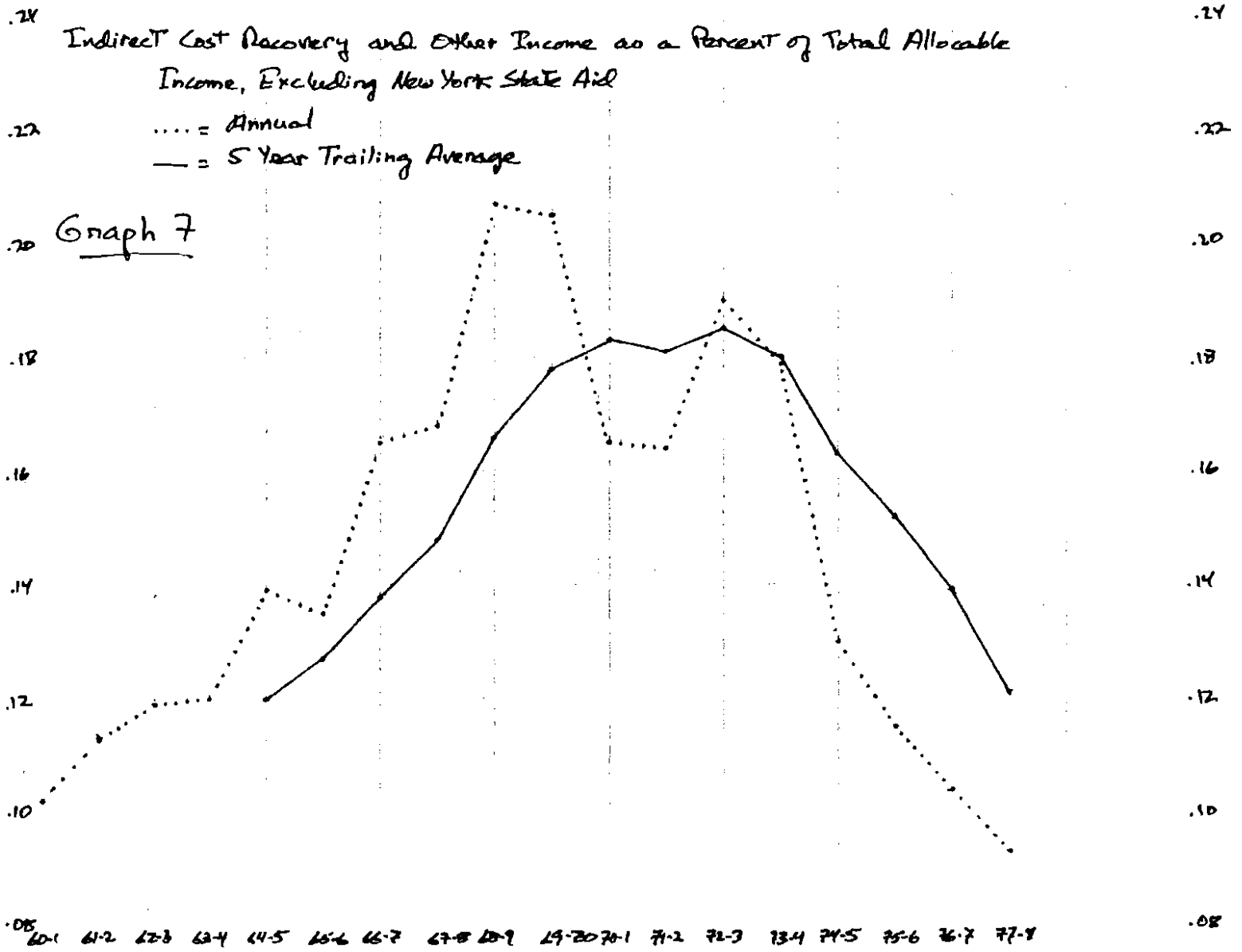


Indirect Cost Recovery and Other Income as a Percent of Total Allocable Income, Excluding New York State Aid

.... = Annual

— = 5 Year Trailing Average

Graph 7



gifts remained essentially static. The new income line, $1,106,000 from the State, enabled the College to make income and expenditures barely balance. Through 1973-74, tuition and fee income lagged and indirect cost recovery declined, and in 1973-74 the College could again have had a deficit on the order of a million dollars had not the rates for New York State Aid been increased and were it not a year unusually productive of "Other Income." As it was, the College ran what till then was its highest deficit, $300,000. In 1974-75, there was a significant, $500,000 collapse in "Other Income," but this was more than offset by the 1974-75 enrollment surge, which jumped income from tuition and fees by an amount just under $2,000,000. In 1975-76, other income sources continued to deteriorate, but tuition and fee income rose another $850,000 with the second year of the enrollment surge. All the time, however, expenditures had been rising and a two-year increase in total allocable income of over $2,500,000 was sufficient only to turn a $300,000 deficit into a $170,000 surplus.

In 1976-77, luck ran out and all the fundamental weaknesses in income sources evident through the 1970's coincided. The enrollment surge of the previous two years proved transitory and enrollment fell back to earlier levels. As a result, tuition and fee income dropped over $300,000. Curiously the percent of total allocable income deriving from the instructional program reached a high that year, partly because the tuition and fee decline was more than offset by an increase in New York State Aid, and partly because indirect cost recovery and other income continued to decline. This year, no income source seems to be improving significantly, and total allocable income will probably be just about what it has been for the last two years--fifteen million, four hundred thousand, and some odd dollars.

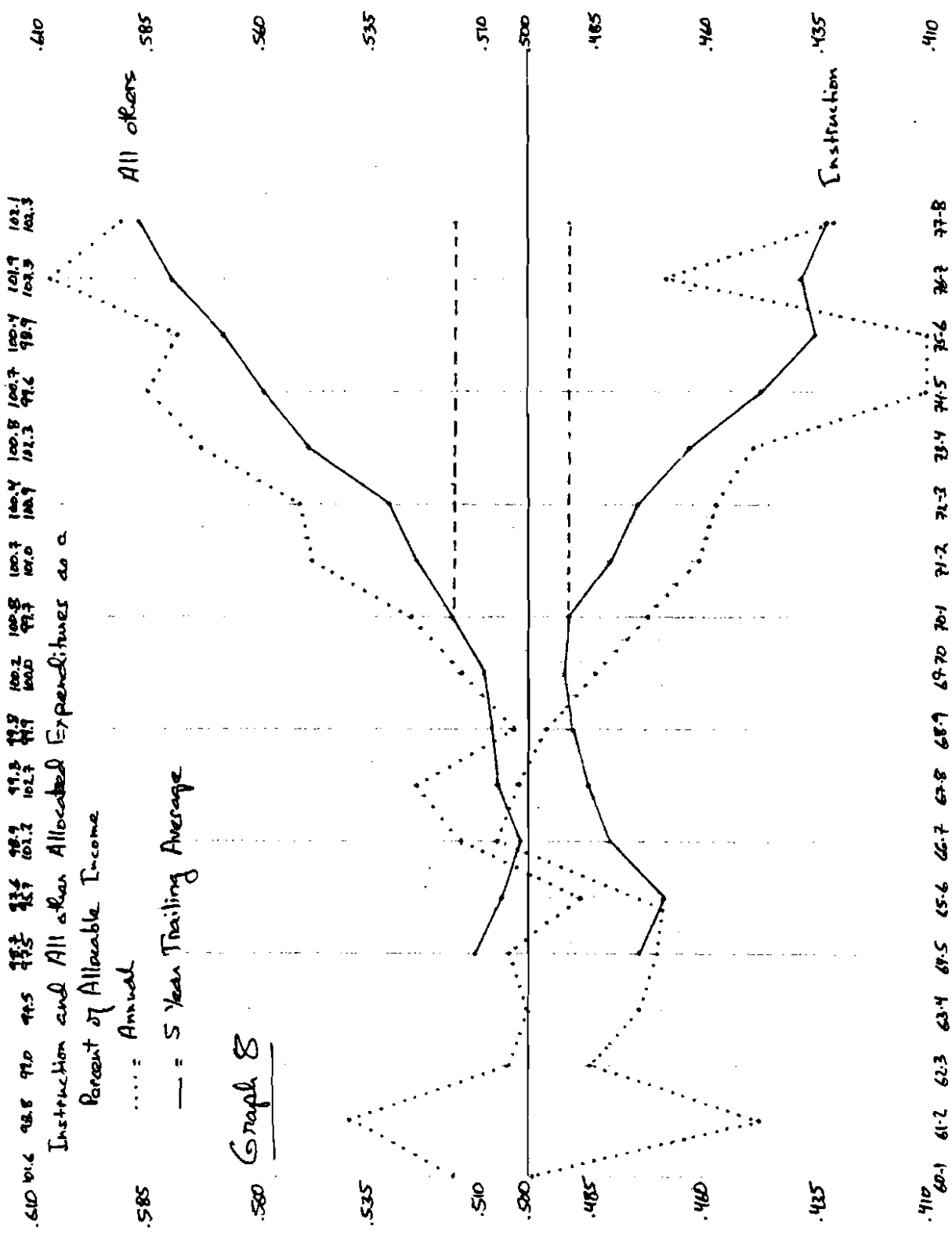
What bears stressing, in sum, is that the income problems of the College are not problems that have suddenly arisen in the last year or two. Rather they are long-term problems, essentially the conjunction of two long-term problems. First, what might be called the "profits" for general or allocable income from grants, represented in the budget by indirect cost recoveries and other recoveries burried in "Other Income," have declined significantly as external funding has tighetened. Had we been able to maintain these "profits" at the level of the late 1960's, the College would be receiving something on the order of $1,000,000 more in recoveries than it is presently. Second, throughout the 1970's, the College's income ledger has been severely penalized by the enrollment decline of the late 1960's. It seems, perhaps owing to the advent of the Bundy Money, that we never really took note of that decline, but it has been with us for some time and has cost us a great deal of money. Had we been able to maintain enrollments over the past ten years at roughly the levels of the early 1960's, so that the point totals for 1974-75 and 1975-76 would have represented a slight decline rather than a fortuitous surge, our current total allocable income would be 2 to 3 million dollars higher than it is now, and our cumulative income over the past ten years would have been some 20 million, plus or minus, greater than it has been. The task before us is not so much to recoup the enrollment loss of 1976-77, but still to rebuild from the loss of 1965-66 through 1969-70.

The Expenditure Problem

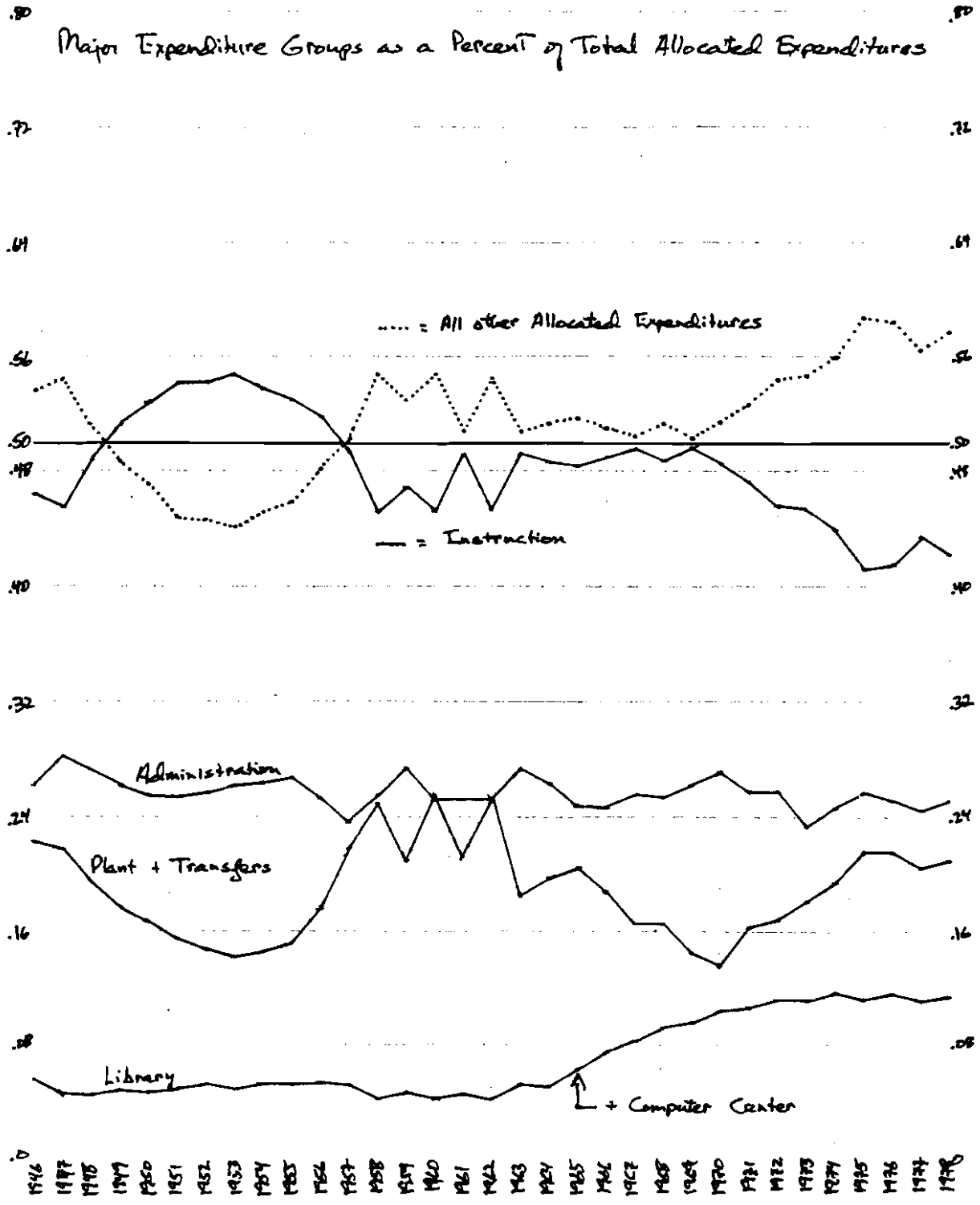
It is a serious financial condition to have less income than one might have had if..., only when one cannot keep one's expenditures within the limits of the income one does have in fact. We have seen above that during the late 1960's Teachers College entered a long-term deficit, one which it has not emerged from, but sunk into deeper and deeper. For the years ending 1967 and 1968, the College ran its first consecutive deficits, substantial ones to boot. As we have seen, enrollment was in a precipitous decline that bottomed in 1969-70. For the five years ending 1969-70, the College, for the first time, at least in the post-war period, had an average deficit, and it has remained in the red for every five-year period since then. By the start of the 1970's it should have been clear that tuition and fee income would be less than it might have been if..., but, if memory serves correct, the cliche then held that the College was reducing its dependence on tuition--in other words, a weakness was perceived as a strength. Cost recoveries from grants were high and the Bundy Money was new and novel. What might have then been perceived as the onset of a serious financial condition, seems instead to have been pereived as an ambiguous situation, one meriting substantial economies in the instructional program while the College at the same time carried through a substantial expansion of plant. Since the late 1960's the income conditions making for a deficit on the order of a million dollars have been present. How have expenditures been controlled since that time? The remaining graphs help answer that question.

Traditionally, approximately half of allocable income has been spent on Instruction. Expenditures for Instruction cover primarily the academic-year Divisional budgets and the Summer School budget; they pay faculty and other instructional salaries, Divisional and Departmental secretarial salaries, certain telephone, postage, and supply charges, and so on. Graph 8, one of the most important in the set, shows how expenditures for Instruction, expressed as a percent of allocable income, have varied year-by-year and in a five-year trailing average. The upper half of the graph shows, also year-by-year and in a five-year trailing average, how the sum of all other allocated expenditures, expressed as a percent of allocable income, has varied. Along the top border, for each year, are written the sum of the two percentages, and above those the sum of the percentages for the five year period ending in that year. When the summed percentages are below 100%, the College has a surplus, and above, the College has a deficit. As can be readily seen, since the crucial period 1966-67 through 1969-70, the percent of income spent on instruction has declined markedly, from a high in 1966-67 of 50.7% to a low in 1974-75 and again in 1975-76 of 41.1%. This 9.6% decrease represents a lot of money: had expenditures for instruction in 1975-76 been at the 1966-67 rate, they would have been some $1,480,000 more than they were in fact.

Graph 9 has as its main purpose to show that the marked decline in the percent of income spent on instruction during the 1970's is not a return to a normal pattern after an abnormally generous allocation to instruction in the 1960's. Quite the reverse: throughout the 1960's, the allocation to instruction was almost exactly on the average for the entire post-war period, and the


Graph 8
Instruction and All other Allocated Expenditures as a Percent of Allocable Income
..... = Annual
— = 5 Year Trailing Average
All others
Instruction

Graph 9


Major Expenditure Groups as a Percent of Total Allocated Expenditures
..... = All other Allocated Expenditures
— = Instruction
Administration
Plant + Transfers
Library
+ Computer Center

decline during the 1970's was quite unprecedented. What is also remarkable in this graph is the way variations in the percent allocated to instruction invert variations in the percent allocated to the sum of Plant Operation & Maintenance and Transfers. The graph can be divided into four periods, 1946-57, 1957-63, 1963-70, and 1970-78. During the first two and the last, the curve for Instruction is uncannily the mirror image of the curve for Plant & Transfers. The only exception is for 1963-70, when the declining curve for Plant & Transfers is reflected somewhat less precisely, not in Instruction, but in the rising curve for the Library & the Computer Center. Finally, it is worth noting how steady, throughout the period, the allocation for the composite, "Administration," has been.*

In reacting to an earlier version of this Report, however, the Controller rightly objected to some of the headings used in Graph 9, particularly to "Administration," which masks a great variety of expenditures. The generic heading of "Administration" is one taken from the Controller's own budget summaries, but his point is nevertheless well taken. To chart how expenditures have changed, it is useful to look at categories that are somewhat more refined although still large enough to be significant components of the budget. The remaining graphs are designed to show changes in nine such categories. In all of them the annual results are shown by dotted lines, five-year trailing averages by a solid line. We have argued that since the late 1960's it should have been clear to the College that it faced potentially serious income problems; and therefore on each graph we have projected from 1970-71 the percent for the average of the period 1966-67 through 1970-71 as a potential standard for measuring the success of cost control efforts in each category.

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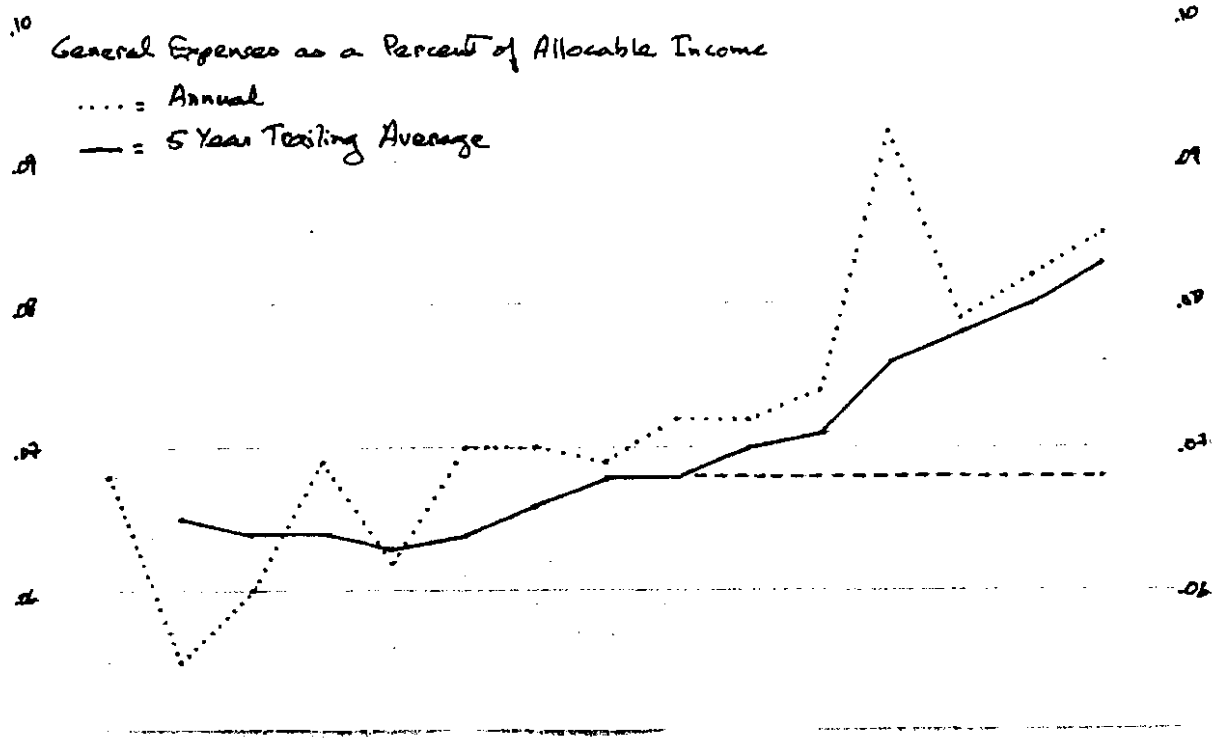
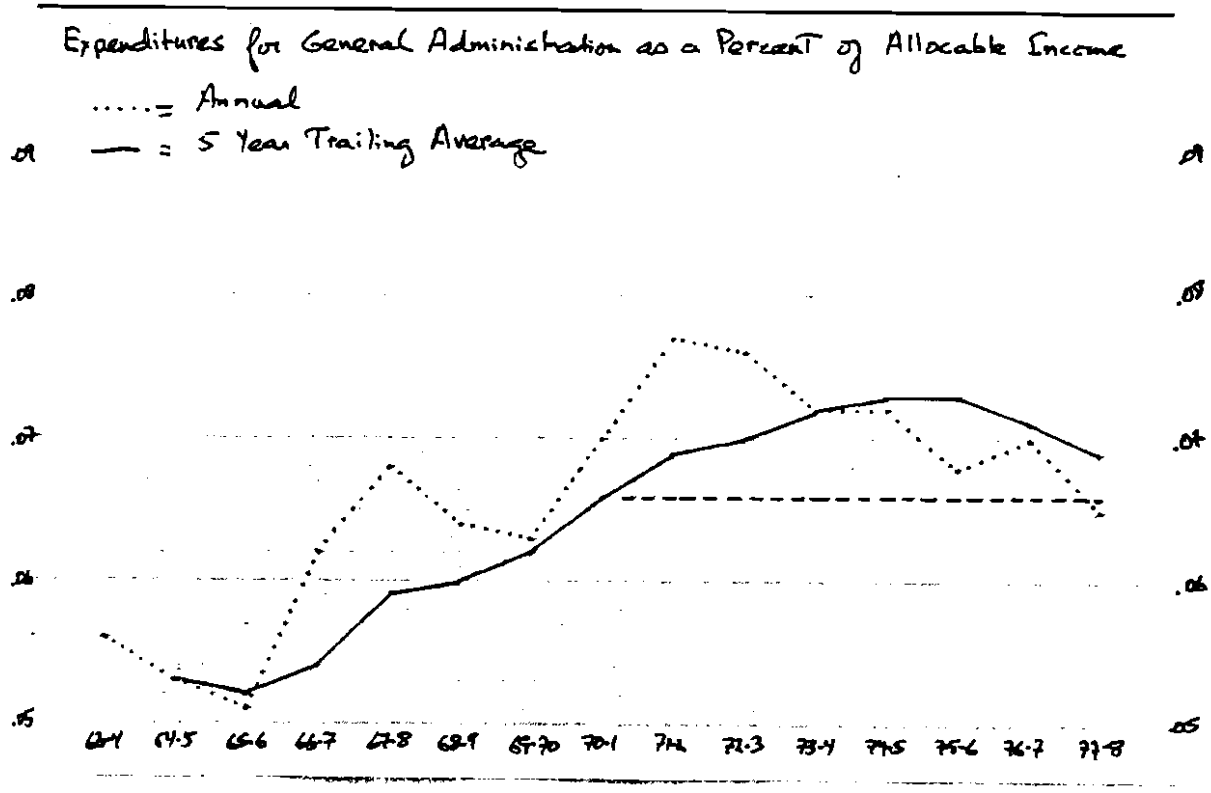
* In this graph, unlike in the others, expenditures are expressed as a percent of total expenditures rather than as a percent of income. The reasons for this lie with problems in the data--accounting assumptions used in the data sources available to me for the years prior to 1960-61 were different from the assumptions used in the sources giving data for more recent years. To construct the graph, I have had to do much estimating, following methods that, I believe, may somewhat underestimate the allocations to instruction prior to 1960-61. Explanations of the problems are too complicated to go into here. I have available on request a set of working tables which underlie the entire analysis in this report and in which the problems and my methods of estimating are explained.



a) General Institutional Expenditures. The expenditures are charted as a percent of allocable income in the top half of Graph 10. They have been rising sharply. The category itself is a potpurri of disparate expenses. Significant ingredients in the potpurri are listed below with the amounts (in '000) spent for them in 1972-73 and the amounts budgeted for them in the current year. The figures in parentheses show the percent they constitute of total allocable income.

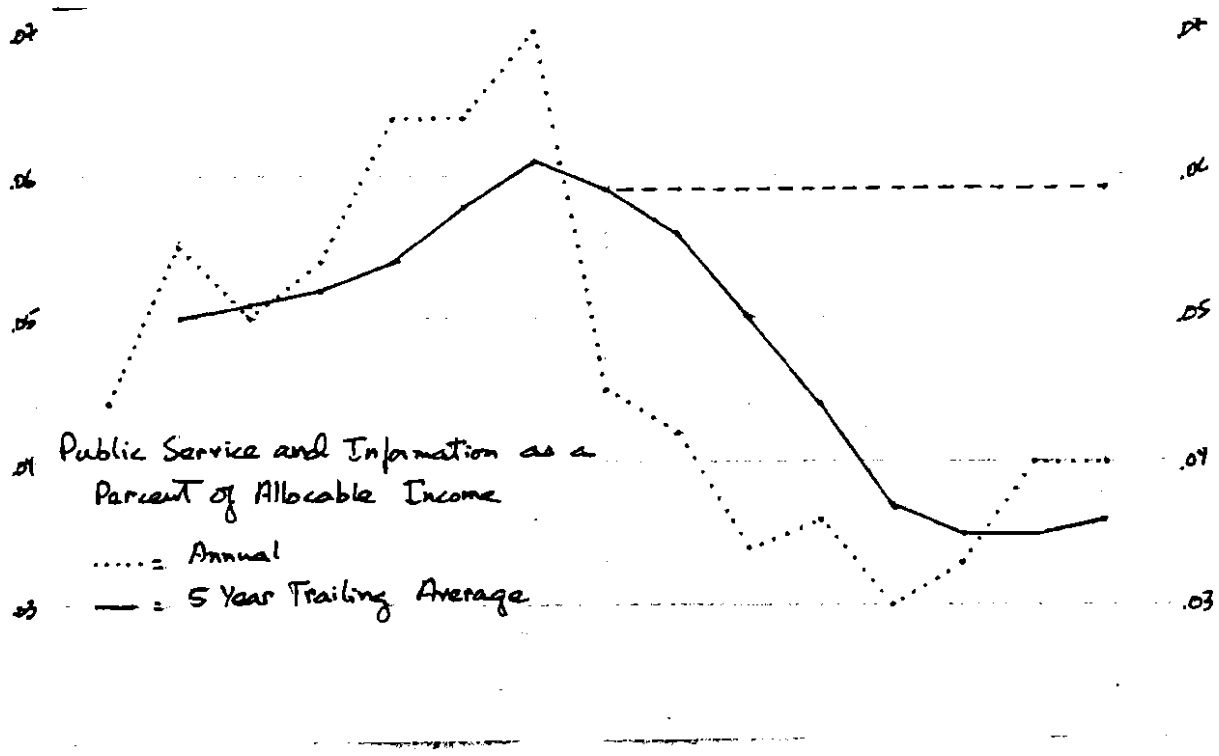
	1972-73	Revised Recommended Budget for 1977-78
Telephone & Telegraph	$187 (01.54%)	$240 (01.52%)
Post Office	102 (00.84%)	45 (00.28%)
Appropriations	38 (00.31%)	75 (00.47%)
General Property & Liability Insurance	41 (00.34%)	185 (01.17%)
Unallocated Staff Retirement & Insurance	54 (00.45%)	108 (00.68%)
Tuition Grants--Faculty & Staff	139 (01.15%)	193 (01.22%)
Legal and Audit Expense	69 (00.57%)	150 (00.95%)
Special Studies	39 (00.32%)	25 (00.16%)
Investment Services	25 (00.21%)	37 (00.23%)
Transcription Typing Center	55 (00.45%)	99 (00.63%)
Office of Facilities Planning	42 (00.35%)	20 (00.13%)
All Others (not relative to this list, but the full list on the budget summaries)	29 (00.24%)	70 (00.44%)

Recently, the most significant increase has been incurred in General Property & Liability Insurance costs; those combined with increases in Legal and Audit Expense account for a good part of the rise. The decrease in Post Office costs is an apparent decrease, as many post office charges have been allocated to other budgets. The sharp bump in the curve for 1974-75 in the graph resulted from an item, on the order of $100,000, buried somewhat conspicuously in the "All Others" category for that year.

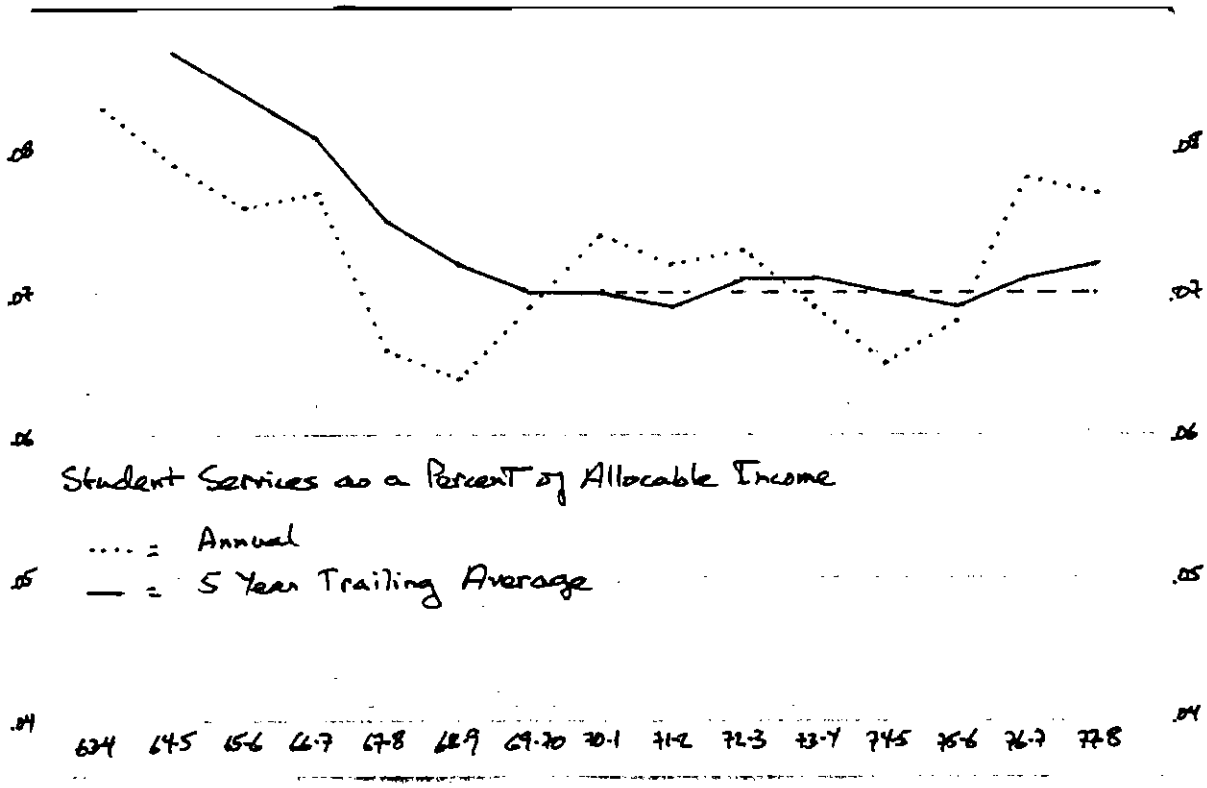


b) General Administration. This category covers administration in its usual sense, and the lower half of Graph 10 shows how much what "They" do costs. Unlike the curve for General Institutional Expenses, which is sharply rising, the curve for General Administration is descending. In the early 1970's, expenditures for General Administration were considerably above what they had been in the late 1960's, but if the current budget is met in these areas, they will, for the first time in this decade, get below the average for the late 1960's. The following table shows the breakdown for this area.

Amounts in '000	1972-73	Revised Recommended Budget for 1977-78
Office of the President	$86 (00.71%)	$107 (00.68%)
Office of the Dean	121 (01.00%)	88 (00.56%)
Office of Director--Internal Studies	57 (00.47%)	25 (00.16%)
Office of the Provost	102 (00.84%)	86 (00.54%)
College Policy Council	0 (00.00%)	4 (00.03%)
Office of Personnel Services	111 (00.92%)	150 (00.95%)
Office of the Controller	157 (01.30%)	153 (00.97%)
Office of the Bursar	282 (02.33%)	333 (02.10%)
Office of the Purchasing Agent	73 (00.60%)	86 (00.54%)
Office of the Contract Officer	56 (00.46%)	49 (00.31%)
Allocated Charges Deducted	(129)(01.06%)	(115)(00.72%)



c) Public Service and Information. The graph shows expenditures in this area as a percent of allocable income. These, along with Instruction, are the only expenditures to show a decisive decline since the late 1960's, and given the nature of the College's income problems, it may be questioned whether these economies reflected sound policy. In the last two years, the Office of Public Relations, started in 1976-77, and the Office of Institutional Development have been receiving some Capital Campaign Funds ($106,000 and $134,000 split almost evenly). I have included these funds in making the calculations in this graph, although technically they are neither part of allocable income nor of allocated expenditures. Inclusion of them, however, gives a more accurate indication of the College's recent efforts in this area, and they account for the rise on the annual curve during the last two years.

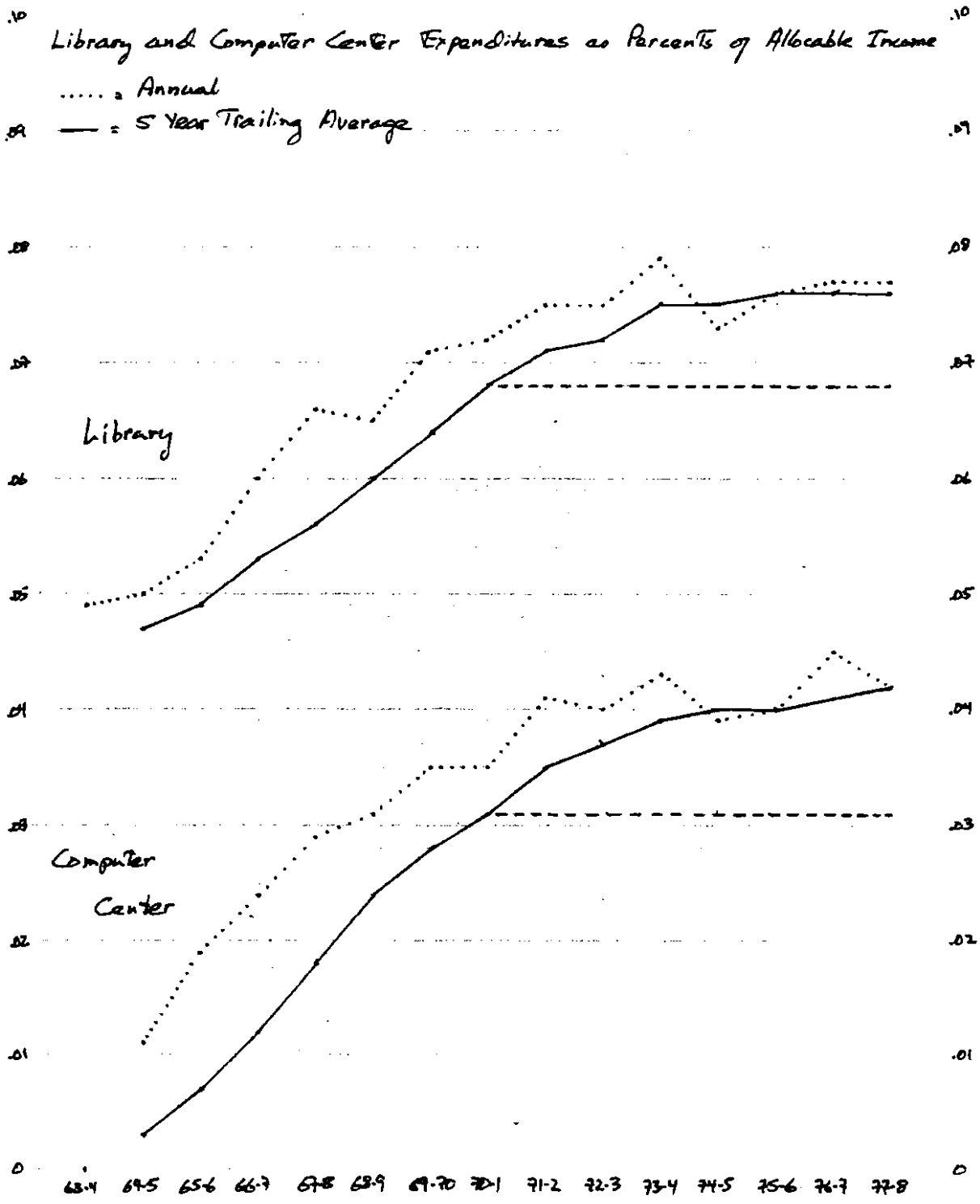


d) Student Services. Since the late 1960's, expenditures for student services have been very steady as a percent of allocable income. Only in the last two years has the annual line risen significantly above the trailing average. Student Services covers the following areas:

Amounts in '000	1972-73	Revised Recommended Budget for 1977-78
Office of Associate Dean--Student Affairs	$73 (00.60%)	$95 (00.60%)
Office of Institutional Studies	34 (00.28%)	34 (00.21%)
Office of Admissions	242 (02.00%)	316 (02.00%)
Office of the Registrar & Doctoral Studies	269 (02.22%)	334 (02.11%)
Office of Placement	173 (01.43%)	216 (01.37%)
Office of Student Aid	55 (00.45%)	89 (00.56%)
Office of Student Life	78 (00.64%)	47 (00.30%)
Student Senate	24 (00.20%)	25 (00.16%)

It should also be noted that several of these services produce fees that amount to approximately $200,000, which are included in tuition and fee income.

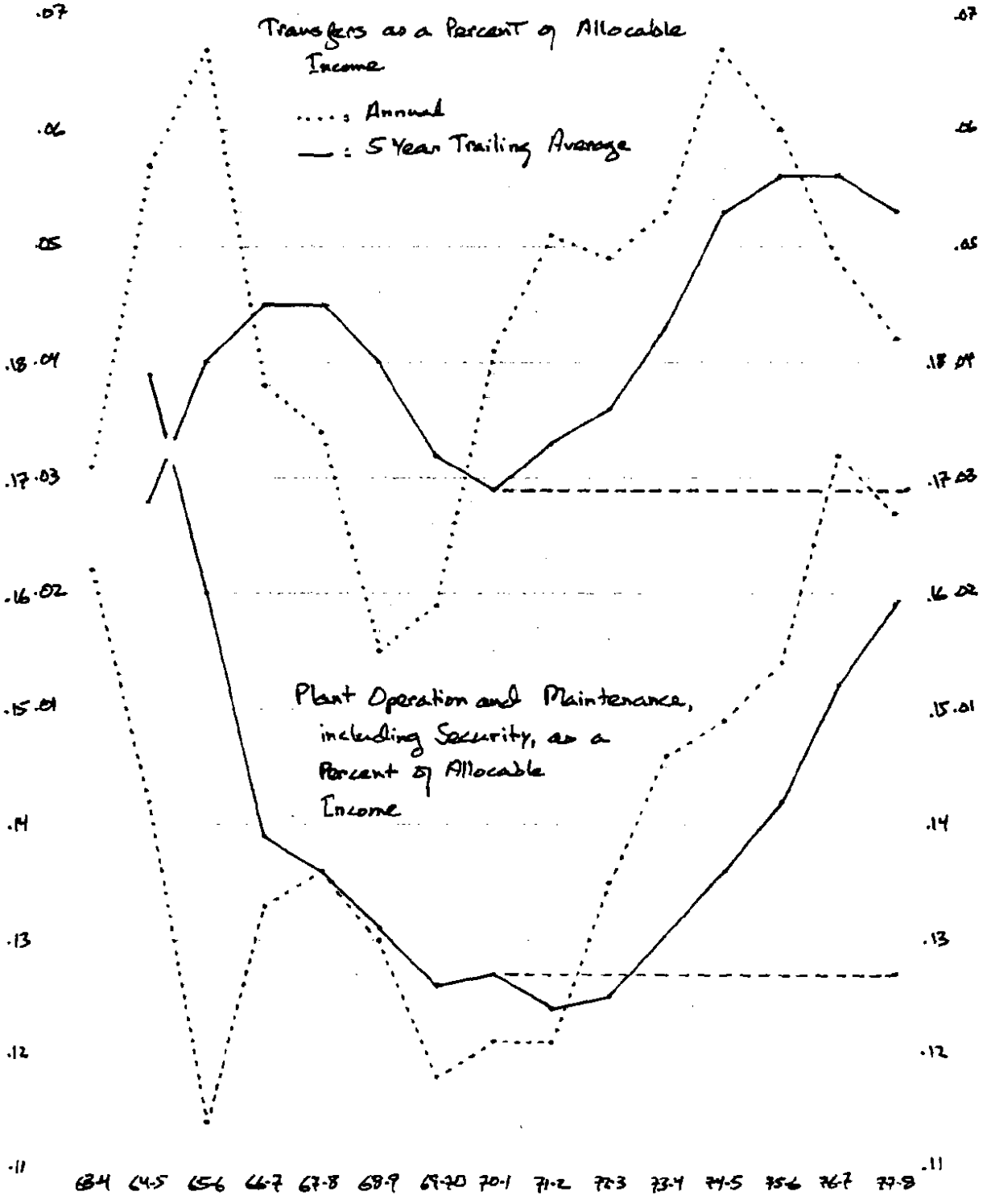
Graph 12


Library and Computer Center Expenditures as Percents of Allocable Income
..... = Annual
—— = 5 Year Trailing Average
.10
.09
.08
.07
.06
.05
.04
.03
.02
.01
0
Library
Computer Center
63-4
64-5
65-6
66-7
67-8
68-9
69-70
70-1
71-2
72-3
73-4
74-5
75-6
76-7
77-8

e) The Library. During the late 1960's, expenditures for the Library as a percent of income were rising steadily, as is shown in the top half of Graph 12. They have since reached a plateau at a little less than 1% above what they averaged through the late 1960's. The detailed budget breakdowns available to me do not make it possible to dissociate salary costs of the library from book and equipment costs. Earlier budget formats that listed salaries and book purchases separately suggest that a much greater percentage of library costs than most would expect go to salaries. The present library facilities make the efficient use of staff very difficult. These factors should be kept in mind in considering plans for the renovation of the library.

f) The Computer Center. The Computer Center started in 1964-65 and since then its costs as a percent of allocable income have risen quite steadily, with some indication that they have reached a plateau at a bit over 4% of allocable income. This level is just over 1% above the average for the late 1960's.

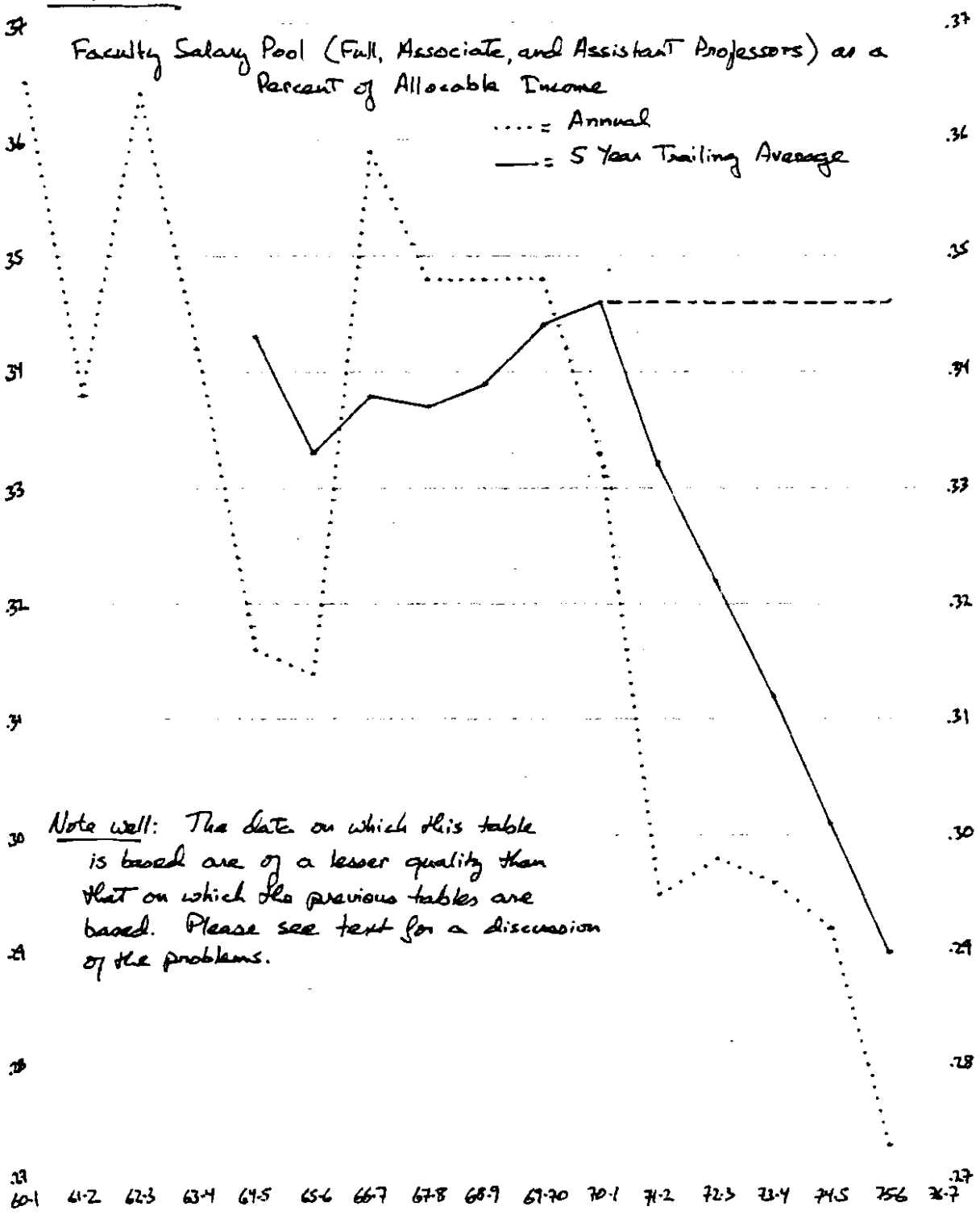
Graph 13


Transfers as a Percent of Allocable Income
.....: Annual
—: 5 Year Trailing Average
Plant Operation and Maintenance, including Security, as a Percent of Allocable Income
.07
.06
.05
.18 .04
.17 .03
.16 .02
.15 .01
.14
.13
.12
.11
63-4 64-5 65-6 66-7 67-8 68-9 69-70 70-1 71-2 72-3 73-4 74-5 75-6 76-7 77-8

g) Transfers. The upper part of Graph 13 shows expenditures for Transfers as a percent of allocable income. It is not quite precise to talk of Transfers as expenditures, for they are almost always a transfer of funds from one account to another, in this case, the transfer of funds from the current income and expenditure account to other accounts of the College. Usually transfers have to do with Plant. A certain amount needs to be taken each year and set aside for major alterations and the purchase of equipment. Some transfers may have to do with the instructional program--in recent years funds have been set aside from current income for a program development fund. Other transfers are made to contingency funds, such as workman's compensation funds, although these are usually made, not against current income as an expenditure, but out of surpluses in years where they are substantial. The base below which transfers cannot prudently decline was probably reached in 1968-69, when the College set aside $135,000 for alterations and nothing else. A sound, long-term base would probably be around $200,000, divided between equipment and alterations, about 1.5% of allocable income. In 1970-71, interest and amortization charges for Thorndike Hall began to appear under the Transfer line, quickly mounting to over $500,000, about 3.0% of allocable income. Since these charges are a long-term obligation, one that we will have to bear for the next 35 years or more, we have a major problem. Right at the time that the College should have been awakening to the seriousness of its financial condition, it jumped the minimum base for Transfers to a level well over double what it had been in the past. These changes are evident in the annual curve for Transfers in Graph 13. In the current budget interest and amortization charges seemed to have dropped by $100,000 or so, suggesting that perhaps some sort of partial refinancing of those charges has been managed. It would greatly help the College deal with its present serious financial condition could further refinancing bring down the Transfer base even more.

h) Plant Operation and Maintenance. The lower part of Graph 13 shows that costs of Plant Operation and Maintenance as a percent of allocable income have varied considerably. They came down rapidly in the early 1960's, making possible the rise in costs of the Library and the Computer Center; in the 1970's they have risen rapidly, largely at the expense of the Instructional budgets. About half of the increase in the 1970's is attributable to Security, the rest, presumably to the energy crisis. The detailed budget breakdowns lump the bulk of plant costs under one head, "Operation and Maintenance of Plant," and hence I can say little more about the recent rise in these costs, except that it has been steep.

Graph 14


Faculty Salary Pool (Full, Associate, and Assistant Professors) as a Percent of Allocable Income
.... = Annual
—— = 5 Year Trailing Average
37
36
35
34
33
32
31
30
29
28
27
.37
.36
.35
.34
.33
.32
.31
.30
.29
.28
.27
60-1
61-2
62-3
63-4
64-5
65-6
66-7
67-8
68-9
69-70
70-1
71-2
72-3
73-4
74-5
75-6
76-7
Note well: The data on which this table is based are of a lesser quality than that on which the previous tables are based. Please see text for a discussion of the problems.

1) The Faculty Salary Pool. The marked decline in the percent of allocable income going to Instruction, shown in Graphs 8 and 9, raises the question: how has this decline been achieved? Dean Wayland has suggested in a meeting of the Budget Committee that it may have resulted from the sharp reduction in secretarial support for the faculty. Another explanation stresses the significant contraction in the size of the faculty that has occurred in the 1970's. The following table, based on a computer print-out giving the size of the faculty by rank for each year since 1960-61 shows how the size and composition of the faculty has changed.

Size and Composition of the Faculty
in Relation to the % of Expenditures Allocated to Instruction

	% of Income from Inst	% of Expenses to Inst	Trustee Appointments				Non-trustee App		
			Total	Full Prof	Asc. Prof	Ass. Prof	PT Inst.	FT Inst	Adj.+ Visit
1960-61	(85.7%)	(49.9%)	127	90	25	12	95	14	8
1961-62	(84.8%)	(44.8%)	125	88	21	16	100	18	10
1962-63	(83.9%)	(48.6%)	130	83	28	19	104	14	8
1963-64	(85.6%)	(47.5%)	130	80	27	23	133	18	6
1964-5	(82.8%)	(47.2%)	133	74	30	29	132	15	11
1965-6	(83.5%)	(47.0%)	148	76	41	31	121	20	16
1966-7	(81.5%)	(50.7%)	167	82	44	41	131	19	19
1967-8	(82.6%)	(50.2%)	174	84	49	41	119	20	18
1968-9	(79.2%)	(49.6%)	184	86	52	46	154	16	14
1969-70	(79.9%)	(48.5%)	185	90	47	48	158	21	23
1970-1	(84.3%)	(47.5%)	174	86	51	37	141	26	25
1971-2	(82.6%)	(46.2%)	162	75	55	32	120	17	20
1972-3	(82.1%)	(45.8%)	162	77	50	35	135	18	35
1973-4	(79.9%)	(45.0%)	160	71	52	37	113	19	27
1974-5	(85.2%)	(41.1%)	162	74	53	35	93	25	19
1975-6	(85.5%)	(41.1%)	149	67	54	28	92	17	16
1976-7	(86.2%)	(46.9%)	153	71	55	27	71	18	44
1977-8	(85.7%)	(43.2%)							

This table in itself merely suggests, but does not show a relation between contraction of the faculty and contraction of the allocation to Instruction. It gives a count, I am told, of people actually teaching, not those on administrative or research appointments. To test accurately whether the reduction in the percent of income going to instruction has been achieved primarily through the contraction of the faculty, it is necessary to have figures for the faculty salary pool for each year during the period in question. Each year, the College reports to the AAUP the average compensation, salary plus benefits, for each rank on the faculty. The Controller has given me a table summarizing the figures reported annually, giving the average compensation by rank and the numbers, as of October 1, in each rank. These numbers, however, include all persons who hold the rank, regardless of whether or not they are on teaching appointment. Hence they cannot be used to approximate the faculty salary pool incorporated in the budget category of Instruction. Using the numbers in the above table with the average compensation figures

from the AAUP summaries, however, does give such an approximation, the results of which are shown in Graph 14, which clearly suggests that the reduction in recent years of the percent of income spent on instruction has been achieved primarily by the relative contraction of the faculty salary pool.

A word of caution about this table, however. As it stands, Graph 14 suggests that virtually all of the reduction in the percent of income spent on instruction has been achieved by contraction in numbers of full, associate, and assistant professors; virtually none by contraction in secretarial support or contraction in instructional staff not of faculty rank. Nevertheless, secretarial support and instructional staff not of faculty rank have contracted, and in the case of the latter group this has clearly happened as can be seen from the figures in the last three columns of the above table, especially for part-time instructors. The changes in Graph 14 might be deceptive to a degree, for the numbers of full, associate, and assistant professors on which they are based probably include some who are paid, in whole or in part, through grants for research and specially financed instructional programs. The level of external funding has rapidly declined in the 1970's and if the number of those separately financed and included in the count of teaching faculty members has declined more rapidly than the number of those regularly financed, then Graph 14 would exaggerate the decline in the percent of allocable income spent on faculty salaries through the instructional budget. The Controller has prepared a pie chart for 1975-76 that shows Salaries by Type within the Educational and General Budget, excluding Separately Financed Programs, giving the total amounts for professorial, instructional, professional, secretarial and clerical, building and grounds wages, and wages and salaries not on appointment. The amount for Professorial given in that chart is some $360,000 lower than that arrived at by the estimate explained above, suggesting that indeed the counts are contaminated by external financing on the order of about 10%. This contamination could not account for all of the decline shown in Graph 14, or even most of it, but might account for something up to one third of it. It would help us greatly to understand our recent expenditure patterns could the disaggregation of salaries by type that the Controller has done for 1975-76 be done for each year since 1960-61.

Towards a Strategy by Way of Questions

Altogether, these graphs show a very serious situation, a situation that is especially serious from the point of view of the faculty. The College is caught in a squeeze between rising over-all costs and lagging over-all income. The squeeze has caused a serious contraction of the College's instructional resources, and will continue to do so unless we can alleviate the pressures. It is clear from this report that as a budgetary priority instruction has suffered heavily in this decade. The faculty can help itself in this situation, and the College, if it can develop a long-term strategy consistent both with its interest as a group within the College and with the interest of the College as a whole, if it can develop it cooperatively with the administration. Some observations towards this end follow.

An effective strategy to alleviate the pressures on the instructional budget and on the over-all College budget must work in the two directions of reducing expenditures and increasing income. The gut response of most faculty members to Graphs 8 through 14 will immediately be: cut non-instructional costs; cut the costs that have been rising relative to income. The first step in developing an effective strategy is to do that, but it is however, more easily said than done. I do not believe that the non-instructional costs have risen becuase no-one has tried to lower them. They are, unfortunately but realistically, harder to limit and contract than instructional costs are. This is not to say that we can only resign ourselves to their continued escalation in absolute dollar amounts and as a percent of income. It is to say, however, that we cannot expect them to come down merely by wishing they would, merely by demanding that they do. If we want them to come down we need to help in finding ways to make it happen, in finding ways that make sense and in finding the energy through which sensible possibility can be made effective actuality. Hence some questions:

How can the College achieve significant savings in general expenses, especially those that have been rising rapidly, such as insurance costs, for reasons seemingly far beyond our control?

What ideas do we have and what actions can we take that will help the College perform the functions of general administration and student services so that the costs of these might come down a bit further?

What can we do to make our public information and service functions more effective without pushing up their costs?

Can we conjure up realistic ways by which the library could reduce its costs while maintaining or improving its service?

How can computer costs be lowered?

Can anyone develop a sound plan by which the minimum long-term base for transfers can be lowered significantly?

> What can be done with rising energy costs to limit the expense of operating and maintaining our plant? Can anyone develop a less costly plan for providing effective security within and around our buildings?

Costs in many of these areas have been going up because so far no one has come up with good, workable answers to questions such as these. The administration, the faculty caucus, diverse committees are eager for help in the search for answers.

Controlling costs, however, is not alone going to get us out of our present condition. Costs now are so far beyond income, which has lagged, that even quite drastic economies will not free any significant money for reallocation, but will rather contribute to lowering our long-term deficit. Costs are going to have to be cut, and the faculty will help itself in the face of such stringencies by finding ways, workable ways, to cut non-instructional costs. But to get out of the situation we need, even more than on expenditures, to work on the problems of income.

It is useful, perhaps, to think of working to increase income in two ways, incrementally and comprehensively. Lots of small initiatives and actions can aggregate into a large increase in over-all income, on the one hand; and rather comprehensive changes in policy can sometimes provide a significant, one-time increase in resources that can greatly facilitate the initiation and follow-through on many of the incremental possibilities. To my mind, the strategy most likely to achieve a decisive turn-around in our financial condition would be one that manages to link the incremental effectively with the comprehensive, one that seeks a large, sudden input of income, an input that is itself not perhpas sustainable, and that uses that income to nurture as many incremental initiatives as can be generated.

Attention to incremental initiatives is very much under way, and it is very, very important. A budget analysis such as this one concentrates on large categories, aggregates such as tuition and fee income, indirect cost recovery, other income; this obscures the complicated human realities behind these categories. In reality income grows and contracts incrementally by the addition and subtraction of actual instances. Each time one of us capitalizes on a chance opportunity to recruit a student; takes the trouble to land a grant, large or small; puts out the effort to discover a potential clientele, to develop a program to meet its needs; does diverse things--writing, speaking, what have you--that draws interested attention to the College; each time one of us does such things we add an increment to income--as this process goes, so goes our long-term financial condition. The analysis of income shows two long-term problems areas: overhead income has declined sharply and tuition and fee income has lagged. These are the two decisive areas where sustained, incremental improvement over the coming years needs to be attained. We are all aware of that; attention has been focused on it; initiatives and policies are underway to work towards it.

The are difficulties, however, in the incremental strategy when it is the whole of one's strategy. It is a slow strategy and it has been set in motion in a time of acute deficit, a deficit that demands short-term economies

that work at cross-purposes with the long-term incremental strategy. It is hard to develop new programs in a time of serious faculty contraction. It is hard to garner grants at a time when support services are scandously scarce. It is hard to recruit students aggressively when morale is low. Incremental initiatives thrive on optimism and resources available for incremental allocation, and these presently are simply not at hand. That, it would seem, is why the incremental strategy needs to be complemented by a comprehensive one, one designed to provide a sudden input of resources with which incremental possibilities can be nurtured. In 1969-70 the College was the passive recipient of such an input of resources, the unexpected $1,100,000 from what was then the new New York State Aid Program, but in 1969-70, the College lacked an incremental strategy and failed to put those new resources to long-term use: despite a temporarily balanced budget, the College's financial condition continued to deteriorate. The College now has an incremental strategy, and to make it work as well as it might, the College again needs a sudden rise in income, an increase on the order of one or two million dollars yearly, enduring for a couple of years at least; a big pot of unexpected income, one that would be seen, not as <u>the</u> solution happily enabling next year's budget to be balanced, but as a foundation for an effective, incremental solution that enables the budget over coming decades to be balanced.

I think, perhaps romantically, that such a pot of income can be found. And I think, perhaps desperately, that such a pot of income <u>must</u> be found. Somewhere there is a sizeable source of income that we can tap to provide the funds to support our incremental rebuilding of our institutional economy. The times are such, however, that we cannot expect such income to come to us, fortuitously, without effort, like the Bundy Money. We need to seek it out, to uncover it, to find a way to bring it in, and it is in the interest of both the faculty and of the College that we devote some effort to doing just that. Hence another question:

> What comprehensive initiative might the College take now to raise its income over the next two to three years 10 to 15 percent above what it would be in the absence of such an initiative, so that there would be the resources available to foster our incremental initiatives and the time for them to bear fruit?

The remainder of this report sets forth one such possible, comprehensive initiative. I do so, not because I am convinced that it is necessarily the best such possible initiative, but because I believe it is one that merits serious consideration and one that well exemplifies the kind of thinking that we will need to do if we are going to improve our financial condition decisively.

An Illustrative Proposal

Turn back to Graph 3 and note again the difference in the level of points taught between Fall and Spring, a difference particularly marked during the mid 1960's. The 1976 "Budget Book" notes this phenomenon: "For reasons which are not clear, the spring enrollments are lower than the autumn enrollments." There is in this phenomenon a clue, one that, if pursued with a certain rigor and imagination, leads to a large pot of potential income, a large pot that can potentially be tapped in the manner described above, giving us over a few years a significant boost. Let us try to follow the clue.

Some students complete their programs in the Fall; some new students start their programs in the Spring; the balance is more or less even; the turnover between those who complete and those who start does not explain the difference between enrollment in the Fall and in the Spring. What then, what other phenomena, do these data reveal? Some students drop out, interrupt for one or another reason their program of study. How many are they? Might these explain the difference? Such questions lead to further questions that go beyond the immediate question of the difference between Fall and Spring. Precisely what is the composition, overall, of a full year's enrollment? What are the determinants, the broad, over-all determinants, that give rise to a particular year's total points taught? We normally think of enrollment as a pipeline through which students pass, entering as new students, continuing, slowly or rapidly, as old students, and leaving as graduates. How true is such a simple image?

For each term the Registrar puts out an analysis of enrollment in which there is a chart that shows the dates of previous attendance for all "credit enrollments" (a somewhat deceptive term for a student who has enrolled for one or more points of credit). After a good deal of head scratching, it is possible with the charts for Autumn, Spring, and Summer to build up a composite picture of the enrollment for the whole year. For convenience, I have broken it into three broad categories, although somewhat more refined ones would be possible. These three categories are:

New Students. Students who enroll at Teachers College for the first time at one or another point during the year. Typically about half of the new student total starts in the Fall, a quarter in the Spring, and a quarter in the Summer.

Retained Students. Students who enroll in a year who had also enrolled in the previous year.

Recovered Students. Students who enroll in a year, who have previously enrolled in Teachers College, but who did not enroll in the previous year.

In a more or less typical year, 7,600 students enroll, of whom 2,500 are new students, 4,400 are retained students, and 700 are recovered students.

Let us add to this data certain other statistics that are easily available, namely the number of degrees awarded each year, the total points taught each year, and the number of "free points," points taught that are given away without payment in one or another form coming to the College. All this data for the seven years ending 1975-76 is set forth in the following table:

	New Students	Retained Students	Recovered Students	Total Students	Degrees Awarded	Total Points	Free Points
75-76	2,558	4,859	671	8,088	1,985	95,731	6,780
74-75	2,920	4,437	736	8,093	1,959	97,841	7,051
73-74	2,545	4,239	744	7,528	1,740	89,647	5,947
72-73	2,411	4,263	708	7,382	1,690	91,009	6,139
71-72	2,485	4,265	732	7,482	1,724	89,781	5,634
70-71	2,318	4,132	829	7,279	1,653	88,842	6,015
69-70	2,155	4,112	920	7,187	1,764	85,585	5,070

(Point totals in this table come, not from the data on which Graphs 3, 4, and 5 are based, but from a ten-year summary made by the Controller that gives a more complete count. Hence the higher totals.)

Now let us try to think about this data broadly, theoretically, in the manner of the economist, to see what information we can extract from it.

It is evident that the recruitment of new students over the long-run maintains the pool of total students, but it is equally evident that it is not the only factor determining how large, in any particular year, the pool will be. It is also evident that the size of the pool is not the only factor determining how many points will be taught, for the student total in the two most recent years shown is almost identical, yet the point totals differ by over 2,000 points. To the historian that I normally am, these differences and changes are explained by a myriad of concrete choices, each of which I would ideally want to understand, but here we want to think as economists, seeking explanations that will account for the aggregate changes. We proceed, therefore, to define and calculate a set of rates as follows:

1) The Recruitment Rate. The number of new students each year as a percent of the total number of students the prior year.

2) The Retention Rate. The number of retained students each year as a percent of the total number of students the prior year.

3) The Recovery Rate. The number of recovered students each year as a percent of the total number of students the prior year.

4) The Growth Rate. Which would be the sum of 1, 2, and 3. This could be used to estimate the total number of students next year by multiplying the the total number of students this year by it.

5) The Graduation Rate. The number of degrees awarded in each year as a percent of the total number of students in that year.

6) The Gross Loss Rate. The sum of the retention rate (2) and the graduation rate (5) for the previous year subtracted from 100.

7) The Net Loss Rate. The sum of the retention rate (2), the recovery rate (3), and the graduation rate (5) for the previous year subtracted from 100.

8) The Intensity Rate. The total number of points taught each year divided by the total number of students each year.

9) The Discount Rate. The total number of free points each year divided by the total number of points each year.

These rates calculate out on the above data as follows.

	Recruitment Rate	Retention Rate	Recovery Rate	Growth Rate	Graduation Rate	Gross Loss Rate	Net Loss Rate	Intensity Rate	Discount Rate
75-76	31.6%	60.0%	8.3%	99.9%	24.5%	15.8%	7.5%	11.84	7.1%
74-75	38.8%	58.9%	9.8%	107.5%	24.2%	18.0%	8.2%	12.09	7.2%
73-74	34.5%	57.4%	10.1%	102.0%	23.1%	19.7%	9.6%	11.91	6.6%
72-73	32.2%	57.0%	9.5%	98.7%	22.9%	20.0%	10.5%	12.33	6.7%
71-72	34.1%	58.6%	10.1%	102.8%	23.0%	18.7%	8.6%	12.00	6.3%
70-71	32.3%	57.5%	11.5%	101.3%	22.7%	18.0%	6.5%	12.21	6.8%
69-70	. %	. %	. %	. %	24.5%	. %	. %	11.91	5.9%

With these rates we can start seriously searching for a big pot of potential tuition and fee income and thinking about possible means for substantially tapping it.

To begin with, meditate on the Gross Loss Rate. During the 1970's, each year between 15 and 20 percent of the previous year's enrollment neither graduates nor returns. Actually this rate is somewhat understated because of imperfections in the data on which it is calculated: some students receive degrees and return to work for a higher degree so they are counted twice and some students receive more than one degree in a year so they too are counted twice. Let us ignore these imperfections, however, realizing that the calculations will be understated by an unknown, but not too significant factor. On the average, roughly, enrollment is about 7,600 annually, of which we lose annually about 18% or 1,400 students who are, so to speak, AWOL, absent without leave. The recovery rate shows that on the average, without particularly trying, we get back previously lost students at a rate equivalent to 10% of the prior year's enrollment, leaving, on the average, 8% who leave each year never to come back. These build up into a pool of former students who have never finished. Using the net loss rate, we can calculate fairly precisely the size of this pool: during the six years 1970-71 through 1975-76 it builds up to 3,800 students who are AWOL.

A certain portion of these 3,800 former students are simply not recoverable: actuarial statistics would lead us to believe that a few have died; others have left because they have flunked out; some have gone carrying away an unshakeable dislike for Teachers College; others have moved to far off places; a few have transferred to other institutions and are happy there. But despite all those factors, quite spontaneously six, seven, eight hundred

or so come back each year, and behind them there is this large pool of potentially recoverable students. Would it be worth making a special effort to get more of them to come back? Let us try to calculate the potential returns of such an effort.

To do this has proved very perplexing. Working with a hypothetical set of stable years based on averages for the six years in the above table, it is possible to estimate that it takes approximately 3.8 years or 45 points to earn a degree. Exactly when the average lost student makes his or her exit eludes estimation from the data at hand. To get a sound estimate of the potential benefits from recovering a substantial proportion of our lost students, we would need to sample empirically how many points lost students have generally taken before going AWOL. Let us assume, for the sake of argument, that normally the drop-out leaves after completing 22 points, about half the average degree, and has 23 points still to complete. Let us assume that through a concerted effort we could recover one quarter of the pool of former students that without effort we will not recover, that is 950 students, using the pool we have established for the 1970's. 950 students at 23 points each is 21,850 potentially recoverable points, which, at $129 a point, would be $2,818,650 in income spread over two years or so. Let us recognize, however, that in order to get those students back, we may have to discount their tuition rates fairly heavily, say 20%. Hence we need to deflate the $2,818,650 in our estimate to $2,254,920. Having done that, however, we need to realize that if we recover these students and they go on to earn degrees, they will bring to us more Bundy Money than we could otherwise expect, so this needs to be added into our estimate. The average Bundy award in 1975-76, dividing our New York State Aid receipts for that year by the number of degrees awarded, was $880 per degree. 950 average degrees would bring $836,000, which, with the tuition and fee estimate, would mean that recovering half of the pool of students lost during 1970-71 through 1975-76 could bring us $3,090,920 over two to three years.

This estimate, when all is said and done, is extremely tentative, merely a suggestion that unrecovered lost students constitute a large pool of potential income. It may be optimistic to expect to recover ever a quarter of the pool. The assumptions with respect to points in the estimate may prove empirically too high or too low. Further, the pool may be seriously underestimated. As mentioned, the underlying data embodies double counting which inflates retention and graduation rates: by simply subtracting degrees awarded from new students during the years in question, the pool for these years would appear to be 4,500, not 3,800, and even that method still embodies some double counting. And beyond that, the pool on which we have estimated the potential returns from recovering AWOL students is one accumulated only from 1970-71 through 1975-76. The real pool reaches further back. During the mid to late 1960's there was undoubtedly a very high net loss rate and by pursuing the data we could greatly increase our estimate of the pool, and with that the potential returns from recovering lost students. Suffice it to say, simply, that there is a large but yet indeterminate pool of students who have already been admitted to TC, who have already attended TC, but who are now not at TC. Recovering a large portion of them might be a fit goal both for incremental and especially for comprehensive initiatives, a way to boost income over the next few years so that we would have the re-

sources and time to carry through on the many things we need to do to refound our finances.

How might we go about recovering a significant portion of this pool? Incrementally there are many things that might be done, contacting students who have not returned, initiating diverse efforts at re-recruitment, so to speak. But let us try to go further; let us look at the possibilities for comprehensive policy in this matter. We have been reasoning as economists and have worked a significant discount into our tuition and fee estimate. What kind of over-all discounting policy might best back up incremental efforts at re-recruitment? One proposal of a comprehensive character that has from time to time been voiced is the idea of guaranteed tuition levels: the fee schedule in force when a student first enrolls will remain in force for that student provided he or she maintains continuous registration and completes his or her program within a specified period. We can return shortly to some of the other potential effects such a guaranteed tuition plan might have on some of the other rates that the above analysis has shown to be essential to determining over-all enrollment. Here let us create a variant of that plan for lost students: former students who have not been registered during the current year, can register next year at the fee schedule in force at the date of their last registration and they can stay on that schedule provided they maintain continuous registration and complete their program in a specified period. This, especially if it was made a one-time opportunity, would create a significant incentive for once lost students to turn themselves into recovered students. How many would come back, only experience can tell. The potential of the policy, however, for giving us the sudden rise in income with which to make our more incremental policies better bear their fruit would seem to me to make it worth, at the least, serious examination.

In addition to attracting students lost in the past, a plan of guaranteed tuition rates, if adroitly drawn, would have other effects. First, it could significantly help prospective students plan the cost of their education, and thus it might help to raise the recruitment rate a bit. By making continuous registration a condition of guaranteed tuition rates, our retention rate might rise to a level significantly above what it is at present. By putting a terminous on the guarantee, specifying that the student must complete within a certain period, the intensity rate, the average number of points the average student takes per year, would rise. Finally, all these changes would effect the graduation rate, raising it and with it the level of Bundy Money the College receives. The sum of these possible effects could be very important. Let us assume that for the current year we will have had, on final count, a total of 7,200 students, an intensity rate of 12 and a discount rate of 7%, assumptions which are in the realm of plausibility. With those rates we would teach a total of 86,400 points, of which 80,353 would be paid points. Let us assume that we institute a good plan of guaranteed tuition, one that has, on a modest scale, the effects here anticipated. Let the recruitment rate be a conservative 31%; imagine an increase in the retention rate from 60% to 65%; in the recovery rate from 9% to 15%; in the intensity rate from 12 to 12.5 points; recognize that such an initiative would raise the discount rate too, say from 7% to 10%. The growth rate would then be 111%, giving us a student total next year of 7,990, a gain of 790. At an intensity rate of 12.5 we would teach 99,900 points, a gain of 13,500; but the higher

discount rate would mean that only 89,910 would be paid points, still a gain, all the same, of 9,557, or, at $129 per point, $1,232,853. If the graduation rate rose so little as from 24 to 25%, with that increase and the increase in the base, we would grant 250 more degrees, producing an extra $220,000 in Bundy Money. Clearly the possibility may merit serious study.

My point in setting forth this possibility here in some detail, however, is not to advance it as a proposal ready for implementation. Rather I advance it here as an illustration, as an illustration of the kind of comprehensive initiative that we should try to develop as a part of our over-all strategy for dealing with a situation adverse to our interests. In the end, an incremental policy alone, on its own, may be all that we can possibly pursue, for on rigorous examination the above, and all other comprehensive initiatives that we might plan, may prove to be false hopes. Yet incremental policy alone will be slow in bearing fruit, and if we cannot generate a complementary, comprehensive initiative, we will need the fortitude to keep up the effort, bit by bit, in the midst of comprehensive cuts.

One last caution: if we can develop a comprehensive initiative, we need to be very clear about its limits. Sudden jumps in income are basically fortuitous and are not in themselves the foundation of a sound financial condition. What I have described above could raise income significantly for two or three, maybe four, years, but this essentially fortuitous increase would lead to a sustained increase only if the number of new students recruited annually steadily increases as well. The controlling factor is the recruitment of new students; with the recruitment of new students the controlling factor is the sum of our incremental efforts. These are concrete: each course, workshop, program, grant, article, book, or lecture; each particular that attracts money and students, talent and ideas--these are the incremental essence. With these, the comprehensive initiative can truly be a complement, something that completes, by preventing the steady attrition that will disable us and by providing the staff, the time, the support that will enable us better to do all the particulars that we can. The incremental alone will be excruciatingly difficult. The comprehensive alone will be eventually calamitous. Over the next few years, any increase in our income should be used, not merely to balance the budget, but to nurture our incremental efforts. We should avoid an income stimulus <u>in the place of</u> our incremental efforts; we should seek an income stimulous <u>for the sake of</u> our incremental efforts.