PERFORMANCE AUDIT REPORT

Faculty Salaries In Kansas And The Resources Committed To Pay Them

A Report to the Legislative Post Audit Committee
By the Legislative Division of Post Audit
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AND THE RESOURCES COMMITTED TO PAY THEM

OBTAINING AUDIT INFORMATION

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Summary of Legislative Post Audit's Findings

How do the resources committed to pay faculty salaries at the Regents' universities compare with those resources at their peer institutions? During fiscal year 1987, the University of Kansas and Kansas State University had significantly less money per credit hour to spend on faculty salaries and operating expenses than the average of their peers. (The "Margin of Excellence" program begun during the current year may affect Kansas' relative funding position.) Kansas schools receive a larger portion of their general use funding from the State General Fund and less from other sources than the average of their peer schools. One of the five peer states is so well funded that it increases the peer average considerably. If that state is removed from the averages, Kansas State University has about the same amount of money as the remaining peers, but the University of Kansas would still have less money.

What factors may be contributing to differences in salaries between Kansas universities and their peer institutions? Although Kansas' per-capita income is somewhat higher than the average of the peer states, Kansas' tax rates before federal tax reform have been somewhat lower, leaving less money to finance higher education. In recent years, Kansas has given slightly less of its General Fund budget to higher education than the average of the peer states. In addition, Kansas has a larger population of postsecondary students making demands on the limited resources. Salary increases in Kansas generally have not been as large as those granted in the peer states, thereby contributing to a drop in average salaries relative to the peers. However, if faculty salaries are adjusted for the cost of living, Kansas faculty have comparable or better purchasing power than faculty in most peer states. Kansas State University appears to have a larger number of faculty for its size than the other peer institutions. However, a lack of consistent information about the number of part-time faculty and graduate teaching assistants the schools employ prevented the auditors from assessing the impact of this factor.

FACULTY SALARIES IN KANSAS AND THE RESOURCES COMMITTED TO PAY THEM

Recent faculty salary figures published by the American Association of University Professors showed that, on average, Kansas faculty are paid less than faculty at peer institutions in other states. During its 1988 session, the Kansas Legislature approved \$11.9 million, for the first year of a plan submitted by the Kansas Board of Regents to increase funding of Kansas' State-run colleges and universities. The plan, labeled "The Margin of Excellence," is a three-year plan designed to bring the salaries of faculty and other unclassified positions to 100 percent of the average of the designated peer institutions and to bring overall funding of the six universities to 95 percent of the average of the peers. As originally requested, the plan would add about \$15.2 million to the budget base each year for a total compound cost of more than \$90 million during that three-year period.

Legislative questions have been raised recently about what factors have actually contributed to the differences in faculty salaries between Kansas universities and their peer institutions. One concern was that the differences may not be influenced as much by the resources committed to pay faculty salaries as by the way the universities are using these resources to help pay faculty salaries.

To address these questions, the Legislative Post Audit Committee directed the Legislative Division of Post Audit to conduct a performance audit of the resources committed to pay faculty salaries at Kansas State University and the University of Kansas, as compared with their peer institutions in other states. The audit addressed the following specific questions:

1. **How do the resources committed to pay faculty salaries at the Regents' universities compare with those resources at their peer institutions?**

2. **What factors outside the universities might be affecting the amount of money available for faculty salaries and operating expenses at Kansas universities?**

3. **What factors within the sample universities may be contributing to differences in salaries between Kansas universities and their peer institutions?**

To answer these questions, the auditors gathered financial reports from Kansas State University, the University of Kansas, and each of their peer institutions in Colorado, Iowa, North Carolina, Oklahoma, and Oregon. (The selection of these peer institutions is discussed in the box on page 3.) They standardized and compared revenues at each school. They also gathered information about the budget and appropriations processes in the peer states and looked at selected factors within the universities that could account for differences in average salaries. Internal factors the auditors examined included the mix of disciplines at each school, the mix of faculty ranks, and the allocation of expenditures among various categories such as instruction, research, and academic support. They also compared factors outside the schools' control that could have an impact on the amount of money available for faculty salaries. These factors included state wealth and tax effort, the number of postsecondary students each state supports, the level of budgetary increases in recent years, and differences in the cost of living in the cities where the peer institutions are located.

In general, the auditors found that in fiscal year 1987, both Kansas schools had considerably less money per credit hour to spend on faculty salaries. A larger portion of the money that was available to Kansas schools came from the State General Fund, and a considerably smaller portion came from other income such as interest income and sponsored research overhead. One of the peer states is so well funded that it significantly raises the peer average. Compared with the remaining four peers, the University of Kansas still has less money for salaries and operating expenses, while Kansas State University comes very close to the peer average.

Factors that contribute to differences in money available for faculty salaries include a lower tax effort in Kansas that results in less money being available to spend on government and higher education, a slightly smaller portion of the State's General Fund budget going to higher education, and a larger student population making demands on those resources. The size of salary increases in Kansas have generally not kept pace with other states. When cost of living differences are taken into account, the salary relationships between Kansas schools and peers can change significantly.

Other factors the auditors examined, such as the mix of faculty and expenditure patterns, did not appear to substantially affect differences in the amounts of money available for faculty salaries. However, the auditors were unable to gather consistent information necessary to fully assess staffing patterns at the universities. Preliminary analysis suggests that Kansas State University has relatively more faculty than its peer institutions. But the auditors could not fully assess whether Kansas State had significantly more faculty because they were unable to gather consistent information on part-time faculty and graduate teaching assistants. These and other findings will be discussed in more detail in the sections that follow. Questions II and III have been combined for reporting purposes.

How Do the Resources Committed to Pay Faculty Salaries At the Regents' Universities Compare With Those Resources at Their Peer Institutions?

Because universities have varied missions, they have a number of different types of faculty who may be paid from different sources of funds. For example, research faculty may be paid partly or entirely from a research grant supplied by a governmental or private source. Likewise, some faculty may be paid from endowment money or another source that does not show up in the university's regular accounting system. Therefore, it is impractical to determine the exact amounts of money that a given school may have available to pay all types of faculty.

Selecting Peer Institutions
For the University of Kansas and Kansas State University

The Board of Regents first began using peer institutions in other states for funding comparisons in 1976. A task force charged with selecting these peer schools first set out to select states that were similar to Kansas in population, percent of people living in non-metropolitan areas, per-capita income, and the percent of high school graduates enrolled in public universities, public community colleges, and private institutions. The next step was to identify a pool of similar institutions in those states. The institutions had to be similar in enrollment, funding and expenditure patterns, and in degree programs. Using this process, the Regents' task force selected five peer institutions for the University of Kansas and five for Kansas State University. Those institutions and some comparative information for each one are shown below

	'87-'88 Avg. Faculty Salary	Fall '87 FTE Enrollment	1986 State Population	'86 Per-Capita Income
Univ. of N. Carolina, Chapel Hill	$44,300	19,008	6,331,000	$12,438
Univ. of Iowa	$43,000	24,910	2,850,000	$13,348
Univ. of Colorado, Boulder	$42,500	22,155	3,296,000	$15,234
University of Kansas	**$37,600**	**23,948**	**2,459,000**	**$13,789**
Univ. of Oklahoma	$35,400	18,719	3,306,000	$12,283
Univ. of Oregon	$34,900	18,604	2,702,000	$13,328
N. Carolina State University	$40,200	20,824	6,331,000	$12,438
Iowa State University	$38,100	25,792	2,850,000	$13,348
Colorado State University	$37,500	19,633	3,296,000	$15,234
Oregon State University	$36,200	15,481	2,702,000	$13,328
Oklahoma State University	$34,600	19,682	3,306,000	$12,283
Kansas State University	**$32,800**	**17,007**	**2,459,000**	**$13,789**

Staff from the Regents' universities visit each peer school at least every other year to conduct comprehensive cost studies of each peer institution using definitions and procedures developed by the Regents' task force. Kansas staff examine expenditure information on general use funds including the state general funds, tuition and student fee revenues, land grant funds, and sponsored research overhead. Approximately 85 percent of the total operating budget of each peer institution is examined.

Although Kansas has selected the schools shown above for peer comparisons, those schools do not always consider Kansas schools as their peers for comparative purposes. Officials from Oklahoma and Oregon were the only peers who indicated that they routinely use Kansas schools as peers when doing comparative studies.

Salary comparisons published annually by the American Association of University Professors are frequently used to compare schools. Those comparisons focus primarily on full-time instructional faculty. Consequently, this audit focuses on those same faculty members and the sources of funds from which they are paid. The table on the next page shows comparative salary figures for the 1987-1988 school year. The salary figures shown in the table do not reflect cost-of-living differences among the various cities where the universities are located. When cost of living differences are considered, the Kansas faculty may have as much purchasing power with their current salaries as faculty in their peer states. Cost of living information is presented later in this report.

Full-time instructional faculty are generally paid from moneys that universities call "general use" funds. General use funds are those moneys a university receives

1987-88 Average Salaries by Rank
For KU, K-State, and Their Peers
As Published by
The American Association of University Professors(a)

	Average All Ranks	Professor	Associate Professor	Assistant Professor	Instructor
Univ. of N.Carolina	$44,300	$55,800	$40,100	$34,500	$28,700
Univ. of Iowa	$43,000	$51,000	$38,700	$32,800	$27,500
Univ. of Colorado	$42,500	$49,500	$37,800	$33,600	$24,900
Univ. of Kansas	**$37,600 (4)**	**$44,200 (4)**	**$32,800 (6)**	**$28,300 (6)**	**$20,700 (5)**
Univ. of Oklahoma	$35,400	$43,800	$33,200	$28,400	$18,900
Univ. of Oregon	$34,900	$43,900	$33,900	$28,500	$22,100
KU Peer Avg. (b)	$41,317	$49,975	$37,066	$31,723	$23,097
N. Carolina State U	$40,200	$55,100	$39,900	$34,500	$26,500
Iowa State U	$38,100	$48,700	$37,000	$31,000	$21,000
Colorado State U	$37,500	$43,800	$34,500	$30,000	$20,600
Oregon State U	$36,200	$44,600	$36,000	$30,100	$21,700
Oklahoma State U	$34,600	$43,100	$33,600	$29,900	$20,700
Kansas State U	**$32,800 (6)**	**$40,700 (6)**	**$31,000 (6)**	**$27,800 (6)**	**$21,400 (3)**
KSU Peer Avg. (b)	$38,597	$47,304	$36,317	$31,198	$21,293

(a) Numbers in parentheses indicate the Kansas schools' relative rank among the peers
(b) Legislative Post Audit developed the peer average figures from information presented by the American Association of University Professors.

that have not been restricted by a donor or governing body and that have not been earmarked internally by the university for a particular purpose. In Kansas, general use moneys primarily consist of State appropriations, student tuition, and certain interest income. Universities also receive money called "sponsored research overhead" for administering research grants. Although not termed general use moneys in Kansas, these overhead funds are generally available to the universities to use however they wish. The auditors included these moneys in the definition of general use moneys for the purpose of this audit.

To determine how Kansas compares with the peer states in the amount of money available to fund faculty salaries, the auditors gathered fiscal year 1987 financial reports from the University of Kansas, Kansas State University, and each of their respective peer institutions. From those reports they recorded the revenues for each school that were shown as current unrestricted revenue. They contacted officials from each school to try to determine if any of those current unrestricted revenues were earmarked for special purposes and could not be used for faculty salaries or operating expenditures. If any of those revenues were earmarked, the auditors did not count them as available to pay faculty salaries.

The next step involved trying to standardize programs and fund allocation procedures among the several states and peer institutions involved in the audit. For example, some states may appropriate money for fringe benefits such as retirement directly to a central governing board rather to each university. In such cases, the money had to be added to or subtracted from the resources available to the universities to be comparable to the way Kansas handles these moneys. To accomplish this, the auditors relied on adjustments the Regents' universities' staff make during the annual cost studies they conduct at the peer institutions. The adjustments made during the cost studies are for expenditures only. The auditors had to make comparable adjustments to revenues. During this phase, the auditors also subtracted money for utilities, museums, athletics, and the like because resources allocated to these items vary so much among the schools.

Finally, adjustments needed to be made to try to achieve some uniform measure that accounted for the different sizes of schools, levels of courses (undergraduate, graduate, and doctoral), and the mix of disciplines (engineering, business, liberal arts, etc.) taught at the Kansas schools and their peers. The Board of Regents' staff had already developed a system for weighting credit hours at each of the schools to account for these factors. The auditors reviewed that system and used it in their analysis.

The auditors divided total general use money (after adjustments) by the total number of weighted credit hours taught at each school during fiscal year 1987 to arrive at a uniform measure of resources per weighted credit hour.

Their main findings are as follows:

- Compared with their selected peer schools in five states, both the University of Kansas and Kansas State University had less money to spend on faculty salaries and other operating expenses in fiscal year 1987.

- Kansas provides more of the money available for faculty salaries and operating expenses from the State General Fund and less from tuition and other sources than the average of the peers.

- The peer averages are raised significantly by one of the selected peer states. If North Carolina schools are excluded from the averages and only the remaining four peers are considered, the University of Kansas still has less general use money for salaries, but Kansas State University approaches the average.

The auditors found that it is impractical to provide a precise comparison among the schools. Each school uses its resources somewhat differently and each has different ways of allocating and accounting for funds. The auditors made every effort to standardize the revenues available for faculty salaries, but even so, caution should be used when drawing conclusions from the numbers in this report. The numbers shown should not be considered absolute differences, but rather indicators of relative relationships among the schools. Funding differences of one or two dollars per credit hour may not be significant.

Compared With the Average of Their Selected Peers, In 1987 the University of Kansas and Kansas State University Had Fewer Resources Available to Pay Instructional Faculty Salaries

The auditors' review of general use moneys at the peer institutions during fiscal year 1987 showed that both of the Kansas universities generally had less money to fund faculty salaries and other operating expenditures on a per-credit hour basis than the average of the other peer schools. It should be noted that these figures do not take into account the Margin of Excellence program which began in fiscal year 1989.

The table below shows resources available to pay faculty salaries and operating expenses for the two Kansas schools and the average for their peers during fiscal year 1987.

General Use Moneys Available for Fiscal Year 1987
To Fund Faculty Salaries and Operating Expenditures
On a Weighted Credit-Hour Basis

	Peer Average	Kansas Schools	Difference
University of Kansas			
Appropriations	$60.85	$58.95	$1.90
Tuition	29.46	24.82	4.64
Other	9.40	2.85	6.55
Total	$99.71	$86.62	$13.09
Kansas State University			
Appropriations	$91.27	$85.24	$6.03
Tuition	23.94	19.93	4.01
Other	15.41	10.60	4.81
Total	$130.62	$115.77	$14.85

During fiscal year 1987, the University of Kansas had about $13 less per credit hour to spend on faculty salaries and other operating expenditures compared with the average at the peer institutions. The comparison for Kansas State University and its peers shows a similar result. Kansas State had almost $15 less per weighted credit hour to spend on faculty salaries and operating expenditures.

For the University of Kansas, the biggest difference in funding was in tuition and other sources of income such as interest earnings and sponsored research overhead moneys. The difference in General Fund appropriations was about $2 per weighted credit hour.

For Kansas State University, the biggest single difference in funding per weighted credit hour was in General Fund appropriations. Kansas State received about $6 less per weighted credit hour than the average of its peers. However, tuition and all other sources of revenue still account for more than half of the difference in funding between Kansas State and its peers.

Endowments Can Affect The Amount of Money Available For Faculty Salaries

In addition to money universities receive directly from legislative appropriations, tuition, and other sources, they may also receive indirect support from outside sources such as an endowment association. Endowment associations may subsidize or completely fund the salaries of some faculty. The amounts of support schools receive from endowment associations are generally not included in a school's financial statements, and the associations are reluctant to release such information. But the amounts can be significant. For example, the notes to one school's 1987 financial statements indicate that a foundation spent about $11.6 million on behalf of the school for facilities, equipment, salary supplements, and the like, of which only $4.7 million is reflected in the financial statements.

It should be noted that the land grant colleges such as Kansas State show a higher amount of resources per credit hour than the regular doctoral granting institutions like the University of Kansas. This does not mean that these schools are significantly better funded. The reason for the difference is that the two types of universities have different missions. The land grant schools have very large research and extension activities. These activities employ faculty and receive funds but do not generate student credit hours. Therefore, when total funding is divided by weighted credit hours taught at the institution, it appears that the land grant schools have a higher level of funding per credit hour than the other universities.

The estimated amounts it would take to bring the Kansas schools up to the level of the peers in general use funding for salaries and other operating expenditures are about $14.8 million at the University of Kansas and about $12.8 million at Kansas State University. For fiscal year 1989, the first year of the Margin of Excellence program, the University of Kansas received about $3.3 million and Kansas State received just over $3.1 million in additional money for salaries and program enhancements.

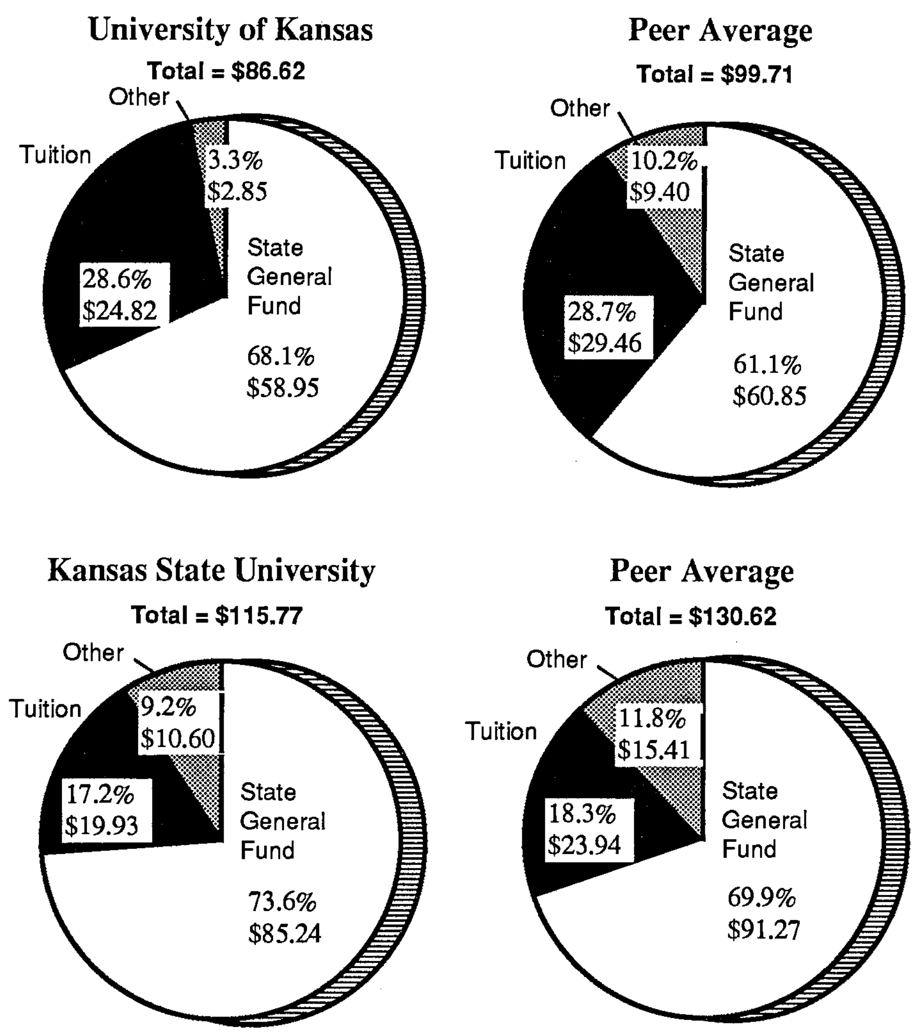
Even Though Kansas Schools Have Less Money to Spend, A Larger Portion of the Money They Have Comes From the State General Fund

The charts on the next page compare the percent of the total money available for faculty salaries that came from each major source— State appropriations, tuition and fees, and other sources.

As the charts show, General Fund appropriations in Kansas provided a larger portion of general use moneys available for faculty salaries and operating expenses than in the peer states. For the University of Kansas, General Fund appropriations accounted for 68 percent of total funding compared with about 61 percent for its peers. For Kansas State University, General Fund appropriations accounted for almost 74 percent of general use funding available for faculty salaries compared with about 70 percent for its peers.

Sources of General Use Money
Available to Fund Salaries & Operating Expenditures

(Percent of Total and Dollars/Weighted Credit Hour)



Compared to the average of their five peer institutions in Colorado, Iowa, North Carolina, Oklahoma, and Oregon, both Kansas universities rely more heavily on State-appropriated dollars as a source of funding faculty salaries. At the University of Kansas, appropriated money (General Fund appropriations and tuition) accounted for 97 percent of available moneys while the peer average was about 90 percent. At Kansas State University, State-appropriated money accounted for about 91 percent of general use moneys compared to a peer average of about 88 percent.

For both Kansas schools, the percent of funding supplied by tuition was about the same as the average at their peer schools. However, other sources of income, including such items as interest income, sponsored research overhead, and Federal Land Grant moneys, provided a larger portion of general use funding at the peers. Part of the difference shown for other sources of revenue may be attributable to the ways in which schools allocate and account for their moneys. In Kansas, certain moneys such as student activity fees are designated by the institution for a specific purpose and are not used for salaries and operating expenses. The auditors found that some schools do not specifically designate some of these funds. Therefore, the auditors counted them as being available to fund salaries and operating expenses at those schools. It should be kept in mind that the peer schools still have these other activities to fund and must use part of their general use moneys for those purposes. The overall impact appears to be that the peer schools may have somewhat more flexibility in how they allocate their money between faculty salaries and other activities.

One of the Peer States Significantly Raises The Average Resources Available for the Peers

During the auditors' review of general use moneys, they noted that both the University of North Carolina and North Carolina State University had the highest level of funding of any of the schools in their respective peer groups. Each school significantly raised the peer averages for their respective groups. The University of Oregon and Colorado State University generally had the lowest level of general use money available for salaries, but they did not affect the averages as drastically as the North Carolina schools. The following table is presented to show the average resources at the peer schools without the North Carolina schools included.

General Use Moneys Available For Fiscal Year 1987 To Fund Faculty Salaries and Operating Expenditures

	Peer Average Without N. Carolina	Kansas Schools	Difference
University of Kansas			
Appropriations	$53.38	$58.95	-$5.57
Tuition	32.61	24.82	7.79
Other	8.22	2.85	5.37
Total	$94.21	$86.62	$7.59
Kansas State University			
Appropriations	$76.37	$85.24	-$8.87
Tuition	25.20	19.93	5.27
Other	13.86	10.60	3.26
Total	$115.43	$115.77	-$.34

Compared with the peer average excluding North Carolina, the University of Kansas still had $7.59 less per weighted credit hour to spend on faculty salaries and operating expenses. Kansas State University, on the other hand, comes very close to the peer average.

The amount of money that comes from each source of revenue changes significantly when North Carolina schools are removed, primarily because both North Carolina schools are heavily state funded. Excluding the North Carolina schools, peer average general fund appropriations per credit hour dropped from nearly $61 to $53.38 for the University of Kansas' peers, and from more than $91 to $76.37 for Kansas State University's peers. In this comparison, Kansas schools received more money per credit hour from the State General Fund than the average of the four remaining peers. Kansas' General Fund appropriations also provided a larger percentage of the general use moneys available for faculty salaries and operating expenses.

The Board of Regents reports that at the time the North Carolina schools were selected as peers their appropriations per capita were about the same as in Kansas and their appropriations per student were less. However, the Regents indicate that during the past 10 years North Carolina has increased state appropriations for operating expenses for higher education by about 175 percent compared with a 93 percent increase in Kansas.

What Factors May Be Contributing to Differences in Salaries Between Kansas Universities and Their Peer Institutions?

To answer this question, the auditors examined differences between Kansas and the peer states for such factors as the level of increase in overall state budget as compared with increases in higher education funding, the structure of the State general fund higher education budget, the number of public higher education institutions, the number of students per capita, state taxes and income per capita, the cost of living, and the appropriations process.

The auditors also examined several variables within the universities' control that can have an impact on the amount of money available for faculty salaries. These factors included the mix of faculty ranks, the mix of disciplines, expenditure patterns by category (instruction, research, academic support, etc...), expenditure patterns within the instruction category (salaries, other operating expenditures), the use of part-time faculty and graduate teaching assistants, and student/faculty ratios.

The auditors' main findings are:

- Although Kansas' per-capita income is somewhat higher than the average of the peer states, Kansas' tax rates are somewhat lower, leaving less money to finance government, including higher education.

- Kansas gives slightly less of its General Fund budget to higher education and has more students per-capita to support.

- Some peer states have more latitude in spending unexpected tuition revenues for salaries and other operating expenses.

- Salary increases in Kansas generally have not been as large as those granted in the peer states.

- Even though average faculty salaries at the University of Kansas are lower, purchasing power is higher than in most peer states because of cost of living differences.

Most other factors the auditors reviewed such as the mix of faculty ranks and differences in patterns of expenditures did not appear to have a significant impact on differences in average salaries. However, the auditors were unable to fully assess the affect that staffing patterns play in accounting for differences in faculty salaries because of a lack of consistent information. These and other findings will be discussed in more detail in the sections that follow.

Kansas Has Lower Per-Capita State Tax Collections Even Though It Has Higher Per-Capita Income Than the Peer States

Of the six peer states, Kansas ranked second in personal income in fiscal year 1987 with an average income of $13,789 per person compared with the average of the peer states of $13,326. However, it was below average in per-capita state taxes. Its per-capita taxes in fiscal year 1987 were $842 compared with the peer average of $865. Therefore, even though the population has a higher income, Kansas has less money available to fund State government, including higher education. If Kansas per-capita taxes were at the peer average of $865, an additional $55.7 million in revenue would be collected.

It should be noted that these figures are based on collections before the reform of the federal tax system and the resulting windfalls in State income taxes. Consequently, Kansas' relative position among the five peer states may have changed significantly. The auditors could not find any published comparative figures that would show Kansas' current position.

Kansas Gives Slightly Less of Its Tax Dollars to Higher Education, And Has More Students to Support

Kansas is slightly below average in the percent of its total State General Fund budget that it allocates to higher education. In fiscal year 1988, Kansas allocated approximately 20.6 percent of its State General Fund budget, or $383.9 million, to higher education compared with a peer state average of 21.7 percent.

In fiscal year 1987, Kansas ranked second of the peer states in the number of full-time-equivalent higher education students per capita. Kansas' 37.6 postsecondary students for every 1,000 people was surpassed only by North Carolina's 38.3 students for every 1,000 people. The peer average was 35.8 students for every 1,000 people.

The intense usage of postsecondary institutions in Kansas places a greater burden on the financial resources available. If Kansas' student population was at the peer average, it would have about 4,400 fewer postsecondary students to support.

Although Kansas gives less of its budget to higher education, more of its higher education budget goes to four-year institutions. In fiscal year 1988, Kansas allocated nearly 85 percent of its higher education General Fund budget, or $325.5 million, to four-year schools and the Board office, compared with the peer average of 74 percent.

This high percentage allocated to four-year institutions may be attributed, at least in part, to the high percentage of students in Kansas' four-year institutions. In 1985, Kansas ranked second among the peers in percent of public higher education enrollment in public four-year institutions. The Kansas percentage was 74.4 percent compared with a peer average of 65.6 percent.

Because it allocates a greater percentage of its State higher education budget to four-year institutions, Kansas allocates a lower percent than the peer states to such categories as scholarships, support for community colleges, vocational technical schools, and private schools. For example, Kansas allocated 14 percent of its State higher education budget to provide support for community colleges and vocational technical schools in fiscal year 1988, the lowest amount of any of the peer states. Allocating a larger portion of State general fund dollars to four-year schools does not necessarily mean that Kansas community colleges and technical schools receive less total funding than similar institutions in peer states. In Kansas, these institutions receive a large part of their funding from local sources. On the basis of total State and local funds, Kansas allocates slightly more than the average of the peer states to higher education.

Fall 1987 Tuition Rates at the Peer Institutions

School	1987/88 Undergraduate Tuition and Fees: Resident	Non-Resident
University of Colorado, Boulder	$1,859	$7,151
University of Iowa	1,564	4,900
University of Oregon	1,556	4,340
University of Kansas	**1,325**	**3,495**
University of Oklahoma	1,087	3,328
University of North Carolina, Chapel Hill	845	4,447
Colorado State University	$1,799	$5,235
Iowa State University	1,564	4,900
Oregon State University	1,506	4,290
Kansas State University	**1,331**	**3,501**
Oklahoma State University	1,050	3,104
North Carolina State University	880	4,220

Some Peer States Have More Latitude in Spending Unexpected Tuition Revenues for Salaries and Other Operating Expenses

The Kansas Legislature places an expenditure limitation on tuition receipts. Therefore, if tuition revenues are greater than expected, the dollars cannot be spent by the universities without subsequent action by the Legislature. If the Legislature does not release the fees, the money cannot be spent in the year it is collected.

Since 1987, the Kansas Legislature has allowed institutions to spend 75 percent of excess tuition revenue they received as a result of unanticipated enrollment increases. The 1987 fee releases were the first to be granted since 1981. Fee releases are not granted for excess tuition resulting from other causes such as a different mix of resident and non-resident students than expected. While Kansas' practice on releasing excess tuition is more restrictive than the other states, it is the only state among the peers that grants supplemental appropriations to replace shortfalls in tuition receipts.

Universities in Colorado, Iowa, and North Carolina are allowed to spend any tuition revenues they collect in excess of the amount projected during the appropriations process. The Oregon Legislature places a limit on the expenditure of tuition, but according to an Oregon legislative fiscal analyst, it always approves fee releases allowing the institutions to spend the extra revenue. The Oklahoma Legislature allows institutions to keep excess tuition receipts for one year.

Salary Increases in Kansas Generally Have Not Been as Large As Those Granted in Other States

The table on the following page shows the percent increases in the average salary at the University of Kansas and Kansas State University between fiscal years 1983 and 1987, and the average and range of salary increases granted at their respective peer schools.

As the table shows, the average salary at both the University of Kansas and Kansas State increased by approximately 21 percent compared with 24 percent and

Salary Increases Based on Peer Studies in Other States May Be Difficult to Match

Iowa is in the second year of a three-year program to increase faculty salaries by 13 percent per year. Average faculty salaries in Iowa are already significantly higher than in Kansas. Iowa's program was based on salary comparisons with 10 peer institutions for each of the three Iowa universities. (No Kansas schools were included in these groups.) The comparison showed that each of the Iowa universities had lower average salaries than any of their peers. The Iowa legislature and the universities agreed that each year the institutions will provide approximately two percent from internal allocations, the Board of Regents will provide approximately five percent from tuition increases, and the state general fund would make up the remaining 6 percent.

Although the original plan was to have annual 13 percent increases, the state has not been able to reach that goal. During the first year, the increases were 11 to 12 percent depending on the university. This year the increases were 10 percent at two of the universities and 10.8 percent at the other.

The program has been fairly successful. One of the universities has moved up to seventh place, one to eighth, and the other is still last but is much closer to tenth place than it was.

	FY83-FY87 Increase In Average Salary	FY83-FY87 Increase In Peer Average	Range of Peer Increases
University of Kansas	21.1%	24.0%	12.6% - 31.8%
Kansas State	21.0%	23.2% [a]	12.2% - 40.0%

(a) Excludes Oregon State University because information was not available.

23 percent average increases at the peer schools. While the differences between the Kansas universities and the peer averages were not large, the differences caused faculty salaries to fall farther behind the peer averages. For example, the average salary at Kansas State fell from 93 percent of the peer average in fiscal year 1983, to 91.4 percent of the peer average in fiscal year 1987.

When Salaries Are Adjusted for the Cost of Living, Rankings and Relationships Among the Schools Change Significantly

According to the American Chamber of Commerce Researchers Association, Lawrence has a lower cost of living than any of the cities in which the University of Kansas' peer institutions are located. (Similar information is not available for all of Kansas State University's peers.) Quarterly, the Association publishes a cost-of-living index based on prices of 59 components such as housing, utilities, and groceries.

The auditors' review of that index showed that, as of the fourth quarter of calendar year 1987, significant differences existed between Lawrence and other cities where peer institutions are located, particularly Chapel Hill and Boulder. With the significant difference in cost of living, the salaries in Lawrence might be expected to be somewhat lower than in the cities with a higher cost of living. The auditors adjusted the average salaries at each of the peer institutions based on the cost-of-living index. The results are shown in the table on the facing page.

Cost of Living Index for Cities in Which the University of Kansas' Peer Institutions Are Located

City	Cost of Living Index	FY 1988 Average Salary	Adjusted Average Salary
Chapel Hill, North Carolina	109.0	$44,300 (1)	$37,350 (3)
Boulder, Colorado	104.7	$42,500 (3)	$37,304 (4)
Iowa City, Iowa	101.6	$43,000 (2)	$38,895 (1)
Eugene, Oregon	100.5	$34,900 (6)	$31,914 (6)
Oklahoma City-Norman, Ok.	93.7	$35,400 (5)	$34,720 (5)
Lawrence, Kansas	**91.9**	**$37,600 (4)**	**$37,600 (2)**
Peer Average Salary		$41,317	$36,973

An index of 100 represents the national average. Differences of three or fewer index points are not statistically significant. But differences of more than three index points indicate a real difference in the cost of living.

As the table on the previous page shows, the average salary at the University of Kansas adjusted for the cost of living was second among the peers, surpassed only by the University of Iowa. On this adjusted basis, the average salary at the University is 1.7 percent above the adjusted peer average of $36,973.

Although the differences for Kansas State University's peers could not be fully assessed, it appears that the impact would not be as dramatic. The auditors were able to gather information for Manhattan and some of the peer cities as of the fourth quarter of 1986. At that time, Manhattan had an index of 95.2 compared with 95.7 in Fort Collins, Colorado, 101.5 in Raleigh, North Carolina, and 105.1 in Ames, Iowa. Therefore, the range in cost-of-living in those cities did not appear to be as wide as the cities where the University of Kansas' peers are located.

Other Factors the Auditors Examined Either Did Not Explain Salary Differences, Or Could Not Be Fully Assessed Because of a Lack of Information

The auditors examined a number of other factors at the Kansas schools and the peers that might explain differences in average salaries. Those factors included the percent of total faculty in each faculty rank (professor, associate professor, etc...) and the distribution of faculty among higher-paid disciplines, such as engineering, compared with the percentage of faculty in lower-paid disciplines. The auditors reviewed how each school allocates its expenditures among various functions such as instruction, research, and administrative support. Within the instruction category, the auditors determined the amount spent on salaries and other operating expenditures. Finally, the auditors examined the workloads of faculty by looking at student/faculty ratios and credit hours taught per faculty member.

Most of these factors did little to explain differences in faculty salaries at Kansas universities and their peer institutions. For example, the table below briefly summarizes the distribution of funds among major functional categories such as instruction, research, academic support, and the like.

General Use Expenditures By Category

	University of Kansas	Peer Average	Kansas State	Peer Average
Instruction	59.2%	58.7%	41.7%	41.3%
Funded Research	4.6%	3.5%	20.1%	18.1%
Public Service	-	-	14.0%	15.3%
Academic Support	13.7%	13.1%	9.7%	8.2%
Student Services	4.1%	6.1%	2.8%	3.4%
Institutional Admin.	9.5%	9.6%	5.3%	7.3%
Physical Plant	8.9%	9.0%	6.4%	6.3%
	100.0%	100.0%	100.0%	100.0%

As the table shows, the Kansas schools are very close to the peer average in the percent of total expenditures spent on instruction. Because instruction is the category from which instructional salaries are paid, it does not appear the schools are allocating money to other functions at the expense of faculty salaries. Also, both Kansas schools spent a higher percentage of their instructional dollars on salaries than the peer schools.

The number of faculty employed could have an impact on salary differences, but the auditors were unable to obtain sufficient data to fully assess this factor. The auditors tried to compare staffing patterns at the two Kansas schools and their peer institutions to determine if the number of faculty per student corresponded to the differences in faculty salaries. They were told by university officials that several important pieces of information needed for that analysis could not be provided on a consistent basis. Among the missing data were the number and full-time equivalency of part-time faculty members and the number of graduate teaching assistants.

Without information on the number of part-time faculty and graduate teaching assistants and a uniform measure of the workloads of part-time faculty, it is not possible to definitely determine if one university has relatively more faculty than its peers. Another weakness in the data is that the number of full-time instructional faculty had to be determined by using data reported by the schools to the American Association of University Professors. The Association asks schools to report only faculty who are employed full-time and whose major regular assignment is instruction. However, many faculty have split teaching/research assignments. Therefore, a faculty member at one university who is assigned only 60 percent to instruction could be reported and compared with faculty at other institutions who are assigned 90 percent to instruction. Therefore, some differences in ratios may not be meaningful. However, it still may be useful to look at full-time faculty to determine if a particular university appears to be significantly different from its peers.

On the basis of full-time instructional faculty alone, Kansas State University has lower ratios of students to faculty and appears to teach fewer credit hours per full-time faculty member than the average of its peers. The following table shows this information for fiscal year 1987.

	University of Kansas	Peer Average	Kansas State	Peer Average
Students/Full-time Faculty	25.5/1	23.6/1	19.7/1	22.5/1
Weighted Credit Hours Per Full-time Faculty	1,207	1,256	1,018	1,227

Kansas State's ratio of 19.7 students per full-time instructional faculty member is the lowest of any of its peer institutions. The University also generates a significantly lower number of weighted credit hours per full-time faculty member than the average of its peers—1,018 compared with 1,227. On the surface, this would appear to be an indication that Kansas State has proportionally more instructional faculty than its peer institutions. If this is true, it would help to explain lower salaries at Kansas State University because there would be proportionally more faculty to support with the same number of dollars. If Kansas State had the same student/faculty ratio as the peer average they would have had 756 full-time faculty, 108 fewer than it had in 1987.

However, other schools may employ a larger number of part-time faculty and graduate teaching assistants than Kansas State, thereby reducing the number of full-time faculty they employ. This scenario would make the number of students and credit hours per full-time faculty member appear to be higher at those schools. The opposite could also be true. Kansas State may employ a larger number of part-time faculty and graduate teaching assistants than the peers. In that scenario, Kansas State's number of students and credit hours per full-time faculty would be inflated. Without good information about part-time faculty and graduate teaching assistants, it was impossible for the auditors to take this analysis to a meaningful conclusion.

The same analysis for the University of Kansas does little to explain why its salaries are lower than its peers. As the table shows, the University appears to have somewhat fewer full-time faculty per student than the average of its peers. But once again, information on part-time faculty and graduate teaching assistants is necessary to fully compare the schools.

Recommendation

If the Board of Regents continues to use peer comparisons for funding requests, it should work with the peer universities to collect good, comparable data on part-time faculty and graduate teaching assistants so that differences in expenditures or staffing patterns can be fully explained.

APPENDIX A

Agency Responses

On September 10, 1988, copies of the draft audit report were sent to the Kansas Board of Regents, the University of Kansas, and Kansas State University, for review and comment. Those written responses are included in this appendix.

KANSAS BOARD OF REGENTS
SUITE 609 • CAPITOL TOWER • 400 SW EIGHTH • TOPEKA, KANSAS 66603-3911 • (913) 296-3421

RECEIVED
SEP 20 1988
LEGISLATIVE POST AUDIT

September 19, 1988

Mr. Meredith Williams
Legislative Post Auditor
Legislative Division of Post Audit
109 W. 9th, Suite 301
Topeka, KS 66612

Dear Mr. Williams:

I have reviewed the draft copy of your performance audit report, Faculty Salaries In Kansas and the Resources Committed To Pay Them. Your staff is to be complimented on the professional and thorough manner in which they have conducted this audit. We believe they have reached several important and valuable conclusions, which can be of use to the Post Audit Committee and to 1989 legislative consideration of the Margin of Excellence. We believe this audit reaffirms the fundamental conclusion of our peer comparisons, that our institutions have less to spend per student than do the peers. We offer several comments and observations in the succeeding paragraphs. However, they are offered to complement, rather than criticize, the observations of the audit team.

The considerable influence of North Carolina upon peer computations is accurately reported by the audit team and the magnitude of the North Carolina influence has increased over time. However, it was not present when the peers were initially selected, a fact reflected in national reports on appropriations per capita and appropriations per student. North Carolina was originally selected on the basis of institutional similarity. It therefore seems inappropriate to discontinue peer comparisons with North Carolina simply because the state has made a priority of higher education and the result causes our peer comparisons to appear low. We should learn from their lead rather than dismiss them as being better than us.

A major audit finding is that Kansas provides more of the money available for faculty salaries from the State General Fund and less from tuition and other sources than the peer average. I believe two factors are extremely relevant to this finding. First, the percentage of total expenditures from tuition in Kansas is approximately equal to the peer average, a factor displayed graphically by the audit. Secondly, the Regents' Margin of Excellence plan includes approximately 8 percent annual increases in overall tuition revenues during each of the three years of that plan. The Regents have adopted FY 1989 tuition increases of 3 percent for residents and 9 percent for nonresidents and FY 1990 increases of 5 percent for residents and 12 percent for nonresidents. Consequently, the ranking of Kansas tuition to the peers is likely to be significantly different in the fall of 1990, than was the fall 1987 rankings displayed in the audit.

The auditors observe on page 9 of the draft that Kansas treats as restricted use expenditures several activities, which the peers consider general use. Certainly institutional practices vary in this regard. However, the peer comparisons compensate for such differences, so the relative funding computations are made on a comparable basis. Further, it seems unlikely that expanding the activities considered as general use expenditures would significantly increase the overall funding available for salaries and other operating expenditures. Limited increases in flexibility would apparently have little overall significance, as no evidence suggests our restricted use funded activities are more generously financed than our general use activities.

Cost of living in Kansas and peer university cities was considered by the auditors. We agree that Kansans enjoy a favorable cost of living climate. I believe this climate may be an important factor in retaining existing personnel. However, I do not believe it is a tool from which to make our salaries more saleable. Our experience indicates that gross salary is the factor most relevant when recruiting faculty and cost of living is typically not a compelling part of the discussion.

We appreciate the opportunity to review the audit and commend your team for their thoroughness in reviewing a very complex issue.

Sincerely,

Stanley Z. Koplik
Executive Director

SZK:jp

cc: Chancellor Budig
President Wefald

The University of Kansas

Office of the Chancellor

September 19, 1988

RECEIVED
SEP 20 1988
LEGISLATIVE POST AUDIT

Mr. Meredith Williams
Legislative Post Auditor
109 West 9th, Suite 301
Mills Building
Topeka, Kansas 66612-1285

Dear Mr. Williams:

Thank you for the recently completed performance audit report, Faculty Salaries in Kansas and the Resources Committed to Pay Them. While the audit results seem to be essentially reasonable and objective, we have some reservations and questions. The first five focus on general areas of concern and the remaining five relate to the more mechanical elements of the audit.

1. North Carolina Issue. While we recognize that data from the two North Carolina universities raise the peer averages for both the University of Kansas and Kansas State University, to exclude North Carolina simply on that basis seems arbitrary and capricious. It is very important to recognize that when North Carolina was selected as a peer, appropriations per capita were close to those of Kansas and appropriations per student were less. Since that time, appropriations in North Carolina have far exceeded those in Kansas. While these facts are mentioned in the third paragraph on page 10 of the audit, they need to be emphasized.

2. Peer Schools. Page 3 of the audit refers to the fact that only Oregon and Oklahoma indicate that they routinely use Kansas schools as peers when doing comparative studies. It is our position that the schools selected by the Board of Regents as peers for the University of Kansas are truly peers. It is very likely that schools selected by Colorado, North Carolina, and Iowa for various comparative purposes are more likely to be "aspirational" peers than true peers.

3. Margin of Excellence. The first paragraph of page 6 discusses FY 1987 funding, but then notes that these figures do not take into account Margin of Excellence funds which begin in FY 1989. No mention is made of FY 1988 faculty salary increases which, at a rate of 1.5% led to a further deterioration in faculty salary funding compared to the peer average.

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4. Faculty Salary Support - Endowment. In the box on page 7 the report notes how endowment funding can impact faculty salaries. University of Kansas faculty salary data for the AAUP report includes faculty salary supplements from endowed funds. If these supplemental amounts were to be excluded, the University of Kansas faculty salaries would fall even further below peer average salaries.

5. Higher Education Budget. We are very concerned about the statements on page 12 of the report which refer to the percentage of the state budget going to four year institutions. Distribution of higher education funding is a sensitive and complex issue in Kansas. We believe that the statements in this section of the document could be construed to endorse an increase in tuition and a reduction in state support for four year institutions.

6. Page 1 - How is the $90 million cost figure for the three-year Margin of Excellence proposal computed?

7. Page 6 - Are the peer average figures simple or weighted? What is the definition of "resources available"?

8. Page 7 - How was the estimated $14.8 million figure for the University of Kansas derived?

9. Page 12 - The Fall 1987 tuition rates for North Carolina State University are missing.

10. Page 14 - It is our experience that when recruiting faculty the focus is on absolute salary and compensation dollars, not relative cost-of-living or federal and state tax-rate adjusted dollars.

We appreciate this opportunity to respond to the audit report. If you have any questions or need further information from the University of Kansas, please contact Deb Teeter, Institutional Research and Planning, 864-4412.

Respectfully,

Gene A. Budig
Gene A. Budig
Chancellor

GAB:dw

KANSAS
STATE
UNIVERSITY

Office of the President
Anderson Hall
Kansas State University
Manhattan, Kansas 66506
913-532-6221

September 16, 1988

RECEIVED
SEP 20 1988
LEGISLATIVE POST AUDIT

Mr. Merideth Williams
Legislative Post Auditor
109 West 9th, Suite 301
Mills Building
Topeka, KS 66612-1285

Dear ~~Mr. Williams:~~ Merideth:

Thank you for sharing the draft of your audit report, Faculty Salaries in Kansas and the Resources Committed to Pay Them. We believe the report was done with care and objectivity, and commend the staff not only for producing a thorough and excellent report but for conducting this difficult study with great professionalism and courtesy.

There are a few instances where we believe some clarification may be helpful to the reader.

1. We appreciate the fact that the staff was asked to provide analyses which exclude results from North Carolina--even though such an exclusion seems to be inappropriate. We believe the reader might be better able to interpret the ensuing results if the auditors had noted that faculty compensation at North Carolina State, while the highest among the five peer universities, ranked that institution only 25th among the nation's 50 land-grant universities.

2. The last paragraph in the box on Page 3 is correct but, we believe, misleading. Institutions commonly choose "comparison institutions" on the basis of their aspirations rather than on the basis of objective similarity. Technically, these are not "peers", although they are often identified in this way. The peer universities selected for the Kansas institutions are not the institutions we most admire and would like to emulate; they are the universities which, on objective bases, are highly similar to the corresponding Kansas university. (See Rawson, T., Hoyt, D., and Teeter, D. "Identifying Comparable Institutions". Research in Higher Education, 18, 1983, 299-310).

3. The first paragraph on Page 6 may mislead readers. It is true that the figures do not take into account funding for the FY 1989 Margin of Excellence (which is expected to improve our position somewhat relative to peers). It is also true (but not mentioned) that the figures fail to take into account FY 1988 funding. The salary figures published by Academe, which the auditors had available to them, make it clear that the small increases which the Regents' universities received in FY 1988 significantly weakened our competitive position.

4. Although the auditors explained why the figures given on Pages 6 and 9 are misleading for land-grant universities, they did not attempt to make an appropriate adjustment. Given the data reported on Page 15, it appears that they should have been able to do this.

5. We believe that the third sentence on Page 11 represents a serious overgeneralization. It is based on a cost-of-living adjustment for Lawrence and for the cities in which the University's peers are located. The auditors were unable to obtain the necessary data for Kansas State and its peers, but acknowledged that earlier data suggested a different conclusion than the one stated in this report. A recent study conducted by Nevada economists reported that, when average faculty salaries were adjusted for both cost-of-living and state/local taxes, Kansas State ranked 48th among the 50 land-grant universities.

6. Given the substantial difficulties which have been encountered in determining the number of FTE instructional positions available to a given university, acknowledged on Page 16, we question the wisdom of providing the analyses shown on that page or of reaching the conclusion (top of Page 17) that Kansas State would have 108 fewer full-time faculty if it had the same student/faculty ratio as its peers. This conclusion assumes that dependable data were collected, an assumption which the auditors themselves refused to make. We are making a careful internal study of related questions, and so are particularly sensitive to published reports which do not take into account the complex, but critically important, considerations which are involved.

Again, thank you for the opportunity to respond. I have a high personal regard for the conscientious and able analysis of your staff, and of their personal and professional integrity.

Sincerely,

Jon Wefald

Jon Wefald
President

dc