

DOCUMENT RESUME

ED 305 011

HE 022 330

AUTHOR Caruthers, J. Kent; Marks, Joseph L.
TITLE State Funding of Higher Education for Quality Improvement in the SREB States.
INSTITUTION Southern Regional Education Board, Atlanta, Ga.
PUB DATE 88
NOTE 64p.; For related documents, see HE 022 327 and HE 022 331.
AVAILABLE FROM Southern Regional Education Board, 592 Tenth St., NW, Atlanta, GA 30318-5790 (\$8.00).
PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Access to Education; *Educational Finance; Educational Improvement; *Educational Quality; Expenditures; *Financial Support; Full State Funding; *Higher Education; Income; Questionnaires; *State Aid; State Colleges; Student Financial Aid; Teacher Salaries
IDENTIFIERS *United States (South)

ABSTRACT

The question of whether the quality improvement rhetoric has led to changes in state funding levels and funding strategies in the Southern Regional Education Board (SREB) states is considered. The information reported here is based on an extensive review of education finance officers, and on-site visits to about half of education finance officers, and on-site visits to about half of the SREB states. The following topics are addressed: (1) the link between quality improvement and funding (regional and national reports, state reports, and state goals for improved funding); (2) analysis of funding levels (alternative ways to assess funding effort, ability to pay, willingness to pay, demand for services, higher education's relative priority, actual support, and summary of overall funding levels); (3) analysis of revenue patterns and practices (types of revenue and their effect on access and quality, and the mix of revenue sources); (4) analysis of expenditure patterns (key expenditure areas and their possible impact on access and quality improvement, and analyses of spending by function and by object, faculty salary spending, and student financial aid); (5) changes in state funding processes and practices (efforts to incorporate quality improvement in formula approaches, enrollment recognition approaches, new or expanded formula categories, funds appropriated outside of formula structures, and summary of budgetary attempts to influence quality); and (6) closing observations (changes in state support for higher education, shifts among revenue sources, shifts in expenditure patterns, and changes in state-level funding methods). Definitions of revenue and expenditure categories and the survey form are appended. Twenty-five tables report enrollment, appropriation, expenditure, revenue and other trend data. Contains 15 references. (KM)

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HIGHER EDUCATION FOR QUALITY IMPROVEMENT
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**STATE FUNDING OF
HIGHER EDUCATION FOR QUALITY IMPROVEMENT
IN THE SREB STATES**

**J. Kent Caruthers
Joseph L. Marks**

**Southern Regional Education Board
592 Tenth Street, N.W.
Atlanta, Georgia 30318-5790**

1988

\$8.00

PREFACE

The recent history of higher education can be described in terms of its phases. The mid-to-late 1960s have often been described as the "golden growth phase." The 1970s was a phase emphasizing planning for retrenchment and meeting accountability standards. The current phase is best characterized by its growing concern for improved quality, especially for access to quality undergraduate education.

In the 1980s, the Southern Regional Education Board (SREB) and national and state commissions have expressed concern about the need for improved quality in higher education. Through the pronouncements of governors, state boards, and special study commissions, state after state has called for increased quality and better funding.

Increased quality in higher education is desirable to almost everyone--students, employers, the general public, elected officials, and institutional leaders. While colleges and universities have some opportunity to improve their quality at no additional cost, conventional wisdom and many recent reports suggest that significant increases in quality generally require increased funding or modified funding methods.

The key question this report considers is:

Has the quality improvement rhetoric led to changes in state funding levels and funding strategies in the SREB states?

This report is based on (1) an extensive review of background data and a 1987 SREB survey of the state higher education finance officers, whose cooperation and input are gratefully acknowledged, and (2) site visits to about half of the SREB states.

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1. THE LINK BETWEEN QUALITY IMPROVEMENT AND FUNDING

Regional and National Reports

The Southern Regional Education Board (SREB) has been at the forefront, both regionally and nationally, in the call for quality improvement. In 1981, SREB issued *The Need for Quality* which suggested that establishing higher entrance standards and improving the preparation of high school graduates were a vital first step in strengthening higher education.¹

It also suggested that duplicative and ineffective programs and certain bureaucratic practices that serve vested interests more than educational necessities may tie up funds that could be used to finance improvements.

In 1983, SREB issued *Meeting the Need for Quality*. This report evaluated the progress which had been made to date and included recommendations that states address barriers to tightening admissions standards such as inflexible enrollment-driven funding formulas. It also noted that some quality improvements will require additional financing, while some could lead to cost savings.²

Four years after its initial report, SREB released *Access to Quality Undergraduate Education* advancing 15 recommendations on how the states and the institutions could increase the quality of the undergraduate experience. Many of the recommendations focused on setting minimum entrance and progress standards and criteria for students. Some also concerned funding policies and practices. For example, SREB recommended that states support remedial programs through a separate category of state appropriations.³

SREB continued this theme in its 1986 report, *Getting Students Ready for College*. This report set forth fundamental steps that states can take to prepare high school students to meet higher college entrance standards. Considered most important was the initiation of a new form of student assessment--student preparedness testing. Again SREB noted that states could encourage colleges and schools to implement quality-improvement initiatives through budgetary policies.⁴

A number of other prominent educational organizations have also stressed the quality improvement theme and issued reports. Perhaps the best known among these is the 1984 National Institute of Education's (NIE) *Involvement in Learning*. The NIE report found that American higher education had accomplished much, especially in making advanced learning available to a majority of high school graduates, but the study group called for:

- College administrators to allocate more resources to the instruction of first-year and second-year undergraduate students.
- Institutional administrators to provide adequate fiscal support to co-curricular programs such as lecture series in order to maximize student involvement.

- State legislatures and boards of trustees to reverse the decline in the purchasing power of faculty salaries by increasing them at rates higher than inflation.
- State agencies (and others) to focus their funding strategies on how to facilitate greater student learning and development.⁵

The Education Commission of the States (ECS) found in a 1987 report entitled *Choosing Quality: Reducing Conflict Between the State and the University*, that "perhaps the most promising new form of initiative are state incentive grants designed to create university initiatives toward quality." Incentive funding was viewed favorably since it allowed the universities to retain significant autonomy and would likely lead to greater diversity among quality programs.⁶

State Reports

Many state leaders responded to the regional and national challenges to improve the systems of higher education. Their responses have taken a number of forms, including more emphasis on program evaluation, raising entry standards, assessing student achievement, and, as will be described in detail in a subsequent chapter, changes in funding systems by de-emphasizing the rewards for enrollment growth and by increasing funding levels. Another response, and at the same time an important statement of quality improvement themes, is found in state studies by special study groups appointed by some combination of the governor, state legislature or statewide higher education board.

Kentucky was among the first of the SREB states during this era to address excellence through a special study commission. Created by the Council on Higher Education, the Committee on Higher Education in Kentucky's Future (also known as the Prichard Committee because of Ed Prichard, its founding chairman) developed a series of wide ranging recommendations built around the title theme, *In Pursuit of Excellence*. The report encouraged creation of a "fund for academic excellence" that would be used for scholarships, endowed chairs, faculty awards, and various incentive grants. The committee also asked that the governor appoint a task force to devise method for increasing appropriations.⁷ Subsequently, in 1985, the Council on Higher Education developed its first strategic plan. It too called for quality improvement initiatives in the form of centers of excellence and endowed chairs. As a result, an initial set of such programs, which were selected through a strictly competitive process, was funded by the governor and legislature for the 1986-1988 biennium.

In Georgia, the governor, legislature, and Board of Regents jointly appointed a Study Committee on Public Higher Education Finance in 1981. After a year and a half of study and deliberation, the Study Committee issued its report, *Formula for Excellence*, which called for increased overall funding, incentives for better management and sponsored research, and creation of new funding categories for remedial education and quality improvement.⁸

Also in 1981, Tennessee's Ninety-Second General Assembly adopted a resolution which mandated a comprehensive study of all levels of public education in the state. Twenty-five years had elapsed since a similar previous study had been authorized. The major goal of the study was to develop a long-range educational plan covering all levels of education.

Among the recommendations were 90 concerning higher education and fully one-third concerned funding.

The Florida Board of Regents created the Regents Study Commission on Funding for Excellence in 1984. The Commission offered 15 recommendations concerning excellence, funding, and financial management processes. Topics included faculty salaries, endowed chairs, student fees, financial aid, and funding incentives. An entire chapter of the Regents' report concerned how private support for public higher education could "produce the margin of excellence for instruction, research, and public service."¹⁰

In *The Virginia Plan for Higher Education, 1985*, the Virginia Council of Higher Education adopted a "10 point plan" to pursue the goal of making Virginia's colleges and universities "among the best in the nation." Eight of the 10 points address increasing funding levels and redirecting funds, including the recommendation of a competitive grant set-aside, fully funding of the budget guidelines, and an equipment trust fund.¹¹

The Select Committee on Higher Education in Texas was established by the state legislature in 1986 to develop proposals to guide the state's public system of higher education into the 21st century. Although much of its work focused on management and governance, the Select Committee noted an over-reliance on a funding formula that provides no reward or incentive for excellence. In its place, the Select Committee encouraged a funding method with a base funding component determined by formulas reflecting institutional roles and missions, an incentive funding component for academic improvement and managerial innovation, and a special initiative funding component for academic programs.¹²

The South Carolina Commission on Higher Education issued a special report in 1987 in which it proposed "a bold new initiative to move South Carolina's system of higher education to the cutting edge of excellence." This report, entitled *The Cutting Edge: Higher Education's Initiatives for Excellence*, addressed excellence in students, instruction, research for economic development, planning, and assessment. It concluded that such "initiatives in excellence in higher education require an immediate additional commitment of resources" for scholarships, endowed professorships, research incentive grants, and other programs.¹³

Under the title *Oklahoma's Secret Crisis*, the Oklahoma Higher Education Task Force issued recommendations in 1987 concerning quality, governance, funding, program duplication, and economic impact. The Task Force was created by an act of the state legislature and included both gubernatorial and legislative appointees. The Task Force found that "universal access to higher education in Oklahoma has been achieved" and called for "a fundamental commitment ... to achieve universal quality." In addition to recommending that funding be increased to the national average, the report called for new tuition policies and allocation incentives.¹⁴

State Goals for Improved Funding

While the various reports contain a variety of recommendations and strategies for improving quality, each also addresses funding. These reports recommend both the provision of more adequate resources and the implementation of new funding approaches to encourage quality improvement.

Further evidence that many states believe that funding is a necessary ingredient of quality can be seen in several examples of state goals for overall funding levels.

- Florida's governor and cabinet, sitting as the State Board of Education, established a goal to achieve the upper quartile level in the nation in faculty salaries, overall funding, and student achievement.
- Georgia's study committee established what is likely a more realistic goal of funding its university system at the upper quartile in the SREB region, a level that it has reached and maintained.
- Texas replaced an earlier goal that faculty salaries should be at the regional average and replaced it with the goal of a state faculty salary average at the average of the 10 largest states in the nation.
- Virginia's faculty salary target is now at the 60th percentile of its peer group rather than just at the midpoint.

Funding level adjustments and the budget process are common ways for state leaders to try to strengthen their systems of higher education since the budget often is both the chief planning and the chief policy tool of the state. Although governors, legislators, and state board members do not exercise direct influence in the classroom to strengthen undergraduate education, they can create incentives and provide the necessary resources for quality improvement through the budget process.

2. ANALYSIS OF FUNDING LEVELS

The primary funding-related question related to quality improvement is whether the state per-student funding levels for higher education have been improving with respect to both national averages and general price level increases. This support level is a function of numerous factors, only some of which can be directly influenced by state leaders.

Alternative Ways to Assess Funding Effort

There are a number of different yet valid perspectives when assessing how well a state supports its system of higher education. Depending on how a question is asked, one can find answers that will give different impressions of state effort. In this assessment, five different measures of state support are considered:

- ability to pay;
- willingness to pay;
- demand for services;
- relative priority;
- actual support levels.

Each perspective is important in gaining a complete understanding of the financial relation between a state and its system of higher education.

Ability to Pay

Those officials who have responsibility for developing the overall state budget, including the higher education budget, inescapably face the question of the ability of the state's citizens to pay for programs and services. No matter how important the needs, the amount to be spent is limited by the amount that the state's taxpayers can contribute to the state treasury. A state's ability to pay is influenced by both the earnings of its citizens and the income-producing ability of its human and natural resources and other assets, such as industrial plants and equipment, or a geography and atmosphere attractive to tourists.

Per Capita Income

The measure "per capita income" considers a state's ability to support its colleges and universities in terms of the current earnings of the state's citizens. With the lower per capita income levels generally found in the SREB states, this measure is cited frequently by state political leaders to justify current spending rates that also are lower than average. The SREB region gained on the national average for per capita income in the early 1980s, but began to lose ground toward the end of the 1980 to 1986

period, primarily due to the relatively low per capita income gains in the oil- and gas-producing states of Louisiana, Oklahoma, and Texas (see Table 2-1). The latest observation shows the SREB states together to be at 89.2 percent of the national average. Over the period, eight of SREB's 15 states (Arkansas, Florida, Georgia, Maryland, North Carolina, South Carolina, Tennessee, and Virginia) had per capita personal income growth rates greater than the national rate, but only three exceed the current national average for per capita income (Florida, Maryland, and Virginia).

Table 2-1
TRENDS IN STATE PER CAPITA INCOME *

	1980	1981	1982	1983	1984	1985	1986	Percent Change
United States	\$9,919	\$10,949	\$11,481	\$12,098	\$13,114	\$13,907	\$14,641	47.6
SREB Region	8,905	9,938	10,453	10,972	11,853	12,559	13,065	46.7
SREB Region as Percent of U.S.	89.8%	90.8%	91.0%	90.7%	90.4%	90.3%	89.2%	--
Alabama	7,704	8,463	8,829	9,355	10,115	10,760	11,336	47.1
Arkansas	7,470	8,333	8,624	9,117	9,955	10,553	11,073	48.2
Florida	9,765	10,820	11,322	12,147	13,033	13,897	14,646	50.0
Georgia	8,350	9,305	9,870	10,679	11,805	12,638	13,446	61.0
Kentucky	8,018	8,862	9,225	9,451	10,340	10,759	11,238	40.2
Louisiana	8,682	9,822	10,249	10,458	10,946	11,267	11,193	28.9
Maryland	10,809	11,972	12,754	13,656	14,849	15,948	16,864	56.0
Mississippi	6,927	7,668	8,005	8,314	8,916	9,279	9,716	40.3
North Carolina	7,998	8,879	9,282	9,986	11,001	11,685	12,438	55.5
Oklahoma	9,395	10,676	11,354	11,152	11,725	12,173	12,283	30.7
South Carolina	7,587	8,377	8,708	9,328	10,171	10,749	11,299	48.9
Tennessee	8,027	8,804	9,187	9,726	10,635	11,284	12,002	49.5
Texas	9,195	11,120	11,686	11,935	12,780	13,488	13,478	37.6
Virginia	9,818	10,878	11,604	12,418	13,498	14,477	15,408	56.9
West Virginia	7,919	8,522	8,981	9,101	9,680	10,079	10,576	33.6

* Total personal income divided by total population.

SOURCE: U.S. Bureau of Economic Analysis, "State Personal Income, 1969-86: Revised Estimates," Survey of Current Business, Vol. 67, No. 8 (Washington, DC: U.S. Government Printing Office, 1987).

Tax Capacity

A related ability to pay measure is "state tax capacity." This measure recognizes that a state's ability to pay for services is based on more than personal income alone. For instance, a state may have significant levels of petroleum exports or an active tourist industry whose economic value to the state is not completely reflected by measures of per capita income. Tax capacity for a state is estimated by multiplying the national average tax rates by the state's taxable base for each major tax source. On this measure of tax capacity Louisiana ranks much higher than on the per capita income measure, due to its petroleum-based economy (see Table 2-2). During the past eight years, the SREB states almost reached parity with the national average in tax capacity per capita, but then began to lose ground, primarily due to relatively low per capita tax capacity increases in Alabama, Arkansas, Kentucky, Louisiana, and West Virginia. Eight of the 15 states (Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Tennessee, Texas, and West Virginia) experienced tax capacity growth rates lower than the national average; the SREB region remains about 4 percentage points off the national average.

Table 2-2
TRENDS IN STATE PER CAPITA TAX CAPACITY*

	1980	1981	1982	1983	1984	1985	1986	1987	Percent Change
United States	\$825	\$867	\$949	\$1,029	\$1,112	\$1,176	\$1,305	\$1,408	70.7
SREB Region	778	816	910	1,016	1,099	1,145	1,264	1,350	73.5
SREB Region as Percent of U.S.	94.3X	94.1X	95.9X	98.7X	98.8X	97.4X	96.9X	95.9X	—
Alabama	627	660	719	767	818	880	977	1,028	64.0
Arkansas	644	671	747	840	873	913	1,009	1,028	59.6
Florida	842	866	947	1,041	1,156	1,217	1,371	1,501	78.3
Georgia	685	705	778	838	931	1,022	1,159	1,267	85.0
Kentucky	693	736	789	844	910	927	1,023	1,070	54.4
Louisiana	850	897	1,035	1,200	1,259	1,255	1,357	1,394	64.0
Maryland	825	857	941	1,009	1,106	1,164	1,298	1,521	84.4
Mississippi	578	607	659	737	786	802	905	985	70.4
North Carolina	677	708	754	819	906	1,020	1,160	1,239	83.0
Oklahoma	875	937	1,106	1,311	1,405	1,351	1,442	1,563	78.6
South Carolina	635	664	714	774	826	888	996	1,098	72.9
Tennessee	677	701	752	813	860	944	1,062	1,140	68.4
Texas	958	1,011	1,168	1,360	1,452	1,454	1,555	1,612	68.3
Virginia	759	803	899	969	1,040	1,124	1,259	1,352	78.1
West Virginia	751	800	891	926	1,023	1,024	1,128	1,056	40.6

* National average tax rates multiplied by the taxable base for every major tax source.

SOURCE: Kent Halstead, State Profiles: Financing Public Higher Education, 1978 to 1987
(Washington, D C.: Research Associates of Washington, 1987)

Regional Summary

On both types of measures of ability to pay, the SREB states are 5 to 10 percent below the national average. Only two states--Maryland and Florida-- exceed the national average on both measures. Over the time period examined, the region's growth in ability to pay has been sufficient only to maintain pace with national growth but not to close the gap. Thus, any improvement in college and university funding during this period would have to come from either increased tax efforts or a greater priority on higher education.

Willingness to Pay

The ability to pay for higher education services (from either current personal income or other forms of wealth) only partially explains how much state budget makers have available to appropriate to their colleges and universities. Of equal importance is the overall willingness of a state to tax itself to pay for any kind of public service. Such measures as "taxes as a percent of personal income" and other measures of tax effort are used to evaluate "willingness to pay."

State Tax Revenues Per \$1,000 of Personal Income

The most common measure of willingness to pay is the ratio of state tax collections to the state's personal income. This computation is used to compare an individual state's ratio over a number of years to see if tax revenues are keeping pace with economic growth and to compare tax effort across states. When a state ranks below its peers or below its own historic levels, proponents of publicly funded programs are apt to claim that the state's citizens are not paying their fair share for necessary services. On the other hand, legislators are less likely to be willing to increase taxes further whenever a state ranks comparatively high. From 1980 to 1986, in 9 SREB states (Alabama, Arkansas, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Oklahoma, and West Virginia) residents paid a higher proportion of their personal incomes on state taxes than the national average. However, the average for the region dropped slightly from 95 percent to 94 percent of the national average over the period (see Table 2-3).

Table 2-3
TRENDS IN STATE TAX REVENUES
PER \$1,000 OF PERSONAL INCOME*

	1980	1981	1982	1983	1984	1985	1986	Percent Change
United States	\$60.81	\$59.56	\$61.07	\$60.49	\$63.46	\$64.85	\$64.61	6.3
SREB Region	57.86	57.09	17	57.01	58.28	61.51	60.70	4.9
SREB Region as a Percent of U.S.	95.1%	95.9%	95.3%	94.3%	91.8%	94.9%	93.9%	--
Alabama	61.77	64.62	63.06	63.14	66.97	67.56	65.24	5.6
Arkansas	67.87	62.03	63.52	63.10	65.96	70.07	69.55	2.5
Florida	50.00	48.18	46.86	47.66	50.91	52.74	53.34	6.7
Georgia	59.57	58.27	58.80	57.20	57.33	59.93	59.91	0.6
Kentucky	72.99	69.88	73.07	74.10	72.69	75.10	76.75	5.2
Louisiana	65.32	66.42	69.60	65.21	64.12	76.30	72.05	10.3
Maryland	60.44	58.01	58.60	59.07	61.13	61.69	62.04	2.7
Mississippi	71.87	71.59	71.14	71.61	75.12	74.70	75.16	4.6
North Carolina	68.15	64.85	67.83	66.33	68.30	70.92	70.85	4.0
Oklahoma	62.13	67.26	73.92	71.01	68.54	74.10	72.92	17.4
South Carolina	70.53	68.43	69.86	69.62	71.13	76.22	75.67	7.3
Tennessee	51.08	47.95	50.06	49.23	49.95	55.73	56.76	11.1
Texas	48.11	49.78	50.64	47.78	47.82	52.21	49.47	2.8
Virginia	52.05	51.12	50.80	51.47	53.42	54.14	54.36	4.4
West Virginia	78.87	76.00	83.37	82.27	90.71	95.08	91.13	15.5

* Total state tax revenues divided by total personal income in thousands of dollars.

SOURCES: U.S. Bureau of the Census, State Government Finances in 1980 (1981) and 1981 (1982) and 1982 (1983) and 1984 (1985) and 1985 (1986) and 1986 (1987); U.S. Bureau of Economic Analysis, "State Personal Income, 1969-86: Revised Estimates," Survey of Current Business, Vol. 67, No. 8 (Washington, D.C.: U.S. Government Printing Office, 1987).

Tax Effort

An alternative but more complex measure of willingness to pay is also useful to consider. Using the overall tax capacity of the state, tax effort is calculated as the ratio of tax collections to tax capacity indexed to the national average. On this measure the SREB states are closing the gap between their efforts and the national average (see Table 2-4). Twelve of the 15 states (all but Maryland, Mississippi, and Tennessee) have higher tax effort measures than at the start of the decade. Nonetheless, only West Virginia is currently above the national average.

Table 2-4
TRENDS IN STATE TAX EFFORT*

	1980	1981	1982	1983	1984	1985	1986	1987	Percent Change
United States	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	--
SREB Region	78.9	81.9	81.1	80.6	80.9	81.5	80.6	83.7	6.1
SREB Region as a Percent of U.S.	78.9%	81.9%	81.1%	80.6%	80.9%	81.5%	80.6%	83.7%	--
Alabama	82.0	85.7	85.2	90.6	87.1	86.6	88.6	90.7	10.6
Arkansas	80.2	81.4	85.5	78.9	81.2	82.7	84.1	92.3	15.1
Florida	73.4	78.2	73.8	73.3	72.1	75.1	73.1	74.0	0.8
Georgia	89.4	95.7	96.2	97.3	95.8	92.6	89.8	89.6	0.2
Kentucky	82.6	86.7	88.6	88.4	88.5	90.8	88.7	90.0	9.0
Louisiana	77.2	82.2	77.7	76.7	81.8	81.3	78.8	90.4	17.1
Maryland	106.1	109.3	108.6	107.4	106.2	107.2	106.5	97.5	-8.1
Mississippi	93.6	96.5	96.5	94.6	92.4	94.6	94.8	92.0	-1.7
North Carolina	86.5	90.9	96.9	95.3	93.7	87.8	86.8	90.5	4.6
Oklahoma	70.5	74.0	71.5	72.6	78.3	80.3	77.1	79.2	12.3
South Carolina	86.4	81.5	95.5	95.3	95.8	95.5	94.5	94.5	9.4
Tennessee	84.1	86.8	84.2	87.0	85.5	82.0	79.4	83.9	-0.2
Texas	64.2	64.4	64.9	64.6	65.6	67.1	67.3	73.8	15.0
Virginia	86.6	88.3	88.3	89.5	89.8	89.2	88.5	88.2	1.8
West Virginia	76.5	82.2	82.1	83.1	86.0	87.7	90.8	106.1	38.7

* The ratio of tax collections to tax capacity indexed to the national average.

SOURCE: Kent Halstead, State Profiles: Financing Public Higher Education, 1978 to 1987
(Washington, D.C.: Research Associates of Washington, 1987).

Regional Summary

The two ways of looking at willingness to pay yield slightly different findings. Compared to personal income, the majority of SREB states levy taxes above the national average. But compared to tax capacity (which also takes into account additional tax sources beyond personal income), while significant movement toward the national average has occurred, the region's tax effort lags considerably behind the nation.

Demand for Services

In addition to the availability of funds, the demand for services has significant impact on determining the appropriate funding level for a state's system of public higher education. Based on the age distribution and educational attainment of the state's population and the availability and attractiveness of private higher education institutions, one state may have a much greater or lesser need to fund its public colleges and universities than another. With its significant levels of in-migration of retirees, for instance, Florida has a smaller potential demand for higher education than does West Virginia with its high level of high school graduates per college-age population.

High School Graduates Per Age Group

The number of high school graduates per 18- to 24-year-old population is a measure of potential demand for higher education (see Table 2-5). Some of the variation among the states may be attributed to the success of the secondary schools in preventing dropouts and retaining students until graduation. This type of data underscores the importance that SREB and others have placed on strengthening the overall system of education, rather than isolating attention on a single sector, such as colleges and universities. As compared to the national average, 12 of the 15 SREB states (all but Arkansas, Maryland, and West Virginia) have fewer high school graduates per 18- to 24-year-old population. The regional average has typically been about 90 percent of the national average throughout the decade. The small year-to-year drops over the 1980 to 1986 period for the nation and the region reflect smaller young age cohorts leading to lower graduation rates from the secondary schools.

Table 2-5
ANNUAL HIGH SCHOOL GRADUATES AS A PERCENT OF THE
POPULATION AGED 18 TO 24

	1980	1981	1982	1983	1984	1985	1986	Percent Change
United States	10.2	10.0	10.0	9.8	9.6	9.4	9.5	-7.1
SREB States	9.3	9.2	9.1	8.8	8.7	8.6	8.7	-6.2
SREB Region as a Percent of U.S.	90.9	91.5	90.9	90.0	90.6	90.8	91.7	--
Alabama	9.5	9.3	9.5	9.3	9.0	8.8	9.0	-5.5
Arkansas	10.6	10.7	10.7	10.7	9.8	9.9	9.8	-7.8
Florida	8.6	8.4	8.2	7.7	7.7	7.4	7.6	-11.8
Georgia	8.9	8.8	9.0	8.8	8.4	8.3	8.3	-7.3
Kentucky	9.2	9.4	9.5	9.2	9.1	9.1	9.1	-1.2
Louisiana	9.2	9.0	7.7	7.5	7.8	7.8	8.1	-11.4
Maryland	11.1	11.1	11.2	10.8	10.4	10.1	9.9	-11.2
Mississippi	9.4	9.0	9.1	9.1	8.9	8.5	8.6	-8.4
North Carolina	9.0	8.8	9.0	8.7	8.6	8.9	8.9	-0.2
Oklahoma	9.8	9.4	9.0	8.6	8.5	8.7	9.1	-6.8
South Carolina	9.0	8.9	8.7	8.5	8.3	8.6	8.7	-3.1
Tennessee	9.2	9.3	9.4	8.8	9.3	8.5	8.9	-2.4
Texas	9.0	8.9	8.8	8.6	8.4	8.4	8.7	-3.6
Virginia	9.8	9.5	9.7	9.4	9.0	9.0	8.8	-9.7
West Virginia	10.0	10.0	10.1	10.3	10.1	10.3	10.4	-4.1

SOURCES: U.S. Bureau of the Census, Current Population Reports, "State Population and Household Estimates, With Age, Sex, and Components of Change: 1981-86," Series P-25, No.1010. (Washington, D.C.: U.S. Government Printing Office, 1987); Kent Halstead, State Profiles: Financing Public Higher Education, 1978 to 1987 (Washington, D.C.: Research Associates of Washington, 1987).

College Enrollment Per Age Group

A related and more direct measure focuses on actual college enrollment per population of the "college-going age." This potential pool of students has become increasingly difficult to measure in recent years as colleges have expanded their range of services to the so-called nontraditional student. Previously the relevant age group was considered to be 18 to 24 years old, but more current analyses have expanded the limit to include the group aged 25 to 44. While the previous exhibit considered potential enrollment demand, Table 2-6 is a measure of actual demand for public higher education in a state over time related to the base population of 18- to 44-year-olds in the state.

All but one state in the region as well as the national average have declined on this measure in the 1980s, due in part to the baby boom generation enlarging the size of the 25- to 44-year-old age group, compared to the 18- to 24-year-old age group (see Table 2-6). Throughout the decade, the regional average has approached the national average on this measure, with seven states currently exceeding the national rate (Alabama, Maryland, Mississippi, North Carolina, Oklahoma, Texas, and Virginia).

Regional Summary

Although the SREB region's high school graduation performance trails the national average, its college-going rate tends to keep pace with national levels. The latter rate is particularly important to consider in developing state budgets and in assessing state efforts to support higher education.

Table 2-6

COLLEGE ENROLLMENT* AS A PERCENT OF THE
POPULATION AGED 18 TO 44

	1980	1981	1982	1983	1984	1985	1986	Percent Change
United States	7.7	7.6	7.5	7.2	7.0	6.8	6.8	-11.7
SREB Region	7.4	7.3	7.3	7.1	6.9	6.8	6.7	-9.5
SREB Region as a Percent of U.S.	97.1	96.3	97.3	98.3	98.6	99.1	97.9	--
Alabama	9.4	9.1	9.0	8.9	8.4	8.3	8.2	-12.8
Arkansas	6.4	6.2	6.3	6.2	6.1	5.8	6.0	-6.3
Florida	7.2	6.9	6.8	6.5	6.2	5.9	5.9	-18.1
Georgia	5.5	5.4	5.5	5.3	5.1	4.9	4.7	-14.5
Kentucky	6.3	6.2	6.1	5.9	5.6	5.5	5.7	-9.5
Louisiana	6.4	6.4	6.4	6.4	6.4	6.8	6.0	-6.3
Maryland	7.5	7.5	7.5	7.6	7.5	7.4	7.1	-5.3
Mississippi	8.8	9.1	8.9	8.8	8.7	8.9	8.0	-9.1
North Carolina	8.5	8.6	8.7	8.9	8.5	8.7	8.7	2.4
Oklahoma	8.9	8.6	8.4	8.2	7.8	7.9	8.2	-7.9
South Carolina	6.1	5.8	5.8	5.5	5.4	5.4	5.4	-11.5
Tennessee	6.6	6.3	6.3	6.2	5.8	5.5	5.5	-16.7
Texas	8.0	7.8	7.8	7.6	7.4	7.3	7.1	-11.3
Virginia	7.8	7.7	7.5	7.3	7.0	6.9	7.0	-10.3
West Virginia	7.3	7.3	7.2	7.1	6.8	6.5	6.6	-9.6

* Public higher education full-time-equivalent enrollment.

SOURCES: U.S. Bureau of the Census, Current Population Reports,
"State Population and Household Estimates, With Age, Sex,
and Components of Change: 1981-86," Series P-25, No.1010.
(Washington, D.C.: U.S. Government Printing Office, 1987);
Kent Hslstead, State Profiles: Financing Public Higher
Education 1978 to 1987 (Washington, D.C.: Research
Associates of Washington, 1987).

Higher Education's Relative Priority

Institutions of higher education, of course, are only one of many claimants for state appropriations. Each state also is responsible for providing for elementary and secondary education, public transportation, law enforcement and corrections, and a host of other social services and business regulation activities. Even though the geography, demography and the economy of each state translate into a different mix of state needs, a useful perspective to consider is the relative priority of higher education among all state programs. In a climate of frequent calls for quality improvement, shifts in the proportion going to higher education might well be expected to be observed.

Percent of State and Local Funds Allocated

The most direct measure of the priority that a state places on its higher education programs is the percent of overall state and local tax revenues that are appropriated for its colleges and universities. Governors and legislators sometimes find their state's ranking on this measure to be surprising. This is because many governors and state legislatures do not have authority to appropriate the total state budget due to the existence of earmarked funds, for example, gasoline taxes dedicated to highways. In such cases, a much smaller proportion of the total state budget is appropriated to higher education than they realize. Colleges and universities get a larger proportion of the budget over which legislators actually deliberate.

Two ways of examining the percent of state and local tax revenues that are appropriated for higher education are examined here. When funds for research, agriculture, and medical operations are included, higher education's share of state and local tax revenues has increased in only two SREB states (North Carolina and Tennessee) over the past eight years (see Table 2-7). The SREB region has followed the national trend, with a declining share of state and local tax revenues being allocated to higher education. Still, higher education remains a relatively higher priority for the SREB region, with 11 states exceeding the national average (Alabama, Arkansas, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia, and West Virginia).

A second way to examine the percent of state and local tax revenues that are appropriated for higher education is to exclude funds for research, agriculture, and medical operations. This measure is often termed higher education operating appropriations and is more relevant to the question of emphasis on access to quality undergraduate education. Here again, only two SREB states (North Carolina and Tennessee) show an increased share over the past eight years; the SREB region has followed the national trend of a declining share of state and local tax revenues. Nonetheless, 9 SREB states (Alabama, Arkansas, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia) show higher support rates than the national average (see Table 2-8).

Table 2-7
TOTAL HIGHER EDUCATION APPROPRIATIONS
AS A PERCENT OF STATE AND LOCAL TAX REVENUES
1980 THROUGH 1987

	1980	1981	1982	1983	1984	1985	1986	1987	Percent Change
United States	10.7	11.0	10.9	10.4	10.2	10.7	10.2	9.8	-8.4
SREB Region	12.5	12.9	12.8	12.2	12.0	12.6	11.9	11.5	-8.0
SREB Region as a Percent of U.S.	116.8	117.3	117.4	117.3	117.6	117.8	116.7	117.3	--
Alabama	16.2	16.9	15.6	14.8	14.5	16.6	18.2	14.8	-8.6
Arkansas	13.5	13.3	11.9	12.3	11.9	14.0	13.2	11.8	-12.6
Florida	10.9	11.0	11.6	10.9	10.7	10.5	8.9	8.6	-21.1
Georgia	12.0	12.0	12.3	11.8	11.3	11.5	11.1	10.6	-11.7
Kentucky	14.5	13.1	13.0	13.2	13.3	12.9	12.6	12.6	-13.1
Louisiana	12.5	13.1	13.5	12.3	11.1	12.5	11.3	8.8	-29.6
Maryland	10.0	10.5	9.9	10.4	9.7	10.1	9.8	9.8	-2.0
Mississippi	17.0	17.4	17.2	16.4	17.6	16.9	15.7	13.6	-20.0
North Carolina	15.2	15.5	15.1	15.0	14.4	17.8	17.4	16.6	9.2
Oklahoma	13.0	13.4	13.8	13.4	10.3	10.4	11.9	9.7	-25.4
South Carolina	19.0	18.6	16.4	15.2	15.3	16.4	15.2	14.4	-24.2
Tennessee	12.8	12.3	12.3	11.8	11.9	13.7	13.9	13.5	5.5
Texas	16.4	16.8	18.1	16.2	15.9	15.7	13.6	11.4	-30.5
Virginia	12.5	13.2	12.4	12.2	11.8	12.3	11.8	12.4	-0.8
West Virginia	13.2	12.0	11.9	10.8	9.9	10.9	10.4	9.9	-25.0

SOURCE: Kent Halstead, State Profiles: Financing Public Higher Education, 1978 to 1987. (Washington, D.C.: Research Associates of Washington, 1987).

Table 2-8
HIGHER EDUCATION OPERATING APPROPRIATIONS AS A PERCENT OF STATE AND LOCAL TAX REVENUE
1980 THROUGH 1987

	1980	1981	1982	1983	1984	1985	1986	1987	Percent Change
United States	8.9	9.2	9.1	8.6	8.5	8.9	8.5	8.1	-9.0
SREB Region	10.3	10.5	10.6	10.1	9.7	10.2	9.5	8.7	-15.5
SREB Region as a Percent of U.S.	115.7	114.1	116.5	117.4	114.1	114.6	111.8	107.4	--
Alabama	12.6	13.2	12.2	11.5	11.3	12.6	14.0	11.2	-11.1
Arkansas	9.8	9.6	8.6	8.9	8.6	10.2	9.9	8.7	-11.2
Florida	9.1	9.0	9.5	9.0	8.9	8.7	7.0	6.6	-27.5
Georgia	9.4	9.4	9.7	9.4	8.6	8.9	8.5	8.2	-12.8
Kentucky	10.4	9.5	9.1	9.5	9.5	9.3	9.2	9.2	-11.5
Louisiana	8.9	9.3	9.7	8.7	7.8	8.6	8	6.2	-30.3
Maryland	8.1	8.3	7.9	8.3	7.8	8.2	7.9	7.7	-4.9
Mississippi	12.4	12.5	12.1	11.6	12.5	12.1	10.6	9.6	-22.6
North Carolina	11.8	12.1	11.8	11.7	11.2	13.8	13.7	13.1	11.0
Oklahoma	9.2	9.7	10.3	10.4	7.8	7.9	9.1	7.3	-20.7
South Carolina	13.9	13.5	11.6	10.8	11.0	11.8	10.9	10.5	-24.5
Tennessee	10.5	10.1	10.1	9.7	9.7	11.2	11.4	11.1	5.7
Texas	11.3	11.9	12.9	11.3	11.3	11.1	9.7	8.1	-28.3
Virginia	10.1	10.7	10.1	9.9	9.6	10	9.5	9.9	-2.0
West Virginia	9.5	8.7	8.6	7.8	7.2	7.8	7.5	7.1	-25.3

SOURCE: Kent Helstead, State Profiles: Financing Public Higher Education, 1978 to 1987.
(Washington, D.C.: Research Associates of Washington, 1987).

Regional Summary

The most striking observation revealed by the examination of these two relative priority measures appears when the two are compared. Higher education operating appropriations have lost more ground over the past eight years to other state priorities than did total higher education related funding (that which includes research, agriculture and medical operations). In addition, the SREB region's total higher education related appropriation share of state and local tax revenues declined 8.0 percent compared to a nationwide decline of 8.4 percent, but the region's higher education operating appropriation share declined 15.5 percent compared to a nationwide decline of 9.0 percent. Apparently other regions of the country, while giving somewhat lower priority to higher education operating appropriations, have maintained their shares of state and local tax revenues better than the SREB region, which has been a leader in calling for quality improvement and the funding adjustments and funding levels to support it.

Most SREB states have made major changes in their funding of elementary and secondary education in the 1980s. This in part accounts for the declining share of revenues to higher education. For example, teacher salaries in the SREB region have closed the gap with national averages while faculty salaries have not. These school reform efforts are intended to promote quality improvement in higher education in the long term. But, in the short term, may reduce the relative priority of higher education funding in state budgets.

Actual Support

Unlike the previous indicators that tend to describe government finance more generally, the funding measure that probably is most related to the potential quality of colleges and universities is "revenue per student." Regardless of the state's wealth, willingness to pay taxes, demand for services, or priority on higher education, the revenue per student measure describes the amount of resources that institutions of higher education can deploy to provide a quality education.

There are several different ways to calculate the measure of revenue per student. The most common is state appropriations per full-time-equivalent (FTE) student. Due to inflation levels, it also is important to analyze these measures on a constant dollar basis to determine if overall per student funding levels are improving.

A state's standing on this measure in relation to other states is affected by the funds it provides and by the mix of institutional types. For example, states with larger proportions of their public college enrollment in research universities will tend to supply higher overall per student revenues. Comparisons by institutional type and comparisons based on complex weighting schemes are available, but, for purposes of this analysis, overall statewide comparisons are useful in identifying trends within the states.

State Appropriations Per Student

When state appropriations per FTE student, unadjusted for inflation (current dollar basis), are considered each of the 15 SREB states show increases (see Table 2-9). However, only 5 states exceeded the national

growth rate (Alabama, Georgia, North Carolina, Tennessee, and Virginia) and the region continues to be less than 88 percent of the national average for per FTE student funding.

For colleges and universities, a commonly used measure of the effects of inflation is the Higher Education Price Index (HEPI). The HEPI is based on a "market basket" of what the typical college or university purchases. Therefore, it recognizes changes in the prices of laboratory equipment and supplies, library materials, and faculty salaries as well as the other items more common to all enterprises, e.g., utilities, clerical wages, and commodities.

Adjusting the data shown previously using the HEPI price deflator reveals that appropriations growth in 8 states (Florida, Kentucky, Louisiana, Maryland, Mississippi, South Carolina, Texas, and West Virginia) has not kept pace with the combined effects of inflation and enrollment changes (see Table 2-10). For whatever reasons, e.g., local economies, competing demands, etc., only 7 of the 15 SREB states (Alabama, Arkansas, Georgia, North Carolina, Oklahoma, Tennessee, and Virginia) provide more appropriations on a per student, inflation-adjusted basis now than they did in 1980. Five of those seven states (Alabama, Georgia, North Carolina, Tennessee, and Virginia) increased per student funding more than the national average. The inflation-adjusted regional average is now 2.6 percent higher than at the start of the decade, reflecting a compound annual growth of only 0.37 percent.

Within states there is variation in the levels of per full-time-equivalent student state appropriation for operating expenses. The amounts vary according to the size and program structure of the colleges and universities in each state. The SREB-State Data Exchange classifies colleges and universities according to objective criteria: there are three types of doctoral granting institutions, three types of other four-year institutions, and four types of two-year colleges. Table 2-11 shows the most current state operating appropriation for each category of institution.

Regional Summary

Despite the region's growth in inflation-adjusted per student revenues, the regional average remains about 90 percent of the national average. The growth in per student state appropriations fell just short of the national growth rate and has increased in real terms only very slightly since 1980.

Table 2-9
 STATE APPROPRIATIONS FOR PUBLIC HIGHER EDUCATION PER FULL-TIME-EQUIVALENT STUDENT
 1980 THROUGH 1987
 (current dollars unadjusted for inflation)

	1980	1981	1982	1983	1984	1985	1986	1987	Percent Change
United States	\$2,387	\$2,519	\$2,706	\$2,798	\$3,035	\$3,494	\$3,728	\$3,871	62.2
SREB Region	2,085	2,273	2,534	2,657	2,807	3,187	3,312	3,390	62.6
SREB Region as a Percent of U.S.	87.3%	90.2%	93.7%	94.7%	92.5%	91.2%	88.8%	87.6%	--
Alabama	1,798	1,991	2,002	2,155	2,201	2,737	3,455	3,005	67.1
Arkansas	2,136	2,170	2,322	2,384	2,483	3,149	3,645	3,438	61.0
Florida	2,045	2,232	2,504	2,567	2,885	3,197	2,956	3,147	53.9
Georgia	2,410	2,690	3,074	3,193	3,281	3,710	4,045	4,387	82.0
Kentucky	2,412	2,349	2,484	2,779	3,090	3,305	3,547	3,611	49.7
Louisiana	2,222	2,581	2,837	2,909	2,845	3,159	3,093	2,952	32.9
Maryland	2,235	2,430	2,482	2,703	2,709	3,033	3,274	3,495	56.4
Mississippi	1,954	2,149	2,138	2,258	2,550	2,611	2,515	2,684	37.4
North Carolina	1,992	2,145	2,328	2,428	2,435	3,283	3,590	3,841	92.8
Oklahoma	1,595	1,839	2,263	2,729	2,425	2,607	3,007	2,586	62.1
South Carolina	3,009	3,147	3,094	3,127	3,556	4,208	4,258	4,509	49.9
Tennessee	2,141	2,246	2,406	2,543	2,716	3,517	4,042	4,453	108.0
Texas	2,007	2,237	2,830	2,820	3,119	3,249	3,085	3,031	51.0
Virginia	2,009	2,237	2,313	2,350	2,707	3,113	3,314	3,672	82.8
West Virginia	1,971	1,992	2,175	2,089	2,205	2,557	2,878	2,926	48.5

SOURCE: Kent Halstead, State Profiles: Financing Public Higher Education, 1978 to 1987
 (Washington, D.C.: Research Associates of Washington, 1987).

Table 2-10
 PRICE-ADJUSTED STATE APPROPRIATIONS FOR PUBLIC HIGHER EDUCATION PER FTE STUDENT
 1980 THROUGH 1987
 (1987 constant dollars adjusted for inflation)

	1980	1981	1982	1983	1984	1985	1986	1987	Percent Change
United States	\$3,784	\$3,604	\$3,516	\$3,421	\$3,522	\$3,799	\$3,883	\$3,871	2.3
SREB Region	3,305	3,252	3,295	3,240	3,257	3,465	3,450	3,390	2.6
SREB Region as a Percent of U.S.	87.3X	90.2X	93.7X	94.7X	92.5X	91.2X	88.8X	87.6X	--
Alabama	2,850	2,849	2,603	2,635	2,554	2,976	3,599	3,005	5.4
Arkansas	3,386	3,105	3,019	2,915	2,881	3,424	3,797	3,438	1.5
Florida	3,242	3,194	3,256	3,139	3,348	3,476	3,079	3,147	-2.9
Georgia	3,820	3,849	3,997	3,904	3,807	4,034	4,213	4,387	14.8
Kentucky	3,824	3,361	3,230	3,398	3,586	3,593	3,695	3,611	-5.6
Lou. .ana	3,522	3,693	3,689	3,557	3,301	3,435	3,222	2,952	-16.2
Maryland	3,543	3,477	3,227	3,305	3,144	3,298	3,410	3,495	-1.4
Mississippi	3,098	3,075	2,780	2,761	2,959	2,839	2,620	2,684	-13.4
North Carolina	3,158	3,069	3,027	2,969	2,826	3,569	3,740	3,841	21.6
Oklahoma	2,528	2,631	2,943	3,337	2,814	2,834	3,132	2,586	2.3
South Carolina	4,770	4,503	4,023	3,824	4,126	4,575	4,435	4,509	-5.5
Tennessee	3,394	3,214	3,128	3,110	3,152	3,824	4,210	4,453	31.2
Texas	3,182	3,201	3,680	3,448	3,619	3,532	3,214	3,031	-4.7
Virginia	3,185	3,201	3,008	2,874	3,141	3,385	3,452	3,672	15.3
West Virginia	3,124	2,850	2,828	2,554	2,559	2,780	2,998	2,926	-6.4

SOURCE: Kent Halstead, State Profiles: Financing Public Higher Education, 1978 to 1987,
 (Washington, D.C.: Research Associates of Washington, 1987).

Table 2-11
STATE AND LOCAL GENERAL OPERATING APPROPRIATIONS PER FTE STUDENT
BY TYPE OF INSTITUTION
1987-88

	Doctoral			Master's		Bacca- laureate	Two-Year			
	I	II	III	I	II		I	II	III	IV
SREB Region	\$4,729	\$4,590	\$3,875	\$3,671	\$3,504	\$3,330	\$2,629	\$3,284	\$5,220	\$4,671
Alabama	3,650	4,495	4,250	3,958	3,608	2,354	--	2,232	--	4,292
Arkansas	4,484	--	--	3,723	3,693	3,957	--	3,365	--	--
Florida	6,542	5,813	6,494	7,083	7,460	--	--	3,480	--	--
Georgia	5,569	5,130	--	2,703	3,251	2,602	2,993	3,726	--	6,342
Kentucky	4,109	4,433	--	3,975	4,508	--	2,084	--	--	3,533
Louisiana	3,300	--	2,480	--	2,539	--	2,861	--	--	3,911
Maryland	5,478	--	5,813	3,033	4,322	5,019	--	3,495	--	--
Mississippi	--	3,671	3,184	--	3,420	--	--	2,363	--	--
North Carolina	6,819	5,340	4,714	4,986	5,079	6,189	--	4,207	--	--
Oklahoma	3,729	--	--	--	2,373	2,902	--	3,209	--	--
South Carolina	5,179	4,588	4,661	--	3,601	2,816	2,879	3,217	--	--
Tennessee	5,250	4,714	4,094	--	4,096	--	--	3,208	--	--
Texas	3,935	4,032	3,079	2,975	3,824	3,301	--	3,342	6,668	--
Virginia	4,439	4,735	3,544	2,742	3,124	3,262	3,411	2,532	3,233	--
West Virginia	4,635	--	--	3,038	3,470	2,671	--	2,487	--	--

"--" indicates that there is no institution of the particular category in the state or that data for 1987-88 were not reported.

SOURCE: SREB-State Data Exchange, 1987-88.

Summary of Overall Funding Levels

In trying to evaluate the trends in the 1980s on these five key measures of higher education demand and support a summary index comparing each regional and state statistic to the national statistics gives a useful overview. Index numbers are derived by dividing each state or regional value by the United States average (see Table 2-12).

Tax effort went up above the national rate of increase but wealth (per capita income) did not. The net result might be stability in funds available. However, since overall tax capacity went above the national rate of increase, the increased tax effort might be expected to yield more revenues from which higher education could receive increases.

The most significant finding for the 1987 data is that, despite the region's stated high priority on quality improvement in higher education, per student funding lags behind the national averages at about the same rate as the region's tax effort. While 11 states appropriate a greater share of their budgets to higher education than the national average (all but Florida, Louisiana, Maryland, and Oklahoma), only one state (West Virginia) has a greater than average tax effort. Only three states (Georgia, South Carolina, and Tennessee) exceed the national average on appropriations per student.

Looking over the decade, tax effort relative to the national average increased in 11 states (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, North Carolina, Oklahoma, South Carolina, Texas and West Virginia). Also, enrollment demand increased in 9 states (Arkansas, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, Virginia, and West Virginia). Eight states (Alabama, Arkansas, Georgia, Kentucky, Maryland, North Carolina, Tennessee, and Virginia) now place a relatively higher priority on higher education when compared to the national average but a lower priority when compared to themselves in 1980. Only 5 states (Alabama, Georgia, North Carolina, Tennessee, and Virginia) gained against the national average in per student spending. When adjusted for inflation and taking the increased enrollment demand into account, state funding for public higher education in the region averaged only 0.4 of one percent increase annually from 1980 to 1987. Increased funds for quality improvement have not been available in many parts of the region.

Table 2-12
SUMMARY OF STATE SUPPORT INDICES
1980 AND 1987

	Tax Capacity Index		Tax Effort Index		Enrollment Demand Index		Relative Priority Index		Appropriations per Student Index	
	1980	1987	1980	1987	1980	1987	1980	1987	1980	1987
United States	100	100	100	100	100	100	100	100	100	100
SREB States	94	96	79	84	96	99	116	107	87	88
Alabama	76	73	82	91	122	121	126	138	75	78
Arkansas	78	73	80	92	83	88	98	107	89	89
Florida	102	107	73	74	94	87	91	81	86	81
Georgia	83	90	89	90	71	69	94	101	101	113
Kentucky	84	76	83	90	82	84	104	114	101	93
Louisiana	103	99	77	90	83	88	89	77	93	76
Maryland	100	108	106	98	97	104	81	95	94	90
Mississippi	90	70	94	92	114	118	124	119	82	69
North Carolina	82	88	87	91	110	128	118	162	83	99
Oklahoma	106	111	71	79	116	121	92	90	67	67
South Carolina	77	78	86	95	79	79	139	130	126	116
Tennessee	82	81	84	84	86	81	105	137	90	115
Texas	116	114	64	74	104	104	113	100	84	78
Virginia	92	96	88	88	101	103	101	122	84	95
West Virginia	91	75	82	106	95	97	95	88	83	76

SOURCE: Derived from tables 2-2, 2-4, 2-6, 2-7, and 2-10.

3. ANALYSIS OF REVENUE PATTERNS AND PRACTICES

Another way of looking at the relative priority of public higher education in a state is to examine the percent of total public higher education revenues that states contribute. This chapter describes the various types of revenue, the possible impacts of each on program quality, and recent trends in the mix of revenues from different sources.

Types of Revenue and Their Effect on Access and Quality

Revenue for institutions of higher education are reported in a number of different categories:

- tuition and fees;
- government appropriations;
- government grants and contracts;
- private gifts, grants, and contracts;
- endowment income;
- sales and services of education activities;
- auxiliary enterprises.

(See Appendix A for definitions of the revenue categories.)

These categories are based on the source of funds. Another set of categories is based on the limitations placed on the use of the revenues. In this scheme funds are either restricted or unrestricted. Restricted funds may be used only for purposes that are specified by the contributor or required by administrative provisions. For instance, the National Science Foundation may grant funds for a specific research program; these funds may not be used for any other purpose. Restricted revenues account for about 35 percent of all public higher education revenues (see Table 3-1). This discussion of revenue sources in relation to quality improvement efforts will focus on unrestricted funds--those funds over which state and campus leaders have the flexibility to direct toward opportunities for improvement.

Table 3-1
 PERCENT DISTRIBUTION, CURRENT FUNDS REVENUES
 SREB STATES, 1986

Unrestricted Revenues.....	65.2
Government Appropriations	47.3
Tuition and Fees	14.1
Restricted Revenues.....	34.8
Government Contracts/Grants	12.7
Auxiliary Services and Sales	19.4
Private Gifts and Endowment Earnings*	3.8
All Other	2.7
Total.....	100.0

* Some private gift funds reported here are unrestricted revenues.

SOURCE: National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education," unpublished data for fiscal year 1986 (Washington, D.C.: National Center for Education Statistics).

Government appropriations (an unrestricted source) accounts for just under half (47 percent) of all revenues to public higher education institutions in the region. In descending order of importance, the other sources are sales and services of auxiliary enterprises, hospitals, and educational departments (19 percent), tuition and fees (14 percent), government grants and contracts (13 percent) and private gifts and endowments (4 percent). Overall, about two-thirds of the total revenue can be considered as unrestricted.

For most institutions, two major types of revenue account for almost all unrestricted income: government appropriations and student tuition and fees.

Government Appropriations

Government appropriations are the major source of funds for most public colleges and universities. Within the SREB states, government appropriations account for amounts ranging from 69.7 percent of the total unrestricted revenue in Maryland to 84.5 percent in North Carolina (see Table 3-2). Standard college accounting practices further classify government appropriations into three categories: state, local, and federal.

Of the three categories, state appropriations is easily the largest. The next largest unrestricted government source is local appropriations. This source primarily affects community colleges which, in some states, have local district tax bases. Federal appropriations are not very common in college and universities, except in land-grant colleges. Because they comprise about three-quarters of the available unrestricted funds, government appropriations are the major source of dollars for quality improvement.

Table 3-2
PERCENT DISTRIBUTION OF UNRESTRICTED REVENUE SOURCES

	State and Local Government	Tuition and Fees	Other
United States	74.5	22.2	3.3
SREB States	77.6	19.0	3.4
Alabama	76.5	19.0	4.4
Arkansas	73.7	16.4	10.0
Florida	78.9	17.9	3.2
Georgia	76.4	19.9	3.7
Kentucky	78.6	20.5	0.9
Louisiana	76.4	21.7	1.9
Maryland	69.7	27.6	2.6
Mississippi	77.0	20.8	2.2
North Carolina	84.5	12.1	3.4
Oklahoma	84.1	14.0	1.9
South Carolina	78.2	20.1	1.7
Tennessee	75.9	21.5	2.6
Texas	79.3	16.1	4.6
Virginia	70.0	26.6	3.4
West Virginia	79.9	18.7	1.4

SOURCE: National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education," unpublished data for fiscal year 1986 (Washington, D.C.: National Center for Education Statistics).

Tuition

In public institutions, student tuition and fees are the second largest source of unrestricted income. This category includes all required fees paid by students to enroll in the institution, including out-of-state tuition where applicable. Practices in assessing tuition vary considerably across the states.

More states have turned to formal tuition policies as a means to assist them in making decisions about appropriate tuition and fee levels. In 1980, two-thirds of the states nationwide and three-fourths of the SREB states determined tuition in the historical pattern--tuition was set to generate all or a part of the difference between what the institutions believed they needed and what state government appropriated. Half of the SREB states (Arkansas, Georgia, Kentucky, Louisiana, Oklahoma, South Carolina, Tennessee, and Virginia) have now established and implemented formal policies to determine tuition and fees.¹⁴

Three general methods are used, all sharing the idea that tuition and fees should be set in relation to some other indicator. This is often called an "indexing" or "benchmark" approach.

- Tuition is set in relation to an external yardstick, such as the Consumer Price Index (CPI) or per capita personal income.
- Tuition is set as a specified proportion of the costs of providing educational programs.
- Tuition is set in relation to a group of peer institutions.

Private Giving

Once the almost exclusive domain of private colleges, private giving is becoming a significant revenue source for many public colleges and universities, especially large doctoral granting universities. Many development campaigns are designed around the theme of "providing the margin for excellence." Revenue from private sources often has the additional advantage to colleges of being available for allocation to the areas of greatest priority and not being subject to line item control by state budget authorities.

Wide variations exist in how the development (fund-raising) function is organized, especially across types of institutions. In the larger universities, fund-raising often is organized as part of a separate corporate entity usually known as the "foundation." In some cases, the separate schools and colleges within a university have their own foundations. When foundations are separately organized, their revenues are not reported along with those of the beneficiary university. Instead, the institution's books only reflect amounts that the foundation passes along from its resources--amounts which may be more or less than*the foundation's own current revenues.

Universities use a number of different strategies in soliciting and allocating external financial support. With regard to comprehensive programs to provide access to a quality undergraduate education, special fund-raising programs often are mounted to support distinguished scholars, to expand the library collection, or to provide scholarships and fellowships to worthy students. These strategies expand on the more traditional fund-raising efforts to construct new facilities and underwrite the costs of intercollegiate athletics.

The Mix of Revenue Sources

The mix of revenue sources is an important consideration in understanding how a state system of higher education operates and its opportunities for further development. Given the rhetorical commitment to quality improvement and access, one might expect an increasing share of costs to be borne by states. Systems often find that one or more revenue sources are being overlooked as a possible means for providing resources for improvement.

State-by-State Comparisons of Revenue Mix

Government appropriations, which account for about three-quarters of all unrestricted revenues, clearly are of primary importance in each of the states. Despite their general reliance on appropriations, the states vary considerably in their mix of unrestricted revenues.

When three categories of unrestricted revenues are considered (tuition, appropriations, and "all other"), it turns out that in 1986 ten states are placing a greater reliance on student tuition and fees than in 1980; they are: Arkansas, Georgia, Kentucky, Louisiana, Mississippi, South Carolina, Tennessee, Texas, Virginia, and West Virginia (see Table 3-3). Louisiana, South Carolina, Virginia, and West Virginia have had the largest shifts toward relying more on tuition and fees.

As a result, the reliance on state appropriations has dropped somewhat. The regional average dipped from 79.8 percent to 77.6 percent over the same period, with 9 of 15 states showing a lesser reliance on appropriations (Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, South Carolina, Texas, and Virginia). Louisiana, in particular, shows substantial reductions in the percent of revenue covered by state appropriations. Responsiveness to the calls for improved funding to support quality improvement might show more state support relative to other sources of unrestricted revenue.

Table 3-3
TRENDS IN THE MIX OF MAJOR SOURCES OF
UNRESTRICTED REVENUE
PERCENT DISTRIBUTION, 1980 TO 1986

	Tuition & Fees		State/Local Appropriations		Other	
	1980	1986	1980	1986	1980	1986
United States	19.2	22.2	77.9	74.5	2.9	3.3
SREB States	17.0	19.0	79.8	77.6	3.3	3.4
Alabama	19.8	19.0	76.1	76.5	4.1	4.4
Arkansas	16.3	16.4	77.0	73.7	6.7	10.0
Florida	18.7	17.9	80.6	78.9	0.7	3.2
Georgia	16.8	19.9	79.5	76.4	3.7	3.7
Kentucky	16.3	20.5	82.2	78.6	1.5	0.9
Louisiana	17.0	21.7	82.9	76.4	0.1	1.9
Maryland	29.0	27.6	67.5	69.7	3.5	2.6
Mississippi	19.6	20.8	79.7	77.0	0.7	2.2
North Carolina	12.9	12.1	84.3	84.5	2.8	3.4
Oklahoma	16.7	14.0	81.7	84.1	1.6	1.9
South Carolina	15.3	20.1	82.1	78.2	2.6	1.7
Tennessee	20.9	21.5	75.4	75.9	3.7	2.6
Texas	11.9	16.1	83.6	79.3	4.5	4.6
Virginia	21.2	26.6	73.7	70.0	5.2	3.4
West Virginia	13.1	18.7	79.7	79.9	7.1	1.4

SOURCE: National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education," unpublished data for fiscal years 1980 to 1986 (Washington, D.C.: Center for Education Statistics).

Trends in Private Giving

Private giving has become a growing source of funds for many public colleges and universities, particularly in their efforts to improve academic quality. In many cases, the reliance on private giving is a relatively recent event and the role of such monies is not yet well understood.

Earlier in this chapter recent trends in the growth of the "other" category funding (mostly private giving) as a percent of total unrestricted revenues were shown. A more direct analysis is one which shows the percentage increase in private giving and endowment earnings as a percent of total current fund revenues (restricted and unrestricted). All but one SREB state (Kentucky) experienced an increase in private financial support between 1980 and 1986 (see Table 3-4). This growth is especially noticeable in Florida and Tennessee, which show six-year growth rates of 165 percent and 171 percent, respectively. Their growth is attributable to the matching fund (public and private) endowed chair programs that have been developed and actively promoted in each state.

Table 3-4
GROWTH OF THE IMPORTANCE OF PRIVATE GIVING
AS A PERCENT OF TOTAL CURRENT FUNDS REVENUES
PUBLIC INSTITUTIONS, 1980 TO 1986

	Private Gifts		Endowment Earnings		Total of Previous Columns		Percent Change
	1980	1986	1980	1986	1980	1986	
United States	2.5	3.2	0.5	0.6	3.0	3.8	126.7
SREB Region	2.6	3.3	0.5	0.6	3.1	3.9	125.8
Alabama	2.4	3.0	0.6	0.4	3.0	3.4	113.3
Arkansas	5.7	7.2	0.2	0.3	5.9	7.5	127.1
Florida	2.6	4.3	0.0	0.0	2.6	4.3	165.4
Georgia	3.3	5.1	0.1	0.1	3.4	5.2	152.9
Kentucky	3.8	2.6	0.2	0.5	4.0	3.1	77.5
Louisiana	1.5	2.0	0.1	0.0	1.6	2.0	125.0
Maryland	1.3	2.0	0.1	0.1	1.4	2.1	150.0
Mississippi	1.5	2.2	0.1	0.1	1.6	2.3	143.8
North Carolina	2.4	3.3	0.4	0.3	2.8	3.6	128.6
Oklahoma	1.4	1.8	0.0	0.0	1.4	1.8	128.6
South Carolina	1.7	2.2	0.1	0.1	1.8	2.3	127.8
Tennessee	2.1	3.7	0.3	0.4	2.4	4.1	170.8
Texas	2.9	3.9	1.6	1.7	4.5	5.6	124.4
Virginia	2.6	2.6	0.5	0.8	3.1	3.4	109.7
West Virginia	4.5	0.6	0.0	0.0	4.5	0.6	13.3

SOURCE: National Center for Education Statistics, "Financial Statistics of Institutions of Higher Education," unpublished data for fiscal years 1980 to 1986 (Washington, D.C.: National Center for Education Statistics).

4. ANALYSIS OF EXPENDITURE PATTERNS

Although the primary role of state-level authorities in the budget process is to establish the amount of revenue, state officials also influence how campus-level administrators expend their funds. This influence is reflected through earmarked appropriations (line item funding) and various types of spending controls. This chapter examines how spending patterns may have shifted to respond to the growing concern for access to quality undergraduate education.

The data here only examine changes between major spending areas and do not allow an examination of shifts in funding priorities within major spending categories. Significant efforts to address quality improvement could be funded through reallocations that cannot be observed from this data.

Key Expenditure Areas and Their Possible Impact on Access and Quality

Choosing to spend available resources in one manner rather than another can have a significant impact on the quality of an institution. For example, the choice to invest more heavily in a learning resources laboratory would appear to have a more direct and immediate influence on academic quality than would the efficiencies gained from spending on better telephone switching equipment. Similarly, the choice between hiring more academic counselors or additional purchasing technicians will have an impact on quality.

At the statewide level, it is possible to examine shifts in spending decisions in two major ways--by functional area and by object of expenditure.

Functional Spending Areas

Standard accounting practices for colleges and universities call for each expenditure to be classified according to its functional or programmatic area. The major functional areas for educational and general expenditures are:

- instruction;
- organized research;
- public service;
- academic support;
- student services;
- institutional support;

- operation and maintenance of plant;
- scholarships and fellowships (see Appendix for definitions of these expenditure categories).

For effective institutional operations, spending across these functions needs to be balanced. That is, a pattern of consistent underspending in any single area is likely to have adverse consequences across all other areas.

Despite the need for balance, choosing to spend on "scholarships and fellowships" almost certainly will have a greater impact on student access than spending elsewhere. And, spending on certain types of student services and instruction will have greater influence on the quality of undergraduate education than will spending elsewhere.

Objects of Expenditure

Classification of expenditures according to object or purpose also provides insight into institutional priorities. Common objects of expenditure are salaries and wages, fringe benefits, travel, utilities, and equipment, among others. The categories for object of expenditure are not consistent across the states, so regional-level analysis is not feasible. Several major objects, however, can be examined indirectly. For instance, faculty salary comparisons are abundant and several studies are conducted annually on the volume of library acquisitions.

Analysis of Spending by Function

Spending by function varies according to type of institution. For instance, a common priority for major universities is to increase research expenditures; community colleges spend little for such programs. Therefore, comparisons of statewide statistics, while useful, should proceed with caution because of the different mixes of institutions of different types which characterize states.

Overall Distribution by Function

In 1986 instruction accounted for slightly less than half (42.9 percent) of spending from all revenue sources (see Table 4-1). The other two academic missions--research and public service--account for 11.2 percent and 6.0 percent, respectively. Student services, at 4.6 percent, is the smallest of the major functional areas.

Table 4-1
 PERCENT DISTRIBUTION OF OPERATING EXPENDITURES
 SREB STATES, 1986

Instruction	42.9
Research	11.2
Public Service	6.0
Academic Support	8.7
Student Services	4.6
Institutional Support	10.6
Plant Operations	10.0
Scholarships	6.6

SOURCE: National Center for Education Statistics,
 "Financial Statistics of Institutions of
 Higher Education," unpublished data for
 fiscal years 1980 and 1986 (Washington,
 D.C.: Center for Education Statistics).

Trends in Spending by Function

For an institution and its state-level supporters to have been responsive to the recommendations for access and quality improvement, one would expect to see increased spending in several functional areas, especially for instruction, scholarships and, to a lesser extent, research, academic support, and student services. In the 1980s only scholarships and fellowships and institutional support grew faster than the average for all functions (see Table 4-2). In particular, a major increase (greater than 300 percent) occurred in scholarships and fellowships in the region. On the other hand, spending on both instruction and student services grew at a rate slower than the overall average.

Spending on instruction dropped from 44.9 percent to 42.9 percent of the total, and operation of plant dropped from 11.1 percent to 10.0 percent (see Table 4-3). Scholarships and fellowships jumped from 2.8 percent to 6.2 percent. The only other function to gain percentage share was institutional support, from 10.2 percent to 10.5 percent.

These data give a mixed picture of support for quality improvement with access. The striking increases in scholarships and fellowships is certainly a positive finding. However, the below average growth and, hence, declining proportion of expenditures in instruction and student services while institutional support (general administration) grew at a rate above average is not a particularly positive finding.

Table 4-2
TRENDS IN FUNCTIONAL SPENDING PATTERNS, FISCAL YEARS 1980 AND 1986
(thousands of dollars)

Function	United States			SREB States		
	1980	1986	Percent Change	1980	1986	Percent Change
Instruction	\$13,318,733	\$21,880,782	64.0	\$4,070,208	\$7,023,993	73.0
Research	3,408,633	5,705,144	67.0	1,030,878	1,829,710	77.0
Public Service	1,512,843	2,515,734	66.0	547,618	988,521	81.0
Academic Support	2,785,726	4,693,543	68.0	788,118	1,418,236	80.0
Student Services	1,754,757	2,921,758	67.0	438,354	754,606	72.0
Institutional Support	3,135,496	5,667,144	81.0	926,814	1,714,476	85.0
Operation of Plant	4,267,409	5,177,254	58.0	1,003,941	1,635,312	63.0
Scholarships/ Fellowships	970,363	3,449,	255.0	250,774	1,018,778	306.0
TOTALS	30,153,960	52,010,723	72.0	9,056,705	16,383,635	81.0

SOURCE: Center For Education Statistics, "Financial Statistics of Institutions of Higher Education," unpublished data for fiscal years 1980 to 1986 (Washington, DC: National Center for Education Statistics).

Table 4-3
CHANGES IN PERCENT DISTRIBUTION OF EXPENDITURES
BY CATEGORY OF EXPENDITURE
SREB STATES, 1980 TO 1986

	1986	1980
Instruction	42.9	44.9
Research	11.2	11.4
Public Service	6.0	6.0
Academic Support	8.7	8.7
Student Services	4.6	4.8
Institutional Support	10.6	10.2
Plant Operations	10.0	11.1
Scholarships	6.0	2.8

SOURCE: Table 4-2.

Analysis of Spending by Object

As discussed above, common categories of objects of expenditure do not exist across state lines. This fact, of course, precludes interstate comparisons, but it does not limit analyses within individual states. As a people-intensive enterprise, personal services is the major object category for colleges and universities. Data from Georgia is used to examine possible differences in spending on major objects (see Table 4-4).

Table 4-4
UNIVERSITY SYSTEM OF GEORGIA
COMPARISON OF 1981 AND 1987 EXPENDITURES
PERCENT DISTRIBUTION BY OBJECT

Object of Expenditure	1981 Spending	1987 Spending	Percent Change
Personal Services	79.80	82.43%	2.64
Travel	0.95	0.73	-0.22
Motor Vehicle Expenses	0.21	0.15	-0.07
Supplies and Materials	3.52	2.75	-0.77
Repairs and Maintenance	1.21	1.28	0.07
Utilities	4.37	4.00	-0.37
Lease of Equipment	0.00	0.04	0.04
Rents	1.11	0.34	-0.77
Insurance and Bonding	0.12	0.15	0.04
Workman's Compensation	0.00	0.00	0.00
College Work Study	0.26	0.15	-0.11
Other Operating Expenses	0.45	0.47	0.02
Software	0.00	0.15	0.15
Publications/Printing	0.70	0.51	-0.19
Real Estate Rentals	0.13	0.08	-0.05
Per Diem and Fees	0.59	0.44	-0.15
Contracts	0.95	0.83	-0.12
Computer Charges	0.03	0.06	0.03
Telecommunications-Data	1.34	0.05	-1.29
Telecommunications-Other	0.00	1.09	1.09
Scholarships	0.02	0.03	0.01
Stipends	0.00	0.00	0.00
Motor Vehicle Purchases	0.10	0.03	-0.07
Library Purchases	1.99	1.15	-0.84
Other Equipment Purchase	2.15	2.16	0.01
Unassigned Balance	0.00	0.01	0.00
Personal Services Lapse	0.00	0.94	0.94
TOTALS	100.00%	100.00%	--

SOURCE: Board of Regents, University System of Georgia, Budget 1986-87 and Budget 1987-88 (Atlanta: Board of Regents, University System of Georgia, 1982, 1986).

Trends in Spending by Major Object

The major finding from these data is that nearly five out of every six dollars is spent on personal service (salaries, benefits, etc.) Utilities, various types of equipment, and supplies/materials are the next largest objects of expenditure. Over the period from 1981 to 1987 in the University System of Georgia significant increases in personal services (salaries and benefits) and decreases in library purchases and supplies and materials can be observed.

Analysis of Faculty Salary Spending

Since personal services is the largest expenditure category, spending on salaries deserves further analysis. Faculty salaries are the largest component of personal services, and this is probably the subcategory that is most directly related to academic quality.

Rate of Salary Increase by Faculty Rank

Over the past seven years, the salary differences between faculty at the various ranks appears to be diminishing, with the assistant professors averaging slightly higher percentage increases than associate or full professors (see Table 4-5). For example, salaries of full professors averaged 56 percent more than assistant professors in 1982-83 and 54 percent more in 1986-87. Overall regional average faculty salaries have increased about 45 percent over the past seven years.

Table 4-5

FACULTY SALARY TRENDS IN THE SREB STATES BY RANK
1980 THROUGH 1987

Year	Full Professor		Associate Professor		Assistant Professor	
	Amount	Percent Increase	Amount	Percent Increase	Amount	Percent Increase
1980-81	\$29,580	--	\$23,025	--	\$18,949	--
1981-82	32,594	10.2	25,180	9.4	20,785	9.7
1982-83	34,733	6.6	26,787	6.4	22,118	6.4
1983-84	36,021	3.7	27,672	3.3	22,962	3.8
1984-85	38,471	6.8	29,664	7.2	24,730	7.7
1985-86	40,905	6.3	31,561	6.4	26,402	6.8
1986-87	42,851	4.8	33,038	4.7	27,736	5.1
Total						
Increase	\$13,271	44.9	\$10,013	43.5	\$8,787	46.4

SOURCE: SREB-State Data Exchange, 1980-81 through 1986-87.

Variation in Faculty Salary Increases by State

Faculty in all states have not shared equally in the general increase. Salary growth rates among the states have varied by more than two-to-one (see Table 4-6). Faculty salaries in 11 of the 15 SREB states failed to keep pace with the state's increase in per capita income (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, and West Virginia).

Given the central role of faculty in the quality of undergraduate education, this finding is not encouraging.

Table 4-6
COMPARISONS OF "ALL RANKS" FACULTY SALARY AVERAGE AND PER CAPITA INCOME INCREASES
1981 TO 1987

	1980-81	1986-87	Salary Increase	Per Capita Income Increase
United States	\$24,150	\$35,790	48.2X	47.6X
SREB Region	21,880	31,634	44.6	46.7
SREB Region as a Percent of U.S.	90.6X	88.4X	--	--
Alabama	21,486	31,423	46.2	47.1
Arkansas	20,328	27,785	36.7	48.2
Florida	22,367	33,797	51.1	50.0
Georgia	23,174	34,529	49.0	61.0
Kentucky	21,945	30,216	37.7	40.2
Louisiana	22,589	28,007	24.0	28.9
Maryland	23,769	34,680	45.9	56.0
Mississippi	19,091	26,174	37.1	40.3
North Carolina	21,495	31,156	44.9	55.5
Oklahoma	21,844	29,930	37.0	30.7
South Carolina	21,400	30,116	40.7	48.9
Tennessee	20,889	31,430	50.5	49.5
Texas	21,928	31,947	45.7	37.6
Virginia	22,145	35,764	61.5	56.9
West Virginia	20,586	28,469	38.3	33.6

** indicates data not available

SOURCE: American Association of University Professors. "The Annual Report on the Economic Status of the Profession," Academe, August 1981 and March 1987; SREB-State Data Exchange, 1980-81 and 1986-87.

Analysis of Student Financial Aid

While much of the attention that has been given to the recent recommendations focused on quality improvement in isolation from other priorities, the SREB recommendations have called more specifically for increased access to quality undergraduate education. SREB reasons that improved quality should not come at the expense of student access if the state systems are to continue to contribute to both the economic and cultural development of their states. Now that most states in the region provide reasonable geographic access to colleges and universities for their citizens, the major access issue is cost. Programs of student financial aid are designed to remove economic barriers to college participation.

Major Types of Student Aid

If the purpose of student aid is to help low income students have access, then need-based aid is far more efficient than low tuition. Merit-based aid, on the other hand, primarily affects student choices among higher education opportunities.

Several major types of financial aid programs exist--most can be classified as either grants or loans. Each approach has its own advantages. From the student perspective, grants (either scholarships or fellowships) are most desirable since they entail no future burden to repay. Several types of criteria are used to determine eligibility for grants, usually economic need and/or academic potential. As part of the quality improvement movement, several states have begun major scholarship programs to retain their most talented high school students, such as offering an automatic grant to all Merit Scholarship finalists.

On the other hand, federal budget officials favor loan programs. Access can be provided to a much larger number of students with the same current level of expenditure through loans. Also, the obligation to repay is believed to encourage students to become more prudent in their educational decisions. Critics of loans worry that the potentially high debt levels may discourage students to such an extent that access is threatened, particularly for economically disadvantaged students.

Trend Comparisons of State Student Grant Programs

Between 1980-81 and 1986-87 need-based state grants appear to be only half as prevalent in the SREB states' mix of grant aid as in the nation (see Table 4-7). The emphasis on need-based grants varies greatly across the region. Almost all grants in Tennessee are need-based, compared to under 10 percent in North Carolina. State need-based grants for undergraduates went up less than the national average, while the total of state grants went up substantially faster than the national average.

As an important factor in access, the relatively low support for need-based aid in the SREB region leaves much room for improvement. However, the increasing non-need-based grant funds may support some quality improvement goals depending on the criteria used, for instance, programs to keep merit scholars in state. Given the growing reliance on tuition as a source of higher education revenues, one would expect growing support for need-based grants.

Table 4-7
GROWTH OF STATE STUDENT GRANT
PROGRAM DISTRIBUTIONS
1980-81 TO 1986-87

	Need-Based Under-graduate Grants		Percent Increase	Percent of Total Grants	Total State Grants		Percent Increase
	1980-81 (thousands)	1986-87* (thousands)			1983-84** (thousands)	1986-87* (thousands)	
United States	\$836,195	\$1,398,819	67.3	80.6	\$1,225,115	\$1,734,979	41.5
SREB Region	75,852	122,670	61.7	41.0	184,067	299,019	62.5
SREB Region as a Percent of U.S.	9.1%	8.8%	--	--	15.0%	17.2%	--
Alabama	1,427	2,163	51.6	21.8	5,572	9,936	78.3
Arkansas	2,046	5,145	151.5	90.2	2,308	5,703	147.1
Florida	11,527	15,311	32.8	43.1	26,040	35,516	36.4
Georgia	3,569	4,734	32.6	25.5	16,072	18,537	15.3
Kentucky	6,627	11,583	74.8	94.7	8,228	12,233	48.7
Louisiana	1,062	1,447	36.2	63.1	3,016	2,295	-23.9
Maryland	5,741	7,214	25.7	73.2	8,393	9,856	17.4
Mississippi	1,302	1,230	-5.5	59.9	2,525	2,055	-18.6
North Carolina	3,694	4,397	19.0	9.8	35,679	44,950	26.0
Oklahoma	2,041	9,450	363.0	47.7	8,000	19,795	147.4
South Carolina	11,069	16,415	48.3	92.2	12,578	17,796	41.5
Tennessee	6,475	13,735	112.1	99.6	7,081	13,787	94.7
Texas	12,981	20,293	56.3	25.8	25,530	78,556	207.7
Virginia	3,829	4,350	13.6	22.7	15,688	19,133	22.0
West Virginia	2,462	5,203	111.3	58.7	7,357	8,871	20.6

* Estimated

** 1983-84 is used here because it was the first year in which graduate as well as undergraduate and non-need-based as well as need-based state grant programs were reported.

SOURCE: Kenneth R. Reher and Jerry S. Davis, 15th, 17th, and 18th Academic Year Annual Survey Reports (Harrisburg, PA: National Association of State Scholarship and Grant Programs, 1984, 1986, 1987.)

5. CHANGES IN STATE FUNDING PROCESSES AND PRACTICES

Another major question related to the SREB states' response to the call for quality improvement funding adjustments is whether they have changed their state-level budgeting processes and practices. Based on state responses to the SREB-sponsored survey, which focused on changes occurring between 1980 and 1986, many SREB states have made such modifications. The changes can be grouped into four categories:

- incorporating quality improvement concepts in existing funding formulas;
- shifting financial incentives away from enrollment growth;
- creating new "quality" categories in current funding approaches;
- relying on non-formula categories to target funds to specific quality-related programs.

In practice, the changes implemented by the states incorporate a combination of these approaches.

Efforts to Incorporate Quality Improvement in Formula Approaches

One approach used by SREB states to strengthen their state colleges and universities has been to ensure that the existing formula provides sufficient funding for their institutions to achieve quality. In some cases, the traditional formula structures were not changed. Instead, the mathematical factors within the formula were altered in ways that enable the institutions to achieve dollar levels similar to their peers in other states.

Practices in Setting Funding Level Targets

Since higher education leaders find it difficult to defend any absolute level of funding in isolation, many formula presentations and background materials rely on interstate comparisons to justify funding levels. Generally speaking, those states below the average seek to move toward the average. Those states that are above average either seek policy support to remain at that higher plateau, for example, an upper quartile standard, or propose a new comparison group with a higher average. In either case, the justification is based on being competitive with other states as they recruit quality faculty who demand high salaries and adequate lab, library, computer, and staff support. Most state-level targets are based on either overall funding rates or on faculty salary averages.

The Alabama Commission on Higher Education provides the clearest example of using an overall funding average to establish its funding request. It computes the SREB average funding rate per full-time-equivalent

(FTE) student (excluding Alabama's own data) for the most recent year available. This funding rate is then adjusted to reflect actual and projected inflation, for example, 4 percent per year, and then multiplied by the number of FTE students eligible for state support. Other states also consider SREB (or other) averages in making their funding requests, although their use of such data more often is to establish the overall range rather than the specific amount to be requested.

Where the funding formula is built on student-to-faculty ratios, the states frequently use average faculty salary rates in comparison states as a factor in their formulas. For instance, the Kentucky Council on Higher Education has established a set of "benchmark institutions" for each of its categories of universities. These institutions generally are in other SREB states and in states that border Kentucky. Each biennium, the average faculty salaries are determined for each set of benchmark institutions and are used to adjust the formula guidelines.

Changes in Formula Relationships

The SREB survey found another type of change in the funding process that does not require a structural modification in the formula. Authorities agree to adjust the formula's various mathematical relationships. The University System of Georgia, for instance, has long used a variation of student-to-faculty ratios in its formula. In their 1982 formula revision, a new category for remedial education was created that, in effect, enabled a lower average class size in remedial classes and thus giving a special recognition to the funding requirements of remedial education in that system.

Many formulas first calculate the requirement for instruction and then express the formulas for most other components of the budget such as maintenance and student services, as a percentage of the amount for instruction. A state wishing to respond to calls to maximize student involvement through reinforcing the student services funding could merely increase the funding percent.

Enrollment Recognition Approaches

The single most influential factor in traditional funding formulas has been enrollment. Although enrollments can be counted in many different ways, the central fact remains that more students usually result in more dollars. Not surprisingly, at times this fact has been seen as inhibiting quality improvement. The method for recognizing enrollment has received considerable attention in efforts to make formulas more responsive to quality improvement.

General Concerns About Enrollment-Driven Formulas

Even though enrollment traditionally has been the centerpiece of funding formulas, its use has long been a source of concern. The criticisms range from philosophical to technical. The major quality-related complaint is that enrollment-driven formulas have caused institutions to compete quantitatively, that is, for increased numbers of students, rather than qualitatively, that is, with stronger programs. Colleges can gain more formula dollars with more students and that does not directly or necessarily lead to stronger programs.

A second concern about some types of enrollment-driven formulas is that enrollment levels alone often fail to reflect programmatic and qualitative needs. For instance, the need for library resources probably results more from the mission of the institution, for example, the breadth and level of program offerings, than on the number of students alone. A third concern is that many enrollment-driven formulas presume a one-to-one relationship between the number of students and the amount of resources required. Since there are fixed costs (costs which do not diminish in proportion to the numbers of students served), a slight reduction or shift in the number of students can have pronounced effects on the level of resources generated.

Techniques and Rationale for Counting Enrollments

State budget authorities have tried to respond to these criticisms in a number of ways. To reduce the direct incentive to increase enrollments, some states, such as Florida and Tennessee, have developed the concept of target enrollments or enrollment corridors. Although slightly different in application, both strive to base funding decisions for a college on an established enrollment level. The college then faces no funding consequences from enrollment fluctuations in an established range, for example, plus or minus 5 percent. Instead, major changes in funding levels come in response to such programmatic decisions as adding a new major field of study or developing a special research emphasis.

A variation of this approach is to define and calculate enrollments for funding purposes in a way that will avoid extreme shifts in resource levels. For instance, Kentucky uses a three-year rolling average of enrollments in its process; Florida and some other SREB states recognize an enrollment floor. In the first case, a Kentucky institution will be rewarded (or penalized) eventually for a gain (or loss) of enrollment, but year-to-year fluctuations are minimized and the institution has time to plan to allocate its increases (or decreases) more effectively. In the case of enrollment floors, the budget of a Mississippi or Virginia institution with declining enrollment levels is protected or "buffered" from reductions beyond a certain point.

Weighting Enrollments to Reflect Program Differences

A final enrollment-related concern found in SREB's survey of formula funding practices is how to recognize programmatic differences among the institutions. Most academic leaders acknowledge that certain programs, for example, graduate science and engineering, cost more to teach than others. To ensure that appropriate (or at least equitable) amounts are available for each program, states frequently revise their schemes for weighting enrollment for funding purposes. During its 1982 formula revisions, the University System of Georgia created four broad programmatic categories with differing funding rates. As part of its current formula revision, the Mississippi system now recognizes doctoral instruction apart from other graduate-level teaching.

New or Expanded Formula Categories

Beyond the obvious efforts to achieve quality through overall funding level increases, the SREB survey found that some states have created new formula categories to target resources on opportunities to strengthen specific academic programs. This approach is attractive in those states where the state-level policymakers want to minimize involvement in institutional decisions.

In Georgia, for instance, the 1982 formula revision resulted in a new quality improvement category that is calculated as a 1 percent supplement to the traditional formula base. This category is intended to provide each college with a separate pool of funds that will not become committed to ongoing needs. Instead, these funds are to respond to special needs and opportunities where slightly more resources can make the most difference, for example, for major purchases of laboratory equipment.

Tennessee's performance funding method is outcome-driven. Under their approach, up to 5 percent beyond the regular formula base may be earned by providing certain evidence of striving for or achieving quality, for example, establishing a planning and evaluation process or meeting program accreditation standards. These supplemental funds can be spent on any purpose of the institution's own choosing.

Other attempts to influence quality through formula changes can be seen in the research area. Instead of providing all research funding as a function of enrollment levels, several states (such as Kentucky, Mississippi and Tennessee) base at least part of their research support on the success of their universities in obtaining external, sponsored research funding. This approach presumably creates a greater incentive for faculty to be active in research, which, in turn, is presumed to lead to higher quality advanced instruction.

Kentucky's formula provides continuation funding amounts over the 1988-1990 biennium for those programs previously approved as Centers of Excellence through the Council on Higher Education's competitive selection process. In future formula calculations, funding for continuation, improvement, reduction, or elimination will be based on biennial progress reports. Requests for initial quality incentive funding (new centers of excellence or endowed chairs) are handled outside of the formula structure.

Also incorporated into Kentucky's formula by the 1986 General Assembly was the Salary Incentive Fund to address faculty recruitment and retention problems.

Funds Appropriated Outside of Formula Structures

A more common approach for targeting resources on quality improvement is to develop and fund specific initiatives outside the formula. Among these approaches are endowed chairs, centers of excellence, and special funding categories for competitive research grants, libraries, and equipment.

The nation's more prestigious colleges and universities have benefited from endowed chairs for a number of years. Under this approach, a portion

of the school's endowment is dedicated to supporting a particular faculty position. The annual earnings on this separate endowment are used to supplement or pay all of a distinguished faculty member's salary and perhaps to underwrite a portion of other related costs, such as laboratory expenses. Endowed chairs are effective in recruiting faculty members of substantial reputation and, depending on the amount of the endowment, lighten the drain on other current revenues.

In recent years, several SREB states have expanded this concept to include state incentive grants to create endowed chairs. A typical arrangement is for the state to match \$500,000 of earmarked private giving with \$500,000 of one-time state funds to create a million dollar endowed chair. The expected annual earnings of \$50,000 to \$100,000 are then enough for a highly competitive salary for a distinguished scholar.

Florida was among the first of the SREB states to create and fund "centers of excellence" in its universities. The intent of this program is to create additional monetary incentives for quality improvement while at the same time attempting to differentiate university missions more fully. Each university was invited to develop one or more proposals to create centers of excellence in areas where the institution had an existing strength and faced an opportunity to achieve national distinction with only a moderate amount of additional funding. Once a program proposal was approved by the Board of Regents, it became eligible for both formula (enrollment-driven) and non-formula funding.

Special funding programs for library collections and academic equipment have been used by a number of states. This approach is especially attractive when:

- the legislature is uncertain about the continuing availability of funds;
- the institutions have been faced with a series of budget reductions and/or mid-year reversions;

A good example is found in Mississippi where the legislature, during a 1987 special session, allocated a \$16 million surplus for one-time equipment and library book funding. Research equipment also has been the beneficiary of such programs. Equipment often is a critical concern since many schools never developed adequate budgets for equipment replacement after funding their original purchases with building or research grants. In Virginia, the State Council on Higher Education created a \$100 million equipment trust fund to respond to significant needs in engineering and other programs. Virginia's "Commonwealth Centers" and "Eminent Scholars" programs provide additional emphasis for quality improvement initiatives.

Summary of Budgetary Attempts to Influence Quality

The SREB survey has identified a number of methods that states can employ and have used to try to influence quality through the budget process. In describing those approaches, several individual states were identified as examples. Table 5-1 provides an overview showing which states reported that they are employing the various methods to affect quality in their public higher education institutions.

Table 5-1
STATE LEVEL EFFORTS TO IMPROVE
QUALITY THROUGH THE BUDGET PROCESS

	External Funding Targets	Changes in Formula Relationships	Enrollment Recognition	New Formula Categories	Quality Targeted Funding
Alabama	SREB Average		3-Year Average	Veterinary Medicine Agricultural Extension	Eminent Scholars
Arkansas			3-Year Average	Equipment Replacement Economic Development	Research Grants Economic Development
Florida					
2-Year			Enrollment Corridor		Academic Improvement Trust Fund
4-Year	Upper Quartile of Nation	Libraries Physical Plant	Enrollment Corridor		Eminent Scholars Quality Improvement Program Science Development Grants Programs of Emphasis High Technology Equipment
Georgia	Upper Quartile of Region	Instructional Programs	Prior Year	Remedial Education	Quality Improvement Program Special Funding Initiative
Kentucky	Peer Salary Comparisons	Major Changes in 1982	3-Year Average	Centers of Excellence Salary Incentive Fund	Centers of Excellence Endowed Chairs
Louisiana			Prior Year	Operation of Plant Utilities	Eminent Scholars Carefully Defined Research, Program Review
Maryland			2nd Prior Year	Student Aid	
			Projections		

	External Funding Targets	Changes in Formula Relationships	Enrollment Recognition	New Formula Categories	Quality Targeted Funding
Mississippi					
2-Year			Projections		
4-Year		Revision Underway	Prior Year		
North Carolina					
2-Year			Prior Year		
4-Year					Distinguished Professors
Oklahoma			Projections		
South Carolina	Peer Salary Comparisons		Prior Year	Medical Education Residency Programs Hospital	Competitive Grants
Tennessee	Peer Salary Comparisons	Student/Faculty Ratio; Faculty Salaries	Base/Range	Performance Funding College Preparation	Centers of Excellence Centers of Emphasis Chairs of Excellence Postsecondary Improvement Fund
Texas	10 Largest States for Faculty Salaries		Prior Year	Faculty Development Educational Oppor- tunity	Capital Improvements Engineering Equipment Competitive Research Grants
Virginia	60th Percentile on Faculty Peer Salary Comparisons	Plant Operations and Maintenance	Prior Year and Projections	Moveable Equipment Academic Computing Equipment Trust Fund	Funds for Excellence Student Assessment Eminent Scholars Commonwealth Centers
West Virginia			3-5 Year Trends		Endowed Positions Research & Development Equipment

SOURCE: SREB survey of state higher education agencies, 1987.

By far the most common change to the traditional formula funding approach has been to modify the manner in which enrollments are recognized or counted. Growing out of concerns for the need to de-emphasize growth or to buffer the institutions from year-to-year fluctuations, the majority of states no longer use projected enrollments in their formula calculations. Instead, most use either prior year actual enrollments or a rolling average technique. Several do not adjust funding levels until enrollments are outside a designated corridor. These changes tend to protect higher education's base funding upon which quality improvement efforts can be maintained and possibly strengthened.

Other recent formula changes more directly related to quality improvement include the creation of new categories for remedial education, faculty development, student access, and equipment. The use of separate formula categories for these activities serves to highlight their importance to state-level budget makers and tends to assure the institutions that the state has a long-term commitment to the activity.

A widespread direct method of changing budgetary practices to achieve quality improvement has been the introduction of non-formula budget categories for special programs or initiatives. About half of the SREB states have non-formula support for distinguished professors. Other popular areas for non-formula support have included equipment, research grants, and centers of excellence. Many of these initiatives are related to such quality improvement goals as increasing research capacity and higher education's support of economic development. Relatively few of the changes have addressed the quality improvement goal of access to quality undergraduate education.

6. CLOSING OBSERVATIONS

During the early to middle 1980s, regional, national, and state special study commissions issued calls for improving quality in the nation's colleges and universities. Many dealt with the need to implement specific programs, such as new curricula and assessing student achievement. Also, the studies generally recognized the financial implications of the recommended programs and addressed the methods and amounts of state-level funding for institutions of higher education.

This report has focused on these financial implications and has examined various quality improvement initiatives and state-level funding processes in the SREB states. It has also analyzed funding levels and trends in the sources and uses of available funds.

Changes in State Support for Higher Education

Regardless of the exact wording of the various funding-related recommendations, a common implicit goal is for the state to increase its level of per-student support at a rate at least as fast as competing states and to keep pace with inflation.

During the 1980s, 8 of SREB's 15 states have failed to provide state appropriations sufficient both to accommodate enrollment growth and to offset inflationary price-level increases. This disappointing performance is the result of a number of factors, including changes in tax capacity, tax effort, enrollment demand, and other state-level spending priorities.

Compared to the national averages, between 1980 and 1986, the 15 SREB states had the following performance:

- 7 states saw their tax capacity increase faster than the national average;
- 11 states increased their tax efforts faster than the national average;
- 11 states experienced enrollment growth faster than the national average;
- 13 states allocated a smaller share of their overall state appropriation to higher education; and
- only 5 states gained on the national average in state appropriations per student; thus, 10 SREB states fell behind in per-student support.

Apparently, states in other regions are at least equally committed to increasing the funding of higher education as are the SREB states.

Shifts Among Revenue Sources

Although state and local appropriations are the primary source of support for the region's colleges and universities, several of the special studies conducted in SREB states recently also addressed the need to develop other sources of funds. In particular, these studies called for student fees to be established on a more formal basis and for greater efforts to attract private giving.

SREB's 15 states experienced the following shifts among the major sources of unrestricted revenue between 1980 and 1986:

- 11 states now have less reliance on state and local appropriations;
- 9 states now have a greater reliance on student tuition and fees; and
- 12 states now receive a larger portion of their support through private giving.

The evidence suggests that most states have not been full partners in efforts to fund improvements in their systems of higher education. Instead, the financial burden is shifting to students and to private donors.

Shifts in Expenditure Patterns

The various proposals for improving the quality of the SREB region's colleges and universities suggested specific areas for increased spending. In addition to the omnipresent calls to spend more on the instruction function and on faculty salaries in particular, the study groups also offered recommendations for greater spending on libraries and other forms of academic support, on student services, and on scholarships and fellowships.

Among the eight major institutional functions used to classify expenditures, the percent of total institutional spending in the SREB region has:

- decreased proportionately for instruction, research, academic support, student services, and operation and maintenance of plant;
- increased for institutional support (general administration);
- increased for scholarships and fellowships;
- remained constant for public service.

These findings do not show a significant shift in the direction of quality improvement targets.

Data for the entire region to describe spending by object of expenditure is not readily available, but analyses of selected data suggest that ever-greater portions of the budget go to salaries and benefits. Even with this trend, faculty salaries in only 4 states in the region managed to increase more than the overall national increase in per capita income.

Changes in State-Level Funding Methods

The majority of SREB states no longer use projected enrollments in their funding formulas. Instead, most use either prior year actual enrollments or a "rolling average" technique. Several do not adjust funding levels until enrollments are outside a designated "corridor." These changes tend to reduce year-to-year fluctuations due to enrollment changes.

Other recent formula changes include the creation of new categories for remedial education, faculty development, student access, and equipment. The use of separate formula categories for these activities serves to highlight them to state-level budget makers.

The most common type of change to formula funding systems has been the introduction of non-formula budget categories for programs like endowed chairs. This change represents a fundamental change in state funding strategy. Rather than appropriate new funds through the existing formula, they are appropriated through special, strings-attached, programs. Many of these initiatives are related to such quality improvement goals as increasing research capacity and stimulating economic development. Relatively few have addressed improving access to quality undergraduate education.

Conclusion

Not every state in the region has relied on a formal study commission to express its concerns about strengthening its systems of higher education. Instead, states often have made incremental improvements through the efforts of governors, key legislators, state higher education boards and their executives, and campus leaders. But, regardless of the origins, virtually every state in the region has witnessed some formal expression in support of a stronger system of higher education.

Of the 7 states that have received reports from special study commissions, 1 has experienced a relative increase in per-student appropriations, 1 has had no change, and 5 have fewer dollars when inflation is taken into account (see Table 6-1). Of the 4 states that have made major modifications to their formulas, three have experienced funding level gains. Finally, of the 8 states that have developed major non-formula funding categories, 3 have seen increased appropriations. Funding system adjustments apparently do increase and redirect funding, as the calls for quality improvement suggest.

Of the 15 funding formulas identified in the region, 8 have been modified. Greater changes in funding processes can be seen in non-formula approaches; 13 of the 19 funding approaches (formula and non-formula) have added non-formula programs. Finally, only 5 of the 15 states have gained on the national average in state appropriations per student.

Table 6-1
SUMMARY OF STATE-LEVEL EFFORTS AND RESULTS TO
IMPROVE QUALITY THROUGH THE BUDGET PROCESS

State	Year of Special Study Commission	Changes in Formula Approach	New Non-Formula Funding Programs	Relative Changes in Funding Levels
Alabama	Not Applicable	None	Minor	5.4% Increase
Arkansas	Not Applicable	None	Minor	1.5% Increase
Florida				2.9% Decrease
Community Colleges	Not Applicable	Not Applicable	Minor	
University System	1984	Minor	Major	
Georgia	1981	Major	Major	14.8% Increase
Kentucky	1980, 1985	Major	Minor	5.6% Decrease
Louisiana	Not Applicable	None	Major	16.2% Decrease
Maryland				1.4% Decrease
Community Colleges	1986	Minor	None	
Senior Institutions	Not Applicable	None	None	
Mississippi				13.4% Decrease
Community Colleges	Not Applicable	None	None	
University System	Not Applicable	None	None	
North Carolina				21.6% Increase
Community Colleges	Not Applicable	None	None	
University System	Not Applicable	Not Applicable	Minor	
Oklahoma	1986	Not Applicable	None	2.3% Increase
South Carolina	1987	Minor	Minor	5.5% Decrease
Tennessee	1982	Major	Major	31.2% Increase
Texas	1986	Minor	Major	4.7% Decrease
Virginia	1985	Major	Major	15.3% Increase
West Virginia	Not Applicable	Not Applicable	Major	6.4% Decrease

REFERENCES

1. Southern Regional Education Board. *The Need for Quality* (Atlanta: SREB, 1981)
2. Southern Regional Education Board. *Meeting the Need for Quality* (Atlanta: SREB, 1983).
3. Southern Regional Education Board. *Access to Quality Undergraduate Education* (Atlanta: SREB, 1985).
4. Southern Regional Education Board. *Getting Students Ready for College* (Atlanta: SREB, 1986).
5. Study Group on the Conditions of Excellence in American Higher Education, *Involvement in Learning: Realizing the Potential of American Higher Education* (Washington: National Institute of Education, 1984).
6. Frank Newman, *Choosing Quality: Reducing Conflict Between the State and the University* (Denver: Education Commission of the States, 1987).
7. Prichard Committee on Higher Education in Kentucky's Future, *In Pursuit of Excellence* (Frankfort, KY: Council on Higher Education, 1981).
8. Study Committee on Public Higher Education Finance, *Formula For Excellence: Financing Georgia's University System in the '80s* (Atlanta: University System of Georgia, 1982).
9. Tennessee Comprehensive Education Study Task Force, *Tennessee Comprehensive Education Study, 1981-82* (Nashville, TN: State of Tennessee, 1982).
10. Regent's Study Commission on Funding for Excellence, *A Path to Excellence* (Tallahassee: Florida Board of Regents, 1985).
11. State Council of Higher Education of Virginia, *The Virginia Plan for Higher Education, 1985* (Richmond: State Council of Higher Education, 1985).
12. Select Committee on Higher Education, *Report of the Select Committee on Higher Education* (Austin, TX: Select Committee on Higher Education, 1987).
13. South Carolina Commission on Higher Education, *The Cutting Edge: Higher Education's Initiatives for Excellence* (Columbia, SC: South Carolina Commission on Higher Education, 1987).
14. Oklahoma Higher Education Task force, *Oklahoma's Secret Crisis* (Oklahoma City: Oklahoma Higher Education Task Force, 1987).
15. Joseph L. Marks and Stephanie A. Korcheck, "Tuition and Fees in the SREB States: Trends and Issues," *Financing Higher Education*, No. 31 (Atlanta: SREB, 1987).

APPENDIX A
DEFINITIONS OF REVENUE AND EXPENDITURE CATEGORIES

Revenue Categories

Tuition and Fees. All tuition and fees (including student activity fees) assessed against students for education purposes. Includes tuition and fee remissions or exemptions even though there is no intention of collecting from the student. Includes those tuitions and fees that are remitted to the state as an offset to the state appropriation. (Charges for room, board, and other services rendered by auxiliary enterprises are not included.)

Government Appropriations. Includes all amounts received by the institution through acts of a legislative body, except grants and contracts. These funds are for meeting current operating expenses, not for specific projects or programs. Examples are federal land-grant appropriations and federal revenue sharing funds. Federal appropriations received through state channels should be included in the total for federal appropriations.

Government Grants and Contracts. Revenues from governmental agencies which are for specific research projects or other types of programs. Examples are research projects, training programs, and similar activities for which amounts are received or expenditures are reimbursable under the terms of a government grant or contract. Related indirect costs recovered are considered unrestricted revenues. Amounts equal to direct costs incurred are charges against current restricted funds. Includes Pell Grants, federal grants and contracts received through state channels, and local appropriations.

Private Gifts, Grants, and Contracts. Revenues from private donors for which no legal consideration is involved and private contracts for specific goods and services provided to the funder as stipulation for receipt of the funds. Includes only those gifts, grants, and contracts that are directly related to instruction, research, public service, or other institutional purposes. Monies received as a result of gifts, grants, or contracts from a foreign government are included as well as the estimated dollar amount of contributed services.

Endowment Income. Includes (1) the unrestricted income of endowment and similar funds; (2) restricted income of endowment and similar funds to the extent expended for current operating purposes; and (3) income from funds held in trust by others under irrevocable trusts. Does not include capital gains or losses. If any such gains are spent for current operations, these are treated as transfers, not revenues. Excluded is endowment income for hospitals. For institutions that have adopted a spending formula by which they expend not only the yield, but also a prudent portion of the appreciation of the principal, includes the amount calculated by the "total return" concept. The amount so calculated is adjusted for protection of the endowment principal from its loss of purchasing power if that provision is part of the spending formula.

Sales and Services of Education Activities. Revenues derived from the sales of goods or services that are incidental to the conduct of instruction, research, or public service. Examples include film rentals, scientific and literary publications, testing services, university presses, and dairy products.

Expenditure Categories

Instruction. Expenditures of the colleges, schools, departments, and other instructional divisions of the institution and expenditures for departmental research and public service that are not separately budgeted are included in this classification. Includes expenditures for both credit and non-credit activities. Excludes expenditures for academic administration where the primary function is administration (e.g. academic deans). The instruction category includes: general academic instruction; occupational and vocational instruction; special session instruction; community education; preparatory and adult basic education; and remedial and tutorial instruction conducted by the teaching faculty for the institution's students.

Research. Includes all funds expended for activities specifically organized to produce research outcomes and commissioned by an agency either external to the institution or separately budgeted by an organizational unit within the institution. Does not include non-research sponsored programs (e.g. training programs).

Public Service. All funds budgeted specifically for public service and expended for activities established primarily to provide non-instructional services beneficial to groups external to the institution. Examples are seminars and projects provided to particular sectors of the community. Include expenditures for community services and cooperative extension services.

Academic Support. Includes expenditures for the support services that are an integral part of the institution's primary mission of instruction, research, or public service. Includes expenditures for libraries, museums, galleries, audio-visual services, academic computing support, ancillary support, academic administration, personnel development, and course and curriculum development. Includes expenditures for veterinary and dental clinics if their primary purpose is to support the institutional program.

Student Services. Funds expended for admissions, registrar activities, and activities whose primary purpose is to contribute to student's emotional and physical well-being and to their intellectual, cultural, and social development outside of the context of the formal instructional program. Examples are career guidance, counseling, financial aid administration, and student health services (except when operated as a self-supporting auxiliary enterprise). Includes the administrative allowance for Pell Grants.

Institutional Support. Includes expenditures for the day-to-day operational support of the institution, excluding expenditures for physical plant operations. Includes expenditures for general administrative services, executive direction and planning, legal and fiscal operations, and public relations/development.

Operation and Maintenance of Plant. Includes all expenditures for operations established to provide service and maintenance related to grounds and facilities used for education and general purposes. Also includes expenditures for utilities, fire protection, property insurance, and similar items. Does not include expenditures made from the institutional plant funds account.

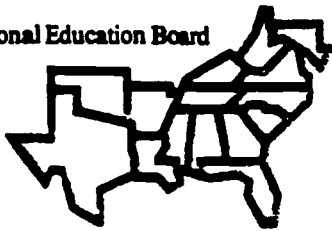
Scholarships and Fellowships. Includes expenditures given in the form of outright grants and trainee stipends to individuals enrolled in formal coursework, either for credit or non-credit. Aid to students in the form of tuition or fee remissions included. (Excluded are those remissions that are granted because of faculty or staff status; these are charged to staff benefits.) Does not include College Work-Study Program expenses; these are expenses where the student served (e.g. dining hall). Includes Pell Grants.

SOURCE: Adapted from National Center for Education Statistics financial statistics survey form.

APPENDIX B
SURVEY FORM

Southern Regional Education Board

SR
- 392 Tenth Street, N.W. • Atlanta, Georgia 30318-5790 • 404/875-9211



**Questionnaire on State Funding and Budgeting Practices
for Four-Year and Two-Year Colleges and Universities**

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Please return to SREB (Attn: Joe Marks) by August 1, 1987

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1. **Respondent Information**

- a. State _____
- b. Agency _____
- c. Name _____
- d. Phone Number _____

2. **Current Funding Formula Guidelines**

- a. Does your agency use a formula approach to build the appropriations request?

Four-year Colleges and Universities Yes ____ No ____

Two-year Colleges Yes ____ No ____

(Please describe or provide a copy of any available descriptive materials.)

- b. Does your agency use a formula approach to allocate among institutions the appropriations received?

Four-year Colleges and Universities Yes ____ No ____

Two-year Colleges Yes ____ No ____

(Please describe or provide a copy of any available descriptive materials.)

- c. If not included in the descriptive materials you have attached, please list the functional categories that have separate formulas (for example, instruction, faculty salaries, physical plant, libraries, etc.).

- d. If not included in the descriptive materials you have attached, please list the separate sub-categories within instruction and the other major functional categories (for example, lower division, upper division, master's, doctoral, agriculture, business, etc.).

3. Current Non-Formula Distributions

Does your agency recommend or allocate funding (all or part) by some means other than a formula?

Four-year Colleges and Universities Yes ____ No ____
 Two-year Colleges Yes ____ No ____

(Please describe or provide a copy of any available descriptive materials.)

4. Changes in Funding Practices

Please describe any structural changes in your agency's funding practices since 1980 (for example, new formula categories, new non-formula categories, etc.).

5. Funding For Quality Improvement

Please describe any methods used by your state in distributing funds that are specifically aimed at quality improvement (for example, special funding for endowed chairs, laboratory equipment, etc.).

6. Enrollment Recognition Approaches

If the number of students is a factor in your funding process, how are students counted? (for example, FTE for projected year, current year, moving average, corridors, credit hours, etc.).

7. Remedial Education Funding

How is funding provided for remedial courses? (for example, separate funding category, as lower division, etc.).

8. Special Topics

Many states have implemented various types of quality improvement and quality assurance programs. Please identify types of programs used in your state and, if possible, the annual expenditures for each.

- | | | | |
|---------------------------------|----------|---------|----------------------|
| a. Statewide Program Review | Yes ____ | No ____ | Estimated Cost _____ |
| b. Statewide Testing Program(s) | Yes ____ | No ____ | Estimated Cost _____ |
| c. Enhancing Research Capacity | Yes ____ | No ____ | Estimated Cost _____ |
| d. Enhancing Faculty Salaries | Yes ____ | No ____ | Estimated Cost _____ |
| e. Others (please list) _____ | | | Estimated Cost _____ |