residents. Overall, statewide enrollments of nonresidents increased from 38,225 to 39,432. The trend for UNC should be followed, to determine if/when material decreases in nonresident enrollments begin to appear.

To the extent that peer states also are under fiscal pressure and have adopted similar policies for nonresident tuition, there might be a leveling effect in the coming years. That is, the cost of attending a public university in another state could begin to approximate private university tuition rates. The broad impact, in which North Carolina will share, may be that fewer students will cross state borders to attend public institutions.

Tuition and Fees - Graduate and Professional Students

While the primary focus of this analysis was undergraduate tuition, a brief discussion of graduate and professional tuition follows.

Finding 8: Average graduate tuition rates are the same as undergraduate rates, for both resident and nonresident categories.

There are exceptions of slightly higher tuition rates for medicine, veterinary medicine, dentistry, and pharmacy. But even tuition rates for medical professions is only 23 percent higher, at \$921, than undergraduate and graduate resident tuition of \$747 for FY 1992–1993. Among peers, 15 states of 49 responding in the SHEEO study have tuition policies that differentiate between undergraduate and graduate tuition.⁶

Exhibits 8 and 9 indicate that UNC tuition and fees for graduate students, especially for resident students, is low compared with peers. For residents in research/doctoral universities, graduate tuition and fees are \$1,208 or 40 percent of the peer state average of \$3,007. In comprehensive universities, graduate tuition and fees are \$1,201 or 56 percent of the peer state average of \$2,127.

Fees

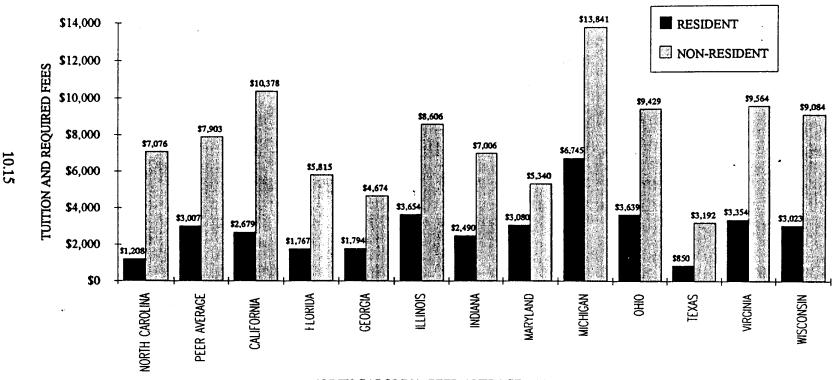
The comparative data presented above are from a study that compares tuition and fees, where fees are defined as "average charges" reported by the states; therefore, the impact of fees already is incorporated in the discussion above. Nonetheless, the question of UNC fees requires further explanation.

Fees in each of the three categories defined above are established by constituent institutions, with Board of Governors approval. Fees required of all students are associated with debt service on certain facilities or associated with various non-instructional services not provided for through appropriations but which institutions determine are necessary to fulfillment of mission.⁷ Fees are associated with athletics, recreation, health care and social services.

⁶ *Ibid.*, SHEEO p. 13.

⁷ Debt service fees are eliminated when debt is retired.

Exhibit 8
Resident and Nonresident Graduate Tuition and Required Fees at Research/Doctoral Universities
North Carolina and Peer States
FY 1991-1992



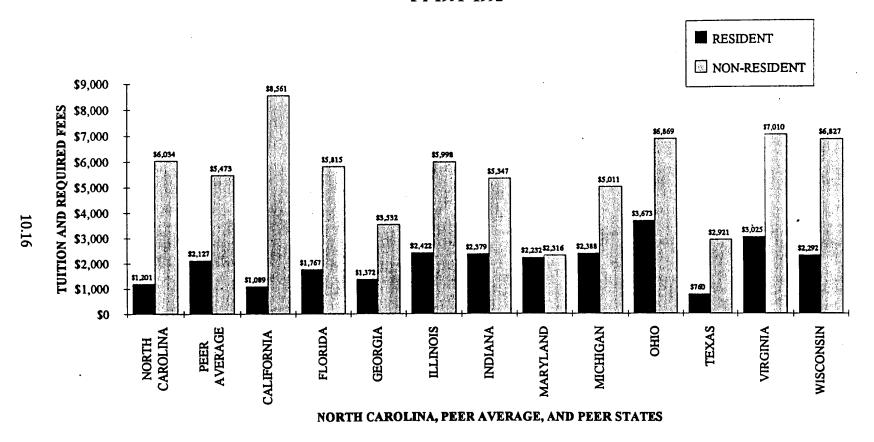
NORTH CAROLINA, PEER AVERAGE, AND PEER STATES

Exhibit 9

Resident and Nonresident Graduate Tuition and Required Fees at Comprehensive Universities

North Carolina and Peer States

FY 1991-1992



Note: UNC tuition rate is for Comprehensive I's; Comprehensive II's slightly lower.

Source: Tuition and Fee Rates: A National Comparison, Higher Education Cordinating Board, Stae of Washington, November, 1991

Unlike tuition, which is added to the General Fund, fee revenues are collected by the institutions, deposited with the State Treasurer, and available to the institution to draw as needed. Fees (other than academic fees) are not counted in determining the cost of education or state appropriations share of total requirements per FTE. Exhibit 10 shows the FY 1991-92 fees charged by each of the sixteen constituent institutions in the UNC system. They range from a low of \$358 at Pembroke State University to a high of \$718 at UNC-Greensboro, representing a range from 39 percent to 48 percent of the institution's tuition and fee charges. The system average for fees is \$515.

Two significant factors account for wide variation in non-academic fees. First, as institutional missions and programs vary, provision of various kinds of instructional support and student development services also varies. This is inherent in the nature of universities.

Second, variations in how specific noninstructional facilities have been financed contribute to fee differences. This is an effect of the capital appropriations method, under which operating budget reversions have been appropriated to designated projects by the General Assembly in subsequent years, combined with a policy to permit (or require) institutions to fund certain facilities with fee-supported revenue bonds. To the extent that some campuses acquired a given facility by appropriations, while another issued bonds to finance a similar facility, there will be a difference reflected in the level of associated student fees.

Finding 9: UNC tuition and fees have been determined in separate decision processes, in one case by the General Assembly and in the other by the Board of Governors.

While the General Assembly has focused its attention on the tuition part of the student cost equation, it has delegated responsibility to the Board of Governors to determine instructional and non-instructional fees. Recently, the General Assembly focused attention on this disparity and has required the Board of Governors to freeze fees and prepare an analysis of the existing fee structure, together with recommendations for fee management. The Board of Governors' fee report is due in April 1993. The Board of Governors committee that currently is studying fees is considering alternatives that may include:

- a dollar cap on building/debt service-related fees
- a percentage increase of approximately 20 percent from current debt service fee levels; and
- an increase in the dollar amount of fees.

Finding 10: Only the tuition portion of a "total student cost" policy can be formulated now, until further analysis of fees is completed.

Establishment of a combined tuition and fee (student cost) policy expressed as a percent of cost of education is impossible at present, until receipt of the Board of Governors' analysis and recommendations. Therefore, recommendations below attempt to address the **tuition** portion of

Exhibit 10 The University of North Carolina Tuition and Fees Undergraduate Resident and Nonresident Students by Institution FY 1991-1992

		RESIDEN	Τ	NONRESIDENT							
	TUITION	FEES	COMBINED		TUITION	FEES	COMBINED				
SCHOOL OF THE ARTS	\$1,158	\$472	\$1,630		\$7,617	\$472	\$8,089				
UNC-GREENSBORO	\$774	\$718	\$1,492		\$6,642	· \$718	\$7,360				
UNC-WILMINGTON	\$676	\$626	\$1,302		\$5,730	\$626	\$6,356				
N.C. STATE	\$774	\$464	\$ \$1,238		\$6,642	\$464	\$7, 106				
WESTERN CAROLINA	\$676	\$553	\$1,229		\$5,730	\$ 553	\$6,283				
N.C. A&T	\$676	\$552	\$1,228		\$5,730	\$552	\$6,2 82	M			
UNC CHAPEL HILL	\$774	\$439	\$1,213		\$6,642	\$439	\$7,081				
EAST CAROLINA	\$676	\$528	\$1,204		\$5,730	\$ 528	\$6,258				
N.C. CENTRAL	\$676	\$493	\$1,169		\$5,730	\$493	\$6,223				
APPALACHIAN	\$676	\$491	\$1,167		\$5,730	\$4 91.	\$6,221				
ELIZABETH CITY	\$ 556	\$594	\$1,150		\$5,030	\$594	\$5,624				
UNC CHARLOTTE	\$676	\$471	\$ \$1µ47		\$5,730	\$4 71	\$6,201				
UNC ASHEVILLE	\$556	\$560	\$1,116		\$5,030	\$560	\$5,590				
FAYETTEVILLE	\$676	\$420	\$1,096		\$5,730	\$420	\$6,150				
WINSTON-SALEM	\$556	\$504	\$1,060		\$5,030	\$504	\$5,534				
PEMBROKE	\$556	\$358	\$914		\$5,030	\$358	\$5,388				

Source: UNC General Administration

the equation and leave opportunities for expansion to a student cost policy that incorporates fees, when it is possible to do so.

TUITION AND FEES - NORTH CAROLINA COMMUNITY COLLEGE SYSTEM

Tuition - Resident Students

Students at NCCCS are either "curriculum students" or "occupational extension" students. The subject of this discussion is tuition for curriculum students. In NCCCS, instruction and tuition charges are based on the quarter system. This analysis assumes a "typical" curriculum student in NCCCS would be enrolled for three of four quarters. "Annual tuition" therefore is the quarterly tuition rate times three quarters. (In reality, students may enroll for any number of quarters in a given year.)

As Exhibit 11 indicates, NCCCS tuition for resident curriculum students has risen 181 percent since FY 1986-1987, to the FY 1992-1993 level of \$185.50 per quarter or \$556.50 for a typical three-quarter year.

Student activity fees vary by college but are set by the State Board of Community Colleges at a maximum of \$7 per quarter, not to exceed \$28 per year. Total fees range from a low of \$9 at Wake Technical Community College to a high of \$33.75 at Lenoir Community College.

Finding 11: NCCCS resident tuition for three quarters of study nearly equals tuition at UNC comprehensive II universities.

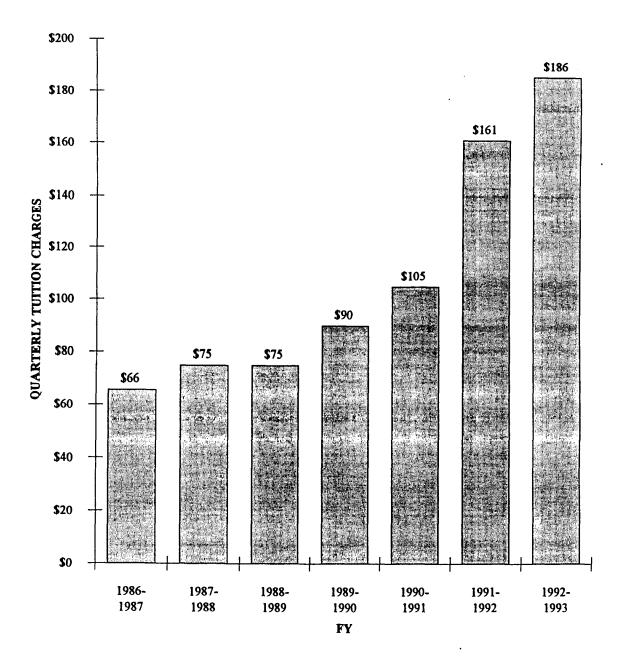
In FY 1992-93, tuition at UNC's comprehensive II universities is \$590. While UNC students also have required fees in excess of those charged at NCCCS, they also have a fuller array of facilities and services, especially as residential students. NCCCS tuition, at \$556, has been increased to a point where the disparity in student cost between the systems is disappearing.

Finding 12: NCCCS resident tuition is second lowest of the 50 states and well below the national average.

Because the 11 selected peer states are less applicable to NCCCS than to UNC, this comparison is based on national data. In FY 1991-1992, only Hawaii, at \$440, was lower than North Carolina, which was \$483. In that year, the national average was \$1,054. North Carolina's tuition was 46 percent of the national average. This 49th lowest rank in tuition was despite much larger percentage increases in North Carolina, where the four-year increase, to 1991-1992, was 115 percent, while the national average increase for the same period was only 35 percent.

⁸ Categorical programs such as literacy and non-curriculum programs are charged on a course fee basis or there are no charges at all.

Exhibit 11
North Carolina Community College System
Quarterly Tuition Charges for Resident Students
FY 1986-1987 to FY 1992-1993



Note: "Annual" tuition is quarterly tuition times three, or \$ 556. Source: North Carolina Department of Community Colleges

Tuition - Non-Resident Students

The history of recent increases in tuition charged to nonresidents of NCCCS students has been similar. It currently is set at \$1,505 per quarter or \$4,515 for a three-quarter year, representing an increase of 196 percent since 1986-1987, when nonresident tuition was \$504 per quarter. But the comparison to the national average yields quite different results.

In FY 1991-1992, North Carolina's nonresident tuition was \$4,515, well above the national average for nonresidents of \$3,088. North Carolina's nonresident tuition was increased by 115 percent during the four-year period, while the national average increased only 40 percent.

By headcount, nonresidents accounted for 1,161 of 26,571 NCCCS students, or only 4.2 percent in 1991–92. Most of the nonresidents are enrolled in college-parallel programs in NCCCS institutions and the tuition they pay generates approximately \$ 5 million in revenues. Unlike in UNC, nonresident students do not represent a particularly important cohort for NCCCS overall, although they may be an important enrollment component for some institutions near the State's borders. There does not seem to be any justification for increasing nonresident tuition charges in NCCCS.

FEDERAL FINANCIAL AID

Student financial aid in higher education consists of scholarships, grants, loans, and employment opportunities. Financial aid is available to students through institutional, private, federal and state sources. Institutional sources of aid are provided and controlled by individual educational institutions and private sources include community organizations, foundations, professional associations, corporations and commercial lending institutions. Federal and state government sources together provide the major portion of total financial aid through a broad range of programs. Of the many complex issues in financial aid, this study only addresses the question of federal financial aid levels in North Carolina.

The Federal Government is the largest provider of student financial aid. Federal aid programs are administered through the U.S. Department of Education and the U.S. Department of Health and Human Services.

Finding 13: North Carolina's low tuition levels may preclude some students from qualifying for need-based federal aid programs.

This is an hypothesis that emerged in the analysis. Since the Congressional methodology for calculation of financial need centers on costs of attendance versus resources available to cover those costs, it is possible that more federal funds would flow to North Carolina students to offset an increase in tuition.

Reliable data to clearly support or eliminate this hypothesis were unavailable; however, Exhibit 12 is an attempt to determine if North Carolina exhibits an especially low level of federal assistance per student. It shows a calculation of federal financial assistance per student,

for North Carolina and peer states, using 1989 data from the U.S. Department of Education. The reported data include federal financial assistance to students by state (for selected federal programs); total enrollment by state (public and private); and percent of students in private institutions. Federal financial assistance per student (the last column) is calculated.

EXHIBIT 12 North Carolina and Peer States Federal Financial Assistance: FY 1989										
Peer State	Student Financial Assistance (\$1,000s)	Total Student Enrollment	Percent Enrollment in Private Colleges	\$ Federal Financial Aid per Student						
California	554,133	1,744,879	7.5	317						
Florida	281,939	573,712	13.7	382						
Georgia	75,913	239,208	20.0	317						
Illinois	300,080	709,937	19.2	423						
Indiana	152,811	275,821	21.8	555						
Maryland	85,895	255,326	10.6	336						
Michigan	242,965	560,320	14.2	433						
North Carolina	123,244	345,401	18.5	357						
Ohio	276,304	550,729	24.6	502						
Texas	394,929	877,859	9.6	450						
Virginia	114,055	344,284	16.1	331						
Wisconsin	181,141	290,672	14.5	624						
Average			15.9	419						

Source: Digest of Education Statistics 1991, US Department of Education, Table 342, p. 361.

Among the 11 peer states, North Carolina receives the fourth lowest per student federal assistance although its private higher education enrollment is higher, at 18.5 percent, than two of the three lowest. (It is assumed for purposes of this illustration that a higher private college enrollment would mean greater average levels of federal financial assistance.) Wisconsin receives the highest amount of \$624 with a private college enrollment of 14.5 percent and California and Georgia receive the lowest amount of \$317 with private enrollments of 7.5 and 20 percent respectively. The peer state average for federal assistance is \$419 and private college enrollments average 15.9 percent. North Carolina is above the average in private college enrollments by 2.6 percent but below the peer average in federal assistance by \$62 per student.

Based on this approximate analysis, it is the opinion of the consultants that the low tuition levels of UNC and NCCCS could contribute to the low level of per-student federal financial aid. If this is true, it is possible that future tuition increases might be partially offset by an increased flow of federal student aid to North Carolina. This is an issue that may merit more careful analysis.

TUITION POLICIES AND PRACTICES IN PEER STATES

Many states have an explicit policy that guides either the legislature or the higher education governing board in setting tuition levels.

Finding 14: Of 36 states, 19 have a policy on tuition or on tuition and fees and two-thirds of all the states have changed tuition and student cost policies recently.

The special sample of 11 peer states and other samples indicate widespread use of a specific tuition policy. Moreover, in the wake of fiscal difficulties states have been experiencing, a number of them have revised or are revising tuition policies to reflect current realities. In the 1988 SHEEO study, 33 of 49 states answered affirmatively a question about whether there had been a significant change in the policy on which tuition is based.... and/or a significant change in the percentage of cost or state appropriations borne by the students. By 1992, the proportion may be much higher. Therefore, for North Carolina to choose the occasion of the GPAC studies to redefine its policy approach to tuition and fees would place it squarely in a national trend.

Responsibility for Tuition and Fee Policy/Levels

Finding 15: In many states, legislatures establish tuition policy, within which governing boards determine tuition rates.

According to the 1988 SHEEO study, the institutional or system governing board sets tuition rates in forty-two of the forty-nine states; the State Coordinating Board sets tuition in three of the states and the legislature sets tuition in California, Nebraska, Texas and Washington. While few state legislatures play a direct role in setting tuition rates, many play an indirect role by establishing limits or guidelines or by requiring a specified level of revenue that must be generated from tuition.¹⁰

North Carolina's practice is similar, but does not expressly refer to "policy." Chapter 1244, Section 116–11 which defines powers and duties of the Board of Governors, states that:

(7) the Board shall set tuition and required fees at the institutions, not inconsistent with the actions of the General Assembly.

⁹ *Ibid.*, SHEEO, page 9.

¹⁰ Ibid., SHEEO, p. 1.

Comparison of Total Resources Available per FTE Student

Finding 16: UNC is at a competitive disadvantage to peers in the total resources applied per FTE student, because tuition is low.

The case for raising tuition can be made in terms of the average total resources available per student, in North Carolina versus its peers. As can be seen in Exhibit 13, North Carolina ranks high among all the states and the District of Columbia in many categories of taxpayer support to education, but not in overall revenues available. North Carolina ranks 7th in higher education appropriations per capita; 6th in higher education appropriations per \$1,000 of per capita income; 6th in higher education appropriations as a percent of tax revenues, and 13th in higher education appropriations per student. However, North Carolina's rank drops noticeably, to 28th, in the total amount of appropriations plus tuition per student. This is because tuition revenue, as a percent of appropriations plus tuition, is very low, with North Carolina ranked 44th.

These data reveal that peer states deploy more revenues per student than does North Carolina because they typically have more tuition revenues applied.

If North Carolina currently has potential to raise tuition within a reasonable interpretation of "as far as practicable," then future tuition increases can narrow the current gap between North Carolina and its peers in per-student resources available. Also, it is unlikely that there will be significant new funds available in coming years from General Fund sources. Therefore, augmented tuition revenues are likely to be one of two available major sources of funds for maintaining the State's investment¹². In budget terminology, a program of planned and phased tuition increases would be the principal source of UNC's "expansion budget" for several years.

Tuition Policy Alternatives

Undergraduate Resident Tuition. As Appendix A reveals, seven of the eleven peer states have either a formally approved policy or traditional practice of setting tuition and fees at a designated percentage of cost of education. Five of the fifteen SREB states have similar policies. Nine of the 16 WICHE states have such policies. Percent of cost of education is the most prevalent basis for tuition policy.

Finding 17: Among peer states, the percentage of cost of education "assigned" to tuition and required fees ranges from 25 to 35 percent.

¹¹US Department of Commerce, Bureau of the Census and Research Associates of Washington, State Profiles: Financing Public Higher Education: 1978 to 1992.

¹²Internal resource reallocation for UNC and NCCCS, the other source, is discussed in two separate issue papers, "Academic Program Planning – The University of North Carolina" and "Program and System Structure – The North Carolina Community College System."

10.25

Exhibit 13
Selected Indicators of Support to Higher Education
North Carolina and Peer States, with US Rankings
FY 1991-1992

	HE Appro	P US	HE Approp	US	Tax Revenue Per	US	HE Approp	US	HE Approp	US	HE Approp	US	Tuition as % of	US
	Capita	Rank	1	Rank	Student	Rank	Tax Revenue	Rank	per Student	Rank	per Student	Rank	Approp + Tuit	
NORTH CAROLINA	\$218	7	\$13.34	6	\$47,531	39	9.9%	6	\$4,724	13	\$5,866	28	19.5%	44
PEER AVERAGE	\$157	N/A	\$8.45	N/A	\$58,283	N/A	7.1%	N/A	\$4,104	N/A	\$5,889	N/A	29.6%	N/A
USA AVERAGE	\$ 161	N/A	\$8,62	N/A	\$62,499	N/A	6.8%	N/A	\$4,257	N/A	\$ 5,912	N/A	28.0%	N/A
CALIFORNIA	\$190	12	\$9.14	28	\$5 3,063	26	8.7%	10	\$4.619	14	\$5,307	42	13.0%	. 48
FLORIDA	\$ 115	46	\$6.15	44	\$67,910	16	6.7%	31	\$4,568	16	\$5,800	29	21.2%	39
GEORGIA	\$ 135	42	\$7.88	37	\$61,533	18	6.5%	33	\$4,024	31	\$5,460	35	26.3%	33
ILLINOIS	\$152	37	\$7.42	40	\$63,882	17	6.4%	34	\$4,077	29	\$5,092	45	20.5 % 19.9%	43
INDIANA	\$162	28	\$9.59	25	\$51,787	30	8.1%	18	\$4,186	25	\$6,409	16	34.7%	18
MARYLAND	\$168	21	\$7.69	38	\$68,846	14	5.6%	43	\$3,837	37	\$5,944	27	35.4%	16
MICHIGAN	\$166	24	\$9.02	30	\$55,685	24	7.8%	24	\$4,316	22	\$7,261	9	40.6%	8
OHIO	\$ 135	43	\$7.66	39	\$55,728	23	6.2%	36	\$3,429	41	\$6,035	25	43.2%	7
TEXAS	\$166	23	\$9.90	23	\$49,949	35	8.0%	20	\$4,004	32	\$5,081	ے 46	43.2% 21.2%	41
VIRGINIA	\$166	22	\$8.43	34	\$53,962	25	6.1%	37	\$3,299	44	00000000 00200000 0000 00	33	P 0000 00000000000000000000000000000000	
WISCONSIN	\$176	18	\$10.02	21	\$58,765	21	8.1%	Y 540000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	\$5,477	0000000000000	39.8%	9
	1 311a	TO	310.02	•	330,703	- 41	0.170	17	\$4,788	12	\$6,909	11	30.7%	22

Sources: US Dept of Commerce, Bureau of the Census and Research Associates of Washington, State Profiles: Financing Public Higher Education: 1978 to 1992

Factors other than percent of cost of education used to establish tuition include:

- current and expected state appropriations
- financial needs of the system
- expected enrollment and needed revenue
- financial aid availability
- tuition charges at peer institutions
- higher education price index
- consumer price index
- percent of per capita personal income.

North Carolina's tuition has been budget-driven in that it has centered on a combination of the first three of the above factors, with the constitutional provision as guiding framework.

Undergraduate Nonresident Tuition. Policies of the SREB, peer group, and WICHE states for undergraduate nonresident tuition use different variables that include:

- 75 to 100 percent of cost of education
- the amount appropriated per student for "education and general" expenditures
- the SREB average
- a multiple of two to four times the level of resident tuition.

Comparison of North Carolina with Peer Policy Levels

If 25 to 35 percent of cost of education is representative of peer state tuition policies, then North Carolina has possibilities for framing a policy, within the constitutional mandate, that would allow UNC tuition to increase from its current levels. For NCCCS, tuition increases would be less reasonable at present. Each of these is discussed below.

UNC. Average "requirements per FTE or cost of education" at UNC for FY 1992-1993 is \$7,502 per FTE. At FY 1992-1993 average tuition and academic fees of \$819, undergraduate resident students currently pay 10.9 percent of the cost of education. Using the differentiated requirements per FTE for each institution, Elizabeth City State University is lowest at 6.3 percent and UNC-Greensboro is highest at 13.1 percent. If average required other fees of \$515 are included, then UNC students are paying 17.8 percent of the cost of education figure. (Cost of education of \$7,502 does not include many of the costs associated with nonacademic fees.)

NCCCS. Cost of education is an elusive number for NCCCS because of the nature of the funding model and the types of curricula. The most commonly used number is \$2,900 for

¹³ Higher Education: Who Pays? Who Benefits? Who Should Pay?; The 1973 Carnegie Commission Report.

"curriculum" FTE students.¹⁴ Using this figure, with FY 1992-1993 tuition levels at \$556 (for three quarters), NCCCS curriculum students currently pay about **19.2 percent** of the cost of education.

Finding 18: NCCCS curriculum students pay a larger relative share of the cost of education than UNC students.

The policy recommendations that follow will suggest a way to change this relationship between UNC and NCCCS tuition, based on cost of education policy percentages.

RECOMMENDATIONS

North Carolina expects very modest revenue growth for the next eight years or so. Anticipated lack of increasing appropriations coupled with recent reductions in expenditures make it necessary to adopt a policy that provides a contemporary interpretation of the constitutional mandate and, at the same time, generates increased revenues to support North Carolina's public higher education institutions.

North Carolina must protect its considerable investment in higher education. It cannot afford to allow reversal of the gains that higher education has brought to the State. Studies show that libraries, faculty salaries and deferred maintenance are three critical areas in which UNC is at risk of slippage in both actual quality and perceived reputation. These priorities will need more money than will be available through anticipated state appropriations, given conflicting service demands and new priorities. Additionally, lack of new funds can severely limit the creation of selected new programs the State requires to meet economic development, workforce, and social needs.

Similarly, NCCCS will be increasingly vital to the State, as its single largest investment vehicle for both general education and specific training and retraining of the State's technical and skilled workforce. The State also might decide to support a policy that directs increasing numbers of students into community colleges for the first two years of college study, an alternative described in the issue paper on "The Continuum of Education and Inter system Governance."

The first two of the following recommendations are "macro" recommendations for a policy. The remaining recommendations address supporting issues.

Responsibility for Tuition Policy Versus Rates

Recommendation 1:

The General Assembly should interpret the Constitution by defining the contemporary meaning of "as far as practicable" and mandate the governing boards to set tuition rates within that interpretation.

¹⁴North Carolina General Assembly Fiscal Research Division.