Benchmarks:
Measures of College Affordability and Student Aid in North Carolina

May 2006

An Update to the Study Published December 2004

The State Education Assistance Authority is pleased to make available an update to the 2004 report, *Benchmarks: Measures of College Affordability and Student Aid in North Carolina*, based on analysis by Laura Greene Knapp, Education Research Consultant. The updated information provides new insight on the affordability of attending college based on two important financial indicators – financial need after scholarships and net price of attendance -- for needy undergraduate North Carolinians enrolled in a campus of the University of North Carolina.[1]

Summary of Findings

The five year period between the 1999-2000 and 2003-2004 academic years saw significant and much-publicized tuition increases at the University. It also saw rapid enrollment growth, especially among populations likely to need financial assistance.

Despite these increases in costs and enrollment of needy students, the affordability measures in this study indicate that the University remained affordable for the average needy North Carolina student in 2003-2004. As costs increased, scholarships for needy students increased significantly more.

During the five year period covered by this study at the campuses of the University of North Carolina:

- North Carolina resident undergraduate enrollment increased by 15,838 students, up 14%, and the number of Federal Pell Grant recipients increased by 48%, up 13,407 students, indicating that substantially all of the new students were needy.
- The standard measure of inflation, the Consumer Price Index (CPI), increased by 10%.
- Scholarships to needy North Carolina students increased by 71% (State scholarships increased by 143%).
- Average annual borrowing through student loans increased by 6%, less than the CPI.
- The total "sticker" price of attending a UNC campus increased by 29%, but the net price after scholarships to needy students increased by 13.5%.
- For needy North Carolina students with total family incomes below $58,060, the net price increase after scholarships was 9.8%, slightly less than CPI.
- Needy students attending a UNC campus had an average need remaining after scholarships of $3,939, an amount achievable through readily available low interest loans and part-time employment opportunities.

[1] Data on the other affordability measures from the 2004 study, the college-going rate and cumulative indebtedness of graduating students, and on financial aid received by all students attending postsecondary institutions in North Carolina will be updated at the end of 2006. Data are from 15 of the 16 campuses. Data from Fayetteville State University are not included in calculations for the 2003-2004 year. Out of state and independent students are not included in this study.

Indicators of Affordability

This report addresses two important indicators of the impact on affordability of increases in tuition or other costs associated with attendance at UNC for needy undergraduate students of different income levels: 1) the amount of need remaining after scholarship aid, and 2) the net price of attendance at UNC. The analysis presents average data for all North Carolina resident undergraduates who attended a campus of the University of North Carolina during the 2003–2004 academic year who were financially dependent on their parents, had financial need, and received financial aid. It also presents data separately for those students from families with incomes under $58,060, which represents the bottom 60% of family incomes in North Carolina in 2002. The data are summarized in tables in the final section of the report.

Both indicators take into consideration the total price of a year at UNC which reflects not only tuition and fees, but also mandatory expenses such as books, housing, meals, personal expenses and transportation associated with a year of undergraduate college life. The average total price of attendance for all North Carolina resident needy financial aid recipients attending all 16 campuses of the UNC System during the 2003-2004 academic year was $11,645.

Need-based financial aid is based on a policy assumption that the primary responsibility for paying for college rests with the student and family, insofar as the student and family can reasonably be expected to pay. Both indicators of affordability in this study utilize standardized federal financial aid analysis to determine the amount a student and family can reasonably be expected to pay, their "Expected Family Contribution," and the needy student's eligibility for financial aid. The difference between the total price of attendance for an academic year and the Expected Family Contribution is determined to be their "financial need."

Expected Family Contribution (EFC). A family's EFC is calculated annually by a statutory federal formula which considers financial information as well as family demographics and circumstances. Financial information considered by the formula for dependent students includes income and selected assets of the student and the student's family. The average EFC for North Carolina resident undergraduates with financial need attending the University of North Carolina for 2003-2004 was $3,653, up from $3,457 in 1999-2000. For students from families with incomes below $58,060 in 2002, the average EFC was $2,230, up from $1,898 in 1999-2000.

Financial Need. In determining the amount of need-based financial aid for which a student might qualify, the EFC is compared to the college price. Students with EFCs equal to or larger than the college price have no demonstrated financial need. However, if the student's EFC is less than the college price, then the student has demonstrated a need for financial aid in the amount of the difference. In 2003-2004, the average financial need for students included in this study was $8,009, up from $5,829 in 1999-2000. For students from families with incomes below $58,060 in 2002, the average financial need was $9,261, up from $6,968 in 1999-2000.

Once need is calculated according to the federal formula, the campus puts together a "package" of aid programs, including scholarships, loans, and employment opportunities. Generally scholarships are offered first, to the extent the campus can locate these funds for needy students. However, in practice most needy students have some financial need remaining after their scholarship aid is applied toward their college education.

Remaining Need After Scholarship Aid

Scholarships[2] are aid funds that require no work or repayment on the part of the student. Scholarship aid is awarded based on a variety of factors in addition to financial need and all scholarship aid is considered in this report. Between 1999-2000 and 2003–2004, the average total scholarship aid from all sources awarded to North Carolina residents attending UNC increased 71%, from $2,482 in 1999-2000 to $4,250 in 2003-2004. Of the total for 2003-2004, scholarships from federal sources averaged $1,875 per student, an increase of 54% over the four year period, and scholarships from the state of North Carolina averaged $1,373 per student, a 143% increase over the same period. For students from families with incomes below $58,060 in 2002, the average scholarship aid was $5,028, up from $2,911 in 1999-2000. Notably, state scholarship aid for this group of students increased by nearly 157% during the five year period.

Remaining need after scholarship aid is calculated by subtracting the EFC and the amount of scholarship aid from the total price of attendance. In order for the net price of college attendance to be considered reasonably affordable, the amount of this remaining need after scholarship aid should fall within a range achievable through some combination of student borrowing and/or part-time employment during the academic year. The range (currently $4,500 - $5,000 annually) is based on current borrowing limits for federally-subsidized low interest loans and estimates of potential part-time earnings through employment at the hourly minimum wage, as described in detail below.

Remaining need after scholarship aid for needy North Carolina students averaged $3,939 in 2003-2004, an increase of 12.5% since 1999-2000, but below the reasonably affordable target range of $4,500 to $5,000. For students from families with incomes below $58,060 in 2002, the average remaining need after scholarship aid was $4,361, up from $4,140 in 1999-2000. For this group the remaining need after scholarship increased at a rate of 5.3%, or about half of the 10% rate of inflation during the period as measured by the Consumer Price Index (CPI), the standard measure of inflation.

UNC Net Price of Attendance

Needy students do not actually pay the total price of college. The actual amount paid is the net price of attendance, the total price less scholarships. This net price includes any amount of remaining need after scholarships plus the amount calculated under the federal formula as the Expected Family Contribution (EFC).

An assumption of the aid formula is that students will be responsible, through work or loans, for the amount of their remaining need after scholarships and that the family will be responsible for the EFC. However, from the perspective of the family, combining the EFC and the remaining need after scholarships into one sum, net price, reflects the total amount they actually pay. Some families may elect to place a higher burden of work or loan on the student, while others

[2] "Scholarships" are used throughout this paper to include gift aid regardless of whether the program is designated as a "grant" or as a "scholarship." Since neither a grant nor a scholarship requires repayment, the commonly understood term "scholarship" is adopted for the sake of simplicity.

may shoulder more of the net price by relying on savings, diverting current income, or through parental borrowing.

The total price net of scholarships represents what the student and family must pay either in the present from savings or earnings, or in the future through education loan repayment. In 1999-2000, the total price net of scholarships was $6,545 and in 2003-2004 it was $7,430. While the actual dollar amount of the price net of scholarships increased by $855, the percentage of the total price actually paid by students and their families after scholarship aid declined from 73% to 64% over the period, as scholarship funding increased more than the total price of attendance. For students from families with incomes below $58,060 in 2002, the average total price net of scholarships was $6,570, up from $5,984 in 1999-2000.

Increases in the net price of attendance can be compared with increases in the CPI, to determine their effect on affordability. For the five year period of the study, the CPI increased 10%. While the average total sticker price of attendance at the University of North Carolina increased by 29% from 1999-2000, the net price increase after scholarships for needy North Carolina students was 13.5% overall, and only 9.8% for those with total family incomes below $58,060.

Paying the Net Price/Remaining Financial Need after Scholarships

Students and their families have the option of paying remaining financial need after scholarships, as well as part or all of their EFC, through readily available low-interest loans, savings, or current income, such as might be earned through student part-time employment during the academic year.

Student Loans. Students and their families can use education debt to cover their expected family contribution or to meet financial need, depending on the type of loan. This report considers only student loans borrowed through the federally-sponsored Stafford and Perkins loan programs. The amount students may borrow in the form of Stafford loans depends on their grade level in school. The annual maximums for undergraduate, dependent students by grade level are: $2,625, first year; $3,500, second year; and $5,500, third year and beyond. The average annual student debt incurred through these programs for 2003-2004 was $3,057, an increase of 6% over the $2,885 average in 1999-2000. It is noteworthy that actual average annual borrowing remained below the potential borrowing capacity of the average student.

Part-time student employment. The average remaining need after scholarships and loans for 2003-2004 was $1,610. Based on a reasonable work expectation of 15 hours per week during the academic year – not including any work during the summer or during semester breaks – a student could earn approximately $2,400 through employment at the minimum wage, which was $5.15 per hour in 2003-2004. This report does not include any work aid, such as earnings through subsidized work-study programs on campuses, in its analysis because it is a relatively small proportion of total financial aid awarded to UNC students and because data were unavailable for earnings from jobs that are not subsidized through aid programs and are thus not part of their financial aid package. Such off campus jobs are very common ways in which students meet their cost of education.

By taking advantage of loans and/or part-time employment, a typical student should be able to cover the amount of remaining need after scholarship aid to attend the University of North Carolina. The ratio of loans to earnings from part-time employment can be determined based

on individual preferences of the student. Some clearly borrow more and work less, while others choose to work more hours to minimize future indebtedness.

Parental Loans. Parents have three ways to finance the EFC – they may save in advance, divert current income, or they may pay out of future income by borrowing. Many families use a combination of all three approaches. Because most families have little excess current income, those who have not saved in advance of college almost invariably have to borrow more than those who have been able to set aside funds through savings. Parents may borrow in a number of ways, including home equity loans and the federal PLUS program, which provides for sums up to the entire price of attendance less any financial aid received by the student. Data on parental borrowing are not a part of this study.

Summary Data

Table 1
All North Carolina Family Incomes

	1998 Income	2002 Income
Lowest income quintile	$0 to $20,002	$0 to $20,219
2nd income quintile	$20,003 to $34,589	$20,220 to $36,600
3rd income quintile	$34,590 to $50,980	$36,601 to $58,060
4th income quintile	$50,981 to $80,509	$58,061 to $85,550
Highest income quintile	$80,510 and above	$85,551 and above

Table 2
Affordability Indicators – The University of North Carolina

Analysis based on data for all North Carolina resident undergraduates who were financially dependent on their parents, had financial need, and received financial aid to attend a campus of the University of North Carolina for the 1999-2000 and 2003-2004 academic year.

Data on lower income students represent those students from families with incomes under $58,060, the bottom 60% of family incomes in North Carolina in 2002.

	Averages overall				Averages for Lower Income Students			
	Average 1999-2000	Average 2003-2004	Dollar Change	Percent Change	Average 1999-2000	Average 2003-2004	Dollar Change	Percent Change
Price of Attendance	$9,002	$11,650	$2,648	29.4%	$8,866	$11,560	$2,694	30.4%
Estimated Family Contribution	3,457	3,653	196	5.7%	1,898	2,230	332	17.5%
Financial Need	5,829	8,009	2,180	37.4%	6,968	9,261	2,293	32.9%
Total Scholarship Aid	2,482	4,250	1,768	71.2%	2,911	5,028	2,117	72.7%
From Federal Sources	1,219	1,875	656	53.8%	1,558	2,415	857	55.0%
From State Sources	565	1,373	808	143.0%	632	1,623	991	156.8%
From Other Sources	698	1,002	304	43.6%	721	990	269	37.3%
Remaining Need after Scholarships	3,501	3,939	438	12.5%	4,140	4,361	221	5.3%
Total Price Net of Scholarships	6,545	7,430	885	13.5%	5,984	6,570	586	9.8%
Student Loans	2,885	3,057	172	6.0%	2,787	2,856	69	2.5%
Consumer Price Index				10%				10%