

THIRD ANNUAL REPORT ON
UNIVERSITY OF NORTH CAROLINA
ENROLLMENT PLANNING

December 15, 2001



Submitted by the University of North Carolina Board of Governors
in response to North Carolina Session Laws 1999, Chapter 237,
General Statute 10.8 of the North Carolina General Assembly

Contents

I. ENROLLMENT PLANNING	3
A. Enrollment Projections: Population Pools and UNC Participation Rates.....	4
Pools of Potential Students by Age Group or Cohort	4
Historic UNC Attendance Rates	4
B. Planning to Accommodate Projected Enrollment Growth	5
II. CURRENT AND ANTICIPATED ENROLLMENT GROWTH.....	6
A. Fall 2001 Enrollment	6
First-Time Students	8
Minority Enrollment.....	8
Distance Education.....	9
Trends in Freshman SAT Scores.....	9
B. Revised Fall Headcount Enrollment Projections for 2002-2011	9
III. MANAGEMENT OF CAPACITY	10

THIRD ANNUAL REPORT ON UNC ENROLLMENT PLANNING

December 15, 2001

North Carolina Session Laws 1999, c. 237, s. 10.8 (UNC Enrollment Planning)

The Board of Governors shall report to the Joint Legislative Education Oversight Committee by December 15 of each year on enrollment planning, current and anticipated growth, and management of capacity to meet the demands for higher education in North Carolina. These reports shall continue through December 2005.

I. Enrollment Planning

It is the statutory responsibility of the University of North Carolina to extend the benefits of higher education to the people of North Carolina. Among the six strategic directions that will drive the Board of Governors' UNC long-range plan for 2002-2007 (to be formally adopted in January 2002) is the following: *Access: Ensure affordability and access to higher education for all who qualify and embrace a vision of lifelong learning.* Included among the major strategies associated with this strategic direction are the following:

Implement and monitor annually the 10-year enrollment plan adopted by the Board of Governors in response to the anticipated surge in enrollments, with special attention to efforts to increase enrollments at focused growth institutions.

Continue to promote access, retention and graduation of traditionally underrepresented segments of North Carolina's population, implementing and monitoring the strategies outlined in the diversity plan adopted by the Board of Governors in 2001.

Ensure financial access to North Carolina residents by keeping tuition and fees as low as practicable, while continuing to expand need-based financial aid resources for low-income students.

Facilitate educational access through the effective use of information technology to provide information on educational opportunities (e.g., CFNC and Pathways), to offer e-learning courses and programs, to deliver academic and student services, and to promote inter-institutional collaboration in course and program delivery.

Continue to promote collaboration with community colleges through initiatives such as the North Carolina Comprehensive Transfer Articulation Agreement, delivery of baccalaureate completion and graduate programs at community college sites, and enrollment planning.

Maximize the capacity of UNC institutions to serve the anticipated enrollment growth through more efficient use of on-campus facilities, increased summer school enrollment, expanded use of off-campus instruction sites, new academic programs, and e-learning.

Ensure the timely and cost effective construction and renovation of facilities to accommodate current students and anticipated enrollment growth.

The Board of Governors adopted the first ten-year enrollment plan for UNC in April 1999, to cover the period 1998-2008. At that time, it was understood that the plan would have to be monitored carefully and be revised and updated biennially. This was

accomplished with the adoption in June 2001 of an updated 10-year enrollment plan for the period 2000-10.

A. Enrollment Projections: Population Pools and UNC Participation Rates

The first step in updating the UNC enrollment plan was the development of enrollment projections. Projections must be understood for what they are—planning tools that enable the University to estimate future “demand”—the number of students that could be expected to enroll in future years if past trends continue into the future.

The UNC projection model is designed to project future enrollment for the 16 UNC constituent institutions. It assumes that the other sectors of higher education in North Carolina (the NCCCS and independent colleges and universities) will do projections for their respective institutions. Total future demand for higher education in North Carolina can be determined by summing the projections of these three sectors.

The UNC enrollment projections are built on extrapolations of two elements: 1) pools of potential students by age group or cohort (e.g., 18-21, 22-24, 25-35, and 36 and older) for the planning period to estimate the total potential “market,” and 2) the historic UNC attendance rates of these groups to determine the percent of that market that has traditionally enrolled at a UNC institution.

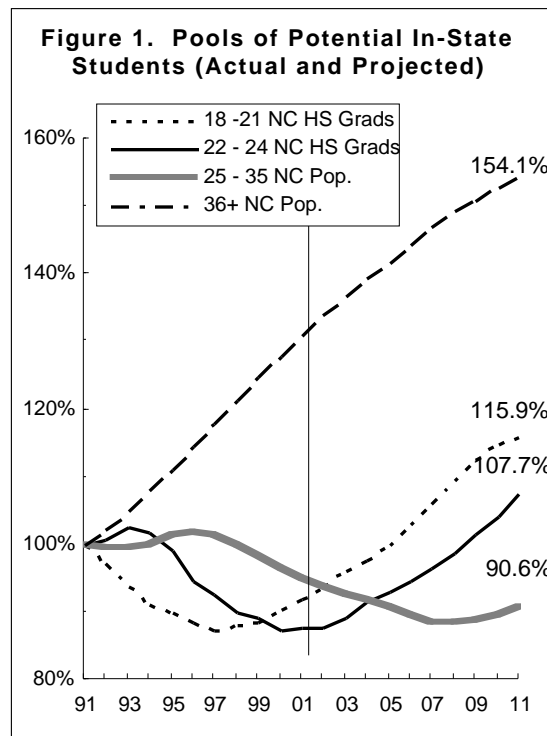
Pools of Potential Students by Age Group or Cohort

UNC relies upon population projections by independent sources for the number of potential students in various age cohorts. For North Carolina high school graduates, UNC uses the projections of high school graduates prepared by the National Center for Educational Statistics. For older North Carolinians, UNC uses the most recent projections supplied by the U.S. Census Bureau. These population projections represent potential demand.

Figure 1 plots data on the actual and projected pools of potential in-state students. The data show that the primary pool of potential undergraduates—18-21 year-old public high school graduates—will increase steadily throughout the decade.

Historic UNC Attendance Rates

To determine what percent of this potential demand can be expected to enroll at a UNC institution, the projection model takes into account the UNC attendance rates of members of these various population pools or cohorts at each UNC institution over the past seven years. This reduces the focus from the entire North Carolina population (or “market”) to that percentage of the



population that has historically enrolled in UNC institutions. The projection model multiplies the projected participation rate of each age cohort by the projected size of that group for a given year at each campus, thus producing an annual enrollment projection for each constituent institution. Projections for the campuses are then summed to produce a total UNC projection of enrollment demand. Given the high cost of out-of-state tuition, the model assumes that the participation rate of out-of-state undergraduates will remain relatively stable.

Figure 2 depicts UNC attendance rates for North Carolina high school graduates over the past decade. This fall UNC going rates increased to 30.9 percent. This follows a three-year period during which the UNC going rate remained stable. This pause in the UNC participation rate may have been attributable to an increase in the number of high school graduates taking advantage of the Comprehensive Transfer Articulation Agreement to seek an associate degree at a community college before transferring to a UNC institution as a junior. Support for this assumption comes from the significant increase in transfer students noticed in fall 2000 and continuing this year.

The data in both Figures 1 and 2 suggest that traditional undergraduates will be the dominant factor in UNC's enrollment growth. However, the University also expects participation rates to increase among students seeking graduate and first professional degrees.

B. Planning to Accommodate Projected Enrollment Growth

Enrollment projections do not constitute an enrollment plan. Rather, they serve as a planning tool that enables institutional leaders to estimate future enrollment demand. The next step is to determine whether (and how) the institution—or, in the case of a system, all of the constituent institutions combined—can meet the projected demand. The answer requires an evaluation of several elements—e.g., institutional mission, current physical capacity, and future capacity for growth.

Development of the UNC enrollment plan was guided by the following principles:

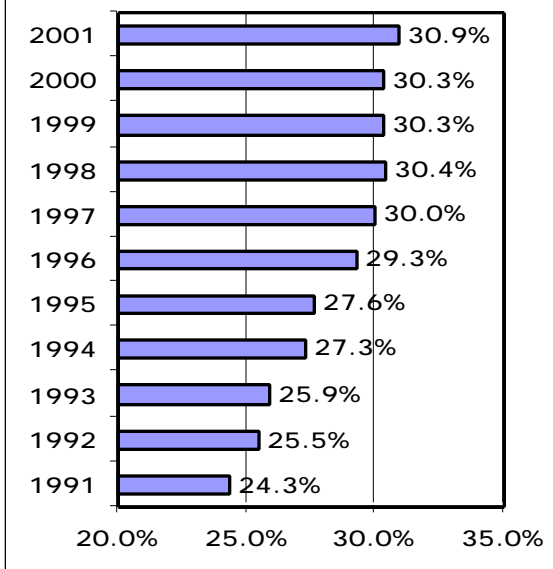
- Use existing capacity to the fullest extent possible.

- Promote economies of scale and stronger institutional financial capacity by setting a target of at least 5,000 to 6,000 students for most campuses.

- Restrain enrollment growth at UNC Asheville and the North Carolina School of the Arts in recognition of their special missions.

- Serve some of the projected enrollment growth through expansion of off-campus enrollment and e-learning.

Figure 2. UNC Going Rate for N.C. High School Graduates: 1991-2001



Applying these principles in partnership with UNC chancellors, appropriate targets for enrollment growth were adopted by the board for each campus. The process began by asking each constituent institution to review its respective enrollment projections and then to indicate the extent to which it could accommodate or exceed its projected enrollment growth. For some UNC institutions, the challenge in serving projected enrollment growth on campus was the lack of adequate facilities, which required assignment of targets that were lower than their projected enrollment growth. On the other hand, seven institutions with current capacity on campus and, in five cases, total enrollments below 6,000 students were targeted for above-average enrollment growth—ECSU, FSU, NCA&T, NCCU, UNCP, WCU, and WSSU. To assist these institutions in meeting ambitious growth targets, the North Carolina General Assembly has appropriated over \$11.5 million in recurring funds. These funds have been used to develop comprehensive enrollment growth plans, improve instruction, develop new academic programs, promote greater operating efficiencies, enhance development offices, and strengthen facilities management capabilities.

In the expectation that some students would prefer the convenience of distance education, institutions were encouraged to consider meeting some of their projected demand through off-campus sites and e-learning.

The 2000-2010 enrollment plan took into account population projections and enrollment data available since 1999, when the original plan was adopted; enrollment projections by the Office of the President blended with the projections of individual campuses; current and anticipated (as a result of the \$2.5 billion bond issue) enrollment capacity on each campus; and each institution's strategic plan, in particular its proposed role in distance education. [Table 1](#) summarizes the targets set (on-campus and off-campus enrollments combined) by institution for the period 2000-2010.

II. Current and Anticipated Enrollment Growth

A. Fall 2001 Enrollment¹

The UNC enrollment plan set enrollment targets for two five-year periods (2000-05 and 2005-2010), with the understanding that both the plan itself and the projections upon which it is based must be carefully monitored and revised as necessary. The University now has enrollment information for the first two years covered by the new plan (fall 2000 and fall 2001). [Table 2](#) compares fall 2001 enrollment with fall 2000 enrollment and with the targets set for fall 2001.

¹ This year marks the second year that the University's report on fall enrollment includes off-campus enrollments. These data are included because (a) off-campus enrollments are now funded on the same basis as on-campus enrollment; (b) the board's enrollment strategies encompass both forms of enrollment; and (c) this convention is consistent with federal guidelines for reporting fall enrollments.

Table 1. UNC Ten-Year Enrollment Growth Plan (2000-2010)

Fall headcount enrollment, 2000 actual and targets for 2005 and 2010, on-campus and off-campus enrollment combined							
Institution	2000 (actual)	2005 (target)	% increase (2000-05)	2010 (target)	% increase (2005-10)	Total Increase	% increase (2000-10)
ASU	13,227	14,850	12.27%	16,600	11.78%	3,373	25.50%
ECU	18,750	22,630	20.69%	27,500	21.52%	8,750	46.67%
ECSU	2,035	2,590	27.27%	3,270	26.25%	1,235	60.69%
FSU	4,487	5,480	22.13%	6,260	14.23%	1,773	39.51%
NCA&T	7,748	9,340	20.55%	11,000	17.77%	3,252	41.97%
NCCU	5,476	6,980	27.47%	8,230	17.91%	2,754	50.29%
NCSA*	768	840	9.38%	900	7.14%	132	17.19%
NCSU	28,619	31,020	8.39%	36,000	16.05%	7,381	25.79%
UNCA	3,292	3,530	7.23%	3,760	6.52%	468	14.22%
UNC Chapel Hill	24,892	28,100	12.89%	29,250	4.09%	4,358	17.51%
UNCC	17,241	20,430	18.50%	24,130	18.11%	6,889	39.96%
UNCG	13,125	15,360	17.03%	18,330	19.34%	5,205	39.66%
UNCP	3,445	5,170	50.07%	6,140	18.76%	2,695	78.23%
UNCW	10,100	11,270	11.58%	12,320	9.32%	2,220	21.98%
WCU	6,699	7,840	17.03%	9,530	21.56%	2,831	42.26%
WSSU	2,857	3,830	34.06%	4,780	24.80%	1,923	67.31%
TOTAL	162,761	189,260	16.28%	218,000	15.19%	55,239	33.94%

* NCSA enrollment figures do not include high school students.

Table 2. Comparison of Fall 2000 and Fall 2001 Headcount Enrollment

Institution	Fall 2000	Fall 2001		Change (2000-2001)	
	Actual	Target	Actual	Number	Percent
ASU	13,227	13,528	13,762	535	4.0
ECU	18,750	19,197	19,412	662	3.5
ECSU	2,035	2,128	2,004	-31	-1.5
FSU	4,487	4,701	5,010	523	11.7
NCA&TSU	7,748	8,006	8,319	571	7.4
NCCU	5,476	6,067	5,753	277	5.1
NCSA	768	756	789	21	2.7
NCSU	28,619	28,758	29,286	667	2.3
UNCA	3,292	3,321	3,293	1	0.0
UNC Ch. Hill	24,892	25,894	25,494	602	2.4
UNCC	17,241	17,817	18,308	1,067	6.2
UNCG	13,125	13,749	13,775	650	5.0
UNCP	3,445	3,853	3,933	488	14.2
UNCW	10,100	10,361	10,799	699	6.9
WCU	6,699	6,876	6,863	164	2.4
WSSU	2,857	3,127	2,992	135	4.7
TOTAL	162,761	168,139	169,792	7,031	4.3

Headcount enrollment in fall 2001 reached a record high of 169,792 students. This is an increase of 7,031 (or 4.3 percent) over the 162,761 students who were enrolled in fall 2000. The university as a whole exceeded by 1,779 students the combined enrollment targets set for the 16 UNC institutions. It exceeded the fall 2001 enrollment projected in the 2000-2010 plan by almost 5,000.

Eight institutions, including five focused-growth campuses, exceeded the system-wide average rate of growth of 4.3 percent—FSU, NCA&TSU, NCCU, UNCC, UNCG, UNCP, UNCW, and WSSU. Fifteen institutions experienced some growth. This numerical growth was most dramatic among nine institutions, each with increases of 500 or more students—ASU, ECU, FSU, NCA&TSU, NCSU, UNC Chapel Hill, UNCC, UNCG, and UNCW.

Among the seven focused-growth institutions, only ECSU did not experience a headcount growth, and only ECSU (-1.5 percent) and WCU (2.4 percent) did not exceed the system percentage increase. As a group, the focused-growth institutions grew by 6.5 percent, as compared to 3.8 percent among the non-focused-growth institutions. Historically American Indian and historically black institutions grew at a faster pace (14.2 percent and 6.5 percent respectively) than did historically white institutions (3.7 percent).

Specific groups of students that experienced above average increases in their enrollment this year include:

- First-time students at all degree levels (up 4.9 percent)
- 18- to 24-year-old students (up 4.6 percent)
- Full-time students (up 4.7 percent)
- Minority students (up 6.4 percent)
- Women (up 4.6 percent)

First-Time Students

The proportion of North Carolina high school graduates that entered a UNC institution this fall was 30.9 percent, up from 30.3 percent last fall. The number of first-time freshmen increased by 4.6 percent, the number of new transfer students by 5.1 percent, and the number of new graduate and first professional students by 8.7 percent. Nine institutions (including five focused-growth campuses) exceeded the system average percent growth in new freshmen—FSU, NCA&T, NCCU, NCSA, UNC Chapel Hill, UNCC, UNCP, UNCW, and WSSU. Ten, including six focused-growth institutions, exceeded the system average growth rate in new transfers—ASU, ECSU, FSU, NCA&T, NCCU, NCSA, UNCA, UNCG, WCU, and WSSU.

Minority Enrollment

Minority enrollment increased by 2,708 students (6.4 percent) and represented 27.4 percent of the University's total enrollment, up from last year's 26.7 percent. In percentage terms, the growth for each identified minority group exceeded the growth for white students. The percentages were:

- African American students (up 6.2 percent)
- American Indian students (up 7.7 percent)
- Asian students (up 5.6 percent)

Hispanic students (up 10.6 percent)
 White students (up 3.0 percent)

African American enrollment increased at a greater percentage at both the historically black institutions (6.6 percent) and the historically white institutions (4.9 percent) than was true of white students at historically black institutions (3.6 percent) or historically white institutions (2.8 percent). Taken together, these changes produced an enrollment at the historically white institutions that is 10.5 percent African American, and an enrollment at the historically black institutions that is 13.7 percent white. Overall 44.3 percent of UNC's African American students now enroll at historically white or historically American Indian institutions. By contrast, 4.6 percent of UNC's white students enroll at historically African American or American Indian institutions.

Distance Education

The number of students enrolled in off-campus distance education classes this fall was 6,994, an increase of 1,178 (20.3 percent). An additional 1,925 students enrolled in distance education courses while taking courses on-campus. This suggests that growing numbers of regular session students are choosing to take off-campus classes, generally through the use of technology. As might be expected, distance education courses are especially convenient for nontraditional students (age 25 and older), who constitute 83.5 percent of off-campus enrollment. Students taking only distance education classes are predominantly part-time (91.1 percent).

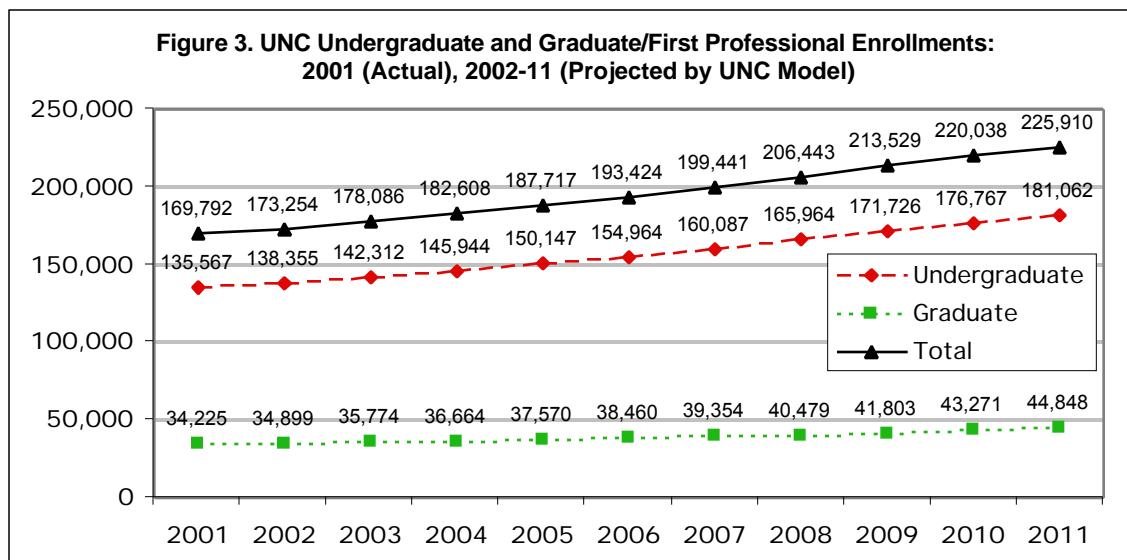
Trends in Freshman SAT Scores

This year the average combined SAT score of entering UNC freshmen declined by two points to a total of 1071. This modest change follows three consecutive increases beginning at 1060 in 1997. Ten UNC institutions, including five focused-growth campuses, experienced an overall increase in average SAT scores: ASU, ECSU, FSU, NCA&T, NCCU, NCSA, UNCA, UNC Chapel Hill, UNCC, and WCU.

B. Revised Fall Headcount Enrollment Projections for 2002-2011

The enrollment projections that formed the basis for the 2000-2010 enrollment plan were generated using enrollment data from fall 1994 through fall 2000. With an additional year of data (fall 2001) now available, projections can be revised and extended to fall 2011. [Figure 3](#) displays projections for the period 2002-2011. Consistent with new reporting conventions, these figures include both on-campus and off-campus enrollments.

The 2001 fall headcount enrollment of 169,792 was considerably higher than the 165,059 projected by the UNC projection model. Some of the unexpected growth can be attributed to individuals who reacted to the economic slowdown by deciding to remain in school or return to improve their credentials in a competitive job market. Fortunately, the enrollment plan made provision for approximately 168,000 students. Thus, the number of students campuses were prepared to enroll and for which they sought and received enrollment increase funding was just 1,800 below actual enrollment, rather than being almost 5,000 short, as would have been the case had the projections been strictly followed.



Using fall 2001 headcount data and new high school graduate projections released by the National Center for Educational Statistics, new enrollment projections were developed in late November 2001. Unfortunately, new U.S. census projections (based on the 2000 census) are not yet available, but will be included the next time that projections are reviewed. Obviously, given the higher UNC going rates experienced in fall 2001, the November 2001 iteration produced higher ten-year projections than those that guided the development of the 2000-2010 enrollment plan adopted in June. However, because this enrollment plan correctly anticipated higher growth rates, the ten-year plan remains remarkably well aligned with the new projections. These projections suggest that total fall headcount enrollment will rise to approximately 220,000 by 2010. The UNC enrollment plan assigns targets to the 16 constituent institutions that sum to 218,000 by 2010, or 2,000 fewer than the new projections forecast. However, the plan keeps pace with the projections until fall 2008, suggesting that adjustments may be required for 2009 and 2010 when the plan is revisited in spring 2003.

Projected enrollment growth for the ten-year period (2000-10) is approximately 57,300 (or 35.2 percent). The new enrollment projections now extend to 2011, when enrollment is projected to reach approximately 226,000. For the ten-year period 2001-2011, enrollment is expected to increase by about 56,000 (or 33 percent). This suggests that the rapid pace of enrollment growth may begin to abate somewhat after 2011.

III. Management of Capacity

The 2000-10 UNC enrollment plan, like the previous plan, is based on the concept of maximizing the efficient use of existing capacity. The space planning standards adopted by the Board of Governors in 1998 represent an aggressive adaptation of space standards promulgated by university systems throughout the United States. Applying these standards, institutions are better able to determine how efficiently they are using existing campus facilities and how many students they ought to be able to serve on campus, and can predict the kinds of new facilities they will require in order to meet the long-range enrollment targets.

Using its space planning standards, the University was able to compare the number of students projected to enroll over the coming two five-year periods with the estimated capacity at each UNC institution. Development of this plan took into account capital projects that were funded as a result of the successful UNC/Community College bond referendum. The University has developed an aggressive schedule that projects when each project will be designed, bid, and ultimately completed. This has aided considerably in estimating future enrollment capacity at each campus.

The UNC enrollment plan is built on an effort to minimize the need for new facilities over the next decade by gradually modifying traditional enrollment patterns. First, recognizing that some campuses cannot sustain the high rates of growth they have experienced over the past decade, the University's enrollment plan seeks to shift more than 10,000 of the projected on-campus enrollment growth to those campuses that are prepared (given adequate facilities) to absorb this enrollment by accepting 10-year growth rates of 40 percent or higher. Second the plan seeks to meet some of the projected demand off campus through distance education. In fall 2001 UNC institutions served almost 7,000 students off-campus. This represents 4.1 percent of the total fall headcount enrollment and 8.6 percent of total graduate enrollment. By 2010 the UNC enrollment plan calls for approximately 21,000 students to be taught through distance education. This would represent nearly 10 percent of total anticipated enrollment, with more than 20 percent of graduate students being served through distance education.

Another strategy to maximize capacity is expansion of enrollment in summer sessions. Like distance education before it was fully funded in 1998-99, summer school degree-credit instruction receives minimal state funding and so is essentially self-supporting. This constrains the ability of campuses to make full use of summer session to deliver degree-credit courses. In order to support instructional costs, most campuses must charge higher tuition in the summer and lack financial aid to assist low-income students. Therefore many students cannot afford summer school courses. Second, in order to be economically viable, courses must attract a high enrollment. This generally limits courses to those at the introductory level and makes it too costly to offer many of the upper division courses that juniors and seniors require to complete their degrees.

Adequate state funding for summer instruction would enable campuses to expand their summer offerings, thereby making year-round use of their facilities more feasible, hastening degree completion, and opening more places for future students. As a test of this thesis, the University's budget request for 2001-03 included a proposal for funding of pilot summer programs at North Carolina State University, UNC Charlotte, and UNC Wilmington. The pilots, if funded, would run for three years. If successful, the board would follow with a request for summer school funding based on an application of the regular-term funding model. With year-round utilization of their facilities, UNC campuses would increase their effectiveness in meeting the growing demand for higher education.