# SEVENTH ANNUAL REPORT ON UNIVERSITY OF NORTH CAROLINA ENROLLMENT PLANNING

December 2005



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

# APPENDIX S

# Contents

I. ENROLLMENT PLANNING	1
A. Meeting the Projections of the 2000 Enrollment Plan	2
B. Enrollment Projections	2
Pools of Potential Students by Age Group or Cohort	3
Historic UNC Attendance Rates	4
Growth in High School Graduates in North Carolina	4
Financial Aid	5
II. CURRENT AND ANTICIPATED ENROLLMENT GROWTH	
A. Fall 2005 Enrollment	7
Diversity Distance Education	8
Increase in SAT Scores.	9
B. Fall Headcount Enrollment Planning for 2002-2012	10
	10

# SEVENTH ANNUAL REPORT ON UNC ENROLLMENT PLANNING

December 15, 2005

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 strategic directions that drive the UNC Board of Governors' long-range plan for 2004-2009 is the following: Access: Ensure affordability and access to higher education for all who qualify and embrace a vision of lifelong learning. Access is identified by the Board as its highest priority. 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 lowincome 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.

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. In June 2001 an updated 10-year enrollment plan for the period 2000-2010 was approved. In concert with developing the *Long-Range Plan 2004-2009*, which was approved by the Board of Governors in January 2004, UNC revised its ten-year enrollment plan to cover the years 2002-12. Currently UNC institutions are engage in a revision of the ten-year enrollment plan to cover the period 2006-15.

# A. Meeting the Projections of the 2000 Enrollment Plan

A significant factor in the justification of the 2000 Bond Program was the need to accommodate student demand for access to UNC institutions. There has been significant growth at all levels and UNC has exceeded the 2000-2010 enrollment plan each year. Undergraduate enrollment has grown from 129,375 in fall 1999 to 155,029 in fall 2005; graduate enrollment has increased from 31,612 in fall 1999 to 41,219 in fall of 2005, which combined is an increase from 160,987 to 196,248 or an increase of 35,261 students, a 22% increase in five years.

The projected enrollment number from the revised 2000 plan for fall 2005 was 189,260. The fall 2005 actual enrollment is 196,248, or 6,988 students more than contemplated in the spring of 2001 when the 2000 plan was revised. Careful planning and adjustment in planned numbers have been made along the way based on new enrollment and revised demographic data.

First-time-in-college freshman enrollment has grown from 24,288 in fall 1999 to 30,217 in the fall of 2005. Resident freshmen have grown from 20,364 in fall 1999 to 26,009 in fall 2005, a 27.7 percent increase. Nonresident freshmen have grown from 3,924 to 4,208 in the same period.

The enrollment projections and plans made in connection with the bond program have all been met and exceeded, and current analysis suggests this will continue to be the pattern for UNC growth.

# B. Enrollment Projections

The first step in developing or 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 projections are designed to identify expected 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.

UNC has developed and used a number of enrollment models to project demand for UNC institutions. The High School Graduates Model and the Census Model were developed in conjunction with the development of the 2002-2012 enrollment targets. The High School Graduates Model focuses on the number of high school graduates we can expect in North Carolina in the future while the Census Model, focuses on the segmentation of the North Carolina population into age groupings and uses historical levels of participation of each segment in UNC institution.

UNC has developed an additional projection model that takes into account the diversity of the population in North Carolina and the historical participation rates of those diverse

groups. This has been named the County Diversity Model. This model, newly developed in 2005, is based on the diversity of our counties. With the rapidly changing demographics in North Carolina, this is an attempt to capture the changing ethnic and racial composition of high school graduates in North Carolina. While this model draws on the work of the Western Interstate Commission for Higher Education and their state-by-state projection of high school graduates, it goes beyond that work by taking the diversity down to the county level. It is based on birth rates county by county in North Carolina and captures in migration. Based on 1991 to 2003 actual DPI data, progression ratios from birth to high school are calculated for the diverse groups in each county. On this basis the number of high school graduates can be projected by diversity category and the demand for UNC intuitions can be projected by diversity category.

# 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 public high school graduates, UNC uses the projections of high school graduates provided by the NC Department of Public Instruction and for special and private high school graduates the projections by the Office of the President. For age groupings of North Carolinians, UNC uses the most recent projections supplied by the U.S. Census Bureau. In addition, UNC developed new data by county for births by diversity category.

Figure 1 plots the percentage changes in the actual and projected pools of potential instate students. The figure displays the number of 18 year olds, the projection by DPI of the number of public high school graduates, and the projection of the number of public high school graduates based on the Diversity Model. Due to the detailed nature of the data it rests on, the Diversity Model may provide the more accurate forecast for NC public high school graduates. When the models are used to project demand for UNC institutions private high school graduates are included as well.

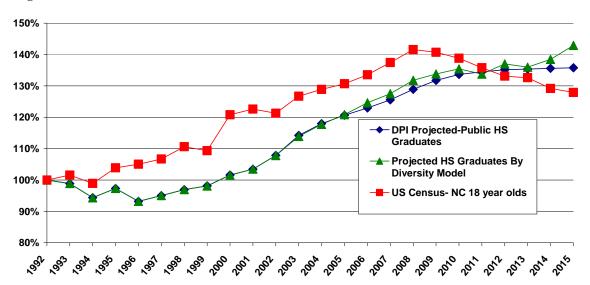


Figure 1. Pools of Potential In-State First-Time Freshmen

#### Historic UNC Attendance Rates

To determine what percent of this potential demand can be expected to enroll at a UNC institution, the projections take 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 projections multiply the projected attendance 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 nonresident tuition, the model assumes that the participation rate of nonresident undergraduates will remain relatively stable.

Figure 2 depicts UNC attendance rates for North Carolina high school graduates over the past decade. UNC has adjusted the way it presents the participation of high school graduates in UNC constituent institutions. Some high school graduates delay college to the second term of the next academic year, and some campuses regularly admit new high school graduates for the second term. To accommodate these practices we will report a preliminary participation percent for the fall and an annual participation rate in the spring after second term enrollment data is available. The data reported below are the annual rates.

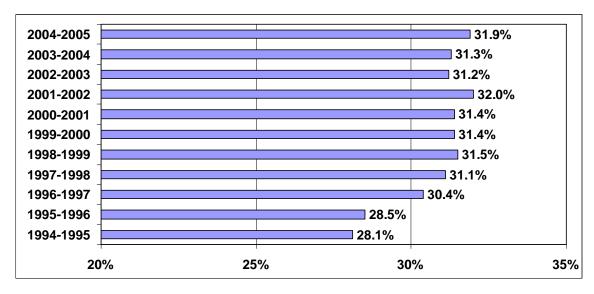


Figure 2. UNC Annual College-Going Rate for New North Carolina High School Graduates: 1994-2004

### Growth in High School Graduates in North Carolina

North Carolina is experiencing a significant increase in high school graduates during this decade, with the increase continuing to 2009/2010. At that point it appears there will be some leveling off of the number of high school graduates, and then in the middle of the next decade an even steeper increase in the number of high school graduates.

The information in Figures 1, 2, and 3 suggests that UNC will continue to experience enrollment increases throughout the decade at the undergraduate level. However, the University also expects participation rates to increase among students seeking graduate and first professional degrees. This will be a result of increased numbers of students receiving baccalaureate degrees and the demand of older citizen to complete degrees or seek new degrees relevant to the changed economy. The availability of distance and online degree programs will enhance UNC's ability to serve these older citizens.

140000 Actual **Projected** 120000 100000 36989 82765 82433 80000 69338 Graduates 65621 62996 61811 60203 60000 40000 20000 2000-01 2001-02 2002-03 2003-04 2004-05 2005-06 2006-07 2007-08 1997-98 1999-00 School Year

Figure 3. Projected North Carolina Public High School Graduates: 2005-2020

#### Financial Aid

The Board of Governors established a Task Force on Student Financial Aid to address the needs of those who were least able to attend college because of financial concerns. As the need-based financial aid plan was developed, UNC trailed other major institutions in the nation in funding for need-based financial aid. To help address this issue, the UNC Need Based Financial Aid Program was inaugurated for the 2000-2001 academic year, using the formula recommended in the report of the Task Force on Student Financial Aid presented to the Board of Governors in November 1999. The formula takes advantage of federal data collection (so no additional application for this program is required) and fully leverages other federal funds such as Pell Grants and tax credits. Due to continuing funding by the General Assembly, over 31,000 students have been aided through this program for 2005-2006 from a financial aid appropriation of \$59 million. The budget now allows funding for all four classes of undergraduate students. Fund information is offered via the Internet so that all campuses at which a student expresses an interest are

simultaneously notified of grant eligibility and can include the UNC Need Based Grant in their aid offers before an enrollment decision is made.

The State Education Assistance Authority released an affordability study in November 2003 and updated in 2004. Its finding on three broad measures of affordability -- the college-going rate in North Carolina, the net price of college in relation to family income, and average cumulative student debt upon graduation – indicate that "despite increased prices, higher education for North Carolinians remains affordable...."

# C. 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 plans have been 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 distance learning at offcampus sites and through e-learning.
- Implement the Bond Program to provide additional and upgraded dormitory space and campus facilities to accommodate growth.

Applying these principles in partnership with UNC chancellors, each board of trustees adopted appropriate targets for enrollment growth 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 initial 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 then-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 \$25 million in recurring special funding. These funds have been used to develop comprehensive enrollment growth plans, improve instruction, develop new academic programs, promote greater operating efficiencies, enhance development offices, strengthen facilities management capabilities, and now are being used to address additional stresses on campus services due to the success of the Focused-Growth Plan.

The table below show the enrollment growth of the focused growth campuses. Over 15,000 students have been added to the focus-growth campuses since 1999.

Table 1. Focused-Growth Institutions Enrollment Growth: 1999-2005

	Fall 1999	Fall 2005	Increase	% increase
ECSU	1,966	2,664	698	35.5%
FSU	4,879	6,072	1,193	24.5%
NCA&T	7,603	11,103	3,500	46.0%
NCCU	5,595	8,219	2,624	46.9%
UNCP	3,062	5,632	2,570	83.9%
WCU	6,580	8,665	2,085	31.7%
WSSU	2,788	5,566	2,778	99.6%
Total	32,473	47,921	15,448	47.6%
UNC	160,987	196,248	35,261	21.9%

It is clear that the plan to significantly increase the role of the focused growth campuses in meeting the demand for UNC institutions is continuing to meet with success.

# II. Current and Anticipated Enrollment Growth

#### A. Fall 2005 Enrollment1

As Table 2 shows, headcount enrollment for fall 2005 reached a record high of 196,248 students. This is an increase of 6,633 (or 3.5 percent) over the 189,615 students who were enrolled in fall 2004. This marks the fifth year in a row that the enrollment increase exceeds 6,000 students.

<sup>&</sup>lt;sup>1</sup> This year marks the sixth 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 enrollments; (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 2. Comparison of Fall 2004 and Fall 2005 Headcount Enrollment

	Fall 2004	Fall 2005		Change (2004-200	
Institution	Actual	Target	Actual	Number	Percent
ASU	14,653	14,776	14,653	0	0.0
ECU	22,767	24,229	23,164	397	1.7
ECSU	2,470	2,547	2,664	194	7.9
FSU	5,441	5,604	6,072	631	11.6
NCA&TSU	10,383	10,812	11,103	720	6.9
NCCU	7,727	8,180	8,219	492	6.4
NCSA	788	838	829	41	5.2
NCSU	29,957	30,283	30,148	191	0.6
UNCA	3,574	3,795	3,499	-75	-2.1
UNC-CH	26,878	27,153	27,276	398	1.5
UNCC	19,846	20,348	20,772	926	4.7
UNCG	15,329	16,177	16,147	818	5.3
UNCP	5,027	5,298	5,632	605	12.0
UNCW	11,574	11,680	11,839	265	2.3
WCU	8,396	9,084	8,665	269	3.2
WSSU	4,805	5,129	5,566	761	15.8
TOTAL	189,615	195,933	196,248	6,633	3.5

All UNC institutions except ASU and UNCA experienced growth this fall. Nine institutions (including six focused-growth institutions) equaled or exceeded the system average growth of 3.5 percent: WSSU (761) 15.8%; UNCP (605) 12%; FSU (631) 11.6%; ECSU (194) 7.9%; NCA&T (720) 6.9%; NCCU (492) 6.4%; UNCG (818) 5.3%; NCSA (41) 5.2%; UNCC (926) 4.7%.

The headcount growth was most dramatic among six institutions, each with increases of 600 or more students: UNCC (926), UNCG (818), WSSU (761), NCA&T (720), FSU (631) and UNCP (605).

Each of the seven focused-growth institutions experienced growth, and only WCU did not exceed the system percentage increase. As a group, the focused-growth institutions grew by 8.3 percent, as compared to 2.0 percent among the non-focused-growth institutions and the 3.5 percent overall growth rate. Historically black and historically American Indian institutions grew at a faster pace (9.1 percent and 12 percent, respectively) than did historically white institutions (2.1 percent).

#### **Diversity**

Minority enrollment (of those identified) increased by 3,320 students (6.1 percent) and is 30.8 percent of the University's enrollment adjusted for those whose race or ethnicity (other) is not known, up from last year's 29.9 percent. In percentage terms, the growth for each identified minority group, except Asian students, exceeded the growth rate for white students, which was 1.8 percent or 2,247. The percentages are:

- African American students (up 6.3 percent or 2,701 students)
- American Indian students (up 8.3 percent or 182 students)

- Asian students (up .5 percent or 29 students)
- Hispanic students (up 11.3 percent or 408 students)

African American enrollment increased at both the historically black institutions (8.9 percent) and the historically white institutions (1.7 percent). White enrollment increased at both the historically black institutions (6.2 percent) and historically white institutions (1.5 percent). Taken together, these changes produced an enrollment at the historically white institutions that is 10.5 percent African American (up in number every year since 1996 but down slightly in percentage from last year), and an enrollment at the historically black institutions that is 12.9 percent white (up in number but down slightly in percentage from last year). In percentage terms, this is the eighth year in a row that African American students have exceeded 10 percent of the total enrollment at the historically white institutions. This means that 39.2 percent (17,815) of UNC's African American students now enroll at historically white or historically American Indian institutions. By contrast, 5.5 percent (7,106) of UNC's white students enroll at historically African American or American Indian institutions.

#### Distance Education

The number of students enrolled in distance education courses this fall is 13,410, an increase of 1,143 (9.3 percent). An additional 7,718 regular term students enrolled in distance education or online courses, for a total of 21,128 students enrolled in distance education or online courses. This suggests that growing numbers of regular term students are choosing to take distance-learning courses, generally through the use of information technology. As might be expected, distance education programs are especially convenient for nontraditional students (age 25 and older), who constitute over 70 percent of off-campus enrollment.

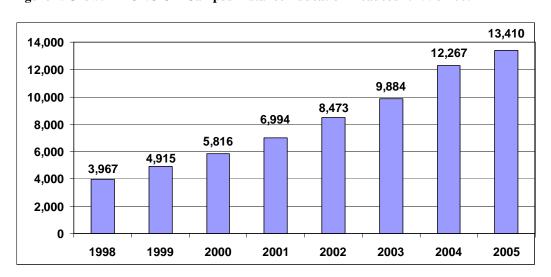


Figure 4. Growth in UNC Off-Campus Distance Education Headcount 1998-2005

#### Increase in SAT Scores

In addition to experiencing record enrollment growth, freshmen SAT scores increased for UNC. Twelve institutions saw the average SAT for first-time-in-college students

increase (ASU, ECSU, FSU, NCA&T, NCCU, NCSA, UNCA, UNC-CH, UNCC, UNCG, UNCW, and WSSU) and the UNC average combined SAT increased from 1079 to 1082.

# B. Fall Headcount Enrollment Planning for 2002-2012

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 the additional fall 2001, 2002, and 2003 data, projections were revised and extended to fall 2012.

These projections suggest that total fall headcount enrollment will rise to approximately 235,000 by fall 2012. The UNC enrollment plan established planned targets for the 16 constituent institutions that sum to just over 208,000 by 2007, and to just over 235,000 for fall 2012. Projected enrollment growth for the ten-year period (2002-12) is approximately 58,213 or a 32.9 percent increase over fall 2002.

While the increase in high school graduates may level off some as we approach 2012, the impact of the rapid growth of high school graduates will be felt for several years subsequent to 2012, as they complete undergraduate study and contribute to a growing demand for graduate education. And the projections that will form the basis for the 2006-2015 Enrollment Plan suggest another period of rapid acceleration in high school graduates in the next decade. Table 3 summarizes by campus and for UNC what the expectations are for the ten-year period 2002-2012.

Table 3. UNC Ten-Year Enrollment Growth Plan (2002-2012)

Fall headcount enrollment, 2002 actual and planned targets for 2007 and 2012							
	2002	2007	%	2012	%	Total	%
Institution	(actual)	(target)	increase	(target)	increase	Increase	increase
ASU	14,178	15,382	8.49%	16,731	8.77%	2,553	18.01%
ECU	20,577	24,569	19.40%	28,500	16.00%	7,923	38.50%
ECSU	2,150	2,848	32.47%	3,578	25.63%	1,428	66.42%
FSU	5,308	5,919	11.51%	6,603	11.56%	1,295	24.40%
NCA&T	9,115	12,900	41.52%	15,867	23.00%	6,752	74.08%
NCCU	6,519	8,234	26.31%	9,938	20.69%	3,419	52.45%
NCSA <sup>*</sup>	817	899	10.04%	923	2.67%	106	12.97%
NCSU	29,637	32,249	8.81%	36,500	13.18%	6,863	23.16%
UNCA	3,391	3,717	9.61%	3,717	0.00%	326	9.61%
UNC-CH	26,028	27,868	7.07%	28,871	3.60%	2,843	10.92%
UNCC	18,916	23,504	24.25%	28,430	20.96%	9,514	50.30%
UNCG	14,453	17,367	20.16%	18,683	7.58%	4,230	29.27%
UNCP	4,432	6,446	45.44%	6,786	5.27%	2,354	53.11%
UNCW	10,918	12,348	13.10%	13,641	10.47%	2,723	24.94%
WCU	7,033	9,460	34.51%	10,210	7.93%	3,177	45.17%
WSSU	3,495	5,121	46.52%	6,202	21.11%	2,707	77.45%
TOTAL	176,967	208,831	18.01%	235,180	12.62%	58,213	32.89%

<sup>\*</sup> NCSA enrollment figures do not include high school students.

# III. Management of Capacity

The 2002-12 UNC enrollment plan, like the previous plan, is based on the concept of maximizing the efficient use of existing capacity and taking advantage of the new and renovated facilities being provided by the bond program. 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 program. The University has developed an aggressive schedule and 100 percent of the bond projects are in some stage of design, construction, or completion. This has aided considerably in estimating future enrollment capacity at each campus. All the bond projects are scheduled to be completed by the end of 2009. In developing the 2006-2015 UNC enrollment plan, facilities for accommodating the increases will again have to be carefully evaluated since the enrollment on many campuses is running ahead of the projections when the bond projects were initially proposed.

The UNC enrollment plan is built on an effort to reduce somewhat the need for new facilities over the next decade by gradually modifying traditional enrollment patterns. This plan presumes that the focused-growth campuses will continue to grow at a rate higher than the growth rate of UNC as a whole. Second, the plan seeks to meet some of the projected demand off campus through distance education. In fall 2005 UNC institutions served over 13,000 students off-campus either through site-based distance education or online programs. This represents 7 percent of the total fall headcount enrollment. By 2012 the UNC enrollment planning calls for approximately 22,000 students to be taught through distance and online education.

HB1264 required UNC in cooperation with the NCCCS to retain consultants to determine the educational needs of business and industry in North Carolina, both current and anticipated. Results of the consultants work will be available in 2006 and will inform future planning for enrollment increases.

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 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

#### APPENDIX S

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. 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.