NC State’s Enrollment Strategy
This enrollment plan outlines primary strategies for fulfilling NC State’s mission to serve the people of North Carolina and its special role within the UNC system as a research-extensive university. It is not intended to predict future enrollment passively by applying historical trends to demographic trends. Rather, this enrollment plan suggests strategies for actively managing the University’s enrollment to achieve the following aims:

- Improve the quality and standing of NC State’s academic programs.
- Ensure sufficient access for North Carolinians to programs that are relatively unique in the UNC system, while emphasizing competitive excellence in programs offered by other campuses.

Consistent with NC State’s strategic plan, this long-range enrollment plan calls for changes in the composition of its student body, notably expanding the proportion of graduate and professional students particularly at the doctoral level. Among undergraduates, the plan will increase transfers and non-NC residents, and facilitate their transfer among colleges. Growth is managed in a way that maintains the University’s strength in science and technology while honoring its commitment to excellence in a comprehensive range of disciplines, particularly those that enrich our responses to the grand challenges facing society.

Total Size
Continued growth is an attractive enrollment option that would accommodate the expanding North Carolina population and provide new faculty positions and other resources to expand and enhance programs and services. However, projected economic conditions suggest that reductions in the University’s base budget may exceed increased revenues triggered by enrollment growth and dramatically reduce resources per student. To protect the quality of the educational programs at NC State, we must slow enrollment growth to fit available resources, invest in strategies to increase non-state funding, and better align enrollment with resources. To this end, this enrollment plan is based on the following strategies:

- Limit growth in undergraduate programs, where state appropriations and tuition are the only sources of support. Instead, emphasize growth in graduate programs that are linked to federally and privately funded research initiatives, that are supported with premium tuition, or where students are self-supporting.
- Alleviate pressure on colleges with service teaching responsibilities and on student support services by limiting lower division enrollment growth.

Graduate Education
Because NC State is one of only two research-extensive universities in the UNC system, the expansion of graduate education – particularly doctoral education – is our highest priority for enrollment growth. Our goal is to increase graduate enrollment as long as there is sufficient demand that we can meet with resources adequate to sustain the quality of education. In particular, this plan calls for these strategies:

- Create ambitious doctoral enrollment targets, especially those related to strategic research initiatives and those that strengthen multidisciplinary initiatives.
- Build professional master’s programs that provide career development opportunities for working adults and that address unmet economic development needs.
- Leverage degree-granting authority and faculty expertise through partnerships with other universities.
- Provide sufficient resources needed to support graduate enrollment projections, including GSSP and stipends, as well as tenure-track faculty and research space.
Many of NC State’s doctoral graduates join the faculties of universities across the nation and world. We share with other doctoral institutions a responsibility for building a faculty diverse in background and perspective, ready to teach and mentor new generations of students, which will be increasingly diverse themselves. To that end, NC State will:

- Recruit and mentor graduate students representing a variety of academic perspectives and racial, ethnic, gender, and geographic backgrounds.

**Undergraduate Programs**

At the undergraduate level, NC State’s focus will be on improving student success and the quality of the undergraduate experience. The greatest threat to student success and program quality is continuing erosion of the resources necessary to provide adequate faculty, academic support services, and equipped classrooms. Undergraduate education depends on state appropriations, tuition, and private support, all of which may be very limited for several years. Accordingly, NC State will limit enrollment growth in undergraduate programs. This will require that we:

- Limit freshmen enrollment to improve selectivity and student success.
- Expand co-curricular programs and student support services, such as advising, counseling, and career services.
- Sharpen our competitive edge for the most highly qualified students by providing sufficient merit aid needed to recruit more highly qualified freshmen.
- Provide sufficient capacity to meet demand for unique programs, while emphasizing quality in areas duplicated on other UNC campuses.

Nonetheless, NC State is committed to providing access for North Carolinians to NC State’s undergraduate programs as much as possible through improved student retention and graduation rates, and through increased transfer enrollment. First, by reducing time to degree, we will free up capacity to serve more students, and, over time, award as many undergraduate degrees as we do now. We will be able to manage course offerings more effectively and provide financial aid to a larger number of students. At the same time we redouble our efforts to support students’ success in their original college of choice, we will facilitate and plan capacity for the nearly 20% of students who change colleges during their undergraduate career. Second, by reducing freshmen and increasing transfers, we can provide degree opportunities for the same number of students while relieving pressure on service departments and academic support services. (See Appendix A: The Case for Transfers). The following steps would support these strategies:

- Develop institution- and program-specific articulation agreements to facilitate the transfer of students prepared to be successful at NC State.
- Develop recruiting, orientation, and student support programs designed especially for transfer students.
- Provide sufficient financial aid to provide access to all qualified North Carolinians including transfers.
- Take deliberate steps to improve graduation rates.
- Reduce barriers faced by undergraduates wishing to change majors (intracampus transfers).

A diverse student body strengthens the educational experience by encouraging interactions among students from different racial and ethnic, social and economic, geographic, and religious backgrounds. In and outside of the classroom, diversity enhances the commerce of ideas, values, and perspectives. At the undergraduate level, NC State will expand diversity by encouraging transfers from community colleges and by increasing the proportion of non-resident freshmen. The following strategies would support these purposes:

- Develop transfer programs with feeder institutions best positioned to contribute to the diversity of NC State’s student body.
- Increase out-of-state recruiting and enrollment.
- Increase resources available for scholarships and need-based financial aid.

**Teaching and Learning with Technology**
Instructional technology can contribute substantially to the quality of teaching and learning. Technology can stimulate innovative teaching, enrich learning resources for students, facilitate interactions among students and faculty, and help us leverage our resources to give access to more students. Distance education, blended courses and programs, and high-impact educational content can raise program quality, student engagement, and efficiency through the following strategies:

- Develop distance education programs in high-demand disciplines where NC State has strength.
- Promote innovative uses of instructional technology to enrich classroom teaching and student engagement.
- Develop a strategy to improve efficient use of classrooms for increasing numbers of blended learning courses and programs.

Enrollment Targets

This plan calls for enrollment growth to 37,000 by 2020, including both on-campus and distance education students. This increase compares to a 20% growth between 2000 and 2010, when NC State’s freshman classes increased rapidly, from 3,839 in 2000 to a high of 4,792 in 2007. Consistent with the goals described above, graduate enrollment will continue to grow as a percentage of the total, from roughly 25% to 27%, with the fastest growth occurring at the doctoral level.

### 2020 Enrollment Plan

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2020</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Freshmen</td>
<td>4,564</td>
<td>4,630</td>
<td>+1%</td>
</tr>
<tr>
<td>New Ag Institute</td>
<td>133</td>
<td>140</td>
<td>+4%</td>
</tr>
<tr>
<td>New Transfers</td>
<td>1,027</td>
<td>1,415</td>
<td>+38%</td>
</tr>
<tr>
<td>New Master’s</td>
<td>1,965</td>
<td>2,402</td>
<td>+22%</td>
</tr>
<tr>
<td>New Doctoral</td>
<td>575</td>
<td>804</td>
<td>+40%</td>
</tr>
<tr>
<td>New DVM</td>
<td>81</td>
<td>100</td>
<td>+23%</td>
</tr>
<tr>
<td>Total Undergraduate</td>
<td>23,514</td>
<td>24,180</td>
<td>+3%</td>
</tr>
<tr>
<td>Total Master’s</td>
<td>5,223</td>
<td>6,070</td>
<td>+16%</td>
</tr>
<tr>
<td>Total Doctoral</td>
<td>3,156</td>
<td>4,060</td>
<td>+29%</td>
</tr>
<tr>
<td>Total DVM</td>
<td>312</td>
<td>390</td>
<td>+12%</td>
</tr>
<tr>
<td>Total non-degree-seeking</td>
<td>2,558</td>
<td>2,300</td>
<td>-10%</td>
</tr>
<tr>
<td>GRAND TOTAL</td>
<td>34,763</td>
<td>37,000</td>
<td>+6%</td>
</tr>
</tbody>
</table>

To establish targets for each college within the overall 37,000 enrollment goal for the entire university, the Enrollment Planning Committee solicited proposed targets from each college. Those proposals were reviewed in light of the University’s new strategic plan and information related to the broad strategies outlined above, including the following.

- Demand as expressed through applications
- Student qualifications and admissions selectivity
- Potential for improving diversity
- Throughput: retention and graduation rates, and time to degree
- Potential for and interest in shifting undergraduate admissions from freshmen to transfers
- Capacity for growth: teaching workloads, revenues vs. expenditures, cost per section, availability of space, and graduate student support

Particular care was taken to assess each college’s capacity and funding potential for graduate education. The Committee reviewed information about the cost per student (including the cost of an average student support package...
for resident, domestic non-residents, and international students) and revenues associated with enrollment (including
the funding formula, tuition premiums, and savings from TA-instructed courses). The 2020 enrollment projections show
more growth in colleges whose sponsored program income is sufficient to fund research assistantships, and to programs
whose students are generally self supporting. College targets are included in Appendix B.

Implementation Strategies

The enrollment strategies described above – expanding graduate programs, strengthening undergraduate programs –
require that NC State build a research (tenured and tenure-track) faculty large enough to expand sponsored research
and to provide a high quality educational experience for our students. We will need to reverse the trends of the last
decade, when headcount enrollment increased by 20%, non-tenure track faculty grew by 23%, and tenure-track faculty
increased by only 1%. To support graduate programs and overall program excellence, NC State must adopt the following
strategy:

- Increase the number of tenured and tenure-track faculty, particularly in areas of growth.
- To the extent feasible, fill instructional positions funded through enrollment growth with permanent faculty,
rather than holding them vacant for budget reductions or teaching overloads.

Like all institutions of higher education, NC State must also improve the efficiency of all its activities, including
instruction. Like all public institutions, we will try to depend less on state support without shifting too much of the
costs to students and their families. This calls for careful enrollment planning in all units, ensuring course availability,
and improved efficiency through multiple strategies:

- Improve alignment between resources and enrollment in each college.
- Balance enrollment growth across programs in a fiscally sound manner that considers both costs and funding.
- Improve retention rates and time to degree at all degree levels, in part by facilitating intra-campus transfers.
- Increase enrollment capacity in colleges that attract large numbers of intra-campus transfers.
- Reduce the cost of instruction and improve classroom utilization through creative use of learning technologies
  and partnerships.
- Re-evaluate the master plan, capital improvements plan, and space utilization strategies as needed to provide
capacity in growth areas.
- Implement research initiatives necessary to attract the resources necessary to support graduate enrollment,
e.g., by implementing a parallel research plan.

With the current funding formulae (including the CVM formula) and instructional salary levels, an increase in total
headcount enrollment to 37,000 and the college distribution described in Appendix B would yield around $7.5 million
new funding and 30 new faculty positions each year. The additional costs of graduate programs may be supported in
part through premium tuition (largely master’s) and sponsored programs (doctoral).
Appendix A: The Case for Transfers

Beginning in 2005, NC State expanded access to the university by admitting larger freshman cohorts. These large cohorts stressed the academic infrastructure, made it increasingly difficult to place intra-campus transfers into degree programs of their choice, lowered the freshman profile, and contributed to lower graduation rates. The 2020 enrollment plan is intended to reverse that trend.

Statewide projections suggest that the number of graduating high school seniors will increase by 17% between 2010 and 2020. NC State has an obligation to accommodate the growing demand for undergraduate degrees and maintain its traditional commitment to providing access. However, under-resourced expansion is not responsible growth. The alternative is to meet the state's higher education needs by reducing the freshman cohort and increasing external transfers from community colleges and other four-year institutions.

The Enrollment Planning Committee (EPC) estimated the impact of replacing freshmen with weaker credentials with external transfers on the freshman profile, graduation rates, and demand for general education courses. The study compared two groups: (1) traditionally aged students who were denied NC State admission as freshmen but who later enrolled at NC State as transfers, and (2) admitted and enrolled new freshmen whose SATs and high school GPAs placed them at the lower end of their cohort. Two samples from the 2001, 2002, and 2003 years were matched on gender, race, major college preference, and cohort year. As expected, the transfers who were not admitted as freshmen had lower SATs and high school GPAs than students who enrolled as freshmen.

The results indicated that enrolling around 400 external transfers in place of marginally qualified freshmen would not significantly improve the freshman profile and would increase the six-year graduation rate by less than one percentage point. However, despite being less qualified at the freshman admissions decision point, the transfers changed their majors less often than native freshmen, were more likely to finish their degrees within six years, performed better in identical courses, and earned a higher cumulative GPA by graduation.

Comparing the Performance of Matched Freshman and Transfer Groups

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>SAT</th>
<th>HS GPA</th>
<th>Graduated within 6 years of HS diploma</th>
<th>NCSU Final GPA</th>
<th>Years to Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman Group</td>
<td>423</td>
<td>1164</td>
<td>3.37</td>
<td>58.4%</td>
<td>2.83</td>
<td>5.1</td>
</tr>
<tr>
<td>Transfer Group</td>
<td>423</td>
<td>1053</td>
<td>3.27</td>
<td>75.2%</td>
<td>2.95</td>
<td>5.2</td>
</tr>
<tr>
<td>Transfers from NC community college</td>
<td>170</td>
<td>1034</td>
<td>3.24</td>
<td>68.8%</td>
<td>3.00</td>
<td>5.4</td>
</tr>
<tr>
<td>Transfers from another UNC</td>
<td>178</td>
<td>1072</td>
<td>3.27</td>
<td>80.9%</td>
<td>2.98</td>
<td>5.1</td>
</tr>
<tr>
<td>Transfer from another institution</td>
<td>75</td>
<td>1054</td>
<td>3.34</td>
<td>76.0%</td>
<td>2.95</td>
<td>5.1</td>
</tr>
</tbody>
</table>

* Freshman and transfer groups were matched on cohort year.

By shifting from freshmen to external transfers, NC State would confer more degrees per student and per credit hour delivered. Over an academic career, one new freshman takes the same number of hours as 1.6 external transfers, so NC State could deliver the same number of credit hours to 100 freshmen as to 163 transfers. Furthermore, because external transfers have typically completed most of their general education requirements, colleges providing service courses would face less pressure to teach lower division courses.

Shifting enrollment growth from freshmen to transfers may also improve NC State’s opportunity to recruit more diverse undergraduate students. Community college populations are more diverse than freshman cohorts and, with focused recruiting efforts and financial aid, the proportion of underrepresented minorities transferring into NC State would be expected to increase.

The EPC recommends an increase in transfer enrollment to provide access and to improve efficiency and diversity. The Committee believes that the best strategy for shifting some undergraduate enrollment from freshmen to transfers is to
develop program-specific articulation partnerships with specific community colleges, similar to those established by the College of Engineering and College of Agriculture and Life Sciences.
### Appendix B: 2020 Enrollment Targets

**Fall Headcount Enrollment**  
Includes distance education

<table>
<thead>
<tr>
<th></th>
<th>New Freshmen</th>
<th>New External</th>
<th>Total Undergraduate</th>
<th>New Master’s</th>
<th>Total Master’s</th>
<th>New Doctoral/DVM</th>
<th>Total Doctoral/DVM</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provost</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>120</td>
<td>120</td>
<td>-</td>
<td>-</td>
<td>120</td>
</tr>
<tr>
<td>CALS</td>
<td>930</td>
<td>350</td>
<td>5,510</td>
<td>230</td>
<td>660</td>
<td>87</td>
<td>495</td>
<td>6,665</td>
</tr>
<tr>
<td>Design</td>
<td>120</td>
<td>25</td>
<td>630</td>
<td>140</td>
<td>375</td>
<td>10</td>
<td>35</td>
<td>1,040</td>
</tr>
<tr>
<td>Education</td>
<td>155</td>
<td>50</td>
<td>900</td>
<td>260</td>
<td>800</td>
<td>100</td>
<td>550</td>
<td>2,250</td>
</tr>
<tr>
<td>Engineering</td>
<td>1,300</td>
<td>250</td>
<td>5,975</td>
<td>725</td>
<td>1,880</td>
<td>310</td>
<td>1,550</td>
<td>9,405</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>170</td>
<td>150</td>
<td>1,450</td>
<td>110</td>
<td>360</td>
<td>30</td>
<td>130</td>
<td>1,940</td>
</tr>
<tr>
<td>CHASS</td>
<td>435</td>
<td>325</td>
<td>3,820</td>
<td>270</td>
<td>720</td>
<td>60</td>
<td>340</td>
<td>4,880</td>
</tr>
<tr>
<td>PAMS</td>
<td>240</td>
<td>40</td>
<td>1,000</td>
<td>75</td>
<td>185</td>
<td>155</td>
<td>680</td>
<td>1,865</td>
</tr>
<tr>
<td>Textiles</td>
<td>165</td>
<td>65</td>
<td>1,000</td>
<td>50</td>
<td>110</td>
<td>16</td>
<td>110</td>
<td>1,220</td>
</tr>
<tr>
<td>Vet Medicine</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>12</td>
<td>20</td>
<td>116</td>
<td>470</td>
<td>490</td>
</tr>
<tr>
<td>Management</td>
<td>350</td>
<td>130</td>
<td>2,570</td>
<td>410</td>
<td>840</td>
<td>20</td>
<td>90</td>
<td>3,500</td>
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<tr>
<td>DUAP</td>
<td>765</td>
<td>30</td>
<td>1,325</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,325</td>
</tr>
<tr>
<td>Non-degree</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,300</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4,630</td>
<td>1,415</td>
<td>24,180</td>
<td>2,402</td>
<td>6,070</td>
<td>904</td>
<td>4,450</td>
<td>37,000</td>
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