

## PROGRAM EVALUATION DIVISION NORTH CAROLINA GENERAL ASSEMBLY

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# PED's Review of the North Carolina Guaranteed Admissions Program (NCGAP) Report

### Summary

Session Law 2015-241 established NCGAP, a deferred admissions program for postsecondary students identified as academically at risk. In January of 2016, the Joint Legislative Program Evaluation Oversight Committee directed the Program Evaluation Division (PED) to assess the methodology and accuracy of conclusions presented in a legislatively-mandated report submitted by the UNC Board of Governors (UNC BOG) and the State Board of Community Colleges (SBCC) on potential program impacts of NCGAP (hereafter referred to as the NCGAP report).

The NCGAP report raised several concerns with the program. The report defined "academically at risk" students as those with weighted high school grade point averages between 2.5 and 2.69 and measured student success using six-year graduation rates. The report found the program may not increase six-year graduation rates for academically at-risk students; will decrease the number of bachelor's degrees students receive; and will require additional resources at UNC institutions for academic and career counseling. The report proposed two implementation options as well as an alternative approach of delaying NCGAP implementation to determine the effects of the BOG/SBCC's recent efforts to increase the success of community college transfer students.

### PED's review of the NCGAP report found several shortcomings and concluded the report:

- may understate community college cohort six-year graduation rates;
- used flawed measures of intent to attend a university in its sample selection process;
- excluded important variables in its regression model, undermining its ability to predict six-year graduation rates for NCGAP participants;
- failed to consider recent efforts to increase the success of transfer students:
- understated potential savings to students;
- may not adequately measure all student debt;
- estimated decreases in enrollment at UNC institutions without recognizing simultaneous increases in community college enrollment and degree production; and
- failed to support its estimate of "tens of millions of dollars" being necessary to advise NCGAP participating students.

PED also observed that use of a different metric or group of measures to identify at-risk students could lead to different student and institutional impacts for which additional incentives to boost NCGAP participation could have been explored.

### North Carolina Guaranteed Admission Program

Session Law 2015-241 established the North Carolina Guaranteed Admissions Program (NCGAP), a deferred admissions program for postsecondary students identified as academically at risk. The legislation (see Appendix A) requires the university system to divert to community college those students who satisfy the admission requirements of a specific University of North Carolina (UNC) institution but who are not as competitive as other students admitted to the same institution. Beginning with the 2017–18 academic year, these students would have to earn an associate degree prior to enrolling at the UNC institution from which they received deferred admission.

The General Assembly seeks to accomplish five goals through implementation of NCGAP:

- Assist more students in obtaining a baccalaureate degree within a shorter time period;
- Provide students with a college education at significantly lower costs for both the student and the State;
- 3. Help decrease student loan debt;
- 4. Provide students with an interim degree if they choose not to continue postsecondary education;
- Provide easier access to academic counseling that will assist students in selecting coursework reflective of their goals and will help them succeed academically.

To assess potential program impacts, Session Law 2015-241 required the UNC Board of Governors (UNC BOG) and the State Board of Community Colleges (SBCC) to jointly study and report to the General Assembly by March 1, 2016, on how NCGAP would accomplish the stated goals, financially impact students and the State, and affect enrollment to 16 UNC institutions and North Carolina's 58 community colleges.

#### JLPEOC Directive to PED to Review NCGAP Report

At its January 11, 2016 meeting, the Joint Legislative Program Evaluation Oversight Committee (JLPEOC) amended the Program Evaluation Division (PED) 2015–17 Work Plan to direct PED to assess the methodology and accuracy of conclusions presented in the BOG/SBCC report.

### Overview of the NCGAP Report

In March 2016, the UNC BOG and SBCC submitted their joint report entitled Analysis of Findings and Recommendations Regarding NC Guaranteed Admission Program (NCGAP), hereafter referred to as the NCGAP report. Staff for UNC BOG and SBCC, along with a private research institute these entities contracted with to advise and review their work, produced a 128-page report.<sup>1</sup>

SBCC chose to attach an addendum to the joint report to clarify its concerns with the report's conclusions.

NCGAP report methodology. As directed by the legislation, the NCGAP report sought to investigate the potential impacts of NCGAP on students and the State. To accomplish this task, the research team chose to measure student success using six-year graduation rates. The most recent six-year graduation rates available for college students were for the class beginning higher education in fall 2009.<sup>2</sup> To compare student outcomes, the researchers had to identify students who started at four-year institutions and those who started at community colleges and then transferred into public universities.<sup>3</sup>

Because no students had yet participated in NCGAP, the researchers attempted to predict the effects of this new program on a prior group of students selected from Department of Public Instruction (DPI) data on spring 2009 public high school graduates. Researchers then narrowed the sample to the specific population of interest: students with an intention to attend a UNC institution who were academically at risk.

<sup>&</sup>lt;sup>1</sup> On November 17, 2015, UNC General Administration entered into an agreement with Research Triangle Institute (RTI) International for 74 hours of work with a total contract value of \$9,618.

<sup>&</sup>lt;sup>2</sup> Six-year graduation rates of community college students in the report's sample rely on the first semester of entry into community college. SBCC staff note they typically measure the success of community college transfer students starting in the semester during which they begin at a university.

<sup>&</sup>lt;sup>3</sup> It is common in social science research for researchers to start with a very large potential subject population and end with a very small but purportedly valid sample.

Exhibit 1 shows the steps taken to identify potential NCGAP participants.

- Intent to attend a UNC institution. To identify students who would participate in NCGAP based upon intent to attend a UNC institution, researchers used two criteria: (1) if a student applied to a UNC institution for the fall 2009 semester, and (2) if a student took the Scholastic Aptitude Test (SAT).
- Academically at-risk students. The NCGAP report chose to define academically at-risk students as those with weighted high school grade point averages (GPAs) between 2.5 and 2.69.4 All UNC institutions require a minimum GPA of 2.5, and the institutions vary in their level of selectivity and competition.

The report further limited the sample of students to only those enrolling in either a UNC institution or community college in the fall of 2009. The report applied several other technical criteria (i.e., students enrolling at multiple institutions, etc.) to trim the sample to 1,085 North Carolina students.

Final NCGAP report sample. The report relied on a statistical method called Propensity Score Analysis (PSA) to control for factors such as age, gender, GPA, and SAT scores that may affect a student's decision to enroll in a community college or a public university. After applying PSA, the researchers excluded an additional 114 students from subsequent analyses due to missing data for PSA variables or for exceeding maxima and minima criteria for subsequent analyses. After the adjustments described above, the NCGAP report used a final sample of 971 students comprised of 701 students who began at a UNC institution and 270 students who began at a community college.

NCGAP report findings. Using the sample of 971 students, the NCGAP report drew the following conclusions:

 NCGAP may not increase six-year graduation rates for academically at-risk students.

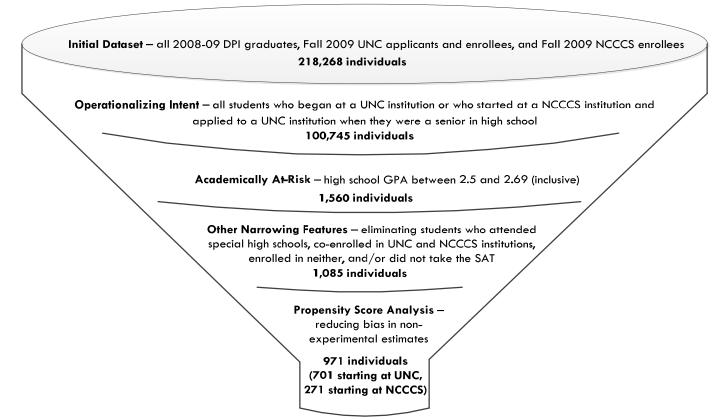
- NCGAP will decrease the number of bachelor's degrees students receive.
- NCGAP will decrease the cost of a college education to both the student and the State.
- NCGAP will lower student debt because NCGAP students would first attend community colleges, which have lower rates for tuition and fees.
- NCGAP will require additional resources at UNC institutions to ensure NCGAP students have access to academic and career counseling.

<u>NCGAP report implementation options.</u> The NCGAP report presents two options and one alternative approach for implementing NCGAP.

- Option 1. This option proposes raising the minimum high school GPA for admission to UNC institutions from 2.5 to 2.7 and offering NCGAP to students with GPAs below the new threshold. The report notes Option 1 is likely to disproportionately affect students at Minority Serving Institutions based on the distribution of projected NCGAP-qualifying students among the constituent institutions.
- Option 2. This option proposes that each UNC institution reduce its admissions rate by 2.5%, such that those students falling within the lowest 2.5% of each institution's admitted class would be offered participation in NCGAP.
- Alternative approach. The NCGAP report suggests delaying NCGAP implementation, which is already state law, to determine the effects of recent BOG/SBCC efforts to increase the success of community college transfer students.

<sup>&</sup>lt;sup>4</sup> Although the NCGAP report notes this definition applies to students with high school weighted GPAs between 2.5 and 2.7, a maximum GPA of 2.69 was used to create the sample.

### Exhibit 1: NCGAP Report Applied a Number of Limiting Factors to Reach its Final Sample



Source: Program Evaluation Division based on NCGAP report (pp. 89-90).

#### **PED Observations of NCGAP Report**

To comply with the legislative directive to evaluate the methodology and accuracy of conclusions found in the NCGAP report, PED staff interviewed officials from both systems, performed statistical analyses to verify results, reviewed academic literature, and consulted with national experts. The following sections detail areas of consideration for each of the legislation's stated goals as they pertain to the methodologies used and accuracy of conclusions made by the report.

## NCGAP Goal 1: To assist more students in obtaining a baccalaureate degree within a shorter time period.

The NCGAP report asserts this goal may not be achieved because it is unlikely that NCGAP will either increase the number of baccalaureate degrees obtained or reduce time to completion. The report's analysis indicates a probable decline in the six-year baccalaureate degree completion rate for students participating in the program (pp. 13-14). This result is inferred because of the difference in degree completion rates for the 2009 study group. In the report's cohort, 36% of students who started at UNC institutions graduated within six years compared to just 11% of students who started at community colleges.

The Program Evaluation Division posits the community college cohort's six-year graduation rates may be understated and actual rates may be higher for three reasons.

- The rationale used to arrive at the final sample of 971 students is flawed because, in measuring intent to attend a UNC institution, it failed to include students who took the American College Test (ACT).
- Findings of the NCGAP report's regression model predicting the probability of community college students graduating within six years should be interpreted with caution due to the exclusion of additional variables that may better predict graduation rates.
- The report's methodology failed to account for recent UNC BOG/SBCC efforts aimed at improving the outcomes of community college students who transfer to UNC institutions.

1. The NCGAP report's sample selection process used flawed measures of intent to attend a university. PED identified a potential issue with the NCGAP report's method of arriving at a sample of 270 community college students and 701 directentry UNC system students.

As discussed earlier, the two variables used to measure the intent of high school students to attend a UNC institution were applying to at least one UNC institution for fall 2009 and having taken the SAT.

This second measure of intent was used because, as the report states (p. 90), a SAT score was "mandatory for a UNC application." However, PED's review of UNC admissions requirements for fall 2009 reveals that an ACT score also was acceptable.

When the report's authors applied the SAT criterion, 34 community college students were eliminated from the sample. However, PED analysis shows that nine of these 34 students took the ACT and not the SAT. In addition, 26 UNC direct-entry students were eliminated for missing SAT data when they had in fact taken the ACT. Including students who took the ACT in addition to those who took the SAT would raise the total sample from 971 to 1,006 students (279 community college students and 727 UNC direct-entry students).

2. Exclusion of important variables in the regression model undermined its ability to predict six-year graduation rates for NCGAP participants. The NCGAP report's regression model predicts a 20.5 percentage-point decrease in the likelihood of potential NCGAP students graduating within six years (p. 99).

PED cautions the General Assembly in relying heavily upon the NCGAP report's findings of the negative effects of NCGAP on student success because of the regression model's limited ability to predict six-year graduation success. One indicator of this limitation is the model's R-Squared value. R-squared values provide social science researchers with an indication of the percentage of variation in the dependent variable explained by the inclusion of all independent variables.<sup>5</sup>

The NCGAP report's six-year graduation success model produced an R-Squared value of .27, meaning that all variables in the model explained 27% of why a student graduates within six years. In other words, the model did not explain 73% of why a student graduates within six years.

The prediction excluded many possible explanations and factors influencing a student's likelihood of graduating. The inclusion of additional variablessuch as employment status, course load, or associate degree attainment-may have provided more certainty on the effects of the program on six-year graduation success of potential NCGAP students.6 In conversations with PED staff, UNC GA and RTI staff stated R-Squared values of .27 are common for publication in education-oriented peer-reviewed articles. PED contends such low R-Squared values may not be appropriate for changing or making public policy. An R-Squared value of .27 fails to support the report's conclusion that NCGAP participants will be less successful in achieving a bachelor's degree than direct-entry UNC students

<sup>&</sup>lt;sup>5</sup> In this case, R-Squared, formally termed "coefficient of determination," is the percentage of variation in the dependent variable (six-year graduation success) that is explained by the inclusion of a number of independent variables (being a community college student, other control variables, etc.) predicting this dependent variable.

<sup>&</sup>lt;sup>6</sup> PED understands that community college applicants indicate their employment status on their applications. Although students' employment status may change during their collegiate careers, this variable still provides information on an additional factor that may affect six-year graduation success.

with similar high school academic records and demographic characteristics.

3. The report failed to consider recent efforts to increase the success of transfer students. As mentioned in the NCGAP report, the methodology used in the analysis cannot account for changes implemented in the University and Community College systems since 2009 to reduce time toward degree completion and improve outcomes for transfer students. Namely, a 2014 revision of the 1997 Comprehensive Articulation Agreement (CAA) should improve the transfer of credits from community colleges to universities and establishes better-defined four-year degree pathways. This agreement also requires community college students who intend to transfer to four-year institutions to take a class entitled ACA 122, College Transfer Success, which provides information and strategies for students to develop clear academic and professional goals. Each of these changes to the CAA is expected to reduce the time to bachelor's degree completion for students who begin their post-secondary education at a community college.

The Program Evaluation Division identified two potential alternative considerations regarding the selection of the sample population. First, the NCGAP report could have used first-time community college students enrolled in ACA 122 in the 2009–10 academic year as a comparison sample. Although this comparison may be limited because students in this course may attend private or forprofit four-year institutions, it indicates intent to attend a four-year institution. Second, the sample could have considered students who took the ACT or the SAT, rather than only the SAT, to more accurately reflect UNC admissions policies.

### NCGAP Goal 2: To provide students with a college education at significantly lower costs for both the student and the State.

The NCGAP report's analysis estimated that students participating in the program would save approximately \$1,750 in tuition and that the State would save \$8,000 for every NCGAP student (p.16).

The Program Evaluation Division posits the NCGAP report understates potential savings to students. The NCGAP report may understate the potential savings to students who choose to participate in NCGAP because the estimate does not include fees and non-optional costs such as oncampus room and board required at the majority of UNC institutions. Eleven of the 16 UNC institutions, or nearly 70%, require students to live on campus for at least their first year. These mandatory costs can add substantially to the total cost of an education at a university. NCGAP students and their families would not face these mandatory costs at a community college for their first two years of study.

For example, Winston Salem State University (WSSU) requires incoming freshmen to live on campus for two years. As Exhibit 2 illustrates, for the 2014–15 school year, living on this campus costs an average of \$3,010 more than living off campus and attending Forsyth Technical Community College (FTCC). WSSU students also paid \$2,231 more in student fees. A student who attends community college for two years while living independently in Winston-Salem could save more than \$10,000 just in fees and room and board. A student who lives at home while attending community college could potentially save even more.

<sup>&</sup>lt;sup>7</sup> For the 2009–10 academic year, there were 1,928 community college students enrolled in ACA 122 and in an AA, AS, or AFA program. These totals are not limited to students who would meet the NCGAP report's definition of being academically at risk (GPAs between 2.5 and 2.69).

Exhibit 2: Students Could Save More than \$12,000 by Attending Forsyth Technical Community College for Two Years Rather than Winston-Salem State University

Institution	Tuition	Fees	Room and Board	Books and Supplies	Total Cost of Attendance
Winston Salem State University (WSSU)	\$3,144	\$2,439	\$8,621	\$900	\$15,104
Forsyth Technical Community College (FTCC)	\$1,848	\$208	\$5,611	\$1,025	\$8,692
Total Difference	\$1,296	\$2,231	\$3,010	-\$125	\$6,412

Note: These figures are estimates and will be affected by individual student choices.

Source: Program Evaluation Division based on data from CollegeCalc.org.

The Program Evaluation Division contends actual cost savings to the State will be dependent upon how UNC constituent institutions choose to implement NCGAP. The NCGAP report asserts the State would save approximately \$8,000 for every student who completes an associate degree before transferring to a UNC institution (p.16). These cost savings are realized because the state appropriation per full-time equivalent (FTE) student is approximately \$2,748 per year for community college students versus \$7,199 for students attending public universities.

The NCGAP report estimated savings using the Option 1 implementation plan of raising the minimum high school GPA admission requirement from 2.5 to 2.7, which would primarily affect less-competitive students as well as UNC institutions that admit a higher percentage of students with high school GPAs between 2.5 and 2.7. Using these assumptions, the NCGAP report produced an accurate estimate of cost savings to the State.

However, actual savings could be higher or lower depending on the implementation strategy selected. For example, higher-tiered schools, those in high cost-of-living areas, and institutions that specialize in science, technology, engineering, and math (STEM) programs have higher faculty costs than other institutions. The cost of education also is affected by the mix of classes offered at each institution. State savings could be higher than estimated with Option 1 if more students are diverted from institutions with high faculty and class costs. Similarly, state savings may be lower if NCGAP largely diverts students

who would be attending UNC's lower-cost institutions.

Finally, the NCGAP report does not account for potential savings to the State that may be achieved by reducing the number of remedial courses at universities or potentially eliminating these courses at universities altogether.

## NCGAP Goal 3: To help decrease the amount of debt resulting from loans that a student may owe upon graduation.

The NCGAP report's analysis indicates that NCGAP would result in \$4,600 less accumulated debt for students who participate in the program (p. 17). Due to limitations in the availability of information, the report's research team used Federal Title IV loan balances as a proxy for total school debt.

The Program Evaluation Division asserts the report's use of only Federal Title IV loan balances may not adequately measure all student debt. For this reason, the NCGAP report's estimate of student debt accumulation for community college students versus university students is incomplete.

The cost of attending UNC institutions is greater than attending community colleges, but the methods for funding education may vary by type of institution. In 2010–11, just 43% of North Carolina's community college students had access to Federal Title IV loans. This level of access to federal loans for community college students was the lowest in the country. In comparison, students at all 16 UNC institutions have access to federal Title IV loans. Without access to federal loans, community college students may be

compelled to use private loans, personal loans, credit cards, and other forms of debt to attend school. These private loans usually have higher interest rates and do not offer the same benefits as federal loans (i.e., subsidized interest, deferment, and forbearance). Thus, the most advantageous mechanism for obtaining student loans is available to students at all UNC institutions but to less than 50% of students at North Carolina's community colleges.

The NCGAP report's analysis does not include private loans or other forms of borrowing that community college students and their families may use to finance their educations. In addition, some students at UNC institutions may use all of their federal loan eligibility and need to borrow through private lenders to complete their studies. The NCGAP report also excluded these private loans from its analysis. Without having more data about how community college students finance their educations and about non-federal forms of debt that may be used by all students alike, the NCGAP report's estimate of debt accumulation is incomplete.

# NCGAP Goal 4: To provide a student with an interim degree that may increase job opportunities if the student chooses not to continue postsecondary education.

Having an associate degree has two benefits. First, those with an associate degree have higher earning potential and more job opportunities than those with only a high school degree. Second, community college students in the sample with GPAs between 2.5 and 2.69 who earn an AA/AS and then transfer to a four-year university perform well at UNC institutions. As the report notes, these students performed comparably to UNC direct-entry students, with 67% of community college students who earned associate degrees graduating with a baccalaureate degree within six years (p. 117). The six-year graduation rate for all UNC direct-entry students, not just those in the academically at risk sample, was 67.4%.

However, the report did not discuss NCGAP's potential impact on the number of associate degrees earned (pp. 17-18). The legislation requires NCGAP students to have an associate degree before university matriculation, so it is plausible that the

program may lead to an increase in associate degrees.

The Program Evaluation Division contends the NCGAP report's estimates of decreasing enrollment at UNC institutions would inversely relate to community college enrollment and degree production. Using the NCGAP report's estimates of students diverted from UNC institutions, PED estimates the number of students obtaining an associate degree would increase by between 133 and 491 students annually. These two estimates rely on the report's two implementation options, with implementation of Option 1 increasing the minimum GPA score for admission at all UNC institutions from 2.5 to 2.7 and Option 2 decreasing each UNC institution's admitted class by 2.5%.

PED's interpretation of the available data suggests Option 1 would provide for an additional 491 instate students with an associate degree and Option 2 may produce an additional 133 associate degrees. Both estimates rely on data for the fall 2014 admitted classes to UNC institutions.

Option 2's low estimate of additional associate degrees assumed the majority of students who would be eligible for NCGAP would migrate from more selective to less selective UNC institutions to ensure they do not fall within the lowest 2.5% of the admitted class of all schools that accepted them. Although NCGAP may have the unintended consequence of students applying to several UNC institutions to ensure non-deferred admission to at least one institution, this assumption may exaggerate actual student behavior and may not accurately estimate the number of additional associate degrees NCGAP may produce.

Although the NCGAP report did not explicitly estimate the number of associate degrees that NCGAP would produce, PED contends a range of 133 to 491 additional in-state students would receive this interim credential.

# NCGAP Goal 5: To provide easier access to academic counseling that will assist students in selecting coursework reflective of their goals and will help them succeed academically.

The success of NCGAP will be affected by the level and quality of academic counseling available to students participating in the program. Because the report did not contain implementation details regarding expanded university programs for advising students, PED could not validate the NCGAP report's assertion that the program may add "tens of millions of dollars" in additional expenses for the university system (p. 19). The NCGAP report noted advising costs will depend on the number of students participating in the program and probably will be similar to or higher than the \$1,000 per student that the university system currently spends advising students in the guaranteed admission programs already in operation (p.19).

The Program Evaluation Division found that the NCGAP report's estimate of tens of millions of dollars being needed to advise students lacked supporting detail. Using the \$1,000 per university student cost presented in the NCGAP report, PED estimates the University system's increase in advising costs would range from \$133,000 to \$491,000 annually based on Option 2 (assuming 133 in-state student participants enroll in the program) and Option 1 (assuming 491 in-state student participants enroll in the program), respectively.

During interviews, State Board of Community College staff stated that, assuming approximately 500 students would be diverted through NCGAP and that those students would be somewhat geographically dispersed, the community college system has adequate capacity to absorb and serve those students with existing staff and programming resources. The community college system contends it can implement NCGAP and competently advise participating students.

In addition to current advising efforts for transfer students, the readiness of community colleges may have been enhanced by the General Assembly recently funding NCCCS Career Coaches. Session Law 2015-241 created positions for career coaches in high schools (report p. 18), and the program is currently under development for implementation by the SBCC.

### Additional Program Evaluation Division Observations

As Program Evaluation Division staff examined the NCGAP report's methodology and conclusions, two larger, unaddressed issues emerged. The first of these issues is the identification of at-risk students and the potential for the UNC and Community College systems to use a different definition to mitigate some of the potential negative or unintended program impacts. The second is the potential for the General Assembly to offer additional incentives to boost program participation.

Use of a different metric or group of measures to identify at-risk students could lead to different student and institutional impacts. The NCGAP report chose to identify at-risk students as those with high school grade point averages (GPAs) between 2.5 and 2.7. This decision, made by the report's research team, heavily influenced the possible outcomes presented in the report. For example, the NCGAP report contends Option 1 would have a disproportionately negative impact on rural, lowincome, and minority students and would jeopardize the future of some of the predominantly minorityserving UNC constituent institutions (MSIs) because these institutions tend to enroll students with lower average GPAs.8 In addition to those students, a broader definition of at-risk students could include students with physical, psychological, or substance abuse issues; students who are the first in their families to attend college; and students who lack clear educational goals. A broader definition of atrisk students may have led to a different distribution of impacts among institutions and students.

Further, the NCGAP report failed to observe that the lower-performing students participating in NCGAP also would disproportionately benefit from NCGAP, experiencing per-student tuition savings of \$1,750 as well as \$4,600 less in accumulated debt—both of which represent figures PED asserts may be understated or incomplete. In addition, students temporarily diverted from the UNC system by NCGAP would be disproportionately represented in students receiving a recognized credential (associate degree) compared to those

 $<sup>^8</sup>$  MSIs admitted 86% of the nearly 500 estimated in-state NCGAP students deemed academically at risk. Eighty-three percent of these nearly 500 students are non-white, and 71% are from low-income families (p. 21).

students leaving after several years of unsuccessful university study without achieving any degree.9

The report also stated that Option 1 would impact UNC budgets, "not just through the loss of state appropriations and tuition but by a reduction in fees and other auxiliary income (housing, dining, etc.). Some of these fees cover fixed costs associated with paying down debt; with fewer students to spread the fixed cost over, remaining students could see their fees increase" (p. 21).

PED notes that NCGAP was intended to benefit students and not to hold harmless any university receiving lower state appropriations and lost revenue from tuition and fees. Displaced resources from universities and costs avoided by NCGAP students would flow with the students to the community colleges serving them.

Methods to boost NCGAP participation could be explored. As envisioned, NCGAP provides incentives for student participation including decreased student debt, earning an interim degree, and being allowed to attend the UNC institution of a student's choice. However, despite these advantages, the NCGAP report's authors expect low to moderate program participation (p. 26). To further promote participation in NCGAP, the General Assembly could consider additional incentives that may reduce perceived impacts on UNC institutions, such as decreased enrollments and receipts, and may encourage more students to participate in NCGAP.

One potential incentive would be for UNC institutions to offer NCGAP participants an integrated university experience during their time at a community college, such as allowing these students to purchase access to university facilities, such as oncampus living, the library, recreational facilities, and athletic events. Although these incentives may decrease savings to students, it would offer NCGAP participants the opportunity to have the university experience prior to enrolling at a UNC institution (thereby perhaps increasing commitment to attend the university and graduate) and may address financial concerns of the university system.

<sup>9</sup> Two minority serving institutions, Fayetteville State University and the University of North Carolina at Pembroke, reported six-year graduation rates of less than 35% for the 2008 cohort (p. 108).

A second potential incentive the General Assembly could offer is decreased university tuition for NCGAP students upon earning an associate degree and transferring to the designated UNC institution. This incentive may encourage participation by students and provide additional assurances for UNC institutions in projecting future enrollment.

#### Conclusions

The NCGAP report attempted to determine the potential effect of NCGAP on North Carolina students and the two entities charged with administering higher education in the State. Because researchers were unable to use a prospective random assignment research design as well as the other methodological limitations noted, the NCGAP report had to use a quasi-experimental methodology to predict the potential student success and financial effects of a yet-to-be implemented policy.

The report accurately noted several recent joint BOG/SBCC efforts to increase the success of community college transfer students. Chief among these efforts are the recent revisions to the Comprehensive Articulation Agreement (CAA) increasing the number of courses transferrable to UNC institutions as graduation requirements and not electives, revisions to the community college course (ACA 122) for students intending to transfer to a university, new methods of identifying academically at-risk students in high school by community colleges, and additional resources for community college coaches. The study methodology was unable to incorporate data about these recent initiatives and their impacts on student achievement.

PED's review of the joint report identified several means by which the report's methodology may have been improved to provide the General Assembly with more useful information on the effects of NCGAP. The methods by which savings to students were calculated may be underestimated. Further, while SBCC staff anticipates implementing NCGAP with existing resources, the UNC system's financial estimates for implementation of the program are not substantiated due to a lack of detail in the implementation plan for the program.

Finally, the report lacks detail about the implementation of NCGAP and the ways in which

the program's outcomes will be monitored. This lack of implementation detail along with low estimated participation rates may indicate a need for the General Assembly to closely monitor program implementation and early results in case further action is needed to achieve the legislatively-stated goals.

For more information on this report, please contact John Turcotte, the director of the Program Evaluation Division, at john.turcotte@ncleg.net. Staff members who made key contributions to this report include Brent Lucas and Sara Nienow. The Program Evaluation Division appreciates the full cooperation given by UNC General Administration and the State Board of Community Colleges, especially their prompt responses to our data requests and the access they granted us to their researchers who produced the NCGAP report.

### Appendix A: 2015 Appropriations Act NCGAP Provision

### NC GUARANTEED ADMISSION PROGRAM (NCGAP)

**SECTION 11.7.(a)** The General Assembly finds that the six-year graduation rate for students pursuing a baccalaureate degree from any constituent institution of The University of North Carolina is too low. The General Assembly further finds that it is important to design and implement a program for the purpose of achieving the following goals: to assist more students to obtain a baccalaureate degree within a shorter time period; to provide students with a college education at significantly lower costs for both the student and the State; to help decrease the amount of debt resulting from loans that a student may owe upon graduation; to provide a student with an interim degree that may increase a student's job opportunities if the student chooses not to continue postsecondary education; and to provide easier access to academic counseling that will assist a student in selecting coursework that reflects the student's educational and career goals and helps the student succeed academically.

**SECTION 11.7.(b)** The Board of Governors of The University of North Carolina and the State Board of Community Colleges shall jointly study and evaluate how a deferred admission program, to be known as the North Carolina Guaranteed Admission Program (NCGAP), for students identified as academically at risk and designed pursuant to subsection (c) of this section, would address the issues and help achieve the goals set out in subsection (a) of this section. In its study the Board of Governors and State Board of Community Colleges shall also consider the best procedure for implementing NCGAP and the fiscal impact it may have with respect to enrollment.

**SECTION 11.7.(c)** NCGAP shall be a deferred admission program that requires a student who satisfies the admission criteria of a constituent institution, but whose academic credentials are not as competitive as other students admitted to the institution, to enroll in a community college in this State and earn an associate degree prior to enrolling as a student at the constituent institution. A student who earns an associate degree from a community college in this State within three years from the date of the deferred acceptance is guaranteed admission at that constituent institution to complete the requirements for a baccalaureate degree. A constituent institution shall hold in reserve an enrollment slot in the appropriate future academic year for any student who accepts a deferred admission. A constituent institution shall also reduce its enrollment for each academic year by the number of deferred admissions granted for that academic year.

**SECTION 11.7.(d)** The Board of Governors of The University of North Carolina and the State Board of Community Colleges shall report their finding and recommendations to the Joint Legislative Education Oversight Committee, the Fiscal Research Division, and the Office of State Budget and Management by March 1, 2016. The report shall include an analysis of the fiscal impact NCGAP may have with regard to enrollment at constituent institutions of The University of North Carolina and at community colleges, the number of students who may participate in NCGAP, and its effect on FTEs.

**SECTION 11.7.(e)** Based on the analysis conducted by the Board of Governors and the State Board of Community Colleges pursuant to subsection (b) of this section and the recommendations made pursuant to subsection (d) of this section, each constituent institution shall design a deferred admission program as part of NCGAP for implementation at the institution. The institution shall design the program so that it may be implemented at the institution beginning with the 2016-2017 fiscal year and applied to the institution's admission process for the 2017-2018 academic year and each subsequent academic year.

**SECTION 11.7.(f)** The State Board of Community Colleges, in consultation with the Board of Governors of The University of North Carolina, shall adopt rules to ensure that a student participating in NCGAP is provided counseling and assistance in selecting coursework that reflects the student's educational and career goals and that provides a smooth transition from the community college to the constituent institution.

**SECTION 11.7.(g)** NCGAP shall be implemented at all constituent institutions and all community colleges beginning with the 2016-2017 fiscal year and shall apply to admissions policies at each constituent institution and community college beginning with the 2017-2018 academic year and each subsequent academic year.

SECTION 11.7.(h) This section does not apply to the North Carolina School of Science and Mathematics.