

REPORT: MINIMUM ADMISSIONS REQUIREMENTS (MAR) PILOT EVALUATION REPORT

May 23, 2018

## Executive Summary

A comparison of the performance for the 2015 and 2016 cohorts shows no statistical difference between the students admitted under the pilot standards and those admitted under the regular admissions standards.

This is an analysis of the 3-year "pilot" allowing some UNC System institutions to reduce minimum required standardized test scores (SAT, ACT) for students with above-minimum high school grade point averages (GPAs). The pilot was initiated in response to UNC System data analysis and review of national research that showed the importance of GPA and the relative insignificance of test scores as predictors of student success. The pilot was a further, intentional test of those findings, which were based on analysis of historical data over a time period of changing (increasing) admissions standards.

At this point in the pilot, there is only information about the number of students admitted in the three cohort years and some performance of the initial cohorts through the middle of the 2017-18 academic year. The cohorts of students admitted under the pilot standards, combined across the three participating institutions, totaled 544 students in fall 2015 through fall 2017. This represents a little under $9 \%$ of new first-time undergraduates (freshmen) at those institutions and just over 5\% of all new degree-seeking undergraduates in the three years.

## Background

The Board of Governors voted to approve the Minimum Admissions Requirements (MAR) Pilot at its October 24, 2014 meeting, to be in effect for the freshmen classes entering fall 2015 through fall 2017. The pilot is essentially a sliding admissions scale that allows for students with high school grade point averages (GPA) above UNC System minimums to be subject to reduced standardized test score minimums relative to those set in Board Policy 700.1.1.

The sliding scale approved by the Board allowed for 0.1-point increments in GPA to offset reductions in the minimum required SAT score by 10 points. For example, a student could be accepted with a 790 SAT (10 points below the 800 minimum) if the student's high school GPA was at least a 2.6 ( 0.1 points above the 2.5 minimum). Note that the sliding scale combinations have been made somewhat more complex since the College Board released a new, re-normed SAT in spring 2016. Exhibit 1 shows the regular standard and the pilot sliding scale.

Exhibit 1: Pilot Admissions Scale, Including New SAT Score Minimums

| Policy Regime | High School <br> GPA Minimum | Old SAT Minimum <br> (Until 2016) | New SAT Minimum <br> (Re-normed in 2016) | ACT <br> Minimum |
| :--- | :--- | :--- | :--- | :--- |
| System-wide Standard | 2.5 | 800 | 880 | 17 |
| Pilot | 2.6 | 790 | 870 | 16 |
| Pilot | 2.7 | 780 | 860 | 16 |
| Pilot | 2.8 | 770 | 860 | 16 |
| Pilot | 2.9 | 760 | 850 | 16 |
| Pilot | 3.0 | 750 | 840 | 15 |

Three UNC constituent institutions (ECSU, FSU, and NCCU) were authorized to participate and began implementation in the fall 2015 term. The policy permits up to 100 students per institution to enter each year under the adjusted admissions criteria. Exhibit 2 provides a summary of the academic backgrounds of students admitted to the three institutions under the pilot.

Exhibit 2: Students Enrolling Under MAR Pilot Criteria and Their Average Admissions Scores

| Institution | Entering <br> Freshman <br> Cohort Year | Number <br> Entering <br> in Pilot <br> Range | High <br> School <br> GPA <br> Average | SAT "old" <br> Average <br> (Number of <br> students in <br> parentheses) | SAT "new" <br> Average <br> (Number of <br> students in <br> parentheses) | ACT Average <br> (Number of <br> students in <br> parentheses) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2015 | 62 | 3.07 | $738(41)$ | - | $15.6(43)$ |
|  | 2016 | 38 | 3.24 | $745(31)$ | - | $15.4(24)$ |
|  | 2017 | 34 | 3.16 | - | ${ }^{*}(2)$ | $15.7(34)$ |
| FSU | 2015 | 99 | 3.14 | $758(80)$ | - | $15.1(65)$ |
|  | 2016 | 92 | 3.19 | $742(73)$ | ${ }^{*}(3)$ | $15.4(61)$ |
|  | 2017 | 45 | 3.13 | $*(4)$ | $720(8)$ | $15.9(42)$ |
| NCCU | 2015 | 51 | 3.39 | $766(37)$ | - | $14.8(35)$ |
|  | 2016 | 83 | 3.42 | $751(55)$ | ${ }^{*}(2)$ | $15.1(56)$ |
|  | 2017 | 40 | 3.37 | ${ }^{*}(2)$ | ${ }^{*}(3)$ | $15.6(39)$ |

## Notes:

1. Average admissions scores are shown for those students submitting them. Students may take an SAT and/or ACT. Numbers in parentheses are the number from the cohort who submitted scores for that test.
2. SAT scores are on a scale of 400 to 1600 , based on the sum of the Reading and Math sections. Individual admissions test scores are super-scored, meaning that a student submitting more than one set of test scores will be considered for admission based on the highest of each of the sections.
3. NCCU elected to raise the GPA minimum to a 3.0 regardless of the range of standardized test scores. In other words, that institution allowed for students to enter with SAT in the 750-790 range and ACT in the $15-16$ score range as long as the student had at least a 3.0 high school GPA.
4. FSU enrolled more than 100 students within the pilot policy ranges in fall 2016. For purposes of evaluation, those additional four students are included here. In practice, universities do not have complete control over the number of accepted applicants who choose to enroll, called "yield rates."
5. An asterisk in the cells above signifies there were fewer than 5 students with such a score, and privacy protection dictates that the score be "masked."
6. "Old SAT" refers to the SAT administered prior to March 2016.

A comparison of some basic demographic and academic backgrounds of the pilot and non-pilot groups in Exhibit 3 shows that the two differ demographically somewhat with regard to gender and race - the pilot group is a higher percentage African-American and female. Academically, the two groups have similar average high school GPAs. And, since the pilot is by definition admitting students with lower standardized test scores, the median SAT and ACT scores are lower for the pilot cohorts.

Exhibit 3: Comparison of Demographic and Academic Characteristics for All Three Cohorts

| Group | \% Female | \% African- <br> American | Median <br> HS GPA | Median SAT <br> Score (old) | Median SAT <br> Score (new) | Median <br> ACT Score |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Met MAR | $64 \%$ | $80 \%$ | 3.21 | 860 | 940 | 18 |
| Pilot | $72 \%$ | $90 \%$ | 3.18 | 760 | 750 | 16 |

The Board of Governors' strategic plan focuses in particular on rural and low-income populations. Exhibit 4 describes the pilot cohorts in those terms, comparing them with non-pilot entering freshmen. The exhibit shows that the pilot cohorts are more likely to be low-income ( 9 percentage points higher Pell recipients) and more likely to be from rural/distressed counties (9 percentage points higher from Tier 1 and Tier 2 counties).

Exhibit 4: Comparison of Strategic-Plan-Related Demographic Characteristics for the Three Cohorts

| Group | \% Pell <br> Recipients | \% Rural <br> Counties | \% Tier 1 County <br> Residency | \% Tier 2 County <br> Residency |
| :--- | :--- | :--- | :--- | :--- |
| Met MAR | $77 \%$ | $56 \%$ | $23 \%$ | $33 \%$ |
| Pilot | $86 \%$ | $67 \%$ | $38 \%$ | $30 \%$ |

## Performance Analysis Results

The Board of Governors' establishment of this pilot admissions policy included specific metrics with which the pilot would be monitored and evaluated. A first, interim analysis of the fall 2015 entering freshmen focused on retention (fall-to-spring and fall-to-fall; at the original institution and system-wide) and total credits earned in the first year (overall as well as conditioned on fall persistence). Staff summarized the data descriptively and conducted different types of multivariate statistical analyses. These analyses included both multiple (OLS) regression and logistic regression models, testing with both clustered and non-clustered standard errors, and focused analyses that applied propensity score matching. The conclusions were similar regardless of the methods used; namely, in the interim analysis of the first cohort's first-year performance, there were statistically insignificant differences between the control and treatment groups in both retention and credits earned. In other words, for the fall 2015 cohort, the control and treatment groups statistically had the same outcomes.

This present analysis looks descriptively at different aspects of the first three years of performance for the initial 2015 cohort, the first two years of performance for the 2016 cohort, and the first-year performance for the 2017 cohort. The conclusions are similar to those of the previous historical data analysis and the prior year's interim analysis of the first cohort. The following diagrams in Exhibits 5a through $5 f$ demonstrate how similar the population entering under the pilot admissions criteria are to the population that met the standard minimum admissions criteria. The distributions of cumulative grade point average and credit hours accumulated are very similar. In other words, the results of this analysis reinforce the findings of the previous, interim analysis and of the analysis that was the basis for the pilot initially.

Exhibit 5a: Term-to-Term Persistence Comparison, Students Entering Under Pilot Admissions Criteria Compared to Those Who Met the Standard Minimum Admissions Criteria


Explanation of the next five charts:
The following box and whisker plots help to summarize the full range of values observed in the data. The chart to the right should help to explain some of the parts of the box and whisker plots:


Exhibit 5b: Cumulative First-Year Grade Point Average Comparison, Students Entering Under Pilot Admissions Criteria Compared to Those Who Met the Standard Minimum Admissions Criteria


| Metric | Pilot Admissions Cohorts | Met Minimum Admissions Requirements |
| :--- | ---: | ---: |
| $75^{\text {th }}$ Percentile | 3.07 | 3.27 |
| $50^{\text {th }}$ Percentile (median) | 2.58 | 2.73 |
| $25^{\text {th }}$ Percentile | 2.00 | 2.04 |

Exhibit 5c: Cumulative Second-Year Grade Point Average Comparison, Students Entering Under Pilot Admissions Criteria Compared to Those Who Met the Standard Minimum Admissions Criteria


| Metric | Pilot Admissions Cohorts | Met Minimum Admissions Requirements |
| :--- | ---: | ---: |
| $75^{\text {th }}$ Percentile | 2.97 | 3.18 |
| $50^{\text {th }}$ Percentile (median) | 2.54 | 2.64 |
| $25^{\text {th }}$ Percentile | 1.98 | 2.00 |

Exhibit 5d: Cumulative Third-Year Grade Point Average Comparison, Students Entering Under Pilot Admissions Criteria Compared to Those Who Met the Standard Minimum Admissions Criteria


| Metric | Pilot Admissions Cohorts | Met Minimum Admissions Requirements |
| :--- | ---: | ---: |
| $75^{\text {th }}$ Percentile | 2.96 | 3.13 |
| $50^{\text {th }}$ Percentile (median) | 2.59 | 2.60 |
| $25^{\text {th }}$ Percentile | 1.93 | 1.95 |



| Metric | Pilot Admissions Cohorts | Met Minimum Admissions Requirements |
| :--- | ---: | ---: |
| $75^{\text {th }}$ Percentile | 30 | 29 |
| $50^{\text {th }}$ Percentile (median) | 25 | 18 |
| $25^{\text {th }}$ Percentile | 15 | 14 |

Exhibit 5f: Cumulative Second-Year Credit Hours Earned Comparison, Students Entering Under Pilot Admissions Criteria Compared to Those Who Met the Standard Minimum Admissions Criteria


| Metric | Pilot Admissions Cohorts | Met Minimum Admissions Requirements |
| :--- | ---: | ---: |
| $75^{\text {th }}$ Percentile | 27 | 27 |
| $50^{\text {th }}$ Percentile (median) | 17 | 17 |
| $25^{\text {th }}$ Percentile | 13 | 12 |

## Next Steps

Based on these results and the prior interim analysis of the pilot cohorts' performance - and consistent with previous research findings - staff recommend continuing the pilot admissions ranges, at least until there is sufficient data to evaluate a full five or six years of affected students' performance (including graduation rates). The following timeline (Exhibit 6) shows the points at which such data would become available.

Exhibit 6: Timeline of Pilot Admissions Policy - Cohort Progression and Evaluation Milestones

- First cohort of freshmen enters in fall 2015
- Second cohort of freshmen enters in fall 2016
- First cohort's one-year retention and first-year GPA are measurable after start of fall 2016 term
- Third cohort of freshmen enters in fall 2017
- Four-year graduation rate measurable for first cohort at end of summer 2019 term
- Four-year graduation rate measurable for second cohort at end of summer 2020 term
- Six-year, five-year, and four-year graduation rates measurable for the three cohorts, respectively, at end of summer 2021 term

