



Preeminent Metrics

Methodology Document

October 2020



BACKGROUND

This document is in response to the 2019 Florida Legislature action that amended section 1001.706(5) of the Florida Statutes to require the Board of Governors to define the data components and methodology used to implement the annual evaluation for Preeminent State Research Universities, as defined in section 1001.7065 of the Florida Statutes. Each university that has been approved by the Board as a Preeminent Research University, or an emerging Preeminent Research University, is required to conduct, and submit, an annual audit to the Board of Governors Office of Inspector General that verifies that the data complies with the definitions and methodology for these Preeminence metrics.

This document has been updated in response to the 2020 Florida Legislature action (see Ch. 2020-117, Laws of Florida) that amended section 1001.7065 of the Florida Statutes to change the sources of these Preeminent metrics to the Board's annual Accountability Plan. These changes become effective for the 2021 Accountability Plan.

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ACADEMIC AND RESEARCH EXCELLENCE STANDARDS

1. Average GPA and SAT/ACT Score

An average weighted grade point average of 4.0 or higher on a 4.0 scale and an average SAT score of 1200 or higher on a 1600-point scale or an average ACT score of 25 or higher on a 36 score scale, using the latest published national concordance table developed jointly by the College Board and ACT, Inc., for fall semester incoming freshmen, as reported annually.

Calculate Average GPA Score

This data is calculated by the Board's Office of Data & Analytics (ODA) staff based on data that institutions upload into the State University Database System (SUDS) as part of the Admissions submission. The results of ODA's calculations are reviewed, and approved, by Institutional Data Administrators before being included in the Accountability Plans.

ODA staff calculate a mean average High School GPA (element #01139) score for each institution for First-time-in-college students [TYPE_OF_STUDENT (#01414) ='B','E'] who are newly admitted, and registered [#02013], during each fall term. ODA staff do not calculate each student's high school GPA because ODA staff do not have access to the students' transcripts. The high school GPA for each student is provided by the institution. The ODA staff calculation excludes student records who have non-traditional grade point averages (#01139= '9.8') or when the student's grade point average was not available (#01139= '9.9').

It is important to note that there are methodological differences across the system in how institutions calculate high school GPA. In consultation with the Council of Academic Vice Presidents (CAVP), Board staff are convening a working group of select institutional representatives to develop a recommendation for how to standardize the reporting of high school GPAs for use in the annual Preeminence evaluation.

Calculate Average SAT/ACT Score

This data is calculated by the Board's Office of Data & Analytics (ODA) staff based on data that institutions upload into the State University Database System (SUDS) as part of the Admissions submission. The results of ODA's calculations are reviewed, and approved, by Institutional Data Administrators before being included in the Accountability Plans.

Background note: ODA staff worked with the Council of Data Administrators to standardize the reporting of test scores. Starting with summer 2018 Admissions data, institutions provided the actual unadjusted superscore for all subscores – not just those used for the admission decision. Institutions are instructed not to convert/concord test scores when submitting Admissions data to SUDS. Institutions are instructed not to report partial test subscores (e.g., mathematics scores but not verbal scores for a given test) or combine other standardized test results. If students submitted both SAT and ACT scores, then the university must report the subscores for both SAT and ACT. If a student submitted two sets of scores for a single test, then the university should only report the highest/super score for that subscore. ODA is responsible for concurring scores as part of their analyses.



The ODA analysis of SAT scores only includes First-time-in-college [TYPE_OF_STUDENT (#01414) = 'B','E'] students with an admission action of admitted or provisionally admitted [FINAL_ADM_ACTION (#01135) = 'A','P','X','C'] who are registered [REGISTERED_CD (#02013) = 'R']. The methodology for calculating the new combined SAT/ACT test scores relies on the following two elements: TEST_REQ_CD (#02008), TEST_SCORE_TYP (#02009).

- The SAT subscores prior to the 2016 SAT redesign are identified when the TEST_REQ_CD (#02008) equals 'S'. Note: The College Board first administered the redesigned SAT in the spring of 2016.
 - ODA staff convert/concord the old SAT subscores (TEST_SCORE_TYP (#02009) equal to 'Q', 'V') to the redesigned SAT (S2) subscore scale based on the national concordance tables. ODA staff combine the two concorded subscores into a single score with a 1600 point maximum score.
- The SAT subscores after the SAT redesign are identified when the TEST_REQ_CD element (#02008) equals 'S2'.
 - ODA staff do not adjust the redesigned Math (#2009=M) and Evidence-based Reading and Writing (#02009=RW) subscores. Board staff combine the two subscores into a single score with a 1600 point maximum score.
- The ACT subscores are identified when the TEST_REQ_CD element (#02008) equals 'A'.
 - ODA staff concord the ACT Math (#02009=M) subscore to the redesigned SAT (S2-M) subscore scale based on the national concordance tables. Board staff sum the ACT subscores for English (#02009=E) and Reading (#02009=RE) and convert/concord to the redesigned SAT (S2-RW) subscore scale based on the national concordance tables. Board staff combine the two concorded scores into a single score with a 1600 point maximum score.
- To calculate the new combined SAT/ACT average, ODA staff will only use the maximum total score from either: the SAT2, the concorded SAT, or the concorded ACT. The table below provides an example of a single student's scores across all three tests. Previously, this student would have been excluded from the SAT average because their ACT score was the highest.
 - Note: the math and verbal subscores for each test are totaled into a single score (on the 1600 scale) before compared. The subscores for different tests (SAT2, SAT, ACT) are not combined into a maximum score.

TYPE	CONCORDED OLD SAT	SAT2	CONCORDED ACT	COMBINED SAT/ACT MAX
MATH	550	580	570	.
VERBAL	500	490	520	.
TOTAL	1050	1070	1090	1090



2. National University Rankings

A top-50 ranking on at least two well-known and highly respected national public university rankings, including, but not limited to, the U.S. News and World Report rankings, reflecting national preeminence, using most recent rankings.

The Board of Governors approved the list of publications shown below during the Nov. 2014 Board meeting as part of the revisions to the 2025 System Strategic Plan. The requirement for Preeminence is a top-50 ranking on at least two of the following national publications: Princeton Review: Top 50 Colleges That Pay You Back, Fiske Guide, QS World University Ranking, Times Higher Education (THE) World University Ranking, Academic Ranking of World University, US News and World Report National University, US News and World Report National Public University, US News and World Report Liberal Arts Colleges, Forbes 'Top Public Universities', Kiplinger, Washington Monthly Liberal Arts Colleges, Washington Monthly National University, and Center for Measuring University Performance.



3. Freshman Retention Rate

A freshman retention rate of 90 percent or higher for full-time, first-time-in-college students,

Freshman Retention Rate (full-time, FTIC) cohorts are based on first-year undergraduate students who enter the institution in the Fall term (or Summer term and continue into the Fall term). Percent retained is based on those who are enrolled during the second fall term. Note: This Preeminent metric is the same as reported in the Key Performance Indicator section of the Accountability Plans.

- The methodology for this metric includes the following SUDS elements:
 - Cohort Type [#1429] is a derived element that is built by ODA staff and is based on the 'Type Of Student At Time Of Most Recent Admission' element [#1413] as reported by institutions in the SIF submissions.
 - Student Right to Know (SRK) Flag [#1437] is an entry status indicator that is a 'Yes/No' flag based on the term (Summer, Fall, or Spring) that a student is first admitted.
 - Full-Time / Part-Time Indicator [#1433] is an indicator based on the number of credit hours attempted (not earned) during their first fall term. A student entering in the fall and taking 12 or more credit hours will remain in the full-time category regardless of the number of credits taken in subsequent terms. This indicator is based on the 'Current Term Course Load' element [#1063] which is the number of hours enrolled/attempted during a term.
 - Cohort Adjustment Flag [#1442] – see PBF methodology document for details.
- **Denominator:** The number of students in the cohort serves as the denominator for the retention rate, and is based on the following rules:
 - Cohort Type= 'FTIC'.
 - Student Right to Know (SRK) = 'Yes'.
 - FT/PT Indicator= 'Full-time'.
 - Cohort Adjustments – excludes: Death (A), Registered but never attended (B), Totally/Permanently Disabled (D), Serve in Armed Forces (F), Federal Foreign Aid Service (eg, Peace Corps) (G), Official Church Mission (M), Multiple Cohorts (Q).
- **Numerator:** The numerator for the standard retention rate includes two components: (1) the number of students in the cohort who are still enrolled during the second fall term, and (2) those students who graduated in their first year - prior to the start of the second fall term.



4. Four-year Graduation Rate

A four-year graduation rate of 60 percent or higher for full-time, first-time-in-college students.

This metric is based on the percentage of first-time-in-college (FTIC) students who started in the Fall (or summer continuing to Fall) term and were enrolled full-time in their first fall semester and had graduated from the same institution by the summer term of their fourth year. FTIC includes 'early admit' students who were admitted as a degree-seeking student prior to high school graduation. Students who were enrolled in advanced graduate programs during their 4th year are excluded. Note: This Preeminent metric is the same as reported in the Key Performance Indicator section of the Accountability Plans.

- The methodology for this metric includes the following SUDS elements:
 - Cohort Type [#1429] is a derived element that is built by ODA staff and is based on the 'Type Of Student At Time Of Most Recent Admission' element [#1413] as reported by institutions in the SIF submissions.
 - Student Right to Know (SRK) Flag [#1437] is an entry status indicator that is a 'Yes/No' flag based on the term (Summer, Fall, or Spring) that a student is first admitted.
 - Full-Time / Part-Time Indicator [#1433] is an indicator based on the number of credit hours attempted (not earned) during their first fall term. A student entering in the fall and taking 12 or more credit hours will remain in the full-time category regardless of the number of credits taken in subsequent terms. This indicator is based on the 'Current Term Course Load' element [#1063] which is the number of hours enrolled/attempted during a term.
 - Cohort Adjustment Flag [#1442] – see PBF methodology document for details.
- **Cohorts:** The number of students in the cohort serves as the denominator for the graduation rate. The denominator used in the calculation of the four-year FTIC graduation rate is based on the following:
 - Cohort Type= 'FTIC' ('B' and 'E').
 - SRK= 'Yes' – includes fall entrants and summer-to-fall entrants.
 - FT/PT Indicator= 'Full-time' only – based on attempted hours in the first fall term.
 - Cohort Adjustments – excludes: Death (A), Registered but never attended (B), Totally/Permanently Disabled (D), Serve in Armed Forces (F), Federal Foreign Aid Service (eg, Peace Corps) (G), Official Church Mission (M), Multiple Cohorts (Q), Pharmacy doctoral program (P), Advanced Graduate Program (T).
- **Graduated:** The number of students in the cohort who graduated within four years (by the fourth summer term after entry) from the same institution serves as the numerator for the graduation rate.



5. National Academy Memberships

Six or more faculty members at the state university who are members of a national academy.

Once a year, in early February, the Office of Data & Analytics staff searches the online directories of the National Academies of Sciences, Engineering, and Medicine and provides member counts based on 'affiliation' (including shared affiliation) and excludes deceased members. The results of ODA's research are reviewed, and approved, by Institutional Data Administrators before being included in the Accountability Plans.

6. Total Annual Research Expenditures

Total annual Science & Engineering research expenditures, including federal research expenditures, of \$200 million or more.

Once a year, the Office of Data & Analytics staff analyzes each institution's response to the National Science Foundation's annual Higher Education Research and Development (HERD) survey that is submitted to the Board office via the Data Request System. ODA staff calculate the total expenditures for science and engineering disciplines by summing the total federal and non-federal expenditures and then subtracting all federal and non-federal expenditures for non-science and engineering disciplines. The results of ODA's research are reviewed, and approved, by Institutional Data Administrators before being included in the Accountability Plans.

7. Total Annual R&D Expenditures in Non-Health Sciences

Total annual Science & Engineering research expenditures in diversified non-medical sciences of \$150 million or more.

Once a year, the Office of Data & Analytics staff analyzes each institution's response to the National Science Foundation's annual Higher Education Research and Development (HERD) survey that is submitted to the Board office via the Data Request System. ODA staff add the total federal and non-federal medical sciences and then subtract that sum from the S&E total that is calculated for the previous Preeminent measure. The results of ODA's research are reviewed, and approved, by Institutional Data Administrators before being included in the Accountability Plans.



8. National Ranking in Research Expenditures

A top-100 university national ranking for research expenditures in five or more science, technology, engineering, or mathematics fields of study.

Once a year, the Office of Data & Analytics staff download research expenditure data, from the National Science Foundation's annual Higher Education Research and Development (HERD) survey using the National Science Foundation's National Center for Science and Engineering Statistics (NCSES) online data tool.

The NSF identifies eight *broad* disciplines within Science & Engineering: Computer Science, Engineering, Environmental Science, Life Science, Mathematical Sciences, Physical Sciences, Psychology, Social Sciences. ODA staff analyze total research expenditures by fiscal year for each public and private four-year institution in the country by *broad* discipline and determine the rankings for each State University System institution for each of the broad disciplines. The unit of analysis is the survey-specific 'Academic Institution, Campus Level'. The results of ODA's research are reviewed, and approved, by Institutional Data Administrators before being included in the Accountability Plans.

9. Patents Awarded

One hundred or more total patents awarded by the United States Patent and Trademark Office for the most recent 3-year period.

Once a year, the Office of Data & Analytics staff searches the online database for the United States Patent and Trademark Office (USPTO) for all *utility* patents awarded during the most recent 3-year period. Due to a year-lag in published USPTO reports, ODA staff perform a manual query of the USPTO database with the following query that only counts utility patents: "(AN/"University Name" AND ISD/yyyy0101->yyyy1231 AND APT/1)". There is an opportunity for institutional staff to identify additional patents that were not included in the above query. ODA staff will evaluate these additional patents on a case by case basis (by patent number) to determine if they are included. The results of ODA's research are reviewed, and approved, by Institutional Data Administrators before being included in the Accountability Plans.

10. Doctoral Degrees Awarded Annually

Four hundred or more doctoral degrees awarded annually, including professional doctoral degrees awarded in medical and health care disciplines.

This data is calculated by the Board's Office of Data & Analytics (ODA) staff based on data that institutions upload into the State University Database System (SUDS) as part of the Degrees Awarded (SIFD) submission. This measure includes all 'Doctoral research' degrees, defined as DOC_CLASS (#02039) = 'R'. This measure also includes Health Professional doctoral degrees, defined as DOC_CLASS= 'P' and CIP_DEGREE (#01082) = '51'. The reporting year for degrees includes the summer, fall, and spring terms of a given year based on the TERM_DEG_GRANT (#01412) element. This measure is based on the standard 'summer to summer' methodology based on REPT_TIME_FRAME (#02001) that identifies when the institution reported the degree to the Board office. The results of ODA's calculations are reviewed, and approved, by Institutional Data Administrators before being included in the Accountability Plans.



11. Number of Post-Doctoral Appointees

Two hundred or more postdoctoral appointees annually.

Once a year, the Office of Data & Analytics staff reviews NSF summary reports for each institution's response to the National Science Foundation/National Institutes of Health annual Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). The NSF summary reports rank institutions by the total number of postdoctoral appointees in science, engineering, and health fields. For this preeminent metric, rank does not matter – only the total post-doctoral count is relevant. The results of ODA's research are reviewed, and approved, by Institutional Data Administrators before being included in the Accountability Plans.

12. Endowment Size

An endowment of \$500 million or more.

Once a year, the Office of Data & Analytics staff reviews the National Association of College and University Business Officers (NACUBO) and Commonfund Institute's annual online report of Market Value of Endowment Assets. The results of ODA's research are reviewed, and approved, by Institutional Data Administrators before being included in the Accountability Plans.