

2015-16 STRIVE HI INDICATORS AND MEASURES Technical Report

Summary

2015-16 Strive HI results are based largely on measures selected from pre-ESSA (Every Child Succeeds Act) discussions and feedback sessions in anticipation of Hawaii’s, then, first year of its three-year renewal of ESEA (Elementary and Secondary Education Act) Flexibility. In December 2015, ESSA was enacted and the US Department of Education (USDE) provided states options for 2015-16 reporting given the major design and reporting changes expected beginning 2016-17. Hawaii opted to apply many of the measures earlier identified for its year-one renewal of ESEA Flexibility. In addition, Hawaii is reporting a ‘frozen’ 2014-15 list of school classifications for 2015-16, as allowed by USDE. Because no new classifications are required for 2015-16, no Strive HI index scores are reported, only results for each of the system measures.¹

Indicators and Measures

The four key Strive HI indicators (Proficiency, Growth, Readiness, and Achievement Gaps) have been retained. In addition, an Other Measures indicator has been added for each school level. This report presents 2015-16 Strive HI indicators and measures, and the rules describing how these measures were calculated.

Strive HI Indicators and Measures: 2015-2016			
	Elementary	Middle/Intermediate	High
Achievement	ELA proficiency rate	ELA proficiency rate	ELA proficiency rate
	Math proficiency rate	Math proficiency rate	Math proficiency rate
	Science proficiency rate	Science proficiency rate	Science proficiency rate
Growth			
	ELA MGP	ELA MGP	ELA MGP
	Math MGP	Math MGP	Math MGP
Readiness			4-Year graduation rate
	Chronic Absenteeism rate	Chronic Absenteeism rate	11 th grade ACT
			College-Going rate
			5-Year graduation rate
Achievement Gap			
	ELA Current Year Gap rate	ELA Current Year Gap rate	ELA Current Year Gap rate
	Math Current Year Gap rate	Math Current Year Gap rate	Math Current Year Gap rate

	Elementary	Middle	High
Other Measures	Retention rate	% earning a C or higher in Algebra I	Chronic Absenteeism rate
	% of 3 rd grade students scoring “Above” on SBA Reading claim		% earning a C or higher on AP, IB, UH Course-Taking or CTE Concentrators ²

¹ On October 4, 2016, school classifications and disaggregated transparent reporting will be publicly posted on the Accountability Resource Center of Hawaii (ARCH) (<http://arch.k12.hi.us/school/strivehi/strivehi.html>).

² This measure includes Advanced Placement (AP) courses, higher-level International Baccalaureate (IB) courses, non-remedial UH courses, and Career and Technical Education (CTE) Concentrators.

Achievement Indicator

	Elementary	Middle/Intermediate	High
Achievement	ELA proficiency rate	ELA proficiency rate	ELA proficiency rate
	Math proficiency rate	Math proficiency rate	Math proficiency rate
	Science proficiency rate	Science proficiency rate	Science proficiency rate

What (elementary, middle/intermediate, high schools)

Three measures comprise the Achievement Indicator: Proficiency rates for ELA, math and science. Assessment results applied include the following:

- Smarter Balanced Assessments in ELA and math
- HSA science and high school Biology I end-of-course exams
- HSA alternate assessments in ELA, math and science
- Kaiapuni Assessment of Educational Outcomes (KAEO)

Who (elementary, middle/intermediate, high schools)

Only students enrolled for the Full School Year (FSY)³ are included in these calculations.

How (elementary, middle/intermediate, high schools)

The proficiency rate is based on the number of FSY students taking the test and receiving a valid test score (denominator). The numerator consists of the number of those students who are proficient (numerator).

$$\text{Proficiency Rate} = \frac{\text{\# FSY students proficient}}{\text{\# of FSY students taking the test}}$$

³ FSY is defined as enrolled at a school continuously from the Official Enrollment Count Date through May 1 unless May 1 falls on a weekend, in which case, the Monday following May 1.

Growth Indicator

	Elementary	Middle/Intermediate	High
Growth	ELA MGP	ELA MGP	ELA MGP
	Math MGP	Math MGP	Math MGP

What (elementary, middle/intermediate, high schools)

ELA and math median growth percentiles (MGP) indicate a school's median (middle) student growth percentile (SGP). Therefore, an ELA MGP of 54 means half of its students had a growth percentile of 54 or higher. Alternatively stated, half of the students had growth of 54 or below.

Who (elementary and middle/intermediate schools)

Only students enrolled for the FSY who have SBA results for the current and at least prior year.⁴ Grade level repeaters along with students taking non-SBA assessments are not included in the calculation.

Who (high schools)

Only students who were FSY at the same high school from grades 9 through 11, and took the state assessment as an 8th and 11th grader.

How (elementary, middle/intermediate, high schools)

Rank order a school's student growth percentiles and select the median value. This is the school's median growth percentile.

School A	School B
88	70
87	67
61	55
48	51
40	48
38	47
20	41

School A's median growth percentile = 48

School B's median growth percentile = 51

⁴ A minimum of two consecutive years of test scores are necessary to generate growth.

Readiness Indicator

	Elementary	Middle/Intermediate	High
Readiness	Chronic Absenteeism rate	Chronic Absenteeism rate	4-Year graduation rate
			11 th grade ACT
			College-Going rate
			5-Year graduation rate

What (elementary, middle/intermediate schools)
 A Chronic Absenteeism rate is the sole Readiness measure. Chronic Absenteeism replaces the 8th grade ACT measure previously used for middle/intermediate school Readiness.

What (high schools)
 The Readiness Indicator comprises of four measures that includes a five-year graduation rate newly adopted in 2015-16.

- Four-Year graduation rate
- 11th grade ACT
- College-Going rate
- Five-Year graduation rate

Who (elementary and middle/intermediate schools)
 Only students enrolled for the FSY are included in these calculations.

Who (high schools)

- Four-Year graduation rate: Students comprising the prior year graduating cohort. Four-Year graduation rates for 2015-16 Strive HI results are based on the 2014-15 graduating cohort.
- 11th grade ACT: 11th grade students enrolled for the FSY.
- College-Going rate: Student who graduated from high school who then enrolled in an institute of higher education with 16 months of receiving a regular high school diploma. These are diploma graduates from the 2013-14 school year.
- Five-Year graduation rate: Students from the 2013-14 four-year cohort denominator plus student who transferred-in during the fifth year minus students who transferred out, emigrated, or died during the fifth year.

How (elementary, middle/intermediate schools)

Chronic absenteeism is based on the number of FSY students enrolled at a school (denominator). The numerator comprises of the number of those FSY students that were absent, excused or unexcused, for 15 or more days during the FSY period.⁵

$$\text{Chronic Absenteeism Rate} = \frac{\text{\# of FSY students with 15 or more days absent}}{\text{\# of FSY enrolled at a school}}$$

How (high schools)

- Four-Year graduation rate: This is Hawaii's official graduation rate which is reported to USDE and publicly posted according to federal requirements. The rate is calculated using a Four-Year Adjusted Cohort Graduation Rate (ACGR) methodology. Hawaii's graduation rate reported for Strive HI is lagged by a year. The graduation rate reported for 2015-16 Strive HI results are based on the four-year cohort graduating by the end of 2014-15.

$$\text{4-Yr ACGR Rate} = \frac{\text{\# of on-time graduates in year } x^a}{\text{\# of first-time entering ninth graders in year } x-4^b + (\text{\# of transfers in}) - (\text{\# of transfers out})}$$

^a x = graduating school year

^b x-4 = 9th grade school year

Graduates are students who received a diploma within four years

- "On-time" for all students is four years
- Graduation requirements may be completed during the summer of the given final year
- GED, certificates of completion and other school-based certificates do not count as graduates for this calculation
- Students who transfer into the Hawaii Department of Education System (System) or Hawaii State Public School (School) will be **added** to the school's appropriate graduating cohort
- Students who transfer out of the System must be documented by the sending School with an official transcript request from the receiving U.S. school, only then can the student be removed from the cohort
- Students whose status is unknown or dropped out of the System are non-graduates
- Students who were retained in grade 9 count only in their "first time grade 9" cohort

For more information go to: www2.ed.gov/policy/elsec/guid/hsgrguidance.pdf

⁵ The FSY period for 2015-16 is from the Official Enrollment Count Date (8/11/15, and 8/19/15 for some charter schools, through May 2, 2016).

- **11th grade ACT:** Based on the number of 11th grade FSY students that took the test (denominator). The numerator comprises of the number of those students that attained a composite score of 19 or higher.

$$\text{ACT Attainment Rate} = \frac{\text{\# of FSY students attaining a composite score of 19 or higher}}{\text{\# of 11th grade FSY students that tested}}$$

- **College-Going rate:** Provided by the National Student Clearinghouse as reported by the Hawaii P-20 Partnership for Education. Based on high school diploma earners enrolled in college within 16 months after high school graduation. The National Student Clearinghouse includes more than 3,600 colleges and universities accounting for 98% of all students in public and private U.S. institutions. For more information go to: www.p20hawaii.org
- **Five-Year graduation rate:** The Five-Year Graduation Rate is an “extended-year adjusted cohort graduation rate” that accounts for graduates for an additional, fifth year. This rate is calculated following the same methodology used for the four-year adjusted cohort graduation rate. As with the four-year rate, the five-year rate reported for Strive HI is lagged by a year. The five-year graduation rate reported for 2015-16 Strive HI results is based on the five-year cohort graduating by the end of 2014-15.⁶

$$\text{5-Yr ACGR Rate} = \frac{\begin{array}{c} \text{2013-14 four-year adjusted cohort graduation rate numerator count} \\ \text{plus the \# of students in the cohort who earned a regular high school diploma} \\ \text{by the end of the 2014-15} \end{array}}{\begin{array}{c} \text{2013-14 four-year adjusted cohort graduation rate denominator count plus the \#} \\ \text{students who transferred in during the 2014-15 school year minus students who} \\ \text{transferred out, emigrated, or died during the 2014-15 school year} \end{array}}$$

⁶ The four-year and five-year rates reported in this year’s Strive HI results represent different students (cohorts). Both the four- and five-year rates are based on students graduating in 2014-15; however, the base year for each cohort is different. The four-year cohort was established with first-time 9th graders at the beginning of the 2011-12 school year, while the five-year cohort was established at the beginning of the 2010-11 school year.

Achievement Gap Indicator

	Elementary	Middle/Intermediate	High
Achievement Gap	ELA Current Year Gap rate	ELA Current Year Gap rate	ELA Current Year Gap rate
	Math Current Year Gap rate	Math Current Year Gap rate	Math Current Year Gap rate

What (elementary, middle/intermediate, high schools)

Two measures comprise the Achievement Gap Indicator: An ELA Current Year Gap Rate and a Math Current Year Gap Rate. The gap rate is based on proficiency results for students participating in one of the following assessments.

- Smarter Balanced Assessments in ELA and math
- HSA alternate assessments in ELA and math
- Kaiapuni Assessment of Educational Outcomes (KAEO)

Who (elementary, middle/intermediate, high schools)

Only FSY students who tested are included in this calculation. The gap rate is a comparison between High Need (HN) students and Non-High Need (NHN) students.

High Need students include the following FSY students who tested:

- Economically disadvantaged students
- Students with disabilities (IDEA only)
- English Language Learners
- Recent exits (2 years) for Students with disabilities and English Language Learners

Non-High Need students comprise of all remaining FSY students who tested.

Schools with less than 30 non-high need or high need students do not have a gap calculation due to reliability concerns.

How (elementary, middle/intermediate, high schools)

The gap rate compares the proficiency rates between the NHN and HN subgroups. The rate is expressed as a percent change of the difference between the two subgroups' proficiency rates.

$$\text{Achievement Gap Rate} = \frac{(\text{NHN \% Proficient} - \text{HN \% Proficient})}{\text{NHN \% Proficient}}$$

Example

1. NHN % Proficient = 70%
2. HN % Proficient = 35%
3. Gap Rate = $(.70 - .35) / .70 = .50$ or 50%

Other Measures Indicator

	Elementary	Middle	High
Other Measures	Retention rate	% earning a C or higher in Algebra I	Chronic Absenteeism rate
	% of 3 rd grade students scoring "Above" on SBA Reading claim		% earning a C or higher on AP, IB, UH Course-Taking or CTE Concentrators

What (elementary schools)

Two measures comprise elementary schools' Other Measures: A Retention Rate and a 3rd Grade Advanced Reading Rate.

What (middle/intermediate schools)

The rate for students passing Algebra I with a C or higher is the sole measure for middle and intermediate schools.

What (high schools)

Two measures comprise high schools' Other Measures: A Chronic Absenteeism Rate and an Advanced Course-Taking and CTE Concentrator Rate.

Who (elementary schools)

The Retention Rate is based on students in the 1st grade through the highest terminal grade up to the 7th grade. The Third Grade Advanced Reading Rate is based on FSY 3rd grade students taking the Smarter Balanced Assessment in English Language Arts.

Who (middle/intermediate schools)

The Algebra I Rate is based on 8th grade FSY students taking Algebra I.

Who (high schools)

The Chronic Absenteeism Rate is based on all FSY students. The Advanced Course-Taking and CTE Concentrator Rate is based on an unduplicated count of 11th and 12th grade high school students taking one or more of these courses.

How (elementary schools)

First grade students through the school's highest terminal grade, up to 7th grade, are used for the Retention Rate. Each student's grade level at the beginning of the school year is compared to their grade level following completion of the school year.⁷ Students whose grade level were not promoted, that is, remained the same are considered retained. Students transferring out to another school are not counted towards the sending or receiving school. Retention rates are lagged a year, therefore, students retained in 2014-15 are used for 2015-16 Strive HI results.

$$\text{Retention Rate} = \frac{\text{\# of students from the denominator retained}}{\text{\# of 1st through terminal grade level students enrolled minus students that transferred out or in}}$$

The 3rd Grade Advanced Reading Rate is based on the number of all 3rd grade FSY students enrolled at a school (denominator). Of those students, the number that received an "Above" rating on their reading claim (numerator).

$$\text{3rd Grade Advanced Reading Rate} = \frac{\text{\# of 3rd grade FSY students achieving an SBA Reading Claim of "Above"}}{\text{\# of 3rd grade FSY students enrolled at a school}}$$

How (middle/intermediate schools)

The Algebra I rate is based on the number of 8th grade FSY students enrolled at a school (denominator). The numerator comprises of the number of 8th grade FSY students receiving a mark of C or higher for Algebra I.

$$\text{Algebra I Rate} = \frac{\text{\# of 8th grade FSY students receiving a C or higher}}{\text{\# of 8th grade FSY students enrolled at a school}}$$

How (high schools)

Chronic absenteeism is based on the number of FSY students enrolled at a school (denominator). The numerator comprises of the number of those FSY students that were absent, excused and unexcused, for 15 or more days during the FSY period.

$$\text{Chronic Absenteeism Rate} = \frac{\text{\# of FSY students with 15 or more days absent}}{\text{\# of FSY students enrolled at a school}}$$

⁷ The "beginning of the school year" and "completion of the school year" are based on Official Enrollment Count (OEC) Dates. For 2015-16 Strive HI results, the Retention Rate is based on the August 2014 OEC Date compared against the August 2015 EOC Date, given the rate is lagged one year for reporting purposes.

The Advanced Course-Taking and CTE Concentrator Rate is based on an unduplicated number of 11th and 12th grade FSY students enrolled at a school (denominator). The numerator comprises of an unduplicated count of 11th and 12th grade students who received a C or higher for all Advanced Placement (AP) courses, higher-level International Baccalaureate (IB) courses, courses in the UH System (not including remedial courses), or completing a CTE (Career and Technical Education) Concentrator path.⁸

$$\text{Advanced Course-Taking \& CTE Concentrator Rate} = \frac{\text{Unduplicated \# of 11}^{\text{th}} \text{ and } 12^{\text{th}} \text{ grade FSY students earning C or higher on AP, IB, UH courses, or completing as a CTE Concentrator}}{\text{\# of 11}^{\text{th}} \text{ and } 12^{\text{th}} \text{ grade FSY students enrolled at a school}}$$

⁸ UH courses excludes remedial or developmental English and math courses, and excludes English as a Second Language-type courses numbered less than 100 (these courses are not classified as remedial/developmental but are designed to prepare students for ENG 100 or ESL 100). Based on course grades of C- or better, or CR (credit) if course was taken with a credit/no credit grading option.