

# 2018-19 STRIVE HI MEASURES AND CALCULATIONS

## Technical Guide

### Overview

The 2018-19 Strive HI Performance System (Strive HI) is designed to track the progress of our schools to support success for all students. It is comprised of measures aligned with (1) federal law, the Every Student Succeeds Act (ESSA), and (2) Student Success Indicators as presented in the Hawaii Department of Education & Board of Education 2017-2020 Strategic Plan. This document explains Strive HI measures and how they are calculated. Please refer to the Glossary of Terms and Acronyms at the end of this document for further terminology information.

<b>2018-19 Strive HI Measures</b>		
School Type	Measure	What
<b>Elementary and Middle/ Intermediate Schools</b>	Academic Achievement	Percent meeting LA standards*
		Percent meeting math standards*
		Percent meeting science standards
	School Growth*	ELA median growth percentile for SBA
		Math median growth percentile for SBA
		Percent meeting HSA-Alt growth expectations for ELA
		Percent meeting HSA-Alt growth expectations for math
		Percent meeting KAEO growth expectations for LA
		Percent meeting KAEO growth expectations for math
	Chronic Absenteeism*	Percent chronically absent
	English Language Proficiency*	Percent meeting ELP growth to target
	School Climate	Percent reporting positively on the Tripod Survey school climate dimension
	Inclusion Rate	Percent of special education students in general education classes for 80% or more of the school day
Third and Eighth Grade Literacy	Percent Above or At/Near who are meeting grade level standards for reading	



	Achievement Gap	Difference in LA and math proficiency rates for high needs (economically disadvantaged, special needs, English Learners) and non-high needs students
<b>High Schools</b>	Academic Achievement	Percent meeting LA standards*
		Percent meeting math standards*
		Percent meeting science standards
	Graduation Rate*	Four-Year graduation rate (ACGR)
	Chronic Absenteeism*	Percent chronically absent
	English Language Proficiency*	Percent meeting ELP growth to target
	School Climate	Percent reporting positively on the Tripod school climate dimension
	Inclusion Rate	Percent of special education students in general education classes for 80% or more of the school day
	Ninth Grade On-Track	Percent of first-time 9 <sup>th</sup> graders promoted to 10 <sup>th</sup> grade on time
	Achievement Gap	Difference in LA and math proficiency rates for high needs (economically disadvantaged, special needs, English Learners) and non-high needs students
	CTE Concentrator	Percent of 12 <sup>th</sup> grade students completing a CTE Program of Study
	College-Going Graduates	Percent of high school graduates enrolling in a post-secondary institution by the following Fall

\* Measures applied for ESSA Accountability determinations. For ESSA Accountability, when the current year All Students n-size does not meet 20, up to two prior years of data are pooled to meet the minimum n-size. If after pooling prior years data the n-size is still not met, a result is not calculated and the measure is treated as missing data denoted with a double hyphen (--).

## Strive HI Measures

### Academic Achievement

Elementary	Middle/Intermediate	High
LA proficiency rate	LA proficiency rate	LA 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 content areas comprise Academic Achievement: Proficiency rates for language arts, math and science. Assessment results applied for proficiency include the following:

- Smarter Balanced Assessments in ELA and math for grades 3 – 8 and 11.
- HSA alternate assessments for grades 3 – 8 and 11 in ELA and math, and science for grades 4, 8 and 11
- Kaiapuni Assessment of Educational Outcomes (KAEO) for grades 3 – 8 in Hawaiian language arts and math, and science (grade 4 and 8)
- HSA science (grades 4 and 8)
- Biology I end-of-course (EOC) exam (high school only)

#### How (elementary, middle/intermediate, high schools)

The proficiency rate (except for Bio I EOC) is based on the number of Full School Year (FSY)<sup>1</sup> students taking the test and receiving a valid test score (denominator). The numerator consists of the number of those students who are proficient (numerator).

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

Proficiency for the Biology I EOC exam is based on the students taking the exam, both FSY and non-FSY students.

$$\text{Biology I Proficiency Rate} = \frac{\text{\# of students proficient}}{\text{\# of students taking the exam}}$$

<sup>1</sup> Students considered Full School Year (FSY) students were enrolled at the same school from the Official Enrollment Count (OEC) Date through May 1, 2019. The OEC Date for all schools was 8/20/18 except for Alakai O Kauai which was on 8/28/18.

## School Growth

Elementary	Middle/Intermediate	High
LA MGP and % Meeting Growth (HSA-Alt & KAEO)	LA MGP and % Meeting Growth (HSA-Alt & KAEO)	N/A
Math MGP and % Meeting Growth (HSA-Alt & KAEO)	Math MGP and % Meeting Growth (HSA-Alt & KAEO)	

### What (elementary, middle/intermediate)

Beginning 2017-18, the U.S. Department of Education required growth results for LA and math students taking the HSA-Alternate Assessment or Kaiapuni Assessment of Educational Outcomes (KAEO). Median growth percentiles (MGP) for SBA students continue to be reported.

- Median Growth Percentiles (MGP) for SBA Students  
MGPs indicate a school's median (middle) student growth percentile (SGP) which ranges from 99 – 1. 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. For more information, go to:

<http://www.hawaiipublicschools.org/VisionForSuccess/SchoolDataAndReports/Growth-Model/Pages/home.aspx>

- Transition Matrix Model for HSA-Alt and KAEO Students  
The percent of HSA-Alt and KAEO students meeting growth is based on the following transition matrices comparing students' proficiency levels between the current and prior year. Cells denoting "Yes" count as meeting growth expectations.

**2019 Update:** The KAEO prior year proficiency level of 2 vs current year proficiency level of 2 was changed from "No" in 2018 to "Yes" in 2019. All other KAEO and HSA-Alt matrices cells remain the same.

		HSA-Alt						KAEO			
		Current Year Proficiency Level						Current Year Proficiency Level			
Prior Year Proficiency Level		1	2	3	4	1	2	3	4		
		1	No	Yes	Yes	Yes	No	Yes	Yes	Yes	
2	No	No	Yes	Yes	No	Yes	Yes	Yes			
3	No	No	Yes	Yes	No	No	Yes	Yes			
4	No	No	No	Yes	No	No	No	Yes			

Who (elementary and middle/intermediate schools)

Only students enrolled for the current FSY who have SBA, HSA-Alt or KAEO (only grade 4) results for at least the current and prior year.<sup>2</sup> Students repeating a tested grade level are not included in the calculation.

How (elementary, middle/intermediate schools)

- Median Growth Percentiles (MGP) for SBA Students  
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

- Transition Matrix Model for HSA-Alt and KAEO Students  
Based on the Transition Matrix, students demonstrating one year of growth serve as the numerator total. The denominator is based on all students taking the HSA-Alt or KAEO.

**Graduation Rate**

Elementary	Middle/Intermediate	High
N/A	N/A	Four-Year Graduation Rate

What (high schools)

High schools' prior year Four-Year Adjusted Cohort Graduation Rate (ACGR). The 2018 graduating cohort is used for 2018-19 Strive HI ESSA Accountability determinations.

Who (high schools)

Students comprising the 2017-18 graduating cohort. The cohort includes students, who entered the 9<sup>th</sup> grade for the first time in SY2014-15, plus students transferring into the cohort, less students transferring out of the cohort during the four-year period.

<sup>2</sup> A minimum of two consecutive years of test scores are necessary to generate growth.

### How (high schools)

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 2018-19 Strive HI results are based on the four-year cohort graduating by the end of SY2017-18.

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

<sup>a</sup> x = graduating school year

<sup>b</sup> x-4 = 9<sup>th</sup> 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](http://www2.ed.gov/policy/elsec/guid/hsgrguidance.pdf)

### **School Quality or Student Success**

Elementary	Middle/Intermediate	High
Chronic Absenteeism rate	Chronic Absenteeism rate	Chronic Absenteeism rate

### What (elementary, middle/intermediate and high schools)

The Chronic Absenteeism rate is based on the number of students absent (excused/unexcused) for 15 or more days during the FSY period. For secondary school students, a student is considered absent if he/she did not attend more than 50% of scheduled classes that day.

Who (elementary, middle/intermediate and high schools)

Only students enrolled for the FSY are included in these calculations.

How (elementary, middle/intermediate and 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 or unexcused, for 15 or more days during the FSY period.

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

**Progress to English Language Proficiency**

Elementary	Middle/Intermediate	High
% of students meeting growth to target	% of students meeting growth to target	% of students meeting growth to target

What (elementary, middle/intermediate, high schools)

Progress to English Language Proficiency is based on the % of students who are proficient or on-track to proficiency on the ACCESS for ELLs.

Who (elementary, middle/intermediate and high schools)

All students (FSY and non-FSY) taking the ACCESS for ELLs for two or more consecutive years. Because first year results are for baseline purposes, students' second (or last tested) year results that either meet or are on-track to meet proficiency are counted towards the rate.

How (elementary, middle/intermediate and high schools)

$$\text{ELP Growth to Target Rate} = \frac{\text{\# of students meeting or on-track to meet proficiency}}{\text{\# of students taking the ACCESS for ELLs for two or more consecutive years}}$$

For more information go to DOE Memos and Notices, December 19, 2017, *School Year 2017-18 English Learner Growth to Target School and Student Level Accountability Calculations*.

**School Climate**

Elementary	Middle/Intermediate	High
% of students reporting “positively” on the School Climate Dimension of the Tripod Survey	% of students reporting “positively” on the School Climate Dimension of the Tripod Survey	% of students reporting “positively” on the School Climate Dimension of the Tripod Survey

What (elementary, middle/intermediate, high schools)

The percent of students reporting “positively” on the School Climate Dimension of the Tripod Survey.

Who (elementary, middle/intermediate, high schools)

Students in grades 3 – 12.

How (elementary, middle/intermediate, high schools)

The School Climate rate is based on the statewide Strategic Plan baseline rate of 73% of students reporting positively. A cut-score reflecting the 73% statewide rate was derived and applied to each school’s students’ individual school climate composite scores. The rate is based on the number of students meeting or exceeding the cut-score over the total number of participants. The following cut-scores were derived and applied to each school’s students’ composite scores:

Upper Elementary: 72.10 pts  
Secondary (middle & high school): 69.62 pts



Example calculation: School A is an elementary school with 10 students where by the 72.10 upper elementary cut-score is applied. Students climate scores are as follows:

- 97.00
- 89.00
- 86.00
- 83.00
- 78.00
- 74.00
- 73.00
- 
- 72.00
- 63.00
- 57.00

7/10 = 70% of students reported positive school climate

$$\text{School Climate Rate} = \frac{\text{\# of survey participants answering "positively" on the Tripod School Climate Dimension}}{\text{\# of survey participants completing the Tripod School Climate Dimension}}$$

**Inclusion Rate**

Elementary	Middle/Intermediate	High
% of students in general education classrooms for 80% or more of the school day	% of students in general education classrooms for 80% or more of the school day	% of students in general education classrooms for 80% or more of the school day

What (elementary, middle/intermediate, high schools)

The percent of students with disabilities that were inside a general education classroom for 80 percent or more of the school day.

This includes students with disabilities placed in:

- Regular class with special education/related services provided within regular classes
- Regular class with special education/related services outside regular classes
- Regular class with special education services provided in resource rooms

Who (elementary, middle/intermediate, high schools)

Students who are IDEA eligible from ages 6 through 21.

How (elementary, middle/intermediate, high schools)

Data are gathered from the December 1<sup>st</sup> Child Count, which is verified by school level personnel and reported to the Office of Special Education Programs.

$$\text{Special Education Inclusion Rate} = \frac{\text{\# of IDEA students in general education} \\ \text{80\% or more of the school day}}{\text{\# of students with IEP aged 6–21 years}}$$

**Third and Eighth Grade Literacy**

Elementary	Middle/Intermediate	High
% Above or At/Near meeting 3 <sup>rd</sup> grade level standards for reading	% Above or At/Near meeting 8 <sup>th</sup> grade level standards for reading	N/A

What (elementary, middle/intermediate)

The percent of third or eighth grade students Above or At/Near meeting grade level standards for reading, aka, reading claim level (3 = Above, 2 = At/Near, 1 = Below).

Who (elementary, middle/intermediate)

Third and eighth grade FSY students who took the SBA ELA are included in this calculation.

How (elementary, middle/intermediate)

The rate is derived from the number of FSY students taking the SBA ELA who achieved Above or At/Near for reading, over the total number of FSY students taking the SBA ELA.

$$\text{Reading Literacy Rate} = \frac{\text{\# of FSY (3<sup>rd</sup> or 8<sup>th</sup> grade) students achieving Above or} \\ \text{At/Near for meeting reading standards}}{\text{\# of FSY (3<sup>rd</sup> or 8<sup>th</sup> grade) students taking the SBA ELA}}$$

### Ninth Grade On-Track

Elementary	Middle/Intermediate	High
N/A	N/A	% of first-time 9 <sup>th</sup> graders promoted to 10 <sup>th</sup> grade on time

What (high schools)  
Percent of first-time 9<sup>th</sup> graders who promote to 10<sup>th</sup> grade by the beginning of the following school year.

Who (high schools)  
First-Time 9<sup>th</sup> graders enrolled at the beginning of the school year. Repeats, mid-year in-system transfers, and undocumented mainland transfers are excluded.

How (high schools)  
The rate is based on students enrolled as first-time 9<sup>th</sup> graders on the beginning of the year Official Enrollment Count (OEC) (denominator). These students enrolled on the subsequent year OEC as 10<sup>th</sup> graders comprise the numerator.

Based on the denominator (# of first-time 9<sup>th</sup> graders), # of those same students that promote to 10<sup>th</sup> grade the following school year

Ninth Grade On-Track =  $\frac{\text{Based on the denominator (# of first-time 9<sup>th</sup> graders), # of those same students that promote to 10<sup>th</sup> grade the following school year}}{\text{\# of first-time 9<sup>th</sup> graders}}$

### Achievement Gap

Elementary	Middle/Intermediate	High
LA Proficiency Gap	LA Proficiency Gap	LA Proficiency Gap
Math Proficiency Gap	Math Proficiency Gap	Math Proficiency Gap

What (elementary, middle/intermediate, high schools)  
The point difference between the proficiency rates of non-high needs versus high-needs students. 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) in Hawaii language arts and math

Who (elementary, middle/intermediate, high schools)

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

High Need students include the following FSY students who tested:

- Economically disadvantaged students
- Students with disabilities (IDEA only)
- English Language Learners
- Recently exited (2 years) English Language Learners

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

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 percentage point difference between the two subgroups' proficiency rates.

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

Example

1. NHN % Proficient = 70%
2. HN % Proficient = 40%
3. Achievement Gap = (70% - 40%) = 30 percentage points

**CTE Concentrator**

Elementary	Middle/Intermediate	High
N/A	N/A	% of 12 <sup>th</sup> grade students completing a CTE Program of Study

What (high schools)

Percent of 12<sup>th</sup> grade students completing a CTE Program of Study with a grade of D or higher.

Who (high schools)

Grade 12 FSY students.

How (high schools)

The CTE Concentrator Rate is based on 12<sup>th</sup> grade FSY students enrolled at a school (denominator). The numerator comprises of 12<sup>th</sup> grade students who completed a CTE Program of Study with a grade of D or higher.

$$\text{CTE Concentrator Rate} = \frac{\text{\# of 12}^{\text{th}} \text{ grade FSY students completing a CTE Program of Study with a grade of D or higher}}{\text{\# of 12}^{\text{th}} \text{ grade FSY students enrolled at a school}}$$

**College-Going Graduates**

Elementary	Middle/Intermediate	High
N/A	N/A	% of graduates enrolling in a post-secondary institution by the following Fall

What (high schools)

Percent of graduates who enroll in a post-secondary institution by the following Fall. Includes vocational or trade schools and two- or four-year colleges.

Who (high schools)

All prior school year high school diploma graduates. Post-Secondary enrollment is based on data reported by the National Student Clearinghouse in collaboration with Hawaii P-20.

How (high schools)

The College Going Rate is based on students graduating the school year prior (denominator) who then enrolled into a post-secondary institution by the following Fall (numerator).

$$\text{College Going Rate} = \frac{\text{\# enrolling in a post-secondary institution by Fall 2018}}{\text{\# of graduates in SY2017-18}}$$

## Reporting Results

Strive HI results are reported annually for all Hawaii public schools. Most schools' results are reported as is; however, there are several conditions where data are suppressed or adjusted.

### Minimum n-size requirement

While the large majority of reports display all of a school's Strive HI results, there are schools where some data are not reported due to too few students. Such schools are often small and do not have enough students to meet the minimum n-size of 20. Where an n-size of 20 is not met with current year All Students data, up to two prior years of data are pooled to meet the n-size requirement to report. This pooling is applied to the following measures: LA and Math Proficiency, ELA and Math Median Growth Percentiles<sup>3</sup>, Chronic Absenteeism, English Language Proficiency, and Graduation Rates.

If after prior year(s) pooling an n-size of 20 or more students cannot be met, results for that measure are denoted in reports by a double hyphen (--). In other instances, a particular measure may not be applicable to any of the students at the school, e.g., the English Language Proficiency measure in a school without English Learners. In these instances, such missing data are also denoted by a double hyphen (--). Last, when a result may compromise student privacy, e.g., 0% proficiency, such results are suppressed and also denoted by a double hyphen.

### FSY Participation Rate Penalty

In an effort to ensure Strive HI results reflect a valid composition of each school's population, LA and math participation (SBA, HSA-Alt, KAEO) is monitored and a penalty applied when the All Students rate drops below 95% participation. This penalty is based only on FSY students, where the number of students dropping the participation rate below 95% is coded as non-proficient. For example, 200 FSY students should have tested but only 180 tested that resulted in a participation rate of 90% (180/200). To meet the 95% requirement, an additional 10 students should have tested:  $190/200 = 95\%$ . Incidentally, of the 180 who tested, 90 were proficient resulting in a proficiency rate of 50%. Because the participation requirement of 95% was not met by 10 students, 10 non-proficient students are added to the school proficiency rate denominator, effectively reducing the school's proficiency from 50% to  $(90 / (180 + 10)) = 47.37\%$

### The Accountability Data Center (ADC): Strive HI Student-Level Access

Student-Level rosters used to generate Strive HI results are available on the secure, sign-in portion of the Accountability Data Center (ADC). Where data are missing or suppressed on Strive HI reports, the individual students and their results underlying the missing/suppressed data can be reviewed on or exported from the ADC. All school principals and principal designated staff have access to the sign-in portion of the ADC. Please know that the ADC also allows public access to Strive HI data that are aggregated at the school-level, and where necessary, suppressed according to FERPA requirements. For ADC secure, sign-in access requests or questions about this Technical Guide, contact Glenn Nochi, Evaluation Specialist, via email at [glenn.nochi@k12.hi.us](mailto:glenn.nochi@k12.hi.us) or at (808) 733-4008.

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<sup>3</sup> Beginning 2018-19, prior year pooling will be applied to the Percent Meeting Growth measure for HSA-Alt and KAEO students.

## **Glossary of Terms and Acronyms**

ACCESS for ELLs: English proficiency test for English Learners.

ACGR (Adjusted Cohort Graduation Rate): Hawaii's official four-year graduation rate methodology.

CTE (Career and Technical Education): Program provides opportunities to learn/apply academic and technical skills and knowledge within a career pathway.

ELA (English Language Arts): Includes the SBA ELA and HSA-Alt ELA.

ELP (English Language Proficiency): A Strive HI measures required by ESSA.

ESSA (Every Student Succeeds Act): The current reauthorization of the Elementary and Secondary Education Act (ESEA).

FSY (Full School Year): Students considered FSY are enrolled at the same school from the Official Enrollment Count Date through 5/1, unless 5/1 falls on a weekend, in which case, the Monday following.

HN (High Needs): A subgroup of students comprising of economically disadvantaged, students with special needs, and English learners.

HSA-Alt (Hawaii State Alternate Assessment): Alternative assessment for students with the most significant cognitive disabilities as documented in the student's Individualized Education Program.

IDEA (Individuals with Disabilities Education Act): Law ensuring free appropriate public education to eligible children with disabilities.

KAEO (Kaiapuni Assessment of Educational Outcomes): Hawaiian Language arts, math and science assessment administered to 3<sup>rd</sup> and 4<sup>th</sup> grade Hawaiian Language Immersion Program students.

LA (Language Arts): Includes the SBA ELA, HSA-Alt ELA, and the KAEO Hawaiian Language Assessment.

MGP (Median Growth Percentile): Metric attributed to schools' ELA and math growth.

NHN (Non-High Needs): An achievement gap comparison subgroup of students not part of the High Needs subgroup.

OEC (Official Enrollment Count) Date: Generally 10 days following the start of school and used for school enrollment counts and school funding among other purposes.

SBA (Smarter Balanced Assessment): One of Hawaii's adopted summative state assessments to measuring the depth and breadth of the Hawaii Common Core Standards.

Tripod Survey (Tripod Student Perception Survey): Hawaii Department of Education surveys students statewide about school climate of instruction, and safety and relationships. Results of the Tripod School Climate Dimension serve as the Strive HI School Climate Measure.