# Introduction

The Achievement Component measures students' academic achievement using each level of performance on Ohio's State Tests. The Achievement Component has two measures: the Performance Index and the Performance Indicators. The Performance Index (PI) is used to assign the Achievement Component Rating. The Performance Indicators measure is data that is reported but <u>does not</u> factor into the rating of the component. The details of each measure and how the rating is assigned can be found in this technical document.

# Table of Contents

Introduction	1
Overview of Measures	2
Performance Index	2
Performance Indicators Measure	2
Business Rules for Both Measures	3
Determining Students Included in this Component	3
Inclusion Criteria	3
Additional Business Rules for Both Measures	4
Data Elements	4
Performance Index Calculation	5
Determining Total Tests	5
Assigning Tests to Performance Levels	8
Calculating Points for Each Performance Level	
Additional Business Rules	
Performance Indicators Measure Calculation – Report Only Data	
Performance Indicators – Denominator of Calculation	
Performance Indicators- Numerator of Calculation	
Performance Indicators - Calculation	
Achievement Component Rating and Descriptions	

### **Overview of Measures**

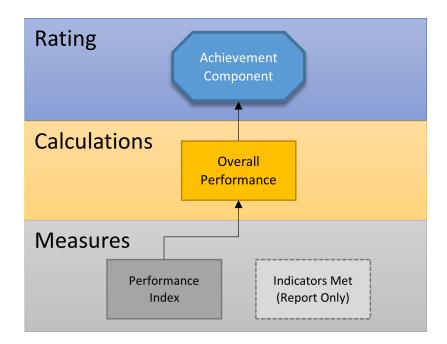
This section includes descriptions of each measure within the Achievement Component. References to Ohio Revised Code (*ORC – state law*) and Ohio Administrative Code (*OAC – rule*) are included. Additional detail on the calculation and reporting codes is included throughout this document.

### Performance Index

The Performance Index measure (ORC 3302.01(A) and 3302.03(D)(1)(c)) uses the performance level results for students in grades 3 through high school on Ohio's State Tests. The Performance Index score accounts for the level of achievement of every student, not just whether they are "proficient." Each test a student takes is assigned an achievement level based on the test score with higher test scores resulting in higher achievement levels. On the Performance Index, the higher performance levels receive larger weights in the calculation – but all achievement levels are included. More information about test achievement levels is <u>available annually in the 'Understanding Ohio's State Tests Reports</u>" guidance document.

#### Performance Indicators Measure

The Performance Indicators measure (<u>ORC 3302.02(A)</u>) is a report-only measure within this component – meaning the data does not factor into the rating determination. The Performance Indicators measure reports the percentage of students scoring proficient or higher on each of Ohio's State Tests disaggregated by grade level and subject.



# Business Rules for Both Measures

### Determining Students Included in this Component

To calculate a report card for each school and district, several accountability rules must apply. For these detailed rules, the <u>"Where Kids Count" technical documentation</u> helps walk through when and where a student will count in a calculation on the report cards.

#### **Inclusion Criteria**

In addition to the business rules detailed in the "Where Kids Count" document, additional filters are used to determine if students will count at their educating school or district or at the school or district of residence.

These include:

How Received Element = "\*", "3", "7", "8", "9", "A", "C", "D", "G", "J", "K", "M", "R", "S", "W", and "Y";
AND Student Percent of Time > 0.

#### AND

• District Relationship element = '1'

#### OR

• Sent Reason Element = "CT," "JV," "PS," 'ES', "MR," "OS", "CR", or "PI".

#### OR

• Students that the district sent to a special education cooperative program at another district. These students will be included in the sending district's calculation **only** based upon the data reported by the district educating the student. The educating district would report the students with a How Received Element = "B".

### AND

• Student is enrolled in the district for a full academic year as reported in the Majority of Attendance IRN element. Refer to "Full Academic Year" definition for additional details.

#### AND

• For How Received = "K", the student counts at the STEM school but for district accountability, the student is moved from the STEM school to the student's resident district for independent STEM schools or to the educating district for STEM schools operated by a traditional school district.

### AND

• For students reported with a How Received of "P", "Q" or "T", their accountability is set to the state level only.

#### AND

• Students with Required Test Type = "STR" and a score not = "\*\*\*" and Required Test Type = "ALT" and Score NOT = "\*\*\*" ("\*\*\*" means that the student did not take the test). Includes students with Score

Not Reported = "I" (Invalidated) or "S" (Non-Scorable Assessment), **AND** all students with disabilities regardless of whether they took the test with accommodations.

#### AND

• Tuition Type Element = "D" and "T"

#### AND

• Excludes students with LEP = "L" and "S" and foreign exchange students who have been in US schools for fewer than 360 school days (or the equivalent of two school years) unless the student plans to graduate from an Ohio high school.

#### **Additional Business Rules for Both Measures**

#### English Language Learners and Foreign Exchange Students

English Language Learners enrolled in U.S. schools for no more than two years as of the 2021-2022 school year are not included in the calculation if they are coded with the "L" or "S" code in the English Learner Status Element (FD170) of the *Student Attributes – Effective Date Record* (section 2.5) of the <u>EMIS manual</u>. These codes indicate that the student is enrolled in a U.S. School where English is the main language of instruction for the first or second year. Foreign exchange students who have been enrolled for less than 180 days also are not included.

#### Alternate Assessment Waiver

Prior to 2017-2018, districts were subject to a 1.0% cap on alternate assessment scores that could count as proficient or higher. If a district exceeded its cap, scores were demoted from their "actual" level of Proficient, Accomplished or Advanced to the "Basic" level and were counted at a weight of 0.6. In 2018 and beyond, the agency received a waiver from the U.S Department of Education to be allowed to count all tests at their **real** performance level. In 2021-2022, the ESSA waiver continues to eliminate the demotion and all scores are included at their **real** performance level.

### Data Elements

ASSESSMENT AREA CODE ASSESSMENT TYPE CODE GRADE LEVEL OF STUDENT AT TIME OF TEST REQUIRED TEST TYPE SCORE SCORE SCORE NOT REPORTED TEST DATE TEST GRADE LEVEL EFFECTIVE END DATE STATE EQUIVALENT GRADE LEVEL HOW RECEIVED AND SENT REASON ELEMENTS HOW RECEIVED IRN ELEMENT SENT TO PERCENT OF TIME ELEMENT STUDENT PERCENT OF TIME MAJORITY OF ATTENDANCE IRN ACCOUNTABILITY IRN LEP STATUS ELEMENT FOREIGN EXCHANGE STUDENT GRADUATION PLAN ELEMENT ACCELERATED ASSESSMENT ACCOUNTABILITY IRN ELEMENT ACCELERATED SUBJECT AREA CODE ACCELERATED ASSESSMENT FLAG ACCELERATED LEVEL COUNT

# Performance Index Calculation

To receive a score on the Performance Index measure, a school or district must have at least ten (10) accountable students taking one or more assessments. In cases where a school or district has fewer than ten unique students across all tested grades who have taken assessments, the data will be masked, and no PI Score will be calculated.

- N-Size: 10 accountable students taking one or more assessments
- Subjects: All subjects
- Grades: 3-8, high school
- Tests: 3-8 English language arts, math, and science, Algebra I, Geometry, Integrated Math I, Integrated Math II, ELA II, American History, American Government, Biology
- Alternate Assessments Included: Yes
- Substitute Assessments Included: Yes
- Full Academic Year: Yes
- Retakes: No
- Multiple tests in the same subject and same school year: Each subject's test counts only one time in each school year and the highest score from all attempts is the one that is used for report card purposes.

### **Determining Total Tests**

Because of <u>State law</u>, untested students must be included in the calculation and schools and districts receive zero points for them. Thus, the first step is to determine the total number of tests that should have been taken. In prior years, some tests were not included, but for 2022 and later, the law requires all tests in all subjects to be used. Ohio's current tests are: English language arts and math for grades 3-8, science for grades 5 and 8, and ELA 2, Algebra I, Geometry, Integrated math I and II, Biology, American History and American Government at the high school level.

At all grades, the alternate assessments for students with significant cognitive disabilities are included. In addition, students can take alternative tests in Advanced Placement (AP) and International Baccalaureate (IB) if they are taking corresponding AP or IB courses. These substitute tests can be used to fulfill a graduation requirement for a seal and are included in the Performance Index score calculation starting with the 2021-2022 school year and beyond. The matrix below shows the tests that are included in this calculation.

TEST CODE	SCIENCE SUBSTITUTE	TEST CODE	AMERICAN GOVERNMENT SUBSTITUTE	TEST CODE	AMERICAN HISTORY SUBSTITUTE
AP02	Biology	AP32	U.S. Government and Politics	AP33	U.S. History
AP05	Chemistry	IB91	Global Politics Higher Level	IB26	History 2: Americas Higher Level
AP35	Physics 1	IB92	Global Politics Standard Level	AP32	U.S. Government and Politics
AP36	Physics 2				

AP23	Physics C: Electricity and Magnetism			
AP24	Physics C: Mechanics			
IB10	Biology Higher Level			
IB50	Biology Standard Level			
IB12	Chemistry - Higher Level			
IB52	Chemistry - Standard Level			
IB16	Design Technology - Higher Level			
IB 56	Design Technology - Standard Level			
IB 58	Environmental Systems and Societies			
IB 49	Physics - Higher Level			
IB 77	Physics - Standard Level			
IB 93	Sports, Exercise and Health Science -			
10.92	Higher Level			
IB 94	Sports, Exercise and Health Science -			
10 94	Standard Level			

Every student enrolled in a course that that has a corresponding test is required to take the test. If a student fails to test, the district or school is required to report a *Score Not Reported* reason (Record FA235) found in the *Student Assessment Record* (section 2.8) of the <u>EMIS manual</u>. Certain codes exclude the test from being included in the PI score calculation. However, if the *Score Not Reported* reason does not exclude the test, it will be included in the PI calculation and is considered a test not taken.

The table below can be used to determine whether an untested student will affect the calculation. Note that in two cases (Code "I" and Code "S"), the student is considered to have tested, and the test is treated as a "Limited" range test. For all other cases, the test either counts as a test not taken or is excluded from the calculation.

CODE	DESCRIPTION	STATUS
Α	Medical Reason – Used when a student fails to test because of an	Included in the denominator as a test
~	ongoing medical condition	not taken – zero points earned
В	Parent Refusal	Included in the denominator as a test
В		not taken – zero points earned
С	Student Refusal	Included in the denominator as a test
C		not taken – zero points earned
D	Suspension/Expulsion	Included in the denominator as a test
D	Suspension	not taken – zero points earned
E	Absent during the test administration window	Included in the denominator as a test
L	Absent during the test administration window	not taken – zero points earned
F	Other (reason not listed)	Included in the denominator as a test
	other (reason not listed)	not taken – zero points earned
	EOC assessment (GE) not given for the course in which the student	Test NOT included in the denominator of
G	is enrolled within this district, includes courses that span multiple	the calculation
	years	
Н	SSID for this student appears on the assessment vendor file due to	Test NOT included in the denominator of

	data error; student with this SSID was not required to be assessed	the calculation
		Included in the denominator as a test
I	Student took the test, but it was, for good cause, invalidated	that was taken in the Limited range
	Student moved in or out of the district before the test was	Test NOT included in the denominator of
J	administered	the calculation
к	Test not required due to part time student status, home school, non-public school and not enrolled in a course for this assessment/subject area	Test NOT included in the denominator of the calculation
м	Medical Emergency**	Test NOT included in the denominator of the calculation
N	Student taking subject above grade level, no subject test at the higher grade	Test NOT included in the denominator of the calculation
Р	Due to timing of the alternate assessment determination	Test NOT included in the denominator of the calculation
S	Non-scorable assessment (used only for students taking the alternate assessment for students with significant cognitive disabilities)	Included in the denominator as a test that was taken in the Limited range
w	Assessment score not reported because student received graduation credit due to course completion prior to end of course assessment availability or due to an assessment administration being canceled due to the COVID-19 ordered school building closure in school year 19-20 or due to the COVID-19 flexibility for juniors and seniors in 20-21	Test NOT included in the denominator of the calculation
x	Assessment score not reported because the student received graduation credit for the assessment are due to completion of a dual credit course	Test NOT included in the denominator of the calculation
Y	Student transferred in with the course already completed	Test NOT included in the denominator of the calculation
2	Assessment score not reported because the student received graduation credit for an alternative non-public school EOC assessment prior to public district enrollment	Test NOT included in the denominator of the calculation
5	Student assessed but results not available from the assessment vendor by the close of the collection	Included in the denominator as a test not taken – zero points earned

\*\*The "M" code (Medical Emergency) is not reported by districts. When the Ohio Department of Education grants a medical emergency waiver for a student, the agency uses this code internally to denote that the student was 'excused' from testing.

### Assigning Tests to Performance Levels

After determining which tests to include, the tests are sorted into seven performance levels or 'buckets' based on the score ranges that align to performance levels. The performance level 'buckets' include:

- Advanced Plus
- Advanced
- Accomplished
- > Proficient
- Basic
- Limited
- Tests Not Taken

Alternative tests taken in AP or IB courses are converted to the appropriate performance bucket based on the crosswalk in the table below.

TEST CODE	SUBJECT	UNTESTED	LIMITED	BASIC	PROFICIENT	ACCOMPLISHED	ADVANCED
AP02	Biology	Test was required, but was not taken	1	N/A	2	3	4 or 5
AP05	Chemistry	Test was required, but was not taken	1	N/A	2	3	4 or 5
AP35	Physics 1	Test was required, but was not taken	1	N/A	2	3	4 or 5
AP36	Physics 2	Test was required, but was not taken	1	N/A	2	3	4 or 5
AP23	Physics C: Electricity and Magnetism	Test was required, but was not taken	1	N/A	2	3	4 or 5
AP24	Physics C: Mechanics	Test was required, but was not taken	1	N/A	2	3	4 or 5
IB10	Biology Higher Level	Test was required, but was not taken	1	N/A	2 or 3	4 or 5	6 or 7

IB50	Biology Standard Level	Test was required, but was not taken	1	N/A	2 or 3	4 or 5	6 or 7
IB12	Chemistry - Higher Level	Test was required, but was not taken	1	N/A	2 or 3	4 or 5	6 or 7
IB52	Chemistry - Standard Level	Test was required, but was not taken	1	N/A	2 or 3	4 or 5	6 or 7
IB16	Design Technology - Higher Level	Test was required, but was not taken	1	N/A	2 or 3	4 or 5	6 or 7
IB 56	Design Technology - Standard Level	Test was required, but was not taken	1	N/A	2 or 3	4 or 5	6 or 7
IB 58	Environmental Systems and Societies - Standard Level	Test was required, but was not taken	1	N/A	2 or 3	4 or 5	6 or 7
IB 49	Physics - Higher Level	Test was required, but was not taken	1	N/A	2 or 3	4 or 5	6 or 7
IB 77	Physics - Standard Level	Test was required, but was not taken	1	N/A	2 or 3	4 or 5	6 or 7
IB 93	Sports, Exercise and Health Science - Higher Level	Test was required, but was not taken	1	N/A	2 or 3	4 or 5	6 or 7
IB 94	Sports, Exercise and Health Science - Standard Level	Test was required, but was not taken	1	N/A	2 or 3	4 or 5	6 or 7

AP33	U.S. History	Test was required, but was not taken	1	N/A	2	3	4 or 5
IB26	History 2: Americas Higher Level	Test was required, but was not taken	1	N/A	2 or 3	4 or 5	6 or 7
AP32	U.S. Government and Politics	Test was required, but was not taken	1	N/A	2	3	4 or 5
IB91	Global Politics Higher Level	Test was required, but was not taken	1	N/A	2 or 3	4 or 5	6 or 7
IB92	Global Politics Standard Level	Test was required, but was not taken	1	N/A	2 or 3	4 or 5	6 or 7

### Calculating Points for Each Performance Level

Once all the tests are sorted to the appropriate performance bucket, the percentage of tests that fall into each bucket is calculated and multiplied by the corresponding weight shown in the table below. This results in a weighted score for each performance level. The weighted scores for each performance level are summed to create an overall Performance Index Score.

PERFORMANCE LEVEL	WEIGHT
Advanced Plus	1.3
Advanced	1.2
Accomplished	1.1
Proficient	1.0
Basic	0.6
Limited	0.3
Tests Not Taken	0.0

#### **Additional Business Rules**

#### Accelerated Students

In addition, the law rewards schools, and districts for having students on a Formal Written Acceleration Plan where the student takes an assessment that is in a higher grade than the student's overall grade, provided the student scores Proficient or higher, such as might happen if a 5th grader takes a 6th grade math class and thus takes the 6th grade math assessment.

For the purpose of calculating the PI score, a formally accelerated student's assessment that scores in the "Proficient" range will count as if it is in the "Accomplished" range; an assessment in the "Accomplished" range will count as if it is in the "Advanced" range and an assessment in the "Advanced" range will count in the "Advanced Plus" range.

The department uses the *Student Acceleration Record* (FB Record) (section 2.7) of the <u>EMIS manual</u> from the current school year to determine which tests are eligible for the bonus weight. This record is reported for a student who has a referral from the district's Acceleration Evaluation Committee and who is placed on a Written Acceleration Plan (WAP) for one or more subject areas. If a student is whole grade accelerated or participated in early entrance to kindergarten, an acceleration record is reported for each of the **five** subject areas (social studies, mathematics, reading, science, writing) and **all** tests in **all** subjects are eligible for the bonus weight. If a student is single subject accelerated (for example, a student is a typical fourth grader for ELA, but is taking fifth grade math after being placed on a Written Acceleration Plan), an FB Record is reported for math and only that test is eligible for the bonus weight.

It is important to understand that an acceleration record must be reported **each year** that a student is accelerated for a particular subject because the department only uses the **current year's** acceleration record for the purpose of determining who is eligible for the bonus weight. Students continue to be considered formally accelerated when taking high school assessments as long as they remain ahead of their peers. As such, a student who was formally accelerated in elementary or middle school still will be eligible to earn the bonus weight on high school end of course tests because they will take those tests one year earlier than a student on a "normal" trajectory.

If a student transfers from one district to another and continues to be accelerated at their new school, the new district should report the acceleration record for the student, so they continue to be eligible for the bonus weight on any tests taken in the accelerated subject(s).

An acceleration record stops being reported if the student no longer is accelerated. For example – if a fourthgrade student with a WAP spent the 2021-2022 school year in fifth grade math, an acceleration record would have been reported for math in the 2021-2022 school year. If a district decides to end the student's acceleration in 2022-2023 so that they do not move ahead to sixth grade math in the year when their overall grade is five, no record is reported for that school year. Students are required to test annually in grades 3-8 so a student who ends acceleration takes the test that matches his or her overall grade level and is included in the PI score and appropriate test indicator calculations.

# Performance Indicators Measure Calculation – Report Only Data

The Performance Indicators measure reports the percentage of students who take a test and earn a performance level of proficient or higher. Each individual subject test indicator is calculated separately, but to have a percentage calculated for a test, a school or district must have at least 10 accountable students with valid scores. An indicator with fewer than 10 scores does not get included and no proficiency percentage is displayed.

- N-Size: 10 accountable tests in each grade and subject
- Subjects: All subjects
- Grades: 3-8, high school
- Tests:
- 3-8 English language arts and math, science vin grades 5 and 8, Algebra I, Geometry, Integrated Math I, Integrated Math II, ELA II, American History, American Government, Biology
- Alternate Assessments Included: Yes
- Substitute Assessments Included: Yes
- Full Academic Year: Yes
- Retakes: No
- Multiple tests in the same school year: Each subject's test counts only one time in each school year and the highest score from all attempts is the one that is used for report card purposes.

### Performance Indicators – Denominator of Calculation

*Calculation:* Total number of students per test who meet the inclusion criteria, including students who take the Alternate Assessment or an approved substitute assessment and have a valid score.

For each subject/grade level test, this is a count of students who actually took the test. The testing records included are: (*REQUIRED TEST TYPE* = "STR" and the *SCORE* is not = "\*\*\*") and (*REQUIRED TEST TYPE* = "ALT" and the *SCORE* is not = "\*\*\*").

For high school science and social studies end-of-course assessments, students also are included if they take one of the approved substitute assessments. The list of the assessments can be found above. The same assessments are used for this calculation that are used for the Performance Index Score.

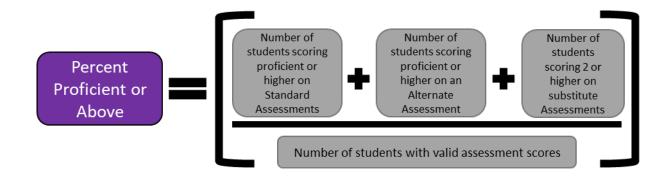
### Performance Indicators- Numerator of Calculation

*Calculation:* Total number of students per test who meet the inclusion criteria and score Proficient or higher. For the approved substitute assessments, the conversion in the table below is applied.

ADVANCED PLACEMENT	INTERNATIONAL BACCALAUREATE	SCORE FOR INDICATOR
4 or 5	6 or 7	Proficient (in numerator)
3	4 or 5	Proficient (in numerator)
2	2 or 3	Proficient (in numerator)
1	1	Not Proficient

### Performance Indicators - Calculation

The Performance Indicator calculation uses the numerator and denominator, as described above, to derive a proficiency percentage for each test. Each performance indicator represents the percentage of students who scored at or above the proficient level out of the students who took each test.



# Achievement Component Rating and Descriptions

The Achievement Component for schools and districts is rated solely based on the Performance Index measure. The rating scale is based on the percentage of possible points earned. State law (<u>ORC 3302.03</u>) changed this calculation starting with the 2021-2022 school year to use the new **"maximum score"** calculation.

Prior to the 2021-2022 school year, a Performance Index score of 120 points was considered a perfect score because this score would be earned if 100% of the tests from non-accelerated students earned a performance level of Advanced on all applicable state tests. The grades assigned to each school or district were based on the percentage of points earned out of that maximum score of 120.

From 2021-2022 forward, the law establishes a new calculation to determine the number that represents the maximum Performance Index score. The law now requires the number to be derived separately for schools and districts by taking the average of the highest two percent of Performance Index Scores achieved by all schools for the current school year for the school calculation and the average of the highest two percent of Performance Index Scores achieved by all districts for the current school year for the districts for the current school year for the district calculation. Community schools are included in the school-level calculation.

It is important to understand that because the law requires the Department to use **current** school year data, (i.e. – the 2021-2022 maximum will be derived using the average of the highest 2 percent of school or district Performance Index scores from the 2021-2022 school year), the maximum PI score will change throughout the reporting window. Only when the reporting window closes, and all appeals are processed, can the final maximums be calculated so that school and district personnel will be able to see how they performed against the standards.

ACHIEVEMENT COMPONENT RATING SCALE AND DESCRIPTIONS						
Percentage of Maximum Points Earned	Rating	Rating Description				
Greater than or equal to 90% of Max Score	5 Stars	Significantly exceeds state standards in academic achievement				
Greater than or equal to 80% but less than 90% of Max Score	4 Stars	Exceeds state standards in academic achievement				
Greater than or equal to 70% to but less than 80% of Max Score	3 Stars	Meets state standards in academic achievement				
Greater than or equal to 50% but less than 70% of Max Score	2 Stars	Needs support to meet state standards in academic achievement				
Less than 50% of Max Score	1 Star	Needs significant support to meet state standards in academic achievement				

Once the Performance Index score and measure percentage is calculated, a rating will be assigned based on the percentages shown below.