

School Progress Index

What is the School Progress Index (SPI)?

Measures Progress, Not Performance

The United States Department of Education (USDE) last year gave states the opportunity to develop a new accountability system for measuring how well students and their schools were progressing over time to improve the performance of all students. Under this new system, Maryland has adopted a realistic and achievable goal of cutting in half the number of students in each school who are not achieving at the proficient level by 2017, with annual improvement targets set for every school and every subgroup individually. The new system has high expectations for students and schools — it is set against targets that are very rigorous, yet more attainable and achievable for schools. In addition to achievement and growth, the system focuses strongly on new measures of a school's ability to close gaps between its highest performing student groups and its lowest, and for high schools to graduate students on time and College- and Career-Ready. With the help of teachers and principals across the State, Maryland has developed new measures of school progress that are not tied to one test result, but rather reflect multiple Indicators of progress. This new system is called the School Progress Index (SPI).

Why is Maryland adopting this new accountability system?

Each School Is Measured Against Its Own

In the prior accountability system, which included Adequate Yearly Progress, the Maryland State Department of Education (MSDE) published annual targets for schools and, under USDE, guidelines pronounced schools “failing” when one content measure fell short. The new School Progress Index sets more realistic and achievable goals and provides a much more in-depth view of the strengths and challenges of a particular school. With this comprehensive data, school leaders can provide targeted support and interventions to overcome a particular weakness. In other cases, they can recognize schools that are reaching their targets.



What are the Indicators that make up the SPI and how were they determined?

Uses Multiple Measures

Maryland gathered representatives of the State's education, business, and parent communities to determine what Indicators were important in measuring school progress and to obtain recommendations on the weight each of these Indicators might play in forming a School Progress Index. This standards-setting group submitted a School Progress Index formula for elementary and middle schools and a separate but similar Index for high schools that was accepted by the State Superintendent and the State Board of Education. The School Progress Index will look at the following Indicators: Achievement, Gaps, Student Growth, and College- and Career-Readiness. These Indicators can, when taken together, paint an accurate picture of every school's progress. The measures follow federal guidelines and represent assessment data, data on subgroups, data on student year-to-year progress, high school coursework, graduation, and post-graduation information. (*Refer to insert.*)

What is “Achievement” and how is it calculated?

Student Proficiency Is still Measured Annually

Since the early 2000s, Maryland has annually administered the Maryland School Assessments (MSAs) for Reading, Mathematics, and Science to elementary and middle school students and calculates the Achievement Indicator from the progress made by all students on the three assessments. Reading and Mathematics are administered each year beginning in grade 3, while Science is administered in grades 5 and 8. Each assessment, Reading, Mathematics, and Science, is assigned equal weight. At the high school level, the High School Assessments in Algebra/Data Analysis, English, and Biology are used and are also weighted equally. The Achievement Indicator asks whether the school made enough progress this year to be on target to achieve its 2017 goals for English/Language Arts, Mathematics, and Science.

For elementary and middle schools, Achievement counts 30 percent of the School Progress Index. At the high school level, Achievement makes up 40 percent of the Index. In order to receive the full 30 or 40 percent in the Index, a school must meet its annual proficiency target for the year in the “all students” subgroup in the Mathematics, English/Language Arts, and Science. Because the Achievement score is computed from three exams (Reading, Mathematics, and Science in elementary/middle school and English, Algebra/Data Analysis, and Biology in high school), slow progress in one area can be overcome with more progress in another area.



What is “Student Growth” and how is it calculated?

Looking for Continuous Improvement

Student Growth is the progress a student makes from one year to the next. The Growth Indicator represents all students’ growth within an elementary or middle school for Mathematics Proficiency and Reading Proficiency on the MSA. The Student Growth Indicator is specifically focused on whether students made at least one year’s worth of progress over the past year’s performance. Student Growth is only measured at the elementary/middle school level and constitutes 30 percent of the Index. In order to receive all 30 percent, all students within an elementary/middle school would have to meet the target for the year in both Reading and Mathematics.

Why is Science being included?

Part of a National Trend

Science at the elementary/middle level and Biology at the high school level are included because nationally, the trend is to incorporate Science measures into accountability systems since Science is of equal importance to English/Language Arts and Mathematics to the success of all students. Earlier this year, Maryland’s standard-setting group expressed similar agreement and included Science in the School Progress Index Achievement and Gaps Indicators. Science is taught every year, but only summatively tested in grades 5 and 8. Biology is tested at the high-school level.



What is “Gap Reduction” and how is it calculated?

Subgroup Performance Is Targeted for Improvement

The Federal Government has standardized several student subgroup populations. These subgroups are broken out by race, poverty level, educational disability, and English Language Learners. The Gap Reduction Indicator looks at the gap between the highest and lowest performing subgroups at a school. The school can receive credit for reduction of its gaps only by raising the performance of the lowest performing group, not by decreasing the performance of its highest performing group.

The goal of reducing the gap makes up 40 percent of the total School Progress Index for a school. In order to receive the full 40 percent, a school would have to meet the target for the year to reduce the gap between their highest and lowest performing subgroups and would have to meet the annual target to reduce the gap between subgroups for graduation and dropouts.

What is “College- and Career-Readiness” and how is it calculated?

We Need to Prepare Graduates for the Future

College- and Career-Readiness represents a combination of measures that ensures students are prepared for life after graduation. College- and Career-Readiness consists of the 5-Year Adjusted Cohort Graduation Rate and College- and Career- Preparation (CCP). CCP is a measurement of a student's success in one of the following areas: Advanced Placement (AP) or International Baccalaureate (IB); Career and Technology Education (CTE) Concentrators; or Enrollment in College. Students who have exited high school with a Maryland State High School Diploma are counted as being successful for CCP when the student achieves at least one of the following:

- AP or IB: Earned a score of 3 or greater on an AP exam OR earned a score of 4 or greater on an IB exam.
- CTE Concentrators: Attained advanced standing (enrolled in the third course) in a State-approved Career and Technology Education program of study.
- Enrollment in College: Subsequently entered a post-secondary institution (2-year, 4-year, or technical school) within 16 months of high school graduation.

College- and Career-Readiness makes up 20 percent of a high school's overall School Progress Index score. In order to receive the full 20 percent, the school has to meet the annual target of having students graduate within 5 years and complete one of the options for College- and Career-Preparation. (*Refer to insert.*)

Why are the Indicators different for Pre-K-8 schools and high schools?

The School Progress Index Is a Measure of Progress

Elementary and middle schools have data that can gauge Achievement, Gap Reduction, and Student Growth. High schools can also follow Achievement and Gap Reduction progress, but Student Growth cannot currently be tracked since there is no high school level year-to-year testing similar to the elementary and middle school assessments for comparison. High schools instead use College- and Career-Readiness measures.

Since Maryland has long been considered a leader in student achievement, but has struggled in closing the achievement gaps for some of its students, the standard-setting group determined that the Gap Reduction Indicator would be the highest weight under the Elementary and Middle School formula and equivalent to the Achievement Indicator in high school. (*Refer to insert.*)

Once a school's Student Progress Index (SPI) score is calculated, how is it used?

Strands Are Used to Provide Support, Intervention, and Recognition

Each school will receive a score on each of the Indicators and the overall SPI. This data will ensure an in-depth look at the school — where it is strong and areas that may need improvement. This information will be used to group schools in one of five “Strands.” Strands are designed to categorize schools to provide them with Support, Intervention, and Recognition. These Strands are designed to help the school leaders gain a better understanding of how the school is progressing towards its targets and to better direct resources and support to the school.

Strand	School Progress Index Score	Indicator Score
Strand 1: Meets and exceeds the academic standards for all students.	SPI Score is 1.0 or greater	Meeting all three annual Indicator Targets
Strand 2: Generally meets or exceeds academic standards.	SPI Score is greater than or equal to 0.9	Meeting two of three annual Indicator Targets
Strand 3: Has needs for specific populations, but not generally systemic problems.	SPI Score is greater than or equal to 0.9	Meeting only one annual Indicator Target
Strand 4: Has needs that will require differentiated services.	SPI Score is greater than or equal to 0.9	Meeting no annual Indicator Targets (but very close to all three)
Strand 5: Has serious needs that might require more systemic change.	SPI Score is less than 0.9	Meeting zero, one, or two annual Indicator Targets

How is it possible for a school to have a high percentage of students performing at the “proficient and advanced” levels, but have an Index less than 1.0 or be in Strand 3 or 4?

The Strand Groupings Are Reflective of the Magnitude of a School’s Problems NOT the Type of Problem

Many schools scoring well on the Maryland School Assessments or the High School Assessments will still face challenges because Achievement is only one component of the SPI. For example, there may be subgroups in the school that are performing far below the general student body. If so, then the gap between the highest performing subgroup and the lowest performing subgroup may be very large; in this case the school would not receive the full 40 percent contribution from Gap Reduction in their overall SPI score. Similar issues in Student Growth (elementary and middle schools) and College- and Career-Readiness (high schools) could also be at play for the school. Analysis of data down to the classroom level will be needed to reveal the challenges needing attention.

What assistance will be provided to schools?

Focusing on the Areas of Greatest Need

School Progress Index, Indicator, and Strand information helps school leaders focus their attention on those areas of greatest need and to forecast problem areas before they become intractable. School systems will focus their attention on performance using the instructional tools they have used in the past, but they will now be armed with individual student progress and growth data, and have new vantage points for following students year to year. In some cases, the solutions will involve instructional changes within the school. The new accountability system narrows the use of the most intensive school improvement processes to only the most problematic schools. Consequently, limited resources are more accurately focused on the greatest challenges, and communities and schools can rally around them.

Strand	Maryland State Department of Education (MSDE) and Local Education Agency (LEA)
1	The school will identify the professional development and training that can lead to additional improvement in achievement. The LEA may provide this resource or the school can seek training beyond their own LEA.
2	It is expected that the LEA will assure that lower-performing subgroups and other particular needs the school may have (specifically in the Indicator that was missed) are addressed in the School Improvement Plan (SIP)/School Performance Plan (SPP). Title I schools that fail to make the AMO in Mathematics or Reading will be eligible to apply for 1003(a) School Improvement Grant (SIG) funds.
3	The school will develop a School Improvement Plan (SIP)/School Performance Plan (SPP) that will address the specific Indicators that are missed. Progress on improvement of the Indicators will be monitored by the LEA. Title I schools that fail to make the AMO in Mathematics or Reading will be eligible to apply for 1003(a) School Improvement Grant (SIG) funds.
4	The LEA will examine the existing supports in the school to determine the effectiveness of the current path for increased progress and monitor necessary changes to address all instruction as well as those ancillary supports, like classroom management training, that can prevent other problems from interfering with instruction. Title I schools that fail to make the AMO in Mathematics or Reading will be eligible to apply for 1003(a) School Improvement Grant (SIG) funds.
5	The LEA will provide intensive, sustained support and technical assistance through onsite monitoring for the school. It may include, but is not limited to, examining existing supports, curriculum, instruction, assessment, professional development with accountability, school culture and climate, family and community support, organizational structure and resources, and comprehensive and effective planning. Title I schools that fail to make the AMO in Mathematics or Reading will be eligible to apply for 1003(a) School Improvement Grant (SIG) funds.

Visit MdReportCard.org for school and system SPI data.

Visit MarylandPublicSchools.org for additional SPI materials.



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Maryland Classroom

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Maryland School Progress Index

Grades PreK-8

Meeting Performance Targets (AMO)

Achievement*

30%

- 33.3%- Mathematics Proficiency (MSA)
- 33.3%- Reading Proficiency (MSA)
- 33.3%- Science Proficiency (MSA)

Gap*

40%

Gap between *lowest* subgroup and *highest* subgroup within a school:

- 33.3%- Mathematics Proficiency (MSA)
- 33.3%- Reading Proficiency (MSA)
- 33.3%- Science Proficiency (MSA)

Indicators

Measures

Growth*

30%

Percent of students making one year's growth:

- 50%- Mathematics Proficiency (MSA)
- 50%- Reading Proficiency (MSA)

Grades 9-12

Meeting Performance Targets (AMO)

Achievement*

40%

- 33.3%- Mathematics Proficiency (Algebra/ Data Analysis HSA)
- 33.3%- English Proficiency (English HSA)
- 33.3%- Science Proficiency (Biology HSA)

Gap*

40%

Gap between *lowest* subgroup and *highest* subgroup within a school:

- 20%- Mathematics Proficiency (Algebra/ Data Analysis HSA)
- 20%- English Proficiency (English HSA)
- 20%- Science Proficiency (Biology HSA)
- 20%- Cohort Graduation Rate
- 20%- Cohort Dropout Rate

College-and Career-Readiness*

20%

- 60%- Cohort Graduation rate
- 40%- College and Career Preparation (CCP)
 - Advanced Placement or International Baccalaureate
 - Career and Technology Education (CTE) Concentrators
 - Enrollment in College (2-Year, 4-year, and/or Technical School)

*ALT-MSA is included in the index component