Maryland State Department of Education
Frequently Asked Questions:
School Progress Index

General Questions:

1. What is the School Progress Index (SPI) and what does it mean for individual schools?

In 2011, the United States Department of Education gave states the opportunity to develop a new system for measuring and reporting school performance. Maryland re-designed its accountability system focusing on the progress schools are making towards improving student achievement, closing achievement gaps, and enabling students to move towards readiness for college and career by mastering grade-level and course-level curriculum goals each year. Under this new system, Maryland has adopted a realistic goal of cutting in half the number of students in each school who are not achieving at the proficient level. With the help of teachers and principals across the State, Maryland has also developed measures of school progress based on multiple Indicators and referencing Annual Measureable Objectives (AMOs) based on the school's history. These indicators are compared to the school's progress targets and combined to generate a School Progress Index (SPI) for every school. The SPI is an estimate of the extent to which the school has met its targets. A school on target to progress as expected will achieve an Index score of 1 or better.

2. Is the accountability measure called School Performance Index or School Progress Index?

It is called the School Progress Index. The original title was the School Performance Index. Upon further consideration, it was determined that School Progress Index better described the Index since the components are based upon progress and growth, not upon a single standard of achievement. The U.S. Department of Education approved Maryland's request to rename the Index as School Progress Index on November 6, 2012.

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

Maryland gathered representatives of the State's education, business, and parent communities to determine important Indicators of school progress and to obtain recommendations on the weight each of the Indicators might play in forming a School Progress Index. A School Progress Index addressing three Indicators of "progress" emerged from those recommendations. As the Table below describes, Achievement and Closing Achievement Gaps were identified as essential Indicators of progress at all three levels. Student growth was addressed in grades 3 through 8, and college- and career- readiness was identified as an essential high school Indicator.

The School Progress Index will look at the following Indicators:

Indicator	Elementary and Middle Schools	High Schools
Achievement: Did the school make enough progress this year to be on target to achieve its 2017 goals for English/language arts,	X	X

Mathematics, and Science?		
Gaps: Did the school make progress in reducing the gaps between its highest and lowest performing subgroups?	X	X
Student Growth: Did students on average make a year's growth over the past year's performance?	X	
College and Career Readiness: Did the percentage of students graduating on time increase? Did students complete rigorous coursework to prepare them for college and careers?		X

These Indicators can, when taken together, paint an accurate picture of every school's progress. These 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.

4 . How much does each Indicator count toward a school's progress and why are they different for Pre-K-8 schools and high schools?

Annual statewide achievement tests are limited to elementary and middle school grades, allowing for an estimate of student growth. College and career-readiness are essential to high school improvement. Hence the difference between the elements included at each level.

Therefore, elementary and middle schools have data that can gauge Achievement, Gap Reduction, and Student Growth. High schools also follow Achievement and Gaps progress along with College- and Career-Readiness measures.

Elementary and Middle Schools	High Schools
30% Achievement	40% Achievement
40% Gap	40% Gap
30% Growth	20% College and Career-Readiness

Determination of the weights assigned to each component was based on input to the Maryland State Superintendent and State Board of Education from a standards-setting group that consisted of educators, business people, and parents. Since Maryland has long been considered a leader in student achievement, but has struggled to close the achievement gaps for some of its students, the Gap Indicator received the highest weight under the Elementary and Middle School formula and weight equal to Achievement for High Schools. Since Maryland has only recently begun to collect College- and Career-Readiness data for public school students it was decided that a weight of 20% of the total score would be appropriate.

5. **How are schools expected to move from using AYP data to the School Progress Index data in school improvement planning?**

Adequate Yearly Progress (AYP) gave a simplistic view of a school's status. Its simplicity gave no credit for incremental improvements, and its simplistic nature gave no insight into some of the deeper reasons a school was succeeding or failing in terms of progress. AYP did not recognize the real difficulty in making improvements in many low performing schools and gave a singular, unrealistic deadline for meeting a one-size-fits-all performance standard for all schools that would have eventually resulted in

virtually no schools meeting their targets.

The current structure of ESEA Flexibility with Annual Measurable Objectives (AMOs) for each school (both for all students and for each subgroup) to cut in half the number of students who are not proficient in 6 years (by 2017) recognizes the complexity in improving schools as well as factors in the pace of improvement. Thus, this process is a more reasonable measure for all schools than was the NCLB target of 100 percent proficiency by 2014.

School leaders are now provided with a more revealing array of information on the status of a school and the reasons a school may or may not be improving. The additional information contributing to the SPI and the strands for support, intervention and recognition will be more valuable in making school improvement decisions. Addressing the components of the SPI will contribute to the improvement of the SPI for a school. AYP appropriately focused school leaders on a bottom line. SPI still focuses attention on the bottom line, but it will eliminate an artificial label of failure for schools and open multiple gateways for local school systems to intervene as necessary.

Additionally, the AMOs offer precise guidance for targeted school improvement. Once local practitioners become familiar with the new AMOs, they should be able to craft School Improvement Plans (SIPs) and Student Learning Objectives (SLOs) with meaningful precision and for better deployment of resources.

6.   Why is Science weighted equally as Reading and Math within the Index?

Science at the elementary level and Biology at the high school level are included because there is general agreement that Science is of significant importance for today's students if they are to compete in the global marketplace. This is a change from the previous accountability system, which was based solely on English/language arts and Mathematics. Nationally, the trend is to incorporate Science measures into accountability systems since they are of equal importance to English/language arts and Mathematics and to the success of all students. Earlier this year, Maryland standard setters expressed similar agreement with the inclusion of Science in the School Progress Index Achievement Indicator.

While Reading and Mathematics achievement is measured annually (grades 3 through 8, and high school), Science scores are measured less frequently (grades 5, 8 and Biology). However, the annual learning expectations for all three content areas are equivalent. What is important is not the frequency with which the MSA is given, but the equal significance of Science compared to Reading and Math as part of the Maryland Curriculum.

7.   When will Index data for 2012 be released?

The 2012 SPI data will be released at the December 17, 2012 State Board meeting.

8. How will the public learn about the SPI? Is there a communication plan?

A communication plan is developed and will help with transition to the new system. As data management issues are being solved, so have communication issues, including the new vocabulary. The Maryland State Department of Education (MSDE) is working with both local school system staffs and Departmental staff to ensure that communications are clear and helpful to stakeholders as the

transition occurs. Brochures, webinars, and presentations have been developed, and more are planned; all will be available to the local school systems on http://www.marylandpublicschools.org/MSDE/programs/esea_flex/ .

A revised website http://mdreportcard.org/ will contain significant information, definitions and explanations about the SPI and each of the Indicators. The website data on the 2012 SPI will be available on December 17, 2012 following the release to the State Board.

Definitions:

9.   What is "Achievement" and how is it calculated?

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 overall school scores for the three assessments. Reading and Mathematics are administered each year beginning in grade 3, while Science is administered in grades 5 and 8. Each of Reading, Mathematics, and Science are 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.

Achievement is the percentage of "all students" group scoring proficient or advanced on Maryland standardized assessments progressing toward targets.

For elementary and middle schools, Achievement counts for 30% of the School Progress Index score. Therefore, a reported Achievement Indicator score of .3 means the school is meeting its annual proficiency goal for the year. Exceeding the goal results in an Achievement score greater than .3. If the school has fallen short of the Achievement goal for the year, the school will receive a score that is less than .3. Because the Achievement score is computed from three courses (Reading, Mathematics, and Science in elementary/middle school and English, Algebra/Data Analysis, and Biology in high school), low proficiency in one course area can be overcome by higher proficiency in the other courses.

At the high school level, since the Achievement Indicator score represents 40% of the School Progress Index score, meeting the Achievement goal of raising student proficiency results in an Achievement score of .4 for that year. Scores lower than .4 occur when high schools fall short of the Achievement goal, and scores higher than .4 occur when schools exceed those goals.

10.   What is "Gap Reduction" and how is it calculated?

The Federal government has standardized several student subgroup populations. These subgroups are defined by race, poverty level as determined by Free and Reduced Meals (FARMS) information, educational disability, and English Language Learners (ELLs). The Gap Reduction is a decrease in the performance gap between the highest and lowest performing subgroups. The Gap Indicator asks the question, "Are there any subgroups in the school that are performing far worse than the highest subgroup in the 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.

In order to receive a .4 rating a school would have to have no gap between their highest performing subgroup and their lowest. All students would be performing and progressing on the same level.

11. Can the gap be reduced by lowering the performance of the highest subgroup?

No. A condition is built into the aggregation addressing this. Once the highest percent proficient for the present year is determined, it is then compared with the percent proficient of the same subgroup from the prior year. If the prior year percentage is greater, the current year high is replaced with the prior year high.

12. What is Student Growth and how is it calculated?

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 the following measures:

- Mathematics Proficiency (MSA)
- Reading Proficiency (MSA)

In order to receive a .3 rating all students within the school would have to progress a full year's worth in Mathematics and Reading.

13. What is College- and Career- Readiness and how is it calculated?

College-and Career- Readiness represents a combination of measures that ensures students are college- or career-ready upon graduation.

College- and Career-Readiness consists of:
- 5-Year Adjusted Cohort Graduation Rate (60 percent); and
- College and Career Preparation (CCP) (40 percent).

CCP is a measurement of a student's success in one of the following areas: Advance Placement (AP) or International Baccalaureate (IB) Program; Career and Technology Education (CTE) Concentrators; or College Enrollment. 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 in a State-approved Career and Technology Education program of study (enrolled in the third course).
- Enrollment in College: Subsequently entered a post-secondary institution (two-year, four-year, or technical school) within 16 months of high school graduation.

In order to receive a rating of .2 all high school students in a school would have graduated within 5 years and would have completed one of the options for College- and Career-Preparation.

14. Is the data for 5-yr cohort graduation and College- and Career-Preparation (CCP) lagged?

Each year the cohort groups for 5-yr cohort graduation and College- and Career- Preparation are lagged. For 2012, the cohort group for 5-yr cohort graduation is 2011; and the cohort group for CCP is 2010 in order to capture the college enrollment data.

15. What is the revised definition of the College- and Career-Readiness component for the School Progress Index, and has it been approved yet?

The College- and Career-Preparation Measure of the College- and Career-Readiness Indicator of the High School Index has been approved by the U.S. Department of Education and is:

> 60% Cohort Graduation Rate
> 40% College and Career Preparation (CCP)
> - Advanced placement (AP) exam performance (schools receive credit for students who receive a 3 or better on any AP exam) OR International Baccalaureate (schools receive credit for students who receive 4 or better on any IB exam) ; or
> - Career Concentrator (schools received credit for a student enrolled in the 3rd year of a CTE Program); or
> - College enrollment (schools receive credit for students that enroll in a 2- or 4-year credit bearing, public or private, in or out of State, or technical institution).

16. What is the definition of Career Technology Education (CTE) Concentrator?

A CTE Concentrator is a student who has attained advanced standing in a State-approved Career and Technology Education program of study (enrolled in the third course of a CTE program).

Technical:

17.   What "n" (minimum group) sizes are being used?

In short, "*n*-size" for accountability/achievement remains at 5, as it has always been in Maryland. Graduation rates are based on minimum group sizes of 30.

For the School Progress Index, Achievement is only applied at the 'All Student' level, so there is no "*n*-size" count for Achievement. Growth is at the "All Student" level and likewise does not have an "*n*-size" count. Gap Reduction has an *n*-count of 20 for all areas including Cohort Graduation Rate and Cohort Dropout Rate. For College- and Career-Readiness (CCR), the College- and Career-Preparation component does not have an *n*-count; the Cohort Graduation Rate *n*-count is 30 for CCR.

18. Will the 4-year or the 5-year rate be used for Graduation within the School Progress Index (SPI)?

The five-year cohort rate will be used for Cohort Graduation Rate within the SPI for Gap and College- and Career- Readiness.

19. How does the School Progress Index address subgroups in which students are duplicated in special and racial subgroups?

By definition, students may be assigned to multiple subgroups. Hence their scores may be counted in two or more groups. This is not new with ESEA Flex. Under NCLB rules, AYP decisions were based on the performance of subgroups comprised of overlapping students. The ESEA Flexibility guidelines with respect to gap reduction goals are no different. Schools with a homogeneous population based on race/ethnicity will by definition have only one race/ethnicity subgroup and at most three special services groups – special education, Free and Reduced Meals (FARMS), and English Language Learners (ELL) – and hence at most four subgroups for Gap Reduction computations. The argument is that, in this case, it is more difficult to reduce the gap between the highest and lowest performing subgroups because the groups contain some of the same students so that gains by the lowest performing subgroup also contribute to gains in the highest performing subgroup. While this is true, the magnitude of the effect depends on the relative proportion of the number of students in the lowest performing subgroup. For example, if the lowest performing subgroup has 20 students and the highest performing subgroup has 100 students, each student in the lowest performing subgroup contributes 5% toward the lowest performing group's score and 1% toward the highest performing subgroup's score. Thus, gains or declines by students in the lowest performing subgroup contribute twice as much to the lowest performing subgroup as they do toward the highest performing subgroup.

20. Will suppression rules related to the Family Education Rights and Privacy Act (FERPA) apply (not able to provide data that is greater than or equal to 95 percent or less than or equal to 5 percent)?

Suppression rules will apply only to the "n" counts for College- and Career- Preparation (CCP) measures within the College- and Career- Readiness Indicator for the School Progress Index for High Schools. The CCP measure at the school level has small populations of students in the numerator. All other metrics of the SPI are percentages/decimals and do not identify small populations of students. Therefore, these metrics will not be suppressed.

21. How do we explain that moving from Advanced 9 to Advanced 8 in MSA is not growth?

The method for measuring growth for elementary and middle school within SPI is based on the percentage of students who scored at or above their prior year's performance level (stayed the same or improved rather than declined). There was no attempt to "value" the amount of change, since the ESEA Flexibility goal of all students demonstrating growth was deemed more appropriately measured by a metric based on the percentage of students showing growth rather than a metric based on the amount of change that would by definition be compensatory (many small improvers could be potentially masked by a few large decliners). This is basically a binary measure for this component of the index. Overall, Maryland's use of multiple measures and triangulation of information is seen as a preferred approach to measuring student growth.

The binary matrix or SPI Growth Calculation value is an aggregate that applies only to the whole school. No individual student performance is identified, and no student is flagged as having gained or lost ground.

22. What do we do if it is a new school? Or a school with new grade configurations?

Currently, the baseline year for the Annual Measurable Objectives (AMOs) will be the year in which the school and/or subgroup data are first available. The formula is then applied with the expectation of a 50% gap reduction between the highest- and lowest-performing subgroups by the target year. The question was if a new school and/or subgroup was to appear in 2016, would the AMO be based on a 50% reduction in one year or an 8.3% reduction for the final remaining year (50% / 6 years = 8.3% per year)? MSDE is checking with USDE on this question and – will provide information when it is available.

23. Does the National Student Clearinghouse include 2 and 4 year colleges/universities? Also, for example, are culinary and truck driving schools included?

College enrollment data is obtained from the National Student Clearinghouse for the College Enrollment portion of the College- and Career- Preparation component of the College- and Career-Readiness Indicator in the School Progress Index for High Schools.

The National Student Clearinghouse represents 96 per cent of all U.S. Institutions of Higher Learning and includes, "All types of postsecondary institutions: in-state, out-of-state, two-year, four-year, public, private, trade school, vocational, etc."

24. Can you/will you compute and provide AMO targets for Science?

AMO targets for Science have been calculated for the School Progress Index (Achievement and Gap). These AMOs will be delivered to local school systems when finalized as part of the 2012 SPI local deliverables.

25. Can Dual Enrollment (student enrolled in both high school and college), military and/or employment be added to the College- and Career-Preparation measures?

Any proposed changes in the SPI College- and Career-Preparation measures beyond 2012 would need review and approval by the State Superintendent and the U.S. Department of Education.

26. Can International Baccalaureate (IB) data be part of the College and Career Preparation Data?

MSDE received approval to use IB data in the SPI. See Questions #13 and 14.

27. Where do the Advanced Placement (AP) data come from for the College- and Career-Preparation?

MSDE receives a summary file of all AP records for the State from College Board.

28. If only one portion of the SPI includes a "growth" measure then how can we say that is an adequate way to compute growth as part of a teacher's evaluation?

Growth was employed at the elementary and middle school levels only because all of the right elements were present. Growth occurs at the high school level, as well, but valid statewide measures are not available right now to support such a measure. For a statewide accountability program, graduation related data proves to be highly valuable for the SPI and provides good insights into the progress of a

school toward its goals.

The student growth component of the new educator evaluation initiative is composed of multiple measures, only one of which is drawn specifically from the School Progress Index. The incorporation of a whole-school measure reflects Maryland's belief that the faculty as a whole share ownership of the success of a school.

29. What does 1.0 or higher mean for the SPI, the Indicators, or the measures within the Indicators?

A progress scale value of 1.0 or higher in the measure, the Indicator or the Index means the target was achieved.

Strands for Support, Intervention and Recognition:

30. Once a school's Student Progress Index score is calculated, how is it used?

Once a school's SPI is calculated, the school is classified into one of five "strands" for support, intervention and recognition. Schools are classified into five strands for support, intervention and recognition based on their overall School Progress Index score as well as their scores on the individual Indicators. These strands are designed to help the school leaders gain a better understanding of how the school is progressing towards its goals and to better direct resources and support to the schools. The following table explains what each strand means:

Strand for support, intervention and recognition	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 3 annual Indicator Targets
Strand 2 Generally meeting or exceeding academic standards	SPI Score is greater than or equal to 0.9	Meeting 2 of 3 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 require differentiated change	SPI Score is greater than or equal to 0.9	Meeting no annual Indicator Targets
Strand 5 Has serious needs that will require systemic services.	SPI Score is less than 0.9	Meeting zero, one or two annual Indicator Targets

A school in Strand 1 had met or exceeded its goal to increase student proficiency and has met its individual Indicator goals as well. A school in Strand 2 has met or exceeded its goal to increase student progress, but has not met one of its individual Indicator goals. Schools in Stands 3 and 4 have met or nearly met their goal to increase student progress, but have missed two or all individual Indicator goals, respectively. Strand 5 is reserved for schools failing to increase student progress, and falling short of meeting all three Indicator goals.

31. How is it possible for a school to have a high percentage of students performing at the "proficient and advanced" levels, but have a Strand of 3 or 4 ranking?

Many schools scoring well on the Maryland School Assessments or the High School Assessments will still face challenges. Achievement is only one of the three indicators in 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, causing the school's Gap score to fall below .4. Similar issues in student growth (elementary and middle schools) and college- and career-readiness (for high schools) may be at play for the school. Analysis of data all the way down to the classroom level will be needed to reveal the weaknesses needing attention.

32. How are schools grouped based on a measure of the magnitude of the issues the schools face?

The State Education Agency (SEA) and the Local Education Agencies (LEAs) are required to support schools that have not met all of the AMOs. Maryland has developed a series of Strands for Support, Intervention and Recognition to differentiate the types of support schools will need and to provide a clearer picture for schools and stakeholders about the areas in which the schools need to improve to reach their Annual Measurable Objectives.

33. How do the strands come into play when identifying the Priority, Focus, and Approaching Target schools?

Strands do not come into play when identifying Priority and Focus Schools. These schools are identified based on the USDE definition of Priority and Focus Schools. Please see ESEA Flexibility waiver at http://www.marylandpublicschools.org/NR/rdonlyres/118D52EC-38DA-4EC8-97AA-2D7B29FFC604/32673/MD_ESEA_Request_r_06222012_.pdf , sections 2.D and 2.E. Identification of Priority School designation is based on academic achievement. Identification of Focus schools is based on the gaps between the highest performing subgroup and the lowest performing subgroup.

Schools are identified as Approaching Target Schools if they are Title I schools and have not made all AMOs in reading and math for all subgroups and the "all students" category. Identification of Approaching Target schools is based on state assessment achievement.

Schools are placed in strands based upon where the individual school falls in the composite score of gap, achievement, and growth (or college- and career-preparation for high schools).

34. How are strands assigned?

The strand for support, intervention and recognition assignment process provides information on the confounding factors that contribute to the SPI. The methodology uses the achievement of targets for each of the SPI component score areas plus the overall SPI score to place schools in strands. This methodology provides a rational basis for the assignment of strands in a way that will guide school leaders in making school improvement decisions.

While the SPI itself is important, it is equally important to know if the school has all the right conditions in place for continued school improvement. It is important to know if the school is on track overall with its improvements, but the object is to address the needs of all groups through emphasis on achievement and gap reduction along with growth at the elementary and middle levels and college- and career-readiness information at the high school level. A school scoring a high SPI may meet the needs of many student groups but may not necessarily be meeting the needs of some of the traditionally lower

performing groups.

By allowing the SPI to operate as an independent variable, great flexibility is provided along with a more compensatory nature (it functions like the 1602 combined score for HSAs).

The SPI plus the component scores provide insights into the work to be done as well as a school's strengths to be cultivated. A good school improvement plan would look at the component scores and identify improvement work around those measures. The result should be improvements in the SPI.

35. Why is Maryland adopting this new accountability system and what assistance will be provided to schools that are in the lower-level Strands?

In the prior accountability system, Adequate Yearly Progress published a host of annual targets for schools and pronounced schools "failing" when one content measure fell short. The new School Progress Index sets more reasonable goals and provides a much more in depth view of the strengths and weaknesses of a particular school. With this comprehensive data, school leaders can provide targeted resources and interventions to overcome a particular weakness. Strand information for support, intervention and recognition, viewed along with Indicator information and overall SPI 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 same kinds of 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 the most problematic schools. Consequently, limited resources are more accurately focused on the greatest challenges, and communities and schools can rally around them.