TO: Members of the State Board of Education

FROM: Lillian M. Lowery, Ed.D.

DATE: October 30, 2013

SUBJECT: School Progress/School Progress Index: 2013 High School Results

---

PURPOSE:

To provide a summary and overview of the components, calculation, and results of School Progress and the School Progress Index for 2013.

BACKGROUND:

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, measuring student growth, 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 developed measures of school progress based on multiple Indicators and referencing Annual Measurable 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.

Summary of School Progress Results for High Schools
The MSA data release marks the second year under Maryland's granted flexibility regarding the federal No Child Left Behind (NCLB) law. Under Maryland's new "School Progress" plan, each school is measured against more realistic and achievable targets, and must work to strengthen achievement across all subgroups.

Schools and systems will work to cut in half over the next six years the percentage of students not scoring at proficient levels on the exams.   As in the past, the accountability system measures all students as well as racial subgroups and groups of students receiving additional services, such as special education, English language learners and FARMs. Schools and systems must work to hit improvement targets, known as annual measureable objectives (AMOs). AMOs will be

calculated for the student population in each school as well as in special service and racial subgroups.

Maryland's plan now focuses special attention on those schools with the most difficulty.

Under the School Progress calculation, over 70 percent (70.8 percent) of Maryland High Schools met the AMO targets for all students compared to 87.1 percent in 2012. The targets will continue to rise over the next four years.

Data Tables

Percentage of Schools Meeting "All Students"

2012			2013		
School Count	Schools Met	% Met	School Count	Schools Met	% Met
249	217	87.1%	243	172	70.8%

Percentage of Subgroups for High Schools Meeting AMOs

2012				2013			
School Count	Total Sub-groups	Subgroups Met	% Sub-groups Met	School Count	Total Sub-groups	Subgroups Met	% Sub-groups Met
249	3,203	3,052	95.3%	243	3,237	2,870	88.7%

EXECUTIVE SUMMARY:

The School Progress Index addresses Indicators of "progress" —Achievement, Closing Achievement Gaps, Student Growth, and College- and Career-Readiness. 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.

Measures of progress were selected for each Indicator. The Maryland School Assessment (MSA) tests in reading, mathematics, and science and the High School Assessment tests in Algebra/Data Analysis, English, and Biology are used to measure student achievement in the elementary, middle, and high schools. Additional measures in the high school model include 5-year cohort graduation rate, 4-year cohort dropout rate, career preparation, performance on rigorous academic tests, and enrollment in college. Annual progress targets have been established for each measure and for school and subgroup based on 2011 baseline data and reflecting equal increments over time.

At each level and for each progress Indicator, actual performance is compared to the progress target. A value of 1.00 indicates that the progress target was achieved. Values less than 1.00 indicate progress that fell just short of the target. Values greater than 1.00 indicate progress that exceeded the target. The School Progress Index is a weighted composite of these Indicators, as shown below.

Values have been calculated for every content/subgroup and aggregate combination for every school and the State aggregate. The table below describes the values for each Indicator and the composite School Progress Index for Maryland.

Table 1. State Summary of School Progress by Level

Level	Indicator and Composite Progress Index Values for Maryland			
2013	Achievement	Gap	CCR	School Progress
High School	0.9797	0.9115	0.9917	0.9549
2012				
High School	0.9936	0.9602	1.0002	0.9816

Based on the SPI and performance on the Indicators, schools are placed in one of five Strands for support, intervention, and recognition as shown in Table 2 chart below.

Table 2.

Strand	Overall Score	Number of Components Met		
		E, M, H	EM, MH, EH	EMH
1	1.0 or greater	All 3	All 6	All 9
2		2 of 3	4-5 of 6	6-8 of 9
3	Greater than or equal to 0.9	1 of 3	2-3 of 6	3-5 of 9
4		0 of 3	0-1 of 6	0-2 of 9
5	Less than 0.9	0-2 of 3	0-4 of 6	0-6 of 9

As Table 3 below describes, in 2013 62 high schools—25.6 percent—achieved an SPI of 1.00 or higher and achieved all three Progress Indicators. 57.4 percent were classified in Strand 2 or Strand 3, indicating attainment of one or more Progress Indicators. 16.9 percent of schools were classified in Strand 4 or Strand 5.

Table 3. Number of Schools – Strand Assignment

	High Schools		
Strand	2012	2013	Diff
1	82	62	-20
2	84	74	-10
3	54	65	11
4	14	20	6
5	8	21	13
Total	242	242	

CONCLUSION:

The purpose of this transmittal memo report is to describe the model and its application, Maryland's model holds schools accountable for continuous improvement in student learning. This accountability model employs three Indicators and multiple Measures; establishes clear, ambitious, and reasonable progress targets aligned with critical content; and determines progress using a set of Indicators and a composite School Progress Index. This wealth of data will enable schools and systems to drill down to identify what is working and what is not.

Data specific to schools and school systems will be reported on the Maryland Report Card website at 12:00 p.m. on October 30. School and central office staff will review, analyze, and interpret this information, share it with their school communities, and use it as a planning tool to guide actions to improve the learning of all students.

School Progress (SP) versus School Progress Index (SPI) Elementary and Middle Schools

SP

Student performance measured annually in Reading and Mathematics in grades 3-8. High schools English and Algebra.

Schools accountable for attainment of "proficiency" by ALL students and each subgroups

Schools accountable for participation rate for ALL students and each subgroup and Attendance Rate for ALL students

No overall school rating or interventions

SPI

Student performance measured annually in Reading, Mathematics and Science in grades 3-8. High schools English, Algebra and Biology.

Schools accountable for achievement, growth and closing achievement gaps for ALL students and subgroups

Multiple indicators of performance including progress, closing gaps and growth targets

Overall School Index and Strand assigned with associated interventions

- All schools should improve the learning of **all** students.

- Schools have different needs and operate in specific contexts - the strategies they adopt for improvement should reflect their needs.

- School performance targets should reflect the school's history of student performance.

- Schools should be judged by
  - the progress they make towards improving the learning of all students, in the aggregate and by subgroup.
  - the extent to which they close subgroup gaps in achievement.

- Moving to Realistic and Achievable targets through ESEA Flexibility

- New Annual Measurable Objectives (AMOs) approved by USDE as part of Maryland's ESEA Flexibility Request

- Uses MSA results and attendance data

- **Three indicators:**
  - Proficiency Progress

    English and Algebra/Data Analysis Proficiency

    All Student group and at each subgroup

  - Participation Rate
    - All Student group and at each subgroup

  - 4 or 5 Year Adjusted Cohort Graduation Rate
    - All Student group and at each subgroup

Proficiency Progress

- ## **Establishing AMOs - Calculations**
  - 50% reduction of basic proficiency by 2017 (Subtract the non-proficient number from 100, divide in half, then divide this number by 6)
  - Target increases in equal increments for the 6 years from 2012 to 2017
  - For "all students" group and each subgroup
  - 2011 assessment results used as the baseline year for setting AMOs
  - Each school for **all and each subgroup** has its own unique targets based on its baseline year results

Examples of Achievement Targets

2011	2012	2013	2014	2015	2016	2017	Gain/Year
0.00%	8.33%	16.67%	25.00%	33.33%	41.67%	50.00%	8.33%
10.00%	17.50%	25.00%	32.50%	40.00%	47.50%	55.00%	7.50%
20.00%	26.67%	33.33%	40.00%	46.67%	53.33%	60.00%	6.67%
30.00%	35.83%	41.67%	47.50%	53.33%	59.17%	65.00%	5.83%
40.00%	45.00%	50.00%	55.00%	60.00%	65.00%	70.00%	5.00%
50.00%	54.17%	58.33%	62.50%	66.67%	70.83%	75.00%	4.17%
60.00%	63.33%	66.67%	70.00%	73.33%	76.67%	80.00%	3.33%
70.00%	72.50%	75.00%	77.50%	80.00%	82.50%	85.00%	2.50%
80.00%	81.67%	83.33%	85.00%	86.67%	88.33%	90.00%	1.67%
90.00%	90.83%	91.67%	92.50%	93.33%	94.17%	95.00%	0.83%
95.00%	95.42%	95.83%	96.25%	96.67%	97.08%	97.50%	0.42%

2012 versus 2013 School Progress Results

High Schools

Percentage of Subgroups Meeting AMOs

2012				2013			
School Count	Total Sub-groups	Sub-groups Met	% Sub-groups Met	School Count	Total Sub-groups	Sub-groups Met	% Sub-groups Met
249	3,203	3,052	95.3%	243	3,237	2,870	88.7%

Percentage of Schools Meeting "All Students"

2012			2013		
School Count	Schools Met	% Met	School Count	Schools Met	% Met
249	217	87.1%	243	172	70.8%

2012 versus 2013 Breakdown

2012 Local School System Count of Schools Meeting the 'All Students'		
Category	All – 3 Schools	> 3 Schools
Met – All Students	16	
Not Met – All Students	6	2

2013 Local School System Count of Schools Meeting the 'All Students'		
Category	All - 3 Schools	> 3 Schools
Met – All Students	7	
Not Met – All Students	13	4

AMO's are school specific and increase every year

Summary

- "The progress of each school toward meeting their own unique targets provide valuable information over time on the effectiveness of instructional strategies, the inherent needs of the students and the extent to which the school is fulfilling those needs."
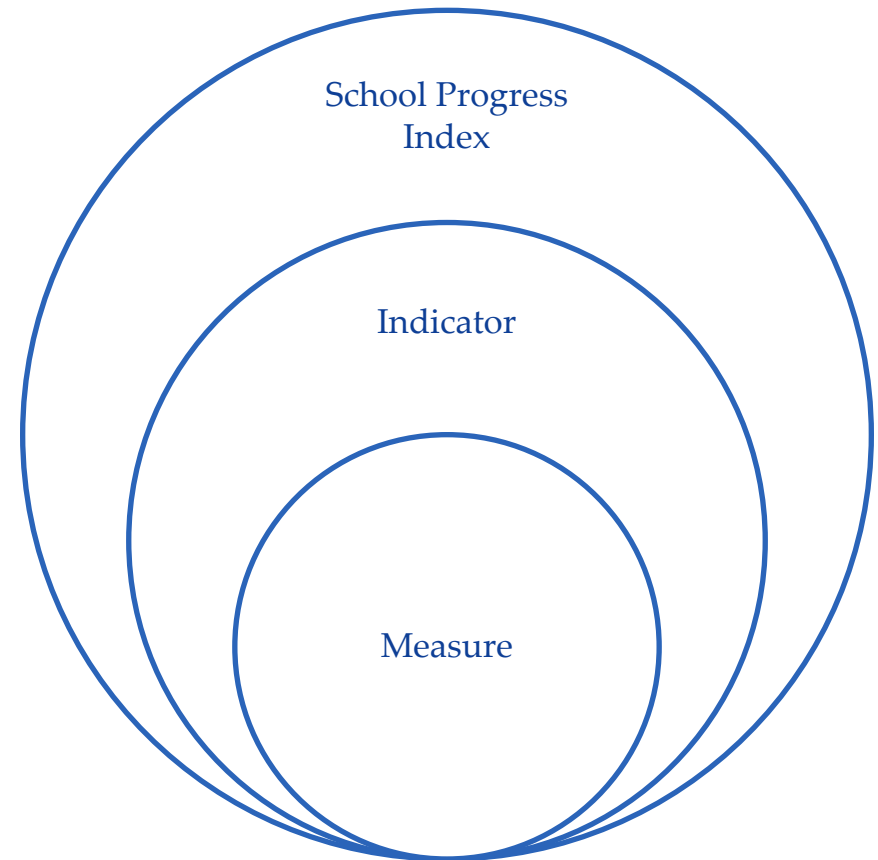
ESEA FLEXIBILITY: SPI

- All schools should improve the learning of **all** students.

- Schools have different needs and operate in specific contexts - the strategies they adopt for improvement should reflect their needs.

- School performance targets should reflect the school's history of student performance.

What is the School Progress Index?

▶ Continuous scale based on indicators of adequacy:
  ‣ Achievement (E, M, HS)
  ‣ Growth (E, M)
  ‣ Gap Reduction (E, M, HS)
  ‣ College & Career Readiness (HS)

▶ Stakeholder Input (Standard Setting):
  ‣ Each indicator is individually weighted based on importance in assessing overall school progress
  ‣ Measures within indicators individually weighted

▶ Measured at the Elementary, Middle, and High School Levels (span)
  ‣ Combined schools with multiple span codes are measured at each level and then combined to create a single score

School Progress Index

Indicator

Measure

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)

Growth* — 30%

Percent of students making one year's growth:

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

*ALT-MSA is included in the index component

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)

Indicators

- **<u>Achievement</u>** - Percentage of "all students" proficient or advanced on Algebra, English and Biology

- **<u>Gap Reduction</u>** - Decrease in the performance gap between the highest and lowest performing subgroups for Algebra, English, Biology Proficiency, 5 year Cohort Grad Rate and 4 year Cohort Dropout Rate

- **<u>College and Career-Readiness</u> (CCR)** – Assure students are ready for college or career upon graduation by measuring the 5 Year Cohort Grad Rate and meeting AP, IB or CTE Concentrator advance standing or enrolled in college within 16 months of graduation

State Level Achievement
Annual Measurable Objectives (AMOs)

Span	Content	Baseline 2011	2012	2013	2014	2015	2016	2017
High School	Algebra	85.46	86.67	87.88	89.09	90.31	91.52	92.73
	English	82.96	84.38	85.80	87.22	88.64	90.06	91.48
	Biology	82.17	83.66	85.14	86.63	88.12	89.60	91.09

Span	Content	Baseline 2011	2012	2013	2014	2015	2016	2017
High School	Algebra	66.80	69.57	72.33	75.10	77.87	80.63	83.40
	English	63.94	66.95	69.95	72.96	75.96	78.97	81.97
	Biology	66.08	68.91	71.74	74.56	77.39	80.22	83.04
	5- yr Cohort Grad	65.82	68.67	71.52	74.36	77.21	80.06	82.91
	4- yr Dropout	78.27	80.08	81.89	83.70	85.51	87.32	89.14

State Level College and Career Readiness Annual Measurable Objectives (AMOs)

Content	Base 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
5 yr Cohort Grad Rate*	84.57	85.15	85.72	86.30	86.88	87.46	88.04	88.62	89.20	89.78
College & Career Prep	83.57	84.94	86.30	87.67	89.04	90.41	91.78	N/A	N/A	N/A

*Based on a 50% reduction in 9 years

State AMO Status – High School

Year	Achievement			Gap				
	Algebra	**English**	**Biology**	**Algebra**	**English**	**Biology**	**5yr Grad**	**Drop-out**
2012	85.85%	84.48% MET	82.74%	65.06%	65.47%	65.91%	67.80%	75.61%
2012 AMO	86.67%	84.38%	83.66%	69.57%	66.95%	68.91%	68.67%	80.08%
2013	85.99%	84.13%	83.46%	65.08%	58.27%	65.56%	68.42%	78.15%
2013 AMO	87.88%	85.80%	85.14%	72.33%	69.95%	71.74%	71.52%	81.89%

State AMO Status – High School

Year	College and Career Readiness	
	2012 5-Yr Grad Rate*	**2011 College & Career Preparation ***
2012	85.51% MET	84.42%
2012 AMO	85.15%	84.94%
2013	86.32% MET	83.61%
2013 AMO	85.72%	86.30%

* Lagged due to the availability of data

Local High School Span SPI

- There are 14 LEAs with a High School SPI of greater than 1.0

- Six LEAs have a High School SPI of between .9 and 1.0

- Four LEAs have a High School SPI of less than .9

Note: A 1.0 SPI value means meeting the target

State Board Meeting

2013 School Progress Index- Strands for Support, Intervention, and Recognition for High Schools Summary

Henry R Johnson, Jr., Ed. D
Assistant State Superintendent
Division of Curriculum, Assessment and Accountability

Strand Categorization

Strand	Overall Score	Number of Indicators Met		
		E, M, H	**EM, MH, EH**	**EMH**
1	1.0 or greater	All 3	All 6	All 9
2	Greater than or equal to 0.9	2 of 3	4-5 of 6	6-8 of 9
3		1 of 3	2-3 of 6	3-5 of 9
4		0 of 3	0-1 of 6	0-2 of 9
5	Less than 0.9	0-2 of 3	0-4 of 6	0-6 of 9

- Number of Indicators Met includes:
    - Indicators for which the Percent Proficient of Target for the weighted indicator composite = 1.00 or greater
    - Indicators that were not evaluated due to small population

- E, M, H defines a particular grade span for a school.
    - E – Elementary
    - M – Middle
    - H – High
  Some schools may have multiple grade spans (i.e. a school containing grades 6-12 would be a MH school).

Number of Schools

■ 2012 ■ 2013 ■ Difference

Strand 1: 82, 62, -20
Strand 2: 84, 74, -10
Strand 3: 54, 65, 11
Strand 4: 14, 20, 6
Strand 5: 8, 21, 13
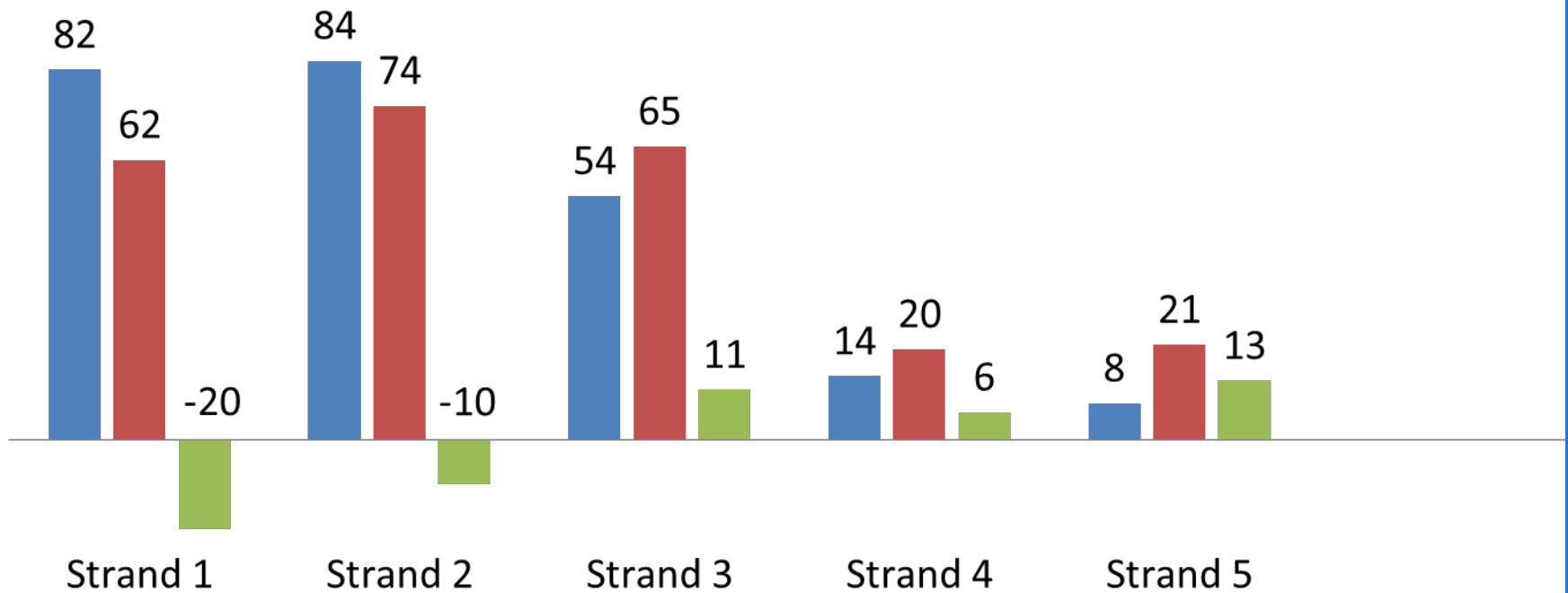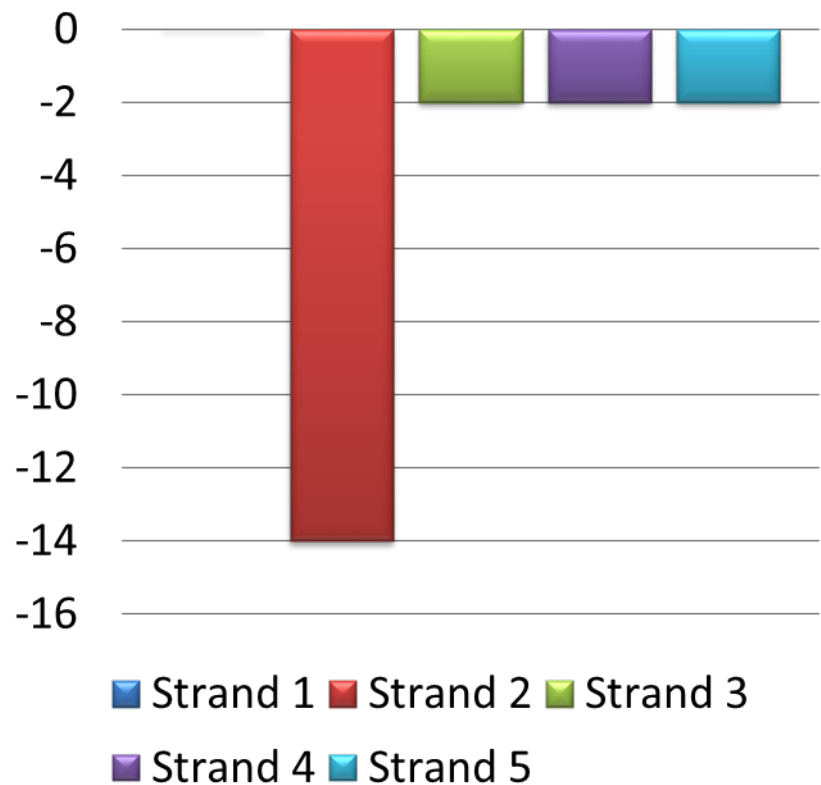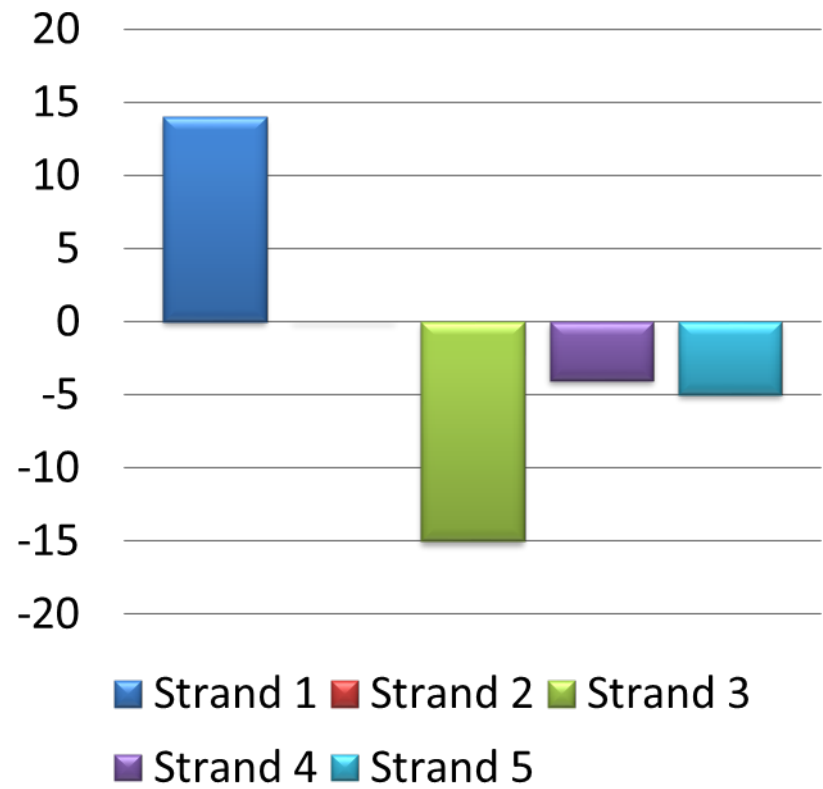
Strand 1

2012 vs 2013 HS SPI Totals:

- 2012= 82 Schools
- 2013= 62 Schools
- Difference= -20 Schools

Strand	Difference
1	0
2	-14
3	-2
4	-2
5	-2

Strand Changes
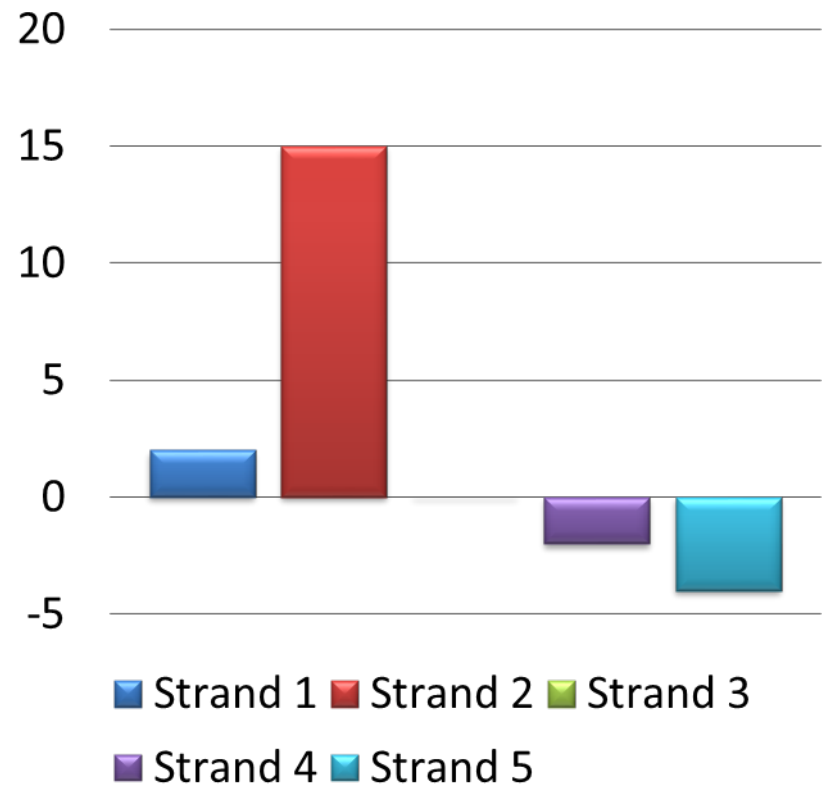
Strand 2

2012 vs 2013 HS SPI Totals:

- 2012= 84 Schools
- 2013= 74 Schools
- Difference= -10 Schools

Strand	Difference
1	14
2	0
3	-15
4	-4
5	-5

Strand Changes

Strand 1 Strand 2 Strand 3 Strand 4 Strand 5

Strand 3

2012 vs 2013 HS SPI Totals:

- 2012= 54 Schools
- 2013= 65 Schools
- Difference= 11 Schools

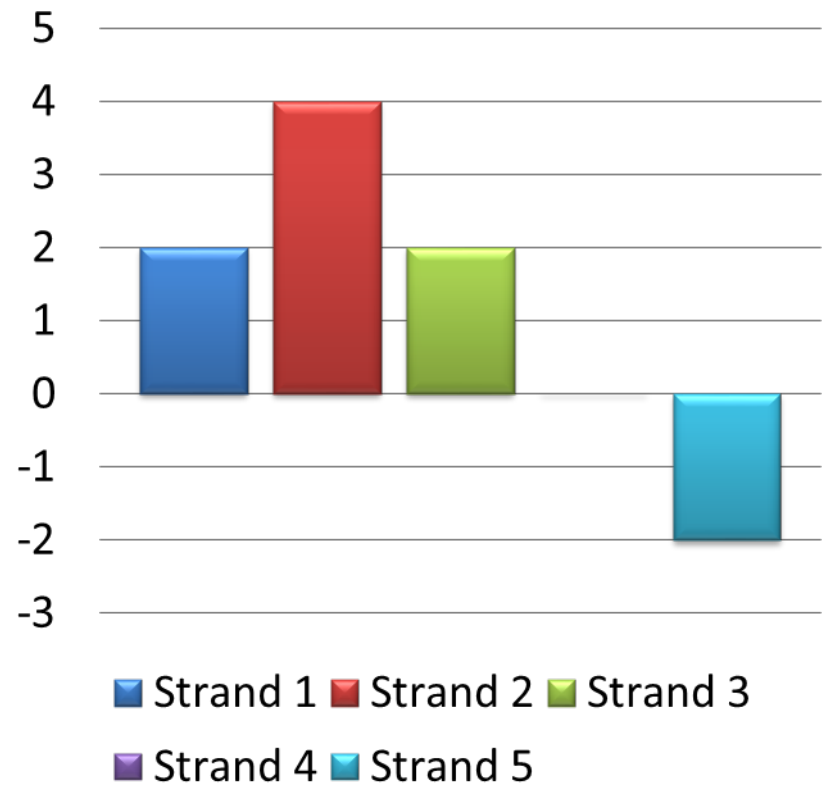| Strand	Difference
1	2
2	15
3	0
4	-2
5	-4

Strand Changes

Strand 4

2012 vs 2013 HS SPI Totals:

- 2012= 14 Schools
- 2013= 20 Schools
- Difference= 6 Schools

Strand	Difference
1	2
2	4
3	2
4	0
5	-2

Strand Changes

Legend: ■ Strand 1 ■ Strand 2 ■ Strand 3 ■ Strand 4 ■ Strand 5
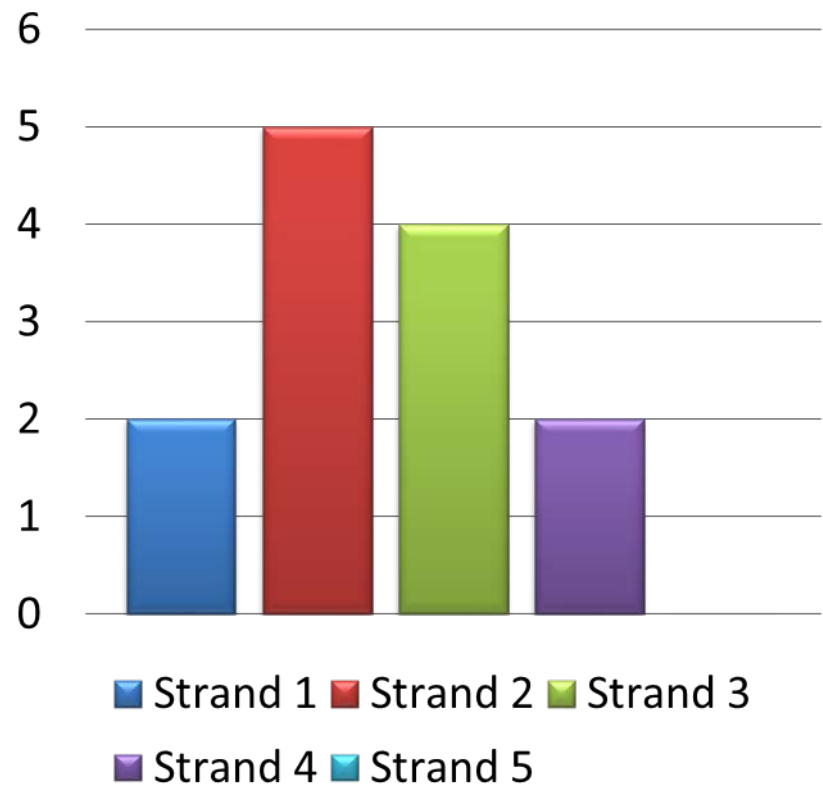
Strand 5

2012 vs 2013 HS SPI Totals:

- 2012= 8 Schools
- 2013= 21 Schools
- Difference= 13 Schools

Strand	Difference
1	2
2	5
3	4
4	2
5	0

Strand Changes

Local System Strand Summary

- There are 11 LEAs that have 100% of their high schools in Strand 1 through Strand 3

- Eleven additional LEAs have 80 to 99% of their High Schools in Strand 1 through 3

- Twelve LEAs have no High Schools in Strands 4 or 5

- Ten additional LEAs have less than 21% of their High Schools in Strands 4 and 5.

Strand	Maryland State Department of Education (MSDE) and Local Education Agency (LEA) Support
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 on 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 Plans (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 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.

Questions?