MARYLAND STATE DEPARTMENT OF EDUCATION
EQUITY AND EXCELLENCE

Karen B. Salmon, Ph.D.
State Superintendent of Schools

TO: Members of the State Board of Education

FROM: Karen B. Salmon, Ph.D.

DATE: February 26, 2019

SUBJECT: ESSA Accountability Implementation Update and Data Analysis Results

PURPOSE:

To inform the State Board on the ongoing implementation and analysis of the 2018 accountability system, to demonstrate updates to the Maryland Report Card, and to discuss potential adjustments to the 2019 system.

EXECUTIVE SUMMARY:

Information presented will include:

1. Update on reporting calendar
2. Demonstration of School Report Card student group results
3. Update on appeals process
4. Discussion of possible modifications to points and ratings assignments (item for Board discussion and direction regarding future actions)
5. Data analysis results: Student group performance (within-school analysis)
6. Data analysis results: School performance and school characteristics (cross-school analysis)
7. Data analysis results: Overview of ongoing internal validity analyses

ACTION:

No action is necessary; for discussion only.

ESSA Accountability Implementation Update and Data Analysis Results

MARYLAND STATE DEPARTMENT OF EDUCATION

EQUITY AND EXCELLENCE

STATE BOARD MEETING

February 26, 2019

Accountability Implementation Update and Data Analysis Results

1. Update on reporting calendar
2. Demonstration of School Report Card student group results
3. Update on appeals process
4. Discussion of possible modifications to points and ratings assignments
5. Data analysis results: Student group performance (within-school analysis)
6. Data analysis results: School performance and school characteristics (cross-school analysis)
7. Data analysis results: Overview of ongoing internal validity analyses

Update On Reporting Calendar

Report Card Website Developments		Available Dec Board Meeting	Available Jan Board Meeting	Available Feb Board Meeting	By March/ Apr Board Meeting	Year 2
Accountability	Maryland School Report Card	x				
	School data downloads (Star Ranking and Accountability Detail)	x	x			
	School Report Card Refresh: Appealed Schools			x		
	School Report Card Details (Disaggregation by student groups)			x		
	Annual Targets (Proficiency, English Learner, Graduation Rate)				x	
	Equity				x	
	Comprehensive Support and Improvement Schools		x			
	Targeted Support and Improvement Schools			x		
	Analysis tools (Comparison to like schools)					x
Additional Reporting of 2017-2018	MDCAP (Science, Alternate Assessments)				x	
	Civil Rights Data Collection (CRDC)				x	
	Cohort Graduation Rate			x		
	Financial					x

Update on Appeals

Handout available day of State Board meeting

Possible Modifications for 2019 Accountability System

Item already approved:

- Amend the middle school "Access to a Well-Rounded Curriculum" measure to include the 6-8 grade band

Item to discuss:

- Single-year adjustment of star "cut points"

Item considered and not recommended for discussion or adoption:

- Change chronic absenteeism measure points from "assigned scores" to "percent of points earned"

Possible Modifications to Points and Ratings Assignments

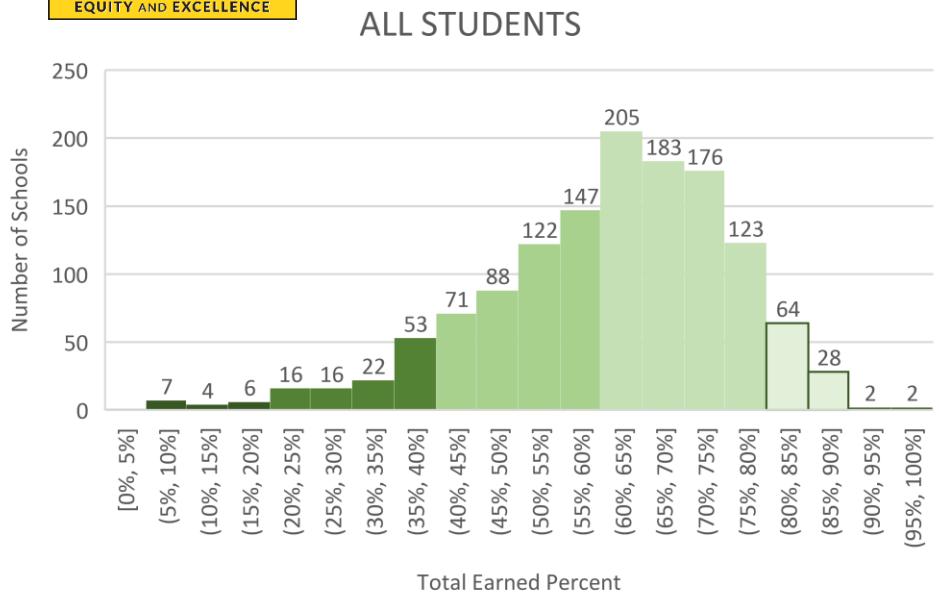
2017-2018 Distribution of Star Ratings

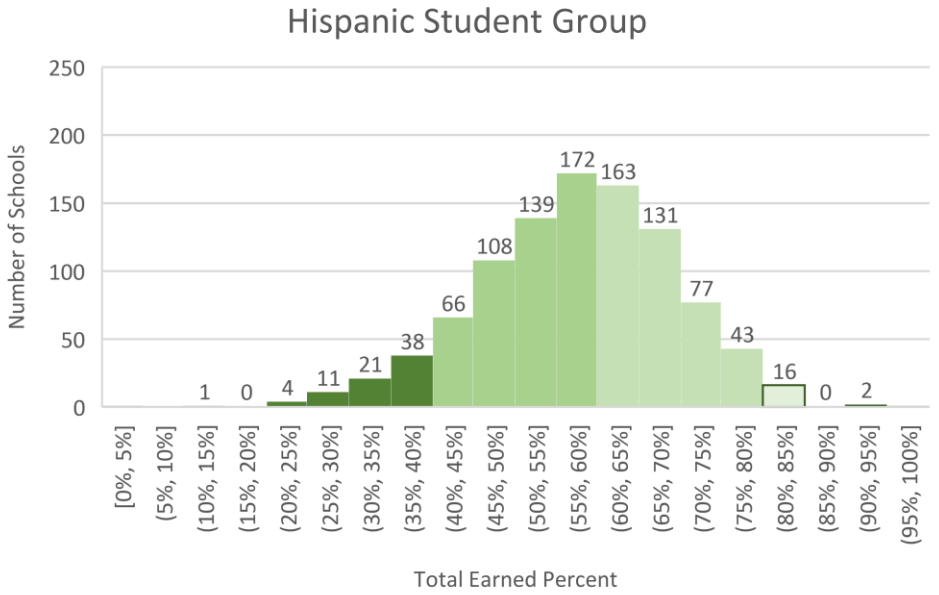
		ALL SCHOOLS		Elementary		Middle		High		Combined	
Total Earned Percent	**Awarded Stars**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Less than 30%	★	35	3%	7	1%	1	0%	8	4%	19	14%
30% or greater and less than 45%	★★	144	11%	60	8%	19	9%	27	13%	38	28%
45% or greater and less than 60%	★★★	356	27%	177	23%	91	42%	50	25%	38	28%
60% or greater and less than 75%	★★★★	564	43%	377	49%	80	37%	75	37%	32	24%
75% or greater	★★★★★	219	17%	144	19%	25	12%	42	21%	8	6%

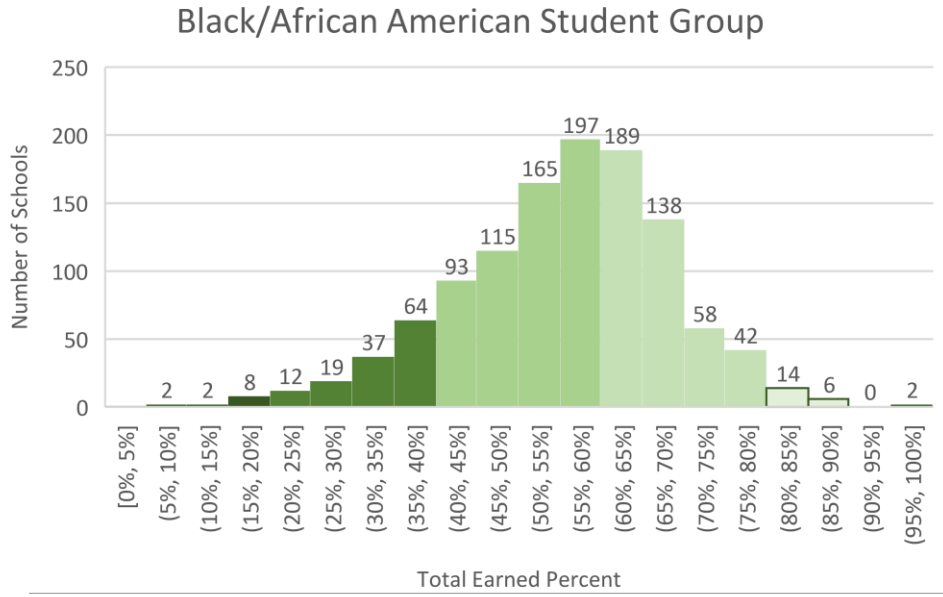
2018 Methodology: Set a standard for five-star schools, then used preliminary data to set the remaining cut points based on an estimated distribution (~10%, 20%, 40%, 20%, 10%), a wide "stable" three-star band, and symmetry.

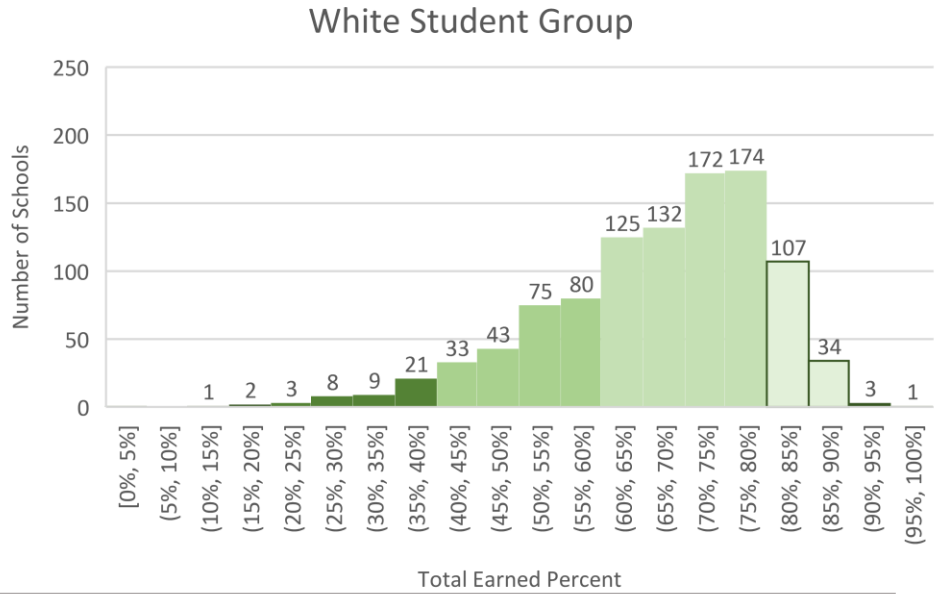
See handout for simulations using 2018 data

Distribution of Points Earned Percent, By Student Group

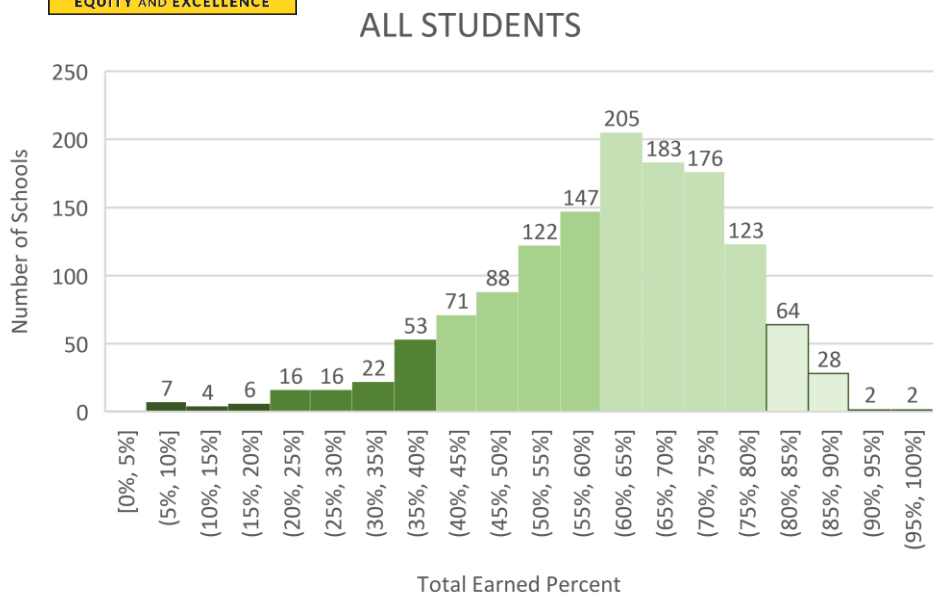


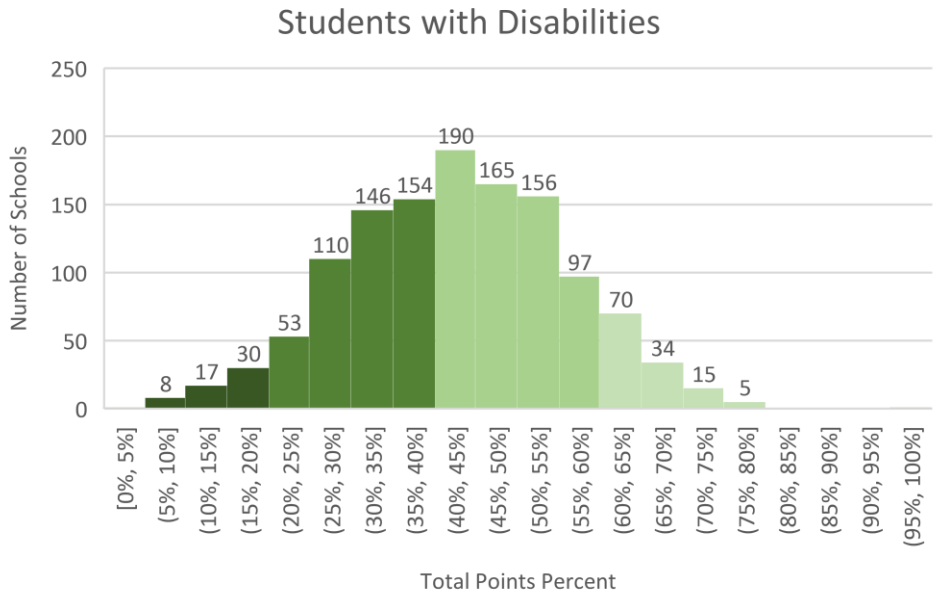


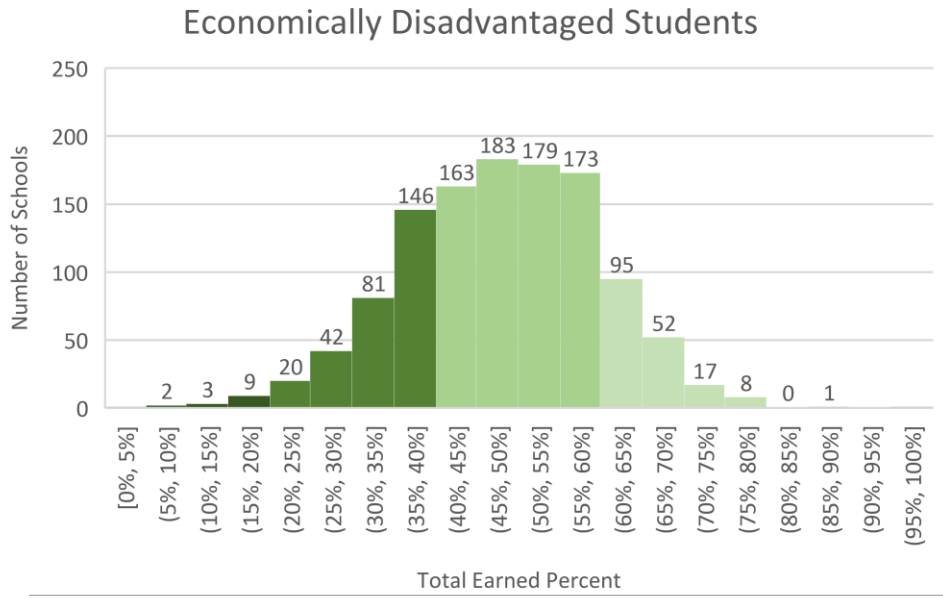


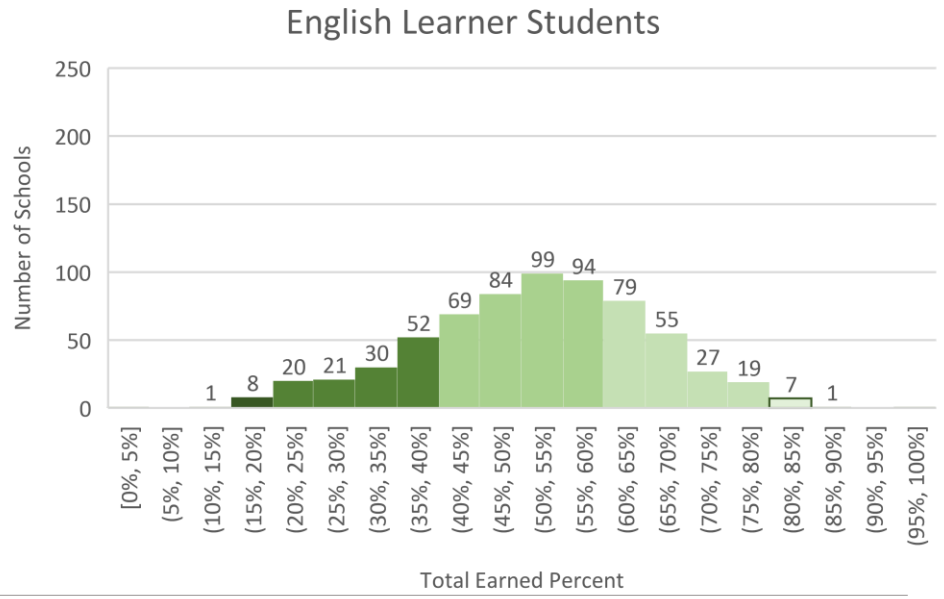


Distribution of Points Earned Percent, By Student Group









Distribution of Points Earned Percent, By Student Group

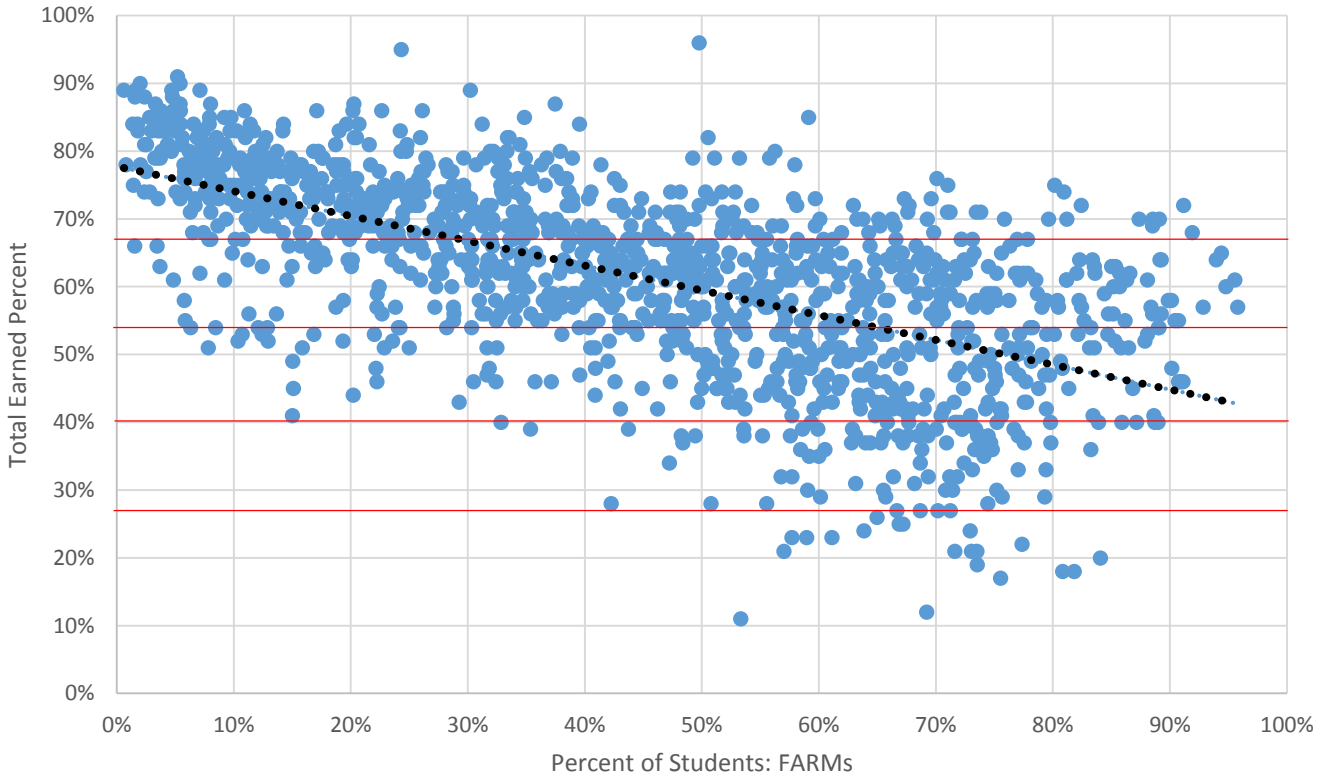
		Number of Schools					Percent of Schools				
	School Average, Total Earned Percent	[0% to 20%)	[20% to 40%)	[40% to 60%)	[60% to 80%)	[80% to 100%]	[0% to 20%)	[20% to 40%)	[40% to 60%)	[60% to 80%)	[80% to 100%]
All students	61%	17	107	428	687	96	1%	8%	32%	51%	7%
Asian	75%	0	5	46	303	214	0%	1%	8%	53%	38%
Black/African American	55%	12	132	570	427	22	1%	11%	49%	37%	2%
Hispanic/Latino	58%	1	74	485	414	18	0%	7%	49%	42%	2%
Two or more Races	60%	0	46	285	322	38	0%	7%	41%	47%	5%
White	67%	3	41	231	603	145	0%	4%	23%	59%	14%
Economically Disadvantaged	48%	14	289	698	172	1	1%	25%	59%	15%	0%
English Learner	52%	9	123	346	180	8	1%	18%	52%	27%	1%
Students with Disabilities	43%	55	463	608	124	0	4%	37%	49%	10%	0%

Relationship Between School Performance and School Characteristics

Overview of cross-school analysis results:

- School characteristics are associated with school performance…
- …but many schools over- or under-performed a performance "predicted" by school characteristics alone.
- The percentage of FARMs students was not related to, or only weakly related to, "credit for," "access to," progress in achieving English language proficiency, and median student growth percentile.

Relationship Between School Performance and School Characteristics: FARMs

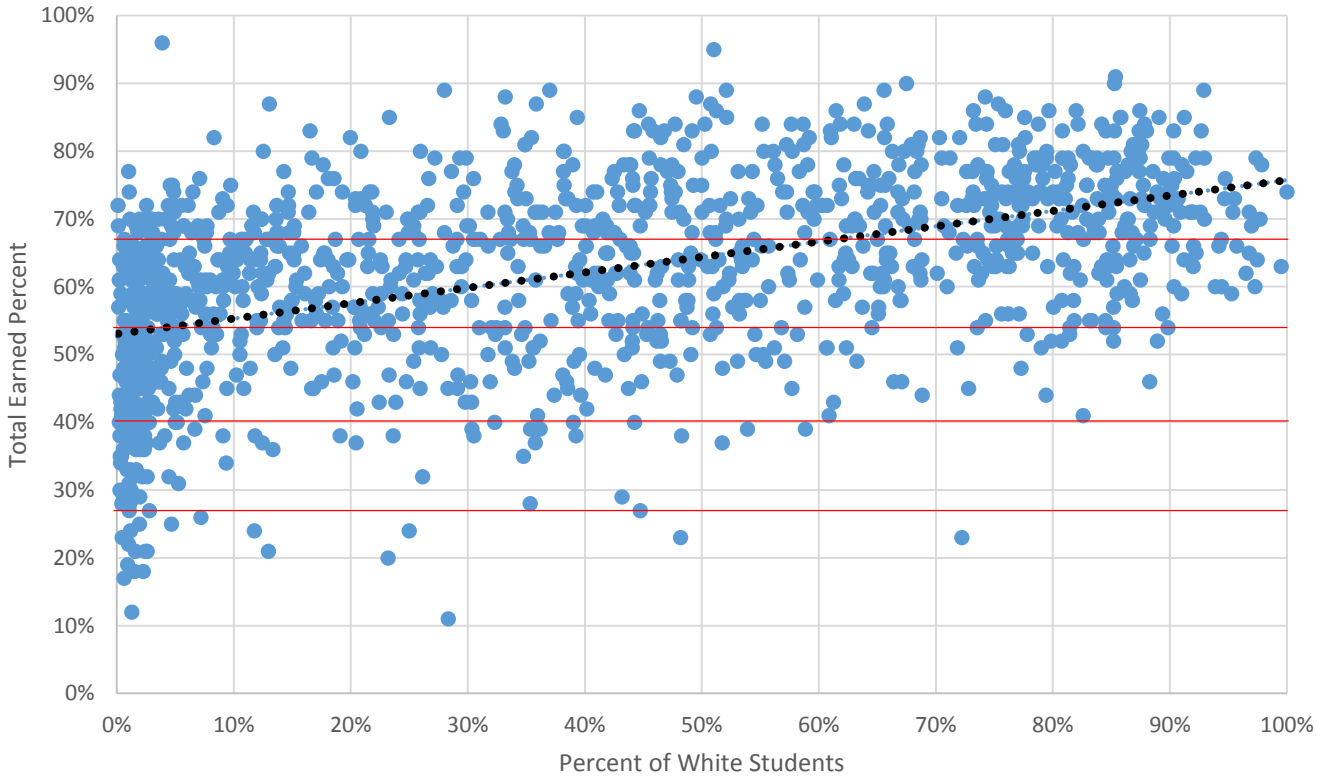


B = -0.359

R^2 = 0.372

Total Earned Percent	Awarded Stars	% FARMs Range	# of Schools
Less than 30%	★	42.2 to 84.1%	35
30% or greater and less than 45%	★★	15.0 to 89.0%	145
45% or greater and less than 60%	★★★	5.8 to 95.8%	356
60% or greater and less than 75%	★★★★	1.5 to 95.6%	564
75% or greater	★★★★★	0.6 to 80.2%	219

Relationship Between School Performance and School Characteristics: White Students

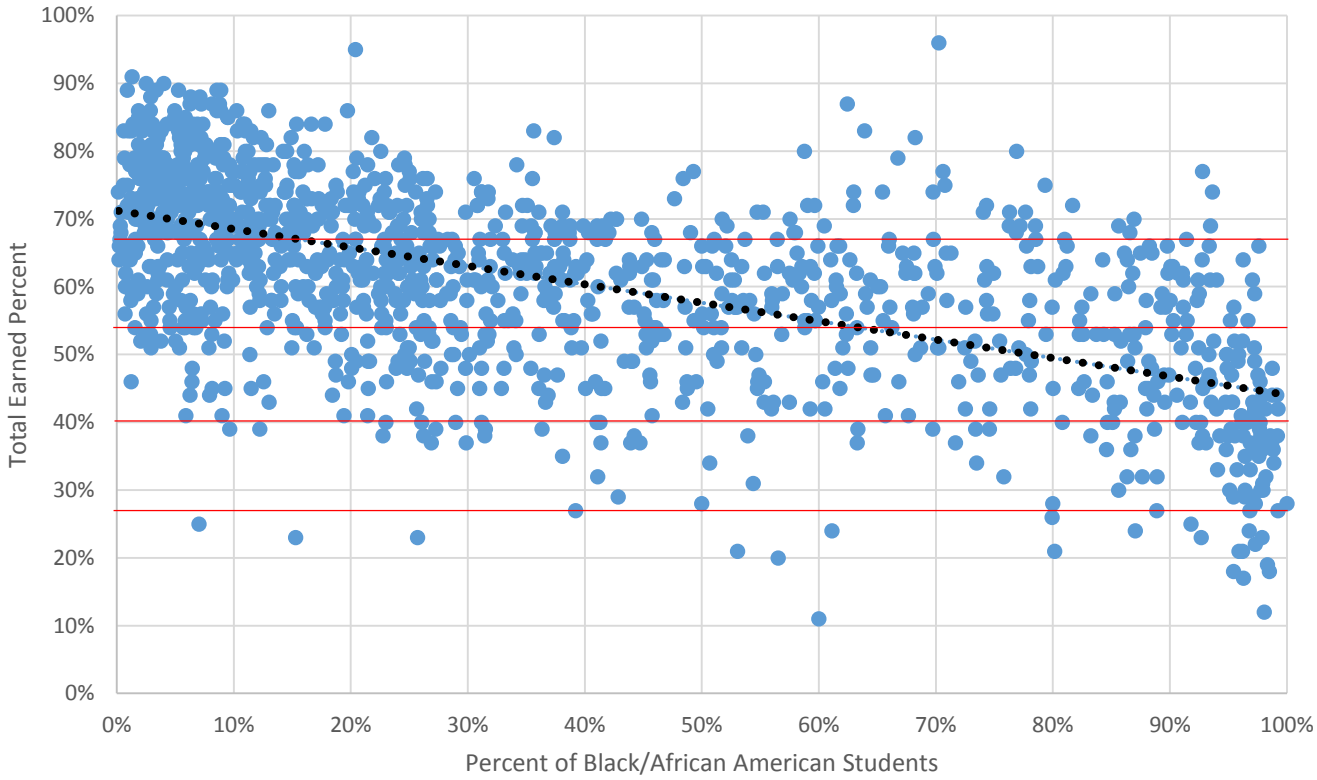


B = 0.232

R^2 = 0.261

Total Earned Percent	Awarded Stars	% White Range	# of Schools
Less than 30%	★	0.3 to 72.2%	35
30% or greater and less than 45%	★★	0.2 to 82.6%	145
45% or greater and less than 60%	★★★	0.2 to 97.3%	356
60% or greater and less than 75%	★★★★	0.1 to 100%	564
75% or greater	★★★★★	1.0 to 97.9%	219

Relationship Between School Performance and School Characteristics: Black/African American Students



B = -0.272

R^2 = 0.355

Total Earned Percent	Awarded Stars	% Black/African American Range	# of Schools
Less than 30%	★	7.0 to 100%	35
30% or greater and less than 45%	★★	5.9 to 99.2%	145
45% or greater and less than 60%	★★★	0.7 to 98.8%	356
60% or greater and less than 75%	★★★★	0.1 to 97.6%	564
75% or greater	★★★★★	0.6 to 92.8%	219

Relationship Between Indicators and Measures and FARMs

	No significant relationship between %FARMs and score	Weak negative (greater %FARMs → lower score)	Moderate negative	Strong negative
INDICATORS		Academic Progress	Graduation Rate	Academic Achievement
		Progress in Achieving English Language Proficiency	Readiness for Postsecondary Success	
		School Quality/Student Success		
MEASURES	Credit for Completion of a Well-Rounded Curriculum	Median Student Growth Percentile, ELA	Chronic Absenteeism	Percent Proficient, ELA
	Access to a Well-Rounded Curriculum	Median Student Growth Percentile, Math	Four-Year Graduation Rate	Percent Proficient, Math
		Progress in Achieving English Language Proficiency	Five-Year Graduation Rate	Avg. Performance Level, ELA
			On-Track in 9th Grade	Avg. Performance Level, Math

Strong: |r| >= 0.7
Moderate: 0.5 < |r| <= 0.7
Weak: |r| <= 0.5

Overview of Ongoing Internal Validity Analyses

Do the indicators and measures provide unique information about school performance?

Most indicators and measures are moderately correlated with each other. Moderate correlation suggests the indicators provide different types of evidence about school performance.

Exceptions:

1. Academic Achievement measures are highly correlated to one another (percent proficient and average performance level), and to chronic absenteeism. This suggests these measures are not providing unique information.
2. "Access to" and "Credit for" are highly correlated to one another at the elementary level.
3. "Credit for" has a low correlation with all other measures at the high school level, which suggests it is providing unique information about high schools.

Overview of Ongoing Internal Validity Analyses

How do the indicators and measures impact schools' scores?

1. Elementary and middle schools scored lowest on the Academic Achievement indicator, and highest on School Quality and Student Success.
   - Low-scoring measures: percent proficient, SGP
   - High-scoring measures: "access to," "credit for"
2. High schools scored lowest on Academic Achievement and School Quality and Student Success, and highest on Graduation Rate and Readiness for Postsecondary Success.
   - Low-scoring measures: percent proficient, chronic absenteeism
   - High-scoring measures: on-track in 9th grade, four-year graduation, five-year graduation

Another interpretation: if a "low-scoring" indicator or measure were removed, star ratings would be higher for many schools. If a "high-scoring" indicator or measure were removed, star ratings would be lower for many schools. Removing the others would not impact star ratings.

Overview of Ongoing Internal Validity Analyses

Does performance on a single indicator predict overall performance?

1. High schools that score well on Graduation Rate tend to do well overall.
2. Elementary schools that score well on Academic Progress tend to do well overall.
3. All schools that score well on Academic Achievement tend to do well overall.

Option 1: Do not make adjustments to standards.

	All Schools			E	M	Combo	H
Stars	Percent of Points	N	%	N	N	N	N
★	0%-30%	35	3%	7	1	19	8
★★	30%-45%	145	11%	60	19	39	27
★★★	45%-60%	356	27%	177	91	38	50
★★★★	60%-75%	564	43%	377	80	32	75
★★★★★	75%-100%	219	17%	144	25	8	42

Option 2: Bands use equal "slices" of percent of points earned.

	All Schools			Change			E	M	Combo	H
Stars	Percent of Points	N	%	↓★	No change	↑★	N	N	N	N
★	0%-20%	6	0.5%	0	6	29	1	1	3	1
★★	20%-40%	103	7.8%	0	74	71	34	7	41	21
★★★	40%-60%	427	32.4%	0	356	0	209	103	52	63
★★★★	60%-80%	687	52.1%	0	564	0	460	96	36	95
★★★★★	80%-100%	96	7.3%	123	96	0	61	9	4	22

Option 3: Adjusted standards.

	All Schools			Change			E	M	Combo	H
Stars	Percent of Points	N	%	↓★★	↓★	No change	N	N	N	N
★	0%-40%	109	8.3%	0	0	35	35	8	44	22
★★	40%-55%	280	21.2%	0	74	71	129	62	41	48
★★★	55%-70%	535	40.6%	0	209	147	333	98	37	67
★★★★	70%-80%	299	22.7%	0	388	176	207	39	10	43
★★★★★	80%-100%	96	7.3%	0	123	96	61	9	4	22

Option 4: Maintain the range for one-star but adjust other standards; higher range for four-star schools.

	All Schools			Change			E	M	Combo	H
Stars	Percent of Points	N	%	↓★★	↓★	No change	N	N	N	N
★	0%-30%	35	2.7%	0	0	35	7	1	19	8
★★	30%-55%	354	26.8%	0	0	145	157	69	66	62
★★★	55%-70%	535	40.6%	0	209	147	333	98	37	67
★★★★	70%-85%	363	27.5%	0	388	176	248	46	14	55
★★★★★	85%-100%	32	2.4%	0	187	32	20	2	0	10

Option 5: Maintain the range for one-star but adjust other standards; lower range for four-star schools.

	All Schools			Change			E	M	Combo	H
Stars	Percent of Points	N	%	↓★★	↓★	No change	N	N	N	N
★	0%-30%	35	2.7%	0	0	35	7	1	19	8
★★	30%-45%	145	11.0%	0	0	145	60	19	39	27
★★★	45%-65%	561	42.5%	0	0	356	304	125	51	81
★★★★	65%-85%	546	41.4%	0	205	359	374	69	27	76
★★★★★	85%-100%	32	2.4%	0	187	32	20	2	0	10

Report Card website (MdReportCard.org) Status Update

Report Card Website Developments		By Dec 4th- Jan Board Meeting	By Feb Board Meeting	By March Board Meeting	By Apr Board Meeting	By May Board Meeting	Available Year 2
Accountability	Maryland School Report Card	x					
	School data downloads (Star Ranking and Accountability Detail)	x					
	School Report Card Refresh: Appealed Schools		x				
	School Report Card Details (Disaggregation by student groups)		x				
	Annual Targets (Proficiency, English Learner, Graduation Rate)			x			
	New Student Group Reporting (Foster, Military Connected, Homeless)				x		
	Equity				x		
	Comprehensive School Improvement Schools	x					
	Targeted School Improvement Schools		x				
	Analysis tools (Comparison to like schools)						x
Additional Reporting of 2017-2018	MDCAP (Science, Alternate Assessments)			x			
	Graduation Rate			x			
	Civil Rights Data Collection (CRDC)				x		
	Graduation and College Enrollment					x	
	Financial						x