



Massachusetts' Next-Generation Accountability System

Spring 2018



AGENDA

1. System highlights
2. Timeline & process
3. Accountability indicators
4. Weighting of accountability indicators
5. Normative component
6. Criterion-referenced component
7. Categorization of schools
8. Categorization of districts
9. Reporting

1

System highlights

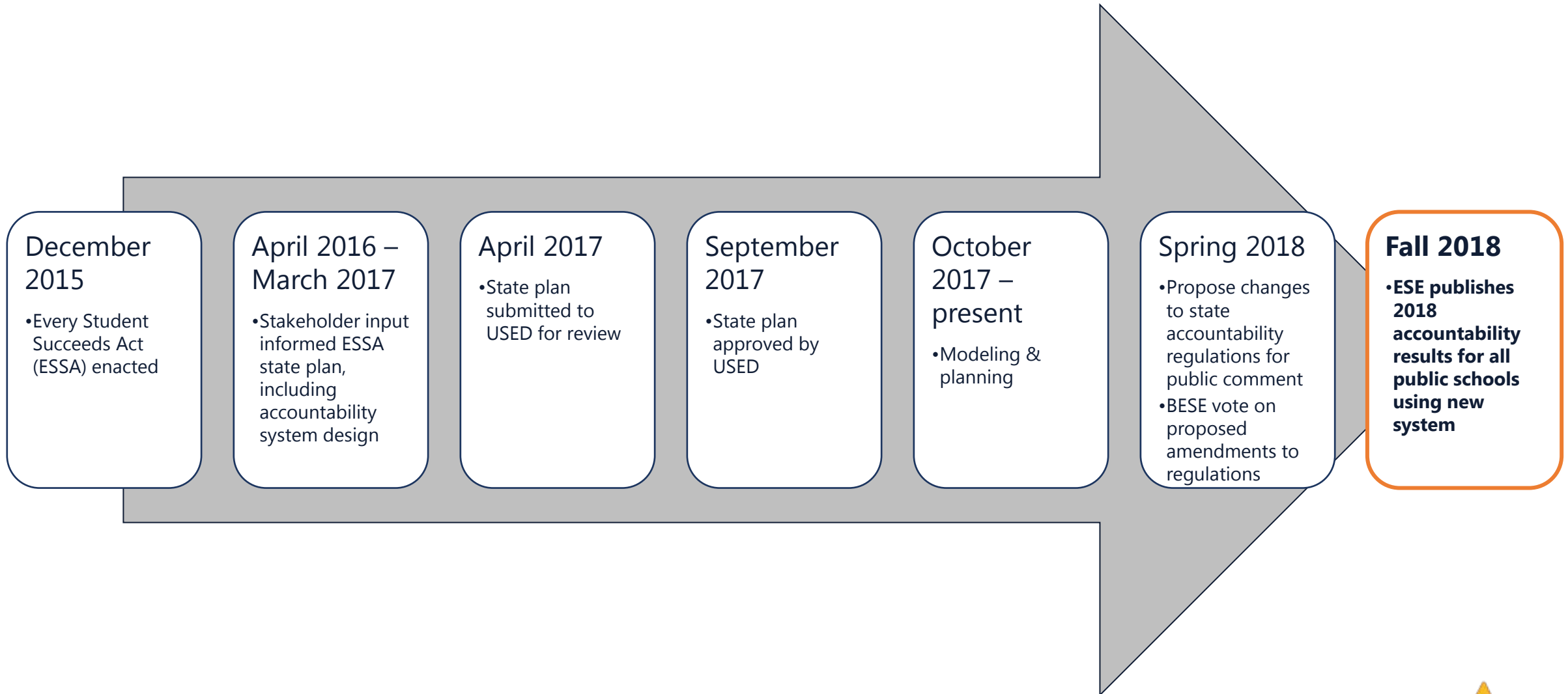
System highlights

- Additional accountability indicators
 - Provide information about school performance & student opportunities beyond test scores
- Normative & criterion-referenced components
 - Accountability percentiles & progress toward targets
- Focus on raising the performance of each school's lowest performing students
 - In addition to the performance of the school as a whole
- Discontinuation of accountability & assistance levels 1-5
 - Replaced with accountability categories that define the progress that schools are making & the type of support they may receive from the Department

2

Timeline & process

Timeline & process



Timeline & process

- Prior to implementing the new accountability system, the Board of Elementary & Secondary Education must approve:
 - Proposed amendments to state accountability regulations
 - The framework for district & school accountability described in this presentation

3

Accountability indicators

Required accountability indicators

- ESSA requires states to include the following indicators in an accountability system
 - Academic achievement based on annual assessments in English language arts (ELA), math, & science
 - A measure of student growth or progress for elementary & middle schools
 - Graduation rates for high schools
 - Progress in achieving English proficiency for English learners
 - At least one measure of school quality or student success

Massachusetts' accountability indicators – non-high schools

Indicator	Measure
Achievement	<ul style="list-style-type: none">• English language arts (ELA) average scaled score• Mathematics average scaled score• Science achievement (Composite Performance Index (CPI))
Student Growth	<ul style="list-style-type: none">• ELA mean student growth percentile (SGP)• Mathematics mean SGP
English Language Proficiency	<ul style="list-style-type: none">• Progress made by students towards attaining English language proficiency (percentage of students meeting annual targets required in order to attain English proficiency in six years)
Additional Indicator(s)	<ul style="list-style-type: none">• Chronic absenteeism (percentage of students missing 10 percent or more of their days in membership)

Massachusetts' accountability indicators – high schools

Indicator	Measure
Achievement	<ul style="list-style-type: none"> English language arts (ELA) achievement (Composite Performance Index (CPI)) Mathematics achievement (CPI) Science achievement (CPI)
Student Growth	<ul style="list-style-type: none"> ELA mean student growth percentile (SGP) Mathematics mean SGP
High School Completion	<ul style="list-style-type: none"> Four-year cohort graduation rate Extended engagement rate (five-year cohort graduation rate plus the percentage of students still enrolled) Annual dropout rate
English Language Proficiency	<ul style="list-style-type: none"> Progress made by students towards attaining English language proficiency (percentage of students meeting annual targets required in order to attain English proficiency in six years)
Additional Indicator(s)	<ul style="list-style-type: none"> Chronic absenteeism (percentage of students missing 10 percent or more of their days in membership) Percentage of 11th & 12th graders completing advanced coursework (Advanced Placement, International Baccalaureate, dual enrollment courses, &/or other selected rigorous courses)

English language proficiency indicator

- New indicator in 2018
- Set students on a non-linear path to achieving English language proficiency in six years
- Set targets for each English learner based on:
 - Starting point (initial ACCESS for ELLs assessment results);
 - Grade; &
 - Years in Massachusetts
- School & district performance will be measured based on the percentage of students meeting their targets each year



Accountability indicators

- Will use average scaled score for the science & high school test once all tests have transitioned to Next-Generation MCAS
- Accountability data may be negatively impacted by late or inaccurate district data submissions
 - Student Information Management System (SIMS)
 - Student enrollment/subgroup membership
 - Chronic absenteeism
 - Student Course Schedule (SCS)
 - Advanced coursework completion



4

Weighting of accountability indicators

Federal requirements

- “Substantial weight” on achievement, progress, EL proficiency, & graduation rate
 - Together, they must be given “much greater weight” than any measures of school quality or student success



Considerations for weighting achievement & growth

- The current ratio of achievement & growth is 3 (achievement) to 1 (growth)
- Impact of increasing weight of growth in system:
 - Could increase differentiation between high- & low-achieving schools
 - Increases the value of a normative measure (there will always be a 1st percentile & a 99th percentile)
 - Decreases the value of grade 3 assessment results (no SGP for students in grade 3)
 - Decreases value of science assessment in system (no SGP for science)

Considerations for weighting achievement & growth

- All indicators need to be included in the weighting
- Progress towards English language proficiency only applies to a subset of schools, & weighting needs to be flexible
- Ratio between achievement & growth can be held constant between non-high schools & high schools but actual weightings will differ
- ESE intends to apply the same weighting rules to both the normative & criterion-referenced components of the system
- Recommendation is to maintain current ratio (3:1)
 - Board to make final decision this spring



Proposed weighting of indicators in non-high schools

Indicator	Measures	Current Weighting 3:1	
		With ELL	No ELL
Achievement	<ul style="list-style-type: none"> • ELA, math, & science achievement values (based on scaled score) 	60%	67%
Student Growth	<ul style="list-style-type: none"> • ELA/Math Student Growth Percentile (SGP) 	20%	23%
English Language Proficiency	<ul style="list-style-type: none"> • Progress made by students towards attaining English language proficiency 	10%	
Additional Indicators	<ul style="list-style-type: none"> • Chronic absenteeism 	10%	10%

Proposed weighting of indicators in high schools & middle/high/K-12 schools

Indicator	Measures	Current Weighting 3:1	
		With ELL	No ELL
Achievement	<ul style="list-style-type: none"> • ELA, math, & science achievement 	40%	48%
Student Growth	<ul style="list-style-type: none"> • ELA/Math Student Growth Percentile (SGP) 	20%	22%
High School Completion	<ul style="list-style-type: none"> • Four-year cohort graduation rate • Extended engagement rate • Annual dropout rate 	20%	20%
English Language Proficiency	<ul style="list-style-type: none"> • Progress made by students towards attaining English language proficiency 	10%	
Additional Indicators	<ul style="list-style-type: none"> • Chronic absenteeism • Percentage of students completing advanced coursework 	10%	10%

5

Normative component

Normative component – rationale

- Federal law (ESSA)
 - Requires states to identify the lowest performing 5 percent of schools as needing comprehensive support & intervention
 - Requires states to identify schools with low performing subgroups as needing targeted support & intervention
- State law
 - Requires that a school must be among the lowest performing 20 percent of schools statewide in order to be eligible for designation as “underperforming”



Normative component

- Accountability percentile 1-99, calculated using all available indicators for a school
- Compares schools administering similar statewide assessments
- Used to identify the lowest performing schools in the state
- Same calculation used at the subgroup level to identify low-performing subgroups



Comparisons

- Schools will be grouped & compared based on the assessment(s) administered in 2018
 - Non-high schools
 - Serving only a combination of grades 3-8
 - Administering only Next-Generation MCAS tests in ELA & math
 - Middle/high/K-12 schools
 - Serving grade 10 & at least one other grade 3-8
 - Administering a combination of Next-Generation & legacy MCAS tests in grades 3-8 & 10
 - High schools
 - Schools in which the only tested grade is grade 10
 - Administering only legacy MCAS tests
- Separate comparison categories will not be necessary once all grades/tests have transitioned to Next-Generation MCAS



Old vs. new percentiles

- 2018 accountability percentiles should not be compared to school percentiles from 2012-2017
 - Different comparison “universe”
 - Inclusion of additional indicators
 - Fewer years of data used in calculation



6

Criterion-referenced component

Criterion-referenced component – rationale

- Federal law (ESSA)
 - Requires states to establish ambitious long-term goals & measures of interim progress
- Perception
 - Accountability determination should not depend solely on the relative success of other schools
- Resource allocation
 - Accountability system built solely on a normative measure (percentile rank) may not sufficiently differentiate schools



Criterion-referenced component

- Focus on closing the achievement gap by raising the “achievement floor”
 - Gap-closing can occur as a result of a decline in performance by the high-performing group
- In addition to meeting targets for the school as a whole, the performance of the lowest performing 25 percent of students in each school will be measured
 - Every school has a lowest 25 percent of performers
 - Identified from cohort of students who were enrolled in the school for more than one year

Lowest performing students – cohort model

- For most schools serving grades 3-8, these students were:
 - Officially enrolled in current school for two consecutive years;
 - October 1, 2016 through October 1, 2017 (SIMS)
 - Tested in current school in 2017 & 2018; &
 - Not a first- or second-year English learner in 2018
- In schools where a legitimate cohort cannot be identified (fewer than 20 students), accountability results will be based on the performance of the “all students” group only

Lowest performing students – year-to-year approach

- In high schools, the cohort model cannot be used
- Improvement will be measured using a year-to-year approach based on students who were:
 - Officially enrolled in current school for two consecutive years;
 - October 1, 2016 through October 1, 2017 (SIMS)
 - Tested in grade 10 in current school in 2018, & attended grade 9 in the same school or district in 2017; &
 - Not a first- or second-year English learner in 2018
- In schools where a legitimate cohort cannot be identified (fewer than 20 students), accountability results will be based on the performance of the “all students” group only
- Same methodology will be applied to schools ending in grade 3



Identifying students in the lowest performing cohort

- Identified using a combined 2017 ELA & math average scaled score
- ESE will share each school & district's list via a secure dropbox
 - For 2018 accountability reporting, lists will be shared in spring 2018
 - For 2019 & beyond, lists can be shared earlier (e.g., in the fall)

Criterion-referenced component

- Targets set for each accountability indicator, for the school as a whole & for the lowest performing 25 percent of students in each school

Indicator	Non-high schools		High schools & middle/high/K-12 schools	
	All students	Lowest performing students	All students	Lowest performing students
ELA scaled score	✓	✓	✓	✓
Math scaled score	✓	✓	✓	✓
Science achievement	✓		✓	✓
ELA SGP	✓	✓	✓	✓
Math SGP	✓	✓	✓	✓
Four-year cohort graduation rate	N/A	N/A	✓	
Extended engagement rate	N/A	N/A	✓	
Annual dropout rate	N/A	N/A	✓	
EL progress	✓		✓	
Chronic absenteeism	✓	✓	✓	✓
Advanced coursework completion	N/A	N/A	✓	

*Minimum group size for each indicator = 20 students

Setting targets

- For 2018 reporting, targets will only be set for one year
 - Long-term targets will be set in the future
- Targets for achievement indicators will be based on the assessment performance of schools that have demonstrated improvement in the past
 - For example, the average improvement of “improvers” on MCAS
- Targets for non-assessment indicators will be based on analysis of past trends & reasonable expectations for improvement



Criterion-referenced component

- Points assigned based on progress toward target for each indicator, for both the aggregate & the lowest performing 25 percent of students

Declined	No change	Improved	Met target	Exceeded target
0	1	2	3	4

Criterion-referenced component calculation – non-high school

Indicator	All students (50%)			Lowest performing students (50%)		
	Points earned	Total possible points	Weight	Points earned	Total possible points	Weight
ELA scaled score	3	4	-	2	4	-
Math scaled score	2	4	-	2	4	-
Science achievement	2	4	-	1	4	-
Achievement total	7	12	60%	5	12	67%
ELA SGP	4	4	-	4	4	-
Math SGP	3	4	-	4	4	-
Growth total	7	8	20%	8	8	23%
EL progress	2	4	10%	-	-	-
Chronic absenteeism	3	4	10%	4	4	10%
Weighted total	6.1	9.6	-	5.6	10.3	-
Percentage of possible points	63.5%		-	54.4%		-
Criterion-referenced target percentage	59%					

Criterion-referenced component calculation – high school

Indicator	All students (50%)			Lowest performing students (50%)		
	Points earned	Total possible points	Weight	Points earned	Total possible points	Weight
ELA achievement	3	4	-	2	4	-
Math achievement	2	4	-	2	4	-
Science achievement	2	4	-	1	4	-
Achievement total	7	12	40%	5	12	67%
ELA SGP	4	4	-	4	4	-
Math SGP	3	4	-	4	4	-
Growth total	7	8	20%	8	8	23%
Four-year cohort graduation rate	3	4	-	-	-	-
Extended engagement rate	4	4	-	-	-	-
Annual dropout rate	3	4	-	-	-	-
High school completion total	10	12	20%	-	-	-
EL progress	2	4	10%	-	-	-
Chronic absenteeism	3	4	-	4	4	-
Advanced coursework completion	3	4	-	-	-	-
Additional indicators total	6	8	10%	4	4	10%
Weighted total	7.0	10.0	-	5.6	10.3	-
Percentage of possible points	70.0%		-	54.4%		-
Criterion-referenced target percentage	62%					

7

Categorization of schools

Categorization of schools

- Schools will no longer be placed in a vertical hierarchy of levels 1-5
- Number of schools that will be placed into a category based upon a relative standing will be cut in half from previous system
 - Approximately 90 percent of schools could be categorized based on their own performance against targets
- Most schools will have 50 percent of its categorization based on students that have been in the school for at least two years
- Category labels are primarily tied to the level of required assistance or intervention
- Stronger emphasis on schools commended for success

Categorization of schools

Schools without required assistance or intervention (approx. 85%)

Schools requiring assistance or intervention (approx. 15%)

Schools of recognition	Meeting targets	Partially meeting targets	Not meeting targets	Focused/targeted support	Broad/comprehensive support
Schools demonstrating high achievement, significant improvement, or high growth	Criterion-referenced target percentage 75-100	Criterion-referenced target percentage 50-74	Criterion-referenced target percentage 0-49	<ul style="list-style-type: none"> •Non-comprehensive support schools with percentiles 1-10 •Schools with low graduation rate •Schools with low performing subgroups •Schools with low participation 	<ul style="list-style-type: none"> •Underperforming schools •Chronically underperforming schools

Notes:

- Category names not finalized
- School percentiles & performance against targets will be reported for all schools

Categorization of schools

- Current Level 4 & Level 5 schools will be classified as underperforming or chronically underperforming until an exit decision is made by the Commissioner
- Schools ending in grade 3 will be classified based on criterion-referenced component only
 - No student growth, therefore no accountability percentile
- Schools with no tested grades will be classified as “insufficient data”
- Schools with low assessment participation (below 95 percent) will be classified as needing focused/targeted support
 - By subgroup & by subject
 - Using a two-year participation rate average



Categorization of schools – non-high school examples

Non-high school #1

Accountability percentile	16
Criterion-referenced target percentage	51%
Participation rates	>95%
Low-performing subgroups	0
Accountability determination: Partially meeting targets	

Non-high school #2

Accountability percentile	31
Criterion-referenced target percentage	66%
Participation rates	>95%
Low-performing subgroups	1
Accountability determination: Focused/targeted support	

Categorization of schools – high school examples

High school #1

Accountability percentile	42
Criterion-referenced target percentage	75%
Participation rates	>95%
Low-performing subgroups	0
Graduation rate	66%
Accountability determination: Focused/targeted support	

High school #2

Accountability percentile	12
Criterion-referenced target percentage	76%
Participation rates	>95%
Low-performing subgroups	0
Graduation rate	70%
Accountability determination: Meeting targets	



8

Categorization of districts

Categorization of districts

- Districts will be classified based on the performance of the district as a whole
 - No longer categorized based on performance of lowest performing school
- District accountability percentiles will not be calculated
- Classified based on criterion-referenced component
 - Adjustments made for low graduation rates & low assessment participation
- Board may designate a district as underperforming or chronically underperforming

Categorization of districts

Districts without required assistance or intervention

Districts requiring assistance or intervention

Meeting targets	Partially meeting targets	Not meeting targets	Focused/targeted support	Broad/comprehensive support
Criterion-referenced target percentage 75-100	Criterion-referenced target percentage 50-74	Criterion-referenced target percentage 0-49	<ul style="list-style-type: none">•Districts with low graduation rate•Districts with low participation	<ul style="list-style-type: none">•Underperforming districts•Chronically underperforming districts

Notes:

- Category names not finalized
- Performance against targets will be reported for all districts

9

Reporting

Accountability reports

- Accountability reports published for each district & school (fall 2018)
- Reports will include:
 - Overall classification
 - Including reason(s) for classification (e.g., low graduation rate, low-performing subgroup)
 - Criterion-referenced target percentage
 - Accountability percentile (schools only)
 - Data related to performance on each accountability indicator for each subgroup meeting the minimum group size (20 students)
 - All students
 - Lowest-performing students
 - High needs students
 - English learners
 - Students with disabilities
 - Economically disadvantaged students
 - Major racial/ethnic subgroups



District & school report cards

- ESE will publish redesigned district & school report cards in late fall 2018
- Will include measures of performance/opportunity beyond assessment & accountability results
 - Discipline rates
 - Availability of art education
 - Educator data
 - Grade 9 course-passing
 - Per-pupil expenditures

Thank you!

esea@doe.mass.edu · (781) 338-3550

