

**RHODE ISLAND
SCHOOL AND DISTRICT
ACCOUNTABILITY SYSTEM
ESEA FLEXIBILITY UNDER NCLB**

TECHNICAL BULLETIN

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TABLE OF CONTENTS

| | |
|--|-------------------------------------|
| The Rhode Island State Context | 3 |
| School and District Classification Categories and Measures of Performance..... | 4 |
| Composite Index Score (CIS)..... | 4 |
| Cut Scores | 6 |
| Achievement Levels..... | 7 |
| Absolute Percent Proficient | 8 |
| Progress to 2017 Targets..... | 9 |
| Subgroup Performance Gaps against Performance Reference Group | 11 |
| Percentage of students in Distinction Level..... | 12 |
| Student Growth | 13 |
| High School Graduation Rate | 14 |
| High School Scaled Score Change | 15 |
| CIS Calculation..... | 15 |
| Participation Rate..... | 16 |
| Graduation Rate Target..... | 16 |
| Annual Measurable Objectives | 18 |
| Persistently Lowest Achieving (PLA) Schools..... | 20 |
| Classification of Schools..... | 20 |
| Flexibility within the Accountability System | 21 |
| Student Exemptions | 21 |
| Error Bands | 22 |
| Data Rounding Rules | 22 |
| Cell Size | 22 |
| Procedures for Very Small Schools | Error! Bookmark not defined. |
| Classification and Appeals Process Timeline | 23 |
| Appeals Process | 24 |
| District Accountability and Classification Process..... | 24 |
| AMO and Accountability Report Cards | 25 |

THE RHODE ISLAND STATE CONTEXT

On January 8, 2002, the federal Elementary and Secondary Education Act (ESEA) was reauthorized as the No Child Left Behind Act (NCLB). NCLB required states to establish a single accountability system that includes every school and district. Rhode Island proposed an accountability model incorporating NCLB requirements to the US Department of Education for approval and this model was first implemented to interpret performance on students' assessments during the 2002-03 school year.

In 1997, the Rhode Island General Assembly enacted Article 31. That legislation put into place a policy framework and accountability system that included all Rhode Island public schools. Article 31 required schools to align their educational processes with the Rhode Island school reform agenda, as outlined in the Comprehensive Education Strategy (CES). At the core of this agenda was the expectation that the Department of Education would create high standards and expect high achievement for all students. Article 31 required the Commissioner to make judgments about school performance on a regular basis. This requirement was given additional weight with the NCLB legislation. As a result, the Board of Regents and the Commissioner set forth clear expectations and targets for schools to improve overall performance and close gaps in performance between groups of students.

Rhode Island introduced the New England Common Assessment Program (NECAP) for students in grades 3-8 in October 2005 to further comply with the requirements of NCLB. The NECAP high school assessments in reading, writing and mathematics were introduced in October 2007. A statewide assessment of science was introduced at grades 4, 8 and 11 in May 2008. Beginning in the 2008-09 school year, the Rhode Island Department of Elementary and Secondary Education (RIDE) adopted the National Governor's Association (NGA) four-year adjusted cohort graduation rate formula. Beginning in 2011, Rhode Island adopted a new hybrid four-year and five-year cohort graduation rate formula.

In September 2011, the U.S. Department of Education offered states the opportunity to request flexibility on some of the provisions of the NCLB statute. This was in exchange for states to implement rigorous standards, improve instruction and prepare all students for college and career readiness. With input from the education field and from the public, RIDE designed a new accountability system that will enable RIDE to:

- focus on achievement gaps, high performance and making progress;
- diagnose school performance by identifying specific shortcomings and achievements;
- provide each school with the specific support or intervention needed to improve student achievement; and
- provide these schools with the ability to select interventions that respond to their context and their needs.

The ESEA Flexibility request submitted by Rhode Island was approved by the U.S. Department of Education on May 29, 2012. This document is the updated version of the Technical Bulletin for classifying schools and districts based on this system. The following pages describe the process that was used to classify schools and districts in the 2011-12 school year. It departs significantly from the process that was used in prior years because of the changes in the flexibility request.

SCHOOL AND DISTRICT CLASSIFICATION CATEGORIES AND MEASURES OF PERFORMANCE

The old system of classifying schools as “Made AYP” or “Did Not Make AYP” is no longer used under the new system. RIDE now classifies schools into one of six categories:

- Commended Schools,
- Leading Schools
- Typical Schools,
- Warning Schools,
- Focus Schools, and
- Priority Schools.

These classifications are based on seven metrics or measures of performance:

1. Absolute Percent Proficient (also called “Proficiency” for short),
2. Progress Toward 2017 Targets (or “Progress”),
3. Subgroup Performance Gaps Against Performance Reference Group (or “Gap-Closing”),
4. Percentage of Students in Distinction Level (or “Distinction”),
5. Student Growth (or “Growth”) – elementary and middle level only,
6. High School Graduation Rate (or “Graduation”) – high school level only, and
7. High School Scaled Score Change (or “Improvement”) – high school level only

Beyond the seven metrics, the accountability system factors in Annual Measurable Objectives for subgroups for reading and mathematics proficiency, test participation and graduation rates.

It is important to note that a school is classified as only one level (elementary, middle or high). In general, this is the highest grade span which it includes and for which it has sufficient numbers to calculate the above metrics. If there are sufficient metrics in a different level other than the level containing the highest grade, then the school is classified under that level. A district is classified separately at each appropriate level. Therefore a district with grades K-12, would be evaluated at the elementary level, at the middle level and at the high school level.

COMPOSITE INDEX SCORE (CIS)

Each of Rhode Island’s schools will have a Composite Index Score (CIS) ranging from 20 to 100 points, in order to be classified appropriately. Each district will have a CIS for each applicable level (i.e. elementary, middle and high). The scores will be earned within each of the seven measures of performance. Within each metric, cut scores were assigned to divide the range of scores into five levels of performance. There are also three metrics which are not used for determining points in the CIS, but which are potential limiting factors in the classification of schools and districts. These are the Graduation Rate Target, the Participation Rate, and Annual Measurable Objectives (AMOs).

Each of the metrics of the accountability system, except for the high school graduation rate, is comprised of various subcomponents, based on different subject areas (i.e. reading and mathematics) and different student population subgroups. The subgroups used include:

1. **All Students** who were tested;
2. **The Consolidated Minority and Economically Disadvantaged Subgroup**, which includes African-American, Hispanic, Asian, Pacific Islander, and Native American students, as well as students receiving Free/Reduced Price Lunch (FRPL);
3. **The Consolidated Program Subgroup**, which includes students with an Individualized Education Plan (IEP, also referred to as Students with Disabilities) as well as English Language Learner (ELL) students; and
4. **The Performance Reference Subgroup**, which includes students who are not economically disadvantaged, not in ELL programs and not receiving IEP services. This subgroup is not used for independent measurements but is used for calculating gaps.
5. **ESEA Subgroups**, which are subgroups required to be measured by the Elementary and Secondary Education Act of 1964, as reauthorized in 2001. These include African American, Asian, Hispanic, Native American, White, IEP, ELL, FRLP, Pacific Islander, and Multi-Racial. The latter two subgroups were not used in prior years' accountability calculations in Rhode Island.

For all of the metrics, each subcomponent is measured separately. For the point-bearing metrics, subcomponents are scored using the five levels. The mean of the subcomponent scores is then calculated to create a score for each metric. The scores for each individual metric are then weighted, from a possible maximum of 5 points to a possible maximum of 30 points, together totaling a possible maximum of 100 points. The individual scores for each metric are then added together to arrive at a total score (i.e. the CIS). Table 1 below provides a summary of the metrics of performance, the subcomponents, and the weights assigned.

Table 1: Composite Index Score Point Totals

| Metric | Subcomponent Populations | Subcomponent Subject(s) | Elementary & Middle Schools | High Schools |
|---------------|--|--------------------------------|--|---------------------|
| Proficiency | All Students Minority & FRPL IEP & ELL | Reading Math | 30 points | 30 points |
| Progress | All Students | Reading Math | 10 points | 10 points |
| Gap-closing | Minority & FRPL IEP & ELL | Reading Math | 30 points | 30 points |
| Distinction | All Students | Reading Math | 5 points | 5 points |
| Growth | All Students Minority & FRPL IEP & ELL | Reading & Math (combined) | 25 points | -- |
| Graduation | All Students | Graduation | -- | 20 points |
| Improvement | All Students | Reading | -- | 5 points |

| | | | | |
|---|---|---------------------------|-------------------|-------------------|
| | | Math | | |
| Graduation Annual Target | All Students | Graduation rate (HS only) | --* | --* |
| Participation Rate | All Students | Reading Math | --* | --* |
| Annual Measurable Objectives (AMOs) | All Students African American Asian Pacific Islander Hispanic Native American White Multi-Racial Students with Disabilities English Language Learners Economically Disadvantaged Students | Reading Math | --* | --* |
| Persistently Lowest Achieving (PLA) School Status | N/A | N/A | --* | --* |
| Total: | | | 100 points | 100 points |

***Note:** The Graduation Annual Target, Participation Rate, AMOs, and PLA status are not assigned points, but are potential limiting factors in the classification of schools. In addition, low scores in certain metrics are also potential limiting factors.

CUT SCORES

For each of the seven accountability components, cut scores were assigned to create five increments. Cut points within each component were assigned within the following framework:

1. The highest levels of performance reflect current achievement data in each category. They outline achievable yet aspirational goals for each school.
2. The lowest levels of performance also reflect the current unacceptably low performance in each category.
3. The middle ranges attempt to differentiate among the ranges of school performance based on the most recent data sets we have for schools.

A school is only measured on any subcomponent if there are results for at least 20 students. Cut scores may vary based on grade span (i.e. elementary, middle and high) and on subject area but they do not vary by subgroup. The cut scores are provided in tables below in the appropriate section for each metric.

In general, the points a school earns for each evaluated subcomponent are averaged and then multiplied by the metric weight and divided by 5 (representing the 5 point scale). For example, Absolute Percent Proficient is worth a maximum of 30 possible points; the points a school receives for this metric = (Subcomponent Average Score * 30)/5. The one exception is Graduation Rate metric, which has a 6th possible point, as explained below, so the points a school receives for this metric = (Subcomponent Average Score * 20)/6.

ACHIEVEMENT LEVELS

Rhode Island's Assessment and Accountability System is aligned to Grade Level/Span Expectations (GLEs/GSEs) that have been presented to districts to use as guides for assessment and curriculum development. For each of the reading, writing and mathematics assessments, students receive a scaled score. The first digits of the scaled score indicate the grade level of the test; the last two digits indicate the actual score. Student results are also reported under NECAP in four achievement levels. These are:

- Proficient with Distinction
- Proficient
- Partially Proficient
- Substantially Below Proficient

Cut scores between the different achievement levels vary for each grade and content area. The process for calculating scaled scores from raw scores and for setting these cut points is described elsewhere (See, for example, the *Guide to Using the 2011 NECAP Reports*, available at <http://reporting.measuredprogress.org/NECAPPublicRI/documents/1112/Fall/Guide%20to%20Using%20the%202011%20NECAP%20Reports.pdf>) Throughout this bulletin, the percentage of students in Proficient with Distinction or in Proficient will be referred to as the Percent Proficient or Absolute Percent Proficient.

October NECAP tests are used to assess the prior year's achievement. Therefore, before accountability computations are done, students' scores are assigned to the previous grade and to the school in which the student was enrolled at the time. Table 2 illustrates the attribution of test scores to the prior year using the terms "Tested Year" and "Teaching Year." Students in elementary and middle schools were tested in October (testing year), but they were tested against the grade level expectations of the prior year (teaching year). For example, reading, writing and mathematics test scores of students tested in the eighth grade are assigned to the school where each child was a seventh grade student.

Table 2: Assignment of Scores from Testing Year to Teaching Year

| Grade During October Testing (Testing Year) | Grade Assigned for Accountability (Teaching Year) |
|--|--|
| 3 | 2 |
| 4 | 3 |
| 5 | 4 |
| 6 | 5 |
| 7 | 6 |
| 8 | 7 |
| 11 | 10 |

NOTE: Percent proficient scores are calculated from the teaching year data file, but participation rates are calculated from the testing year data file.

If a student was not continuously enrolled in a school from October 1, 2010 to the end of the 2010-11 school-year, then their scores are excluded from Percent Proficient calculations. In addition, certain students are exempted from analysis (see the Student Exemptions section below). In addition, 12th graders and 11th graders who had been retained in grade who were re-tested on 11th grade NECAP assessment – provided that they received a valid score the previous year – are also excluded from calculations.

District percent proficient rates combine student scores for all grades from all district schools as well as for students tested at “outplacement” schools.

ABSOLUTE PERCENT PROFICIENT

The percentage of students in a school or district who score Proficient or Proficient with Distinction is worth 30 points out of 100 in Rhode Island’s classification system. There are six subcomponents (Reading and Math for All Students, Minority/Poverty, and IEP/ELL). Each subcomponent is only measured if there are at least 20 students in that subgroup who were tested. Districts are measured separately at each applicable level (elementary, middle and high). Cut scores for absolute percent proficient are provided in Table 3 below.

Table 3: Absolute Percent Proficient Cut Scores for 2012

| Metric | Subgroups | Grade Span & Subject | 1 Point | 2 Point | 3 Points | 4 Points | 5 Points |
|---|--------------------|----------------------|---------|--------------|--------------|--------------|----------|
| Absolute Percent Proficient (30 points) | All students | ES Reading | < 45 | ≥ 45 < 60 | ≥ 60 < 80 | ≥ 80 < 90 | ≥ 90 |
| | Minority + Poverty | MS Reading | < 45 | ≥ 45 < 60 | ≥ 60 < 80 | ≥ 80 < 90 | ≥ 90 |
| | | HS Reading | < 45 | ≥ 45 < 60 | ≥ 60 < 80 | ≥ 80 < 90 | ≥ 90 |
| | IEP + ELL | ES Math | < 35 | ≥ 35 < 50 | ≥ 50 < 70 | ≥ 70 < 90 | ≥ 90 |
| | | MS Math | < 30 | ≥ 30 < 50 | ≥ 50 < 70 | ≥ 70 < 85 | ≥ 85 |
| | | HS Math | < 10 | ≥ 10 < 30 | ≥ 30 < 45 | ≥ 45 < 70 | ≥ 70 |

Note: Numbers in the cells above refer to the percentage of students scoring Proficient or Proficient with Distinction on NECAP.

For each school or district, the percentage of students who are proficient for each subgroup is independently calculated in reading and in mathematics. Points from 1 to 5 are then assigned for each subgroup and subject based on the cut scores shown in the table above. The mean of these six values – or however many there are with enough students to measure – is then calculated. The equation below is used to assign Absolute Proficiency Metric points in each school or district.

$$\text{Points Assigned to Absolute Proficiency Metric} = \frac{(\text{Average Score} * 30)}{5}$$

Results for a school or district may range from 6 to 30 points.

PROGRESS TO 2017 TARGETS

Annual Progress Toward 2017 Targets accounts for 10 points out of 100 in Rhode Island’s classification system. Schools and districts are expected to decrease by half the percentage of students who are not meeting proficiency between 2010-11 and 2016-17. This metric measures whether a school or district is making adequate annual progress toward this goal.

Progress in this system is measured separately for each school or district and for each subject area. The metric is calculated using the following steps:

1. The Baseline is defined as the percentage of students scoring Proficient or Proficient with Distinction on the 2010-11 NECAP.
2. The 2016-17 Target is defined as the midpoint between the Baseline and 100% proficiency.

$$Target = Baseline + \frac{100 - Baseline}{2}$$

3. The Gap is defined as the difference between the Baseline and the 2016-17 Target.

$$Gap = \frac{100 - Baseline}{2}$$

4. Progress is defined as the difference between 2011-12 performance and the Baseline.

$$Progress = Current - Baseline$$

5. The metric is then calculated as $100 * \frac{Progress}{Gap}$, or, written differently:

$$Metric = 100 * \frac{Current - Baseline}{(100 - Baseline)/2}$$

Or

$$Metric = 200 * \frac{Current - Baseline}{100 - Baseline}$$

6. This is then compared to the cut scores provided in Table 4 below.

Table 4: Progress to 2017 Targets Cut Scores for 2012

| Metric | Subgroups | Grade Span & Subject | 1 Point | 2 Point | 3 Points | 4 Points | 5 Points |
|--------------------------------------|--------------|----------------------|---------|-------------|------------|-------------|----------|
| Progress to 2017 Targets (10 points) | All students | Reading | < -3 | ≥ -3 < 0 | ≥ 0 < 8 | ≥ 8 < 16 | ≥ 16 |
| | | Math | | | | | |

Note: Numbers in the cells above refer to 100 times the ratio of current progress from baseline to expected progress by 2016-17 from baseline, for proficiency on NECAP.

For each school, scores are calculated separately for all students in reading and in mathematics. For each district, scores are calculated separately for all students in reading and in mathematics at each level (i.e. elementary, middle and high). Each is only measured if there are at least 20 students in that subgroup who were tested. Points from 1 to 5 are then assigned for each subject, based on the cut scores shown in the table above. A school or district that makes sufficient adequate progress toward the target will get full points for this metric. The mean of the two values is then calculated – or one score is taken alone, if there were at least 20 students tested in that subject but not the other. The equation below is used to assign Progress Toward 2012 Targets points in each school or district.

| |
|---|
| Points Assigned to Progress Toward 2012 Targets = $\frac{\text{Average Score} * 10}{5}$ |
|---|

Results for a school or district may range from 2 to 10 points.

SUBGROUP PERFORMANCE GAPS AGAINST PERFORMANCE REFERENCE GROUP

Subgroup Performance Gaps Compared Against the Performance Reference Group account for 30 points out of 100 in Rhode Island’s classification system. For each school, the percentage of students scoring Proficient or Proficient with Distinction is calculated for the PRG (i.e. students who are not economically disadvantaged, not in ELL programs and not receiving IEP services) for reading and mathematics. The proficiency rate for the PRG is also calculated for each district for reading and mathematics at the elementary, middle, and, high school levels, as appropriate. Likewise, proficiency rates are calculated for the Consolidated Minority and Economically Disadvantaged Subgroup (i.e. African-American, Hispanic, Asian, Pacific Islander, and Native American and/or economically disadvantaged students) and for the Consolidated Program Subgroup (i.e. students in ELL programs and/or students receiving IEP services). Proficiency rates for these subgroups are then subtracted from the PRG proficiency rate, as long as there are at least 20 tested students in both the comparison and reference group for each subject. These are then compared to the cut scores provided in Table 5 below.

Table 5: Subgroup Performance Gaps against Performance Reference Group Cut Scores for 2012

| Metric | Subgroups | Grade Span & Subject | 1 Point | 2 Point | 3 Points | 4 Points | 5 Points |
|---|---------------------------------|----------------------|---------|--------------|--------------|--------------|----------|
| Subgroup Performance Gaps against Performance Reference Group (30 points) | Minority + Poverty IEP + ELL | Reading Math | ≥65 | ≥ 50 < 65 | ≥ 30 < 50 | ≥ 15 < 30 | < 15 |

Note: Numbers in the cells above refer to the difference between the percentages of students scoring Proficient or Proficient with Distinction on NECAP in the Performance Reference Group and the subgroup being compared.

Points from 1 to 5 are then assigned for each subject and subgroup comparison based on the cut scores shown in the table above. The mean of these four values – or however many there are with enough students to measure – is then calculated. The equation below is used to assign Absolute Proficiency Metric points in each school or district.

$$\text{Points Assigned to Subgroup Performance Gaps against PRG} = \frac{(\text{Average Score} * 30)}{5}$$

Results for a school or district may range from 6 to 30 points.

PERCENTAGE OF STUDENTS IN DISTINCTION LEVEL

The Percentage of Students in Distinction Level account for 5 points out of 100 in Rhode Island’s classification system. All other accountability measures in this system sum Proficient and Proficient with Distinction in calculations. This measure simply measures the percentage of students scoring Proficient with Distinction for reading and for mathematics in the school – or at each level in the district. These percentages are then compared to the cut scores provided in Table 6 below.

Table 6: Percentage of Students in Distinction Cut Scores for 2012

| Metric | Subgroups | Grade Span & Subject | 1 Point | 2 Point | 3 Points | 4 Points | 5 Points |
|---|--------------|----------------------|---------|-------------|--------------|--------------|----------|
| Percentage of Tested students in Distinction Level (5 points) | All students | Reading | < 5 | ≥ 5 < 15 | ≥ 15 < 30 | ≥ 30 < 40 | ≥ 40 |
| | | Math | < 5 | ≥ 5 < 15 | ≥ 15 < 25 | ≥ 25 < 35 | ≥ 35 |

Note: Numbers in the cells above refer to the percentage of students scoring Proficient with Distinction on NECAP.

Points from 1 to 5 are then assigned for each subject based on the cut scores shown in the table above. The mean of these two values is calculated – or one score is taken alone, if there were at least 20 students tested in that subject but not the other. The equation below is used to assign Percentage of Students in Distinction points in each school or district.

$$\text{Points Assigned to Percentage of Students in Distinction} = \frac{(\text{Average Score} * 5)}{5}$$

Results for a school or district may range from 1 to 5 points.

STUDENT GROWTH

Student Growth accounts for 25 points for elementary and middle schools in Rhode Island’s classification system. Growth is calculated using the Student Growth Percentile (SGP) methodology developed by Damian Betebenner and described in detail elsewhere (see for example, http://www.nciea.org/publication_PDFs/normative_criterion_growth_DB08.pdf and http://www.nciea.org/publication_PDFs/growthandStandard_DB09.pdf). Each student’s current NECAP score is compared to his previous years’ NECAP scores and the growth is calculated relative to peers with a similar prior academic history.

For this measure, student level percentile records in reading and in mathematics have been combined to increase the number of records available for determining median percentiles for each of the three subgroups (All students, Minority/Poverty and IEP/ELL). Each subgroup is only measured if there are at least 20 students in that subgroup who were tested. Cut scores for growth are provided in Table 7 below.

Table 7: Growth Cut Scores for 2012 – Elementary and Middle Schools Only

| Metric | Subgroups | Grade Span & Subject | 1 Point | 2 Point | 3 Points | 4 Points | 5 Points |
|----------------------------------|---|---------------------------|---------|--------------|--------------|--------------|----------|
| Growth (25 points, ES & MS only) | All students Minority + Poverty IEP + ELL | Reading + Math (combined) | < 35 | ≥ 35 < 45 | ≥ 45 < 55 | ≥ 55 < 65 | ≥ 65 |

Note: Numbers in the cells above refer to the median student growth percentile of a school or district.

For each school or district, a median percentile score is determined for each of the subgroups. Points from 1 to 5 are then assigned for each of these subgroups based on their median percentile scores and the cut points shown in the table above. The mean of these three values – or however many there are with enough students to measure – is then calculated. The equation below is used to assign Student Growth points in each elementary or middle school or district, at the elementary or middle levels.

$$\text{Points Assigned to Student Growth} = \frac{(\text{Average Score} * 25)}{5}$$

Results for a school or district may range from 5 to 25 points.

HIGH SCHOOL GRADUATION RATE

The High School Graduation Rate accounts for 20 points for high schools in Rhode Island’s classification system. For each school or district, four different graduation rates are calculated based on cohorts:

1. The 4-year graduation rate is based on the cohort of students who entered 9th grade for the first time in 2007-08.
2. The 5-year graduation rate is based on the cohort of students who entered 9th grade for the first time in 2006-07.
3. The 6-year graduation rate is based on the cohort of students who entered 9th grade for the first time in 2005-06.
4. From these rates, a weighted graduation rate is calculated based on 50% of the 4-year cohort rate, 25% of the 5-year cohort rate and 25% of the 6-year cohort rate. This this weighted rate is referred to as the “Composite Graduation Rate”.

For any given year, the graduation rate for accountability purposes is the higher of the 4-year rate and the composite rate. For the purposes of this measure, rates are only calculated for the All Students subgroup, provided that there were at least 20 students in the cohort. The graduation rate is then compared to the cut scores provided in Table 8 below.

Table 8: High School Graduation Rate Cut Scores for 2012 – High Schools Only

| Metric | Subgroups | 1 Point | 2 Points | 3 Points | 4 Points | 5 Points |
|---|--------------|---------|--------------|--------------|--------------|----------|
| HS Graduation Rates (20 points, HS only)* | All students | < 65 | ≥ 65 < 75 | ≥ 75 < 85 | ≥ 85 < 90 | ≥ 90 |

Note: Numbers in the cells above refer to the 4-year or composite graduation rate, whichever is higher.

* Schools whose graduation rates are higher than their annual target and schools that have a graduation rate higher than the state average may receive one additional point.

Points from 1 to 5 are then assigned based on the graduation rate and the cut points shown in the table above. In addition, the graduation rate score also includes a sixth possible point. If the 2011-12 accountability graduation rate (i.e. the higher of the 4-year rate and the composite rate) is greater than or equal to the Graduation Rate Target or if it is greater than the statewide average graduation rate, then the school or district is assigned an extra point. (Please see the Graduation Rate Target section below for an explanation of how this is calculated).

Therefore, the equation below is used to assign High School Graduation Rate points in each high school or district for the high school level.

$$\text{Points Assigned to HS Graduation Rate} = \frac{(\text{Score} + \text{Possible Extra Point}) * 20}{6}$$

Results for a school or district may range from 3.33 to 20 points.

HIGH SCHOOL SCALED SCORE CHANGE

The High School Scaled Score Change accounts for 5 points for high schools in Rhode Island’s classification system. Because the state assessment is only administered once at the high-school level (in 11th grade), a growth score is not available. As a proxy, RIDE uses the change in average scale scores at the 11th grade to measure annual improvement. To calculate this measure, a school or district’s 2011-12 11th grade NECAP mean scaled score is subtracted from the 2010-11 mean scaled scores for both mathematics and reading for All Students, provided that there were at least 20 students tested each year. These differences are then compared to the cut scores provided in Table 9 below.

Table 9: High School Scaled Score Change Cut Scores for 2012 – High Schools Only

| Metric | Subgroups | Grade Span & Subject | 1 Point | 2 Point | 3 Points | 4 Points | 5 Points |
|--|--------------|----------------------|---------|--------------|-------------|------------|----------|
| HS Scaled Score Change (5 points, HS only) | All students | Reading | < -3 | ≥ -3 < -1 | ≥ -1 < 1 | ≥ 1 < 3 | ≥ 3 |
| | | Math | | | | | |

Note: Numbers in the cells above refer to the difference in mean scaled score on NECAP between years.

Points from 1 to 5 are then assigned based on the graduation rate and cut points shown in the table above. The mean of these two values is calculated – or one score is taken, if there were at least 20 students tested in that subject but not the other. The equation below is used to assign High School Scaled Score Change points in each high school or district at the high school level.

| |
|---|
| $\text{Points Assigned to High School Scaled Score} = \frac{(\text{Average Score} * 5)}{5}$ |
|---|

Results for a school or district may range from 1 to 5 points.

CIS CALCULATION

Based on the scores earned for each metric, a Composite Index Score is calculated for each Rhode Island school and for each district at each applicable level (i.e. elementary, middle and high). In most cases, this is the sum of scores for each metric. In some circumstances, however, no score can be calculated for a metric. This may occur because of the grade span of a school (e.g. a K-2 school will not have any students tested on NECAP). Or a school may not have been in existence long enough to calculate graduation rates, growth, or improvement. In addition, if no subcomponent (i.e. subgroup and subject combination) of a metric meets the n-size requirement of greater than or equal to 20 students, that metric is not calculated.

If all but one metric has a score, then the following steps are taken:

1. The points attributed to metrics that are measured are summed.
2. This total is then divided by the sum of the maximum possible points for those metrics to create a ratio.
3. This average is then multiplied by the maximum possible points for the other (non-measured) metric.
4. This number is then added to the initial sum, to calculate the CIS for that school or district at that level. In other words,

$$CIS = \sum (Pts, measured metrics) + \frac{\sum (Pts, measured metrics) * \sum (Max pts, missing metric)}{\sum (Max pts, measured metrics)}$$

Example: An elementary school does not have enough students in different subgroups to calculate subgroup gaps (30 possible points), but does have enough students to calculate the other metrics. If that school earns 56 out of a possible 70 points in those metrics, it would receive $56 + (56*30)/80 = 56 + 21 = 77$ points.

If more than one metric does not have a score, then no CIS is calculated.

PARTICIPATION RATE

The Participation Rate is not assigned points for the CIS, but remains an important limiting factor in Rhode Island’s accountability system. Schools and districts must test at least 95% of their enrolled students in reading and mathematics. Allowable exemptions from test participation are listed in the Student Exemptions section below. As opposed to content area measures, participation rates are based on Testing Year rather than Teaching Year data.

If a school fails to test at least 95% of its students in the All Students subgroup in either reading or math, it is classified as a “Warning School,” at best, regardless of the Composite Index Score. If it fails to meet the participation rate target for two consecutive years, it will be classified as a “Focus School,” at best. If it fails to meet the participation rate target for three consecutive years, it will be classified as a “Priority School.”

GRADUATION RATE TARGET

Similar to the Participation Rate, the Graduation Rate Target is an important limiting factor in Rhode Island’s accountability system. High schools and school districts are expected to cut in half the percentage of students not graduating by 2016. Graduation rates of the class of 2010 are used as baseline for this process. The annual targets from 2010 increase annually by the same amount to the 2016 target. This operationally defines graduation rate targets for schools and districts from 2011 to 2016.

The steps used to calculate annual targets are as follows:

1. The Baseline is defined as the 2010 accountability graduation rate (i.e. the higher of the 4-year and the composite rate).
2. The 2016 Target is defined as the midpoint between the Baseline and 100%.

$$2016 \text{ Target} = \text{Baseline} + \frac{(100 - \text{Baseline})}{2}$$

3. The Gap is defined as the difference between the Baseline and the 2016 Target.

$$\text{Gap} = \frac{(100 - \text{Baseline})}{2}$$

4. Annual targets are set by dividing the Gap in six even, annual increments and adding them to the Baseline.

$$\text{Annual Target} = \text{Baseline} + \frac{\text{Gap} * (\text{Years since Baseline})}{6}$$

Or, written differently,

$$\text{Annual Target} = \text{Baseline} + \frac{(100 - \text{Baseline}) * (\text{Years since Baseline})}{12}$$

5. If the current year's accountability graduation rate (i.e. the higher of the 4-year and the composite rate) is greater than or equal to the Annual Target, then the school or district is considered to have met the target.

Example: A school has a graduation rate of 76% in 2010 (Baseline). This means that it has 24% of its students not graduating; which must be reduced to 12% by 2016. 2016 Target = 76% + (100-76%)/2 OR 2016 Target = 88%. And the annual targets increase by 2% every year, as shown in Table 10.

Table 10: Graduation Rate Target Example

| Year | Graduation Target |
|-----------------|--------------------------|
| 2010 (Baseline) | 76% |
| 2011 Target | 78% |
| 2012 Target | 80% |
| 2013 Target | 82% |
| 2014 Target | 84% |
| 2015 Target | 86% |
| 2016 Target | 88% |

If any cohort is less than 20 students, then a graduation rate cannot be calculated. If, as a result, either the Baseline or the current year cannot be calculated, then the graduation rate metric is not evaluated.

Growth provisions, similar to safe harbor provisions, are available to schools and districts which fail to meet their graduation rate. This requires that there is at least a 10% reduction in the gap between the accountability graduation rate of the prior year and 100% graduation. This is calculated as follows:

1. Prior Rate is defined as the previous year's graduation rate.
2. $Growth\ Provision\ Rate = Prior\ Rate + \frac{(100 - Prior\ Rate)}{10}$
3. If the current year's accountability graduation rate (i.e. the higher of the 4-year and the composite rate) is greater than or equal to the Growth Provision Rate, then the school or district is considered to have met the graduation rate annual target.

A school or district that fails to meet its Graduation Rate Target for two consecutive years is classified as a "Warning School," at best, regardless of the Composite Index Score.

ANNUAL MEASURABLE OBJECTIVES

Annual Measurable Objectives are the final metric used for accountability in Rhode Island's system, although they are not assigned points for the CIS. Schools or districts (at each level) have a maximum of 22 possible AMOs to meet. These include content proficiency rates in reading and mathematics for All Students and for the 10 ESEA Subgroups (see Table 1 above).

Content Proficiency AMOs are calculated differently than they were in the past. They are now school or district and subgroup specific. This means that each NCLB subgroup within each school or district has its own AMOs in reading and in mathematics. Based on their performance in 2010-11 assessments, each subgroup is required to cut by half the percentage of students who are not proficient by the 2016-17 school year. The AMOs are based on equal increments from the 2010-11 baseline to the 2016-17 target.

This is calculated using the following steps:

1. The Baseline is defined as the 2010-11 proficiency rate.
2. The 2016-17 Target is defined as the midpoint between the Baseline and 100%.

$$2016 - 17\ Target = Baseline + \frac{(100 - Baseline)}{2}$$

3. The Gap is defined as the difference between the Baseline and the 2016-17 Target.

$$Gap = \frac{(100 - Baseline)}{2}$$

4. Annual targets are set by dividing the Gap in six even, annual increments and adding them to the Baseline.

$$\text{Annual Target} = \text{Baseline} + \frac{\text{Gap} * (\text{Years since Baseline})}{6}$$

Or, written differently,

$$\text{Annual Target} = \text{Baseline} + \frac{(100 - \text{Baseline}) * (\text{Years since Baseline})}{12}$$

Example: In one school 64% of students were proficient in reading in 2010-11. This means that the 2017 Target = 64 + (100-64)/2 OR 2017 Target = 82%. And the annual targets increase by 3% every year, as shown in Table 11.

Table 11: Content Proficiency AMO Example

| Year | AMO |
|--------------------|-----|
| 2010-11 (Baseline) | 64% |
| 2011-12 Target | 67% |
| 2012-13 Target | 70% |
| 2013-14 Target | 73% |
| 2014-15 Target | 76% |
| 2015-16 Target | 79% |
| 2016-17 Target | 82% |

Safe harbor provisions are available to schools and districts which fail to meet an AMO. This requires that there is at least a 10% reduction in the gap between the proficiency rate of the prior year and 100% Proficiency. This is calculated as follows:

1. Prior Rate is defined as the previous year's graduation rate.
2. $\text{Safe Harbor Rate} = \text{Prior Rate} + \frac{(100 - \text{Prior Rate})}{10}$
3. If the current year's proficiency rate is greater than or equal to the Safe Harbor Rate, then the school or district is considered to have met the AMO.

In addition, all subgroups that are evaluated for content proficiency AMOs must also have at least a 95% test participation rate. If a subgroup does not meet the 95% participation threshold in one subject, then the school will be considered to have not met the content proficiency AMO for that subgroup and subject, regardless of the proficiency rate of that subgroup.

A school or district that fails to meet any AMO for two consecutive years is classified as a "Warning School," at best, regardless of the Composite Index Score.

PERSISTENTLY LOWEST ACHIEVING (PLA) SCHOOLS

Finally, Rhode Island’s accountability system takes into consideration whether schools were previously designated as a Persistently Lowest Achieving school. Any Tier I PLA school which is currently receiving funds through the federal School Improvement Grant (SIG) is classified as a “Priority School.” There are 13 such schools. More information on PLA schools can be found on the RIDE website at <http://www.ride.ri.gov/Commissioner/edpolicy/plas.aspx>.

CLASSIFICATION OF SCHOOLS

Classification of schools into Commended, Leading, Typical, Warning, Focus and Priority is based primarily on the Composite Index Score but also factors in the Participation Rate, the Graduation Rate Target, the Annual Measurable Objectives, and the PLA status. Classification is calculated based on the criteria outlined in Table 12 below.

Table 12: Classification Criteria

| Criteria | Classification |
|--|----------------|
| A school with any of the following criteria: <ul style="list-style-type: none"> • Among the 8 schools with the lowest total points (i.e. < 37.8) • A current Tier I PLA school that is receiving SIG funds • School wide participation rate < 95% for three consecutive years | Priority |
| A school not identified as a Priority School, with any of the following criteria: <ul style="list-style-type: none"> • Subgroup gaps points < 12 • Percent proficient points < 10 • School wide participation rate < 95% for two consecutive years | Focus |
| A school not identified as a Priority or Focus School, with any of the following criteria: <ul style="list-style-type: none"> • CIS Score < 50 • School wide participation rate < 95% • Percent proficient points ≤ 10 • Subgroup gap points < 15 • Student growth points ≤ 7.5 • Sum of graduation rate and high school scaled score points ≤ 10 • Failure to attain any AMO for two consecutive years • Failing graduation rate over time | Warning |
| A school not identified as a Priority, Focus or Warning School, with: <ul style="list-style-type: none"> • ≥50 CIS Score < 70 | Typical |
| A school not identified as a Priority, Focus or Warning School, with: <ul style="list-style-type: none"> • ≥70 CIS Score < 77 | Leading |

| | |
|--|-----------|
| or <ul style="list-style-type: none"> • CIS Score ≥ 77, percent proficient points < 24 and subgroup gap points < 24 | |
| A school not identified as a Priority, Focus or Warning School, with: <ul style="list-style-type: none"> • CIS Score ≥ 77 and either: <ul style="list-style-type: none"> • Percent proficient points ≥ 24 or • Subgroup gap points ≥ 24 | Commended |

FLEXIBILITY WITHIN THE ACCOUNTABILITY SYSTEM

Rhode Island’s school and district accountability system includes several flexibilities to ensure as much fairness as possible. These aspects of the accountability System serve to add reliability to the system. The flexibilities include:

- Student Exemptions
- Error Bands
- Rounding Rules
- Cell Size

STUDENT EXEMPTIONS

ELL Students in the U.S. for Less Than One Year: These students are exempt from participating in the NECAP reading or writing exams if they have entered the U.S. after October 1st of the prior year. All students must participate in the mathematics exam. For the reading exam, ELL students in the U.S. for less than one year are excluded from proficiency calculations and the test participation rate. For the mathematics exam, ELL students in the U.S. for less than one year are included in the participation rate, but excluded from proficiency calculations.

State-Approved Special Consideration: Typically, these students have acute medical, emotional or other issues that prevent them from taking the assessments that make up the Rhode Island State Assessment Program. The superintendent submits a letter outlining the student’s special circumstances to the Director of the Instruction, Assessment and Curriculum. Once approved, that student is then removed from the enrollment roster of that school for purposes of accountability calculations.

Home-schooled Students: Home-schooled students may have an arrangement with the district to be tested. However, these students, and their scores, are removed from all accountability calculations for the school and the district.

Students who Enroll or Withdraw from a School During the Period of Testing: Such students are removed from enrollment rosters and their scores are not used in accountability calculations of the school.

It bears noting that some students with significant cognitive disabilities take the **Rhode Island Alternate Assessment** in place of the NECAP exams. Thus, this is not technically an exemption. These students are included in the accountability system calculations. Similarly, students who are tutored to “outplacement” educational services within Rhode Island are expected to take either the NECAP assessments or the Rhode Island Alternate Assessment. These outplacement students are assigned to the school district of financial responsibility when district-level accountability reports are produced.

ERROR BANDS

Errors are inherent to any assessment system. Rhode Island's accountability process considers measurement errors associated with its testing program. To be sure that school or district proficiency rates, and the rates for each subgroup, are related to actual improvement over time rather than random or measurement errors error bands are used in calculating AMOs.

The error band for schools and for their subgroups are largely dependent on the standard deviation of student scores and the number of students tested. An upper limit of the mean index score of the school or subgroup is calculated using a 95% confidence interval. Standard error is calculated as follows:

Error = $1.96 \left(\frac{\sigma}{\sqrt{n}} \right)$ where σ is the standard deviation of the index scores within a subgroup and n is the subgroup population.

DATA ROUNDING RULES

Data rounding is used for participation rates. A rate of 94.5% or higher is allowed to meet the 95% target. Data rounding is not used for the graduation rate. Because academic AMO targets include a single decimal place, rounding has a minimal effect on meeting AMO goals or Safe Harbor targets.

CELL SIZE

Since determinations are made about school performance using subgroups of student populations, an effort is made to avoid making decisions based on a small number of students (n) that would make a school's classification statistically unreliable. For this purpose, decisions are made about subgroups only when there is a minimum of 20 students within the group assessed.

Table 13. Minimum Cell Size Example: (Elementary School)

| <i>Number of Students Tested by Grade and Student Subgroup</i> | | | | |
|--|----------------|----------------|----------------|--------------|
| Subgroup | Grade 3 | Grade 4 | Grade 5 | TOTAL |
| IEP | 15 + | 24 + | 21 = | 60 |
| ELL | 5 + | 6 + | 7 = | 18 |
| Black | 5 + | 4 + | 6 = | 15 |
| Hispanic | 16 + | 14 + | 18 = | 48 |

NOTE: For ELL students, the tally to determine whether 20 or more students are represented is based on the number of students actively receiving ELL services at the time they were tested plus the count of ELL monitored students. ELL monitored students are former ELL students who were exited from ELL program services within the past two years.

In the example in Table 10, rates would be calculated for the IEP ($n = 60$) and Hispanic ($n = 48$) subgroups. Rates would not be calculated for the ELL ($n = 18$) and the Black ($n = 15$) subgroups because this school does not have at least than 20 students across the three grades with test data. This school would also not be evaluated for AMOs for these groups.

CLASSIFICATION AND APPEALS PROCESS TIMELINE

The last opportunity for review of assessment data is the appeal process. A school or district will have 17 days to challenge the accuracy of the data that would lead to its classification. The timeline for 2012 classifications using NECAP assessments at grades 3-8 and 11 are found in Table 14 below:

Table 14. Timeline for Classification and Appeals

| Time Frame | Process or Product |
|-------------------|--|
| October 2011 | Testing Window |
| June 2012 | Analysis of assessment data for accuracy and application of processing rules (e.g., disaggregations, October 1 st enrollment checks, etc.). |
| June 2012 | Appeal process occurs for all schools/districts. |
| July 13, 2012 | Final release of school and district classifications. |

APPEALS PROCESS

Federal law specifies an appeals period to allow Title I schools and districts to challenge their classifications. In Rhode Island, this is typically interpreted as a chance to request formally a review of the accuracy of student enrollment counts or the coding of student background or program characteristics, the accuracy of exemption codes or other similar issues. A request to give the Commissioner of Education discretion to review an appeal when a single target is missed by a very small margin in the context of other performance indicators was denied by the US Department of Education.

RIDE makes every effort to respond to appeals by schools that could potentially change their classification. Reviews are performed as resources permit. RIDE takes the position that the accuracy of student coding and enrollment counts should be guaranteed by districts at the beginning of the testing process rather than at the end.

Appeals must be submitted by the school district superintendents to:

Deborah A. Gist, Commissioner
Rhode Island Department of Education
Office of Instruction, Assessment and Accountability
255 Westminster Street
Providence, RI 02903

DISTRICT ACCOUNTABILITY AND CLASSIFICATION PROCESS

Accountability calculations are made for school districts at each applicable level (elementary, middle and high) in addition to those made for all individual schools within a district. All students who have received instruction in the district for at least one school year are included in an analysis of reading and mathematics performance. The review is done separately for all elementary schools merged into one data set, all middle schools merged and all high schools merged. Districts are also held to the same test participation rate, graduation rate and AMO requirements that exist for schools. Students tutored to “outplacement” schools are included in the analysis of district performance. Calculation of proficiency rates, CIS points, safe harbor provisions and other procedural methods parallel the methods described earlier for schools.

District accountability measurements may sometimes appear to be inconsistent with school classifications. However, it often occurs that subgroups are not reviewed for individual schools because they have fewer than 20 students, but are reviewed at the district level when schools are combined for analysis. In addition, data for “outplacement” students are added into district analyses, but are not used for school analyses.

AMO AND ACCOUNTABILITY REPORT CARDS

The 2012 Rhode Island school, district and state Report Cards will be placed on the RIDE website (www.ride.ri.gov) as soon as they are available. There are two types of report cards:

1. The AMO Report Card, which includes information on all applicable AMOs and participation rates, plus the graduation rate (high schools only)
2. The Accountability Report Card, which includes the points received in each CIS metric, the CIS, and the overall accountability classification of the school.

The information in this *Technical Bulletin* explains how the calculations were done in order to create the Report Cards for schools and districts. It is important to note that the assessment reports prepared by the assessment contractor, Measured Progress, cannot be directly compared to the school and district Report Cards. Students not enrolled in a school for a full academic year are included in basic assessment reports, but are not included in accountability analyses or published report cards. NECAP assessment reports are now designed by the assessment contractor and were delivered to schools and districts in the basic delivery of assessment results in January 2012.