Preparing Every Child for Success in School and in Life

# MSIP 5

This document is not complete; it contains only the scoring guide measures for the DRAFT 2012 APR. It will be revised, and additional MSIP 5 components will be added.

# Guidance Document

## for the fifth version of the Missouri School Improvement Program (MSIP 5)

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## SCORING GUIDE MEASURES

Missouri's Top 10 by 20 plan holds as a primary goal that all students will graduate high school college- and career-ready. To measure progress toward this goal and to distinguish among school and district performance, the Missouri Department of Elementary and Secondary Education computes an Annual Performance Report (APR) score for each Local Education Agency (LEA) and school. This overall score is comprised of scores for each of the fifth version of the Missouri School Improvement Program (MSIP 5) Performance Standards (1) **academic achievement** (2) **subgroup achievement** (3) **high school readiness** (K-8 districts) or **college and career readiness** (K-12 districts), (4) **attendance rate** and (5) **graduation rate** (K-12 districts). Three distinct metrics focusing on status, progress, and growth (where applicable) are used to calculate a comprehensive score used to determine the accreditation level of a school district.

The detailed scoring guides for each performance standard are outlined in the section titled "**SCORING GUIDES**." The academic and subgroup achievement measures are based on the Missouri Assessment Program (MAP) grade-level (GLA), end-of-course (EOC), and MAP-alternate (MAP-A) assessments. The high school readiness measures are based on the end-of-course assessments. Once new assessments aligned to Missouri's Core Academic Standards are available and included in the MAP, the Department will reset the achievement targets accordingly. **Performance and achievement targets will be reviewed and revised, if necessary, every three years.**

## 1. Academic Achievement

*Sources of data used in the Missouri Assessment Program (MAP) calculation: Data are obtained from contracted testing publishers for the grade-level assessment, end-of-course assessments and Missouri Assessment Program-Alternate (MAP-A)assessments. These data files are used to create online reports for district use.*

**Notes:**

- ***As assessments change in 2014-2015 or beyond, the scoring guide will be adjusted.***
- *All MAP performance data are reported to the nearest tenth.*

### STATUS MEASURES

Status is a measurement of the school's or LEA's level of achievement based upon a three-year average of the MAP Performance Index (MPI), unless three years of data are not available. When three years of data are not available for the LEA and/or school, (e.g. a new school is established) the available years will be used for reporting purposes. When three consecutive years of data are not available for the LEA and/or school, (e.g. participation rate not met in prior year), the three most recent years of data - not to exceed a time span of five years - will be used for accountability purposes. A detailed description of how to calculate the MPI can be found later in this document. The MPI is used to determine whether the LEA, school, or subgroup is exceeding, is on target, is approaching or is substantially not meeting the academic achievement target for English language arts, mathematics, science, and social studies MAP assessments.

Status is divided into four levels as follows:

- **Exceeds** – represents a level of performance approximately equivalent to the projected 2020 performance of the top 10 states on the corresponding NAEP exam OR, in subjects for which state-by-state NAEP data are unavailable, an equally rigorous target.
- **On Target** —represents a level of performance about equal to 75% proficient by year 2020 – if Basic achievement is worth 300 points and Proficient achievement is worth 400 points, an MPI of 375 would result from 75% of students scoring at Proficient and 25% scoring at Basic. Current performance is compared to this target, then a linear trajectory is created that requires equal annual progress increments to reach the 2020 target.
- **Approaching**—represents a level of performance equal to 100% Basic if each score at the Basic level yields 300 points.
- **Floor**—represents a level of performance less than 100% Basic if each score at the Basic level yields 300 points.

## PROGRESS MEASURES

The MPI is also used to measure annual improvement on the MAP assessments. This indicator holds LEAs and schools accountable for continuous improvement year to year using a rolling average. This method measures improvement by comparing two-year averages of data and setting targets based on an MPI Gap. Year 1 and 2 are averaged, and years 2 and 3 are averaged; the averages are then compared to determine the amount of improvement. When three years of data are not available in the LEA or school, (e.g. a new school is established) the available years will be used for reporting purposes. When three consecutive years of data are not available, (e.g. assessment data are not available one year for a content area), the three most recent years of data - not to exceed a time span of five years - will be used for accountability purposes. Progress in the LEA or school's MPI recognizes movement of students throughout all MAP achievement levels, ensuring that the focus remains on all students and not just those closest to being proficient. Differentiated improvement targets are set for LEAs, schools and subgroups based on the individual group's two prior years achievement. A detailed description of how to calculate the MPI Gap can be found later in this document.

Progress is divided into four levels as follows:

- **Exceeds** – represents equal to or greater than 5% improvement based on the MPI Gap.
- **On Target**—represents equal to or greater than 3% but less than 5% improvement based on the MPI Gap.
- **Approaching**—represents equal to or greater than 1% but less than 3% improvement based on the MPI Gap.
- **Floor**—represents less than 1% improvement based on the MPI Gap.

## GROWTH MEASURES

Growth is the change in achievement scores for an individual student between two or more points in time. While progress measures the change in the performance of a defined group over time, growth measures the achievement gains of individual students over time. An example of a progress measure would be the change in average assessment scores in last year's third graders compared to this year's third graders. In contrast, a comparable measure of growth would be the difference in average 4th grade scores from this year compared to average 3rd grade scores from last year.

Growth measures for MSIP are determined by conducting a statistical analysis of all valid MAP score pairs from the prior three years. A valid MAP score pair is a score from grades 4 through 8 with a score from the prior year and grade level. For example, a 4th grade score with a valid 3rd grade score from the prior year, both for the same student, is a valid MAP score pair. In this case the 4th grade score in the pair is the outcome score and the 3rd grade score from the prior year is the predictor score. A 5th grade MAP score

with no 4th grade score from the prior year would NOT be included in the statistical analysis because there is no valid predictor score to go with the outcome score.

The statistical analyses determine the relationship between outcome scores and predictor scores across all schools and districts. This relationship is used to calculate a "predicted outcome score" for each score pair. The differences between the predicted outcome scores and the observed outcome scores (the "residuals") from all the analyzed score pairs are then analyzed to determine each LEA or school "effect" on student achievement growth.

A score pair is assigned to an LEA and school when the MAP test that generated the outcome score was taken in that LEA and school, regardless of the LEA and school where the exam that generated the valid predictor score was taken. An LEA or school growth measure (an "effect estimate") is basically the average of the differences between observed and predicted scores from all test pairs assigned to the school or district.

Current limitations in the assessment and related statistical analysis preclude developing a purely standards-based approach to evaluating the adequacy of student growth. **A standards-based approach will be developed as we transition to new assessment.**

At this time, growth measures are only available for grades 4-8 in English language arts and mathematics. School and LEA growth measures are reported in Normal Curve Equivalent (NCE) units on the APR. The state mean is, by construction, a score of 50 NCEs. LEA and school growth measures are compared to the state mean and those that are statistically different from the state mean will be noted. (Statistical significance depends on three factors – the magnitude of the difference from the state mean, the number of score pairs analyzed for the LEA or school, and the overall variability in the individual student growth measures.)

Growth is divided into three levels as follows:

- **Exceeds**—The LEA or school growth measure (effect) is greater than 50 AND the difference from 50 is statistically significant.
- **On Target**— The LEA or school growth measure (effect) is not statistically different from 50.
- **Floor**— The LEA or school growth measure (effect) is less than 50 AND the difference from 50 is statistically significant.

## TEST PARTICIPATION

All LEAs and schools are required to assess at least 95 percent of their students and subgroups on the assessments required by the MAP. ***Irrespective of performance, zero APR points will be awarded to a content area for the aggregate or subgroup(s) for which the rate falls below 95 percent***.

### ELL Exclusion

To meet the participation standard, English language learners (ELL) in their first year of U.S. schooling must participate in the state English Language Proficiency (ELP) assessment and the MAP for mathematics. ELLs in their second year of U.S. schooling and beyond must participate in the mathematics, English language arts, science and social studies MAP and the state ELP assessment. Exceptions to the ELP assessment requirement will be made only where accommodations for ELLs with disabilities are not available for a particular test.

### MAP-A Exclusion

Some students with severe cognitive disabilities are not able to take the standard grade-level or course-level content area assessments. If the student's IEP team determines he/she is unable to participate in the standard assessment, the student takes a MAP-Alternate (MAP-A) assessment. LEAs are required to

assess all students who qualify for the MAP- A assessment on the corresponding MAP-A test, unless an alternate assessment is not yet available. A student's scorable MAP-A portfolio in grade 10 mathematics would be used to meet the Algebra I end-of-course participation requirement, the English language arts grade 11 would be used to meet the English II end-of-course participation requirement, the grade 11 science would be used to meet the biology participation requirement. The LEA would need to use the MAP-A Exception code for the *additional* end-of-course tests, as alternate assessments are not yet available. However, a student would need to have consistently participated in MAP-A assessments previously before the MAP-A Exception code may be used by the LEA for the additional assessments.

If the student's IEP team determines he/she is unable to participate in the standard assessment, the LEA is required to assess the student using a MAP-Alternate (MAP-A) assessment when available. There is no cap on the number of students who may *participate* in the MAP-A test. However, there is a 1% cap on proficient or advanced scores earned from the MAP-A that may be used in the LEA's accountability determinations. The 1% cap is calculated at the LEA level and uses the tested population per subject area. LEAs that serve greater than 100 tested students will be restricted to the cap of 1% of their total tested population per subject area. LEAs that serve 100 or fewer tested students will be restricted to a cap not exceeding 1 student per subject area. LEAs with high percentages of students with cognitive disabilities may submit a Request for Exception to the Cap on Alternate Assessments.

**Full Academic Year**

LEAs are required to test all enrolled students, unless the above specified ELL or MAP-A Exclusion applies. All scores will be reported, but only scores of those students who have been enrolled a "Full Academic Year" in a building and/or LEA will be included in the calculation for the APR score. A full academic year is defined as any student who is enrolled from the last Wednesday in September through the MAP administration, without transferring out of the building or LEA for a significant period of time and re-enrolling. A significant period of time is considered "one day more than half of the eligible days between the last Wednesday in September and the test administration." This information is obtained from the MOSIS data reported by LEAs. This applies to each summary level independently. For example, a student who is coded as "In building less than a year" but was in the LEA a full academic year is excluded from the school totals but is included in the LEA totals.

**Participation Rate Calculation**

The participation rate calculates the percent of students who receive a valid MAP score in a subject or content area. A student for whom the district is accountable is an "Accountable Student." An "Accountable Student" who receives a valid MAP score in a subject or content area is also a "Reportable Student." When an "Accountable Student" does not receive a valid test score, the student receives a "Level Not Determined" (LND) in place of an achievement level score. The percent for Level Not Determined (LND) may not exceed 5%, as all LEAs and schools are required to assess at least 95 percent of their students on the assessments required by the MAP. If test data are not evaluated due to not meeting the minimum 95% participation rate, a symbol appears next to the subject area on the APR summary sheet.

Step 1 – The number of "Accountable Students" is determined. See "Reportable/Accountable Definitions" chart regarding how to determine "Accountable Students."

| Reportable Students | | LND Students | Accountable Students |
|---|---|---|---|
| 130 | + | 2 | 132 |

Step 2 – The Participation Rate is determined. "Reportable Students" divided by "Accountable Students" = "Participation Rate"

| Reportable Students | | Accountable Students | *Participation Rate |
|---|---|---|---|
| 130 | / | 132 | 98.5% |

*No points are awarded for test data if the participation rate falls below 95%.

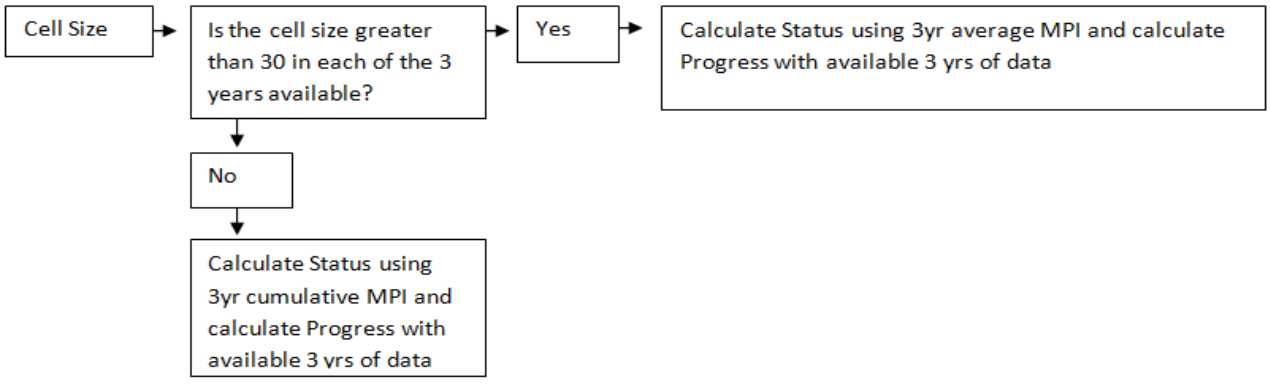
| | Reportable/Accountable Definitions |
|---|---|
| **Reportable (Participant)** | Number of students with an Achievement Level for the content area (Participants) |
| **Level Not Determined (LND)** | Number of students without an Achievement Level or an attempt on any session on the test |
| **Grade-level MAP Accountable** | Number of students enrolled at the time of test administration (Reportable + LND) |
| ***MAP- A Accountable** | Number of students enrolled at the time of test administration (Reportable + LND) |
| **EOC Accountable** | Number of students enrolled in the assessment at the time of test administration (Reportable + LND) + number of students who graduate without participating in the EOC or demonstrating prior accountability fulfillment for the EOC |
| *MAP-A students with a scorable MAP-A portfolio in a tested grade level are assigned an Achievement Level. | |

## CELL SIZE

Student groups must meet the minimum cell size requirement of 30 in order to be evaluated for accountability determinations.

LEAs, schools, super subgroups and subgroups must have at least 30 accountable students in the group being measured in a given content area each year over a three-year period in order to generate scores for accountability based on the average of three annually-calculated MPIs. If this is not possible, the status measure is calculated by "pooling" three years of data and summing the number of Accountable students and the numbers of students in each achievement level across the three year period; the "pooled" counts are used in the calculation used for determining Status and is referred to as the cumulative measure.

This flowchart explains the conditions triggering special cell size decisions for Standard 1:



## MEASURING MAP

The ***MAP Performance Index (MPI)*** is used to develop scores within the Status and Progress metrics and to set academic achievement targets for LEA, school and student group achievement. Student performance on tests administered through the MAP is reported in terms of four achievement levels (below basic, basic, proficient and advanced) that describe a pathway to proficiency. The MPI is a single composite number that represents the MAP assessment performance of every student by awarding points to each student based on the four achievement levels. The points for all students in the LEA, school or student group in a subject area are summed together, divided by the number of students in the group being measured and then multiplied by 100. The result is the MPI for that group and subject. All assessment results from a single accountability year and for a single subject/content area are combined when generating the LEA, school, or student group MPI.

**MPI Point Values**. Numeric values are assigned to each of the Achievement-level scores as follows:

| | |
|---|---|
| Below Basic | 1 |
| Basic | 3 |
| Proficient | 4 |
| Advanced | 5 |

Assigning one point to the Below Basic achievement level and three points for the Basic achievement level supports Missouri's expectation of placing every child on a path towards proficiency. The additional point spread is designed to recognize, through year-to-year improvement in the MPI, the movement of students from this least desirable achievement level. The use of the index also allows for distinction between the Proficient and Advanced student, holding LEAs and schools accountable for continuous improvement beyond proficiency.

**MPI Example Calculation**. Achievement levels are provided by the testing companies for the total number of reportable students in each subject area. In the following example of a single content area for a grade 6-8 building, achievement levels generated through the grade-level MAP, the MAP-Alternate and the end-of-course assessments may be utilized. To generate the MPI, the number of Advanced are multiplied by 5, Proficient by 4, Basic by 3, and Below Basic by 1. These products are then summed, divided by the total number of reportable and multiplied by 100 to produce the MPI which ranges from 100-500. The following example shows how the index is calculated in a single subject and school:

STEP 1 – The number of students in each achievement level is determined for each year.

| | Number Reportable | | | | | | Total Reportable |
|---|---|---|---|---|---|---|---|
| | Grade 6 | Grade 7 | Grade 8 | EOC | MAP-A | | |
| Below Basic | 10 | 5 | 5 | 0 | | = | 20 |
| Basic | 10 | 10 | 15 | 0 | | = | 35 |
| Proficient | 5 | 10 | 15 | 9 | 1 | = | 40 |
| Advanced | 15 | 8 | 5 | 2 | | = | 30 |
| Total Reportable | | | | | | = | 125 |

STEP 2 – The index point value assigned to each achievement level is multiplied by the number of students in each achievement level.

| Achievement Level | Index Point Value | | # of Students | Index points |
|---|---|---|---|---|
| Below Basic | 1 | * | 20 | 20 |
| Basic | 3 | * | 35 | 105 |

| | | | | |
|---|---|---|---|---|
| Proficient | 4 | * | 40 | 160 |
| Advanced | 5 | * | 30 | 150 |
| Total | | | | 435 |

STEP 3 – The total index points is divided by the total number of reportable students and multiplied by 100.

| Total Index Points | | Reportable Students | | | | MPI |
|---|---|---|---|---|---|---|
| 435 | / | 125 | = | 3.48 | *100 | **348** |

The same method is used when calculating at the LEA level.

STEP 1 – The number of students in each achievement level is determined for each year.

| | Gr 3 | Gr 4 | Gr 5 | Gr 6 | Gr 7 | Gr 8 | EOC | MAP -A | | |
|---|---|---|---|---|---|---|---|---|---|---|
| BB | 5 | 8 | 7 | 10 | 5 | 5 | 5 | | = | 45 |
| Basic | 12 | 10 | 8 | 10 | 10 | 15 | 15 | | = | 80 |
| Proficient | 17 | 20 | 14 | 5 | 10 | 25 | 25 | 2 | = | 118 |
| Advanced | 10 | 11 | 10 | 15 | 10 | 5 | 15 | 1 | = | 77 |
| Total Reportable | | | | | | | | | = | 320 |

STEP 2 – The index point value assigned to each achievement level is multiplied by the number of students in each achievement level.

| Achievement Level | Index Point Value | | # of Students | Index points |
|---|---|---|---|---|
| Below Basic | 1 | * | 45 | 45 |
| Basic | 3 | * | 80 | 240 |
| Proficient | 4 | * | 118 | 472 |
| Advanced | 5 | * | 77 | 385 |
| Total | | | | 1142 |

STEP 3 – The total index points is divided by the total number of reportable students and multiplied by 100.

| Total Index Points | | Reportable Students | | | | MPI |
|---|---|---|---|---|---|---|
| 1142 | / | 320 | = | 3.569 | *100 | **356.9** |

**Status Measure Calculation**. The MPI is used to determine whether the LEA, school, or subgroup is exceeding, is on target, is approaching or is substantially not meeting the achievement targets set for the MAP content area. Using three years of data, this indicator holds LEAs and schools accountable for student performance in relation to statewide academic achievement targets.

**Example**: Using three years of data to calculate the 3-year MPI for "ABC" LEA population for mathematics.

| Year 1 MPI | | Year 2 MPI | | Year 3 (most recent year) MPI | | | | 3-year MPI |
|---|---|---|---|---|---|---|---|---|
| 354.2 | + | 356.9 | + | 360.1 | = | 1056 | / 3 | **357.1** |

In this example, the MPI for mathematics from 2010, 2011 and 2012 are averaged and the mean is used to determine whether the LEA, school or subgroup is exceeding, is on target, is approaching or is substantially not meeting the academic achievement target. The 3-year MPI and the corresponding designation of exceeding/on target/approaching are then used to assign points (e.g., a "score") to each standard. For example, if a 357.1 3-year MPI = is "On Target" in mathematics, the LEA, school or subgroup would receive 12 Status Points for mathematics.

**Table 1. Status Scores**

| **Academic Achievement** | **English Language Arts:** Grades 3-8 MAP, MAP-A, Eng I Eng II | **Mathematics:** Grades 3-8 MAP, MAP-A, Alg I, Geo, Alg II | **Science:** Grades 5, 8 MAP, MAP-Alternate, Biology | **Social Studies:** American History; US Government |
|---|---|---|---|---|
| **Status** (3 year average) | Exceeding = 16<br>On Target =12<br>Approaching =9<br>Floor =0 | Exceeding = 16<br>On Target =12<br>Approaching =9<br>Floor =0 | Exceeding = 16<br>On Target =12<br>Approaching 9<br>Floor =0 | Exceeding = 8<br>On Target = 6<br>Approaching =5<br>Floor =0 |

Additional EOCs will be added to the Subject Areas as they become available.

**Progress Measure Calculation.** The MPI also is used to measure annual improvement on the MAP assessments. This indicator holds LEAs and schools accountable for continuous improvement in the LEA, school or subgroup year to year using a rolling average. It recognizes movement of students throughout all MAP achievement levels, ensuring that the focus remain on all students and not just those closest to being proficient. Differentiated improvement targets are set for LEAs, schools and subgroups based on the individual group's two prior years of achievement.

**Example**: Calculating the progress measure for "ABC" school district based on a rolling average of MPI, the following example shows how the progress measure is calculated in a single subject and school district level:

| ABC District English Language Arts | Year 1 | Year 2 | Year 3 (most recent year) |
|---|---|---|---|
| MPI | 358.1 | 346.6 | 365.3 |

STEP 1 – Add the scores for Years 1 and 2 and divide by 2 to determine the average.

(358.1 + 346.6) / 2 = 352.4

STEP 2 - The average MPI for Years 1 and 2 is subtracted from 450 to determine the MPI GAP.

| Constant MPI | | Years 1 and 2 Average MPI | | MPI GAP |
|---|---|---|---|---|
| 450 | - | 352.4 | = | 97.6 |

STEP 3- The MPI gap is used ***to establish progress targets*** as determined by multiplying the MPI gap by the associated percentage, i.e. 5% for exceeding, 3% for on target, 1% for approaching.

**Table 2. Generating Targets for Progress Measure**

| | MPI GAP | | | MPI Increase Needed | Years 1 and 2 Avg MPI | Years 2 and 3 Avg Progress Target |
|---|---|---|---|---|---|---|
| Exceeding | 97.6 | *5% | = | 4.9 | 352.4 | 357.3-500 |
| On Target | 97.6 | *3% | = | 2.9 | 352.4 | 355.3-357.2 |
| Approaching | 97.6 | *1% | = | 1.0 | 352.4 | 353.4-355.2 |

STEP 4 – Add the scores for Years 2 and 3 and divide by 2 to determine the average.

(346.6 + 365.3) / 2 = 356.0

STEP 5 - The district's Years 2 and 3 average MPI is used to determine if the district is exceeding, on target, or approaching the required MPI increase. In this example**, the ABC school district has a Year 2 and 3 average MPI of 356.0, which means that it is designated as "on target" with the improvement benchmark and subsequently receives 6 points as its Progress Score in English language arts.**

**Table 3. Progress Scores**

| **Academic Achievement** | **English Language Arts:** Grades 3-8 MAP, MAP-A, Eng I, Eng II | **Mathematics:** Grades 3-8 MAP, MAP-A, Alg I Alg II | **Science:** Grades 5, 8 MAP, MAP-A, Biology | **Social Studies:** American History; US Government |
|---|---|---|---|---|
| **Progress** (annual improvement) | Exceeding = 12<br>On Target =6<br>Approaching =3<br>Floor =0 | Exceeding = 12<br>On Target =6<br>Approaching =3<br>Floor =0 | Exceeding = 12<br>On Target =6<br>Approaching 3<br>Floor =0 | Exceeding = 6<br>On Target = 3<br>Approaching 1.5<br>Floor =0 |

Additional EOCs will be added to the Subject Areas as they become available.

**Growth Measure Calculation.** Beginning in January of 2010, Missouri initiated a timely and important project to study measures of student growth in achievement. The study was designed to learn more about policies and procedures required to accurately report and appropriately use valid and reliable student growth data. Materials related to this study may be found on the Department's website at dese.mo.gov/MOSIS/MCDS_pilot-student-growth.html. Growth measures in English language arts and mathematics grades 4-8 are calculated using a Missouri Growth Model and included as a Growth Score that may be used in place of the LEA, school or student group progress score. Using statistical methods, the Missouri Growth Model estimates the systemic contributions of LEAs and schools on student growth.

**Table 4. Growth Scores**

| Academic Achievement | **English Language Arts:** Grades 3-8 MAP, MAP-Alternate | **Mathematics:** Grades 3-8 MAP, MAP-Alternate |
|---|---|---|
| **Growth** (Grades 4-8) | Exceeds = 12<br>On Target=6<br>Floor =0 | Exceeds = 12<br>On Target =6<br>Floor =0 |

If the LEA, school, or subgroup growth score is positive and a statistically significant score in mathematics, that growth score would earn 12 Growth Points in mathematics. Progress or growth points, whichever is higher, is applied to the Academic Achievement score.

The status and progress or growth methods are applied to each subject (where applicable). The method awarding the maximum total points from status + progress or growth is used for each subject area. The maximum amount of points that can be earned per subject area cannot surpass the points allocated for Status Points "Exceeding," e.g. 16 for English Language Arts or 8 for Social Studies.

## 2. Subgroup Achievement

*Sources of data used in the Missouri Assessment Program (MAP) calculation: Data are obtained from contracted testing publishers for the grade-level assessment, end-of-course assessments and Missouri Assessment Program-Alternate (MAP-A)assessments. These data files are used to create online reports for district use.*

**Notes:**

- ***As assessments change in 2014-2015 or beyond, the scoring guide will be adjusted.***
- *All MAP performance data are reported to the nearest tenth.*

To better differentiate among needs of the LEAs or schools and to ensure broader inclusion of students whose subgroups have historically performed below the state total, Missouri will continue to issue and report academic achievement for students in the aggregate and for low income students, students with disabilities, English language learners, and the state's major racial and ethnic subgroups. A review of Missouri data identifies five significant gaps in subgroup performance (African American, Hispanic, low income students, students with disabilities and English Language Learners). For accountability determinations (e.g. District Accreditation and Reward, Focus, or Priority building identification), a super subgroup comprised of these five subgroups is used. A student who is included in one or more of the five identified subgroups is included as a single count in the super subgroup calculation.

| Student | Total | Asian/ Pac Is | Black | Hispanic | Am In | White | Multi Racial | FRL | IEP | ELL |
|---|---|---|---|---|---|---|---|---|---|---|
| A | X | | | | | X | | | | |
| B | X | | | | | X | | X | X | |
| C | X | | X | | | | | | | |
| D | X | | X | | | | | X | X | |
| E | X | | | X | | | | X | X | X |
| F | X | X | | | | | | | | |
| G | X | | | | | X | | X | | |
| H | X | | | | | X | | | | |
| I | X | | | | | X | | | | |
| J | X | | | | | | X | | | |

In this example of ten students (see cell size description provided earlier in this document for actual cell size requirements), scores from all ten students are included in the group of total for accountability and reporting purposes when the cell size requirement is met. Group of total is used for Standard 1: Academic Achievement.

The Super Subgroup is used for Standard 2: Subgroup Achievement. A student who is included in one or more of the five identified subgroups, such as students B, C, D, E, and G, is included once (unduplicated count) in the super subgroup calculation when the cell size requirement is met.
Performance of individual subgroups is used for reporting purposes and risk factor/exemplar flag calculations as long as the minimum cell size requirement is met. For example, Student B's score would be reported in the group of Total, White, FRL, and IEP.

The composite super subgroup score is calculated through the same method used to compute the LEA or school-level Academic Achievement score. However, the status target is established based on cutting the achievement gap in half. The amount of points granted for exceeding, on target, approaching, or falling significantly below the target, is displayed in Tables 5 and 6.

The same conceptual and statistical framework used to generate growth measures for Academic Achievement applies to the growth estimates generated for Subgroup Achievement. However, since the growth measure for Subgroup Achievement compares the average growth of students in a district or school's super subgroup to that of the state non-super subgroup, growth measures for Subgroup Achievement must be interpreted in a different manner.

Subgroup growth measures are reported in NCE units on the APR. Growth measures that are statistically significantly different from the state average growth of the non-super subgroup will be noted. Super subgroup growth will earn APR growth points as described below.

Growth is divided into three levels as follows:

- **Exceeds**—The LEA or school growth measure (effect) is greater than 50 AND the difference from 50 is statistically significant.
- **On Target**— The LEA or school growth measure (effect) is not statistically different from 50.
- **Floor**— The LEA or school growth measure (effect) is less than 50 AND the difference from 50 is statistically significant.

**Table 5. Computing the Super Subgroup Achievement Score**

| **Subgroup Achievement** | **English Language Arts:** Grades 3-8 MAP, MAP-Alternate, Eng I, Eng II<br>**Mathematics:** Grades 3-8 MAP, MAP-Alternate, Alg I, Geo and Alg II<br>**Science:** Grades 5, 8 MAP, MAP-Alternate, Biology<br><br>**Points Possible** |
|---|---|
| Status | Exceeding = 4; On Target = 3; Approaching = 2; Floor = 0 |
| Progress Target | Exceeding = 3; On Target = 2; Approaching = 1; Floor = 0 |
| Growth: Grades 4-8 | Exceeding = 3; On Target = 2; Floor = 0 |
| **Subgroup Achievement Total:** Status + Progress or Growth (whichever is higher) | Maximum of 4 points per subject area |

Additional EOCs will be added to the Subject Areas as they become available.

**Table 6. Computing the Super Subgroup Achievement Score**

| **Subgroup Achievement** | **Social Studies :** American History, US Government<br><br>**Points Possible** |
|---|---|
| Status | Exceeding = 2; On Target = 1.5; Approaching = 1; Floor = 0 |
| Progress Target | Exceeding = 1.5; On Target = 1; Approaching = .5; Floor = 0 |
| Growth: Grades 4-8 | Exceeding = 1.5; On Target = 1; Floor = 0 |
| **Subgroup Achievement Total:** Status + Progress or Growth (whichever is higher) | Maximum of 2 points per subject area |

Additional EOCs will be added to the Subject Areas as they become available.

### 3. College and Career Readiness (CCR) (K-12 LEAs only)

**CCR *1-3**

*1-3 The **percent of graduates scoring at or above the state standard** on any department-approved measure(s) of college and career readiness, for example, the ACT®, SAT®, COMPASS® or Armed Services Vocational Aptitude Battery (ASVAB), is determined by dividing the **number of graduates scoring at or above the state standard** by the **number of graduates**, then multiplying by 100.

**Sources of data used in calculation:**

- MOSIS June Enrollment and Attendance – graduates
- ACT®, SAT® COMPASS® and ASVAB files

**Notes:**

- Data as reported by official testing companies for scores on department-approved measures of college and career readiness are used in these calculations.
- ASVAB data are reported by the district through MOSIS submission, if districts choose to report it.
- When students take multiple types of tests and/or a single test multiple times, one score (the highest) is used for the APR calculation.
- **CCR status targets (cutscores) will be reviewed and revised based on inclusion of 2012-2013 data for new measures and/or those without three years of data.**

**Example of supporting data format for APR:**

| | | Year 1 | Year 2 | Year 3 (most recent) | Status |
|---|---|---|---|---|---|
| From MOSIS → | Number of Graduates | 148 | 153 | 155 | |
| From MOSIS and testing company → | Number of Graduates Scoring at or Above the State Standard | 87 | 98.5 | 110.25 | |
| | Percent of Graduates Scoring at or Above the State Standard | 58.7 | 64.4 | 71.1 | 64.7 |

**Method for calculating number of students at or above the state standard:**

| EXPLANATIONS OF CALCULATIONS | EXAMPLES OF DATA | EXAMPLES OF CALCULATIONS |
|---|---|---|
| Approximate equivalent scores are used to establish comparability of scores on different assessments. A matrix of approximately equivalent CCR *1-3 assessment scores | **UNDUPLICATED** Count<br>a. number of graduates who score at or above a 26 on the ACT® or who demonstrate comparable performance on a | a) 18 x 1.25 = 22.5 |

| | | |
|---|---|---|
| (Appendix A) displays SAT®, COMPASS®, and ASVAB exams and their approximately equivalent ACT® scores. Scores on the ACT® are used as reported. **ACT® scores and approximately equivalent scores derived from other assessments must be equal to or greater than the ACT® anchor score in order to be included in the number of students scoring at or above the state standard.** The exam contributing the highest approximate equivalent score is used for each student. | department-approved measure multiplied by 1.25<br><br>b. number of graduates who score at or above a 22 on the ACT® but below a 26 or who demonstrate comparable performance on a department-approved measure multiplied by 1<br><br>c. number of graduates who score at or above an 18 on the ACT® but below 22 or who demonstrate comparable performance on a department-approved measure multiplied by .75<br><br>d. number of graduates who participate in a department approved measure of college and career readiness but score below comparable performance of an 18 on the ACT® multiplied by .25<br><br>e. number of graduates without a score multiplied by zero | <br><br>b) 43 x 1 = 43<br><br>c) 52 x .75 = 39<br><br>d) 23 x .25 = 5.75<br><br>e) 19 x 0 = 0 |
| | Number of graduates scoring at or above the state standard | 22.5 + 43 + 39 + 5.75+ 0 = 110.25 |

**Method for calculating status:**
The percent of graduates scoring at or above state standard is determined by dividing the number of graduates scoring at or above the state standard by the number of graduates, then multiplying by 100.

| EXPLANATIONS OF DATA | EXAMPLES OF DATA (using Year 1-Year 3 figures) | EXAMPLES OF CALCULATIONS |
|---|---|---|
| 1) The **number of graduates** is based on June Enrollment and Attendance Records with an Exit Code indicating the student graduated. | number of graduates | 155 |
| 2) The **number of graduates scoring at or above the state standard** is provided by the testing companies supplying approved assessment data; ASVAB data are provided by LEAs through MOSIS. | number of graduates scoring at or above the state standard | 110.25 |
| 3) The **percent of graduates scoring at or above the state standard** is determined by dividing the **number of graduates scoring at or above the state standard** by the **number of graduates**, then multiplying by 100. | a) number of graduates scoring at or above the state standard = 110.25<br>b) number of graduates = 155 | 110.25 ÷ 155 = .711<br>.711 X 100 = 71.1% |
| 4) **Status** is determined by adding Year1, Year2, and Year3 of the **percent of graduates scoring at or above the state standard** and dividing by 3 (unless three years of data are not available). | (Year1 + Year2 + Year3) / 3 | 58.7 + 64.4 + 68.7 = 194.2<br>194.2 ÷ 3 = 64.7% |

**Method for calculating progress:**
Differentiated improvement targets are set for a given LEA, school or subgroup based on the *two prior years'* performance of that LEA, school or subgroup.

**Example**: Calculating the progress measure for "ABC" school district, the following example shows how the progress measure is calculated at the district level using a rolling average:

| ABC District | Year 1 | Year 2 | Year 3 (most recent year) |
|---|---|---|---|
| Percent of students scoring at or above state standard | 58.7 | 64.4 | 71.1 |

STEP 1 - Add the scores for Years 1 and 2 and divide by 2 to determine the average.

(58.7 + 64.4) / 2 = 61.6

STEP 2 - The average percentage for Years 1 and 2 is subtracted from 100 to determine the CCR *1-3 GAP.

| Constant | | Years 1 and 2 Average Percent | | CCR*1-3 GAP |
|---|---|---|---|---|
| 100 | - | 61.6 | = | 38.4 |

STEP 3 - The CCR*1-3 gap is used ***to establish progress targets*** as determined by multiplying the CCR*1-3 gap by the associated percentage, i.e. 25% for exceeding, 15% for on target, 5% for approaching.

**Table 7. Generating Targets for Progress Measure**

| | CCR*1-3 GAP | | | Percent Increase Needed | Years 1 and 2 Avg Percent | Years 2 and 3 Avg Progress Target |
|---|---|---|---|---|---|---|
| Exceeding | 38.4 | *25% | = | 9.6 | 61.5 | 71.1-100 |
| On Target | 38.4 | *15% | = | 5.8 | 61.5 | 67.3-71.0 |
| Approaching | 38.4 | *5% | = | 1.9 | 61.5 | 63.4-67.2 |

STEP 4 – Add the scores for Years 2 and 3 and divide by 2 to determine the average.

(64.4 + 71.1) / 2 = 67.8

STEP 5 - The district's Years 2 and 3 average percentage is used to determine if the district is exceeding, on target, or approaching the required percent increase. In this example**, the ABC school district has a Year 2 and 3 average percentage of 67.8, which means that it designated as "on target" with the improvement target and subsequently receives 4 points as its <u>Progress Score</u> in CCR *1-3**

**Table 8. Computing the College and Career Readiness *1-3 Score**

| College and Career Readiness | Indicators 1-3:<br><br>Points Possible |
|---|---|
| Status | Exceeding = 10; On Target = 7.5; Approaching 4; Floor = 0 |
| Progress Target | Exceeding = 7.5; On Target = 4; Approaching = 2; Floor = 0 |
| **College and Career Readiness Total:**<br>Status + Progress | Maximum of 10 points per indicator area |

## College and Career Readiness *4

### CCR *4

The percent of graduates who earned a qualifying score on an Advanced Placement (AP), International Baccalaureate (IB), or Technical Skills Attainment (TSA) assessments and/or receive college credit through early college, dual enrollment, or approved dual credit courses meets or exceeds the state standard or demonstrates required improvement.

**Sources of data used in calculation:**

- MOSIS June Enrollment and Attendance – graduates
- MOSIS June Student Core (for TSA data)
- MOSIS October Student Assignment
- MOSIS Courses Completed and Grades Earned
- AP and IB data from Testing Vendors

**Notes:**

- Data as reported by official testing companies for scores on department-approved measures of college and career readiness will be used in these calculations.
- Only dual credit courses from a Missouri institution that is complying with the Coordinating Board for Higher Education's Dual Credit Policy and Principles of Good Practice for Dual Credit Courses will be recognized. See Appendix B.
- See Appendix C for approved TSA assessments.
- When students take multiple types of tests and/or a single test multiple times or earn multiple credits, one metric (the highest) is used for the APR calculation.
- **CCR status targets (cutscores) will be reviewed and revised based on inclusion of 2012-2013 data for new measures and/or those without three years of data.**

**Method for calculating number of students at or above the state standard:**

STEP 1- Determine the number of students with a qualifying score on any of the approved options and multiply by associated point value.

| EXPLANATIONS OF CALCULATIONS | EXAMPLES OF DATA | EXAMPLES OF CALCULATIONS |
|---|---|---|
| Scores on the Advanced Placement (AP) or International Baccalaureate (IB) exams are used as reported by the testing company. Scores on a department-approved Technical Skills Attainment (TSA) assessment are used as reported in MOSIS. Grades earned in department-approved dual credit courses, dual enrollment, early college, AP courses and | **UNDUPLICATED** Count<br>a. number of graduates who score at or above a 3 on an AP exam or who score at or above a 4 on an IB exam multiplied by 1.25<br>b. number of graduates who score proficient on a department-approved TSA assessment multiplied | a) 16 x 1.25 = 20<br>b) 12 x 1 = 12 |

| | | |
|---|---|---|
| IB courses are used as reported in MOSIS. The metric contributing the highest score is used for each student. | by 1<br><br>c. number of graduates who earn a B or greater in a department-approved dual credit course, dual enrollment course, early college course, AP course, or IB course multiplied by 1<br><br>d. number of graduates without a qualifying score or grade on an approved measure multiplied by zero | <br><br>c) 41 x 1 = 41<br><br>d) 77 x 0 = 0 |
| | Number of graduates scoring at or above the state standard | 20 + 12 + 41 + 0 = 73 |

STEP 2- Divide the number of points earned by the number of graduates and multiply by 100.

| Total Points Earned | | Number of Graduates | | | | MPI |
|---|---|---|---|---|---|---|
| 73 | / | 150 | = | .487 | *100 | **48.7%** |

**Example of supporting data format for APR:**

| | | Year 1 | Year 2 | Year 3 (most recent) | Status |
|---|---|---|---|---|---|
| From MOSIS → | Number of Graduates | 148 | 153 | 150 | |
| From MOSIS and testing company → | Number of Graduates Scoring at or Above the State Standard | 87 | 97.5 | 73 | |
| | Percent of Graduates Scoring at or Above the State Standard | 58.8 | 63.7 | 48.7 | 57.1 |

**Method for calculating status:**
The percent of graduates who earned a qualifying score on the AP, IB or TSA assessments or qualifying grade in an early college, dual enrollment, or approved dual credit courses is determined by dividing the number of graduates who earned a qualifying score/grade by the total number of graduates, then multiplying by 100.

| EXPLANATIONS OF DATA | EXAMPLES OF DATA (using Year 1-Year 3 figures) | EXAMPLES OF CALCULATIONS |
|---|---|---|
| 1) The **number of graduates** is based on June Enrollment and Attendance Records with an Exit Code indicating the student graduated. | number of graduates | 148 (Year 1) |
| 2) The **number of graduates** who earned a qualifying score on the AP, IB or TSA assessments or a qualifying grade in early college, dual enrollment, or approved dual credit courses is provided by the testing companies and/or by the Courses Completed and Grades Earned as reported in June Enrollment and Attendance. | number of graduates who earned a qualifying score on the AP, IB or TSA assessments and/or received college credit through early college, dual enrollment, or approved dual credit courses | 87 (Year 1) |
| 3) The **percent of graduates who earned a qualifying score** is determined by dividing the **number of graduates who earned a qualifying score on the AP, IB or TSA assessments or earned a qualifying grade in early college, dual enrollment, or approved dual credit courses** by the **number of graduates**, then multiplying by 100. | a)number of graduates = 148<br><br>b)number of graduates scoring at or above the state standard = 87 | % of graduates scoring at or above the state standard =<br><br>87 ÷ 148 = .588<br><br>.588 X 100 = 58.8% |
| 4) **Status** is determined by adding Year1, Year2, and Year3 of the **percent of graduates who earned a qualifying score on the AP, IB or TSA assessments or earned a qualifying grade in early college, dual enrollment, or approved dual credit courses** and dividing by 3 (unless three years of data are not available). | (Year1 + Year2 + Year3) / 3 | 58.8 + 63.7 + 48.7 = 171.2<br><br>171.2 ÷ 3 = 57.1% |

**Method for calculating progress:**
Differentiated improvement targets are set for a given LEA, school or subgroup based on the *two prior years'* performance of that LEA, school or subgroup.

**Example**: Calculating the progress measure for "ABC" school district, the following example shows how the CCR *4 progress measure is calculated at the district level using a rolling average:

| ABC District | Year 1 | Year 2 | Year 3 (most recent year) |
|---|---|---|---|
| Percent of students who earn a qualifying score | 58.8 | 63.7 | 48.7 |

STEP 1 - Add the scores for Years 1 and 2 and divide by 2 to determine the average.

(58.8 + 63.7) / 2 = 61.3

STEP 2 - The average percentage for Years 1 and 2 is subtracted from 100 to determine the CCR *4 GAP.

| Constant | | Years 1 and 2 Average Percent | | CCR*4 GAP |
|---|---|---|---|---|
| 100 | - | 61.3 | = | 38.7 |

STEP 3 - The CCR*4 gap is used ***to establish progress targets*** as determined by multiplying the CCR*4 gap by the associated percentage, i.e. 25% for exceeding, 15% for on target, 5% for approaching.

**Table 9. Generating Targets for Progress Measure**

| | CCR*4 GAP | | | Percent Increase Needed | Years 1 and 2 Avg Percent | Years 2 and 3 Avg Progress Target |
|---|---|---|---|---|---|---|
| Exceeding | 38.7 | *25% | = | 9.7 | 61.3 | 71.0-100 |
| On Target | 38.7 | *15% | = | 5.8 | 61.3 | 67.1-70.9 |
| Approaching | 38.7 | *5% | = | 1.9 | 61.3 | 63.2-67.0 |

STEP 4 – Add the scores for Years 2 and 3 and divide by 2 to determine the average.

(63.7 + 48.7) / 2 = 56.2

STEP 5 - The district's Years 2 and 3 average percentage is used to determine if the district is exceeding, on target, or approaching the required percent increase. In this example**, the ABC school district has a Year 2 and 3 average percentage of 56.2, which means that it designated as not meeting the progress targets and subsequently receives 0 points as its <u>Progress Score</u> in CCR*4.**

**Table 10. Computing the College and Career Readiness *4 Score**

| **College and Career Readiness** | **Indicator 4:**<br><br>**Points Possible** |
|---|---|
| Status | Exceeds = 10; On Target = 7.5; Approaching 4; Floor = 0 |
| Progress Target | Exceeds = 7.5; On Target = 4; Approaching = 2; Floor = 0 |
| **College and Career Readiness Total:**<br>Status + Progress | Maximum of 10 points per indicator area |

## College and Career Readiness *5-6

**CCR*5-6**

The **percent of post-secondary placement** is determined by dividing the **number of graduates who attend post-secondary education or training, are in the military, or** who complete a Department-approved Career Education program and are placed in an occupation directly related to their training within six months of graduating by **the number of graduates**, and then multiplying by 100.

**Sources of data used in calculation:**

- MOSIS February Graduate Follow-Up
- MOSIS June Enrollment and Attendance – graduates

**Notes:**

- **CCR status targets (cutscores) will be reviewed and revised based on inclusion of 2012-2013 data for new measures and/or those without three years of data.**

### Example of supporting data format for APR:

**Method for calculating supporting data:**

| EXPLANATIONS OF CALCULATIONS | EXAMPLES OF DATA | EXAMPLES OF CALCULATIONS |
|---|---|---|
| The **percent of post-secondary placement** is determined by dividing the **number of graduates who attend post-secondary education or training, are in the military, or** who **complete a Department-approved Career Education program and are placed in an occupation directly related to their training** by **the number of graduates**, and then multiplying by 100. | **UNDUPLICATED** Count<br><br>a. number of graduates who attend post-secondary education = 147<br>b. number of graduates who attend post-secondary training = 118<br>c. number of graduates who are in the military = 17<br>d. number of graduates who complete a Department-approved Career Education Program and are placed in an occupation directly related to their training = 57 | 147+ 118 + 17+ 57= 339 |
| | Number of graduates = 385 | |
| | | 339 ÷ 385 = .880 |
| | Percent of post-secondary placement | .880 x 100 = 88.0% |

**Status** is determined by adding Year 1, Year 2, and Year 3 of the **percent of post-secondary placement and** dividing by 3.

**Example of supporting data format for APR:**

| | Post-secondary education, training, military and CTE placement | Year 1 | Year 2 | Year 3 | Status |
|---|---|---|---|---|---|
| From MOSIS → | Number of Graduates | 377 | 357 | 385 | |
| From MOSIS/ Screen 13 (previous year) → | Number of Graduates who attend post-secondary education or training, are in the military, or who complete a Department-approved Career Education program and are placed in an occupation directly related to their training within six months of graduating. | 320 | 333 | 339 | |
| | Percent of post-secondary placement | 85.0 | 93.3 | 88.0 | 88.8 |

**Method for calculating progress:**
Differentiated improvement targets will be set for a given LEA, school or subgroup based on the *two prior years'* performance of that LEA, school or subgroup.

**Example**: Calculating the progress measure for "ABC" school district, the following example shows how the CCR *5-6 progress measure is calculated at the district level using a rolling average:

| ABC District | Year 1 | Year 2 | Year 3 (most recent year) |
|---|---|---|---|
| Percent of students who earn a qualifying score | 85.0 | 93.3 | 88.1 |

STEP 1 - Add the scores for Years 1 and 2 and divide by 2 to determine the average.

(85.0 + 93.3) / 2 = 89.2

STEP 2 - The average percentage for Years 1 and 2 is subtracted from 100 to determine the CCR *5-6 GAP.

| Constant | | Years 1 and 2 Average Percent | | CCR*5-6 GAP |
|---|---|---|---|---|
| 100 | - | 89.2 | = | 10.8 |

STEP 3 - The CCR*5-6 gap is used ***to establish progress targets*** as determined by multiplying the CCR*5-6 gap by the associated percentage, i.e. 25% for exceeding, 15% for on target, 5% for approaching.

**Table 11. Generating Targets for Progress Measure**

| | CCR*5-6 GAP | | | Percent Increase Needed | Years 1 and 2 Avg Percent | Years 2 and 3 Avg Progress Target |
|---|---|---|---|---|---|---|
| Exceeding | 10.8 | *25% | = | 2.7 | 89.2 | 91.9-100 |
| On Target | 10.8 | *15% | = | 1.6 | 89.2 | 90.8-91.8 |
| Approaching | 10.8 | *5% | = | 0.5 | 89.2 | 89.7-90.7 |

STEP 4 – Add the scores for Years 2 and 3 and divide by 2 to determine the average.

(93.3 + 88.1) / 2 = 90.7

STEP 5 - The district's Years 2 and 3 average percentage is used to determine if the district is exceeding, on target, or approaching the required percent increase. In this example**, the ABC school district has a Year 2 and 3 average percentage of 90.7, which means that it designated as "approaching" the progress target and subsequently receives 2 points as its <u>Progress Score</u> in CCR *5-6.**

**Table12. Computing the College and Career Readiness *5-6 Score**

| College and Career Readiness | Indicators 5-6:<br><br>Points Possible |
|---|---|
| Status | Exceeding = 10; On Target = 7.5; Approaching 4; Floor = 0 |
| Progress Target | Exceeding = 7.5; On Target = 4; Approaching = 2; Floor = 0 |
| **College and Career Readiness Total:**<br>Status + Progress | Maximum of 10 points per indicator area |

## High School Readiness (K-8 LEAs only)

HSR *1 The percent of students who earn a proficient score on one (1) or more of the high school end-of-course (EOC) assessments while in elementary school meets or exceeds the state standard or demonstrates required improvement.

**Sources of data used in calculation:**
- MOSIS June Enrollment and Attendance
- Testing companies

**Notes:**
- **HSR status targets (cutscores) will be reviewed and revised based on inclusion of 2012-2013 data for new measures and/or those without three years of data.**

**Example of supporting data format for APR:**

| | | Year 1 | Year 2 | Year 3 | Status |
|---|---|---|---|---|---|
| From MOSIS → | Number of Grade 8 students | 63 | 48 | 56 | |
| From MOSIS and testing company → | Number of Grade 8 students who earned a qualifying score on a MAP end-of-course assessment | 12 | 8 | 15 | |
| | Percent of Grade 8 students earning a qualifying score | 19.0 | 16.6 | 26.8 | 20.8 |

**Method for calculating status:**
The percent of Grade 8 students who earned a qualifying score on the MAP end-of-course assessments is determined by dividing the number of Grade 8 students who earned a qualifying score on the MAP end-of-course assessments by the total number of Grade 8 students, then multiplying by 100.

| EXPLANATIONS OF DATA | EXAMPLES OF DATA (using Year 1-Year 3 figures) | EXAMPLES OF CALCULATIONS |
|---|---|---|
| The **number of Grade 8 students** is based on June Enrollment and Attendance Records with an Exit Code indicating the student has advanced to Grade 9. | number of Grade 8 students | 63 (Year 1) |
| The number of Grade 8 students who earned a qualifying score on a MAP EOC assessment is determined by the number of Grade 8 students who earned a proficient or advanced score on a MAP EOC assessment prior to advancing to Grade 9. | The number of Grade 8 students who earned a proficient or advanced score on a MAP EOC assessment prior to Grade 9 | 12 (Year 1) |
| The percent of Grade 8 students who earned a qualifying score on the MAP end-of-course assessments is determined by dividing the number of Grade 8 students who earned a | a)number of Grade 8 students = 63<br><br>b)number of Grade 8 | % of "exiting" Grade 8 students who earned a qualifying score = |

| | | |
|---|---|---|
| qualifying score on a MAP EOC assessment by the total number of Grade 8 students, then multiplying by 100. | students who earned a qualifying score = 12 | 12 ÷ 63 = .190<br><br>.190 X 100 = 19.0% |
| 5) **Status** is determined by adding Year 1, Year 2, and Year 3 of the **percent of** Grade 8 students **who earned a qualifying score on a MAP end-of-course assessment** and dividing by 3 (unless three years of data are not available). | (Year1 + Year2 + Year3) / 3 | 19.0 + 16.6 + 26.8 = 62.4<br><br>62.4 ÷ 3 = 20.8% |

**Method for calculating progress:**
Differentiated improvement targets will be set for a given LEA, school or subgroup based on the *two prior years'* performance of that LEA, school or subgroup.

**Example**: Calculating the progress measure for "ABC" school district, the following example shows how the progress measure is calculated at the district level:

STEP 1 - Add the scores for Years 1 and 2 and divide by 2 to determine the average.

(19.0 + 16.6) / 2 = 17.8

STEP 2 - The average percentage for Years 1 and 2 is subtracted from 50 to determine the HSR*1 GAP.

| Baseline | | Years 1 and 2 Average Percent | | HSR*1 gap |
|---|---|---|---|---|
| 50 | - | 17.8 | = | 32.2 |

STEP 3 - The high school readiness gap is used ***to establish progress targets*** as determined by multiplying the high school readiness gap by the associated percentage, i.e. 25% for exceeding, 15% for On Target, 5% for approaching.

**Table 12. Generating Targets for Progress Measure**

| | Prior Year HSR*1 GAP | | | HSR*1 Increase Needed | Prior Year Percent | Progress AMO |
|---|---|---|---|---|---|---|
| Exceeding | 32.2 | *25% | = | 8.1 | 17.8 | 25.9-100 |
| On Target | 32.2 | *15% | = | 4.8 | 17.8 | 22.6-25.8 |
| Approaching | 32.2 | *5% | = | 1.6 | 17.8 | 19.4-22.5 |

STEP 4 – Add the scores for Years 2 and 3 and divide by 2 to determine the average.

(16.6 + 26.8) / 2 = 21.7

STEP 5 - The district's Years 2 and 3 average percentage is used to determine if the district is exceeding, on target, or approaching the required percent increase. In this example**, the ABC school district has a Year 2 and 3 average percentage of 21.7, which means that it designated as "approaching" the progress target and subsequently receives 2 points as its <u>Progress Score</u> in HSR *1.**

**Table 13. Computing the High School Readiness Score**

| High School Readiness | Points Possible |
|---|---|
| Status | Exceeding = 10; On Target = 7.5; Approaching 4; Floor = 0 |
| Progress Target | Exceeding = 7.5; On Target = 4; Approaching = 2; Floor = 0 |
| **High School Readiness Total:** Status + Progress | Maximum of 10 points |

## 4. Attendance Calculation

**Sources of data used in calculation:**

- MOSIS June Cycle Enrollment and Attendance

  Core Data Screen 10 School Calendar Information

Notes:

- Using the end of the year MOSIS June Student Enrollment Attendance, attendance rate is determined for every student grades K-12 who is reported any time throughout the year.
- Students reported as Resident I, Non-Resident, DESEG-IN, Federal Lands, and Parent Tuition are excluded.
- Students with zero hours of attendance are excluded.
- Attendance targets use the individual student's attendance rate and set the expectation that 90% of the students are in attendance 90% of the time.

### Example of supporting data format for APR:

| Individual Student Attendance Rate | Year 1 | Year 2 | Year 3 | Status |
|---|---|---|---|---|
| Number of students with an attendance rate at or above the State standard | 214 | 227 | 240 | |
| Number of students attending school any time during the school year | 250 | 260 | 270 | |
| Percent of students with an attendance rate at or above the State standard | 85.6 | 87.3 | 88.9 | 87.3 |

**Method for calculating supporting data:**
The attendance for each student is determined by using the **"hours of absence"** method. This method is calculated by dividing the **hours of attendance** by the **hours possible,** then multiplying by 100.

**Example of "hours of absence" method for the individual student:**

| EXPLANATIONS OF CALCULATIONS | EXAMPLES OF DATA | EXAMPLES OF CALCULATIONS |
|---|---|---|
| 1) The **hours of attendance and the hours of absence for each student is** reported in the MOSIS June Student Enrollment and Attendance. | **ATTENDANCE HOURS**<br>a) Hours of attendance = 1,012<br>b) Hours of absence = 32 | |

| | | |
|---|---|---|
| 2) The **hours possible** is determined by adding attendance hours and hours of absence. | | 1012+32 =1,044 |
| 3) The **attendance rate of the individual student using the "hours of absence" method** is determined by dividing the **hours of attendance for the individual student** by the **hours possible for the individual student**, then multiplying by 100. | a) Hours of attendance = 1,012<br>b) Hours possible = 1,044 | 1,012 ÷ 1,044 = .969<br>.969 X 100 = 96.9% |
| 4) **The percent of students with an attendance rate at or above the state standard is determined by dividing the number of students scoring at or above the state standard by the number of total students that attended that year, then multiplying by 100.** | a) number of students with an attendance rate at or above 90%=240<br>b) total number of students= 270 | 240 ÷ 270 = .889<br>.889 X 100 = 88.9% |
| 5) **The district's or building's Status** is determined by adding Year1, Year2, and Year3 of the **percent of students with an attendance rate at or above the state standard.** | (Year1 + Year2 + Year3) / 3 | 85.6 + 87.3+ 88.9 = 261.7<br>261.8 ÷ 3 = 87.3% |

**Method for calculating progress:**
Improvement targets are set for LEAs, schools and subgroups based on the individual group's prior two years of status. A 3% increase = "exceeding"; a 2% increase = "on target" and a 1% increase = "approaching".

**Example**: The following example shows how the progress measure is calculated at the district level for a school district:

STEP 1 - Add the scores for Years 1 and 2 and divide by 2 to determine the average.

(85.6 + 87.3) / 2 = 86.5

STEP 2 - Add the scores for Years 2 and 3 and divide by 2 to determine the average.

(87.3 + 88.9) / 2 = 88.1

STEP 3 – Subtract the average of the first and second year from the average of the second and third year. The result is the amount of progress. In the example below the school district has a progress score of 1.6% which places that district between the 1% and 2% which results in a score of "approaching."

**Table 14. Generating Attendance Progress**

| 3 Years of Attendance at or above the state standard | | |
|---|---|---|
| First Year | Second Year | Third Year |
| **85.6** | **87.3** | **88.8** |
| (85.6+87.3)/2 | (87.3+88.9)/2 | |
| **86.5** | **88.1** | |
| 88.1 - 86.5 = **1.6** | | |

**Table 15. Computing the Attendance Score**

| **Attendance** | **Points Possible** |
|---|---|
| Status | Exceeding = 10; On Target = 7.5; Approaching 4; Floor = 0 |
| Progress Target | Exceeding = 7.5; On Target = 4; Approaching = 2; Floor = 0 |
| **Attendance Total:** Status + Progress | Maximum of 10 points |

## 5. Graduation Rate Calculation

High schools and LEAs with high schools are required to meet a four- OR five-year status target or a combination of status and progress targets for the four- OR five-year rate to receive full credit for graduation rate on the APR. The five-year rate tracks students for up to five years, but is otherwise calculated in the same manner as the four-year graduation rate. The fifth-year students remain in their original cohort and that cohort is recalculated based on the aggregate number of students graduating with a regular diploma within a five-year timeframe. Both four- and five-year graduation rates are calculated, and the better of the two is used to determine if schools and LEAs have met the graduation rate target or have shown sufficient improvement.

**Sources of data used in calculation:**

- June Cycle of Core Data, Screen 13 (2008-2012)
  - Includes aggregated student-level data from MOSIS June Cycle certified files

**Notes:**

**Four-Year Adjusted Cohort Graduation Rate Definition -** The four-year adjusted cohort graduation rate is the number of students who graduate in four years with a regular high school diploma divided by the number of students who form the adjusted cohort for the graduating class. From the beginning of 9th grade, students who are entering that grade for the first time form a cohort that is subsequently "adjusted" by adding any students who transfer into the cohort later during the 9th grade and the next three years and subtracting any students who transfer out, emigrate to another country, or die during that same period.

**Five-year Adjusted Cohort Graduation Rate Definition -** The five-year adjusted cohort graduation rate is calculated the same as the four year with the exception that it includes both four- and five-year graduates in the fifth-year cohort.

**Graduating Attendance Centers with grades 10, 11, 12 or 11, 12 -** Attendance centers which do not include the 9th grade will use the same calculation as those attendance centers which include the 9th grade with the exception of substituting the next lowest grade level taught in the attendance center beyond the 9th grade for the beginning of the adjusted cohort.

**Subgroups –** Four-year adjusted cohort graduation rate subgroups are determined by eligibility and participation information in the MOSIS June Student Core reported by the school district for the graduates graduating school year. June Student Core reporting guidance is that the district report eligibility and participation if a student was eligible or participated at anytime during that school year.

**Calculation** – The four-year adjusted cohort graduation rate is calculated by dividing the number of students who graduate[1] in four years or less with a regular high school diploma by the number of students who form the adjusted cohort for that graduating class.

The following formula provides an example of the five- year adjusted cohort graduation rate for the cohort entering the 9th grade for the first time in the fall of 2007-2008 school year and graduating by the end of the 2011-2012 school year.

Graduation targets will be reviewed and revised, if necessary, every three years.

**2012 NOTE: Progress points in this first 2012 draft may be misleading, as the progress *may* reflect the transition to use of data for the 4-year adjusted cohort rate calculation.**

[1] Graduates are reported annually in the MOSIS June Student Core / Enrollment and Attendance collection.

Number of 2008 cohort members who earned a regular high school diploma by the end of the 2011-2012 school year

Number of first-time 9th graders in the fall 2007 (starting cohort) plus students who transfer in, minus students who transfer out, emigrate, or die during the school years 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012

**Cohort Inclusion** – Students are included in the LEA's adjusted cohort when they become a first time 9th grader and enter the district with the following entry codes.

| | |
|---|---|
| S100 | Stop Out: Entry |
| T101 | Transfer from a public school outside district but within state |
| T102 | Transfer from pub school within district |
| T103 | Transfer from home school in state |
| T104 | Transfer from private school in state |
| T105 | Transfer from pub school out of state |
| T106 | Transfer from private school out of state |
| T107 | Transfer from home school out of state |
| T108 | Transfer from drop-out |
| T109 | Transfer from another country |
| T100 | Transfer In Unknown |
| R101 | Remained: Advanced |
| R102 | Remained: Retained |
| R103 | Remained: Other |
| R104 | Remained: Changed Grade |
| E100 | Initial Entry |

*Note: If the student is reported for the first time as a 9th grader and has an entry code of R102 – Remained Retained or R103 – Remained Other that student is placed in the prior year cohort based on the assumption that student had been retained 1 year.*

**Cohort Exclusion** – Students are removed from the LEA's cohort if they exit the school district with the following exit status.

| | |
|---|---|
| S000 | Stop Out: Exit |
| T001 | Transfer to a public school outside district but within state |
| T003 | Transfer to home school in state |
| T004 | Transfer to private school in state |
| T005 | Transfer to public school out of state |
| T006 | Transfer to private school out of state |
| T007 | Transfer to home school out of state |
| T008 | Transfer to another country |
| T009 | Deceased |
| T000 | Transfer out Unknown |
| D02 | Dropped Out: Expulsion |
| D03 | Dropped Out: Received Certificate |
| D04 | Dropped Out: Reached Maximum Age |
| D05 | Dropped Out: GED Program |
| D06 | Dropped Out: Moved not known continuing |
| D01 | Dropped Out: Other |

**Method for calculating supporting data for the LEA and 9-12 building:**
The cohort graduation rate is determined by dividing the number of cohort members who earned a regular high school diploma by the end of the cohort's fourth or fifth school year by the number of first-time 9th graders in the starting cohort plus students who transfer in, minus students who transfer out, emigrate, or die during the cohort's four or five high school years, then multiplying by 100. Cohort members are defined by the year that the first time ninth grade student would complete the fourth year of high school, i.e. a first time ninth grader in SY 2007-2008 is considered a part of Cohort 2008/Class of 2011; a first time ninth grader in SY 2008-2009 is considered a part of Cohort 2009/Class of 2012, and so on.

**Example of the four-year cohort graduation rate calculation:**

| EXPLANATIONS OF CALCULATIONS | EXAMPLES OF DATA | EXAMPLES OF CALCULATIONS |
|---|---|---|
| 1) The **number of cohort members who earned a regular high school diploma by the end of the starting cohort's fourth high school year = number of cohort graduates** reported in the MOSIS June Student Enrollment and Attendance | Graduates = 900 | |
| 2) The **four-year "adjustments"** are reported in the MOSIS June Student Enrollment and Attendance File | 2008: First Time 9th Graders (Starting Cohort 2008 members)+ Transfers in – Transfers out | 1000 + 0 – 50 = 950 |
| | 2009: Cohort 2008 + Transfers in – Transfers out | 950 + 25 -50 = 925 |
| | 2010: Cohort 2008 + Transfers in – Transfers out | 925 + 75 - 25 = 975 |
| | Class of 2011: Cohort 2008 + Transfers in – Transfers out | 975 +50-25 = 1000 |
| 3) The **four-year adjusted cohort** is calculated based on reported adjustments. | (1000 - 50) + (25 - 50) + (75 - 25) + (50 - 25) | 950 – 25 + 50 + 25 = 1000 |
| 4) The **four-year adjusted cohort graduation rate** is determined by dividing the number of cohort graduates by the number of first-time 9th graders in the starting cohort plus students who transfer in, minus students who transfer out, emigrate, or become deceased during the cohort's four high school years, then multiplying by 100. | a) number of 4 year cohort graduates=900<br>b) number of adjusted cohort members = 1000 | 900÷ 1000 = .900<br>.900 X 100 = 90.0% |

| | | |
|---|---|---|
| **5) The district's or building's Status** is determined by adding Year1, Year2, and Year3 of the **adjusted cohort graduation rate** and dividing by three. | (Year1 + Year2 + Year3) / 3 | 87.3+ 88.8 +90.0 = 266.1<br><br>266.1 ÷ 3 = 88.7% |

**Example of the five-year cohort graduation rate calculation:**

| EXPLANATIONS OF CALCULATIONS | EXAMPLES OF DATA | EXAMPLES OF CALCULATIONS |
|---|---|---|
| 1) The **number of cohort members who earned a regular high school diploma by the end of the cohort's fifth high school year is** reported in the MOSIS June Student Enrollment and Attendance | Graduates =920 | |
| 2) The **five-year "adjustments"** are reported in the MOSIS June Student Enrollment and Attendance File | 2008: First Time 9th Graders (Starting Cohort 2008 members) + Transfers in – Transfers out | 1000 + 0 – 50 = 950 |
| | 2009: Cohort 2008 + Transfers in – Transfers out | 950 + 25 -50 = 925 |
| | 2010: Cohort 2008 + Transfers in – Transfers out | 925 + 75 - 25 = 975 |
| | 2011: Cohort 2008 + Transfers in – Transfers out | 975 +50-25 = 1000 |
| | 2012: Cohort 2008 (Class of 2011) + Cohort 2008 Transfers in – Cohort 2008 Transfers out | 1000 + 10 - 5=1005 |
| 3) The **five-year adjusted cohort** is calculated based on reported adjustments. | (1000 - 50) + (25 - 50) + (75 - 25) + (50 - 25)+(10 -5) | 950 – 25 + 50 + 25 +5= 1005 |
| 4) The **five-year adjusted cohort graduation rate** is determined by dividing the number of cohort members who earned a regular high school diploma by the end of the cohort's fifth high school year by the number of first-time 9th graders in the starting cohort + plus students who transfer in, minus students who transfer out, emigrate, or become deceased during the cohort's five high school years, then multiplying by 100. | a) number of 5 year cohort graduates=920<br>b) number of adjusted cohort members = 1005 | 920÷ 1005 = .916<br><br>.916 X 100 = 91.6% |

| | | |
|---|---|---|
| **5) The district's or building's Status** is determined by adding Year1, Year2, and Year3 of the **five-year adjusted cohort graduation rate** and dividing by three. | (Year1 + Year2 + Year3) / 3 | 88.3+ 89.8 +91.6 = 269.7<br><br>266.3 ÷ 3 = 89.9% |

**Method for calculating progress:**
Improvement targets are set for LEAs, schools and subgroups based on the individual group's three year average for status.

| If Status = Floor | | If Status = Approaching | | If Status = On Target or Exceeding | |
|---|---|---|---|---|---|
| Exceeding Progress Target = | 9% | Exceeding Progress Target = | 6% | Exceeding Progress Target = | 3% |
| On Target Progress = | 6% | On Target Progress = | 4% | On Target Progress = | 2% |
| Approaching Progress Target = | 3% | Approaching Progress Target = | 2% | Approaching Progress Target = | 1% |

**Example**: The following example shows how the progress measure is calculated at the district level for a school district:

STEP 1 – Determine the Status of the District. In this example, the district's three-year average = 89.9%, which means it is "On Target" with the Status Measure; as a result, the district's rolling average targets are 3% exceeding, 2% on target, and 1% approaching.

STEP 2 - Add the scores for Years 1 and 2 and divide by 2 to determine the average.

(88.3 + 89.8) / 2 = 89.1

STEP 3 - Add the scores for Years 2 and 3 and divide by 2 to determine the average.

(89.8 + 91.6) / 2 = 90.7

STEP 3 – Subtract the average of the first and second year from the average of the second and third year. The result is the amount of progress. In the example below the school district has a progress score of 1.6% which places that district between the 1% and 2% which results in a score of "approaching."

**Table 16. Generating Graduation Progress**

| **3 Years of Graduation Rate** | | |
|---|---|---|
| First Year | Second Year | Third Year |
| **88.3** | **89.8** | **91.6** |
| (88.3+89.2)/2 | (89.8+91.6)/2 | |
| **89.1** | **90.7** | |
| 90.7 – 89.1 = **1.6** | | |

**Table 17. Computing Graduation Rate Scores**

| | **Graduation Rate: 4 and 5 year rates**<br><br>**Points Possible** |
|---|---|
| Status | Exceeding = 20; On Target = 15; Approaching 8; Floor = 0 |
| Progress Target | Exceeding = 15; On Target = 8; Approaching = 4; Floor = 0 |
| | |
| **Graduation Rate Total:**<br>Status + Progress | **Total possible score for Graduation Rate = 20** |

**Table 18. Computing Graduation Rate Scores for additional state points**

| | **Points Possible** |
|---|---|
| Status | Exceeding = 10; On Target = 7.5; Approaching 4; Floor = 0 |
| Progress Target | Exceeding = 7.5; On Target = 4; Approaching = 2; Floor = 0 |
| | |
| **Dropout Recovery Total:**<br>Status + Progress | **Total possible score for Graduation Rate = 10** |

### Generating a Core Score

Once the scores for Academic Achievement, Super Subgroup and Graduation Rate have been generated, they are combined into a single core score. The core score is used to validate federal accountability determinations under ESEA flexibility.

**Table 19. Computational Table for Generating a Core Score**

| | Academic Achievement | | Subgroup Achievement | | Graduation Rate (for High Schools and LEAs) | CORE SCORE |
|---|---|---|---|---|---|---|
| | English Language Arts | Mathematics | English Language Arts | Mathematics | | |
| Status Score | 0 – 9 – 12 – 16 | 0 – 9 – 12 – 16 | 0 – 2 – 3 – 4 | 0 – 2 – 3 – 4 | 0 – 8 – 15 – 20 | |
| Progress Score | 0 – 3 – 6 – 12 | 0 – 3 – 6 – 12 | 0 – 1 – 2 – 3 | 0 – 1 – 2 – 3 | 0 – 4 – 8 – 15 | |
| Growth Score | 0 – 3 – 6 – 12 | 0 – 3 – 6 – 12 | 0 – 1 – 2 – 3 | 0 – 1 – 2 – 3 | Not Applicable | |
| | Max score: 16 | Max Score: 16 | Max Score: 4 | Max Score: 4 | Max Score: 20 | |
| Tally: | | | | | | <CORE SCORE> |

### Generating the APR Score

Once the scores for Academic Achievement, Subgroup Achievement, College and Career or High School Readiness, Attendance Rate and Graduation Rate have been generated, they are combined into a single score. The APR score is used to differentiate among LEA performance, and results in Accredited with Distinction, Accredited, Provisional and Unaccredited designations.

**Table 19. Computational Table for Generating a Final Score**

| | Academic Achievement | | | | | |
|---|---|---|---|---|---|---|
| | English Language Arts | Mathematics | Science | Social Studies | | |
| Status Score | 0 – 9 – 12 – 16 | 0 – 9 – 12 – 16 | 0 – 9 – 12 – 16 | 0 – 5 – 6 – 8 | | |
| Progress Score | 0 – 3 – 6 – 12 | 0 – 3 – 6 – 12 | 0 – 3 – 6 – 12 | 0 – 1.5 – 3 – 6 | | |
| Growth Score | 0 – 3 – 6 – 12 | 0 – 3 – 6 – 12 | | | | |
| | Max score: 16 | Max Score: 16 | Max Score: 16 | Max Score: 8 | <Max Points Poss> | |
| Tally: | | | | | | <Points Earned> |
| | Subgroup Achievement | | | | | |
| | English Language Arts | Mathematics | Science | Social Studies | | |
| Status Score | 0 – 2 – 3 – 4 | 0 – 2 – 3 – 4 | 0 – 2 – 3 – 4 | 0 – 1 – 1.5 – 2 | | |
| Progress Score | 0 – 1 – 2 – 3 | 0 – 1 – 2 – 3 | 0 – 1 – 2 – 3 | 0 – .5 – 1 – 1.5 | | |
| Growth Score | 0 – 1 – 2 – 3 | 0 – 1 – 2 – 3 | | | | |
| | Max score: 4 | Max Score: 4 | Max Score: 4 | Max Score: 2 | <Max Points Poss> | |
| Tally: | | | | | | <Points Earned> |
| | College and Career Readiness (K-12) and High School Readiness (K-8) | | | | | |

| | CCR *1-3 | CCR*4 | CCR*5-6 | HSR *1 | | |
|---|---|---|---|---|---|---|
| Status Score | 0 – 6 – 7.5 – 10 | 0 – 6 – 7.5 – 10 | 0 – 6 – 7.5 – 10 | 0 – 6 – 7.5 – 10 | | |
| Progress Score | 0 – 2 – 4 – 7.5 | 0 – 2 – 4 – 7.5 | 0 – 2 – 4 – 7.5 | 0 – 2 – 4 – 7.5 | | |
| | Max score: 10 | Max Score: 10 | Max Score: 10 | Max Score: 10 | <Max Points Poss> | |
| Tally: | | | | | | <Points Earned> |
| | Attendance Rate and Graduation Rate (LEAs and buildings with Grade 12) | | | | | |
| | Attendance | Graduation *1 | Graduation *2 | | | |
| Status Score | 0 – 6 – 7.5 – 10 | 0 – 12 – 15 – 20 | 0 – 6 – 7.5 – 10 | | | |
| Progress Score | 0 – 2 – 4 – 7.5 | 0 – 4 – 8 – 15 | 0 – 2 – 4 – 7.5 | | | |
| | Max score: 10 | Max Score: 20 | Max Score: 10 | | <Max Points Poss> | |
| Tally: | | | | | | <Points Earned> |
| Overall Tally: | | | | | **<Total Max Points Possible>** | **<Total Points Earned>** |

Total points earned is divided by the total points possible for the school or LEA then multiplied by 100 to determine the percent of points earned. The total percent of points possible earned is then used at the district level to determine a district's accreditation *status*. The accreditation *status* of three consecutive APRs is then used to inform *district classification* recommendations to the State Board of Education.

***Annual Accreditation Process:***

***Step One:***
On or before August 15th of each school year, the Department produces the District's Annual Performance Report which provides an objective analysis of each district's attainment of the MSIP 5 Performance Standards and Indicators. A district's *Accreditation Classification* remains intact until the State Board of Education rules otherwise. However, the percent of overall points earned on the APR defines each district's *APR Accreditation Status* that year, using one of the following accreditation categories:

| | |
|---|---|
| **Accredited with Distinction** | The district earned a minimum of 90% or more of the APR points possible AND meets other criteria as established by the State Board of Education;* |
| **Accredited** | The district earned 70% or more of the APR points possible; |
| **Provisionally Accredited** | The district earned 50% or more of the APR points possible; |
| **Unaccredited** | The district earned less than 50% of the APR points possible. |

*Criteria will be determined during SY 2012-2013.

***Step Two:***
On or before September 30th of each school year, the Department reviews each district's accreditation status and the APR supporting data for the three most recent APRs to identify trends and status in performance outcomes. If data trends indicate that the district's full accreditation is or may be in jeopardy, the district may be asked to submit its Comprehensive School Improvement Plan (CSIP) to the Department and assistance through the Regional School Improvement Team may be activated.

***Step Three:***
No later than September 30th of each school year, the Department shall use the data review process described in Step Two to make accreditation classification recommendations to the State Board of Education. **Recommendations will be made based on APR status and APR trends and may include other factors as appropriate, e.g. CSIP goals, previous Department MSIP findings, financial status, and/or leadership stability**. Recommendations regarding accreditation classification are presented to the State Board of Education for its approval. Districts are notified by the Department of the accreditation classification assigned by the board.

**Generating Risk Factors/Exemplars**

**Risk Factors/Exemplars**
Risk factors identified through the accountability system are utilized to further distinguish among those schools and LEAs most in need of support, to identify areas in need of improvement, and to guide the school improvement plan. For example, one school may have an overall high core score and/or APR score but may also have a risk factor for a given subgroup and subject area based on proficiency rates on state assessments of academic achievement. This risk factor would be addressed in the Comprehensive School Improvement Plan. Similarly, exemplar flags are utilized to spotlight schools demonstrating high achievement for a given subgroup and subject area.

**Rules for School-Level Risk Factor/Exemplar Flag Assignment**
The percent proficient (i.e., percent with Proficient or Advanced-level achievement) is calculated for each subgroup—i.e., White, Black, Hispanic, Multiracial, Asian, American Indian, ELL, FRL and students with disabilities and grade level for each subject area, annually for the academic achievement indicators. School-level percent proficient values within each combination are ranked, and the 10th and 90th percentiles are determined. Performance at or below the 10th percentile, or at or above the 90th percentile, is flagged for reporting.

(1) *For example*, in schools with a grade 3 population for which at least 30 reportable English language arts scores are available, grade 3 English language arts proficiency rates are calculated, then schools are ranked according to this measure. Those schools with a grade 3 English language arts proficiency rate in the bottom 10th percentile are assigned one risk factor.
(2) Identical reporting processes are used for exemplar flags, except scores are flagged if they meet or exceed the 90th percentile.
(3) Similar reporting process are used for school-level risk factor and exemplar flag assignments for the college and career readiness, high school readiness, attendance and graduation rate indicators, except the metric used for the indicator (e.g., percent of students scoring at or above the state standard, attendance rate, graduation rate) is used in place of percent proficient.

**Rules for LEA-Level Risk Factor / Exemplar Flag Assignment**
While the above rules specifically refer to risk factor and exemplar flag assignment for schools, LEAs are also reviewed for potential risk factors and exemplar flags. For subgroup determinations, the same rules provided would be applied to LEAs in an effort to identify systemic issues affecting multiple schools and highlight district-wide policies contributing to poor or exemplary student performance.

Additionally, risk factors and exemplar flags are assigned based on grade span performance, rather than grade level, by subject area. This is accomplished by pooling district-wide assessment scores into three groupings based on student grade level—grades 3-5 (elementary), 6-8 (middle), and 9-12 (high school)—and calculating proficiency rates for each grade span/subject area combination.

Consistent with the school-level methodologies, performance at or below the 10th percentile, or at or above the 90th percentile, indicates a risk factor or exemplar flag.

## 2012 DRAFT MSIP 5 APR Notes

**Standard 1 Academic Achievement**

- Achievement level scores from all Grade Level Assessment (GLA), End of Course (EOC) assessments, and the MAP-Alternate (MAP-A) are used to calculate the Map Performance Index (MPI) for each of the four subject areas: English language arts, mathematics, science, and social studies.
- LEAs are no longer required to administer both the grade-level-assessment (GLA) and end-of-course (EOC) assessment in the same accountability year to middle school students attaining competencies in the Algebra I course-level-expectations (CLEs). Instead, the LEA will need to determine *which* assessment, the GLA or EOC, is the most appropriate measure for each individual student. Please see the October 2, 2012 Algebra I EOC Administrative Memo for specific guidance.
    - To ensure a consistent metric of annual improvement is applied to the MSIP 5 APR, GLA scores have been removed from 2010, 2011 and 2012 mathematics data for middle school students who participated in both the mathematics GLA and Algebra I EOC in the same accountability year.
- The accountability year begins with the summer administration.
- High School Assessment Requirements:
    - Classes of 2013, 2014, 2015: English II, Algebra I, Biology, Government;
    - Class of 2016: **English I,** English II, **English EOHS,** Algebra I, **Mathematics EOHS,** Biology, Government, **American History;**
    - Class of 2017: English I, English II, English EOHS, Algebra I, Mathematics EOHS, **Additional Mathematics,** Biology, Government, American History,
    - Class of 2018: English I, English II, English EOHS, Algebra I, Mathematics EOHS, Additional Mathematics, Biology, **Additional Science, Additional Science,** Government, American History

**Standard 2 Subgroup Achievement**

- The super subgroup is used for accountability determinations in the APR. When the minimum n size of 30 is not reached using a 3-year cumulative "pooling" of the data, no determination is made. This adjustment is made in the total points possible. For example, a small K-8 district may show a total of 68 points possible in place of 80.
- Individual subgroups that reach the minimum n size of 30 are included in risk factor and exemplar determinations.

**Standard 3 CCR *4 (AP, IB, TSA, dual credit, dual enrollment, early college)**

- Technical Skills Attainment (TSA) data are not included in the DRAFT 2012 release. Once the approved list is finalized, LEAs will be instructed on how to ensure results are appropriately reported so that the data may be included in the 2013 APR release. Please note that districts that choose to include TSA data in the 2013 APR will be asked to report for school years 2010-2011, 2011-2012 and 2012-2013.
- For the other components of this indicator (i.e., AP, IB, dual credit, dual enrollment and early college), full and complete data are ONLY available for 2012 graduates. As a result, the DRAFT 2012 release recognizes status alone. The 2013 APR will include (AP, IB, TSA, dual credit, dual enrollment, and early college) and will use two years of data (i.e., 2012 graduates and 2013 graduates) for the status determination and one year of annual improvement. The phase-in of this indicator will be complete with the 2014 APR, which will include the customary three years of data.

**Standard 3 High School Readiness**

- EOC tests taken in mathematics, science and/or English language arts will be included in the academic achievement indicator, the subgroup indicator and the high school readiness indicator. If multiple EOC tests are taken by one student, the single highest score would be included in the high school readiness indicator. An EOC taken in social studies would only be included in the high school readiness indicator, as there is not a social studies indicator in the K-8 district APR.

**Standard 5 Graduation Rate**

- Both four- and five-year graduation rates are calculated, and the better of the two is used for APR determinations. The four-year rate could first be calculated with 2011 graduates. The five-year rate could first be calculated with the 2012 graduates. The DRAFT 2012 APR includes two years of data for the four-year rate, resulting in a two-year status determination and one year of annual improvement. It includes one year of data for the five-year rate, resulting in a one-year status determination. The 2013 APR will include two years of data for the five-year rate, resulting in a two-year status determination and one year of annual improvement; the four-rate will include the customary three years of data. The phase-in of this indicator will be complete with the 2014 APR, which will include the customary three years of data for both the five- and four-year rates.

- **Progress points in this first 2012 draft may be misleading, as the progress *may* reflect the transition to use of data for the 4-year adjusted cohort rate calculation.**

## 2012 SCORING GUIDES

### 1*1 MAP ACADEMIC ACHIEVEMENT *Mathematics*

| STATUS | | | PROGRESS | | | GROWTH | | |
|---|---|---|---|---|---|---|---|---|
| **Status Measures** | **Status Points Earned** | **MPI Score (3-Year Average)** | **Progress Measures** | **Progress Points Earned** | **Progress Measure Description** | **Growth Measures** | **Growth Points Earned** | **Growth Measure Description** |
| **Exceeding** | 16 | 392.8 - 500 | **Exceeding** | 12 | 5% of MPI GAP increase | **Exceeding** | 12 | a statistically significant score>50 |
| **On Target** | 12 | 352.8 - 392.7 | **On Target** | 6 | 3% of MPI GAP increase | **On Target** | 6 | statistically insignificant growth estimates |
| **Approaching** | 9 | 300 - 352.7 | **Approaching** | 3 | 1% of MPI GAP increase | | | |
| **Floor** | 0 | 100 – 299.9 | **Floor** | 0 | <1% of MPI GAP increase | **Floor** | 0 | a statistically significant score <50 |

**Level Not Determined (LND):** Zero (0) points will be awarded for data when the LND is exceeded.
**Academic Achievement Total:** Status + Progress OR Growth (whichever is higher)
A maximum of 16 points may be applied to the LEA or building level score.

### 1*2 MAP ACADEMIC ACHIEVEMENT *English Language Arts*

| STATUS | | | PROGRESS | | | GROWTH | | |
|---|---|---|---|---|---|---|---|---|
| **Status Measures** | **Status Points Earned** | **MPI Score (3-Year Average)** | **Progress Measures** | **Progress Points Earned** | **Progress Measure Description** | **Growth Measures** | **Growth Points Earned** | **Growth Measure Description** |
| **Exceeding** | 16 | 385.7 - 500 | **Exceeding** | 12 | 5% of MPI GAP increase | **Exceeding** | 12 | a statistically significant score>50 |
| **On Target** | 12 | 362.3 – 385.6 | **On Target** | 6 | 3% of MPI GAP increase | **On Target** | 6 | statistically insignificant growth estimates |
| **Approaching** | 9 | 300 – 362.2 | **Approaching** | 3 | 1% of MPI GAP increase | | | |
| **Floor** | 0 | 100 – 299.9 | **Floor** | 0 | <1% of MPI GAP increase | **Floor** | 0 | a statistically significant score <50 |

**Level Not Determined (LND):** Zero (0) points will be awarded for data when the LND is exceeded.
**Academic Achievement Total:** Status + Progress OR Growth (whichever is higher)
A maximum of 16 points may be applied to the LEA or building level score.

## 1*3 MAP ACADEMIC ACHIEVEMENT *Science*

| STATUS | | | PROGRESS | | |
|---|---|---|---|---|---|
| **Status Measures** | **Status Points Earned** | **MPI Score (3-Year Average)** | **Progress Measures** | **Progress Points Earned** | **Progress Measure Description** |
| **Exceeding** | 16 | 352.8- 500 | **Exceeding** | 12 | 5% of MPI GAP increase |
| **On Target** | 12 | 344.0-352.7 | **On Target** | 6 | 3% of MPI GAP increase |
| **Approaching** | 9 | 300 – 343.9 | **Approaching** | 3 | 1% of MPI GAP increase |
| **Floor** | 0 | 100 – 299.9 | **Floor** | 0 | <1% of MPI GAP increase |

**Level Not Determined (LND):** Zero (0) points will be awarded for data when the LND is exceeded.
**Academic Achievement Total:** Status + Progress
A maximum of 16 points may be applied to the LEA or building level score.

## 1*4 MAP ACADEMIC ACHIEVEMENT *Social Studies*

| STATUS | | | PROGRESS | | |
|---|---|---|---|---|---|
| **Status Measures** | **Status Points Earned** | **MPI Score (3-Year Average)** | **Progress Measures** | **Progress Points Earned** | **Progress Measure Description** |
| **Exceeding** | 8 | 375.0- 500 | **Exceeding** | 6 | 5% of MPI GAP increase |
| **On Target** | 6 | 346.2-374.9 | **On Target** | 3 | 3% of MPI GAP increase |
| **Approaching** | 5 | 300 – 346.1 | **Approaching** | 1.5 | 1% of MPI GAP increase |
| **Floor** | 0 | 100 – 299.9 | **Floor** | 0 | <1% of MPI GAP increase |

**Level Not Determined (LND):** Zero (0) points will be awarded for data when the LND is exceeded.
**Academic Achievement Total:** Status + Progress
A maximum of 8 points may be applied to the LEA or building level score.

## 2*1 MAP SUBGROUP ACHIEVEMENT *Mathematics*

| STATUS | | | PROGRESS | | | GROWTH | | |
|---|---|---|---|---|---|---|---|---|
| **Status Measures** | **Status Points Earned** | **MPI Score (3-Year Average)** | **Progress Measures** | **Progress Points Earned** | **Progress Measure Description** | **Growth Measures** | **Growth Points Earned** | **Growth Measure Description** |
| **Exceeding** | 4 | 392.8 - 500 | **Exceeding** | 3 | 5% of MPI GAP increase | **Exceeding** | 3 | a positive statistically significant score |
| **On Target** | 3 | 329.9 - 392.7 | **On Target** | 2 | 3% of MPI GAP increase | **On Target** | 2 | statistically insignificant growth estimates |
| **Approaching** | 2 | 300 – 329.8 | **Approaching** | 1 | 1% of MPI GAP increase | | | |
| **Floor** | 0 | 100 – 299.9 | **Floor** | 0 | <1% of MPI GAP increase | **Floor** | 0 | a negative statistically significant score |

**Level Not Determined (LND):** Zero (0) points will be awarded for data when the LND is exceeded.
**Subgroup Achievement Total:** Status + Progress OR Growth (whichever is higher)
A maximum of 4 points may be applied to the LEA or building level score.

## 2*2 MAP SUBGROUP ACHIEVEMENT *English Language Arts*

| STATUS | | | PROGRESS | | | GROWTH | | |
|---|---|---|---|---|---|---|---|---|
| **Status Measures** | **Status Points Earned** | **MPI Score (3-Year Average)** | **Progress Measures** | **Progress Points Earned** | **Progress Measure Description** | **Growth Measures** | **Growth Points Earned** | **Growth Measure Description** |
| **Exceeding** | 4 | 385.7 - 500 | **Exceeding** | 3 | 5% of MPI GAP increase | **Exceeding** | 3 | a positive statistically significant score |
| **On Target** | 3 | 335.7 – 385.6 | **On Target** | 2 | 3% of MPI GAP increase | **On Target** | 2 | statistically insignificant growth estimates |
| **Approaching** | 2 | 300 – 335.6 | **Approaching** | 1 | 1% of MPI GAP increase | | | |
| **Floor** | 0 | 100 – 299.9 | **Floor** | 0 | <1% of MPI GAP increase | **Floor** | 0 | a negative statistically significant score |

**Level Not Determined (LND):** Zero (0) points will be awarded for data when the LND is exceeded.
**Subgroup Achievement Total:** Status + Progress OR Growth (whichever is higher)
A maximum of 4 points may be applied to the LEA or building level score.

## 2*3 SUBGROUP ACHIEVEMENT *Science*

| STATUS | | | PROGRESS | | |
|---|---|---|---|---|---|
| **Status Measures** | **Status Points Earned** | **MPI Score (3-Year Average)** | **Progress Measures** | **Progress Points Earned** | **Progress Measure Description** |
| **Exceeding** | 4 | 352.8- 500 | **Exceeding** | 3 | 5% of MPI GAP increase |
| **On Target** | 3 | 308.5-352.7 | **On Target** | 2 | 3% of MPI GAP increase |
| **Approaching** | 2 | 300 – 308.4 | **Approaching** | 1 | 1% of MPI GAP increase |
| **Floor** | 0 | 100 – 299.9 | **Floor** | 0 | <1% of MPI GAP increase |

**Level Not Determined (LND):** Zero (0) points will be awarded for data when the LND is exceeded.
**Subgroup Achievement Total:** Status + Progress
A maximum of 4 points may be applied to the LEA or building level score.

## 2*4 SUBGROUP ACHIEVEMENT *Social Studies*

| STATUS | | | PROGRESS | | |
|---|---|---|---|---|---|
| **Status Measures** | **Status Points Earned** | **MPI Score (3-Year Average)** | **Progress Measures** | **Progress Points Earned** | **Progress Measure Description** |
| **Exceeding** | 2 | 392.0- 500 | **Exceeding** | 1.5 | 5% of MPI GAP increase |
| **On Target** | 1.5 | 308.4-391.9 | **On Target** | 1 | 3% of MPI GAP increase |
| **Approaching** | 1 | 300 – 308.3 | **Approaching** | 0.5 | 1% of MPI GAP increase |
| **Floor** | 0 | 100 – 299.9 | **Floor** | 0 | <1% of MPI GAP increase |

**Level Not Determined (LND):** Zero (0) points will be awarded for data when the LND is exceeded.
**Subgroup Achievement Total:** Status + Progress OR Growth (whichever is higher)
A maximum of 2 points may be applied to the LEA or building level score.

## 3*1-3 College and Career Readiness

| STATUS | | | PROGRESS | | |
|---|---|---|---|---|---|
| **Status Measures** | **Status Points Earned** | **Percent of graduates scoring at or above the state standard** | **Progress Measures** | **Progress Points Earned** | **Progress Measure Description** |
| **Exceeding** | 10 | 67.0-100% | **Exceeding** | 7.5 | 25% of CCR*1-3 GAP increase |
| **On Target** | 7.5 | 50.0-66.9% | **On Target** | 4 | 15% of CCR*1-3 GAP increase |
| **Approaching** | 6 | 40.0- 49.9% | **Approaching** | 2 | 5% of CCR*1-3 GAP increase |
| **Floor** | 0 | 0.0-39.9% | **Floor** | 0 | <5% of CCR*1-3 GAP increase |

**CCR*1-3 Total:** Status + Progress
A maximum of 10 points may be applied to the LEA or building level score.

## 3*4 College and Career Readiness

| STATUS | | | PROGRESS | | |
|---|---|---|---|---|---|
| **Status Measures** | **Status Points Earned** | **Percent of graduates earning a qualifying score** | **Progress Measures** | **Progress Points Earned** | **Progress Measure Description** |
| **Exceeding** | 10 | 38.0-100% | **Exceeding** | 7.5 | 25% of CCR*4 GAP increase |
| **On Target** | 7.5 | 19.0-37.9% | **On Target** | 4 | 15% of CCR*4 GAP increase |
| **Approaching** | 6 | 5.0%-18.9% | **Approaching** | 2 | 5% of CCR*4 GAP increase |
| **Floor** | 0 | 0.0-4.9% | **Floor** | 0 | <5% of CCR*4 GAP increase |

**CCR*4 Total:** Status + Progress
A maximum of 10 points may be applied to the LEA or building level score.
Status Targets represent AP and IB scores and limited course data. Percentage required will be adjusted in later years to reflect inclusion of TSA data and improved course completion data. Status for 2012 only is used in the 2012 DRAFT release; progress is not calculated.

## 3*5-6 College and Career Readiness

| STATUS | | | PROGRESS | | |
|---|---|---|---|---|---|
| **Status Measures** | **Status Points Earned** | Percent of post-secondary placement | **Progress Measures** | **Progress Points Earned** | **Progress Measure Description** |
| **Exceeding** | 10 | 90.0-100% | **Exceeding** | 7.5 | 25% of CCR*5-6 GAP increase |
| **On Target** | 7.5 | 80.0-89.9% | **On Target** | 4 | 15% of CCR*5-6 GAP increase |
| **Approaching** | 6 | 70.0-79.9% | **Approaching** | 2 | 5% of CCR*5-6 GAP increase |
| **Floor** | 0 | 0.0-69.9% | **Floor** | 0 | <5% of MPI GAP increase |

**CCR*5-6 Total:** Status + Progress
A maximum of 10 points may be applied to the LEA or building level score.

## 3 High School Readiness

| STATUS | | | PROGRESS | | |
|---|---|---|---|---|---|
| **Status Measures** | **Status Points Earned** | Percent of high school readiness | **Progress Measures** | **Progress Points Earned** | **Progress Measure Description** |
| **Exceeding** | 10 | 25.0-100 | **Exceeding** | 7.5 | 25% of HSR GAP increase |
| **On Target** | 7.5 | 19.0-24.9 | **On Target** | 4 | 15% of HSR GAP increase |
| **Approaching** | 6 | 12.0-18.9 | **Approaching** | 2 | 5% of HSR GAP increase |
| **Floor** | 0 | 0-11.9 | **Floor** | 0 | <5% of MPI GAP increase |

**HSR Total:** Status + Progress
A maximum of 10 points may be applied to the LEA or building level score.

## 4 Attendance

| STATUS | | | PROGRESS | | |
|---|---|---|---|---|---|
| **Status Measures** | **Status Points Earned** | Percent of students attending 90% of time | **Progress Measures** | **Progress Points Earned** | **Progress Measure Description** |
| **Exceeding** | 10 | 90.0-100 | **Exceeding** | 7.5 | 3% increase |
| **On Target** | 7.5 | 85.0-89.9 | **On Target** | 4 | 2% increase |
| **Approaching** | 6 | 80.0-84.9 | **Approaching** | 2 | 1% increase |
| **Floor** | 0 | 0-79.9 | **Floor** | 0 | <1% increase |

**Attendance Total:** Status + Progress
A maximum of 10 points may be applied to the LEA or building level score.

## 5*1 Graduation Rate

| STATUS | | | PROGRESS | | |
|---|---|---|---|---|---|
| **Status Measures** | **Status Points Earned** | 4 or 5 year rate | **Progress Measures** | **Progress Points Earned** | **Progress Measure Description** |
| **Exceeding** | 20 | 92.0-100 | **Exceeding** | 15 | If Status = Floor, 9% increase needed |
| | | | | | If Status = Approaching, 6 % increase needed |
| | | | | | If Status = On Target or Exceeds, 3 % increase needed |
| **On Target** | 15 | 82.0-91.9 | **On Target** | 8 | If Status = Floor, 6% increase needed |
| | | | | | If Status = Approaching, 4 % increase needed |
| | | | | | If Status = On Target or Exceeds, 2 % increase needed |
| **Approaching** | 12 | 72.0-81.9 | **Approaching** | 4 | If Status = Floor, 3% increase needed |
| | | | | | If Status = Approaching, 2 % increase needed |
| | | | | | If Status = On Target or Exceeds, 1 % increase needed |
| **Floor** | 0 | 0-71.9 | **Floor** | 0 | < stated increase |

**Graduation Rate *1 Total:** Status + Progress
A maximum of 20 points may be applied to the LEA or building level score.
Both 4-year and 5-year rates are calculated and the better of the two is applied to the APR. For the 2012 DRAFT release: One year of status is used for the five-year rate. Progress cannot be calculated for the five-year rate. Two years of status are averaged and used for the four-year rate. Progress is calculated using annual improvement, not rolling average.

## 5*2 Graduation Rate

| STATUS | | | PROGRESS | | |
|---|---|---|---|---|---|
| **Status Measures** | **Status Points Earned** | 4 or 5 year rate | **Progress Measures** | **Progress Points Earned** | **Progress Measure Description** |
| **Exceeding** | 10 | 92.0-100 | **Exceeding** | 7.5 | If Status = Floor, 9% increase needed |
| | | | | | If Status = Approaching, 6 % increase needed |
| | | | | | If Status = On Target or Exceeds, 3 % increase needed |
| **On Target** | 7.5 | 82.0-91.9 | **On Target** | 4 | If Status = Floor, 6% increase needed |
| | | | | | If Status = Approaching, 4 % increase needed |
| | | | | | If Status = On Target or Exceeds, 2 % increase needed |
| **Approaching** | 6 | 72.0-81.9 | **Approaching** | 2 | If Status = Floor, 3% increase needed |
| | | | | | If Status = Approaching, 2 % increase needed |
| | | | | | If Status = On Target or Exceeds, 1 % increase needed |
| **Floor** | 0 | 0-71.9 | **Floor** | 0 | < stated increase |

**Graduation Rate *2 Total:** Status + Progress
A maximum of 10 points may be applied to the LEA or building level score.
Both 4-year and 5-year rates are calculated and the better of the two is applied to the APR. For the 2012 DRAFT release: One year of status is used for the five-year rate. Progress cannot be calculated for the five-year rate. Two years of status are averaged and used for the four-year rate. Progress is calculated using annual improvement, not rolling average.

## Appendix A

## Matrix of Approximately Equivalent CCR *1-3 Assessment Scores

| Student Weight | ACT Composite Score | SAT Critical Reading + SAT Math | COMPASS | ASVAB AFQT |
|---|---|---|---|---|
| 0 | No record of participation | No record of participation | No record of participation | No record of participation |
| 0.25 | < 18 | < 870 | Algebra < 66 and Reading < 81 | < 30 |
| 0.75 | 18 - 21 | 870 - 980 | Algebra >= 66 OR Reading >= 81 | 30 - 62 |
| 1 | 22 - 25 | 990 - 1180 | Algebra >= 66 AND Reading >= 81 | 63-87 |
| 1.25 | 26 - 36 | 1190 - 1600 | n/a | 88-99 |

## Appendix B

**Missouri institutions complying with the Coordinating Board for Higher Education's Dual Credit Policy and Principles of Good Practice for Dual Credit Courses (2012)**

Blue River Community College
Central Methodist University
Cottey College
Crowder College
Drury University
East Central College
Hannibal Lagrange College
Jefferson College
Lincoln University
Lindenwood University
Linn State Technical College
Longview Community College
Maple Woods Community College
Maryville University
Metro Community College
Metropolitan College
Mineral Area College
Missouri State University-West Plains
Missouri State University-Springfield
Missouri Valley College
Missouri Baptist University
Missouri Southern State College
Missouri Western State College
Moberly Community College
Northwest Missouri State University
North Central Missouri College
Ozark Technical College
Penn Valley Community College
Rockhurst University
Southeast Missouri State University
Southwest Baptist University
St Louis University
State Fair Community College
Stephens College
Three Rivers Community College
University Of Central Missouri
University of Missouri – Kansas City
University of Missouri – St. Louis
Wentworth Military Academy
William Jewell College

## Appendix C
### Approved Technical Skills Attainment (TSA) Assessments
### TENTATIVE LIST

Automotive Technician Examination – ASE
Certified Internet Web Professional – CIW
Certified Nurse Aide (CNA) – Missouri Department of Health and Senior Services
Cisco Certified Network Association (CCNA) Final Exam - Cisco Networking Academy
Cisco CCNA Discovery Final Exam – Cisco Networking Academy
Cisco CCNA Exploration Final Exam – Cisco Networking Academy
Cisco CCNP Final Exam – Cisco Networking Academy
Cisco I.T. Essentials Final Exam – Cisco Networking Academy
Collision Repair & Refinishing Tech (ASE) – NATEF
Collision Repair – ICAR
CompTIA - A+ Certification (STS program area only)
Computer Maintenance and Networking- TestOut
NCCER
ProStart Program – National Restaurant Association Education Foundation