



ARRA School Improvement Grant

Business Rules Leading to
Eligibility for the School Improvement Grant

May 17, 2010



ARRA – School Improvement Grant

- Business Rules

- Three tiers of schools
- Three sets of business rules
- Underlined items were items on which the State had some discretion



Business Rules

- Tier 1 – Defining the pool of schools for identifying Tier 1 schools
 - Pool consists of schools meeting ***all*** of the following criteria:
 - At least 30 Full Academic Year students with scores on Mathematics in the most recent two years
 - At least 30 Full Academic Year students with scores on English Language Arts in the most recent two years
 - Eligible to receive Title I funding
 - Receiving Title I funding
 - School is in a phase of School Improvement
 - Identified for Improvement
 - Corrective Action
 - Restructuring
 - **126** total schools are in the Tier 1 pool



Business Rules

- Tier 1—Identifying Tier 1 schools
 - Two paths to get into Tier 1
 - Path 1—from the Tier 1 pool
 - Calculate percentile ranks (explained later)
 - School is in Tier 1 if school percentile rank is less than 5
 - Path 2—from the Tier 1 pool
 - School is in Tier 1 if it is a secondary school with a graduation rate less than 60% for three years running
 - Results
 - 10 total schools
 - 7 from path 1
 - 3 from path 2



Business Rules

- Tier 2 – Defining the initial pool of schools for identifying Tier 2 schools
 - Initial pool consists of schools meeting ***all*** of the following criteria:
 - At least 30 Full Academic Year students with scores on Mathematics in the most recent two years
 - At least 30 Full Academic Year students with scores on English Language Arts in the most recent two year
 - Eligible to receive Title I funding
 - Is a secondary school (serves at least one grade in the range 7-12)
 - **570** total schools are in the Tier 2 pool



Business Rules

- Tier 2—Identifying Tier 2 schools
 - Three paths to get into Tier 2
 - Path 1—from the Tier 2 pool
 - Calculate percentile ranks (explained later)
 - School is in Tier 2 if school percentile rank is less than 5
 - Path 2—from the Tier 2 pool
 - School is in Tier 2 if it is a secondary school with a graduation rate less than 60% for three years running
 - Path 3—from the Tier 1 pool
 - School is in Tier 2 if it ranks lower than or equal to (on a statewide ranking of all schools) than the highest ranked school that got in through path 1
 - Results
 - 98 total schools
 - 29 through path 1
 - 0 through path 2
 - 69 through path 3



Business Rules

- Tier 3 – Identifying Tier 3 schools
 - Two paths to get into Tier 3
 - Path 1—from the Tier 1 pool
 - School is in Tier 3 if it did not make it into Tier 1 but was in the Tier 1 pool
 - Path 2—from pool of small schools
 - Rerun the entire process replacing the 30+ FAY inclusion criterion with a 1+ FAY inclusion criterion
 - Meaning that the school tested at least one student in both English Language Arts and Mathematics in both of the most recent years
 - School is in Tier 3 if the school is a small school and the small school rerun placed it in Tier 1 or Tier 2
 - **120** schools are in Tier 3
 - 47 through path 1
 - 73 through path 2



Eligible Schools by Tier

○ Tier I	10
○ Tier II	94
○ Tier III	120

- Tiers I and II are directly eligible for funds. Tier III schools IF in a district with Tier I and II schools, may be funded through the Tier I and Tier II dollars received by the district.



Calculating Percentile Ranks

- Details and schematic in the next slide
- Incorporate both mathematics and English Language Arts
- Incorporate both achievement level and improvement rates, weighting achievement more heavily than improvement
- Level the playing field across
 - High schools versus Elementary/Middle schools
 - English Language Arts versus Mathematics

High School English Language Arts	Two-year Average Percent Proficient
	3-year slope (improvement)
High School Mathematics	Two-Year Average Percent Proficient
	3-year slope (improvement)
Elementary/Middle School English Language Arts	Two-Year Average Percent Proficient
	Two-Year Average % Improving minus % Declining
Elementary/Middle School Mathematics	Two-Year Average Percent Proficient
	Two-Year Average % Improving minus % Declining

Start with raw data

% proficient

% improving minus % declining (MEAP)

% improvement trend slope (MME)

High School English Language Arts	Two-Year Average Percent Proficient → z-score
	3-year slope (improvement) → z-score
High School Mathematics	Two-Year Average Percent Proficient → z-score
	3-year slope (improvement) → z-score
Elementary/Middle School English Language Arts	Two-Year Average Percent Proficient → z-score
	Two-Year Average % Improving minus % Declining → z-score
Elementary/Middle School Mathematics	Two-Year Average Percent Proficient → z-score
	Two-Year Average % Improving minus % Declining → z-score

Calculate z-scores

To level the playing field between...

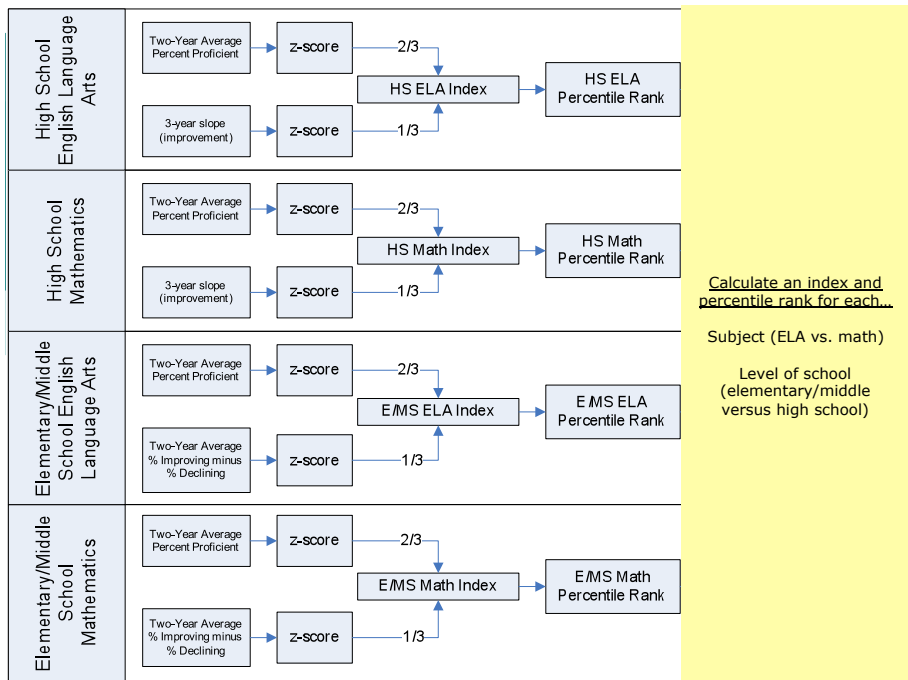
ELA versus Math

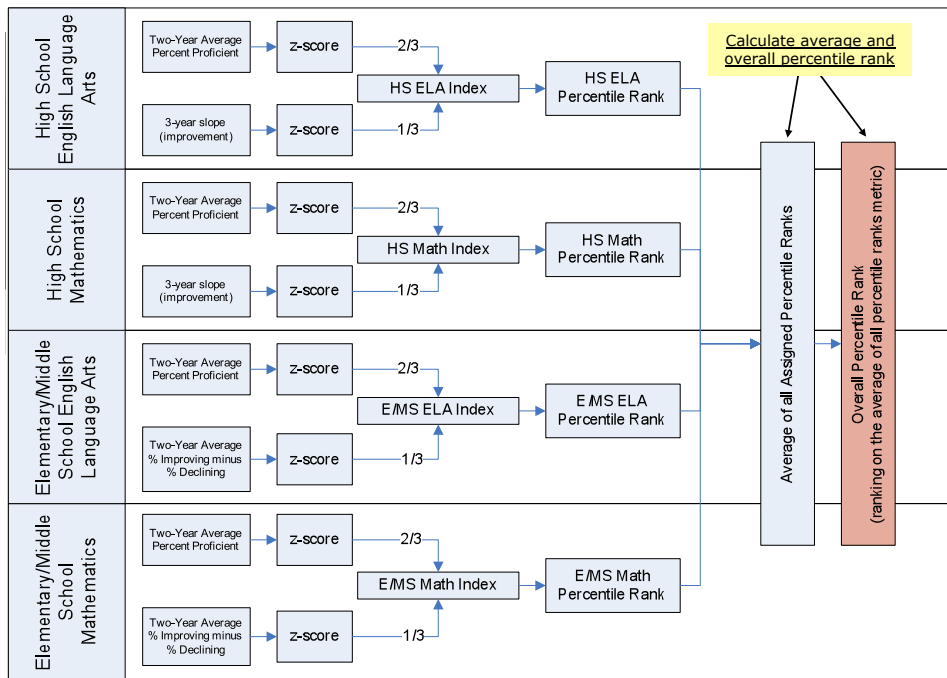
Elementary/Middle versus High schools

Achievement versus Improvement

Positive z-scores show how many standard deviations (SD) above the pool average the school is

Negative z-scores show how many standard deviations (SD) below the pool average the school is

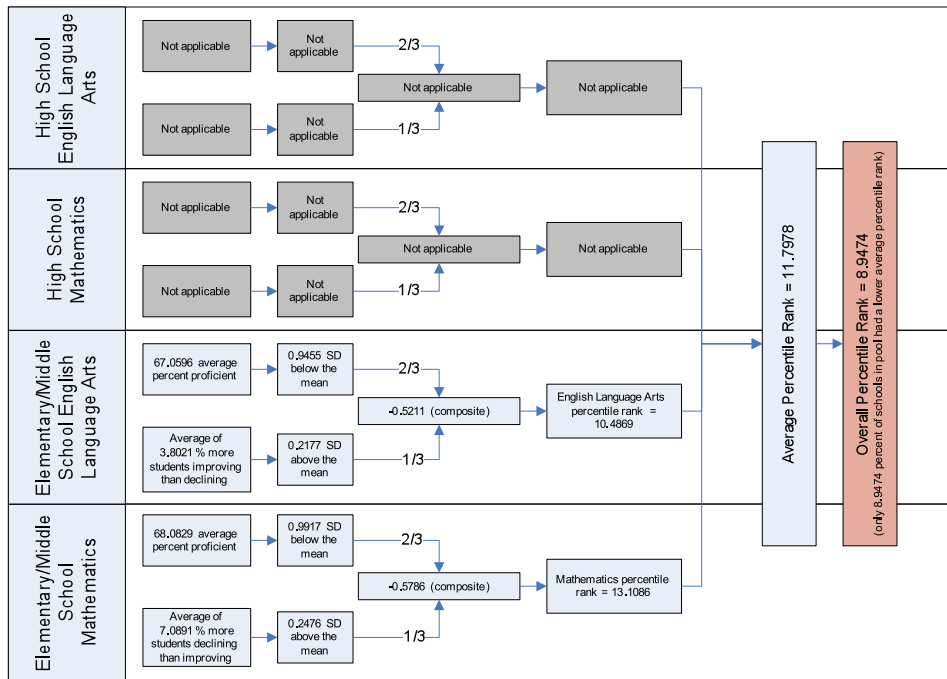


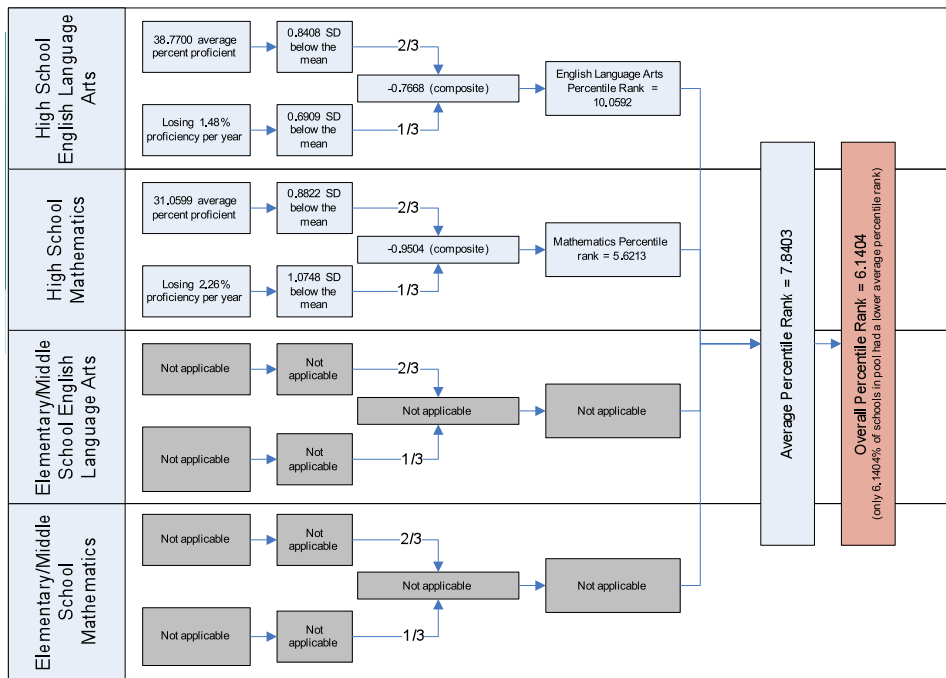




Examples

- Examples are shown for a high school and for an elementary/middle school in the following slides







Top to Bottom Statewide Ranking

- The Federal regulations required comparing schools from the Tier 1 and Tier 2 pools.
- Therefore, a top-to-bottom statewide ranking of schools was also calculated.
- Some schools did not receive a statewide ranking because they tested fewer than 30 students in...
 - ELA and/or Mathematics in...
 - School years 2007-08 and/or 2008-09.
- This top-to-bottom percentile ranking was calculating using the same methods as for the Tier 1 and Tier 2 pools.



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