IDENTIFICATION AND SELECTION OF "ODDS–BEATING" ELEMENTARY SCHOOLS:

COMPARISONS OF RELATIVE SCHOOL PERFORMANCE ON COMMON CORE ASSESSMENTS

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What is "Odds Beating"?

- **Odds-beating elementary schools**
  - Schools whose students exceeded expectation on state assessments for the population served.
  - Schools whose students performed significantly better on 2013 state Common Core-aligned assessments in multiple subjects and grade levels than other schools serving similar demographic populations.

- **Typically performing schools**
  - Schools whose students performed as expected on state assessments for the population served.

Step 1: Estimating Expected Performance

- ☑ **Family inputs to schooling**
  - ▪ **Rates of economic disadvantaged**
    - ▫ **% of students whose families receive public assistance.**
  - ▪ **Rates of English language use**
    - ▫ **% of students classified as English language learners.**
- ☑ **Academic outputs of schooling**
  - ▪ **Knowledge and skills in language arts and quantitative reasoning.**
    - ▫ **Average performance on 2013 ELA and math state assessments, which were aligned to Common Core.**

Rates of Economic Disadvantage & Average 3rd Grade Math Score
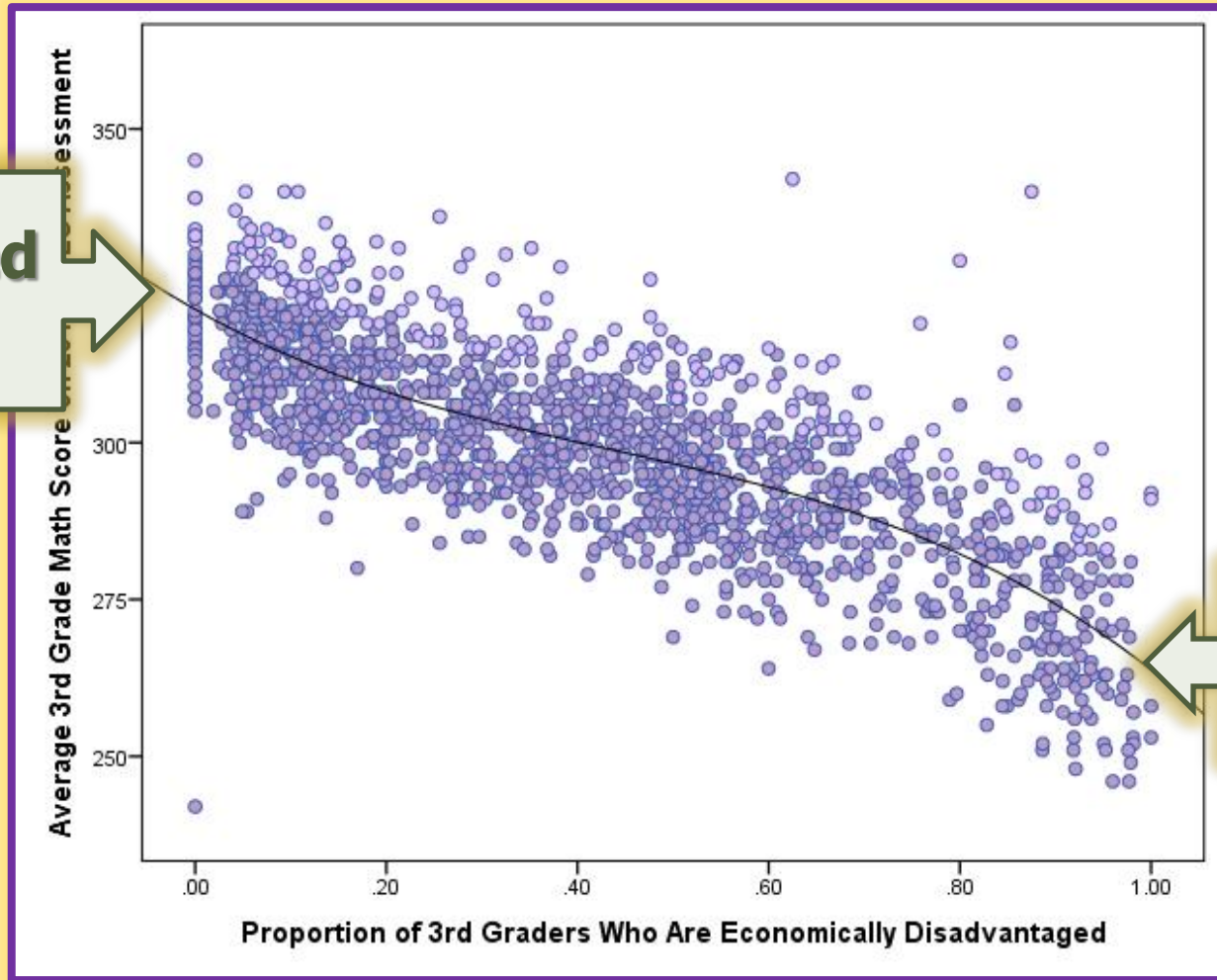
Step 2: Evaluating Actual-Expected Gaps in Performance

- Approach A – Size of Gap.
  - Size of difference compared to state average.
    - Standardized to have a mean = 0 & standard deviation = 1.
  - Odds beaters exceed expectations by more than 1 standard deviation.
- Approach B – Robustness of Gap.
  - Is the difference statistically significant?
    - *t*-test to take into account margin of error.
  - Odds beaters' gap is unlikely to be due to random or chance factors related to statistical estimation.

# Rates of Economic Disadvantage & Average 4th Grade ELA Score
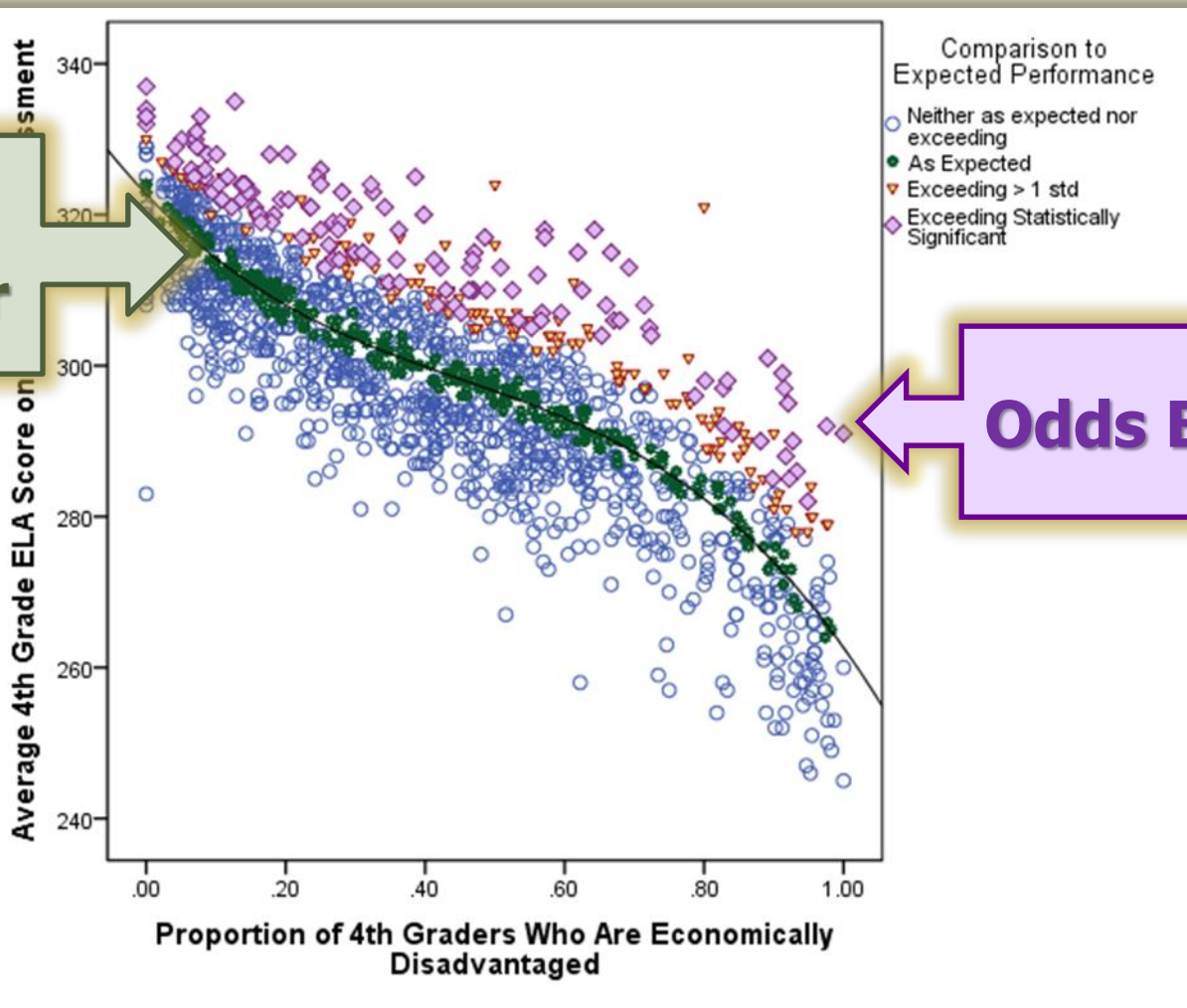
Step 3: Classifying Schools

- ▣ **Multiple comparisons**
  - ▪ ELA & Math scores for 3rd through 5th grades.
- ▣ **Odds Beaters**
  - ▪ Average actual-expected performance gap was greater than 1 standard deviation.

    and/or

  - ▪ Actual-expected gaps were statistically significant in at least 3 comparisons.
- ▣ **Typical Performers**
  - ▪ Average actual-expected gap was less than .25 standard deviation.

    AND

  - ▪ Actual-expected gap was not statistically significant for any of the 6 comparisons.

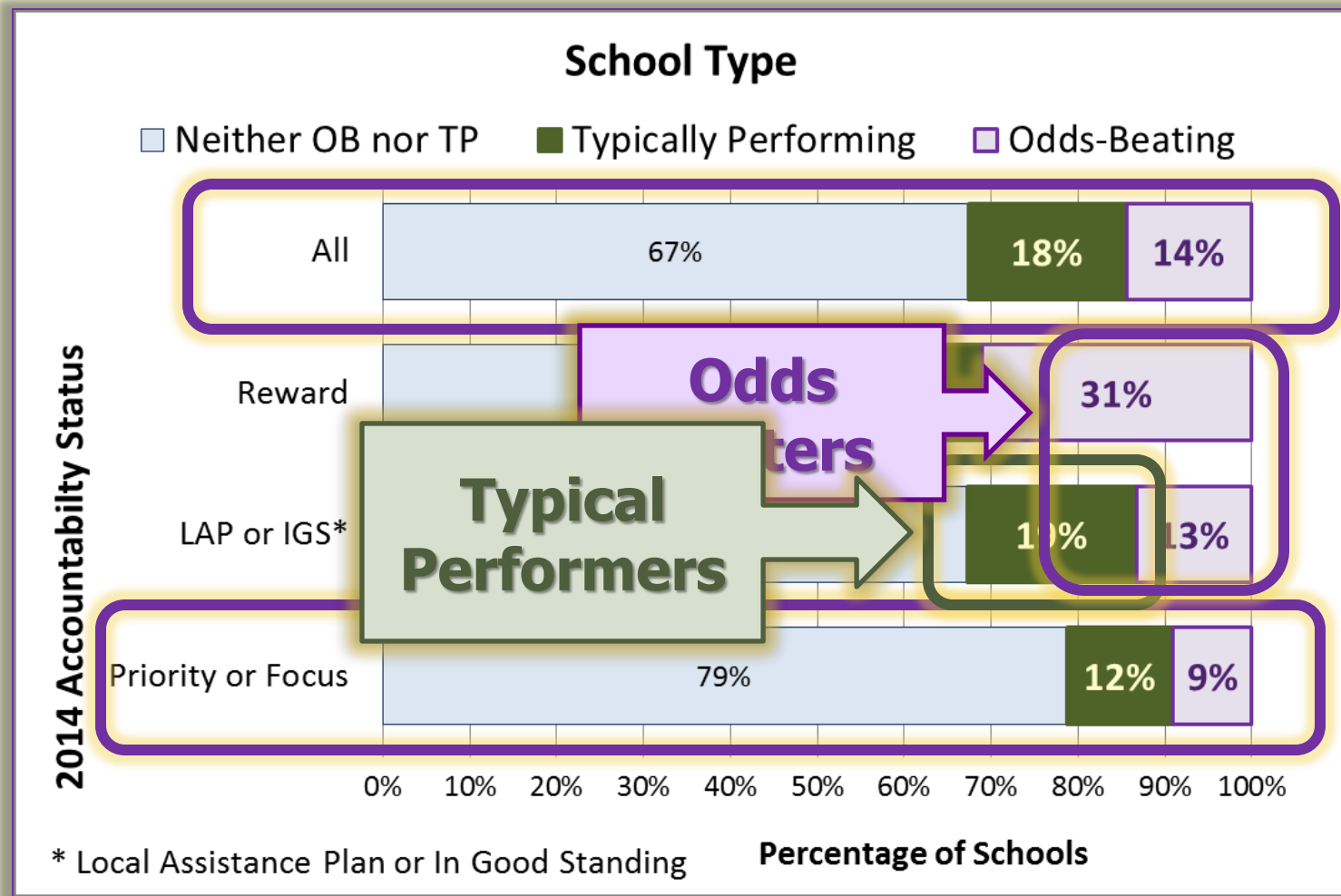# Cumulative Actual-Expected Performance Gaps
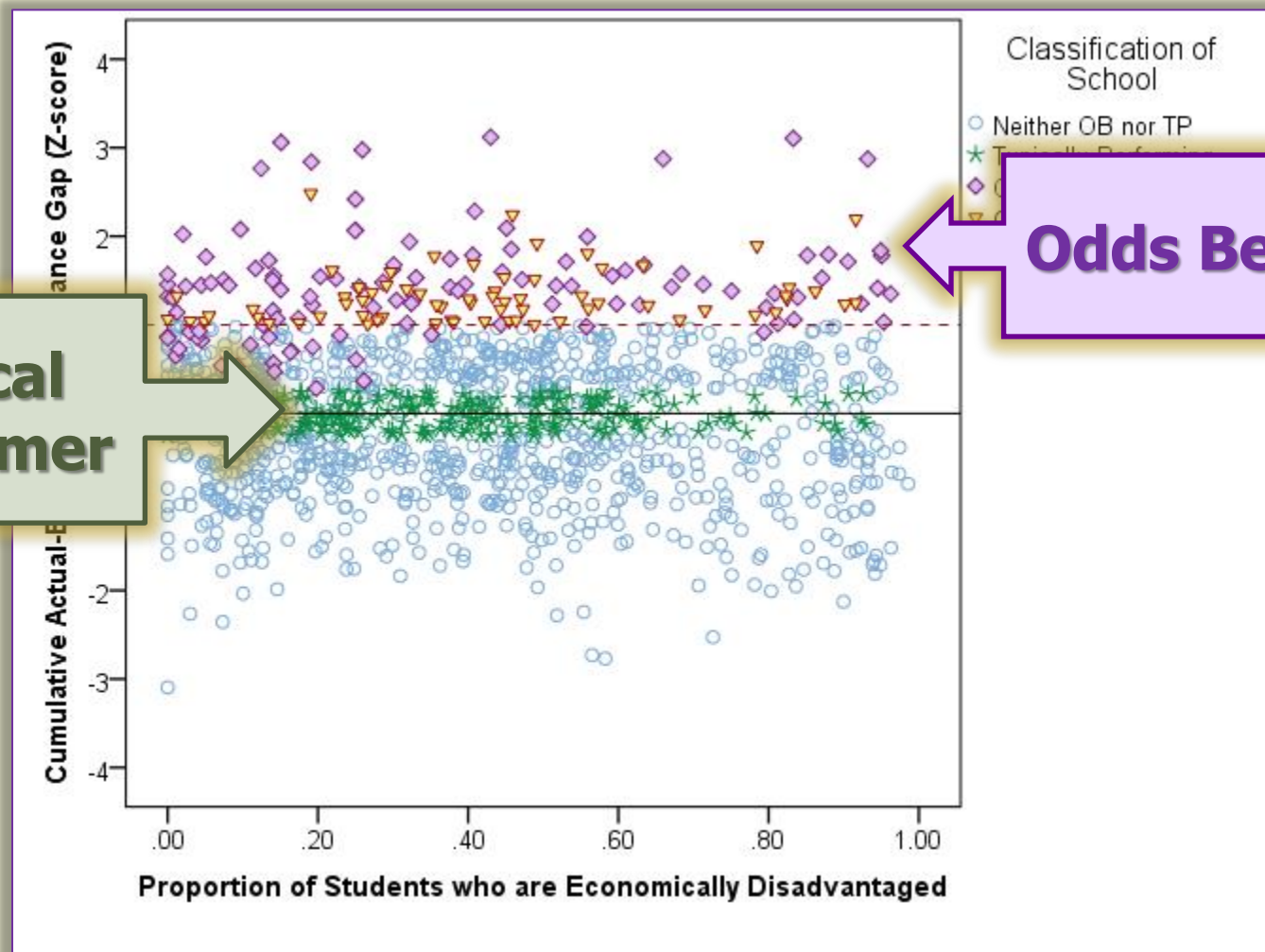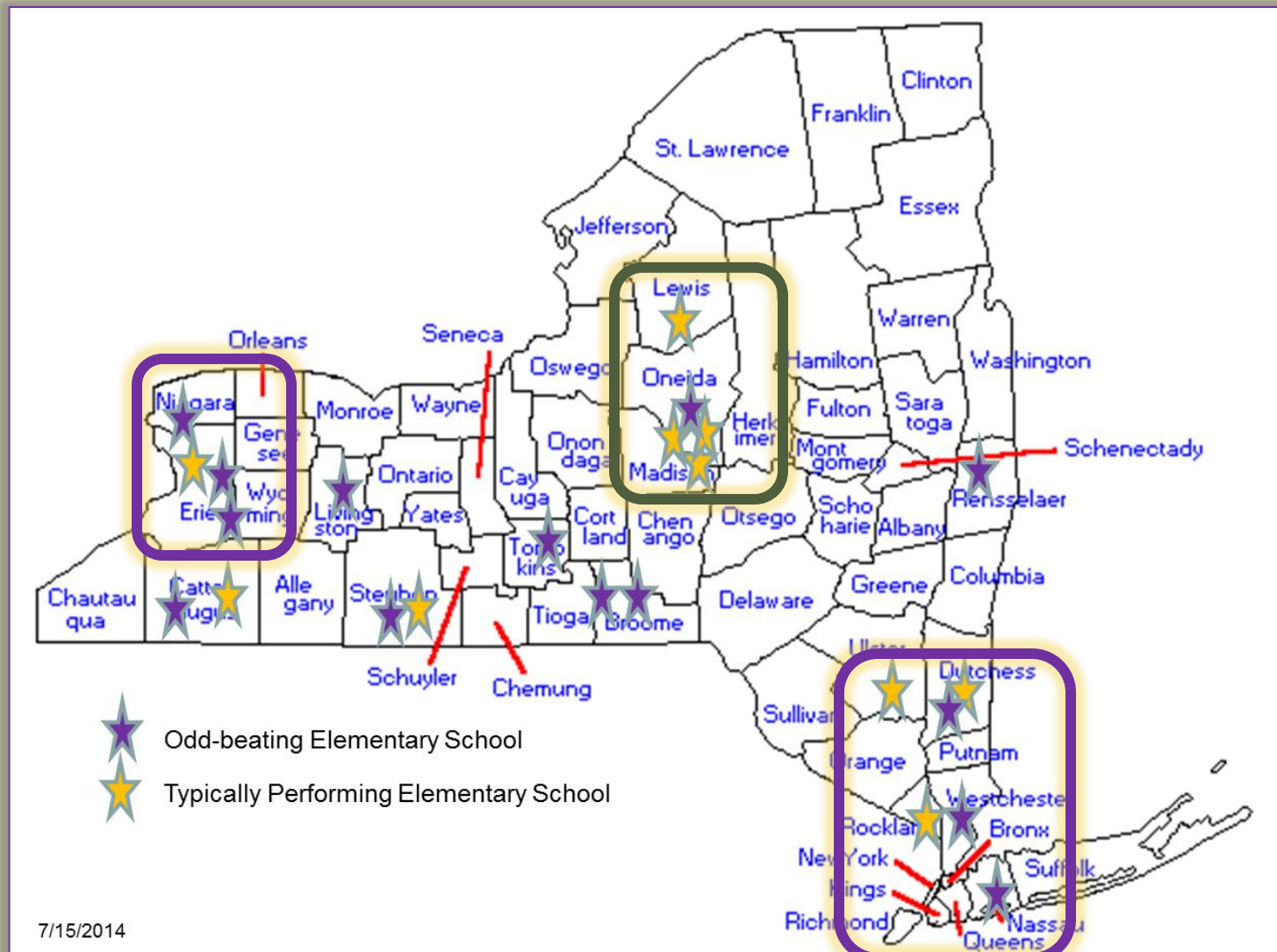
Step 4: Selecting Recruitment Pool

- Purposely selected to be *SIMILAR* in
  - Grade configurations – pre-K/K to 6th grade.
  - State accountability status.
  - Serving more diverse & disadvantaged students.
- Purposely selected to be *DIVERSE* in
  - Type of community – rural, suburban, urban
  - Location in the state.

Accountability Status & Odds-beating Classification

School Type

Legend: ☐ Neither OB nor TP ■ Typically Performing ☐ Odds-Beating

2014 Accountability Status (vertical axis)

- All: 67% | 18% | 14%
- Reward: 31%
- LAP or IGS*: 1?% | 13%
- Priority or Focus: 79% | 12% | 9%

Odds Beaters

Typical Performers

Percentage of Schools (horizontal axis: 0% – 100%)

* Local Assistance Plan or In Good Standing

Locations of Recruitment Pool

Odd-beating Elementary School

Typically Performing Elementary School

7/15/2014

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Odds Beating	% Economically Disadvantaged Students	% White Students
Eagle Bluff	>43%	>89%
Spring Creek	18-43%	>89%
Starling Springs	18-43%	<73%
Yellow Valley	>43%	<73%
Bay City	>43%	<73%
Goliad	>43%	<73%
Typically Performing		
Wolf Creek	18-43%	>89%
Sun Hollow	18-43%	73-89%
Paige City	>43%	73-89%

Categories are approximately the bottom, middle & top 3rds in the state

Response to Reform Initiatives