



2026 Beating the Odds

Calculation Guide

Data Sources

The *Beating the Odds (BTO)* analysis uses data from the Georgia Department of Education's (GaDOE) College and Career Ready Performance Index (CCRPI) and Student Record, and the Governor's Office of Student Achievement's (GOSA) Report Card.

Source	Variable	Notes
GaDOE Accountability Division	CCRPI Single Score	Primary outcome variable of the BTO model; Residential Treatment Centers (RTCs) excluded
GOSA Report Card (data from GaDOE)	Enrollment	K-12 students October Full-Time Equivalent (FTE) counts
	% by race/ethnicity: - Asian/Pacific Islander - Black - Hispanic - Multi-Racial - White % Female % Students with Disability % English Language Learners	% White serves as reference category; % Native American excluded from 2026 model — not a significant predictor and very few schools exceed 3% Native American enrollment (Lauren 2018). ¹
	% Direct Certified Students	Includes students in households receiving SNAP or TANF benefits, identified as homeless, foster, or migrant, or in households qualifying for Medicaid (added in 2023-24)
	Grade cluster - Elementary only - Middle only - High only - Elementary & Middle - Middle & High - Elementary, Middle & High	Elementary only serves as reference category
GOSA	Non-traditional school indicator	Schools serving students with unique instructional needs not adequately addressed in a traditional classroom setting
GaDOE Student Record	Churn rate	Student entries and exits from October FTE count date to May 1, divided by October FTE enrollment; students who withdrew and reenrolled within seven days not counted as mobile

¹ Lauen, D. (2018). *Beating the Odds Statistical Model Technical Report*. Georgia Governor's Office of Student Achievement.

2018 Beating the Odds Model Revisions

Beginning with the 2018 analysis, GOSA revised the Beating the Odds model based on feedback from school systems, the Georgia Department of Education, Georgia’s Educator Effectiveness and Accountability Technical Advisory Committee, and an external statistical expert. For additional details on the revisions, a [general overview](#) of the revised model is available on the GOSA website, as well as the [technical report](#) written by the external statistical expert. Key changes of the changes are as follows:

- Stratify the model by three size groups, based on FTE counts: small (0-500 students), medium (501-1,000 students), and large (1,000+ students)
- Use Fall FTE counts for student enrollment.
- Include the percentage of female students.
- Remove the percentage of Native American students.
- Only use Direct Certification as the economically disadvantaged indicator.
- Include quadratic and cubic terms of predictor variables.
- Include an indicator for non-traditional schools.
- Use standard deviation of the forecast, rather than standard deviation of the predictor.
- Use half a standard deviation in constructing the BTO confidence interval.
- Expand the BTO tiers from 2 to 3.

Analytical Technique

Beating the Odds is estimated through the regression model below.

$$\begin{aligned}
 Y_i = & \beta_0 + \beta_1 \text{Female} + \beta_2 \text{Female}^2 + \beta_3 \text{Female}^3 + \beta_4 \text{Asian} + \beta_5 \text{Asian}^2 + \beta_6 \text{Asian}^3 \\
 & + \beta_7 \text{Black} + \beta_8 \text{Black}^2 + \beta_9 \text{Black}^3 + \beta_{10} \text{Hispanic} + \beta_{11} \text{Hispanic}^2 \\
 & + \beta_{12} \text{Hispanic}^3 + \beta_{13} \text{Multiracial} + \beta_{14} \text{Multiracial}^2 + \beta_{15} \text{Multiracial}^3 \\
 & + \beta_{16} \text{DirectCertification} + \beta_{17} \text{DirectCertification}^2 \\
 & + \beta_{18} \text{DirectCertification}^3 + \beta_{19} \text{ELL} + \beta_{20} \text{ELL}^2 + \beta_{21} \text{ELL}^3 + \beta_{22} \text{SWD} \\
 & + \beta_{23} \text{SWD}^2 + \beta_{24} \text{SWD}^3 + \beta_{25} \text{Churn} + \beta_{26} \text{Churn}^2 + \beta_{27} \text{Churn}^3 + \beta_{28} M \\
 & + \beta_{29} H + \beta_{30} EM + \beta_{31} MH + \beta_{32} EMH + \beta_{32} \text{NonTraditional} + \epsilon_i
 \end{aligned}$$

Estimation & Post-estimation Strategy

BTO uses the model above to calculate the predicted CCRPI Single score. To determine each school’s BTO tier:

1. Compile the data necessary to run the model, as outlined above.
2. Generate a quadratic and cubic version of each percentage variable.
3. Sort the schools by size using the FTE enrollment counts: small (0-500 students), medium (501-1,000 students), and large (+1,000 students).
4. Run the model separately by these three school sizes, in order to generate the predicted scores and the standard deviation of the forecast for each school.
5. Calculate the upper bound of the confidence interval by adding half of the predicted standard deviation to the predicted score.
6. Calculate the lower bound of the confidence interval by subtracting half of the predicted standard deviation from the predicted score.

Schools then receive one of the three following designations for each model:

1. **Beat the Odds:** If a school's actual CCRPI single score is greater than the upper bound of the confidence interval.
2. **Within Expected Range:** If a school's actual CCRPI score is less than or equal to the upper bound of the confidence interval, but greater than the lower bound of the confidence interval.
3. **Below Expected Range:** If a school's actual CCRPI score is less than or equal to the lower bound of the confidence interval.

