# Projected Bottom 25 Percent Student Group Identification Guide 

January 2024

Tennessee's school letter grade system includes a TVAAS Composite for all subjects based on the students whose achievement is the bottom 25 percent in the school for a given subject/grade or course ("Growth25"). The method for identifying which students are in the bottom 25 percent is described in the school letter grade protocol. It is important to understand that this identification method leverages student information from the most recent year, including student assessment scores and enrollment data. As a result, it is not possible to identify with certainty which students will be in Growth25 for a given school year during the actual school year.

It is possible to identify students who are likely to be in Growth25 based on their prior achievement using TVAAS student projections for a given assessment. If a district or school plans to use student projections to estimate which students could be included in Growth25, the following caveats should be considered:

- Growth25 only includes students who spent at least 50 percent of the school year enrolled at the school, so some currently enrolled students who are the bottom 25 percent based on TVAAS achievement at a school are not eligible to be included in the school's Growth25 calculation.
- The TVAAS web application regularly updates student data to reflect the schools where students are currently connected, but this list can vary from the students who have spent at least 50 percent of the school year at a given school due to student mobility.
- Students must have the necessary data to be considered for selection in Growth25. If the students do not have the necessary data, then they cannot be included in Growth25. For example, students must have a current year and an immediate-prior year score in the selected subject for math and ELA assessments in 4-8 (gain model), and a student who does not have a current year score in the selected subject would not be considered for selection in Growth25. Similarly, a student who does not have an expected score for Science, Social Studies and EOC assessments (predictive model) would not be considered for selection in Growth25. See the school letter grade protocol for more detail on the necessary data and selection.
- Both of the Growth 25 selection methods (for the gain and predictive models) use different calculations than the projection model. This is particularly evident in the gain model because it uses an average of the current and prior year score of the selected subject whereas the projection uses all available test scores to estimate a student's likely achievement. It is also true in the predictive model because it uses a different cohort of students than the projection model to establish students' expected scores.
- Some students might not have enough prior test scores to receive a projection for a given assessment, but they will meet the criteria for the Growth 25 calculation. For example, an eighth-grade student who has only ELA scores in seventh and eighth grades will not receive a projection because there are not three prior test scores, but that student does have a current and immediate prior year score in the selected subject, which is required for the Growth 25 calculation.
- For the gain model, students who have repeated a grade will not be included in the Growth25 calculation because they do not have a prior test score in the immediate prior grade.

Given the caveats above, districts and schools using projections to project the bottom 25 percent might want to set a higher threshold than just the bottom 25 percent of students in projected achievement for a given assessment (e.g., the bottom 33 percent) as well as consider which of their students currently enrolled that do not have a projection.

## Education

In the following section, a step-by-step guide is provided to help identify projected bottom 25 percent student group based on the projected probabilities:

1. Go to TVAAS.SAS.com and select "Log In."
2. Log in with school admin credentials.
3. Once logged in to the TVAAS site, select "Export" in the blue bar at the top of the screen and then choose "Data" from the drop-down menu.

4. From the report type drop-down, select "Student Projections" from the list and select "Continue."

|  | Data File Exporter |
| :---: | :---: |
| Report Type |  |
| $\bigcirc$ School Value-Added |  |
| $\bigcirc$ Oeacher Value-Added | Hint: Startyo |
| $\bigcirc$ Rosters |  |
|  | - Continue |

5. Under "Data Formats," select ".csv (comma-separated values)."
6. Under "Districts/Schools," be sure your school is listed and selected. *Note: This should default to your school based on your login credentials.

Education
7. Ensure "Report based on enrolled data" is selected.

8. Under "Projection Groups," select all the grades/subjects/courses for which you want to project the bottom 25 percent and select "submit request."

9. Select "OK" in the confidentiality acknowledgement window.


## Education

10. You will then be taken to the "Exported Files" window. Depending on the number of records for your school's selections, it may take a few minutes for the data to export.

| Exported Files |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Refresh List | Select Data to Export |  |  |
| Your request is being processed. |  |  |  |  |
| File Name | Descriptic | Status | Created | Expires* |
| Student Projections | 1 school in 1 district 7 projection groups | Processing | Dec 19, 2023 04:55 PM EST |  |
| Student Projections 207076.csv | 1 school in 1 district 13 projection groups | Finished | Dec 18, 2023 <br> 11:34 AM EST | $\begin{aligned} & \text { Jan 01, } 2024 \\ & \text { 11:34 AM EST } \end{aligned}$ |
| Student Projections 207051.csV | 1 school in 1 district 1 projection group | Finished | $\begin{aligned} & \text { Dec 18, } 2023 \\ & \text { 12:40 AM EST } \end{aligned}$ | $\begin{aligned} & \text { Jan 01, } 2024 \\ & \text { 12:40 AM EST } \end{aligned}$ |
| Student Projections 207050.csv | 1 school in 1 district 13 projection groups | Finished | $\begin{aligned} & \text { Dec 17, } 2023 \\ & \text { 11:50 PM EST } \end{aligned}$ | $\begin{aligned} & \text { Dec 31, } 2023 \\ & \text { 11:50 PM EST } \end{aligned}$ |

11. Select your browser's refresh button.
12. Once your data has exported, the file name will turn blue under "File Name" and status will show "Finished."

| Exported Files |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Select Data to Export |  |  |  |  |
| File Name | Description | Status | Created | Expires* |
| Student Projections 207183.cSV | 1 school in 1 district 7 projection groups | Finished | $\begin{array}{r} 19,2023 \\ 5 \mathrm{PM} \text { EST } \end{array}$ | $\begin{aligned} & \text { Jan 02, } 2024 \\ & \text { 04:55 PM EST } \end{aligned}$ |
| Student Projections 207076.cSV | 1 school in 1 district 13 projection groups | Finished | $\begin{aligned} & \text { Dec 18, } 2023 \\ & \text { 11:34 AM EST } \end{aligned}$ | $\begin{aligned} & \text { Jan 01, } 2024 \\ & \text { 11:34 AM EST } \end{aligned}$ |
| Student Projections 207051.csv | 1 school in 1 district 1 projection group | Finished | $\begin{aligned} & \text { Dec 18, } 2023 \\ & \text { 12:40 AM EST } \end{aligned}$ | $\begin{aligned} & \text { Jan 01, } 2024 \\ & \text { 12:40 AM EST } \end{aligned}$ |
| Student Projections 207050.csv | 1 school in 1 district 13 projection groups | Finished | $\begin{aligned} & \text { Dec 17, } 2023 \\ & \text { 11:50 PM EST } \end{aligned}$ | Dec 31, 2023 <br> 11:50 PM EST |

13. Click the file name to start downloading your CSV file.
14. Open your downloaded file and select the top "Copyright" row and delete it.

15. Add a column header of "G25" in the header row of column I and add a column header of "Enrolled in Course" in the header row of column J.

| Projection | Projected State Percentile | Probability of |  |  |
| :---: | ---: | ---: | ---: | ---: |
| Gth Math (Approaching Expectai | 45 |  | G25 | Cnrolled in |
| Course |  |  |  |  |

16. In column J, locate a list of students currently enrolled in this course and mark each student with a "Y."
17. Format the spreadsheet as you choose.
18. Select row 1, click the Sort \& Filter icon from the editing group, and click Filter. This will turn data filters on for the header row.
19. Click the down arrow/filter icon in column J and select $Y$ only.

## Education

20. Filter column F for only one grade/subject/course (Ex: EOC Algebra I [Met Expectations]) for which you want to project the bottom 25 percent to show the projection for "Met Expectations."

| E | F | G | H | 1 |
| :---: | :---: | :---: | :---: | :---: |
| Grade (Enrolled - | Projection 7 | Projected State Percentil ${ }^{-}$ | Probability of Succes ${ }^{\text {F }}$ | G25 |
| 7 | EOC Algebra I (Met Expectations) | 65 | 42.8 |  |
| 8 | EOC Algebra I (Met Expectations) | 31 | 7.7 |  |
| 6 | EOC Algebra I (Met Expectations) | 52 | 27.2 |  |

## Education

21. You will need to calculate the number of students that will be in the bottom 25 percet for the grade/subject/course you filtered for in last step. Notice the number of files you have filtered in the bottom left corner of the spreadsheet where you see "\# of \# records found" (Ex: 525 of 8109 records found). The first number (Ex: 525) is the number of students in the filtered selection. Multiply this number by .25 and round up to the next whole number (Ex: 525 * . $25=131.25=132$ in the bottom 25 percent).

22. Select all your spreadsheet data, click "Sort \& Filter," "Custom Sort" and "Add Level" for the following:
a. Level 1-Column G "Projected State Percentile," smallest to largest
b. Level 2-Column H "Probability of Success," smallest to largest
c. Once these fields have been entered, click OK.

| District (Enrolled) $\quad$ - | School (Enrolled) - |  | Grade (Enrolle - | Projection |  |  |  | Projected State Percenti - |  | Probability of Succe ${ }^{-}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oceanside School District | Dolphin Middle School |  | 8 | EOC Algebra I (Met Expectations) |  |  |  |  | 31 | 7.7 |
| Oceanside School District | nalnhin Middlo Cahanl |  | 7 | Enc Almahra I/Mat Exnortatinnel |  |  |  |  | 53 | 27.6 |
| Oceanside School District | Sort |  |  |  |  |  |  | ? $\times$ | 9 | 48 |
| Oceanside School District | + Add Level |  | $\times$ Delete Level | [亩 Copy Level | へ | Options... | $\square$ My data has headers |  | 9 | 6.5 |
| Oceanside School District |  |  | 4 |  |  |  |  |  | 40.6 |
| Oceanside School District | Column |  |  | Sort On |  |  | Order |  | 3 | 28 |
| Oceanside School District |  |  |  | 9 | 3.4 |  |  |  |
| Oceanside School District | Sort by | Projected State Perc $\checkmark$ |  |  |  |  | Cell Values |  | $\checkmark$ | Smallest to Largest | t | 12 | 4.2 |
| Oceanside School District | Then by | Probability of Succe $\checkmark$ |  | Cell Values |  | $\checkmark$ | Smallest to Largest |  | 9 | 65.5 |
| Oceanside School District |  |  |  |  |  |  |  |  | 0 | 13.4 |
| Oceanside School District |  |  |  |  |  |  |  |  |  | 12 | 3.6 |
| Oceanside School District |  |  |  |  |  |  |  |  | 8 | 33 |
| Oceanside School District |  |  |  |  |  |  |  |  | 6 | 18.6 |
| Oceanside School District |  |  |  |  |  |  | OK | Cancel | 0 | 24.2 |
| Oceanside School District |  |  |  |  |  |  |  |  | 17 | 45.8 |
| Oceanside School District | Dolphin M | ddle School | 7 |  | Algebra I ( | Met Exp | ctations) |  | 19 | 3.1 |
| Oceanside School District | Dolphin M | ddle School | 8 | EOC | Algebra 1 ( | let Exp | ctations) |  | 64 | 40.6 |

## Education

23. Once the data is sorted, start with the student at the top of the sorted spreadsheet, drag and select, until the count at the bottom right of the spreadsheet matches the number calculated in step 21 (Ex: 132). *Note: Make sure you are starting with the student at the very top of the list.

24. Move to column I for the last student, select, and type a G25 indicator (Ex: ALG I). Use the "flash fill," the "fill up" command, or "drag and fill" to insert this indicator for all the bottom 25 percent you selected in step 21. *Note: Make sure you are filling this in all the way up to the top student.

25. Clear all current spreadsheet filters and repeat steps 20-25 for each grade/subject/course for which you want to project the bottom 25 percent.
26. Once all grades/subjects/courses have indicators in column I for all the bottom 25 percent, you have a few options for filtering and using the data set you have created.
a. Filter Column I for one of the $\mathbf{G 2 5}$ indicators you created (do not show blanks). This will produce a list of the projected bottom 25 percent by grade/subject/course.
b. Filter column B for one student or a group of students ID(s).
c. This will show how many grades/subjects/courses an individual student or group of students is projected to be in the bottom 25 percent.
