# State of Texas Assessments of Academic Readiness (STAAR ${ }^{\circledR}$ ) On-Track Measure Questions and Answers 

## Defining the STAAR On-Track Measure

1. What is the STAAR on-track measure?

The State of Texas Assessments of Academic Readiness (STAAR ${ }^{\circledR}$ ) on-track measure provides information about whether a student is on track to be at or above the Meets Grade Level performance standard in a future target year. Whether a student is on track or not is measured by using a student's gain score (the difference between the scale score a student achieved in the previous year and the scale score a student achieved in the current year). Individual students are then categorized as On Track or Not On Track toward the target year.

## 2. For what performance standard is the STAAR on-track measure calculated?

The STAAR on-track measure is calculated and reported for the Meets Grade Leve/ performance standard.
3. For what grades and content areas is the STAAR on-track measure reported?

In 2019, on-track measures are available for English and Spanish mathematics in grades 4-8, and for English reading in grades $4-7$ and Spanish reading in grade 4. The STAAR on-track measure is not available for end-of-course (EOC) assessments.

To calculate the STAAR on-track measure, three assessments covering the same content area must be available (previous year, current year, and target year). For example, an on-track measure can be calculated for grade 8 mathematics (current year assessment), because the previous year assessment was grade 7 mathematics, and the target year assessment will be Algebra I, and all three of these assessments measure mathematics knowledge and skills. However, an on-track measure cannot be calculated for grade 8 reading, because the next assessment in a traditional course-taking sequence would be English I, which includes both reading and writing content. Although the previous year assessment (grade 7 reading) and the current year assessment (grade 8 reading) cover the same content area, the target year assessment (English I) covers additional content; therefore an on-track measure cannot be calculated.

## 4. What are the STAAR on-track measure target years?

The STAAR on-track measure target years are grade 5 , grade 8 , and STAAR EOC assessments. The following table lists the current year assessment and the corresponding on-track target assessment for which the STAAR on-track measure is calculated.

| Mathematics |  | English Reading |  | Spanish Reading |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Current Year | On-Track Target | Current Year | On-Track Target | Current Year | On-Track Target |
| Grade 4 | Grade 5 | Grade 4 | Grade 5 | Grade 4 | Grade 5 |
| Grade 5 | Grade 8 | Grade 5 | Grade 8 |  |  |
| Grade 6 | Grade 8 | Grade 6 | Grade 8 |  |  |
| Grade 7 | Grade 8 | Grade 7 | Grade 8 |  |  |
| Grade 8 | Algebra 1 |  |  |  |  |

## 5. How are the On Track and Not On Track classifications determined for vertically scaled tests?

The method for measuring on track takes into account the differences between the performance standards on the vertical scale.

This method assumes that gain scores observed this year will be repeated proportionately to the changes in the Meets Grade Level performance standards in future years. The STAAR on-track measure acknowledges that the changes in the standards across the vertical scale are not uniform and adjusts the expected gain accordingly for future years.


The STAAR on-track classifications are determined by comparing a student's gain score (the difference between the student's current year score and previous year score) to a target gain score, referenced as the On-Track Value. See question 10 for more information about the calculation of the STAAR on-track measure.
6. How are the On Track and Not on Track classifications determined for grade 8 mathematics?

The STAAR on-track measure for grade 8 mathematics is calculated differently than the other vertically scaled tests because grade 8 scores are measured on a different scale than that of the target test (i.e., Algebra I). Rather than using the units of the scales, a $z$-score approach is used. A $z$-score converts scores into standard deviation units that can be compared regardless of scale. Thus, student scores from the previous grade (grade 7) mathematics, grade 8 mathematics, and the Algebra I Meets Grade Level performance standard are converted to a $z$-score scale as follows:

$$
z=\frac{\text { Student Score }- \text { Meets Standard }}{\text { Standard Deviation }}
$$

An on-track measure can be generated by placing all of the values on the same scale. For example:


Gain scores can be measured on the $z$-score scale. If the gain score from grade 7 to grade 8 is repeated from grade 8 to Algebra I, and the student achieves the target at the Meets Grade Leve/ performance standard, then the student is On Track.

## 7. Are there any exceptions to the On Track and Not On Track definitions described above?

Yes. There are some places on the STAAR scale, specifically at the extreme high and low ends of the scale, where the application of the On Track and Not On Track definitions would not be appropriate. At the extreme ends of the scale, unlike the rest of the scale, answering one more question correctly results in large differences in scale scores. For this reason, several places on the scale have been identified as exceptions to the On Track and Not On Track definitions.

- Students who maintained Masters Grade Level performance from the previous year to the current year will be classified as being On Track to Meets Grade Level performance standard in the target year.
- Students scoring at or below "chance" in the current year will be classified as being Not On Track to Meets Grade Level performance standard in the target year.

Chance represents the score that could reasonably obtained solely by guessing. For the reading and mathematics tests, chance is defined as one fourth, or 25 percent, of the possible multiple-choice raw-score points since these questions have four answer options.

## Applying the STAAR On-Track Measure

8. Is on track measured for all students in Texas?

On track is measured only for students who take STAAR assessments. Starting in 2018 English learners (ELs) who take STAAR assessments will receive the same progress measures and on-track measures as non-ELs.

Because of the unique characteristics of STAAR Alternate 2 and the students who take it, a different progress measure is developed specifically for this population. The STAAR Alternate 2 progress measure was available on student reports for the first time in spring 2016. The STAAR Alternate 2 on-track measure was available to districts starting in spring 2017 to allow time to evaluate the accuracy of the on-track component.

## 9. Why do some students not receive an on-track measure?

Only students who receive the STAAR progress measure receive the on-track measure. For more information on the STAAR progress measure eligibility criteria, see the STAAR Progress Measure Questions and Answers on TEA's website.

## 10. How can I calculate my student's STAAR on-track measure?

In order to calculate a student's on-track measure, the following information is needed:

- Test information from the current year, including
- STAAR progress measure
- grade level
- content area
- test language (English or Spanish)
- scale score
- Meets Grade Level performance standard
- Test information from the previous year, including
- grade level
- content area
- test language (English or Spanish)
- scale score
- Meets Grade Level performance standard
- Test information for the target, including
- grade level
- content area
- test language (English or Spanish)
- Meets Grade Level performance standard
- Gain score = Current Year Scale Score - Previous Year Scale Score


The following five steps are used to calculate on-track measure for the Meets Grade Level performance standard for all applicable tests except grade 8 mathematics (see question 6 on how to calculate on-track measures for tests on a horizontal scale:

1. Calculate the distance in scale score points that the student must progress from the previous year to the target year (Distance = Target Year Meets Standard - Previous Year Scale Score).

2. Calculate the distance between the Meets standard from the previous year to the target year (Standards Distance $=$ Target Year Meets Standard - Previous Year Meets Standard).

3. Determine the proportion of the change in standards from the previous year to the current year. Proportion $=($ Current Year Meets Standard - Previous Year Meets Standard) / Standards Distance.

(Current Year Meets - Previous Year Meets)/Standards Distance
4. Find the amount of gain that a student must achieve from the previous year to the current year in order to be On Track to the target year (On-Track Value = Proportion $x$ Distance).

5. Compare the student's gain score to the On-Track Value. If the gain score is greater than or equal to the On-Track Value, then the student is classified as On Track. Otherwise, the student is classified as Not On Track.


The following example shows in detail how the STAAR on-track measure is calculated for determining whether a grade 4 mathematics student is On Track or Not On Track to the Meets standard of 1625 for grade 5 mathematics. In the example below, the student characteristics are as follows:

|  | Grade | Scale Score | Meets Standard |
| :--- | :---: | :---: | :---: |
| Previous Year | 3 | 1325 | 1486 |
| Current Year | 4 | 1492 | 1589 |
| Target Year | 5 |  | 1625 |



1) Calculate the distance in scale score points that the student must progress from the previous year to the target year. (Distance $=$ Target Year Meets Standard - Previous Year Scale Score $=1625-1325=300$ )

2) Calculate the distance between the Meets standard from the previous year to the target year (Standards Distance $=$ Target Year Meets Standard - Previous Year Meets Standard $=1625-1486=139$ ).


Standards Distance $=139$
3) Determine the proportion of the change in standards from the previous year to the current year. Proportion $=($ Current Year Meets Standard - Previous Year Meets Standard) / Standards Distance $=$ $(1589-1486) / 139=0.741)$.

4) Find the amount of gain that a student must achieve from the previous year to the current year in order to be On Track to the target year (On-Track Value $=$ Proportion $\times$ Distance $=0.741 \times 300=222$ ).

5) Compare the student's gain score to the On-Track Value. Here, the gain score is not greater than or equal to the On-Track Value (167 < 222), therefore the grade 4 mathematics student is Not On Track to the grade 5 Meets standard of 1625 .


## Reporting the STAAR On-Track Measure

## 11. How will the STAAR on-track measure be made available?

In 2019, the STAAR on-track measure for the Meets Grade Level performance standard will be included in the STAAR student data file and within the district view of the student data portal. This information will NOT be reported on STAAR Report Cards.

## Interpreting the STAAR On-Track Measure

12. How is the STAAR on-track measure useful to parents, teachers, and administrators?

Scale scores and performance levels convey information about how a student performed in the current year. The STAAR progress measure communicates how much the student has improved from the previous year to the current year. The STAAR on-track measure provides additional information by determining whether the student's current performance level combined with the student's progress from last year to this year has the student on track to reach the Meets Grade Level performance standard in the target year. When used together, this information provides a more complete picture of the student's achievement.

For example, a student may have achieved the Approaches Grade Level performance and have Expected growth, but the student may not be On Track to the Meets Grade Level standard in the target year. This information could help parents, teachers, and administrators identify students for early interventions to prevent them from falling behind in the future.

## STAAR On-Track Measure and Accountability

13. Is the STAAR on-track measure used for the accountability rating calculation?

No. The STAAR on-track measure is not included in the accountability rating calculation.

## Development of STAAR On-Track Measure

## 14. Why did Texas develop and implement the STAAR on-track measure?

Texas Education Code $\S 39.034$ (d) mandates the development of a measure to determine the necessary annual amount of improvement required for a student to be prepared to perform satisfactorily on grade 5, grade 8, and EOC assessments. To meet these requirements, the Texas Education Agency developed the STAAR on-track measure. In doing so, the goal was to provide additional information about student performance that builds upon the existing STAAR progress measure.

