

Calculating Projections with the Texas Projection Measure for TAKS–M

Updated: April 28, 2011

The Texas Projection Measure (TPM) provides an estimate of whether a student is likely to meet the standard (pass) and/or achieve commended performance (obtain the highest performance level) on a TAKS–M assessment at a future grade. This measure is based on 1) the student’s current performance on TAKS–M; 2) the student’s previous-year performance in the subject of interest, if applicable and available; and 3) the TAKS–M scores of other students in the same enrolled grade in the student’s school district. The TPM for TAKS–M was developed for grades 3, 4, 6, and 7 mathematics and reading and grade 10 English language arts (ELA), mathematics, science, and social studies.

In 2011, only TPM projections for grade 10 will be reported on the Confidential Student Report (CSR). Beginning in 2011–2012, State of Texas Assessment of Academic Readiness (STAAR) Modified assessments will replace TAKS–M assessments at grades 3–9. Students currently in grades 3–8 who receive a projection for TAKS–M will not be able to compare their 2011 TAKS–M projections to future TAKS–M scores and the TAKS–M performance standards. Projected scores based on the TAKS–M scoring system cannot be compared with the STAAR Modified performance standards. However, TAKS–M assessments will continue to be administered in subsequent years for students in grades 10 and 11. Therefore, students currently in grade 10 who receive a projection for TAKS–M will be able to compare their 2011 TAKS–M projections to their TAKS–M scores and the TAKS–M performance standards in 2012. Thus, TPM projections for grade 10 will be reported on CSRs.

The purpose of this document is to illustrate the steps needed to calculate the TPM for TAKS–M. The document includes three sections:

1. Single-year TPM calculation steps for students in grade 10 for TAKS–M ELA and mathematics
2. Single-year TPM calculation steps for students in grade 10 for TAKS–M science and social studies
3. Appendices with equation constants, coefficients, and sample single-year TPM calculations for students in grade 10

In addition to these steps, the Texas Projection Measure Calculator is also available to manually calculate the TPM for TAKS–M. The TPM Calculator can be found at <http://tpmcalculator.pearson.com>.

Note that grades 3, 4, 6, 7, and 10 projections are available on the student data files or via the online TPM calculator. Grade 10 projections are also available on the CSR.

For more information about the Texas Projection Measure for TAKS–M, see the Texas Education Agency website at <http://www.tea.state.tx.us/student.assessment/special-ed/taksm/tpm/index.html>.

Please note the following before calculating a TPM for TAKS–M.

- Only students in grade 10 in 2010–2011 will take TAKS–M assessments when they are in the projection grade (grade 11). As a result, only students in grade 10 will be able to compare their TPM scores projected in 2011 with their actual performance in the projection grade. Students in grades 3–8 in 2010–2011 will take STAAR Modified assessments beginning in 2012, and the new STAAR Modified cut points, which will be on a different score scale from TAKS–M, will be applied. Therefore, the students who are currently in grades 3–8 will not have TAKS–M scores to compare with their projections when they are in the projection grades.
- A student must take a TAKS–M test in all subjects required for the calculation. For example, in order to calculate a grade 10 ELA TPM, a student in grade 10 must take a TAKS–M test in both ELA and mathematics. If a student is tested with TAKS or TAKS (Accommodated) in one of these subjects and TAKS–M for the other, the TPM cannot be calculated.

Single-Year TPM Calculation Steps for Students in Grade 10 for TAKS–M English Language Arts and Mathematics

Following are the steps needed to calculate ELA or mathematics projections for students in grade 10 who take TAKS–M. The projection formulas estimate the ELA or mathematics TAKS–M score in the projection grade (grade 11) for students in grade 10.

Step 1: Start with the following student information:

- current grade and subject of the student for whom the TPM is being calculated
- current-year TAKS–M ELA scale score for the student (Read-SS)
- current-year TAKS–M mathematics scale score for the student (Math-SS)

Step 2: Use the 2010 district mean scale score found in the TAKS–M Mean Scale Scores spreadsheet. This document is available at <http://www.tea.state.tx.us/student.assessment/special-ed/taksm/tpm/index.html>. To find the correct district mean, locate the row with the following information:

- Select the County-District-Campus (CDC) number for the student’s current district from column “A.” Locate the correct row containing the student’s current grade from column “D.”
- Select the district mean scale score for the appropriate projection subject from columns “E,” “G,” “I,” “K,” and “M.” District means are calculated the year before they are applied. For spring 2011, district means for each subject are calculated based on the 2010 TAKS–M administration (previous year’s scores). A district mean is calculated for each district with at least 30 students who have valid TAKS–M scores in that grade and subject. If the district did not have at least 30 students, the state mean is used. The source of the mean scale score value associated with each subject is designated in columns “F,” “H,” “J,” “L,” and “N.”

TAKS–M uses the district mean instead of the campus mean when developing TPM equations due to the small number of students taking TAKS–M tests at each campus for each grade and subject. The state mean will be used in situations where a district had fewer than 30 students taking TAKS–M in a grade and subject. The state means for each grade and subject that will have a TPM available in 2011 can be found in rows 7 through 11 of the file containing the TAKS–M mean scale scores.

Step 3: Identify the correct constant value and coefficients to be used in the formula. Locate the correct row in the Single-Year Texas Projection Measure for TAKS–M Constants and Coefficients table in Appendix A. Note that the column labels represent:

- FROM-GRADE = grade from which the projection is made (current grade)
- TO-GRADE = grade to which the projection is made (projection grade)
- SUBJECT = projection subject

The numerical values in the table associated with the correct grade and subject will be used to calculate the projected score(s) as described in Step 4. The numerical values needed to make reading/ELA and mathematics projections are:

- CONSTANT = a value for each grade and subject determined when the coefficients are developed annually
- READ-CO = coefficient to multiply by student’s ELA scale score
- MATH-CO = coefficient to multiply by the student’s mathematics scale score
- D-MEAN-CO = coefficient to multiply by the district mean scale score in the projection subject

Step 4: Calculate the student’s projected scores by inputting the student’s current scale scores from Step 1, the district mean scale score for the projection subject from Step 2, and the constant and coefficients obtained in Step 3 (from Appendix A) into the following equations.

In the following equations, *READ-SS* is the student’s current scale score in ELA and *MATH-SS* is the student’s current scale score in mathematics. *D-READ-SS* and *D-MATH-SS* are the district mean scale scores from the 2010 TAKS–M administration (ELA when calculating the ELA TPM and mathematics when calculating the mathematics TPM). District mean scale scores should be from the district the student was enrolled in when he/she took the 2011 TAKS–M administration.

Projected scale score in reading or ELA =

$$\mathbf{CONSTANT + (READ-CO \times READ-SS) + (MATH-CO \times MATH-SS) + (D-MEAN-CO \times D-READ-SS)}$$

Projected scale score in mathematics =

$$\mathbf{CONSTANT + (READ-CO \times READ-SS) + (MATH-CO \times MATH-SS) + (D-MEAN-CO \times D-MATH-SS)}$$

Step 5: Locate the passing standard and the commended standard for the projection grade and subject of interest in the last two columns (MET STANDARD or COMMENDED PERFORMANCE) of the table in Appendix A. Note that this is the passing standard and commended standard at the **projection grade and subject**, not the passing standard for the student’s current grade and subject. For example, when calculating the projected ELA score for a student who is currently in grade 10 and took the TAKS–M ELA and mathematics tests, locate the passing standards in row 11 of the table. The passing standard provided is for grade 11 ELA (2100), which is the passing standard at the projection grade. The commended standard provided is for grade 11 reading (2400), which is the commended standard at the projection grade.

Step 6: Compare the projected score to the met standard and commended performance. If the projected score is at or above the met standard, then the student is projected as currently on track to meet the standard on the TAKS–M test in the projection grade and subject. If the projected score is at or above the commended performance, then the student is projected as

currently on track to achieve commended performance on the TAKS–M test in the projection grade and subject. For grade 10 students, the projection outcome is reported on the student's CSR as "Texas Projection Measure—Projected to Meet Standard at Grade 11: ZZZ" where "ZZZ" is either "YES" or "NO." The outcome reported will be "YES" if the student is projected to meet the standard at the projection grade and subject and will be reported as "NO" if the student is not projected to meet the standard at the projection grade and subject. Also on the student's CSR is "Texas Projection Measure—Projected to Achieve Commended Performance at Grade 11: ZZZ" where "ZZZ" is either "YES" or "NO". The outcome reported will be "YES" if the student is projected to achieve commended performance at the projection grade and subject and will be reported as "NO" if the student is not projected to achieve commended performance at the projection grade and subject.

Sample one-year calculations related to grade 10 ELA and mathematics are provided in Appendix C:

- example 1: projecting grade 11 ELA from grade 10 ELA
- example 2: projecting grade 11 mathematics from grade 10 mathematics

Single-Year TPM Calculation Steps for Students in Grade 10 for TAKS–M

Social Studies and Science

Following are the steps needed to make social studies and science projections for students in grade 10 who take TAKS–M. For **social studies and science**, the TPM is used to project from grade 10 to grade 11 in 2011.

Step 1: Start with the following student information:

- current grade and subject for the student for whom the TPM is being calculated
- current-year TAKS–M ELA scale score for the student (Read-SS)
- current-year TAKS–M mathematics scale score for the student (Math-SS)
- current-year TAKS–M scale score in projection subject (SOC-ST-SS for social studies and SCI-SS for science)

Step 2: Use the 2010 district mean scale score found in the TAKS–M Mean Scale Scores spreadsheet. This document can be found at <http://www.tea.state.tx.us/student.assessment/special-ed/taksm/tpm/index.html>. To find the correct district mean, locate the row with the following information:

- Select the CDC number for the student’s current district from column “A.” Locate the correct row containing the student’s current grade from column “D.”
- Select the district mean scale score for the appropriate projection subject from columns “E,” “G,” “I,” “K,” and “M.” District means are calculated the year before they are applied. For spring 2011, district means for each subject are calculated based on the 2010 TAKS–M administration. A district mean is calculated for each district with at least 30 students who have valid TAKS–M scores in that grade and subject. If the district did not have at least 30 students, the state mean is used. The source of the mean scale score value associated with each subject is designated in columns “F,” “H,” “J,” “L,” and “N.”

TAKS–M uses the district mean instead of the campus mean when developing TPM equations due to the small number of students taking TAKS–M tests at each campus for each grade and subject. The state mean will be used in situations where a district had fewer than 30 students taking TAKS–M in a grade and subject. The state means for each grade and subject that will have a TPM available in 2011 can be found in rows 7 through 11 of the file containing the TAKS–M mean scale scores.

Step 3: Identify the correct constant and coefficients to be used in the formula. Locate the correct row in the Single-Year Texas Projection Measure for TAKS–M Constants and Coefficients table in Appendix A. Note that the column labels represent:

- FROM-GRADE = grade from which the projection is made (current grade)
- TO-GRADE = grade to which the projection will be made (projection grade)
- SUBJECT = projection subject

The numerical values in the table associated with the correct grade and subject will be used to calculate the projected score(s) as described in Step 4. The numerical values needed to make writing, social studies, or science projections are:

- CONSTANT = a value for each grade and subject determined when the coefficients are developed annually
- READ-CO = coefficient to multiply by student’s ELA scale score

- MATH-CO = coefficient to multiply by the student’s mathematics scale score
- Coefficient for projection subject
 - SOC-ST-CO = coefficient to multiply by student’s social studies scale score
 - SCI-CO = coefficient to multiply by student’s science scale score
- D-MEAN-CO = coefficient to multiply by the district mean scale score in the projection subject

Step 4: Calculate the student’s projected scores by inputting the student’s current scale scores from Step 1, the district mean scale score for the projection subject from Step 2, and the constant and coefficients obtained in Step 3 (from Appendix A) into the following equations.

In the following equations, *READ-SS* is the student’s current scale score in ELA and *MATH-SS* is the student’s current scale score in mathematics. *SOC-ST-SS* is the social studies scale score, and *SCI-SS* is the science scale score. *D-SOC-ST-SS* and *D-SCI-SS* are the district mean scale scores from the previous year’s TAKS–M administration (social studies when calculating the social studies TPM, and science when calculating the science TPM). District mean scale scores should be from the district the student was enrolled in when he/she took the 2011 TAKS–M administration.

Projected scale score in social studies =

$$\mathbf{CONSTANT + (READ-CO \times READ-SS) + (MATH-CO \times MATH-SS) + (SOC-ST-CO \times SOC-ST-SS) + (D-MEAN-CO \times D-SOC-ST-SS)}$$

Projected scale score in science =

$$\mathbf{CONSTANT + (READ-CO \times READ-SS) + (MATH-CO \times MATH-SS) + (SCI-CO \times SCI-SS) + (D-MEAN-CO \times D-SCI-SS)}$$

Step 5: Locate the passing standard and the commended standard for the projection grade and subject of interest in the last two columns (MET STANDARD or COMMENDED PERFORMANCE) of the table in Appendix A. Note that this is the passing standard and commended standard at the **projection grade and subject**, not the passing standard for the student’s current grade and subject. For example, when calculating the projected science score for a student who is currently in grade 10 and took the TAKS–M science test, locate the passing standards in row 10 of the table. The passing standard provided is for grade 11 science (2100), which is the passing standard at the projection grade. The commended standard provided is for grade 11 science (2400), which is the commended standard at the projection grade.

Step 6: Compare the projected score to the met standard and commended performance. If the projected score is at or above the met standard, then the student is projected as currently on track to meet the standard on the TAKS–M test in the projection grade and subject. If the projected score is at or above the commended performance, then the student is projected as currently on track to achieve commended performance on the TAKS–M test in the projection grade and subject. For grade 10 students, the projection outcome is reported on the student’s CSR as “Texas Projection Measure—Projected to Meet Standard at Grade 11: ZZZ” where “ZZZ” is either “YES” or “NO.” The outcome reported will be “YES” if the student is projected to meet the standard at the projection grade and subject and will be reported as “NO” if the student is not projected to meet the standard at the projection grade and subject. Also on the student’s CSR is “Texas Projection Measure—Projected to Achieve Commended Performance at Grade 11: ZZZ” where “ZZZ” is either “YES” or “NO.” The outcome reported will be “YES” if the student is projected to achieve commended performance at the projection grade and subject and will be

reported as "NO" if the student is not projected to achieve commended performance at the projection grade and subject.

A sample one-year calculation related to grade 10 science is provided in Appendix C:

- example 3: projecting grade 11 science from grade 10 science

Appendix A

Single-Year Texas Projection Measure for TAKS–M Constants and Coefficients

Projections are based on TAKS–M data. As a result, these projections will have limited use for determining how students are likely to perform in the projection grades (grades 5 and 8) in the future. Beginning in 2012, STAAR Modified assessments will replace TAKS–M assessments at grades 3–9, and the STAAR Modified performance standards will likely differ at the projection grades.

(See below for an explanation of column names and additional details about the table.)

Row	FROM- GRADE	TO- GRADE	SUBJECT	CONSTANT	READ- CO	MATH-CO	SOC-ST- CO	SCI-CO	D-MEAN- CO	MET STANDARD	COMMENDED PERFORMANCE
1	03	05	Mathematics	366.51	0.2072	0.5292			0.0885	2100	2400
2	03	05	Reading	506.01	0.3887	0.2013			0.1820	2100	2400
3	04	05	Mathematics	68.07	0.1976	0.6303			0.1413	2100	2400
4	04	05	Reading	313.57	0.5203	0.1523			0.1968	2100	2400
5	06	08	Mathematics	397.99	0.2570	0.4470			0.1015	2100	2400
6	06	08	Reading	12.85	0.6492	0.2037			0.1657	2100	2400
7	07	08	Mathematics	148.94	0.2128	0.4985			0.2028	2100	2400
8	07	08	Reading	-86.01	0.6826	0.1538			0.2153	2100	2400
9	10	11	Mathematics	203.61	0.2239	0.6610			0.0122	2100	2400
10	10	11	Science	305.22	0.2480	0.2078		0.3653	0.0198	2100	2400
11	10	11	ELA	-63.96	0.6543	0.1534			0.2062	2100	2400
12	10	11	Social Studies	559.76	0.1867	0.0684	0.4788		-0.0052	2100	2400

- FROM-GRADE = grade from which the projection is made (current grade)
- TO-GRADE = grade to which the projection is made (projection grade)
- SUBJECT = projection subject
- CONSTANT = a value for each grade and subject determined when the coefficients are developed annually
- READ-CO = coefficient to multiply by the student's reading/ELA scale score
- MATH-CO = coefficient to multiply by the student's mathematics scale score
- SOC-ST-CO = coefficient to multiply by the student's social studies scale score
- SCI-CO = coefficient to multiply by the student's science scale score
- D-MEAN-CO = coefficient to multiply by the district mean scale score in the projection subject
- MET STANDARD = the scale score cut point indicating met standard in the projection grade and subject
- COMMENDED PERFORMANCE = the scale score cut point indicating commended performance in the projection grade and subject

For more information about district means in the formulas, see the Frequently Asked Questions document on the TEA website (<http://www.tea.state.tx.us/student.assessment/special-ed/taksm/tpm/index.html>).

Appendix B

Two-Year Texas Projection Measure for TAKS–M Constants and Coefficients

Projections are based on TAKS–M data. As a result, these projections will have limited use for determining how students are likely to perform in the projection grades (grades 5 and 8) in the future. Beginning in 2012, STAAR Modified assessments will replace TAKS–M assessments at grades 3–9, and the STAAR Modified performance standards will likely differ at the projection grades.

(See below for an explanation of column names and additional details about the table.)

Row	FROM- GRADE	TO- GRADE	SUBJECT	CONSTANT	MATH- CO1	MATH- CO2	READ- CO1	READ- CO2	D-MEAN- CO	MET STANDARD	COMMENDED PERFORMANCE
1	04	05	Mathematics	77.76	0.4514	0.3383	0.1367		0.0350	2100	2400
2	04	05	Reading	238.27	0.1241		0.4084	0.2503	0.1175	2100	2400
3	07	08	Mathematics	148.20	0.3570	0.2622	0.1758		0.1221	2100	2400
4	07	08	Reading	-179.39	0.1198		0.5207	0.3268	0.1303	2100	2400

- FROM-GRADE = grade from which the projection is made (current grade)
- TO-GRADE = grade to which the projection is made
- SUBJECT = projection subject
- CONSTANT = value used in the projection equation for each grade and subject, which is determined when the coefficients for the projection formulas are developed annually
- MATH-CO-1 = coefficient for the student’s mathematics scale score for the current year
- MATH-CO-2 = coefficient for the student’s mathematics scale score for the previous year
- READ-CO-1 = coefficient for the student’s reading scale score for the current year
- READ-CO-2 = coefficient for the student’s reading scale score for the previous year
- D-MEAN-CO = coefficient to multiply by the district mean scale score in the projection subject
- MET STANDARD = the scale score cut point indicating met standard in the projection grade and subject
- COMMENDED PERFORMANCE = the scale score cut point indicating commended performance in the projection grade and subject

For more information about district means in the formulas, see the Frequently Asked Questions document on the TEA website (<http://www.tea.state.tx.us/student.assessment/special-ed/taksm/tpm/index.html>).

Appendix C Sample TPM Calculations

Example 1: Projecting Grade 11 English Language Arts from Grade 10 with Single-Year Projections

STEPS	EXAMPLE VALUES
<p>1. Start with the following information:</p> <ul style="list-style-type: none"> • current grade for the student • projection grade • projection subject • TAKS–M English language arts scale score for the student (READ-SS) • TAKS–M mathematics scale score for the student (MATH-SS) 	<p>Grade 10 Grade 11 English language arts READ-SS = 1973 MATH-SS = 2160</p>
<p>2. Find the prior-year district mean scale score for the student in the projection subject (D-READ-SS).</p>	<p>D-READ-SS = 2243 (This is only an example and will vary depending on which district the student currently attends.)</p>
<p>3. Identify the correct constant and coefficients from table in Appendix A.</p> <ul style="list-style-type: none"> ▪ constant ▪ reading coefficient ▪ mathematics coefficient ▪ district mean coefficient 	<p>Row 11 CONSTANT = -63.96 READ-CO = 0.6543 MATH-CO = 0.1534 D-MEAN-CO = 0.2062 (These values will vary depending on which grade and subject the TPM is being calculated.)</p>

<p>4. Calculate the student’s projected score by inputting the scale scores from Step 1, the district mean scale score in the projection subject from Step 2, and the constant and coefficients obtained in Step 3 (from Appendix A) into the equation. Round the projected score to the nearest whole number.</p> <p>Projected grade 11 English language arts score =</p> $\begin{aligned} & \text{CONSTANT} + \\ & (\text{READ-CO} \times \text{READ-SS}) + \\ & (\text{MATH-CO} \times \text{MATH-SS}) + \\ & (\text{D-MEAN-CO} \times \text{D-READ-SS}) \end{aligned}$	<p>Projected grade 11 English language arts score =</p> $\begin{aligned} & -63.96 + \\ & (0.6543 \times 1973) + \\ & (0.1534 \times 2160) + \\ & (0.2062 \times 2243) = \\ & 2020.82 = 2021 \end{aligned}$
<p>5. Locate the met standard and commended performance for the projection grade and subject of interest in the Met Standard column and the Commended Performance column of the table in Appendix A.</p>	<p>Met standard for grade 11 English language arts = 2100</p> <p>Commended performance for grade 11 English language arts = 2400</p>
<p>6. Compare the projected score to the met standard and commended performance. If the projected score is at or above the met standard, then the student is projected as currently on track to meet the standard for the TAKS–M test in the projection grade and subject. If the projected score is at or above the commended performance, then the student is projected as currently on track to achieve commended performance on the TAKS–M test in the projection grade and subject.</p>	<p>2021 < 2100</p> <p>Therefore, the student is projected not to meet the standard in TAKS–M English language arts in grade 11.</p> <p>Texas Projection Measure—Projected to Meet Standard at Grade 11: NO</p> <p>2021 < 2400</p> <p>Therefore, the student is projected not to achieve commended performance in TAKS–M English language arts in grade 11.</p> <p>Texas Projection Measure—Projected to Achieve Commended Performance at Grade 11: NO</p>

Note. Although numbers are rounded for these examples, they will be carried out to more places in the operational calculations.

Example 2: Projecting Grade 11 Mathematics from Grade 10 with Single-Year Projections

STEPS	EXAMPLE VALUES
<p>1. Start with the following information:</p> <ul style="list-style-type: none"> • current grade for the student • projection grade • projection subject • TAKS-M English language arts scale score for the student (READ-SS) • TAKS-M mathematics scale score for the student (MATH-SS) 	<p>Grade 10</p> <p>Grade 11</p> <p>Mathematics</p> <p>READ-SS = 2135</p> <p>MATH-SS = 2143</p>
<p>2. Find the prior-year district mean scale score for the student in the projection subject (D-MATH-SS).</p>	<p>D-MATH-SS = 2152</p> <p>(This is only an example and will vary depending on which district the student currently attends.)</p>
<p>3. Identify the correct constant and coefficients from table in Appendix A.</p> <ul style="list-style-type: none"> ▪ constant ▪ reading coefficient ▪ mathematics coefficient ▪ district mean coefficient 	<p>Row 9</p> <p>CONSTANT = 203.61</p> <p>READ-CO = 0.2239</p> <p>MATH-CO = 0.6610</p> <p>D-MEAN-CO = 0.0122</p> <p>(These values will vary depending on which grade and subject the TPM is being calculated.)</p>

<p>4. Calculate the student’s projected score by inputting the scale scores from Step 1, the district mean scale score in the projection subject from Step 2, and the constant and coefficients obtained in Step 3 (from Appendix A) into the equation. Round the projected score to the nearest whole number.</p> <p style="text-align: center;">Projected grade 11 mathematics score = CONSTANT + (READ-CO x READ-SS) + (MATH-CO x MATH-SS) + (D-MEAN-CO x D-MATH-SS)</p>	<p style="text-align: center;">Projected grade 11 mathematics score = 203.61 + (0.2239 x 2135) + (0.6610 x 2143) + (0.0122 x 2152) = 2124.41 = 2124</p>
<p>5. Locate the met standard and commended performance for the projection grade and subject of interest in the Met Standard column and the Commended Performance column of the table in Appendix A.</p>	<p style="text-align: center;">Met standard for grade 11 mathematics = 2100 Commended performance for grade 11 mathematics = 2400</p>
<p>6. Compare the projected score to the met standard and commended performance. If the projected score is at or above the met standard, then the student is projected as currently on track to meet the standard for the TAKS–M test in the projection grade and subject. If the projected score is at or above the commended performance, then the student is projected as currently on track to achieve commended performance on the TAKS–M test in the projection grade and subject.</p>	<p style="text-align: center;">2124 < 2100</p> <p>Therefore, the student is projected not to meet the standard in TAKS–M mathematics in grade 11.</p> <p style="text-align: center;">Texas Projection Measure—Projected to Meet Standard at Grade 11: YES</p> <p style="text-align: center;">2124 < 2400</p> <p>Therefore, the student is projected not to achieve commended performance in TAKS–M mathematics in grade 11.</p> <p style="text-align: center;">Texas Projection Measure—Projected to Achieve Commended Performance at Grade 11: NO</p>

Note. Although numbers are rounded for these examples, they will be carried out to more places in the operational calculations.

**Example 3: Projecting Grade 11 Science from Grade 10
with Single-Year Projections**

STEPS	EXAMPLE VALUES
<p>1. Start with the following information:</p> <ul style="list-style-type: none"> • current grade for the student • projection grade • projection subject • TAKS-M English language arts scale score for the student (READ-SS) • TAKS-M mathematics scale score for the student (MATH-SS) • TAKS-M science scale score for the student (SCI-SS) 	<p>Grade 10</p> <p>Grade 11</p> <p>Science</p> <p>READ-SS = 2198</p> <p>MATH-SS = 2210</p> <p>SCI-SS = 2169</p>
<p>2. Find the prior-year district mean scale score for the student in the projection subject (D-SCI-SS).</p>	<p>D-SCI-SS = 2120</p> <p>(This is only an example and will vary depending on which district the student currently attends.)</p>
<p>3. Identify the correct constant and coefficients from table in Appendix A.</p> <ul style="list-style-type: none"> ▪ constant ▪ reading coefficient ▪ mathematics coefficient ▪ science coefficient ▪ district mean coefficient 	<p>Row 10</p> <p>CONSTANT = 305.22</p> <p>READ-CO = 0.2480</p> <p>MATH-CO = 0.2078</p> <p>SCI-CO = 0.3653</p> <p>D-MEAN-CO = 0.0198</p> <p>(These values will vary depending on which grade and subject the TPM is being calculated.)</p>

<p>4. Calculate the student’s projected score by inputting the scale scores from Step 1, the district mean scale score in the projection subject from Step 2, and the constant and coefficients obtained in Step 3 (from Appendix A) into the equation. Round the projected score to the nearest integer.</p> <p style="text-align: center;">Projected grade 11 science score = CONSTANT + (READ-CO x READ-SS) + (MATH-CO x MATH-SS) + (SCI-CO x SCI-SS) + (D-MEAN-CO x D-SCI-SS)</p>	<p style="text-align: center;">Projected grade 11 science score = 305.22 + (0.2480 x 2198) + (0.2078 x 2210) + (0.3653 x 2169) + (0.0198 x 2120) = 2143.87 = 2144</p>
<p>5. Locate the met standard and commended performance for the projection grade and subject of interest in the Met Standard column and the Commended Performance column of the table in Appendix A.</p>	<p style="text-align: center;">Met standard for grade 11 science = 2100 Commended performance for grade 11 science = 2400</p>
<p>6. Compare the projected score to the met standard and commended performance. If the projected score is at or above the met standard, then the student is projected as currently on track to meet the standard for the TAKS–M test in the projection grade and subject. If the projected score is at or above the commended performance, then the student is projected as currently on track to achieve commended performance on the TAKS–M test in the projection grade and subject.</p>	<p style="text-align: center;">2144 > 2100</p> <p>Therefore, the student is projected to meet the standard in TAKS–M science in grade 11.</p> <p style="text-align: center;">Texas Projection Measure—Projected to Meet Standard at Grade 11: YES</p> <p style="text-align: center;">2144 < 2400</p> <p>Therefore, the student is projected not to achieve commended performance in TAKS–M science in grade 11.</p> <p style="text-align: center;">Texas Projection Measure—Projected to Achieve Commended Performance at Grade 11: NO</p>

Note. Although numbers are rounded for these examples, they will be carried out to more places in the operational calculations.