# Accountability System Development for 2017-18 and Beyond Accountability Policy Advisory Committee (APAC) 

## Implementation of House Bill 2804

This document provides both a review of and topics for discussion regarding implementation of statutory requirements in House Bill 2804 (HB 2804), $84^{\text {th }}$ Texas Legislature, for the 2017-18 school year and beyond. It includes proposals from members of the Accountability Technical Advisory Committee (ATAC) who met on December 2-3, 2015.

## Review of HB 2804 Domain Requirements

See the Summary of HB 2804 and HB 2804 Domain Indicators documents for a general overview of HB 2804 domain requirements and indicators.

## HB 2804 Domain I: Student Achievement Score Model Options

HB 2804 requires Domain I to include STAAR assessment results at both the satisfactory and collegereadiness standards. For purposes of modeling, data for Domain I is based on 2015 STAAR assessment results from the federal system safeguard reports released in October 2015. The data are constructed at the test level based on the following caveats:

- Includes the 2015 accountability universe of campuses and districts
- Includes grade 3-8 mathematics
- Includes STAAR A test results at phase-in 1 level II and final level II standards
- Includes STAAR Alternate 2 test results at the level II and level III standards
- Includes ELL students' test results via the ELL progress measure and the final level II standard

Multiple modeling options were presented to ATAC members for calculating Domain I. After consideration and discussion of the options, the ATAC recommends the weighted model option described below.

Weighted Model Option. This model uses a methodology similar to Index 4 in the current accountability system in which component scores are derived from STAAR assessment scores at the satisfactory and college readiness standards. An overall Domain I score is calculated by weighting scores for satisfactory and college readiness standards. Three weighting options were calculated:

- Option 1 (ATAC proposal) - 90 percent satisfactory standard and 10 percent college readiness.
- Option 2-75 percent satisfactory standard and 25 percent college readiness.
- Option 3-50 percent satisfactory standard and 50 percent college readiness.


## Weighted Model Sample Campus: Separated Components Then Weighted Accordingly

| Student Achievement Rate: Satisfactory <br> Standard or above All Subjects | All Students | Total Points |
| :--- | :---: | :---: |
| Number of Tests | 673 |  |
| Number at Satisfactory Standard or above | 462 |  |
| $\%$ at Satisfactory Standard or above | $69 \%$ |  |
| Satisfactory Standard Score |  |  |


| Student Achievement Rate: College <br> Readiness All Subjects | All Students | Total Points |
| :--- | :---: | :---: |
| Number of Tests | $\mathbf{6 7 3}$ |  |
| \# at College Readiness | $\mathbf{2 1 3}$ |  |
| \% at College Readiness | $\mathbf{3 2 \%}$ |  |
| College Readiness Score |  |  |

## Weighted Model Option 1 (ATAC Proposal)—Sample Campus: Overall Score 90 Percent Satisfactory Standard/10 Percent College Readiness Weighting

| Overall Domain 1 Score | Student Achievement <br> Score | Multiply By | Weight of | Total Points |
| :--- | :---: | :---: | :---: | :---: |
| Satisfactory Standard or <br> above | 69 | X | $90 \%$ | 62.1 |
| College Readiness | 32 | X | $10 \%$ | 3.2 |
| Domain I: Score |  |  |  |  |

Weighted Model Option 2—Sample Campus: Overall Score 75 Percent Satisfactory Standard/25 Percent College Readiness Weighting

| Overall Domain 1 Score | Student Achievement <br> Score | Multiply By | Weight of | Total Points |
| :--- | :---: | :---: | :---: | :---: |
| Satisfactory Standard or <br> above | 69 | X | $75 \%$ | 51.8 |
| College Readiness | 32 | X | $25 \%$ | 8.0 |
| Domain I: Score |  |  |  |  |

Weighted Model Option 3—Sample Campus: Overall Score 50 Percent Satisfactory Standard/50 Percent College Readiness Weighting

| Overall Domain I Score | Student Achievement <br> Score | Multiply By | Weight of | Total Points |
| :--- | :---: | :---: | :---: | :---: |
| Satisfactory Standard or <br> above | 69 | X | $50 \%$ | 34.5 |
| College Readiness | 32 | X | $50 \%$ | 16.0 |
| Domain I: Score |  |  |  |  |

## Domain I Student Achievement Score Percentiles by Campus Type

| Grade Type | $\begin{aligned} & 90 / 10 \\ & 5^{\text {th }} \\ & \text { pctile } \end{aligned}$ | $\begin{gathered} 90 / 10 \\ 6^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 90 / 10 \\ 7^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{aligned} & 90 / 10 \\ & 8^{\text {th }} \\ & \text { pctile } \end{aligned}$ | $\begin{gathered} \text { 90/10 } \\ 9^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 90 / 10 \\ 10^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 90 / 10 \\ 25^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} \text { 90/10 } \\ 50^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 90 / 10 \\ 75^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 90 / 10 \\ 95^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{aligned} & 90 / 10 \\ & 100^{\text {th }} \\ & \text { pctile } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Elementary Schools | 45 | 46 | 47 | 48 | 48 | 49 | 56 | 64 | 73 | 85 | 99 |
| Middle Schools | 42 | 43 | 44 | 45 | 46 | 46 | 53 | 61 | 70 | 82 | 100 |
| High School/K-12 | 48 | 49 | 49 | 50 | 51 | 52 | 58 | 67 | 75 | 90 | 100 |
| All Grade Types | 45 | 46 | 47 | 47 | 48 | 49 | 56 | 64 | 73 | 86 | 100 |


| Grade Type | $\begin{gathered} 75 / 25 \\ 5^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 75 / 25 \\ 6^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 75 / 25 \\ 7^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 75 / 25 \\ 8^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 75 / 25 \\ 9^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 75 / 25 \\ 10^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 75 / 25 \\ 25^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 75 / 25 \\ 50^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 75 / 25 \\ 75^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 75 / 25 \\ 95^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 75 / 25 \\ 100^{\text {th }} \\ \text { pctile } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Elementary Schools | 40 | 40 | 41 | 42 | 43 | 43 | 50 | 58 | 68 | 81 | 99 |
| Middle Schools | 37 | 38 | 38 | 39 | 40 | 41 | 47 | 55 | 65 | 78 | 99 |
| High School/K-12 | 41 | 42 | 43 | 44 | 45 | 46 | 52 | 61 | 70 | 87 | 100 |
| All Grade Types | 39 | 40 | 41 | 42 | 42 | 43 | 50 | 58 | 68 | 82 | 100 |


| Grade Type | $\begin{gathered} \text { 50/50 } \\ 5^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 50 / 50 \\ 6^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 50 / 50 \\ 7^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} \text { 50/50 } \\ 8^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} \text { 50/50 } \\ 9^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 50 / 50 \\ 10^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 50 / 50 \\ 25^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} 50 / 50 \\ 50^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} \text { 50/50 } \\ 75^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} \text { 50/50 } \\ 95^{\text {th }} \\ \text { pctile } \end{gathered}$ | $\begin{gathered} \text { 50/50 } \\ 100^{\text {th }} \\ \text { pctile } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Elementary Schools | 31 | 32 | 33 | 34 | 34 | 35 | 41 | 49 | 58 | 74 | 98 |
| Middle Schools | 29 | 30 | 31 | 32 | 32 | 33 | 38 | 46 | 56 | 71 | 98 |
| High School/K-12 | 33 | 34 | 34 | 35 | 36 | 37 | 43 | 52 | 62 | 81 | 100 |
| All Grade Types | 31 | 32 | 33 | 33 | 34 | 35 | 41 | 49 | 59 | 75 | 100 |

## HB 2804: A-F Models for Domains

Matrix Model. See the report entitled Comments from Region 10 and TSNAP MATS on A-F System for 2017-18 for further discussion.

Other Variations of Matrix Model. ATAC members were presented with multiple variations of the matrix model. After discussion, members proposed exploring a one letter grade "bump" model. In this model, the A-F letter grade is chosen by the overall Domain I target. Campuses can "bump" one letter grade if the campus Domain I score is in quartile 1 in relation to its campus comparison group. For the examples that follow, the scores used are derived from the 50/50 Student Achievement model outlined above. Domain I A-F targets are based on the following range of Domain I scores:

- 68 or more $=A$ (roughly 10 percent of campuses)
- $56-67$ = B (roughly 20 percent of campuses)
- $37-55=C$ (roughly 55 percent of campuses)
- less than $37=\mathrm{D}$ (roughly 15 percent of campuses)

ATAC members discussed the appropriateness of assigning any district or campus an $F$ during the first year of implementation. Members proposed reserving the $F$ rating for a district or campus that receives a D in one year and fails to improve the following year. Therefore, the model only represents grades A-
D.

## One Letter Grade Bump Model

| Initial Letter Grade Based on Domain I Score in Relation to A-F Targets |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | A <br> (score of 68 or more) | B <br> (score of 56-67) | C <br> (score of 37-55) | (score less than 36) |
|  | A | B | $C$ | $D$ |
|  | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ |


| Resolved Letter Grade with Top 25 Percent Comparison Group (Q1) Bump Applied |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | A | B | C | D |
| Q1 | A | A | B | C |
| Q2 | A | B | C | D |
| Q3 | A | B | C | D |
| Q4 | A | B | C | D |


| Table of Resolved Grade-Bump 1 by Domain I Target Grade |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Resolved Grade - Bump 1 | Domain I Target Grade |  |  |  |  |
| Frequency <br> Percent <br> Row Pct <br> Col Pct | A | B | C | D | Total |
| A | $\begin{array}{r} 827 \\ 11.05 \\ 50.00 \\ 100.00 \end{array}$ | $\begin{array}{r} 827 \\ 11.05 \\ 50.00 \\ 52.31 \end{array}$ | $\begin{array}{r} 0 \\ 0.00 \\ 0.00 \\ 0.00 \end{array}$ | $\begin{array}{r} 0 \\ 0.00 \\ 0.00 \\ 0.00 \end{array}$ | $\begin{array}{r} 1654 \\ 22.11 \end{array}$ |
| B | $\begin{array}{r} 0 \\ 0.00 \\ 0.00 \\ 0.00 \end{array}$ | $\begin{array}{r} 754 \\ 10.08 \\ 53.14 \\ 47.69 \end{array}$ | $\begin{array}{r} 665 \\ 8.89 \\ 46.86 \\ 16.39 \end{array}$ | $\begin{array}{r} 0 \\ 0.00 \\ 0.00 \\ 0.00 \end{array}$ | $\begin{array}{r} 1419 \\ 18.97 \end{array}$ |
| C | $\begin{array}{r} 0 \\ 0.00 \\ 0.00 \\ 0.00 \end{array}$ | $\begin{array}{r} 0 \\ 0.00 \\ 0.00 \\ 0.00 \end{array}$ | $\begin{array}{r} 3393 \\ 45.35 \\ 99.91 \\ 83.61 \end{array}$ | $\begin{array}{r} 3 \\ 0.04 \\ 0.09 \\ 0.30 \end{array}$ | $\begin{array}{r} 3396 \\ 45.40 \end{array}$ |
| D | $\begin{array}{r} 0 \\ 0.00 \\ 0.00 \\ 0.00 \end{array}$ | $\begin{array}{r} 0 \\ 0.00 \\ 0.00 \\ 0.00 \end{array}$ | $\begin{array}{r} 0 \\ 0.00 \\ 0.00 \\ 0.00 \end{array}$ | $\begin{array}{r} 1012 \\ 13.53 \\ 100.00 \\ 99.70 \end{array}$ | $\begin{array}{r} 1012 \\ 13.53 \end{array}$ |
| Total | $\begin{array}{r} 827 \\ 11.05 \end{array}$ | $\begin{array}{r} 1581 \\ 21.13 \end{array}$ | $\begin{array}{r} 4058 \\ 54.24 \end{array}$ | $\begin{array}{r} 1015 \\ 13.57 \end{array}$ | $\begin{array}{r} 7481 \\ 100.00 \end{array}$ |

## For Discussion: Options for District-Level Comparison Groups

Comparison groups for districts would be needed should one of the domain level A-F models mentioned above be implemented. The following are possible options for district comparison groups:

- TEA generates comparison groups for districts in a similar fashion to campus comparison groups. In this option, single-campus districts would not be included. Also, the comparison groups would be limited to a smaller number than the 40 used for campus comparison groups, such as 16 or 20 districts. Finally, indicators in the distance formula used to determine campus comparison groups could be replaced with other PEIMS or financial indicators that are more relevant to districts.
- TEA generates district comparison groups using the indicators applied to Snapshot. Currently, Snapshot provides a peer search tool based on district size, district type, property wealth, and tax rate.
- For options 1 and 2, an alternative approach would allow district to choose their comparison districts from a larger list of similar districts provided by TEA. For example, districts could choose their twenty district comparison group from a list of forty similar districts generated by TEA.
- Statewide comparison with the removal of single-campus districts.
- One proposal from the ATAC was to implement a letter grade "bump" model for districts based on the percentage of campuses within the district with letter grade bumps. For example, if the percentage of bump campuses target was 70 percent and a district had four of five total campuses with a letter grade bump ( 80 percent), then the district would get a letter grade bump as well.


## Domain IV - Summary of Discussion Related to Other Indicators

In September 2015, the ATAC agreed that HB 2804 provides a comprehensive list of Domain IV indicators for high schools. The committee listed the following indicators that could be used for elementary and middle schools.

| September ATAC |  |
| :---: | :---: |
| - Student engagement survey | - Disciplinary data |
| - Participation in clubs | - Participation in GT programs |
| - Participation in UIL | - School climate survey |
| - Participation in Fine Arts | - $\mathrm{A} / \mathrm{B}$ Honor Roll rates |
| - Fitnessgram ${ }^{\circledR}$ | - Retention rates (student) |
| - Teacher turnover rates | - Student Success Initiative (SSI) |
| - Accelerated instruction rates | - Professional development opportunities |
| - Participation in science fairs | - STAAR participation rates |

In October 2015, the APAC agreed with the ATAC that HB 2804 provides a comprehensive list of Domain IV indicators for high schools. The APAC reviewed the list of indicators for elementary and middle schools that were discussed by the ATAC. The discussion included members expressing concern that using $A / B$ honor roll could create an incentive for grade inflation and that it could also disadvantage schools that use alternative grading systems. Members also indicated that attendance rates would not be a useful indicator because attendance is already highly incentivized by the Foundation School Program. Furthermore, dropout-rates would not be useful because drop-out rates aren't calculated for grades K-6 and are typically very low in middle school.

Some APAC members suggested combining the participation indicators (e.g., participation in band or clubs). Members expressed concern about the climate survey because it would not be a consistent survey across all districts and campuses. Others expressed the concern that some of the options could make Domain IV too similar to Domain V. Members also commented that the additional indicators shouldn't result in any additional costs to a district or campus.

To facilitate the committee's decision on which possible indicators to pursue further, staff listed all the indicators being discussed on a board at the front of the room and asked each member to put a check mark by the five that he or she prefers. The following list summarizes the outcome of their preferences (the italic number in brackets indicates the number of check marks an option received, indicating how many APAC members listed it among their top 5).

| October APAC |  |
| :---: | :---: |
| - Academic enrichment (participation in clubs, fine arts, UIL, G/T, science fair, etc.) [17] <br> - Number of middle school students completing high school courses [15] <br> - Participation in language instruction (including world languages and technical languages, such as HTML and computer programming) [15] <br> - Opportunities for teacher enrichment or professional development [12] <br> - Fifth- and eighth-grade inventory [9] <br> - Participation in accelerated instruction [9] | - Disciplinary data [5] <br> - $A / B$ honor roll [3] <br> - Fitnessgram ${ }^{\circledR}$ [1] <br> - Climate Survey [1] <br> - Student Success Initiative (SSI) [1] <br> - Early childhood participation [1] <br> - STAAR participation [0] <br> - No additional indicator: attendance rate only [0] <br> - Item response rates on STAAR [0] |

In December 2015, ATAC members engaged in a wide-ranging discussion about the indicators that could be used in Domain IV. They began by reviewing the top five elementary and middle school indicators recommended by the APAC. Some expressed concern that the indicators being proposed would disadvantage low-income districts that do not have the resources to offer those programs. Others suggested that common definitions be developed for the indicators to ensure that they can be measured consistently across districts and campuses, while others questioned whether ELL students would be counted in the "language instruction" indicator.

ATAC members also discussed the difficulty inherent in assessing elementary campuses for Domain IV. Since STAAR results cannot be used in Domain IV, it is difficult to identify college and career readiness indicators for elementary school students. The committee discussed a student survey that would require extensive psychometric work and would have to be administered by TEA to ensure consistent measurement across all districts and campuses. Ultimately, the ATAC agreed with the APAC that an indicator that awards credit to campuses for its students that take high school courses by grade 8 would be an effective measure of postsecondary readiness.

There was no consensus to pursue the use of the other indicators in Domain IV for elementary and middle schools.

## Domain IV—Description of New Indicators Required in HB 2804

| Indicator | Current Methodologies Under Consideration | Source of Data |
| :---: | :---: | :---: |
| Enlistment in U.S. Military | Number of annual graduates in a given school year who following graduation enlisted in the any branch of the U.S. military ---divided by--- <br> Number of annual graduates in a given school year | PEIMS |
| Industry Certification | Number of annual graduates in a given school year who earned industry certification prior to graduation ---divided by--- <br> Number of annual graduates in a given school year | PEIMS |
| High School Course Credit by Grade 8 | Number of students earning credit for a high school level course by the end of grade 8 <br> ---divided by--- <br> Number of enrolled grade 8 students | PEIMS |
| High School <br> Preparation Course in Grade 7 or 8 | Number of students flagged as having completed a high school preparation course in grade 7 and/or grade 8 <br> ---divided by--- <br> Number of enrolled grade 8 students | PEIMS |

## HB 2804: Options for Overall A-F Calculations

HB 2804 requires an overall A-F letter grade designation as well as A-F designations for each of the five domains. The overall A-F model below provides an example of how an overall A-F letter grade could be generated using Domain I through V cut points and weights. Elements of the model are defined as follows:

- Weights - The combined weights of the domains total 100 percent. Domains I, II, and III comprise 55 percent of the overall grade, Domain IV counts for 35 percent of the overall grade, and Domain V counts for 10 percent of the overall grade.
- Cut Points-Each domain has a determined point for a letter grade of A, B, C, D or F. Domain V has no cut point as the letter grade is given by the district. The cut points in the example are not scaled.
- A-F Scores-The method for quantifying the letter grades of $A, B, C, D$, and $F$ associated with each domain.
- Overall-The cut points for determining a letter grade of A-F.


## Overall A-F Example

|  |  | Cut Points |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Weights $^{1}$ |  | A | B | C | D | F |  |
| $15 \%$ | Domain I | 68 | 56 | 37 | 32 | 0 |  |
| $25 \%$ | Domain II | 60 | 50 | 40 | 30 | 20 |  |
| $15 \%$ | Domain III | 40 | 35 | 30 | 25 | 20 |  |
| $35 \%$ | Domain IV | 80 | 70 | 60 | 50 | 40 |  |
| $10 \%$ | Domain V | District assigns letter grade |  |  |  |  |  |
|  | A-F <br> Scores |  |  |  |  |  |  |
|  | 100 | 89 | 79 | 69 | 59 |  |  |
|  | Overall $^{2}$ | 90 | 80 | 70 | 60 | $<60$ |  |

1. Weights for Domains I through III can be any combination that sums to 55 .
2. In this example, A-F Scores are assigned the highest numerical score possible to quantify the domain letter grades.

| Example 1* |  | Example 2** |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | B 89 | 58 | A | 100 |
|  | B 89 | 55 | B | 89 |
|  | C 79 | 33 | C | 79 |
|  | B 89 | 79 | B | 89 |
|  | A 100 |  | A | 100 |
| Weighted average= |  | Weighted average= |  |  |
| 88.6 |  |  |  | 90.3 |
| Overall Rating: B |  | Ove | ll | g: A |

* No letter grade bump applied.
** Letter grade for Domain I resolved to an A as a result of a Q1 bump.

