# 2018 District and School Performance Framework Calculation Guidebook 

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## Introduction

## Guidebook Purpose, Scope \& Organization

The District and School Performance Frameworks are designed to meet the requirement established under the Colorado Educational Accountability Act that the department hold districts and schools accountable to a common set of outcome data. The system is designed to meaningfully differentiate between performance to better provide supports to schools and districts.

The purpose of this document is to provide clarity and transparency in all calculation steps required for determining both District Performance Framework (DPF) and School Performance Framework (SPF) results. The methodologies parallel each other, so they have been combined in this guidebook.

This document has been organized into four primary sections, to detail the four sequential steps in calculating the frameworks. The sections have each been written with adequate context to enable readers to skip to a section for a particular question on one of these steps:

- Step 1: Generate Summary Calculations from Student-Level Data Files
- Step 2: Determine Sub-Indicator Ratings
- Step 3: Determine Performance Indicator Ratings
- Step 4: Determine Overall Ratings

Step 1 begins with student-level data files provided by the Accountability and Data Analysis (ADA) Unit, not files from the Assessment Unit or any assessment vendors. Not all calculations included in Step 1 contribute to points on the framework; some are included for information only.

Appendix A provides a summary of all the files referenced along with how they map to this guidebook.
Appendices B - D provide tables that summarize Steps 2-4.
Appendix E provides the flow chart that determines when the multi-year framework provides the official rating.
This guidebook outlines the calculation methodology that is used for both 1-year and multi-year frameworks; the methodology is the same. Multi-year frameworks include three years of data, which is helpful in assessing performance in cases where data is limited. The ADA Unit provides 1 -year student-level files to districts annually; multi-year files are available upon request.

## Overview of Calculation Methodology

The district and school performance framework holds schools accountable by evaluating student outcomes around three performance indicators: Academic Achievement, Academic Growth, and Postsecondary and Workforce Readiness. For each district and school, a common set of sub-indicators are used to determine ratings for each of these performance indicators, and then these ratings are combined to determine an overall rating.


In addition to establishing expectations for student outcomes around these performance indicators, the school and district performance frameworks are intended to ensure that schools and districts meet finance, safety, and test participation requirements. Failure to meet one of these assurances can result in a lower overall performance rating, so overall ratings are determined by information related to the following set of elements:

- Performance Indicators:
- Academic Achievement
- Academic Growth
- Postsecondary and Workforce Readiness
- Assurances:
- Finance
- Safety
- Test Participation

In order to understand how ratings for performance indicators are combined to determine a district or school's overall rating, it is first necessary to understand how performance indicator ratings themselves are determined. Here, it is important to recognize that the performance framework assigns performance ratings at three different levels. In addition to the overall rating (highest level) and to the ratings associated with the performance indicators (middle level), the framework assigns ratings to sub-indicators or measures beneath the each of the performance indicators (lowest level).

Beneath the Academic Achievement performance indicator, ratings are assigned to measures reflecting student outcomes on the different subject area tests that make up the state's annual assessment program. Beneath the Academic Growth performance indicator, ratings are assigned to measures reflecting student progress on the state assessments from one year to the next, which calculated based on the Colorado Growth Model.

Underneath the Postsecondary and Workforce Readiness (PWR) performance indicator, ratings are assigned to a combination of student assessment outcomes and graduation, dropout, and matriculation measures.

The sub-indicators or measures that exists beneath the Academic Achievement, Academic Growth, and Postsecondary and Workforce Readiness performance indicators are further divided so that outcomes are evaluated separately at distinct grade ranges and for different student groups.

Grade Ranges: There are separate sets of Academic Achievement and Academic Growth measures at the elementary level, at the middle school level, and at the high school level. Postsecondary and Workforce Readiness measures are only evaluated at the high school level.

Student Groups: At each level, outcome measures representing the performance of all students are evaluated along with outcome measures for specific student subgroups. In most cases, separate outcome measures are evaluated for students qualifying for free or reduced-price lunch, minority students, English learners, and students with Individualized Education Plans (IEPs). In some cases, such as with matriculation rates, the subgroups are specific to a given outcome measure.

Taken together, the collection of outcome measures that exist at each grade range and for each student group beneath the level of performance indicators function as a set of sub-indicators. Point values associated with the sub-indicator ratings serve as the basis for determining an overall ratings for each performance indicator.

- For each sub-indicator where outcome data is available, a district or school is eligible to earn a set number of points. Points are earned in proportion to the level of the rating, so that higher ratings equate to larger point totals.
- For each performance indicator, points are totaled across all sub-indicators where outcome data exist, and the total percentage of points earned out of the total number of points eligible determines the overall rating for that indicator. In this way, the framework determines a rating for Academic Achievement, a rating for Academic Growth, and a rating for Postsecondary and Workforce Readiness (i.e., each performance indicator).

The method for deriving the overall ratings from the performance indicator ratings is nuanced. As will be explained in greater detail in later sections of this guide, it is not simply a matter of totaling up all of the points earned and all of the points eligible across all indicators and using these values to calculate a total percentage of points earned. Rather,

- The percentage of points earned for each of the performance indicators are multiplied by the fixed weights assigned to each performance indicator within the overall structure of the framework.
- The products are then summed to determine the total percentage of points earned on the framework as a whole. This percentage then becomes the basis for determining the overall rating.

The weights associated with each performance indicator are fixed in this way in order to ensure that the relative value given to each one remains consistent across all districts and schools, regardless of variations that occur in the number of points that schools are eligible to earn at the sub-indicator level. The image to the right shows the school pan type overall school plan type ratings that are assigned as a result of the above calculation:


## Performance

Improvement Plan
Priority Improvement
Turnaround


The image to the left shows the five district accreditation ratings that are assigned as a result of the above calculation:

Accredited with Distinction
Accredited
Accredited with Improvement Plan
Accredited with Priority Improvement Plan
Accredited with Turnaround

Insufficient State Data: For schools that serve elementary and middle schools, if minimum n-counts are met for All Students in English Language Arts in Math in the Achievement performance indicator, sufficient data exists for an overall rating.

Additionally, for schools that serve high schools, if minimum n-counts are met for All Students in EWRB and Math in the Achievement performance indicator, and meet minimum n-counts in either graduation rate, dropout rate, or SAT in the PWR performance indicator, then sufficient data exists for an overall rating.

If schools or districts have a rating for at least one sub-indicator, schools and districts will earn a rating at the performance indicator level. N -counts are provided throughout this guidance document in subsequent sections.

## Special Cases

The following are special cases that may impact a school or district's overall rating (i.e., the output of the calculation methodology). More details on these are provided on CDE Accountability website, but are highlighted here so the reader is aware.

Decreased due to Participation: District and school performance frameworks include a test participation assurance. Under this assurance, districts and schools are required to have at least $95 \%$ of students participate in the annual state assessments in Math, English Language Arts, and Science. In cases where a district or school fails to meet the $95 \%$ participation requirement, the official performance rating will be one level lower than the rating this has been determined based on the percentage of points earned on the performance framework. The calculations used to determine whether districts and schools meet the participation requirement are consistent with State Board of Education policy, which allows parents to excuse students from state testing. Students
whose parents excuse them from testing are treated as exempt in the participation rate calculation that is used for the testing assurance.

Low Participation: Official performance ratings identify cases where districts or schools have fewer than 95\% of students participate in the annual state assessments. In these cases, the official rating will include a "Low Participation" designation. Districts and schools that receive this designation differ from cases where the rating is lowered by one level. State Board of Education Policy dictates that ratings are not lowered in cases where students were excused from testing by their parents. The "Low Participation" designation is based on a participation rate calculation that treats parent excusals as non-participants. The designation exists so that the public is aware that the outcome measures included in the performance frameworks may not be representative of the student population as a whole.'

New Schools: CDE publishes performance framework reports for new schools in their first year of operation, prior to any performance data being available. Ratings for new schools are determined by the local district through the request for reconsideration process.

Request to Reconsider: While performance ratings are initially based on the performance outcomes presented in the performance framework, districts may request that CDE revise a rating based on a review of local performance data and other contextual factors. In cases where a request for reconsideration is approved, the official performance rating for a school or district may not be consistent with the rating derived from the calculations in the performance framework.

Alternative Education Campuses: CDE uses a specialized performance framework to evaluate Alternative Education Campuses (AECs), which have specialized missions designed to serve high-risk student populations. The AEC performance framework evaluates schools on a common set of state metrics, but also incorporates outcomes measures selected by individual schools to reflect their specialized missions.

## 1. Generate Summary Calculations from Student-Level Data Files

## ACADEMIC ACHIEVEMENT DATA

The performance framework is built upon student outcome measures organized beneath the Academic Achievement, Academic Growth, and Postsecondary and Workforce Readiness performance indicators. For the Academic Achievement performance indicator, the framework assigns ratings based on mean scale scores obtained on the annual state assessments. This section of the guide describes how to generate the mean scale score calculations using student-level data files provided to districts by the Accountability and Data Analysis (ADA) Unit. Note that mean scale scores are only reported and used in the performance framework when results are available for at least 16 students.

The ADA Unit provides student-level achievement data files to districts each year at the same time that preliminary framework reports are distributed. This guide refers exclusively to files provided by the ADA Unit. Information presented in this guide does not apply to files provided by CDE's Assessment Unit nor to files provided by assessment vendors. For information about where to find the student-level files referenced here, please contact the ADA Unit.

## Reporting Structure for Mean Scale Scores

The student-level files provided to districts are organized in a way that reflects the structure of the performance frameworks. To make sense of the information included in these files, it is necessary to have a basic understanding of the performance framework reporting structure. The overview provided here explains how performance metrics are organized under the Academic Achievement indicator. This is the basis for understanding more specific details about the information included in the student-level files, which are provided in subsections below.

At the highest level, the mean scale scores reported in the performance framework are organized by grade range. Separate sets of mean scale scores are reported at the elementary, middle, and high school levels. For each grade range, mean scale scores are further organized into difference subject areas. At the elementary and middle school levels, separate sets of mean scale scores are reported for English Language Arts, Math, and Science. At the high school level, the subject areas are Evidence-Based Reading \& Writing, Math, and Science.

Within each subject area, there are distinct mean scale score calculations for different groups of students. For every subject area at every grade level, the report includes a mean scale score representing outcomes for all students, along with separate mean scale scores for minority students, students eligible for free or reducedprice lunch, English Learners, and students with disabilities. At the elementary level, there is an additional English Language Arts mean scale score calculation reported for students who were previously identified under the Colorado READ Act as having a significant reading deficiency.

The table below shows how Academic Achievement metrics are organized at the elementary level. Within the performance framework, separate mean scale scores are reported for each group represented in the table.

| Elementary School Level |  |
| :--- | :--- |
| English Language Arts | All Students |
|  | Previously Identified for Read Plan |
|  | English Learners |
|  | Free/Reduced-Price Lunch Eligible |


| Math | Minority Students |
| :--- | :--- |
|  | Students with Disabilities |
|  | All Students |
|  | English Learners |
|  | Free/Reduced-Price Lunch Eligible |
|  | Minority Students |
|  | Students with Disabilities |
|  | All Students |
|  | English Learners |
|  | Free/Reduced-Price Lunch Eligible |
|  | Minority Students |
|  | Students with Disabilities |

The next table shows how Academic Achievement metrics are organized at the middle school level. Again, the performance framework includes separate mean scale scores for each group represented in the table.

| Middle School Level |  |
| :---: | :---: |
| English Language Arts | All Students |
|  | English Learners |
|  | Free/Reduced-Price Lunch Eligible |
|  | Minority Students |
|  | Students with Disabilities |
| Math | All Students |
|  | English Learners |
|  | Free/Reduced-Price Lunch Eligible |
|  | Minority Students |
|  | Students with Disabilities |
| Science | All Students |
|  | English Learners |
|  | Free/Reduced-Price Lunch Eligible |
|  | Minority Students |
|  | Students with Disabilities |

The table below shows how Academic Achievement metrics are organized at the high school level. The pattern is the same as at the elementary and middle school levels, except that the subject area labels differ due to the fact that at the high school level assessment results are taken primarily from the Colorado PSAT assessments rather than from the CMAS assessments.

| High School Level |  |  |  |
| :--- | :--- | :---: | :---: |
| Evidence-Based Reading \& Writing | All Students |  |  |
|  | English Learners |  |  |
|  | Free/Reduced-Price Lunch Eligible |  |  |
|  | Minority Students |  |  |


| Math | Students with Disabilities |
| :--- | :--- |
|  | All Students |
|  | English Learners |
|  | Free/Reduced-Price Lunch Eligible |
|  | Minority Students |
|  | Students with Disabilities |
|  | All Students |
|  | English Learners |
|  | Free/Reduced-Price Lunch Eligible |
|  | Minority Students |
|  | Students with Disabilities |

## Student-Level Data Files

The ADA unit applies a common set of coding conventions to the records included in the student-level Achievement files that it distributes so that all mean scale score calculations can be generated using the same set of procedures. Each record includes a state-assigned student ID (SASID) along with enrollment and demographic information and a scale score result. All of the fields referenced to generate the mean scale score calculations that appear in the performance framework reports are described in detail here.

## Reporting Year

The files provided to districts each year contain the record sets used to generate the most recently published framework reports. Record sets for prior years are available upon request. The files include a field labeled, REPORTING_YEAR, which contains values showing which year of assessment administration each record is associated with. To generate the mean scale calculations reported in the 2018 performance frameworks, refer to the REPORTING_YEAR column and select only records where the value is ' 2018 '.

## Reporting Year Span

The files provided to districts each year contain the record sets used to generate the calculations that are included in the 1-Year performance framework reports. CDE also produces multi-year reports, which are used to determine official accreditation ratings in cases where a single year of data does not provide sufficient information to evaluate performance. Files containing the data sets used to generate the calculations used for the multi-year reports are available upon request.

For the 1-year performance framework report, mean scale score calculations only include records where the reporting year span is designated as being associated with the 1-year report. In the files provided by the ADA Unit, refer to the REPORTING_YEAR_SPAN column and select only records where the value is ' 1 Year'.

For the multi-year performance framework report, mean scale score calculations only include records where the reporting year span is designated as being associated with the multi-year report. In the files provided by the ADA Unit, refer to the REPORTING_YEAR_SPAN column and select only records where the value is ' 3 Year'.

## District Number

The student-level data files provided by the ADA Unit contain all of the records used to calculate the mean scale scores that appear in the district performance framework report. The files include a column titled, DIST_NUMBER, which shows the unique four-digit code assigned to the district within CDE's directory system. This code is used to establish the connection between the assessment data and the performance framework reports, and can be used to identify the records that are included in the mean scale score calculations for a specific district.

## School Number

The student-level files provided by the ADA Unit contain all of the records used to calculate the mean scale scores that appear in the school performance framework reports. The files include a column titled, SCH_NUMBER, which shows the four-digit school code associated with each record. This is the code assigned to the school within CDE's directory system, which is used to establish the connection between the assessment data and the performance framework reports. Refer to the SCH_NUMBER column to identify the records that are included in the mean scale score calculations for specific schools.

## Reporting Data Set

The files provided to districts by the ADA Unit contain the records used to generate calculations for the district performance framework report as well as records used to generate calculations for each of the individual reports used to evaluate the performance of schools within the district. The rules used to generate calculations for the district performance framework report differ from the rules used to generate calculations for the school performance framework reports. The files provided by the ADA Unit include a column titled,
REPORTING_DATA_SET, that distinguishes between the data set used for the district performance framework report and the data sets used for the school performance framework reports. To generate calculations for the district performance framework report, select only records where the value in the data set field is 'DIST'. For school performance framework calculations, select only records where the value is 'SCH'.

## EMH Level (Grade Range)

The frameworks are structured to evaluate student outcomes separately for each grade range: elementary school, middle school, and high school. Within the files provided by the ADA Unit, there is a column titled, EMH_LEVEL, that designates the grade range associated with each record. To generate mean scale score calculations reported at the elementary level, refer to the EMH_LEVEL column and select only records that are coded as 'E'. To generate mean scale score calculations reported at the middle school level, select only records that are coded as ' M '. And to generate mean scale score calculations reported at the high school level, select only records that are coded as ' H '.

## Grade Level

For elementary and middle school calculations, no reference needs to be made to specific grade levels. At the high school level, additional selection criteria must be applied to the GRADE_LEVEL field in order to exclude $11^{\text {th }}$ grade results from the calculations. Records for $11^{\text {th }}$ grade students are not included in the mean scale score calculations reported in the Academic Achievement section of the report. Instead, they are reported under the Postsecondary \& Workforce Readiness indicator. To generate the mean scale score calculations reported in the

Academic Achievement section at the high school level, exclude all records where the value in the GRADE_LEVEL field equals '11'.

## Test Name

The mean scale scores used for the frameworks represent the combined results from both the traditional and alternate assessments. Results from both the traditional and alternate assessments are included in the files provided by the ADA Unit. The English Language Arts and Math calculations reported at the elementary and middle school levels include records where the value in the TEST_NAME column is either 'CMAS' or 'DLM'. At the high school level, the calculations reported for Evidence-Based Reading \& Writing and Math are based on records where the TEST_NAME is either 'CO PSAT/SAT' or 'DLM'. The Science calculations reported at all levels include records where the value in the TEST_NAME column is either 'CMAS SCIENCE' or 'COALT SCIENCE

## Test Subject

## English Language Arts/Evidence-Based Reading \& Writing

At the elementary and middle school levels, calculations that appear on the performance framework report under the English Language Arts label reflect student outcomes on the CMAS English Language Arts assessment along with outcomes from the Colorado Spanish Language Assessment (CSLA) and the Dynamic Learning Maps (DLM) English Language Arts assessment. Within the files provided to district, all of the records these records have the same value in the SUBJECT field. To generate the mean scale score calculations reported for English Language Arts at the elementary and middle school levels, select all records where the value in the SUBJECT column is 'ENGLISH LANGUAGE ARTS'.

At the high school level, calculations that appear on the performance framework report under the EvidenceBased Reading \& Writing label reflect outcomes for $9^{\text {th }}$ and $10^{\text {th }}$ grade students on the Colorado PSAT EvidenceBased Reading \& Writing assessment along with outcomes from the DLM English Language Arts assessment. Within the files provided to district, Colorado PSAT records are coded as "EVIDENCE-BASED READING AND WRITING' in the SUBJECT column and DLM English Language Arts test are coded as 'ENGLISH LANGUAGE ARTS'. To generate the mean scale score calculations reported for Evidence-Based Reading \& Writing at the high school level, select records where the value in the SUBJECT column is either 'EVIDENCE-BASED READING AND WRITING' or 'ENGLISH LANGUAGE ARTS'.

## Math

At the elementary and middle school levels, calculations that appear on the performance framework report under the Math label reflect student outcomes on the CMAS Math assessment along with outcomes from the DLM Math assessment. Within the files provided to district, all of the records that are represented in the Math mean scale score calculations reported at the elementary and middle school levels are coded as 'MATH' in the SUBJECT column.

At the high school level, calculations that appear on the performance framework report under the Math label reflect outcomes for $9^{\text {th }}$ and $10^{\text {th }}$ grade students on the Colorado PSAT Math assessment along with outcomes from the DLM Math assessment. Within the files provided to district, all of the records that are represented in the Math mean scale score calculations reported at the high school level are coded as 'MATH' in the SUBJECT column.

## Science

At the elementary, middle, and high school levels, calculations that appear on the performance framework report under the Science label reflect student outcomes on the CMAS Science assessment along with outcomes from the CoAlt Science assessment. To calculate Science mean scale scores, select records where the value in the SUBJECT field is 'SCIENCE'.

## Student Group Definitions

For each grade range and subject area, the performance framework reports include a mean scale score based on the results of all students, a mean scale score based on the results of English Learners, another based on the results of students qualifying for free or reduced-price lunch, another for minority students, and another for students with disabilities. At the elementary level, an additional English Language Arts mean scale score calculation representing the performance of students who were previously identified with a significant reading deficiency under the Colorado READ Act is included.

## All Students

The mean scale score calculations reported under the All Students label represent the results for all students who received a valid score at the designated grade level and subject area. No demographic information needs to be referenced to identify the records from the student-level files that are used to generate calculations associated with the All Students group.

## Free/Reduced-Price Lunch Eligible Students

The mean scale score calculations reported under the Free/Reduced-Price Lunch Eligible (FRL) label represent the results for students who were reported as eligible for free or reduced-price lunch. To generate the mean scale score calculations for FRL students, select records coded as ' $\gamma$ ' in the FRL_YN column.

## Minority Students

The mean scale score calculations reported under the Minority Students label represent the results for students who were reported as having a racial or ethnic background other than White. To generate the mean scale score calculations for Minority students, select records coded as ' $\gamma$ ' in the MINORITY_YN column.

## English Learners

The mean scale score calculations reported under the English Learners label represent the results for students who were reported as receiving English Language services. The English Learner category includes all students reported as Non English Proficient (NEP), Limited English Proficient (LEP), Fully English Proficient (FEP - Monitor Year 1; FEP - Monitor Year 2; FEP - Exited Year 1; and FEP - Exited Year 2'). To generate the mean scale score calculations for English Learners, select records coded as ' $\gamma$ ' in the ELL_YN column.

## Students with Disabilities

The mean scale score calculations reported under the Students with Disabilities label represent the results for students who were reported as having an Individualized Education Program (IEP). To generate the mean scale score calculations for students with disabilities, select records coded as ' $\gamma$ ' in the IEP_YN column.

## Previously Identified for READ Plan

The mean scale score calculations reported under the Previously Identified for READ Plan label represent the results for students who were previously reported as having a Significant Reading Deficiency (SRD) as part of the annual READ Act data collection. These calculations are only reported for English Language Arts, and only include results for students who took the $3^{\text {rd }}$ or $4^{\text {th }}$ grade assessment. The values in the file are based on information collected from districts through the READ Act data collections completed in all years prior to the year associated with the assessment administration. To generate the mean scale score calculations for students who were previously reported as having an SRD, select records coded as ' $Y$ ' in the READ_ACT_PRIOR_SRD_YN column.

## Scale Scores

The mean scale score calculations reported in the performance framework are based on the scale scores obtained by individual students. In the files provided by the ADA Unit, scale scores for each student are included in the column titled, SCALE_SCORE.

For the CMAS, CSLA, Colorado PSAT, CoAlt records, scale score values reflect the information provided by the vendors that CDE contracts with to score the annual assessments. For DLM records, the test vendor does not provide scale scores for individual student records. Scale score values for DLM are calculated by the ADA Unit. For more details on the methodology for generating DLM scale scores, contact the ADA Unit.

## Valid Scores

The mean scale score calculations reported in the performance framework only reflect student outcomes that are considered valid under state accountability policies. Invalid records are identified based on information provided to the CDE Assessment Unit by districts during the test administration window or during the data review process that is carried out after the testing window closes. In the files provided by the ADA Unit, records for students with invalid scores are coded as ' 0 ' in the VALID_SCORE field. Student who did not participate in testing, or who did not receive a score for any other reason, are also coded as ' 0 ' in the VALID_SCORE field. Mean scale score calculations reported in the performance framework only reflect records that are coded as ' 1 ' in the VALID_SCORE column.

## Included (Yes or No)

State accountability policy establishes explicit criteria for which student records are to be included in the calculations used within the performance framework reports. The files distributed to districts by the ADA Unit provide information for each record showing whether that record met the inclusion criteria. This information is summarized in the column titled, INCLUDED_PFWK_CALCS. All records are coded as either ' Y ' or ' $N$ ' in the INCLUDED_PFWK_CALCS column. Only records coded as ' $Y$ ' are represented in the mean scale score calculations that appear in the performance framework reports.

## Excluded Records

For records that are coded as ' $N$ ' in the INCLUDED_PFWK_CALCS field, the files distributed by the ADA Unit provide information showing why they were excluded from the performance framework calculations. This information is provided in a series of exclusion and exemption columns that are described below. Any record
that is coded as ' $N$ ' in the INCLUDED_PFWK_CALCS field will be coded as ' $\gamma$ ' in at least one of the exclusion or exemption columns. Note that these exclusion and exemption fields are provided for informational purposes and do not need to be referenced directly to generate the summary calculations. For any given record, only the value in the INCLUDED_PFWK_CALCS column needs to be referenced to determine whether it was included in the summary calculations reported in the performance framework.

## Excluded: No Score

In some cases, students may meet all of the criteria to be included in performance framework calculations but nevertheless have no actual test result to be included. The files provided by the ADA Unit include a column titled, EXCLUDED_NO_SCORE_YN, which identifies records where students met all other inclusion criteria but did not receive a scale score on the associated assessment. A record coded as ' $Y$ ' in the EXCLUDED_NO_SCORE_YN column was not included in performance framework calculations because there was no scale score associated with the record.

## Excluded: Not Continuously Enrolled

The mean scale score calculations reported in the performance frameworks only reflect outcomes for students who were continuously enrolled from October Count through the testing window. For the district performance framework, the requirement is that students were continuously enrolled within the district, either at the same school or at multiple schools within the district. For the school framework, students must have been enrolled in the same school from the time of the October Count through testing.

A record coded as ' $Y$ ' in the EXCLUDED_NOT_CONTINUOUS_YN column was not included in performance framework calculations because the student did not meet continuous enrollment criteria. This determination is based on information reported to the CDE Assessment Unit by the district. Refer to the column titled, CONTINUOUS_DISTRICT, to see what information was reported by the district for "continuous in district" status. Refer to the CONTINOUS_SCHOOL column to see what information was reported for "continuous in school" status.

## Excluded: Test Invalid

The mean scale score calculations reported in the performance framework only reflect student outcomes that are considered valid under state accountability policies. The EXCLUDED_TEST_INVALID_YN column identifies records that were designated as invalid. A record coded as ' $\gamma$ ' in the EXCLUDED_TEST_INVALID_YN field was excluded because the record was identified as invalid, either during the test window or during the data review process carried out after testing was completed. Refer to the column titled, DID_NOT_TEST_TEXT, to see specific test invalidation information associated with a record.

## Excluded: Expelled

For the school performance frameworks, mean scale score calculations do not include results for students who were reported as expelled during the test window. The rules for the district performance framework report do not impose any conditions on expulsion status. All records included in the district data set are coded as ' $N$ ' in the EXCLUDED_EXPELLED_YN column. For the school performance framework, a record coded as ' $\gamma$ ' in the EXCLUDED_EXPELLED_YN was excluded because the student was reported as having been expelled from school during the testing window.

## Excluded: Void Grade Level Information

In order for a test record to be included in the framework calculations, the grade level information associated with the record must be consistent with the grade level information listed in the official directory maintained by CDE. Test records are not included in the framework calculations when the grade level information is not consistent with the grade level information listed in the directory. For example, if a test record lists a student as a $7^{\text {th }}$ grader but the directory information for the school associated with that record shows that the school only serves students in grades $K-5$, the record will be excluded from framework calculations. A record coded as ' $Y$ ' in the EXCLUDED_GRADE_LEVEL_VOID_YN field was excluded because the record was identified as being inconsistent with the grade levels listed in the directory.

## Excluded: Detention Facility

Records associated with schools designated within the official directory as detention facilities are not included in performance framework calculations. A record coded as ' $\gamma$ ' in the EXCLUDED_DETENTION_FACILITY_YN was excluded because the school information associated with the record was associated with a school identified as detention facility within the official directory.

## Excluded: Home-Schooled Student

Records for students enrolled in a school designated within the official directory as a home options program are not included in performance framework calculations. Records for students reported with a test invalidation code identifying them as home-schooled students are also excluded from framework calculations. A record coded as ' $\gamma$ ' in the EXCLUDED_HOME_OPTIONS_YN was excluded because the student was identified as a home-schooled student.

## Excluded: Tested Off-Grade

For each set of state assessments, CDE has established criteria for what tests are to be administered to students at each grade levels. The mean scale score calculations reported in the performance framework do not include test results for students who completed a test that was not intended to be administered to students at their grade level. A record coded as ' $\gamma$ ' in the EXCLUDED_OFF_GRADE_YN was excluded because the test was not one that students at that grade level associated with the record were permitted to take.

## Excluded: Void District/School Association

Certain records included in the assessment results are not associated with a valid district code, or are coded in a way that reflects an invalid relationship between a school code and a district code. For instance, a test record may have a school code that according to the directory should be associated with district A , while the record itself identifies it as being associated with record B . These types of records are identified by cross-referencing the district and school code information associated with the assessment results against the information in the official directory maintained by CDE. A record coded as ' $\gamma$ ' in the EXCLUDED_DISTRICT_VOID_YN column was excluded because it was not associated with a valid district code, or included information showing an invalid relationship between the district code and school code.

## Exempt: English Learner in First Year of Enrollment in U.S. Public School

English Learners who have been enrolled in public school in the United States for less than one year at the time of testing are exempt from test participation requirements associated with the annual state assessments. Policy around the Academic Achievement performance metrics has been implemented to apply to two categories of students:

1. Students reported with a Language Proficiency status of NEP or LEP in the current year who had been enrolled in U.S. public school for less than one year at the time of testing during the current year are exempt from the requirement to take the CMAS English Language Arts assessments administered at grades 3 through 8, and from the requirement to take both the Evidence-Based Reading \& Writing and the Math assessments administered to students taking the Colorado PSAT or SAT at grades 9 through 11.
2. Students reported with a Language Proficiency status of NEP or LEP in the prior year who had been enrolled in U.S. public school for less than one year at the time of the prior year test administration are also exempt from testing in the current year if they participated in testing during the prior year. To verify eligibility for the exemption under these conditions, students must have received a valid score on the test taken during their first year in the U.S. As with the first category, the exemption applies to the requirement to take the CMAS English Language Arts assessments administered at grades 3 through 8 in the current year, and from the requirement to take both the Evidence-Based Reading \& Writing and the Math assessments administered to students taking the Colorado PSAT or SAT at grades 9 through 11 in the current year.

A record coded as 'Y: Year 1 of 1'; 'Y: Year 1 of 2'; or 'Y: Year 2 of 2' in the EXEMPT_EL_FIRST_YR_US_YN was excluded from mean scale score calculations because it was associated with a student who was exempt from test participation. The value of ' $Y$ : Year 1 of 1' refers to students who were in still in their first year of enrollment in the U.S. at the time of testing and who exercised their exemption by not participating in testing. The value of 'Y: Year 1 of 2' refers to students who were in still in their first year of enrollment in the U.S. at the time of testing, but who participated in testing and so will be eligible for a second year of exemption next year. The value of ' Y : Year 2 of 2' refers to students who were in their first year of enrollment in the U.S. at the time of testing in the prior year, but who participated in testing in the prior year and so were eligible for a second year of exemption in the current year.

## Calculating Mean Scale Scores

The criteria outlined above can be used to generate any of the mean scale score calculations reported on the district and school performance frameworks using the student-level files provided by the ADA Unit. The files are provided in Microsoft Excel and mean scale scores may be calculated directly from the files by applying the appropriate selection criteria and using the built-in AVERAGE function. Counts can be calculated using the COUNT function. The counts reported in the performance frameworks represent the number of records meeting the inclusion criteria with valid scale scores (VALID_SCORE = ' 1 '), and the means represent the averages of the values in the SCALE_SCORE column for those same records.

Mean scale scores are not reported or used in the performance frameworks when fewer than 16 individual scores are available. This minimum $n$-count requirement is specific to each student group included in the framework reporting structure. For instance, a district may meet the minimum n-count requirement for the 'All

Students' group for Elementary Math and have a mean scale score reported for that sub-indicator. In order for the mean scale score for the 'Minority Students' Math sub-indicator to be reported for that district at the Elementary level, there must also be at least 16 records available for that specific student group at that specific grade range.

Example 1: 2018 District Performance Framework 1-Year Report for District Number 0010 Elementary Math
Count and Mean Scale Score for All Students
Select all records where:

```
REPORTING_YEAR = 2018
REPORTING_YEAR_SPAN = '1 Year'
DIST_NUM = '0010'
REPORTING_DATA_SET = 'DIST'
EMH_LEVEL = 'E'
TEST_NAME = 'CMAS' or 'DLM'
SUBJECT = 'MATH'
VALID_SCORE = '1'
INCLUDED_PFWK_CALCS = 'Y'
```

Execute the following functions to generate the count and mean scale score reported on the performance framework:

```
Count: COUNT (SCALE_SCORE)
Mean Scale Score: ROUND (AVERAGE (SCALE_SCORE), 1)
```

Example 2: 2018 School Performance Framework 1-Year Report for School Number 0955
High School Evidence-Based Reading \& Writing
Count and Mean Scale Score for FRL Students

Select all records where:

```
REPORTING_YEAR \(=2018\)
REPORTING_YEAR_SPAN = '1 Year'
SCH_NUM = '0955'
REPORTING_DATA_SET = 'SCH'
EMH_LEVEL = 'H'
GRADE_LEVEL <> '11'
TEST_NAME = 'CO PSAT/SAT' or 'DLM'
SUBJECT = 'EVIDENCE-BASED READING AND WRITING' or
    'ENGLISH LANGUAGE ARTS'
FRL_YN = ' \(Y\) '
VALID_SCORE = '1'
INCLUDED_PFWK_CALCS = ' \({ }^{\prime}\) '
```

Execute the following functions to generate the count and mean scale score reported on the performance framework:

Count:
Mean Scale Score:

COUNT (SCALE_SCORE)
ROUND (AVERAGE (SCALE_SCORE), 1)

## ACADEMIC GROWTH DATA

The performance framework is built upon student outcome measures organized beneath the Academic Achievement, Academic Growth, and Postsecondary and Workforce Readiness performance indicators. For the Academic Growth performance indicator, the framework assigns ratings based on median student growth percentile calculations (MGPs) that are generating using the Colorado Growth Model. This section of the guide describes how to generate the median growth percentile calculations using student-level data files provided to districts by the Accountability and Data Analysis (ADA) Unit. Note that MGPs are only reported and used in the performance framework when results are available for at least 20 students.

The ADA Unit provides student-level growth data files to districts each year at the same time that preliminary framework reports are distributed. This guide refers exclusively to files provided by the ADA Unit. Information presented in this guide does not apply to files provided by CDE's Assessment Unit nor to files provided by assessment vendors. For information about where to find the student-level files referenced here, please contact the ADA Unit.

## Reporting Structure for Median Growth Percentiles

The student-level files provided to districts are organized in a way that reflects the structure of the performance frameworks. To make sense of the information included in these files, it is necessary to have a basic understanding of the performance framework reporting structure. The overview provided here explains how performance metrics are organized under the Academic Growth indicator. This is the basis for understanding more specific details about the information included in the student-level files, which are provided in subsections below.

At the highest level, the MGPs reported in the performance framework are organized by grade range. Separate sets of MGPs are reported at the elementary, middle, and high school levels. For each grade range, MGPs are further organized into difference subject areas. At the elementary and middle school levels, separate sets of MGPs are reported for English Language Arts, Math, and English Language Proficiency. At the high school level, the subject areas are Evidence-Based Reading \& Writing, Math, and English Language Proficiency.

Within the English Language Arts, Evidence-Based Reading \& Writing, and Math results, there are distinct MGP calculations for different groups of students. For each of these subject areas, at every grade range included in the framework, the report includes an MGP presenting outcomes for all students, along with separate MGPs for minority students, students eligible for free or reduced-price lunch, English Learners, and students with disabilities.

For English Language Proficiency, only one MGP calculation is included at each grade range. This calculation represents the MGP for all students who had a valid growth percentile for the current year on the WIDA ACCESS assessment. MGPs for subgroups of students within the English Language Proficiency results are not included in the framework.

For English Language Proficiency, the 2018 performance framework reports include an additional calculation that shows the percentage of students who are on track to reach proficiency within the timeframe specified by policy. This metric is included for information only in 2018. This calculation also represents all students who had a valid growth percentile for the current year. Percentages for subgroups are not reported in the frameworks.

The table below shows how Academic Growth metrics are organized at the elementary level. Within the performance framework, separate MGPs are reported for each group represented in the table.

| Elementary School Level |  |
| :---: | :---: |
| English Language Arts | All Students |
|  | Previously Identified for Read Plan |
|  | English Learners |
|  | Free/Reduced-Price Lunch Eligible |
|  | Minority Students |
|  | Students with Disabilities |
| Math | All Students |
|  | English Learners |
|  | Free/Reduced-Price Lunch Eligible |
|  | Minority Students |
|  | Students with Disabilities |
| English Language Proficiency | All Students |

The next table shows how Academic Growth metrics are organized at the middle school level. Again, the performance framework includes separate MGPs for each group represented in the table.

| Middle School Level |  |
| :---: | :---: |
| English Language Arts | All Students |
|  | English Learners |
|  | Free/Reduced-Price Lunch Eligible |
|  | Minority Students |
|  | Students with Disabilities |
| Math | All Students |
|  | English Learners |
|  | Free/Reduced-Price Lunch Eligible |
|  | Minority Students |
|  | Students with Disabilities |
| English Language Proficiency | All Students |

The table below shows how Academic Growth metrics are organized at the high school level. The pattern is the same as at the elementary and middle school levels, except that the subject area labels differ due to the fact that at the high school level assessment results are taken primarily from the Colorado PSAT and SAT assessments rather than from the CMAS assessments.

| High School Level |  |
| :--- | :--- |
| Evidence-Based Reading \& Writing | All Students |
|  | English Learners |
|  | Free/Reduced-Price Lunch Eligible |


| Math | Minority Students |
| :--- | :--- |
|  | Students with Disabilities |
|  | All Students |
|  | English Learners |
|  | Free/Reduced-Price Lunch Eligible |
|  | Minority Students |
|  | Students with Disabilities |
|  | All Students |

## Student-Level Data Files

The ADA unit applies a common set of coding conventions to the records included in the student-level Growth files that it distributes so that all MGP calculations can be generated using the same set of procedures. Each record includes a state-assigned student ID (SASID) along with enrollment and demographic information and a student growth percentile. All of the fields referenced to generate the MGP calculations that appear in the performance framework reports are described in detail here.

## Reporting Year

The files provided to districts each year contain the record sets used to generate the most recently published framework reports. Record sets for prior years are available upon request. The files include a field labeled, REPORTING_YEAR, which contains values showing which year of assessment administration each record is associated with. To calculate the MGPs reported in the 2018 performance frameworks, refer to the REPORTING_YEAR column and select only records where the value is '2018'.

## Reporting Year Span

The files provided to districts each year contain the record sets used to generate the calculations that are included in the 1-Year performance framework reports. CDE also produces multi-year reports, which are used to determine official accreditation ratings in cases where a single year of data does not provide sufficient information to evaluate performance. Files containing the data sets used to generate the calculations used for the multi-year reports are available upon request.

For the 1-year performance framework report, MGP calculations only include records where the reporting year span is designated as being associated with the 1-year report. In the files provided by the ADA Unit, refer to the REPORTING_YEAR_SPAN column and select only records where the value is ' 1 Year'.

For the multi-year performance framework report, MGP calculations only include records where the reporting year span is designated as being associated with the multi-year report. In the files provided by the ADA Unit, refer to the REPORTING_YEAR_SPAN column and select only records where the value is ' 3 Year'.

## District Number

The student-level data files provided by the ADA Unit contain all of the records used to calculate the MGPs that appear in the district performance framework report. The files include a column titled, DIST_NUMBER, which shows the unique four-digit code assigned to the district within CDE's directory system. This code is used to establish the connection between the assessment data and the performance framework reports, and can be used to identify the records that are included in the MGP calculations for a specific district.

## School Number

The student-level files provided by the ADA Unit contain all of the records used to calculate the MGPs that appear in the school performance framework reports. The files include a column titled, SCH_NUMBER, which shows the four-digit school code associated with each record. This is the code assigned to the school within CDE's directory system, which is used to establish the connection between the assessment data and the performance framework reports. Refer to the SCH_NUMBER column to identify the records that are included in the MGP calculations for specific schools.

## Reporting Data Set

The files provided to districts by the ADA Unit contain the records used to generate calculations for the district performance framework report as well as records used to generate calculations for each of the individual reports used to evaluate the performance of schools within the district. The rules used to generate calculations for the district performance framework report differ from the rules used to generate calculations for the school performance framework reports. The files provided by the ADA Unit include a column titled, REPORTING_DATA_SET, that distinguishes between the data set used for the district performance framework report and the data sets used for the school performance framework reports. To generate calculations for the district performance framework report, select only records where the value in the data set field is 'DIST'. For school performance framework calculations, select only records where the value is ' SCH '.

## EMH Level (Grade Range)

The frameworks are structured to evaluate student outcomes separately for each grade range: elementary school, middle school, and high school. Within the files provided by the ADA Unit, there is a column titled, EMH_LEVEL, that designates the grade range associated with each record.

To generate MGP calculations reported at the elementary level, refer to the EMH_LEVEL column and select only records that are coded as ' $E$ '. To generate MGP calculations reported at the middle school level, select only records that are coded as ' M '. And to generate MGP calculations reported at the high school level, select only records that are coded as ' H '.

## Grade Level

For MGP calculations, no reference needs to be made to specific grade levels.

## Test Name

Student growth percentile calculations are only generated for students taking the CMAS English Language Arts and Math Assessments, the Colorado PSAT and SAT Evidence-Based Reading \& Writing and Math assessments, and the WIDA ACCESS English Language Proficiency assessment. The ADA Unit does not generate student growth percentile calculations Science or for students taking the alternate assessments.

The English Language Arts and Math growth calculations reported at the elementary and middle school levels include records where the value in the TEST_NAME is 'CMAS'. At the high school level, the calculations reported for Evidence-Based Reading \& Writing and Math are based on records where the TEST_NAME is 'CO PSAT/SAT'. All of the records that are represented in the English Language Proficiency MGP calculations are coded as 'WIDA ACCESS' in the TEST_NAME column.

## Test Subject

## English Language Arts/Evidence-Based Reading \& Writing

To generate these MGP calculations reported at the elementary and middle school levels for English Language Arts, select all records where the value in the SUBJECT column is 'ENGLISH LANGUAGE ARTS'. To generate the MGP calculations reported at the high school level for Evidence-Based Reading \& Writing, select records where the value in the SUBJECT column is 'EVIDENCE-BASED READING AND WRITING'.

## Math

To generate these MGP calculations reported for Math at any level, select records where the value in the SUBJECT column is 'MATH'.

## English Language Proficiency

At the elementary, middle, and high school levels, MGP calculations for English Language Proficiency reflect student growth outcomes on the WIDA ACCESS assessment. Growth percentiles are calculated using the overall score from the WDIA ACCESS assessment. To calculate the MGPs for English Language Proficiency, select records coded as 'OVERALL' in the SUBJECT column.

## Student Group Definitions

At the elementary and middle school grade levels for English Language Arts and Math, and at the high school level for Evidence-Based Reading \& Writing and Math, the performance framework reports include an MGP based on the results of all students, an MGP based on the results of English Learners, another based on the results of students qualifying for free or reduced-price lunch, another for Minority students, and another for students with disabilities.

At all grade levels, the performance frameworks include an additional MGP based on outcomes on the English Language Proficiency assessment. For the English Language Proficiency assessment, only one MGP calculation is reported at each grade range. This calculation represents the MGP for all students who had a valid growth percentile for the WIDA ACCESS assessment. MGPs for subgroups of students within the English Language Proficiency results are not included in the framework.

## All Students

The MGP calculations reported under the All Students label represent the growth outcomes for all students who had individual student growth percentiles calculated under the Colorado Growth Model. No demographic information needs to be referenced to calculate MGPs for the All Students group.

## Free/Reduced-Price Lunch Eligible Students

The MGP calculations reported under the Free/Reduced-Price Lunch Eligible label represent the results for students who were reported as eligible for free or reduced-price lunch. To generate the MGP calculations for FRL students, select records coded as ' $\gamma$ ' in the FRL_YN column.

## Minority Students

The MGP calculations reported under the Minority Students label represent the results for students who were reported as having a racial or ethnic background other than White. To generate the MGP calculations for Minority students, select records coded as ' $\gamma$ ' in the MINORITY_YN column.

## English Learners

The MGP calculations reported under the English Learners label represent the results for students who were reported as receiving English Language services. The English Learner category includes all students reported as Non English Proficient (NEP), Limited English Proficient (LEP), Fully English Proficient (FEP - Monitor Year 1; FEP Monitor Year 2; FEP - Exited Year 1; and FEP - Exited Year 2'). To generate the MGP calculations for English Learners, select records coded as ' $Y$ ' in the ELL_YN column.

## Students with Disabilities

The MGP calculations reported under the Students with Disabilities label represent the results for students who were reported as having an Individualized Education Program (IEP). To generate the MGP calculations for students with disabilities, select records coded as ' $\gamma$ ' in the IEP_YN column.

## Student Growth Percentiles

The MGP calculations reported in the performance framework are based on individual student growth percentiles, which are calculated by the ADA Unit using the Colorado Growth Model. In order to calculate growth percentiles, students must have valid assessment outcomes for at least two consecutive years, and the students must follow the normal grade progression. When these requirements are not met, students will not have a growth percentile measure. For more details on the Colorado Growth Model, contact the ADA Unit.

In the files provided by the ADA Unit, student growth percentiles for each student are included in the column titled, SGP. The files also include both the current year and the prior year scale scores in columns titled SCALE_SCORE and PRIOR_YR_SCALE_SCORE.

## ELP On-Track Status

The calculations reported in the performance framework showing the percentage of students on track to reach English Language Proficiency are also based on information from the Colorado Growth Model. In the files
provided by the ADA Unit, there is a series of five columns that contain the information used to calculate the ontrack percentage: ON_TRACK_L1_TO_L2, ON_TRACK_L2_TO_L3, ON_TRACK_L3_TO_L4, ON_TRACK_L4_TO_L4, and ON_TRACK_L5_TO_L5. For each student, only one column will be populated with values. Which column contains values depends on the student's proficiency level in the prior year.

The names used for the column headers indicate the prior year proficiency level and the target proficiency level. Students who were at level one in the prior year will have a value in the ON_TRACK_L1_TO_L2 field, students who were at level two in the prior year will have a value in the ON_TRACK_L2_TO_L3 field, and so on. The value in the populated field will be either ' 0 ' or ' 1 '. A value of ' 0 ' indicates that the student did not reach the target to be considered on track. A value of ' 1 ' indicates that the student did reach the target.

## Included (Yes or No)

State accountability policy establishes explicit criteria for which student records are to be included in the calculations used within the performance framework reports. The files distributed to districts by the ADA Unit provide information for each record showing whether that record met the inclusion criteria. This information is summarized in the column titled, INCLUDED_PFWK_CALCS. All records are coded as either ' $\gamma$ ' or ' $N$ ' in the INCLUDED_PFWK_CALCS column. Only records coded as ' $Y$ ' are represented in the MGP calculations that appear in the performance framework reports.

## Excluded Records

For records that are coded as ' N ' in the INCLUDED_PFWK_CALCS field, the files distributed by the ADA Unit provide additional information showing why they were excluded from the performance framework calculations. This information is provided in a series of exclusion and exemption columns that are described below. Any record that is coded as ' $N$ ' in the INCLUDED_PFWK_CALCS field will be coded as ' $\gamma$ ' in at least one of the exclusion or exemption columns. Note that these exclusion and exemption fields are provided for informational purposes and do not need to be referenced directly to generate the summary calculations. For any given record, only the value in the INCLUDED_PFWK_CALCS column needs to be referenced to determine whether it was included in the summary calculations reported in the performance framework.

## Excluded: No Student Growth Percentile

In some cases, students may meet all of the criteria to be included in performance framework calculations but nevertheless have no growth percentile result to be included. The files provided by the ADA Unit include a column titled, EXCLUDED_NO_SGP_YN, which identifies records where students met all other inclusion criteria but did not have a student growth percentile for the associated assessment. In order to receive growth percentiles, students must have valid assessment outcomes for at least two consecutive years, and the scores must follow the normal grade progression. A record coded as ' $\gamma$ ' in the EXCLUDED_NO_SGP_YN column was not included in performance framework calculations because there was no student growth percentile associated with the record.

## Excluded: Not Continuously Enrolled

The MGP calculations reported in the performance frameworks only reflect outcomes for students who were continuously enrolled from October Count through the testing window. For the district performance framework, the requirement is that students were continuously enrolled within the district, either at the same school or at
multiple schools within the district. For the school framework, students must have been enrolled in the same school from the time of the October Count through testing.

A record coded as ' $\gamma$ ' in the EXCLUDED_NOT_CONTINUOUS_YN column was not included in performance framework calculations because the student did not meet continuous enrollment criteria. This determination is based on information reported to the CDE Assessment Unit by the district. Refer to the column titled, CONTINUOUS_DISTRICT, to see what information was reported by the district for "continuous in district" status. Refer to the CONTINOUS_SCHOOL column to see what information was reported for "continuous in school" status.

## Excluded: Test Invalid

The MGP calculations reported in the performance framework only reflect student outcomes that are considered valid under state accountability policies. The EXCLUDED_TEST_INVALID_YN column identifies records that were designated as invalid. A record coded as ' $\gamma$ ' in the EXCLUDED_TEST_INVALID_YN field was excluded because the record was identified as invalid, either during the test window or during the data review process carried out after testing was completed. Refer to the column titled, DID_NOT_TEST_TEXT, to see specific test invalidation information associated with records.

## Excluded: Expelled

For the school performance frameworks, MGP calculations do not include results for students who were reported as expelled during the test window. The rules for the district performance framework report do not impose any conditions on expulsion status. All records included in the district data set are coded as ' N ' in the EXCLUDED_EXPELLED_YN column. For the school performance framework, a record coded as ' $\gamma$ ' in the EXCLUDED_EXPELLED_YN was excluded because the student was reported as having been expelled from school during the testing window.

## Excluded: Void Grade Level Information

In order for a record to be included in the framework calculations, the grade level information associated with it must be consistent with the grade level information listed in the official directory maintained by CDE. Records are not included in the framework calculations when the grade level information is not consistent with the grade level information listed in the directory. For example, if a record lists a student as a $7^{\text {th }}$ grader but the directory information for the school associated with that record shows that the school only serves students in grades K-5, the record will be excluded from framework calculations. A record coded as ' $\gamma$ ' in the EXCLUDED_GRADE_LEVEL_VOID_YN field was excluded because the record was identified as being inconsistent with the grade levels listed in the directory.

## Excluded: Detention Facility

Records associated with schools designated within the official directory as detention facilities are not included in performance framework calculations. A record coded as ' $Y$ ' in the EXCLUDED_DETENTION_FACILITY_YN was excluded because the school information associated with the record was associated with a school identified as detention facility within the official directory.

## Excluded: Home-Schooled Student

Records for students enrolled in a school designated within the official directory as a home options program are not included in performance framework calculations. Records for students reported with a test invalidation code identifying them as home-schooled students are also excluded from framework calculations. A record coded as ' $Y$ ' in the EXCLUDED_HOME_OPTIONS_YN was excluded because the student was identified as a home-schooled student.

## Excluded: Tested Off-Grade

For each set of state assessments, CDE has established criteria for what tests are to be administered to students at each grade levels. The MGP calculations reported in the performance framework do not include test results for students who completed a test that was not intended to be administered to students at their grade level. A record coded as ' $Y$ ' in the EXCLUDED_OFF_GRADE_YN was excluded because the test was not one that students at that grade level associated with the record were permitted to take.

## Excluded: Void District/School Association

Certain records included in the assessment results are not associated with a valid district code, or are coded in a way that reflects an invalid relationship between a school code and a district code. For instance, a test record may have a school code that according to the directory should be associated with district A, while the record itself identifies it as being associated with record B. These types of records are identified by referencing the district and school code information associated with the assessment results against the information in the official directory maintained by CDE. A record coded as ' $\gamma$ ' in the EXCLUDED_DISTRICT_VOID_YN column was excluded because it was not associated with a valid district code, or included information showing an invalid relationship between the district code and school code.

## Exempt: Ineligible due to English Language Proficiency Status

For the English-Language Proficiency assessment (WIDA ACCESS), the ADA Unit only calculates student growth percentiles for students who were designated as NEP or LEP at the time of testing. Growth results for student who had a language proficiency designation other than NEP or LEP are not included in performance framework calculations. A record coded as ' $Y$ ' in the EXCLUDED_ENGLISH_PROF_YN column was excluded from English Language Proficiency growth calculations because the student had a language proficiency designation other than NEP or LEP.

## Calculating Median Growth Percentiles

The criteria outlined above can be used to generate any of the MGP calculations reported on the district and school performance frameworks using the student-level files provided by the ADA Unit. The files are provided in Microsoft Excel and MGPs may be calculated directly from the files by applying the appropriate selection criteria and using the built-in MEDIAN function. Counts can be calculated using the COUNT function. The counts reported in the performance frameworks represent the number of records meeting the inclusion criteria with values in the SGP column, and the MGPs reflect the medians reflect the medians of the values in the SGP column.

MGPs are not reported or used in the performance frameworks when fewer than 20 individual student growth percentiles are available. This minimum n-count requirement is specific to each student group included in the framework reporting structure. For instance, a district may meet the minimum n-count requirement for the 'All Students' group for Elementary Math and have an MGP reported for that sub-indicator. In order for the MGP for the 'Minority Students' Math sub-indicator to be reported for that district at the Elementary level, there must also be at least 20 records available for that specific student group at that specific grade range.

## Example 1: 2018 District Performance Framework 1-Year Report for District Number 0010 <br> Elementary Math <br> Count and Median Growth Percentile for All Students

Select all records where:

```
REPORTING_YEAR \(=2018\)
REPORTING_YEAR_SPAN = '1 Year'
DIST_NUM = ‘0010'
REPORTING_DATA_SET = 'DIST'
EMH_LEVEL = 'E'
TEST_NAME = 'CMAS'
SUBJECT = 'MATH'
INCLUDED_PFWK_CALCS = ' \(Y^{\prime}\)
```

Execute the following functions to generate the count and median growth percentile reported on the performance framework:

```
Count: COUNT (SGP)
MGP: ROUND (MEDIAN (SGP), 1)
```

Example 2: 2018 School Performance Framework 1-Year Report for School Number 0955
High School Evidence-Based Reading \& Writing
Count and Mean Scale Score for FRL Students

Select all records where:

```
REPORTING_YEAR = 2018
REPORTING_YEAR_SPAN = '1 Year'
SCH_NUM = '0955'
REPORTING_DATA_SET = 'SCH'
EMH_LEVEL = 'H'
GRADE_LEVEL <> '11'
TEST_NAME = 'CO PSAT/SAT'
SUBJECT = 'EVIDENCE-BASED READING AND WRITING'
FRL_YN = 'Y'
INCLUDED_PFWK_CALCS = 'Y'
```

Execute the following functions to generate the count and median growth percentile reported on the performance framework:

```
Count: COUNT (SGP)
MGP: ROUND (MEDIAN (SGP), 1)
```


## Calculating ELP On-Track Percentage

The criteria outlined above can also be used to generate the on-track percentages reported for English Learners. On-track percentages can calculated by counting the number of records where there is a value of ' 1 ' in any of the five on-track columns, and dividing by the total number of records where there is a value in the SGP column. On-track metrics are not reported or used in the performance frameworks when fewer than 20 records with ontrack growth information are available.

Example 1: 2018 District Performance Framework 1-Year Report for District Number 0010
Elementary English Language Proficiency
Count and On-Track Percentage
Select all records where:

```
REPORTING_YEAR \(=2018\)
REPORTING_YEAR_SPAN = '1 Year'
DIST_NUM = ‘0010’
REPORTING_DATA_SET = 'DIST'
EMH_LEVEL = 'E'
TEST_NAME = 'WIDA ACCESS'
SUBJECT = 'OVERALL'
INCLUDED_PFWK_CALCS = \({ }^{\prime} \gamma\) '
```

Execute the following functions to generate the count and on-track percentage reported on the performance framework:

| Count: |  |
| :--- | ---: |
| Percent On-Track: | COUNT (SGP), 3) <br> ROUND ( |
|  | SUM ( ON_TRACK_L1_TO_L2 + |
|  |  |
|  | ON_TRACK_L2_TO_L3 + |
|  | ON_TRACK_L3_TO_L4 + |
|  | ON_TRACK_L4_TO_L4 + |
|  | ON_TRACK_L5_TO_L5) |
|  | / COUNT (SGP), 3) |

Example 2: 2018 School Performance Framework 1-Year Report for School Number 0955 High School English Language Proficiency
Count and On-Track Percentage

Select all records where:

```
REPORTING YEAR = 2018
REPORTING_YEAR_SPAN = '1 Year'
DIST_NUM = '0955'
REPORTING_DATA_SET = 'SCH'
EMH_LEVEL = 'H'
TEST_NAME = 'WIDA ACCESS'
SUBJECT = 'OVERALL'
INCLUDED_PFWK_CALCS = 'Y'
```

Execute the following functions to generate the count and on-track percentage reported on the performance framework:

| Count: |  |
| :--- | ---: |
| Percent On-Track: | COUNT (SGP), 3) |
| ROUND ( |  |
|  | SUM ( ON_TRACK_L1_TO_L2 + |
|  | ON_TRACK_L2_TO_L3 + |
|  | ON_TRACK_L3_TO_L4 + |
|  | ON_TRACK_L4_TO_L4 + |
|  | ON_TRACK_L5_TO_L5) |
|  | $/$ COUNT (SGP), 3) |

    / COUNT (SGP), 3)
    
## POSTSECONDARY \& WORKFORCE READINESS DATA

The performance framework is built upon student outcome measures organized beneath the Academic Achievement, Academic Growth, and Postsecondary and Workforce Readiness performance indicators. For the Post-Secondary \& Workforce Readiness (PWR) performance indicator, the framework assigns ratings based on graduation rates, dropout rates, matriculation rates, and $11^{\text {th }}$ grade results on the Colorado SAT and DLM assessments. This section of the guide explains how to generate each of these PWR calculations. Note that PWR calculations are only reported and used in the performance framework when results are available for at least 16 students.

The graduation rate and dropout rates used in the performance framework reports are based on the official summary data published by CDE's Data Services Unit each year. The ADA Unit does not manage student-level data related to graduation and dropout rates. The portions of this guide that describe the graduation and dropout calculations refer to the summary files published by the Data Services Unit. Student-level data may be requested from the Data Services Unit.

The ADA Unit does distribute files to districts that contain the student-level records used to calculate matriculation rates and mean scale scores. The matriculation records are distributed in their own standalone file. The records used for the Colorado SAT and DLM calculations are included with the Achievement data files that the ADA Unit distributes. The portions of this guide that describe matriculation and SAT/DLM calculations refer to the student-level files provided by the ADA Unit.

## Reporting Structure for Postsecondary \& Workforce Readiness Metrics

Within the performance frameworks, the PWR indicator encompasses a series of performance metrics: graduation rates, dropout rates, matriculation rates, and mean scale scores based on outcomes on the Colorado SAT and DLM assessments administered to $11^{\text {th }}$ graders. SAT/DLM outcomes are broken out by subject area, with separate ratings are assigned for Evidence-Based Reading \& Writing and Math.

PWR metrics are only reported at the high school level. However, it is important to note that the dropout rate calculations used for the district performance framework do include $7^{\text {th }}$ and $8^{\text {th }}$ grade students. The dropout rates used for the school performance framework only include students in grades 9 through 12.

For the 2018 performance frameworks, graduation rates were the only PWR metrics where rates were evaluated for specific student groups. In addition to assigning ratings based on a district or school's overall graduation rate, the frameworks assigned ratings to separate graduation rates for minority students, for students eligible for free or reduced-price lunch, for English Learners, and for students with disabilities.

In the 2018 frameworks, ratings were only assigned to dropout rates, matriculation rates, and SAT/DLM mean scale scores associated with the student population as a whole. Calculations showing the outcomes for specific student groups on these metrics were included in the 2018 reports for informational purposes, but they were not included in the rating determinations. The information provided here can be used to generate the calculations for specific student groups.

The table below shows how the PWR metrics were organized in the 2018 framework.

| High School Level |  |
| :---: | :---: |
| Graduation Rates | All Students |
|  | English Learners |
|  | Free/Reduced-Price Lunch Eligible |
|  | Minority Students |
|  | Students with Disabilities |
| Dropout Rates | All Students |
|  | English Learners |
|  | Free/Reduced-Price Lunch Eligible |
|  | Minority Students |
|  | Students with Disabilities |
| Matriculation Rates | All Students |
|  | Career and Technical Education (CTE) Institutes |
|  | 2-year |
|  | 4 -year |
| SAT/DLM 11 - Evidence-Based Reading \& Writing | All Students |
|  | English Learners |
|  | Free/Reduced-Price Lunch Eligible |
|  | Minority Students |
|  | Students with Disabilities |
| SAT/DLM 11 - Math | All Students |
|  | English Learners |
|  | Free/Reduced-Price Lunch Eligible |
|  | Minority Students |
|  | Students with Disabilities |

Note: Disaggregated student group performance only counts for points for the graduation rate metric; the others are included for information.

## Graduation Rate Data Sources

Due to conflicting publication timelines, the graduation rates included in the 2018 performance framework are based on the 2017 graduation statistics published by CDE's Data Services Unit. The information used for the performance framework reports comes from the file designated as the "Full 2017 Release". The summary information included in the file can be used to generate all of the calculations that appear in the performance framework reports.

The data file published by the Data Services Unit includes overall graduation rates for all districts and schools across the state as well as rates for specific student groups within districts and schools. The data file organizes rates across multiple tabs. There four total tabs:

- The first tab, labeled "2017 District Grad\% by Race" includes overall district graduation rates along with breakdowns by race and gender.
- The second tab, labeled "2017 School Grad\% by Race" includes overall school graduation rates along with breakdowns by race and gender.
- The third tab, labeled "2017 District Grad\% by IPST" includes district rates broken down by specific student groups other than race and gender.
- The fourth tab, labeled "2017 School Grad\% by IPST" includes school rates broken down by specific student groups other than race and gender.

Calculations for the district performance framework reports are derived from the information in the "2017 District Grad\% by Race" and "2017 District Grad\% by IPST" tabs. Calculations for the school performance framework reports are derived from the information in the "2017 School Grad\% by Race" and "2017 School Grad\% by IPST" tabs. Graduation calculations are only reported and used in the performance framework when the graduation base for the specific student group includes at least 16 students.

## District Number

Each of the data sets included in the file published by the Data Services Unit includes a column titled "Organization Code" that contains the unique four-digit code assigned to the district within CDE's directory system. The organization code is used to link graduation data from the "2017 District Grad\% by Race" and "2017 District Grad\% by IPST" tabs to all of other data elements that are included in the performance framework report. For any given district, the organization code can be used to link graduation data to the district performance frameworks. Refer to the four-digit codes displayed in the framework report to find the corresponding information in the graduation files.

## School Number

The "2017 School Grad\% by Race" tab and the "2017 School Grad\% by IPST" tab each include a column titled "School Code". This column lists the unique four-digit code assigned to the school within CDE's directory system. The school code is used to link graduation data from the "2017 School Grad\% by Race" and "2017 School Grad\% by IPST" tabs to all of other data elements that are included in the school performance frameworks. For any given school, the organization code can be used to link graduation data to the school performance framework report. Refer to the four-digit codes displayed in the framework report to find the corresponding information in the graduation files.

## Graduation Cohorts

For the performance frameworks, calculations associated with the $4,5,6$, and 7 year cohorts are all evaluated to determine the overall rating. For each student group included on the performance framework the graduation rate that is used to determine the rating is the highest of the rates associated with the $4,5,6$, and 7 year cohorts. The value listed in the 'Best Rate' field indicates which cohort had the highest rate and so was used to determine the rating.

In the file published by the Data Services Unit, refer to the "Number of Years After Entering High School" column to identify records for the cohorts reported in the performance frameworks. Records with a value of ' 4 ' are used to calculate the 4 -year rates; records with a value of ' 5 ' are used to calculate the 5 -year rates; records with ' 6 ' are used for the 6 -year rates; and records with ' 7 ' are used for the 7 -year rates.

## All Students

The graduation rate calculations reported on the performance frameworks under the All Students label reflect the values in the "All Students Final Grad Base" column and the "All Student Graduation Rate" column. The
values in the "All Students Final Grad Base" column correspond directly to the values in the 'Count' column on the performance framework reports, and the values in the "All Student Graduation Rate" column correspond directly to the values in the 'Rate/Score' column. No calculations are necessary.

## Free/Reduced-Price Lunch Eligible Students

The graduation rate calculations reported under the Free/Reduced-Price Lunch Eligible label reflect the values in the "Econ. Disadvant. Graduation Base" column and the "Econ. Disadvant. Graduation Rate" column. The values in the "Econ. Disadvant. Graduation Base" column correspond directly to the values in the 'Count' column on the performance framework reports, and the values in the "Econ. Disadvant. Graduation Rate" column correspond directly to the values in the 'Rate/Score' column. No calculations are necessary.

## Minority Students

The graduation rate calculations reported under the Minority Students label are determined by combining information from multiple columns within the Data Services files. The counts reported on the frameworks reflect the sum of values reported in the following columns:

- American Indian or Alaska Native Final Grad Base
- Asian Final Grad Base
- Black or African American Final Grad Base
- Hispanic or Latino Final Grad Base
- Native Hawaiian or Other Pacific Islander Grad Base
- Two or More Races Final Grad Base

The rates reported on the performance frameworks are determined by adding together the number of graduates associated with each of these groups and dividing by the total number included in the graduation base. The total number of graduates associated with the Minority Student group reflects the sum of values reported in the following columns:

- American Indian or Alaska Native Graduates
- Asian Graduates
- Black or African American Graduates
- Hispanic or Latino Graduates
- Native Hawaiian or Other Pacific Islander Graduates
- Two or More Races Graduates


## English Learners

The graduation rate calculations reported on the performance frameworks under the English Learners label on the performance frameworks reflect information reported on the "2017 District Grad\% by IPST" and "2017 School Grad\% by IPST" tabs. The counts that appear on the framework reports reflect the values in the "Limited English Proficient Final Grad Base" column, and the rates that appear on the reports reflect the percentages reported in the "Limited English Proficient Graduation Rate" column. The numerator used to determine the rate is also included in the data file, in the column labeled "Limited English Proficient Graduates Total".

## Students with Disabilities

The graduation rate calculations reported on the performance frameworks under the Students with Disabilities label on the performance frameworks reflect information reported on the " 2017 District Grad\% by IPST" and "2017 School Grad\% by IPST" tabs. The counts that appear on the framework reports reflect the values in the "Students with Disabilities Final Grad Base" column, and the rates that appear on the reports reflect the percentages reported in the "Students with Disabilities Graduation Rate" column. The numerator used to determine the rate is also included in the data file, in the column labeled "Students with Disabilities Graduates Total".

## Dropout Rate Data Sources

Due to conflicting publication timelines, the dropout rates included in the 2018 performance framework are based on the 2017 dropout statistics published by CDE's Data Services Unit. The information used for the performance framework reports comes from the file designated as the "2017 Combined Data Release", which includes both district-level and school-level data. The summary information included in the file can be used to generate all of the calculations that appear in the performance framework reports. Dropout calculations are only reported and used in the performance framework when the dropout base for the specific student group includes at least 16 students.

The data file published by the Data Services Unit includes overall dropout rates for all districts and schools across the state as well as rates for specific student groups within districts and schools. The data file organizes rates across multiple tabs. There four total tabs:

- The first tab, labeled "2017 District by RaceEthnicity" includes overall district dropout rates along with breakdowns by race and gender.
- The second tab, labeled "2017 School by RaceEthnicity" includes overall school dropout rates along with breakdowns by race and gender.
- The third tab, labeled "2017 District by IPST" includes district rates broken down by specific student groups other than race and gender.
- The fourth tab, labeled "2017 School by IPST" includes school rates broken down by specific student groups other than race and gender.

Calculations for the district performance framework reports are derived from the information in the "2017 District by RaceEthnicity" and "2017 District by IPST" tabs. Calculations for the school performance framework reports are derived from the information in the "2017 School by RaceEthnicity" and "2017 School by IPST" tabs.

## District Number

Each of the data sets included in the file published by the Data Services Unit includes a column titled "Organization Code" that contains the unique four-digit code assigned to the district within CDE's directory system. The organization code is used to link graduation data to the district performance frameworks. Refer to the four-digit codes displayed in the framework reports to find the corresponding information in the graduation files.

## School Number

Each of the data sets included in the file published by the Data Services Unit includes a column titled "School Code" that contains the unique four-digit code assigned to the school within CDE's directory system. The organization code is used to link graduation data to the district performance frameworks. Refer to the four-digit codes displayed in the framework reports to find the corresponding information in the graduation files.

## Category

The district-level datasets include a column titled "Category", which does not appear in the school-level datasets. In the district datasets, the "Category" column contains values that are used to distinguish between calculations that include different subsets of schools within districts. For the calculations that are reported in the district performance frameworks, refer to the records where the value is listed as 'DISTRICT TOTALS (INCLUDING ALTERNATIVE SCHOOLS)'.

## All Students

The dropout rate calculations reported under the All Students label reflect the values in the "Total Pupil Count" column and the "Total Dropout Rate" column. The values in the "Total Pupil Count" column correspond directly to the values in the 'Count' column on the performance framework reports, and the values in the "Total Dropout Rate" column correspond directly to the values in the 'Rate/Score' column. No calculations are necessary.

## Free/Reduced-Price Lunch Eligible Students

The dropout rate calculations reported under the Free/Reduced-Price Lunch Eligible label reflect the values in the "Econ. Disadvntgd. Pupil Count" column and the "Econ. Disadvntgd. Dropout Rate" column. The values in the "Econ. Disadvntgd. Count" column correspond directly to the values in the 'Count' column on the performance framework reports, and the values in the "Econ. Disadvntgd. Dropout Rate" column correspond directly to the values in the 'Rate/Score' column. No calculations are necessary.

## Minority Students

The dropout rate calculations reported under the Minority Students label are determined by combining information from multiple columns within the Data Services files. The counts reported on the frameworks reflect the sum of values reported in the following columns:

- American Indian or Alaska Native Pupil Count
- Asian Pupil Count
- Black or African American Pupil Count
- Hispanic or Latino Pupil Count
- Native Hawaiian or Other Pacific Islander Grad Base
- Two or More Races Pupil Count

The rates reported on the performance frameworks are determined by adding together the number of dropouts associated with each of these groups and dividing by the total pupil count. The total number of dropouts associated with the Minority Student group reflects the sum of values reported in the following columns:

- American Indian or Alaska Native Dropouts
- Asian Dropouts
- Black or African American Dropouts
- Hispanic or Latino Dropouts
- Native Hawaiian or Other Pacific Islander Dropouts
- Two or More Races Dropouts


## English Learners

The dropout rate calculations reported under the English Learners label reflect the values in the "Limited English Proficient Pupil Count" column and the "Limited English Proficient Dropout Rate" column. The values in the "Limited English Proficient Count" column correspond directly to the values in the 'Count' column on the performance framework reports, and the values in the "Limited English Proficient Dropout Rate" column correspond directly to the values in the 'Rate/Score' column. No calculations are necessary.

## Students with Disabilities

The dropout rate calculations reported under the Students with Disabilities label reflect the values in the "Students with Disabilities Pupil Count" column and the "Students with Disabilities Dropout Rate" column. The values in the "Students with Disabilities Count" column correspond directly to the values in the 'Count' column on the performance framework reports, and the values in the "Students with Disabilities Dropout Rate" column correspond directly to the values in the 'Rate/Score' column. No calculations are necessary.

## Student-Level Data Files for Matriculation

The matriculation rates that appear in the PWR section of the District and School Performance Frameworks can be generated using the student-level matriculation data files distributed by the ADA Unit each year. The criteria used to identify the student-level records included in the overall matriculation rate as well as for the 2-year, 4year, and CTE rates are outlined below.

## Reporting Year

The matriculation rate calculations that appear in the 2018 performance framework reports include records from the files provided by the ADA Unit where the reporting year is designated as 2018. Refer to the REPORTING_YEAR column and select only records where the value is '2018'.

## Reporting Year Span

For the 1-year performance framework report, matriculation rate calculations only include records where the reporting year span is designated as being associated with the 1-year report. In the files provided by the ADA Unit, refer to the REPORTING_YEAR_SPAN column and select only records where the value is ' 1 Year'.

For the multi-year performance framework report, matriculation rate calculations only include records where the reporting year span is designated as being associated with the multi-year report. In the files provided by the ADA Unit, refer to the REPORTING_YEAR_SPAN column and select only records where the value is ' 3 Year'.

## District Number

The student-level files provided by the ADA Unit contain all of the records used to calculate the matriculation rates that appear in the district performance framework report. The files include a column labeled DIST_NUMBER, which shows the unique four-digit code assigned to the district within CDE's directory system. This code is used to establish the connection between the matriculation data and the performance framework reports, and can be used to identify the records that are included in the mean scale score calculations for a specific district.

## School Number

The student-level files provided by the ADA Unit contain all of the records used to calculate the matriculation rates that appear in the school performance framework reports. The files include a column labeled SCH_NUMBER, which shows the four-digit school code associated with each record. This is the code assigned to the school within CDE's directory system, which is used to establish the connection between the matriculation data and the performance framework reports. Refer to the SCH_NUMBER column to identify the records that are included in the mean scale score calculations for specific schools.

## Included (Yes or No)

All students reported as graduates and completers in the prior End-of-Year data collection are included in the denominator used to determine the matriculation rates reported in the performance frameworks. The Accountability Unit has not established any additional inclusion criteria. The files distributed to districts by the ADA Unit do include a column labeled, INCLUDED_PFWK_CALCS, in order to account for the possibility that inclusion criteria may be developed in the future. All records included in the 2018 data sets are coded as ' $\gamma$ ' in the INCLUDED_PFWK_CALCS column.

## Included in Denominator

State accountability policy establishes explicit criteria for which student records are to be included in calculations used for the performance framework reports. In the files provided by the ADA Unit, only records coded as ' 1 ' in the INCLUDED_DN column are included in the matriculation rate calculations.

Note that as of the 2017-18 academic year, the Accountability Unit has not established any specific inclusion criteria for matriculation rates. All students reported as graduates and completers in the prior End-of-Year data collection are included in the denominator used to determine the matriculation rates. All records in the files provided by the ADA Unit will be coded as ' 1 ' in the INCLUDED_DN column.

## Included in Numerator

Refer to the INCL_NM_TTL column to determine which records are included in the numerator used to determine the overall matriculation rate. Records coded as ' 1 ' in the INCL_NM_TTL column were included in the overall numerator.

Refer to the INCL_NM_2YR column to determine which records are included in the numerator used to determine the matriculation rate for students who enrolled in 2-year institution of higher education. Records coded as ' 1 ' in the INCL_NM_2YR column were included in the 2-year numerator.

Refer to the INCL_NM_4YR column to determine which records are included in the numerator used to determine the matriculation rate for students who enrolled in 4 -year institution of higher education. Records coded as ' 1 ' in the INCL_NM_4YR column were included in the 4 -year numerator.

Refer to the INCL_NM_CTE column to determine which records are included in the numerator used to determine the matriculation rate for students who enrolled in Career or Technical Education institutes. Records coded as ' 1 ' in the INCL_NM_CTE column were included in the CTE numerator.

## Calculating Matriculation Rates

The information provided above can be used to generate any of the matriculation rate calculations reported on the district and school performance frameworks using the student-level files provided by the ADA Unit. The files are provided in Microsoft Excel and matriculation rates may be calculated directly from the files by applying the appropriate selection criteria and using the built-in functions for summing and dividing numeric values. Matriculation rate calculations are only reported and used in the performance framework when the denominator for the specific student group includes at least 16 students.

- To generate the values displayed in the 'Count' column on the framework reports, sum the values in the INCLUDED_DN field.
- To calculate the overall matriculation rate, first sum the values in the INCL_NM_TTL and then divide by the sum of the values in the INCLUDED_DN field. Format the result as a percentage rounded to one decimal place.
- To calculate the 2-Year matriculation rate, first sum the values in the INCL_NM_2YR and then divide by the sum of the values in the INCLUDED_DN field. Format the result as a percentage rounded to one decimal place.
- To calculate the 4-Year matriculation rate, first sum the values in the INCL_NM_4YR and then divide by the sum of the values in the INCLUDED_DN field. Format the result as a percentage rounded to one decimal place.
- To calculate the CTE matriculation rate, first sum the values in the INCL_NM_CTE and then divide by the sum of the values in the INCLUDED_DN field. Round the result to three decimal places and display in percent format.


## Example 1: 2018 District Performance Framework 1-Year Report for District Number 0010 Count and Matriculation Rate for All Students

Select all records where:

```
REPORTING_YEAR = 2018
REPORTING_YEAR_SPAN = '1 Year'
DIST_NUM = '0010'
INCLUDED_DN = '1'
INCL_NM_TTL = '1'
```

Execute the following functions to generate the count and rate reported on the performance framework:

```
Count: SUM (INCLUDED_DN)
Rate: ROUND (SUM (INCL_NM_CTE) / SUM (INCLUDED_DN), 3)
```


## Example 2: 2018 School Performance Framework 1-Year Report for School Number 0955 High School Evidence-Based Reading \& Writing Count and Matriculation Rate for Students Enrolled in 2-Year Institutes

Select all records where:

```
REPORTING_YEAR = 2018
REPORTING_YEAR_SPAN = '1 Year'
SCH_NUM = '0955'
INCLUDED_DN = '1'
INCL_NM_CTE = ' 1 '
```

Execute the following functions to generate the count and rate reported on the performance framework:

Count: SUM (INCLUDED_DN)
Rate: ROUND (SUM (INCL_NM_CTE) / SUM (INCLUDED_DN), 3)

## Student-Level Data Files for Mean Scale Scores

The data used to generate the mean scales scores reported under the Postsecondary \& Workforce Readiness section of the performance frameworks are included in the student-level Achievement files that the ADA Unit distributes to districts each year. Each record in the files includes a state-assigned student ID (SASID) along with enrollment and demographic information and a scale score result. All of the fields referenced to generate the mean scale score calculations that appear in the PWR section of the performance framework reports are described in detail here.

## Reporting Year

The files provided to districts each year contain the record sets used to generate the most recently published framework reports. Record sets for prior years are available upon request. The files include a field labeled, REPORTING_YEAR, which contains values showing which year of assessment administration each record is associated with. To generate the mean scale calculations reported in the 2018 performance frameworks, refer to the REPORTING_YEAR column and select only records where the value is '2018'.

## Reporting Year Span

The files provided to districts each year contain the record sets used to generate the calculations that are included in the 1-Year performance framework reports. CDE also produces multi-year reports, which are used to
determine official accreditation ratings in cases where a single year of data does not provide sufficient information to evaluate performance. Files containing the data sets used to generate the calculations used for the multi-year reports are available upon request.

For the 1-year performance framework report, mean scale score calculations only include records where the reporting year span is designated as being associated with the 1-year report. In the files provided by the ADA Unit, refer to the REPORTING_YEAR_SPAN column and select only records where the value is ' 1 Year'.

For the multi-year performance framework report, mean scale score calculations only include records where the reporting year span is designated as being associated with the multi-year report. In the files provided by the ADA Unit, refer to the REPORTING_YEAR_SPAN column and select only records where the value is ' 3 Year'.

## District Number

The student-level data files provided by the ADA Unit contain all of the records used to calculate the mean scale scores that appear in the district performance framework report. The files include a column titled, DIST_NUMBER, which shows the unique four-digit code assigned to the district within CDE's directory system. This code is used to establish the connection between the assessment data and the performance framework reports, and can be used to identify the records that are included in the mean scale score calculations for a specific district.

## School Number

The student-level files provided by the ADA Unit contain all of the records used to calculate the mean scale scores that appear in the school performance framework reports. The files include a column titled, SCH_NUMBER, which shows the four-digit school code associated with each record. This is the code assigned to the school within CDE's directory system, which is used to establish the connection between the assessment data and the performance framework reports. Refer to the SCH_NUMBER column to identify the records that are included in the mean scale score calculations for specific schools.

## Reporting Data Set

The files provided to districts by the ADA Unit contain the records used to generate calculations for the district performance framework report as well as records used to generate calculations for each of the individual reports used to evaluate the performance of schools within the district. The rules used to generate calculations for the district performance framework report differ from the rules used to generate calculations for the school performance framework reports. The files provided by the ADA Unit include a column titled,
REPORTING_DATA_SET, that distinguishes between the data set used for the district performance framework report and the data sets used for the school performance framework reports. To generate calculations for the district performance framework report, select only records where the value in the data set field is 'DIST'. For school performance framework calculations, select only records where the value is 'SCH'.

## EMH Level (Grade Range)

The performance frameworks only evaluate PWR metrics for districts and schools that serve students at the high school level. The mean scale scores used for the PWR indicator reflect student outcomes on the Colorado SAT 11 and DLM 11 assessments. Within the files provided by the ADA Unit, refer to the EMH_LEVEL column and select only records that are coded as ' H '.

## Grade Level

Additional selection criteria must be applied to the GRADE LEVEL field to distinguish records associated with the Colorado SAT \& DLM 11 assessments from records associated with the Colorado PSAT \& DLM 09/10 assessments. Within the files provided by the ADA Unit, refer to the GRADE_LEVEL column and select only records that are coded as ' 11 '.

## Test Name

The mean scale scores used in the PWR section of the frameworks represent the combined results from the Colorado SAT 11 and the $11^{\text {th }}$ grade DLM assessment. The calculations reported for Evidence-Based Reading \& Writing and Math are based on records where the TEST_NAME is either 'CO PSAT/SAT' or 'DLM'.

## Test Subject

## Evidence-Based Reading \& Writing

To generate the mean scale score calculations reported for Evidence-Based Reading \& Writing, select records where the value in the SUBJECT column is either 'EVIDENCE-BASED READING AND WRITING' or 'ENGLISH LANGUAGE ARTS'.

## Math

To generate the mean scale score calculations reported for Math at the high school level, select records where the value in the SUBJECT column is 'MATH'.

## Student Group Definitions

## All Students

The mean scale score calculations reported under the All Students label represent the results for all students who received a valid score at the designated grade level and subject area. No demographic information needs to be referenced to identify the records from the student-level files that are used to generate calculations associated with the All Students group.

## Free/Reduced-Price Lunch Eligible Students

The mean scale score calculations reported under the Free/Reduced-Price Lunch Eligible (FRL) label represent the results for students who were reported as eligible for free or reduced-price lunch. To generate the mean scale score calculations for FRL students, select records coded as ' $\gamma$ ' in the FRL_YN column.

## Minority Students

The mean scale score calculations reported under the Minority Students label represent the results for students who were reported as having a racial or ethnic background other than White. To generate the mean scale score calculations for Minority students, select records coded as ' $\gamma$ ' in the MINORITY_YN column.

## English Learners

The mean scale score calculations reported under the English Learners label represent the results for students who were reported as receiving English Language services. The English Learner category includes all students reported as Non English Proficient (NEP), Limited English Proficient (LEP), Fully English Proficient (FEP - Monitor Year 1; FEP - Monitor Year 2; FEP - Exited Year 1; and FEP - Exited Year 2'). To generate the mean scale score calculations for English Learners, select records coded as ' $Y$ ' in the ELL_YN column.

## Students with Disabilities

The mean scale score calculations reported under the Students with Disabilities label represent the results for students who were reported as having an Individualized Education Program (IEP). To generate the mean scale score calculations for students with disabilities, select records coded as ' $Y$ ' in the IEP_YN column.

## Scale Scores

The mean scale score calculations reported in the performance framework are based on the scale scores obtained by individual students. In the files provided by the ADA Unit, scale scores for each student are included in the column titled, SCALE_SCORE.

For the CMAS, CSLA, Colorado PSAT, CoAlt records, scale score values reflect the information provided by the vendors that CDE contracts with to score the annual assessments. For DLM records, the test vendor does not provide scale scores for individual student records. Scale score values for DLM are calculated by the ADA Unit. For more details on the methodology for generating DLM scale scores, contact the ADA Unit.

## Valid Scores

The mean scale score calculations reported in the performance framework only reflect student outcomes that are considered valid under state accountability policies. Invalid records are identified based on information provided to the CDE Assessment Unit by districts during the test administration window or during the data review process that is carried out after the testing window closes. In the files provided by the ADA Unit, records for students with invalid scores are coded as ' 0 ' in the VALID_SCORE field. Student who did not participate in testing, or who did not receive a score for any other reason, are also coded as ' 0 ' in the VALID_SCORE field. Mean scale score calculations reported in the performance framework only reflect records that are coded as ' 1 ' in the VALID_SCORE column.

## Included (Yes or No)

State accountability policy establishes explicit criteria for which student records are to be included in the calculations used within the performance framework reports. The files distributed to districts by the ADA Unit provide information for each record showing whether that record met the inclusion criteria. This information is summarized in the column titled, INCLUDED_PFWK_CALCS. All records are coded as either ' $Y$ ' or ' $N$ ' in the INCLUDED_PFWK_CALCS column. Only records coded as ' $Y$ ' are represented in the mean scale score calculations that appear in the performance framework reports.

The files distributed by the ADA Unit do provide detailed information about records that were excluded from calculations. For information about excluded records, refer to the Academic Achievement section above.

## Calculating Mean Scale Scores

The criteria outlined above can be used to generate the mean scale score calculations reported for the PWR indicator on the district and school performance frameworks using the student-level files provided by the ADA Unit. The files are provided in Microsoft Excel and mean scale scores may be calculated directly from the files by applying the appropriate selection criteria and using the built-in AVERAGE function. Counts can be calculated using the COUNT function. The counts reported in the performance frameworks represent the number of records meeting the inclusion criteria with valid scale scores (VALID_SCORE = ' 1 '), and the means represent the averages of the values in the SCALE_SCORE column. Mean scale scores are only reported and used in the performance framework when there are at least 16 valid scores. This minimum n-count requirement is specific to each student group included in the framework reporting structure.

```
Example 1: 2018 District Performance Framework 1-Year Report for District Number 0010 PWR Math Count and Mean Scale Score for All Students
Select all records where:
```

```
REPORTING_YEAR = 2018
```

REPORTING_YEAR = 2018
REPORTING_YEAR_SPAN = '1 Year'
REPORTING_YEAR_SPAN = '1 Year'
DIST_NUM = `0010' DIST_NUM = `0010'
REPORTING_DATA_SET = `DIST`
REPORTING_DATA_SET = `DIST`
EMH_LEVEL = 'H'
EMH_LEVEL = 'H'
GRADE_LEVEL = '11'
GRADE_LEVEL = '11'
TEST_NAME = 'CO PSAT/SAT' or 'DLM'
TEST_NAME = 'CO PSAT/SAT' or 'DLM'
SUBJECT = 'MATH'
SUBJECT = 'MATH'
VALID_SCORE = '1'
VALID_SCORE = '1'
INCLUDED_PFWK_CALCS = 'Y'

```
INCLUDED_PFWK_CALCS = 'Y'
```

Execute the following functions to generate the count and mean scale score reported on the performance framework:

| Count: | COUNT (SCALE_SCORE) |
| :--- | :--- |
| Mean Scale Score: | ROUND (AVERAGE (SCALE_SCORE), 1) |

## Example 2: 2018 School Performance Framework 1-Year Report for School Number 0955 PWR Evidence-Based Reading \& Writing <br> Count and Mean Scale Score for FRL Students

Select all records where:
REPORTING_YEAR $=2018$
REPORTING_YEAR_SPAN = '1 Year'
SCH_NUM = ‘0955'
REPORTING_DATA_SET = 'SCH'
EMH_LEVEL = 'H'

```
GRADE_LEVEL = '11'
TEST_NAME = 'CO PSAT/SAT' or 'DLM'
SUBJECT = 'EVIDENCE-BASED READING AND WRITING' or
                    'ENGLISH LANGUAGE ARTS'
FRL_YN = ' \(Y\) '
VALID_SCORE = '1'
INCLUDED_PFWK_CALCS = ' \(\gamma\) '
```

Execute the following functions to generate the count and mean scale score reported on the performance framework:

```
Count: COUNT (SCALE_SCORE)
Mean Scale Score: ROUND (AVERAGE (SCALE_SCORE), 1)
```


## TEST PARTICIPATION RATES

In addition to the outcomes measures associated with each of the performance indicators, the performance frameworks provide information about rates of test participation. The frameworks report two different types of participation rate information. The first, referred to here as the Accountability Participation Rate, is used to determine whether districts and schools meet the requirements for the Test Participation Assurance. This assurance requires that a minimum of $95 \%$ of students participate in the annual state assessments. Schools and districts are subject to ratings penalties if they do not meet the test participation requirement.

The second type of participation rate data reported in the framework rate is referred to here as the Total Participation rate. This rate represents the percentage of students who were registered to test who ultimately did test and did receive a valid score result. Except for a few cases where students may be exempt from testing requirements, all students enrolled at the time of the test administration are registered for testing.

The key difference between the Accountability Participation rate and the Total Participation rate calculations rests on the treatment of students whose parents excuse them from testing. In the Accountability Participation rate calculations, students who are excused from testing by their parents are treated as exempt. Their records are not counted in the denominator or in the numerator used to calculate the Accountability Participation rates. In contrast, within the Total Participation rate, students who do not test due to a parent excusal are treated as non-participants. Their records are included in the denominator but do not count toward the numerator.

This section of the guide provides describes how to calculate both the Accountability Participation rates and the Total Participation rates that appear in the framework reports. The calculation guidance refers to student-level participation files provided to districts by the Accountability and Data Analysis (ADA) Unit. The ADA Unit provides student-level participation data files to districts each year at the same time that preliminary framework reports are distributed. This guide refers exclusively to files provided by the ADA Unit. Information presented in this guide does not apply to files provided by CDE's Assessment Unit nor to files provided by assessment vendors. For information about where to find the student-level files referenced here, please contact the ADA Unit.

## Reporting Structure for Test Participation

The student-level files provided to districts are organized in a way that reflects the structure of the performance frameworks. To make sense of the information included in these files, it is necessary to have a basic
understanding of the performance framework reporting structure. The overview provided here explains how participation rates are reported within the performance framework. This is the basis for understanding more specific details about the information included in the student-level files, which are provided in subsections below.

The Accountability Participation rate is built around the requirement that a minimum of $95 \%$ of the overall student population participates in each of the various subject area tests administered under the state assessment system. For each district and school in the state, the ADA Unit determines whether the conditions of the test assurance have been met by calculating overall participation rates for English Language Arts, Math, and Science. These overall rates are reported on the front page of the performance frameworks and reflect test participation for students across all grade levels and for all assessments.

The rates that are used to determine whether districts and schools satisfy the conditions of the Test Participation Assurance differ from the other metrics used in the performance frameworks in that they are not broken down by grade range. For districts and for schools that serve students across multiple grade levels, the test participation rates that appear on the front page of the report are the only metrics that represent the student population as a whole. The image below shows how participation rates appear on the front page of the framework report.

Test Participation Rates (Ratings are based on Accountability Participation Rate)

| Subiect | Total <br> Records | Valid <br> Scores | $\begin{aligned} & \text { Participation } \\ & \text { Rate } \end{aligned}$ |  Accountability <br> Parent  <br> Excuses Participation <br> Ratet*  |  | Rating |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| English Language Arts | 976 | 845 | 86.6\% | 128 | 99.6\% | Meets 95\% |
| Math | 976 | 846 | 86.7\% | 129 | 99.9\% | Meets 95\% |
| Science | 253 | 227 | 89.7\% | 25 | 99.6\% | Meets 95\% |

The Total Participation rates that are reported in the frameworks serve a different purpose from the Accountability rates. Whereas the Accountability rates are used specifically to determine whether schools and districts meet the conditions of the participation requirements, the Total Participation rates are meant to inform interpretations of the assessment results that are reported in the Academic Achievement and Postsecondary \& Workforce Readiness sections of the frameworks. Total Participation rate calculations are reported alongside each mean scale score that appears in the performance framework reports. These rates provide a sense of the extent to which the mean scale scores can be considered representative of the underlying student population.

The test participation rates that accompany the mean scale scores in the Achievement and PWR sections of the frameworks follow the same reporting structure associated with those indicators. At the highest level, they are organized by grade range, and then within each grade range they are further broken down to represent specific subject areas and student groups. The image below shows how participation rates are reported within the Academic Achievement sections of the performance framework. This example comes from the elementary section of the report, but the rates would be reported in the same way at the middle and high school levels.

| ACADEMIC ACHIEVEMENT |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subject | Student Group | Count | Participation Rate | Mean Scale Score | Percentile Rank | Pts Earned/ Eligible | Rating |
| CMAS - <br> English <br> Language Arts | All Students | 845 | 86.6\% | 757.6 | 87 | 8/8 | Exceeds |
|  | Previously Identified for READ Plan | 25 | 69.4\% | 711.5 | * | 0/0 | - |
|  | English Learners | $\pi<16$ | - | - | - | 0/0 | - |
|  | Free/Reduced-Price Lunch Eligible | 61 | 83.6\% | 748.4 | 70 | 0.75/1 | Meets |
|  | Minority Students | 156 | 86.2\% | 753.7 | 81 | 0.75/1 | Meets |
|  | Students with Disabilities | 56 | 75.7\% | 728.4 | 25 | 0.5/1 | Approaching |
| CMAS - Math | All Students | 846 | 86.7\% | 755.7 | 90 | 8/8 | Exceeds |
|  | English Learners | $\mathrm{n}<16$ | - | - | - | 0/0 | - |
|  | Free/Reduced-Price Lunch Eligible | 62 | 84.9\% | 745.0 | 73 | 0.75/1 | Meets |
|  | Minority Students | 155 | 85.6\% | 753.5 | 87 | 1/1 | Exceeds |
|  | Students with Disabilities | 56 | 75.7\% | 730.1 | 39 | 0.5/1 | Approaching |
| CMAS- <br> Science | All Students | 227 | 89.7\% | 637.4 | 73 | 6/8 | Meets |
|  | English Learners | $\pi<16$ | - | - | - | 0/0 | - |
|  | Free/Reduced-Price Lunch Eligible | 19 | 90.5\% | 600.8 | 49 | 0.5/1 | Approaching |
|  | Minority Students | 43 | 84.3\% | 624.3 | 65 | 0.75/1 | Meets |
|  | Students with Disabilities | $\pi<16$ | - | - | - | 0/0 | - |
| TOTAL |  | * | * | * | * | 27.5/32 | Meets |

Test participation rates reported in the PWR section of the framework follow the same reporting structure used to present the Colorado SAT 11 results. The image below shows an example.

| Subiect | Student Group | Count | Best <br> Rate | Raterscore | Participation Rate | Pts Earned] Eligible | Pating |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COSAT- | All Students | 289 | * | 550.0 | 95.2\% | 1.5/2 | Meets |
| Evidence- | English Learners | $\pi<16$ | * | - | - | $0 / 0$ | - |
| Based | Free/Reduced-Price Lunch Eligible | 37 | * | 482.4 | 93.0\% | $0 / 0$ | Approaching |
| Reading ${ }^{\text {a }}$ | Minority Students | 71 | * | 530.3 | 95.0\% | $0 / 0$ | Meets |
| Writing | Students with Disabilities | $\pi<16$ | * | - | - | $0 / 0$ | - |
| COSAT- | All Students | 289 | * | 542.3 | 95.2\% | 1.5/2 | Meets |
| Math | English Learners | $\pi<16$ | * | - | - | 0/0 | - |
|  | Free/Reduced-Price Lunch Eligible | 37 | * | 482.4 | 93.0\% | 0/0 | Approaching |
|  | Minority Students | 71 | * | 524.6 | 95.0\% | 0/0 | Meets |
|  | Students with Disabilities | $n<16$ | * | - | - | $0 / 0$ | - |

## Student-Level Data Files

The ADA unit applies a common set of coding conventions to the records included in the student-level participation files that it distributes so that all of the calculations can be generated using the same set of procedures. Each record includes a state-assigned student ID (SASID) along with enrollment and demographic information and participation outcomes. All of the fields referenced to generate the participation rate calculations that appear in the performance framework reports are described in detail here.

## Reporting Year

The files provided to districts each year contain the record sets used to generate the most recently published framework reports. Record sets for prior years are available upon request. The files include a field labeled, REPORTING_YEAR, which contains values showing which year of assessment administration each record is associated with. To generate the mean scale calculations reported in the 2018 performance frameworks, refer to the REPORTING_YEAR column and select only records where the value is ' 2018 '.

## Reporting Year Span

The files provided to districts each year contain the record sets used to generate the calculations that are included in the 1-Year performance framework reports. CDE also produces multi-year reports, which are used to determine official accreditation ratings in cases where a single year of data does not provide sufficient information to evaluate performance. Files containing the data sets used to generate the calculations used for the multi-year reports are available upon request.

For the 1-year performance framework report, mean scale score calculations only include records where the reporting year span is designated as being associated with the 1-year report. In the files provided by the ADA Unit, refer to the REPORTING_YEAR_SPAN column and select only records where the value is ' 1 Year'.

For the multi-year performance framework report, mean scale score calculations only include records where the reporting year span is designated as being associated with the multi-year report. In the files provided by the ADA Unit, refer to the REPORTING_YEAR_SPAN column and select only records where the value is ' 3 Year'.

Note that for 2018, the 1-Year data sets were used to make determinations around the Test Participation Assurance for both the 1-Year and Multi-Year reports. Multi-year data sets were used for the Total Participation rates that appear in the 2018 multi-year reports.

## District Number

The student-level data files provided by the ADA Unit contain all of the records used to calculate the mean scale scores that appear in the district performance framework report. The files include a column titled, DIST_NUMBER, which shows the unique four-digit code assigned to the district within CDE's directory system. This code is used to establish the connection between the assessment data and the performance framework reports, and can be used to identify the records that are included in the mean scale score calculations for a specific district.

## School Number

The student-level files provided by the ADA Unit contain all of the records used to calculate the mean scale scores that appear in the school performance framework reports. The files include a column titled, SCH_NUMBER, which shows the four-digit school code associated with each record. This is the code assigned to the school within CDE's directory system, which is used to establish the connection between the assessment data and the performance framework reports. Refer to the SCH_NUMBER column to identify the records that are included in the mean scale score calculations for specific schools.

## Reporting Data Set

The files provided to districts by the ADA Unit contain the records used to generate calculations for the district performance framework report as well as records used to generate calculations for each of the individual reports used to evaluate the performance of schools within the district. The rules used to generate calculations for the district performance framework report differ from the rules used to generate calculations for the school performance framework reports. The files provided by the ADA Unit include a column titled,
REPORTING_DATA_SET, that distinguishes between the data set used for the district performance framework report and the data sets used for the school performance framework reports. To generate calculations for the district performance framework report, select only records where the value in the data set field is 'DIST'. For school performance framework calculations, select only records where the value is 'SCH'.

## EMH Level (Grade Range)

The files provided to districts by the ADA Unit contain test records from all grade levels that are evaluated under the performance framework. Within the files, there is a column labeled EMH_LEVEL, which designates the grade range associated with each record. For the Accountability Participation rate calculations, no conditions are set on the EMH_LEVEL.

The Total Participation rate calculations that are reported in the Achievement and PWR sections of the performance framework are broken out by grade level. To generate the Total Participation rate calculations reported at the elementary level, select only records where EMH_LEVEL equals ' $E$ '. To calculate rates reported at the middle school level, select only records that are coded as ' $M$ '. And to calculate rates reported at the high school level, select only records that are coded as ' H '.

## Grade Level

At the high school level, additional selection criteria must be applied to the GRADE_LEVEL field to distinguish between the Total Participation rates that are reported in the Academic Achievement and the Total Participation rates that are reported in the PWR section. Records for $11^{\text {th }}$ grade students are not included in the Total Participation rate calculations that are reported in the Academic Achievement section of the report. Instead, records for $11^{\text {th }}$ grade students are included in the Total Participation rates that are reported in the PWR section. To generate the Total Participation rates reported in the Academic Achievement section at the high school level, exclude all records where the value in the GRADE_LEVEL field equals ' 11 '. To generate the participation rates reported in the PWR sections, include only records where the value in the GRADE_LEVEL field equals '11'.

## Test Name

The participation rates reported in the performance frameworks represent the combined results from both the traditional and alternate assessments. This is true for both the Accountability Participation rate calculations and the Total Participation rate calculations. Results from both the traditional and alternate assessments are included in the files provided by the ADA Unit. The English Language Arts and Math calculations reported at the elementary and middle school levels include records where the value in the TEST_NAME column is either 'CMAS' or 'DLM'. At the high school level, the calculations reported for Evidence-Based Reading \& Writing and Math are based on records where the TEST_NAME is either 'CO PSAT/SAT' or 'DLM'. The Science calculations reported at all levels include records where the value in the TEST_NAME column is either 'CMAS SCIENCE' or 'COALT SCIENCE'.

## Test Subject

## English Language Arts/Evidence-Based Reading \& Writing

To calculate the Accountability Participation rates used for the English Language Arts, select all records where the value in the SUBJECT column is either 'ENGLISH LANGUAGE ARTS' or EVIDENCE-BASED READING AND WRITING'. For 2018, exclude records where the value in the GRADE_LEVEL field is ' 11 '.

To calculate the Total Participation rates reported for English Language Arts in the Academic Achievement sections at the elementary and middle school levels, select all records where the value in the SUBJECT column is 'ENGLISH LANGUAGE ARTS'.

To calculate the Total Participation rates reported for Evidence-Based Reading \& Writing in the Academic Achievement section at the high school level, select all records where the value in the SUBJECT column is either 'EVIDENCE-BASED READING AND WRITING' or 'ENGLISH LANGUAGE ARTS'. Exclude records where the value in the GRADE_LEVEL field is ' 11 '.

To calculate the Total Participation rates reported for Evidence-Based Reading \& Writing in the PWR section, select all records where the value in the TEST_NAME field is either 'CO PSAT/SAT' or 'DLM' and where the value in the SUBJECT column is either ‘EVIDENCE-BASED READING AND WRITING' or 'ENGLISH LANGUAGE ARTS'. Include only records where the value in the GRADE_LEVEL field is ' 11 '.

## Math

To calculate the Accountability Participation rates used for Math, select all records where the value in the TEST_NAME field is either 'CMAS', 'DLM', or 'CO PSAT/SAT' and where the value in the SUBJECT column is 'MATH'. For 2018, exclude records where the value in the GRADE_LEVEL field is ' 11 '.

To calculate the Total Participation rates reported for Math in the Academic Achievement sections at the elementary and middle school levels, select all records where the value in the SUBJECT column is 'MATH'.

To calculate the Total Participation rates reported for Math in the Academic Achievement section at the high school level, select all records where the value in the SUBJECT column is 'MATH'. Exclude records where the GRADE_LEVEL = '11'.

To calculate the Total Participation rates reported for Math in the PWR section, select all records where the value in the TEST_NAME field is either 'CO PSAT/SAT' or 'DLM' and where the value in the SUBJECT column is 'MATH'. Include only records where the value in the GRADE_LEVEL field is ' 11 '.

## Science

To calculate the Accountability Participation rates or the Total Participation rates reported for Science, select all records where the value in the SUBJECT column is 'SCIENCE'.

## Student Group Definitions

The participation rates used to determine whether districts and schools satisfy the conditions of the Test Participation Assurance for English Language Arts, Math, and Science are not broken out by student groups. Only the overall participation rates for each subject area are used to determine whether districts and schools meet the requirements of the Test Participation Assurance.

Participation rates reported in the Achievement and PWR sections of the frameworks are broken out by student group. For each grade range and subject area, the performance framework reports include participation rates for all students along with separate rates for English Learners, for student who qualify for free or reduced-price lunch, for minority students, and for students with disabilities. At the elementary level, an additional English Language Arts participation rate is reported for students who were previously identified with a significant reading deficiency under the Colorado READ Act.

## All Students

The mean scale score calculations reported under the All Students label represent the results for all students who received a valid score at the designated grade level and subject area. No demographic information needs to be referenced to identify the records from the student-level files that are used to generate calculations associated with the All Students group.

## Free/Reduced-Price Lunch Eligible Students

The mean scale score calculations reported under the Free/Reduced-Price Lunch Eligible (FRL) label represent the results for students who were reported as eligible for free or reduced-price lunch. To generate the mean scale score calculations for FRL students, select records coded as ' $\gamma$ ' in the FRL_YN column.

## Minority Students

The mean scale score calculations reported under the Minority Students label represent the results for students who were reported as having a racial or ethnic background other than White. To generate the mean scale score calculations for Minority students, select records coded as ' $\gamma$ ' in the MINORITY_YN column.

## English Learners

The mean scale score calculations reported under the English Learners label represent the results for students who were reported as receiving English Language services. The English Learner category includes all students reported as Non English Proficient (NEP), Limited English Proficient (LEP), Fully English Proficient (FEP - Monitor Year 1; FEP - Monitor Year 2; FEP - Exited Year 1; and FEP - Exited Year 2'). To generate the mean scale score calculations for English Learners, select records coded as ' $Y$ ' in the ELL_YN column.

## Students with Disabilities

The mean scale score calculations reported under the Students with Disabilities label represent the results for students who were reported as having an Individualized Education Program (IEP). To generate the mean scale score calculations for students with disabilities, select records coded as ' $Y$ ' in the IEP_YN column.

## Previously Identified for READ Plan

The mean scale score calculations reported under the Previously Identified for READ Plan label represent the results for students who were previously reported as having a Significant Reading Deficiency (SRD) as part of the annual READ Act data collection. These calculations are only reported for English Language Arts, and only include results for students who took the $3^{\text {rd }}$ or $4^{\text {th }}$ grade assessment. The values in the file are based on information collected from districts through the READ Act data collections completed in all years prior to the year associated with the assessment administration. To generate the mean scale score calculations for students who were previously reported as having an SRD, select records coded as ' $\gamma$ ' in the READ_ACT_PRIOR_SRD_YN column.

## Included (Yes or No)

State accountability policy establishes explicit criteria for which student records are to be included in the calculations used within the performance framework reports. The files distributed to districts by the ADA Unit provide information for each record showing whether that record met the inclusion criteria. This information is summarized in the column titled, INCLUDED_PFWK_CALCS. All records are coded as either ' $\gamma$ ' or ' $N$ ' in the INCLUDED_PFWK_CALCS column. Only records coded as ' $Y$ ' are represented in the participation rate calculations that appear in the performance framework reports. Any records coded as ' N ' in the inclusion field are excluded from the calculations reported in the performance framework.

For records that are coded as ' N ' in the INCLUDED_PFWK_CALCS field, the files distributed by the ADA Unit provide additional information showing why they were excluded from the performance framework calculations. This information is provided in a series of exclusion and exemption columns that are described below. Any record that is coded as ' $N$ ' in the INCLUDED_PFWK_CALCS field will be coded as ' $\gamma$ ' in at least one of the exclusion or exemption columns. Note that these exclusion and exemption fields are provided for informational purposes and do not need to be referenced directly to generate the summary calculations. For any given record, only the value in the INCLUDED_PFWK_CALCS column needs to be referenced to determine whether it was included in the summary calculations reported in the performance framework.

## Exempt from Testing

Under certain conditions, students may be exempt from test participation requirements. These students are not included in any of the test participation rates reported in the performance frameworks. The files provided by the ADA Unit include a column titled, EXEMPT_NOT_TESTED_YN, which identifies records for students who were exempt from test participation requirements. A record coded as ' $\gamma$ ' in the EXEMPT_NOT_TESTED_YN column was not included in performance framework calculations due to a testing exemption.

## Excluded: Test Invalid

Certain records are excluded from the test participation calculations reported in the performance frameworks based on the test invalidation information reported by districts. The EXCLUDED_TEST_INVALID_YN column identifies these records. A record coded as ' $\gamma$ ' in the EXCLUDED_TEST_INVALID_YN field was excluded because the record was identified as invalid, either during the test window or during the data review process carried out after testing was completed. Refer to the column titled, DID_NOT_TEST_TEXT, to see specific test invalidation information associated with records.

## Excluded: Expelled

For the school performance frameworks, records for students who were reported as expelled during the test window are not included in the test participation calculations. The rules for the district performance framework report do not impose any conditions on expulsion status. All records included in the district data set are coded as ' $N$ ' in the EXCLUDED_EXPELLED_YN column. For the school performance framework, a record coded as ' $\gamma$ ' in the EXCLUDED_EXPELLED_YN was excluded because the student was reported as having been expelled from school during the testing window.

## Excluded: Void Grade Level Information

In order for a test record to be included in the framework calculations, the grade level information associated with the record must be consistent with the grade level information listed in the official directory maintained by CDE. Test records are not included in the framework calculations when the grade level information is not consistent with the grade level information listed in the directory. For example, if a test record lists a student as a $7^{\text {th }}$ grader but the directory information for the school associated with that record shows that the school only serves students in grades $K-5$, the record will be excluded from framework calculations. A record coded as ' $\gamma$ ' in the EXCLUDED_GRADE_LEVEL_VOID_YN field was excluded because the record was identified as being inconsistent with the grade levels listed in the directory.

## Excluded: Detention Facility

Records associated with schools designated within the official directory as detention facilities are not included in performance framework calculations. A record coded as ' $\gamma$ ' in the EXCLUDED_DETENTION_FACILITY_YN was excluded because the school information associated with the record was associated with a school identified as detention facility within the official directory.

## Excluded: Home-Schooled Student

Records for students enrolled in a school designated within the official directory as a home options program are not included in performance framework calculations. Records for students reported with a test invalidation code identifying them as home-schooled students are also excluded from framework calculations. A record coded as ' $Y$ ' in the EXCLUDED_HOME_OPTIONS_YN was excluded because the student was identified as a home-schooled student.

## Excluded: Tested Off-Grade

CDE has established criteria for what tests are to be administered to students at each grade levels. Students are not required to test outside of these criteria. In some cases, assessment records exist for students at grade levels where they were not required to test. For example, a CMAS English Language Arts assessment result may be reported for a $10^{\text {th }}$ grade student, who would not have been required to take the CMAS assessments. These types of records are not included in participation rate calculations reported in the frameworks and can be identified based on the EXCLUDED_OFF_GRADE_YN column. A record coded as ' $\gamma$ ' in the EXCLUDED_OFF_GRADE_YN was excluded because the test was not one that students at that grade level were required to take.

## Excluded: Void District/School Association

Certain records included in the assessment results are not associated with a valid district code, or are coded in a way that reflects an invalid relationship between a school code and a district code. For instance, a test record may have a school code that according to the directory should be associated with district A, while the record itself identifies it as being associated with record $B$. These types of records are identified by referencing the district and school code information associated with the assessment results against the information in the official directory maintained by CDE. A record coded as ' $Y$ ' in the EXCLUDED_DISTRICT_VOID_YN column was excluded because it was not associated with a valid district code, or included information showing an invalid relationship between the district code and school code.

## Excluded: Duplicate Record

In some cases, students may have multiple records for the same test included in the assessment results. For the participation rate calculations reported in the performance frameworks, only one record for each subject area is used to make participation determinations for individual students. A record coded as ' $\gamma$ ' in the EXCLUDED_DUPLICATE_YN column was excluded because it was identified as a duplicate test record for a student.

## Identifying Records for Accountability Participation Rate Calculations

## Included in Accountability Denominator

In the Participation files distributed by the ADA Unit, records that are used to calculate the Accountability Participation rates can be identified based on the INCLUDED_DN_ACCOUNTABILITY and INCLUDED_NM_ACCOUNTABILTY columns. Records that are coded as ' 1 ' in the INCLUDED_DN_ACCOUNTABILITY field are included in the denominator that is used to determine the Accountability Participation rate.

## Included in Accountability Numerator

Records that are coded as ' 1 ' in the INCLUDED_NM_ACCOUNTABILITY field are included in the numerator that is used to determine the Accountability Participation rate. These students are counted as test participants for state accountability purposes.

## Parent Refusals

Under State Board of Education Policy, districts and schools are not held accountable for students who were excused from testing by their parents. These students can be identified by referring to the PARENT_REFUSAL column in the files distributed by the ADA Unit. Records coded as ' 1 ' are associated with students whose parents excused them from testing.

## English Learners in First Year of Enrollment in U.S. Public School

Students who are classified as English Learners who have been enrolled in U.S. Public School for less than one year at the time of testing are not required to take the English Language Arts assessment. In the Accountability Participation Rate calculations, these students are counted as test participants. Records for student who are identified under this policy are coded as ' 1 ' in the ELL_FIRST_YR_US column in the files distributed by the ADA Unit.

## Calculating Accountability Participation Rates

The participation rates that are used to determine whether districts and schools satisfy the conditions of the Test Participation Assurance can be calculated using the information in the student-level data files provided by the ADA Unit. The files are provided in Microsoft Excel, and the rates can be calculated by applying the appropriate selection criteria and using the built-in functions to calculate sums and percentages. Accountability participation rates are only used for the test participation assurance in cases where there are at least 20 records included in the denominator for the specific subject area. Below this threshold, districts and schools are treated by default as having met the participation requirement in that subject area.

- The values reported under the 'Total Records' header in the performance frameworks represent the sum of values in the INCLUDED_DN_TOTAL column in the student-level files.
- The values reported under the 'Valid Scores' header in the performance frameworks represent the sum of values in the INCLUDED_NM_TOTAL column in the student-level files.
- The percentages reported in the Participation Rate column represent the sum of the values in the INCLUDED_NM_TOTAL column divided by the sum of the values in the INCLUDED_DN_TOTAL.
- The values reported under the 'Parent Excuses' header in the performance frameworks represent the sum of values in the PARENT_REFUSAL column in the student-level files.
- The values reported under the 'Accountability Participation Rate' header in the performance frameworks represent the sum of values in the INCLUDED_DN_ACCOUNTABILTY column in the studentlevel files divided by the sum of values in the INCLUDED_NM_ACCOUNTABILITY column in the student level files.

Example 1: 2018 District Performance Framework 1-Year Report for District Number 0010
Participation Assurance Information for Math
Select all records where:

```
REPORTING_YEAR \(=2018\)
REPORTING_YEAR_SPAN = '1 Year'
DIST_NUM = ‘0010'
REPORTING_DATA_SET = ‘DIST’
GRADE_LEVEL <> '11'
TEST_NAME = 'CMAS' or 'DLM' or 'CO PSAT/SAT'
SUBJECT = 'MATH'
INCLUDED_PFWK_CALCS = ' \({ }^{\prime}\) '
```

Total Records:

SUM (INCLUDED_DN_TOTAL)
Valid Scores:
SUM (INCLUDED_NM_TOTAL)

Participation Rate:
ROUND (SUM (INCLUDED_NM_TOTAL) / SUM (INCLUDED_NM_TOTAL), 3)
Parent Excuses:

SUM (PARENT_REFUSALS)
Accountability Participation Rate:

```
ROUND(
    SUM (INCLUDED_NM_ACCOUNTABILTY) /
    SUM (INCLUDED_NM_ACCOUNTABILTY), 3)
```

Example 2: 2018 School Performance Framework 1-Year Report for School Number 0955
Participation Assurance Information for English Language Arts
Select all records where:

```
REPORTING_YEAR = 2018
REPORTING_YEAR_SPAN = '1 Year'
DIST_NUM = '0010'
REPORTING_DATA_SET = 'SCH'
GRADE_LEVEL <> '11'
TEST_NAME = 'CMAS' or 'DLM' or 'CO PSAT/SAT'
SUBJECT = 'ENGLISH LANGUAGE ARTS' or
    'EVIDENCE-BASED READING AND WRITING'
INCLUDED_PFWK_CALCS = 'Y'
```

Total Records:

SUM (INCLUDED_DN_TOTAL)
Valid Scores:
SUM (INCLUDED_NM_TOTAL)

Participation Rate:

ROUND (SUM (INCLUDED_NM_TOTAL) / SUM (INCLUDED_NM_TOTAL), 3)

Parent Excuses:

Accountability Participation Rate:

ROUND (
SUM (INCLUDED_NM_ACCOUNTABILTY) / SUM (INCLUDED_NM_ACCOUNTABILTY), 3)

## Identifying Records for Total Participation Rate Calculations

## Included in Total Denominator

In the Participation files distributed by the ADA Unit, records that are used to calculate the Total Participation rates can be identified based on the INCLUDED_DN_TOTAL field. Records that are coded as ' 1 ' in the INCLUDED_DN_TOTAL field are included in the denominator that is used to determine the Total Participation rate.

## Included in Total Denominator

Records that are coded as ' 1 ' in the INCLUDED_NM_TOTAL field are included in the numerator that is used to determine the Total Participation rate. These students are counted as participants for the purposes of informing interpretations of mean scale scores.

Note that the Total Participation rate calculations treat students who were excused from testing by their parents as non-participants. Unless some other reason exempted them from testing requirements, they will be coded as ' 0 ' in the INCLUDED_NM_TOTAL field.

## Calculating Total Participation Rates

The participation rates that are reported in the Achievement and PWR sections of the frameworks can also be calculated using the information in the student-level data files provided by the ADA Unit. The files are provided in Microsoft Excel, and the rates can be calculated by applying the appropriate selection criteria and using the built-in functions to calculate sums and percentages. Total participation rates are only reported in cases where districts and schools meet the minimum n-count requirements associated with reporting mean scale scores. Mean scale scores are only reported in cases where there are at least 16 valid score records.

- The denominators used to calculate the participation rates that appear in the Achievement and PWR sections are determined by summing the values in the INCLUDED_DN_TOTAL column in the studentlevel files.
- The numerator used to calculate the participation rates that appear in the Achievement and PWR sections are determined by summing the values in the INCLUDED_NM_TOTAL column in the studentlevel files.
- The percentages reported in the Participation Rate column represent the sum of the values in the INCLUDED_NM_TOTAL column divided by the sum of the values in the INCLUDED_DN_TOTAL.

Example 1: 2018 District Performance Framework 1-Year Report for District Number 0010 Achievement Participation Rates for Elementary English Language Arts Select all records where:

```
REPORTING_YEAR = 2018
REPORTING_YEAR_SPAN = '1 Year'
DIST_NUM = '0010'
REPORTING_DATA_SET = 'DIST`
EMH_LEVEL = 'E'
TEST_NAME = 'CMAS' or 'DLM'
SUBJECT = 'ENGLISH LANGUAGE ARTS'
INCLUDED_PFWK_CALCS = 'Y'
```

Denominator:
SUM (INCLUDED_DN_TOTAL)
Numerator:
SUM (INCLUDED_NM_TOTAL)
Participation Rate:
ROUND (SUM (INCLUDED_NM_TOTAL) / SUM (INCLUDED_NM_TOTAL), 3)

Example 2: 2018 School Performance Framework 1-Year Report for School Number 0955 PWR Participation Rate for Math

Select all records where:

```
REPORTING_YEAR = 2018
REPORTING_YEAR_SPAN = '1 Year'
DIST_NUM = `0010'
REPORTING_DATA_SET = 'SCH'
EMH_LEVEL = 'H'
GRADE_LEVEL = '11'
TEST_NAME = 'CO PSAT/SAT' or 'DLM'
SUBJECT = 'MATH'
INCLUDED_PFWK_CALCS = 'Y'
```

Denominator:
SUM (INCLUDED_DN_TOTAL)

Numerator:

## SUM (INCLUDED_NM_TOTAL)

Participation Rate:

ROUND (SUM (INCLUDED_NM_TOTAL) / SUM (INCLUDED_NM_TOTAL), 3)

## 2. Determine Sub-Indicator Ratings

Sub-indicator ratings are determined by taking the summary calculations generated in the section above and comparing them to the cut point bands for a given measure on the School and District Performance Frameworks. This section of the Calculation Guidebook outlines how a specific score on a sub-indicator for a given school/district translates into a rating of Exceeds, Meets, Approaching, or Does Not Meet on that subindicator on the School/District Performance Framework. This section will also cover how the cut points for a given sub-indicator were developed and how points are assigned.

Please note that a specific school or district may not be eligible for a given measure due to small N sizes. In such a case, the school will not be held accountable for that measure. As a result, the total number of points for a given indicator is based on only the measures for which a school or district is eligible. The total points possible by indicator may vary from school to school and district to district due to differences in measure eligibility.

Below, we describe how measures are baselined and normed in the current iteration of the performance frameworks. Baseline refers to the dataset upon which the measure was first built-for example, CMAS was first included in the frameworks in 2016, and that serves as the baseline year for those measures. The baseline data is normed in order to determine cut points; the norming process is discussed below in more detail, but typically requires that we look at the state-wide performance of the baseline data in order to determine cut points. Measures may be re-normed (which means the cut points are reset or adjusted based on the state-wide performance on that measure) during assessment transitions or when policy changes at the state level make it necessary.

## ACADEMIC ACHIEVEMENT

## Norming/Baseline Methodology

## CMAS ELA and Math

The CMAS sub-indicators measure achievement for grades 3-8 on English Language Arts, Math, and Science. CMAS was first included on the School/District Performance Framework in 2016. These measures have not been re-normed since their first inclusion on the frameworks in 2016.

## CO PSAT 9/10 Evidence Based Reading \& Writing/Math

The CO PSAT sub-indicators measure achievement for high school grades on Evidence Based Reading and Writing and Math for grades 9 and 10. CO PSAT 10 was first included on the School/District Performance Framework in 2017. CO PSAT 9 was first included on the School/District Performance Framework in 2018. It is worth noting that because CO PSAT 9 and CO PSAT 10 are not on the same scale range (CO PSAT 9 occupies a lower portion of the scale score range) that 1-year and multi-year aggregations must be treated differently from CO PSAT.

This measure was initially normed in 2017 when PSAT 10 was first introduced, but was re-normed in 2018 when PSAT 9 was introduced into the frameworks for the reasons noted above. This measure will likely be re-normed for the 2019 SPF/DPF for the multi-year norms to accommodate and additional year of PSAT 9 data. 1-year norms for CO PSAT are based on 1 year of grade 9 and grade 10 data combined from 2018. Multi-year norms are based on 1 year of grade 9 (2018) and 3 years of grade $10(2016,2017$, and 2018) data combined.

## CMAS READ Act Bonus Point

The CMAS READ Act bonus point measure was first included on the School/District Performance Framework in 2016. This measure has not been re-normed since their first inclusion on the frameworks in 2016.

## Cut Point Methodology

CMAS ELA and Math, CO PSAT EBRW and Math
Cut points for the following sub-indicators are determined using the school distributions of a given sub-indicator by EMH level and content area:

- CMAS English Language Arts
- CMAS Math
- CO PSAT 9/10 Evidence Based Reading and Writing
- CO PSAT 9/10 Math

In all cases above, the distribution of mean scale scores on the measures above for a given EMH level for a given content area (ex: CMAS English Language Arts for Middle school) is taken across all eligible schools in the state of Colorado, where eligible schools are those which are not designated as Alternative Education Campuses and which have at least 16 valid scores on the assessment in question for accountability use. The mean scale scores for all eligible schools in the distribution are then rank-ordered. Based on the rank ordering, percentile ranks are developed for each distribution. The school distribution is used to establish cut points for both the School Performance Framework and for the District Performance Framework.

Cut points for each rating band (Exceeds, Meets, Approaching, and Does Not Meet) are derived from these percentile ranks. Cut points are created as follows:

- Does Not Meet: lowest obtainable scale score to the highest scale score associated with the $14^{\text {th }}$ percentile rank in the distribution.
- Approaching: the lowest scale score associated with the $15^{\text {th }}$ percentile rank to the highest scale score associated with the $49^{\text {th }}$ percentile rank in the distribution.
- Meets: the lowest scale score associated with the $50^{\text {th }}$ percentile rank to the highest scale score associated with the $84^{\text {th }}$ percentile rank in the distribution.
- Exceeds: the lowest scale score associated with the $85^{\text {th }}$ percentile rank in the distribution to the highest obtainable scale score.


## CMAS READ Act Bonus Point

The cut point for the CMAS READ Act Bonus Point sub-indicator is always fixed at the particular CMAS scale point of 725.0, which is the Approaching cut point for CMAS. Analysis showed that this cut point was both ambitious and attainable for the population of students with previous identification as having had Significant Reading Deficiencies on READ Act assessments.

## Point Values

Below are the cut points for all Achievement sub-indicators for the traditional 2018 School/District Performance Framework. Note that the due to the norming methodology explained above that the cut points for each subindicator are different for each EMH (Elementary, Middle, High) level.

| Measure Name | CMAS English Language Arts Mean Scale Score |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating |  | Point Values |  | Pctile | Scale Score Range |  |  |
|  | All <br> Students | Disag <br> Groups | Rank <br> Range | Elementary | Middle | High |  |
| Exceeds | 8 | 1 | $85-99$ | $755.9-850$ | $757.3-850$ | NA |  |
| Meets | 6 | .75 | $50-84$ | $739.5-755.89$ | $740.1-757.29$ | NA |  |
| Approaching | 4 | .50 | $15-49$ | $722.3-739.49$ | $724.1-740.09$ | NA |  |
| Does Not Meet | 2 | .25 | $1-14$ | $650-722.29$ | $650-724.09$ | NA |  |


| Measure Name | CMAS Math Mean Scale Score |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | Point Values |  | Pctile Rank <br> Range | Scale Score Range |  |  |
|  | All Students | Disag Groups |  | Elementary | Middle | High |
| Exceeds | 8 | 1 | 85-99 | 751.9-850 | 746.2-850 | NA |
| Meets | 6 | . 75 | 50-84 | 734.3-751.89 | 731.2-746.19 | NA |
| Approaching | 4 | . 50 | 15-49 | 719.1-734.29 | 716.5-731.19 | NA |
| Does Not Meet | 2 | . 25 | 1-14 | 650-719.09 | 650-716.49 | NA |
| Measure Name | CMAS Science Mean Scale Score |  |  |  |  |  |
| Rating | Point Values |  | Pctile Rank Range | Scale Score Range |  |  |
|  | All <br> Students | Disag Groups |  | Elementary | Middle | High |
| Exceeds | 8 | 1 | 85-99 | 655.9-900 | 643.3-900 | 651.3-900 |
| Meets | 6 | . 75 | 50-84 | 601.7-655.89 | 591.4-643.29 | 609.2-651.29 |
| Approaching | 4 | . 50 | 15-49 | 531.9-601.69 | 527.7-591.39 | 564.4-609.19 |
| Does Not Meet | 2 | . 25 | 1-14 | 300-531.89 | 300-527.69 | 300-564.39 |
| Measure Name | CO PSAT - Evidence Based Reading \& Writing Mean Scale Score |  |  |  |  |  |
| Rating | Point Values |  | Pctile Rank Range | Scale Score Range |  |  |
|  | All Students | Disag Groups |  | HS: 1 Year |  | HS: Multi-Year |
| Exceeds | 8 | 1 | 85-99 | 505.0-760 |  | 509.4-760 |
| Meets | 6 | . 75 | 50-84 | 461.1-504.99 |  | 468.2-509.39 |
| Approaching | 4 | . 50 | 15-49 | 423.5-461.09 |  | 430.0-468.19 |
| Does Not Meet | 2 | . 25 | 1-14 | 120-423.49 |  | 120-429.99 |
| Measure Name | CO PSAT - Evidence Based Reading \& Writing Mean Scale Score |  |  |  |  |  |
| Rating | Point Values |  | Pctile Rank Range | Scale Score Range |  |  |
|  | All <br> Students | Disag Groups |  | HS: 1 Year |  | HS: Multi-Year |
| Exceeds | 8 | 1 | 85-99 | 491.0-760 |  | 496.1-760 |
| Meets | 6 | . 75 | 50-84 | 448.4-490.99 |  | 452.7-496.09 |
| Approaching | 4 | . 50 | 15-49 | 413.0-448.39 |  | 418.8-452.69 |
| Does Not Meet | 2 | . 25 | 1-14 | 120-412.99 |  | 120-418.79 |
| Measure Name | CMAS READ Act Bonus Point Mean Scale Score |  |  |  |  |  |
| Rating | Point Values |  |  | Scale Score Range |  |  |
|  | Students with previous READ designation |  |  | Elementary | Middle | High |
| Bonus point | 1 bonus point |  |  | 725.0-850 | NA | NA |
| NA | No bonus point |  |  | 650-724.99 | NA | NA |

## ACADEMIC GROWTH

## Norming/Baseline Methodology

## Median Growth Percentile Sub-indicators

The current sub-indicators on the School Performance Framework which utilize Median Growth Percentiles are as follows:

- CMAS English Language Arts Median Growth Percentile
- CMAS Math Median Growth Percentile
- Colorado PSAT/SAT Evidence Based Reading and Writing Median Growth Percentile
- Colorado PSAT/SAT Math Median Growth Percentile
- English Language Proficiency Median Growth Percentile

These measures are based on the Colorado Growth Model. Due to the nature of the Colorado Growth Model, which is normative by design, the distribution of scores state-wide will always be normal. Given the normal distribution of student growth percentiles produced by the Colorado Growth Model, this data does not need to be baselined or normed year over year. More information about the Colorado Growth Model is available here.

## ELP On Track

The English Language Proficiency On Track measure was first included on the School/District Performance Framework in 2018. In 2018, it was included for informational purposes only. One year of data was normed based on school percentile distributions, then applied to both the School Performance Framework and the District Performance Framework.

## Cut Point Methodology

Median Growth Percentile Sub-indicators
For all measures using Median Growth Percentiles (MGPs), the same cut points are used to determine subindicator ratings. These cut points are derived from the qualities of the Colorado Growth Model-that is, since the school level distribution of Student Growth Percentiles (SGPs) will also approach normality, these cut points do not need to be re-normed over time. Cut points are as follows:

- Does Not Meet: an MGP of 1 to an MGP of 34.5.
- Approaching: an MGP of 35 to an MGP of 49.5.
- Meets: an MGP of 50 to an MGP of 64.5.
- Exceeds: an MGP of 65 to an MGP of 99.


## ELP On Track

Cut points for the English Language Proficiency On Track sub-indicator are determined using the distributions of this sub-indicator by EMH level. The distribution of the percentage of English Learners on track by EMH level is taken across all eligible schools in the state of Colorado, where eligible schools are those which are not designated as Alternative Education Campuses and which have at least 20 valid scores on the ACCESS assessment for accountability use. The percentage of students on track for all eligible schools in the distribution are then rank-ordered. Based on the rank ordering, percentile ranks are developed for each distribution.

Cut points for each rating band (Exceeds, Meets, Approaching, and Does Not Meet) are derived from these percentile ranks. Cut points are created as follows:

- Does Not Meet: lowest possible percentage of students on track (0\%) to the highest percentage of students on track associated with the $14^{\text {th }}$ percentile rank in the distribution.
- Approaching: the lowest percentage of students on track associated with the $15^{\text {th }}$ percentile rank to the highest percentage of students on track associated with the $49^{t h}$ percentile rank in the distribution.
- Meets: the lowest percentage of students on track associated with the $50^{\text {th }}$ percentile rank to the highest percentage of students on track associated with the $84^{\text {th }}$ percentile rank in the distribution.
- Exceeds: the lowest percentage of students on track associated with the $85^{\text {th }}$ percentile rank in the distribution to the highest possible percentage of students on track (100\%).


## Point Values

Below are the cut points for all Growth sub-indicators for the traditional 2018 School/District Performance Framework.

| Measure Name | CMAS English Language Arts Median Growth Percentile |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Point Values |  | MGP Range |  |  |
| Rating | $\begin{gathered} \text { All } \\ \text { Students } \end{gathered}$ | Disag Groups | Elementary | Middle | High |
| Exceeds | 8 | 1 | 65-99 | 65-99 | NA |
| Meets | 6 | . 75 | 50-64.5 | 50-64.5 | NA |
| Approaching | 4 | . 50 | 35-49.5 | 35-49.5 | NA |
| Does Not Meet | 2 | . 25 | 1-34.5 | 1-34.5 | NA |
| Measure Name | CMAS Math Median Growth Percentile |  |  |  |  |
|  | Point Values |  | MGP Range |  |  |
| Rating | All Students | Disag Groups | Elementary | Middle | High |
| Exceeds | 8 | 1 | 65-99 | 65-99 | NA |
| Meets | 6 | . 75 | 50-64.5 | 50-64.5 | NA |
| Approaching | 4 | . 50 | 35-49.5 | 35-49.5 | NA |
| Does Not Meet | 2 | . 25 | 1-34.5 | 1-34.5 | NA |
| Measure Name | CO PSAT/SAT Evidence Based Reading and Writing Median Growth Percentile |  |  |  |  |
|  | Point Values |  | MGP Range |  |  |
| Rating |  | Disag Groups | Elementary | Middle | High |
| Exceeds | 8 | 1 | NA | NA | 65-99 |
| Meets | 6 | . 75 | NA | NA | 50-64.5 |
| Approaching | 4 | . 5 | NA | NA | 35-49.5 |
| Does Not Meet | 2 | . 25 | NA | NA | 1-34.5 |
| Measure Name | CO PSAT/SAT Math Median Growth Percentile |  |  |  |  |
|  | Point Values |  | MGP Range |  |  |
| Rating |  | Disag Groups | Elementary | Middle | High |
| Exceeds | 8 | 1 | NA | NA | 65-99 |


| Meets | 6 | . 75 | NA |  | NA | 50-64.5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Approaching | 4 | . 5 | NA |  | NA | 35-49.5 |
| Does Not Meet | 2 | . 25 | NA |  | NA | 1-34.5 |
| Measure Name | English Language Proficiency Median Growth Percentile |  |  |  |  |  |
| Rating | Point Values |  | MGP Range |  |  |  |
|  | English Learners |  | Elementary |  | Middle | High |
| Exceeds | 4 |  | 65-99 |  | 65-99 | 65-99 |
| Meets | 3 |  | 50-64.5 |  | 50-64.5 | 50-64.5 |
| Approaching | 2 |  | 35-49.5 |  | 35-49.5 | 35-49.5 |
| Does Not Meet | 1 |  | 1-34.5 |  | 1-34.5 | 1-34.5 |
| Measure Name | On Track to English Language Proficiency (informational only in 2018) |  |  |  |  |  |
| Rating | Point Values |  | Pctile <br> Rank <br> Range | Percentage of Students |  |  |
|  | English Learners |  |  | Elementary | Middle | High |
| Exceeds | NA* |  | 85-99 | 86.2-100\% | 73.1-100\% | 71.8-100\% |
| Meets | NA* |  | 50-84 | 77.5-86.19\% | 56.5-73.09\% | 52.0-71.79\% |
| Approaching | NA* |  | 15-49 | 68.8-77.49\% | 43.1-56.49\% | 39.7-51.99\% |
| Does Not Meet | NA* |  | 1-14 | 0-68.79\% | 0-43.09\% | 0-39.69\% |

*This measures was included in the 2018 School/District Performance Frameworks for informational purposes only. The cut point information reported here reflects how the informational measures as reported were displayed, but may not reflect the cut points used on the 2019 frameworks when the measure is included with points attached.

## POSTSECONDARY AND WORKFORCE READINESS

## Norming/Baseline Methodology

CO SAT
The CO SAT sub-indicators measure postsecondary readiness for grade 11 on Evidence Based Reading and Writing. CO SAT data was first included on the School/District Performance Framework in 2017. These measures have not been re-normed since their first inclusion on the frameworks in 2017.

## Dropout Rate and Graduation Rate

Graduation measures the percentage of students who graduated in the Anticipated Year of Graduation (AYG) cohort with the highest rate among the 4 year, 5 year, 6 year, and 7 year rates for a given academic year. Dropout Rate measures the percentage of students in grades 9-12 for schools and grades 7-12 for districts at a given school who dropped out of school in a given academic year. Both sub-indicators are considered measures of postsecondary achievement. Graduation Rate and Dropout Rate was first included on the School/District Performance Framework in 2010. These measures were re-baselined in 2016 after the accountability hold year.

## Matriculation Rate

Matriculation measures the percentage of high school graduates who enroll in a career and technical education program, community college, or four-year institution of higher education in the fall immediately following graduation. Matriculation was first included on the School/District Performance Framework in 2016. This measure has not been re-normed since its first inclusion on the frameworks in 2016.

## Cut Point Methodology

CO SAT
Cut points for the following sub-indicators are determined using the distributions of a given sub-indicator by for high schools by content area:

- CO SAT Evidence Based Reading Writing
- CO SAT Math

In all cases above, the distribution of mean scale scores on the measures above for a given content area is taken across all eligible schools in the state of Colorado, where eligible schools are those which are not designated as Alternative Education Campuses and which have at least 16 valid scores on the assessment in question for accountability use. The mean scale scores for all eligible schools in the distribution are then rank-ordered. Based on the rank ordering, percentile ranks are developed for each distribution. The cut points as established by the school distribution are then applied to both the School Performance Framework and the District Performance Framework.

Cut points for each rating band (Exceeds, Meets, Approaching, and Does Not Meet) are derived from these percentile ranks. Cut points are created as follows:

- Does Not Meet: lowest obtainable scale score to the highest scale score associated with the $14^{\text {th }}$ percentile rank in the distribution.
- Approaching: the lowest scale score associated with the $15^{\text {th }}$ percentile rank to the highest scale score associated with the $49^{\text {th }}$ percentile rank in the distribution.
- Meets: the lowest scale score associated with the $50^{\text {th }}$ percentile rank to the highest scale score associated with the $84^{\text {th }}$ percentile rank in the distribution.
- Exceeds: the lowest scale score associated with the $85^{\text {th }}$ percentile rank in the distribution to the highest obtainable scale score.


## Dropout Rate and Graduation Rate

Dropout and Graduation rate data cut points are determined through periodic analysis of state-wide trend data in school distributions. The cut points as established by the school distribution are then applied to both the School Performance Framework and the District Performance Framework.

## Matriculation Rate

Cut points for the matriculation rate sub-indicator is determined using the statewide school distribution of matriculation rates. The distribution of matriculation rates is taken across all eligible schools in the state of Colorado, where eligible schools are those which are not designated as Alternative Education Campuses and which have at least 16 students included in the matriculation rate. The matriculation rate for all eligible schools in the distribution are then rank-ordered. Based on the rank ordering, percentile ranks are developed for each distribution. The cut points as established by the school distribution are then applied to both the School Performance Framework and the District Performance Framework.

Cut points for each rating band (Exceeds, Meets, Approaching, and Does Not Meet) are derived from these percentile ranks. Cut points are created as follows:

- Does Not Meet: lowest possible matriculation rate (0\%) to the highest matriculation rate associated with the $14^{\text {th }}$ percentile rank in the distribution.
- Approaching: the lowest matriculation rate associated with the $15^{\text {th }}$ percentile rank to the highest matriculation rate associated with the $49^{\text {th }}$ percentile rank in the distribution.
- Meets: the lowest matriculation rate associated with the $50^{\text {th }}$ percentile rank to the highest matriculation rate associated with the $84^{\text {th }}$ percentile rank in the distribution.
- Exceeds: the lowest matriculation rate associated with the $85^{\text {th }}$ percentile rank in the distribution to the highest possible matriculation rate (100\%).


## Point Values

Below are the cut points for all Postsecondary and Workforce Readiness sub-indicators for the traditional 2018 School/District Performance Framework.

| Measure Name | CO SAT Evidence Based Reading and Writing - Mean Scale Score |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Rating | Point Values |  | Pctile <br> Rank <br> Range | Scale Score Range |
|  | All Students | Disag Groups |  | High |
| Exceeds | 2.0 | NA | 85-99 | 559.1-800 |
| Meets | 1.5 | NA | 50-84 | 509.2-559.09 |
| Approaching | 1.0 | NA | 15-49 | 462.3-509.19 |
| Does Not Meet | 0.5 | NA | 1-14 | 200-462.29 |
| Measure Name | CO SAT Math - Mean Scale Score |  |  |  |
| Rating | Point Values |  | Pctile Rank Range | Scale Score Range |
|  | All Students | Disag Groups |  | High |
| Exceeds | 2.0 | NA | 85-99 | 543.4-800 |
| Meets | 1.5 | NA | 50-84 | 491.7-543.39 |
| Approaching | 1.0 | NA | 15-49 | 446.5-491.69 |
| Does Not Meet | 0.5 | NA | 1-14 | 200-446.49 |
| Measure Name | Dropout Rate* |  |  |  |
| Rating | Point Values |  | Pctile <br> Rank <br> Range | Scale Score Range |
|  | All Students | Disag Groups |  | High |
| Exceeds | 4 | NA | 85-99 | .5\% - 0\% |
| Meets | 3 | NA | 50-84 | 2.0\% - .51\% |
| Approaching | 2 | NA | 15-49 | 5.0\% - 2.01\% |
| Does Not Meet | 1 | NA | 1-14 | 100\% - 5.01\% |
| Measure Name | Matriculation Rate* |  |  |  |
| Rating | Point Values |  | Pctile <br> Rank <br> Range | Scale Score Range |
|  | All <br> Students | Disag Groups |  | High |
| Exceeds | 2.0 | NA | 85-99 | 73.1\% - 100\% |
| Meets | 1.5 | NA | 50-84 | 59.3\%-73.09\% |
| Approaching | 1.0 | NA | 15-49 | 41.1\% - 59.29\% |
| Does Not Meet | 0.5 | NA | 1-14 | 0\% - 41.09\% |
| Measure Name Rating | Best-of Graduation Rate* |  |  |  |
|  | Point Values |  | Pctile Rank Range | Scale Score Range |
|  | All <br> Students | Disag Groups |  | High |


| Exceeds | 4 | 1 | $85-99$ | $95 \%-100 \%$ |
| :--- | :---: | :---: | :---: | :---: |
| Meets | 3 | .75 | $50-84$ | $85 \%-94.99 \%$ |
| Approaching | 2 | .50 | $15-49$ | $75 \%-84.99 \%$ |
| Does Not Meet | 1 | .25 | $1-14$ | $0 \%-74.99 \%$ |

*This measure uses data that is a year in arrears.

## 3. Determine Performance Indicator Ratings

Indicator ratings are determined by summing both the points earned and the points possible across all grade levels and all sub-indicators within a given indicator. The percentage of points earned in a given indicator is found, and this percentage is compared to the cut point bands for indicators to find the overall indicator rating. As with sub-indicators, indicators can receive a rating of Does Not Meet, Approaching, Meets, or Exceeds. This section will also cover how the cut points for indicators were developed.

## Baseline Information

The indicator cuts were initially derived in 2010, the first year of the School/District Performance Frameworks. The indicator cut points were established such that each band was the same span of possible points. The same cut point structure has been in place for the indicator cut points since then.

## Cut Point Information

Below are the cut points for all indicators for the traditional 2018 School/District Performance Framework.

| All Indicators (Academic Achievement, Academic Growth, Postsecondary and Workforce Readiness) |  |
| :--- | :---: |
| Rating | Indicator Percentage of Points Earned |
| Exceeds | $87.5 \%-100 \%$ |
| Meets | $62.5 \%-87.49 \%$ |
| Approaching | $37.5 \%-62.49 \%$ |
| Does Not Meet | $25.0 \%-37.49 \%$ |

## 4. Determine Overall Ratings

Overall ratings are determined by taking the weighted average of total points earned across each indicator. The weights by indicator are shown below:

| EMH Level | Indicator | Indicator Weight |
| :--- | :--- | :---: |
| Elementary | Academic Achievement | $40 \%$ |
|  | Academic Growth | $60 \%$ |
| Middle | Academic Achievement | $40 \%$ |
|  | Academic Growth | $60 \%$ |
| High/District | Academic Achievement | $30 \%$ |
|  | Academic Growth | $40 \%$ |
|  | Postsecondary and Workforce Readiness | $60 \%$ |

Once the weighted total points earned has been found for each indicator, then the total weighted points across the entire framework can be summed. The total points possible across the entire framework can also be summed, and the percentage of total points possible across the entire framework can be found. An example of how this information can be derived is below:

| Indicator | Indicator \% Points Earned | Indicator Weight | Weighted Points Earned |
| :---: | :---: | :---: | :---: |
| Academic Achievement | 78\% | 30 | 23.4 |
| Academic Growth | 56\% | 40 | 22.4 |
| Postsecondary and Workforce Readiness | 64\% | 30 | 19.2 |
|  |  |  |  |
| Total Overall Points Possible |  |  | $30+40+30=100$ |
| Total Overall Points Earned | $23.4+22.4+19.2=65$ |  |  |
| Percent Overall Points Earned | 65/100 = 65\% |  |  |

Once the overall percentage of points earned has been derived, the overall framework rating can be found.

## Assurances

## Safety and Finance

For purposes of monitoring a school district's or the institute's substantial and good-faith compliance with the provisions of this title and other statutory and regulatory requirements, CDE obtains assurances regarding budget and financial policies and procedures and financial reporting. Assurances regarding school safety are also obtained for each district on an annual basis. DPF/SPF ratings can be lowered if a district has found to be out of compliance for finance or safety reasons.

## Participation

School accredited on the traditional School/District Performance Framework are published with assessment participation rates included. In cases where a school or district's accountability participation rate is less than $95 \%$ in two or more content areas, the school or district's overall plan type will be lowered one rating.

## Assessment

Assessment assurances relate to districts/schools adhering to the standardized test administration and security procedures for the state assessments. DPF/SPF ratings can be lowered for failure to administer the assessments
appropriately. On an annual basis, the CDE Assessment unit provides assessment assurances for all schools and districts.

## Baseline Information

The initial cut points for the overall plan type assignments were derived by CDE by determining the proportions of schools which would fall into each plan type. These initial cut points were then approved by the State Board of Education. Approximately $15 \%$ of schools were intended to fall into the lower two plan types in order to identify schools needing supports for low performance. Specifically, 5\% of schools were intended to be identified as Turnaround, and 10\% of schools were intended to be identified as Priority Improvement.

The overall plan type cuts were initially derived in 2010, the first year of the School Performance Frameworks. These cuts were re-baselined in 2016 after the Accountability Hold Year in 2015; the proportions of schools in each plan type as of 2014 was used to establish the 2016 cuts. The 2016 overall plan type cuts are currently in use.

## Cut Point Information

Below are the cut points for overall plan type for the traditional 2018 School Performance Framework.

| Plan Type Assignment | Overall Percentage of Points Earned |
| :--- | :---: |
| Performance Plan | $53 \%-100 \%$ |
| Improvement Plan | $42 \%-52.99 \%$ |
| Priority Improvement Plan | $34 \%-41.99 \%$ |
| Turnaround Plan | $25 \%-33.99 \%$ |

The cut points for overall accreditation rating for the 2018 District Performance Framework are slightly different than those for schools. Districts have both slightly different cut points by rating category and an additional highlevel rating category: Accredited with Distinction.

| Plan Type Assignment | Overall Percentage of Points Earned |
| :--- | :---: |
| Accredited with Distinction | $74 \%-100 \%$ |
| Accredited | $56 \%-73.99 \%$ |
| Accredited with Improvement Plan | $44 \%-55.99 \%$ |
| Accredited with Priority Improvement Plan | $34 \%-43.99 \%$ |
| Accredited with Turnaround Plan | $25 \%-33.99 \%$ |

## Appendix A - File Summary

## Student-Level Data Files

The following files are referenced in Section 1 and are used to generate the summary calculations that appear in the performance frameworks. These files are distributed to districts by the ADA Unit and are not available to the public.

```
ADA_PFWK_ACH_STUDENT_DETAIL_2018
ADA_PFWK_GRO_STUDENT_DETAIL_2018
ADA_PFWK_PART_STUDENT_DETAIL_2018
ADA_PFWK_MATR_STUDENT_DETAIL_2018
```


## Summary Calculations and Ratings Data File

Each year, the ADA Unit publishes an Excel file that contains all of the summary calculations and ratings information that appears in the District and School Performance Frameworks. This file is posted on the Performance Frameworks Results page of the ADA website. For 2018, the file was called:

```
2018_DPF_SPF_PUBLIC_DATA_FINAL
```

The public data file includes a series of tabs. Each tab contains a data set that corresponds to a different section of the guidebook. The contents of each tab and its relationship to the different sections of this guidebook are described here:

INDICATOR DETAIL
Contains summary calculations generated by following the steps outlined in Section 1, along with ratings determined by following steps in Section 2.

INDICATOR_TOTALS_ALL_LEVELS
Contains total points earned and eligible for each performance indicator, along with corresponding ratings information determined by following the steps outlined in Section 3 of this guidebook.

FRAMEWORK_TOTALS_ALL_LEVELS
Contains total points earned and eligible on the framework overall, along with corresponding ratings information determined by following the steps outlined in Section 4 of this guidebook.

Appendix B - Sub-Indicator Summary

| 2018 Framework |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sub-Indicat | tor Ratings |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Elementary (grades) |  |  |  |  | Middle (grades) |  |  |  |  |  |  |  | Metric | Does Not Meet (<15th percentile) earns a quarter of points | Approaching (15th $\leq x<50$ th) earns half of points | Meets(50th $\leq x<85$ th)earns threequarters of points | Exceeds ( $\geq 85$ th percentile) earns all points | $\begin{gathered} \text { All } \\ \text { Students } \end{gathered}$ | Disaggregated Student Groups |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  |  | 11 | 12 |  |  |  |  |  |  | EL | FRPL | Minority | Disabilities |
| Achievement |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $n \geq 16$ | $n \geq 16$ | $n \geq 16$ | $n \geq 16$ | $n \geq 16$ |
| CMAS ELA <br> [Score Range: 650-850] |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  | Mean Scale Score | $\begin{aligned} & <722.3 \\ & <724.1 \end{aligned}$ | $\begin{aligned} & 722.3 \leq x<739.5 \\ & 724.1 \leq x<740.1 \end{aligned}$ | $\begin{aligned} & 739.5 \leq x<755.9 \\ & 740.1 \leq x<757.3 \end{aligned}$ | $\begin{aligned} & \geq 755.9 \\ & \geq 757.3 \end{aligned}$ | - 8 p | /1 | $]^{11 p t}$ | _-11pt | $\sim^{11 p t}$ |
| CMAS Math <br> [Score Range: 650-850] |  |  |  | $\checkmark$ |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & <749.1 \\ & <716.5 \\ & \hline \end{aligned}$ | $\begin{aligned} & 719.1 \leq x<734.3 \\ & 716.5 \leq x<731.2 \\ & \hline \end{aligned}$ | $\begin{aligned} & 734.3 \leq x<751.9 \\ & 731.2 \leq x<746.2 \\ & \hline \end{aligned}$ | $\begin{aligned} & \geq 751.9 \\ & \geq 746.2 \end{aligned}$ | _- ${ }^{\text {8pts }}$ | $]^{11 p t}$ | - 11 pt | _-11pt | _ $/ 1 \mathrm{pt}$ |
| CMAS Science [Score Range: 300-900] |  |  |  |  | $\checkmark$ |  |  | $\checkmark$ | $V$ |  |  |  |  |  | $\begin{aligned} & <531.9 \\ & <527.7 \\ & <564.4 \end{aligned}$ | $\begin{aligned} 531.9 & \leq x<601.7 \\ 527.7 & \leq x<591.4 \\ 564.4 & \leq x<609.2 \end{aligned}$ | $\begin{aligned} & 601.7 \leq x<655.9 \\ & 591.4 \leq x<643.3 \\ & 609.2 \leq x<651.3 \end{aligned}$ | $\begin{aligned} & \geq 655.9 \\ & \geq 643.3 \\ & \geq 651.3 \end{aligned}$ | _- ${ }^{18 \mathrm{pts}}$ | _11pt | _/1pt | _-11pt | _-/1pt |
| PSAT EBRW <br> [PSAT9 Score Range: 120-720] [PSAT10 Score Range: 160-760] |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} <423.5 \\ (<430.0) \end{gathered}$ | $\begin{gathered} 423.5 \leq x<461.1 \\ (430.0 \leq x<468.4) \end{gathered}$ | $\begin{gathered} 461.1 \leq x<505.0 \\ (468.4 \leq x<509.4) \end{gathered}$ | $\begin{aligned} & \geq 505.0 \\ & \geq 505.0) \end{aligned}$ | _- ${ }^{18 p t s}$ | $]^{11 p t}$ | - 11 pt | _-11pt | _ $/ 1 \mathrm{pt}$ |
| PSAT Math [PSAT9 Score Range: 120-720] [PSAT10 Score Range: 160-760] |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & <413.0 \\ & (<419.8) \end{aligned}$ | $\begin{gathered} 413.0 \leq x<448.4 \\ (419.8 \leq x<452.7) \end{gathered}$ | $\begin{aligned} & 448.4 \leq x<491.0 \\ & (452.7 \leq x<496.2) \end{aligned}$ | $\begin{aligned} & \geq 491.0 \\ & \geq 496.2) \end{aligned}$ | _/8pts | _-11pt | _-1pt | _-11pt | _-/1pt |
| READ Act Bonus |  |  | * | * |  |  |  |  |  |  |  |  |  |  | N/A | N/A | N/A | N/A | 1 bonus | N/A | N/A | N/A | N/A |
| Growth |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $n \geq 20$ | $n \geq 20$ | $n \geq 20$ | $n \geq 20$ | $n \geq 20$ |
| CMAS ELA |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  | Median <br> Growth Percentile | < 35th percentile | 35th $\leq x<50$ th | 50th $\leq x<65$ th | $\geq 65$ th percentile | /8pts | /1pt | /1pt | /1pt | /1pt |
| CMAS Math |  |  |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  |  |  |  |  | /8pts | /1pt | /1pt | /1pt | /1pt |
| PSAT/SAT EBRW |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | /8pts | /1pt | /1pt | /1pt | /1pt |
| PSAT/SAT Math |  |  |  |  |  |  |  |  | $\checkmark$ |  |  | $\checkmark$ |  |  |  |  |  |  | /8pts | /1pt | /1pt | /1pt | /1pt |
| WIDA ACCESS |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |  |  |  |  |  | N/A | 14 pts | N/A | N/A | N/A |
| Postsecondary \& Workforce Readiness |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SAT EBRW [Score Range: 200-800] |  |  |  |  |  |  |  |  |  |  |  | $\checkmark$ |  | Mean ScaleScore Score | <462.3 | $462.3 \leq x<509.2$ | $509.2 \leq x<559.1$ | $\geq 559.1$ | /2pts | N/A | N/A | N/A | N/A |
| SAT Math [Score Range: 200-800] |  |  |  |  |  |  |  |  |  |  |  | $\checkmark$ |  |  | < 446.5 | $446.5 \leq x<491.7$ | $491.7 \leq x<543.4$ | $\geq 543.4$ | 12pts | N/A | N/A | N/A | N/A |
| Dropout |  |  |  |  |  |  | * | * |  |  |  | * | * | Rate | > 5.0\% | $5.0 \% \geq x>2.0 \%$ | $2.0 \% \geq x>0.5 \%$ | $\leq 0.5 \%$ | 14 pts | N/A | N/A | N/A | N/A |
| Matriculation |  |  |  |  |  |  |  |  | * |  | * | * | * |  | < 41.1\% | $41.1 \% \leq x<59.3 \%$ | $59.3 \% \leq x<73.1 \%$ | $\geq 73.1 \%$ | /2pts | N/A | N/A | N/A | N/A |
| Graduation |  |  |  |  |  |  |  |  |  |  |  | * | * |  | < 75.0\% | $75.0 \% \leq x<85.0 \%$ | $85.0 \% \leq x<95.0 \%$ | $\geq 95.0 \%$ | 14 pts | /1pt | /1pt | /1pt | /1pt |
| Indicates assessment administered in this grade impact metric. <br> * Indicates students in this grade impact performance metric. |  |  |  |  |  |  |  |  |  |  |  |  |  | Notes: |  |  |  |  |  |  |  |  |  |
| 2018 Framework | E |  |  |  | 5 | M |  |  | H |  |  |  |  | Achievement, PSAT: Mulit-year framework rating cut scores are provided in parenthesis.Achievement, READ Act Bonus: For students previously identified for READ Plan, 1 pt earned if CMAS ELA mean scale score $\geq 725$. |  |  |  |  |  |  |  |  |  |
| Participation |  |  |  |  |  |  |  |  |  |  |  |  |  | PWR, Dropout: This includes grades 9-12 for high school and grades 7-12 for district metric. (One year lag in this metric). PWR, Matriculation: This includes matriculation to a 2 -year, 4 -year or CTE institution. (One year lag in this metric). PWR, Graduation: This is a multi-year graduation rate (4, 5, 6, 7 year) for the prior year cohort of graduates. Alternative assessments are included in calculation of the above metrics. |  |  |  |  |  |  |  |  |  |
| ELA \& EBRW (CMAS \& PSAT) Math (CMAS \& PSAT) Science (CMAS) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Appendix C - Performance Indicator Summary

| Performance Indicator Ratings |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | total points earned/ total points eligible $=$ | Does Not Meet | Approaching | Meets | Exceeds |  | apply weighting factor to total points earned | total weighted points earned/ total points assigned = |
| Achievement |  |  |  |  |  |  |  |  |  |
| Mean Scale Score | CMAS ELA |  | $\begin{gathered} <37.5 \% \text { of } \\ \text { points } \end{gathered}$ | $\begin{gathered} 37.5 \% \leq \\ x \\ <62.5 \% \end{gathered}$ | $\begin{gathered} 62.5 \% \leq \\ x \\ <87.5 \% \end{gathered}$ | $\begin{aligned} & \geq 87.5 \% \text { of } \\ & \text { points } \end{aligned}$ |  | multiply 40 points by \% of points earned | / 40 points |
|  | CMAS Math |  |  |  |  |  |  |  |  |
|  | CMAS Science | $\qquad$ / 36 points = |  |  |  |  |  |  |  |
|  | PSAT EBRW |  |  |  |  |  |  | multiply 30 points by \% of points earned | 30 points |
|  | PSAT Math |  |  |  |  |  |  |  |  |
|  | Read Act Bonus |  |  |  |  |  |  |  |  |
| Growth |  |  |  |  |  |  |  |  |  |
| Median Growth Percentile | CMAS ELA | $\qquad$ / 28 points =$\qquad$ \% of points earned | $\begin{gathered} <37.5 \% \text { of } \\ \text { points } \end{gathered}$ | $\begin{gathered} 37.5 \% \leq \\ x \\ <62.5 \% \end{gathered}$ | $\begin{gathered} 62.5 \% \leq \\ x \\ <87.5 \% \end{gathered}$ | $\begin{aligned} & \geq 87.5 \% \text { of } \\ & \text { points } \end{aligned}$ |  | multiply 60 points by \% of points earned | $/ 60$ points |
|  | CMAS Math |  |  |  |  |  |  |  |  |
|  | PSAT/SAT EBRW |  |  |  |  |  |  | multiply 40 points by \% of points earned | / 40 points |
|  | PSAT/SAT Math |  |  |  |  |  |  |  |  |
|  | ACCESS |  |  |  |  |  |  |  |  |
| Postsecondary \& Workforce Readiness |  |  |  |  |  |  |  |  |  |
| Mean Scale Score | SAT EBRW | / 18 points = \% of points earned | $\begin{gathered} <37.5 \% \text { of } \\ \text { points } \end{gathered}$ | $\begin{gathered} 37.5 \% \leq \\ x \\ <62.5 \% \end{gathered}$ | $\begin{gathered} 62.5 \% \leq \\ x \\ <87.5 \% \end{gathered}$ | $\begin{aligned} & \geq 87.5 \% \text { of } \\ & \text { points } \end{aligned}$ | $\begin{aligned} & \sum_{\underset{U}{u}}^{=} \\ & \underset{y}{\text { P}} \end{aligned}$ | N/A | N/A |
|  | SAT Math |  |  |  |  |  |  |  |  |
| Rate (\%) | Dropout |  |  |  |  |  |  | multiply 30 points by $\%$ of points earned | 130 points |
|  | Matriculation |  |  |  |  |  |  |  |  |
|  | Graduation |  |  |  |  |  |  |  |  |


|  |  | School Ratings |
| :--- | :--- | :--- | :--- | :--- | :--- |


|  | District Ratings |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Accredited with Turnaround Plan | Accredited with Priority Improvement Plan | Accredited with Improvement Plan | Accredited | Accredited with Distinction |
| $\begin{aligned} & \quad / 30 \text { points }++\quad 140 \text { points }+\_130 \text { points }= \\ &=\_\quad 100 \text { points } \\ & \% \text { of points } \end{aligned}$ | $\begin{gathered} 25.0 \% \leq \\ x \\ <34.0 \% \\ \text { of points } \end{gathered}$ | $\begin{gathered} 34.0 \% \leq \\ x \\ <44.0 \% \\ \text { of points } \end{gathered}$ | $\begin{gathered} 44.0 \% \leq \\ x \\ <56.0 \% \\ \text { of points } \end{gathered}$ | $\begin{gathered} 56.0 \% \leq \\ x \\ <74.0 \% \\ \text { of points } \end{gathered}$ | $\geq 74.0 \%$ <br> of points |

