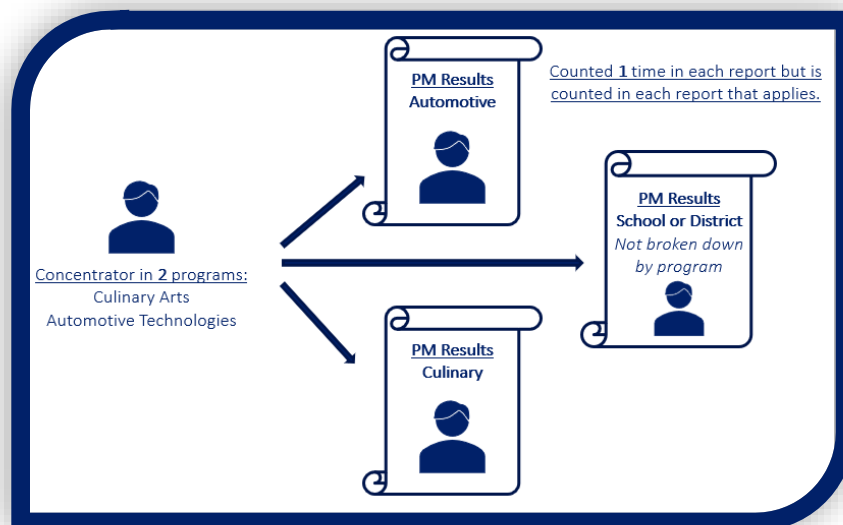This document delineates the business rules and calculation procedures for the Strengthening Career and Technical Education for the 21st Century Act ("Perkins V") performance measures as required by section 113(b)(2)(A) of that act. At the secondary level, there are eight Perkins V performance measures that are calculated for each participating LEA. All performance measures are calculated using data reported to the Arizona Department of Education ("Department") through the CTE Data Portal, supplemented by data reported to the Department through AzEDS. Each measure has an associated state determined level of performance ("SDLP") which is a performance level/target determined by the State and approved by the U.S. Secretary of Education through office of career, technical, and adult education ("OCATE") at the United States Department of Education. The intent of performance measurement is continuous improvement, and as such, SDLP increases on an annual basis for each measure.

ADE will calculate the performance of each sub-recipient using student data aggregated into LEA-level, individual school-level, and individual program-level reports. All performance measures are expressed as rates (a numerator value divided by a denominator value).

UNDUPLICATIVE VS DUPLICATIVE DATA

All eligible concentrators are considered when calculating performance measures results, but students are deduplicated, meaning that students count only once per report. Students can concentrate in multiple programs and are included in the results for each program, but if multiple programs are viewed simultaneously (within the same numerator/denominator value and result), the student is only counted once, regardless of number of CTE concentrations.

For example, consider a student that concentrates in two CTE programs: Culinary Arts and Automotive Technologies. In this example, the student concentrates in both programs at the same school. When viewing performance measures reports for the school as a whole, this student would be counted only once in the numerator and in the denominator for each applicable performance measure. However, when viewing performance measures results for the Culinary Arts program and for the Automotive Technologies program separately, the student would be counted once in each report as well.

There are three ways that performance measure data can be grouped and viewed by schools/districts:

By Program	By School	By District
Students are counted once in each program in which they are a concentrator <u>and</u> meet the requirements of each performance measure. **Example:** Avery is a concentrator in Culinary Arts and in Mechanical Drafting. John, the CTE Director, is reviewing the performance results for his school's programs. Given that Avery meets all of the other requirements for each measure, they would be counted in the performance measure results for Culinary Arts AND for Mechanical Drafting.	Students are counted once, regardless of the number of programs in which they concentrate. Students must meet <u>all</u> of the requirements of each measure to be included in that measure. **Example:** Jesse is a concentrator at Hillside High School in Film and TV Production and in Fashion Design and Merchandising. Susan, the CTE Director, is viewing performance results for Hillside High School overall. Given that Jesse meets all of the other requirements for each measure, they would be counted once in the performance measure results for Hillside High School.	Students are counted once, regardless of number of schools at which they have records and regardless of the number of programs in which they concentrate. Students must meet <u>all</u> of the requirements of each measure to be included. **Example:** Alex is a concentrator at Hillside High School and at their local Career and Technical Education District. Susan, the CTE Director at Hillside High School, is viewing performance measures results for her school and Hannah, the CTE Director at the local CTED, is viewing performance measures results for her school/CTED. Given that Alex meets all of the other requirements for each measure, they would be counted once in the performance measures results for Hillside HighSchool and once in the results for the local CTED.

Note: Only once CTED (East Valley Institute of Technology) is subject to Perkins-required performance measures.

PERFORMANCE MEASURE CALCULATION PROCESS

All performance measures follow the same general calculation process. First, data is grouped depending on how the results will be viewed (state-, district-, school-, or program-level). Only records in the selected grouping will be used to calculate the results. After data is grouped, additional filters are applied specific to each measure. Each record must pass all of the requirements to be included in the calculation. Additional filters include concentrator status, specific exit codes, cohort years, etc. After the dataset is filtered, the students within the dataset are deduplicated using the student's unique identifier (SUID). The calculation counts only the unique SUIDs that appear in the filtered dataset (meaning students are counted only once regardless of the number of times in which they appear in the filtered dataset). Lastly, the results are displayed on the performance measure reports in the CTE Data Portal.

PERKINS PERFORMANCE MEASURE CALCULATION RULES

For each performance measure, current year (reporting year) Participant/Concentrator records that meet all of the requirements for the measure will be included in the calculation. Records must pass all of the requirements to be included in the measure.

1S1 GRADUATION RATE

Numerator: Count all participant/concentrator records in the reporting year where:
1. The record is a concentrator record.
2. The student is in the reporting year cohort (student's cohort year is equal to the reporting year).
3. Student graduated in the reporting year (CTE Data Portal Enrollment Status is "GR")

Denominator: Count all participant/concentrator records in the reporting year where:
1. The record is a concentrator record.
2. The student is in the reporting year cohort (student's cohort year is equal to the reporting year).

2S1 READING/LANGUAGE ARTS PROFICIENCY

Numerator: Count all participant/concentrator records in the reporting year where:
1. The record is a concentrator record.
2. The student is in the reporting year cohort (student's cohort year is equal to the reporting year).
3. Student took a state reading assessment and earned a score of Met or Exceeds.
4. The student left school in the reporting year (CTE Data Portal Enrollment Status is "GR" or "LS").

Denominator: Count all participant/concentrator records in the reporting year where:
1. The record is a concentrator record.
2. The student is in the reporting year cohort (student's cohort year is equal to the reporting year).
3. Student took a state reading assessment (any score).
4. The student left school in the reporting year (CTE Data Portal Enrollment Status is "GR" or "LS").

2S2 MATHEMATICS PROFICIENCY

Numerator: Count all participant/concentrator records in the reporting year where:
1. The record is a concentrator record.
2. The student is in the reporting year cohort (student's cohort year is equal to the reporting year).
3. Student took a state mathematics assessment and earned a score of Met or Exceeds.
4. The student left school in the reporting year (CTE Data Portal Enrollment Status is "GR" or "LS").

Denominator: Count all participant/concentrator records in the reporting year where:
1. The record is a concentrator record.
2. The student is in the reporting year cohort (student's cohort year is equal to the reporting year).
3. Student took a state mathematics assessment (any score).
4. The student left school in the reporting year (CTE Data Portal Enrollment Status is "GR" or "LS").

2S3 SCIENCE PROFICIENCY

Numerator: Count all participant/concentrator records in the reporting year where:
1. The record is a concentrator record.
2. The student is in the reporting year cohort (student's cohort year is equal to the reporting year).
3. Student took a state science assessment and earned a score of Met or Exceeds.
4. The student left school in the reporting year (CTE Data Portal Enrollment Status is "GR" or "LS").

Denominator: Count all participant/concentrator records in the reporting year where:
1. The record is a concentrator record.
2. The student is in the reporting year cohort (student's cohort year is equal to the reporting year).
3. Student took a state science assessment (any score).
4. The student left school in the reporting year (CTE Data Portal Enrollment Status is "GR" or "LS").

3S1 PLACEMENT

Numerator: Count all participant/concentrator records in the reporting year (Placement reporting year is one year prior to the reporting year for all other measures) where:
1. The record is a concentrator record.
2. The student has a corresponding placement survey indicating that they were placed in the second quarter after they finished high school. The Placement Survey must correspond to the concentrator record (by program).
3. The student left school in the reporting year (CTE Data Portal Enrollment Status is "GR" or "LS").

Denominator: Count all participant/concentrator records in the reporting year (Placement reporting year is one year prior to the reporting year for all other measures) where:
1. The record is a concentrator record.
2. The student left school in the reporting year (CTE Data Portal Enrollment Status is "GR" or "LS").

4S1 NONTRADITIONAL

Numerator: Count all participant/concentrator records in the reporting year where:
1. The record is a concentrator record.
2. The record is for a program that has been designated with a nontraditional gender.
3. The student's gender matches the nontraditional gender for the program.
4. The student is enrolled in the reporting year in the same program (the same program in which they are a concentrator).

Denominator: Count all participant/concentrator records in the reporting year where:
1. The record is a concentrator record.
2. The record is for a program that has been designated with a nontraditional gender.
3. The student is enrolled in the reporting year in the same program (the same program in which they are a concentrator).

5S1 INDUSTRY RECOGNIZED CREDENTIALS

Numerator: Count all participant/concentrator records in the reporting year where:
1. The record is a concentrator record.
2. The student graduated in the reporting year (CTE Data Portal Enrollment Status is "GR").
3. The student earned an industry recognized credential for their program (the same program in which they are a concentrator).

Denominator: Count all participant/concentrator records in the reporting year where:
1. The record is a concentrator record.
2. The student graduated in the reporting year (CTE Data Portal Enrollment Status is "GR").
3. The student attempted to earn (including both Pass and Did Not Pass attempts) an industry recognized credential for their program (the same program in which they are a concentrator).

5S4 TECHNICAL SKILLS ASSESSMENT

Numerator: Count all participant/concentrator records in the reporting year where:
1. The record is a concentrator record.
2. The student graduated in the reporting year (CTE Data Portal Enrollment Status is GR").
3. The student took and passed the technical skills assessment for their program (the same program in which they are a concentrator).

Denominator: Count all participant/concentrator records in the reporting year where:
1. The record is a concentrator record.
2. The student graduated in the reporting year (CTE Data Portal Enrollment Status is "GR")
3. The student took the technical skills assessment for their program (the same program in which they are a concentrator).

DEFINITIONS

CTED
Career and Technical Education District; a specialized school district that offers approved career and technical education courses to other school districts ("member districts") on central, satellite, or community college campuses).

SUID
Student Unique Identifier; a state-issued ID number unique to each student used to track the student's movement through the state education system.