Postsecondary Career and Technical Education Data Collection and Reporting Specifications and Procedures Manual

2020-2021

Maryland State Department of Education
Division of Career and College Readiness
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Maryland State Department of Education

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Document Control

Document Information

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Title:	2021 Postsecondary Career and Technical Education Data Collection and Reporting Specifications and Procedures Manual
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Document History

Document Version	Date	Summary of Change
Draft Version 1.0	05/20/2021	Creation
Final Version 1.1	06/30/2021	Data Element 33: Course or Sequence Date Completed changed to Sequence Date Completed Data Element 34: Sequence Start Date added Data Element 35: Date Conferred added. Retention of a postsecondary CTE student is now defined as "A student still enrolled in any Maryland College or University in a for-credit program or noncredit workforce training program as denoted by appearing in the subsequent Maryland Higher Education Commission (MHEC) Fall Enrollment Information System file or Noncredit Workforce Completers System file."
Updated Version 1.2	07/09/2021	Additional guidance provided in CTE Enrollment and Outcome File Layout for reporting Data Element #14 (Occupational Credit Hours) and #26 (HEGIS Code) for non-credit programs.

Purpose

This data collection manual was produced by the Maryland State Department of Education (MSDE) Division of Career and College Readiness (DCCR). It contains technical instructions to assist in the annual collection and submission of Postsecondary Career and Technical Education (CTE). This manual is to be used in coordination with additional relevant guidance provided by the Director of Data and Accountability for Career Programs for the DCCR. The intended audiences for the manual are Postsecondary Perkins Grant Administrators and the data personnel responsible for the collection of CTE data, as well as the data personnel who prepare and format CTE data for submission.

Postsecondary CTE enrollment and outcome data collected by MSDE captures student-level information that includes student demographics, CTE program enrollments, student performance on Maryland Technical Skills Assessments (TSA), the tally of cumulative CTE program credits, and other CTE accountability reporting related information. Postsecondary CTE enrollment and outcome data are submitted via the CTE Enrollment and Outcome file and the Technical Skills Assessment File (Appendix E).

Postsecondary CTE enrollment and outcome data collections are used to support state and federal reporting requirements, including:
- Strengthening Career and Technical Education for the 21st Century Act (Perkins V)
- Pathways in Technology Early College High (P–TECH) School Act of 2017
- Career Youth and Public Sector Apprenticeship Act of 2018
- Career Preparation Expansion Act
- Governor's P-20 Leadership Council of Maryland

At the State level, collected postsecondary CTE enrollment and outcome data are used to support:
- Determining eligibility for federal incentives funds;
- Communicating overall CTE enrollment and student performance to key stakeholders;
- Providing community colleges with the data needed to complete CTE Comprehensive Need Assessments;
- Reviewing Perkins plans for alignment of resources and opportunities for improvement;
- Providing Local Advisory Councils (LAC) and Program Advisory Committees (PAC) with enrollment and performance data to evaluate programs;
- Monitoring each community college's system of CTE and identifying programs in most need of support; and
- Establishing CTE performance target levels as required by Perkins V.

Relevant State and Federal Requirements

The CTE data submitted through the CTE Enrollment and Outcome File Technical Skills Assessment File are authorized by:

State Laws

- Pathways in Technology Early College High (P–TECH) School Act of 2017
- Career Youth and Public Sector Apprenticeship Act of 2018

- [Career Preparation Expansion Act](#)

Federal Laws

- [Strengthening Career and Technical Education for the 21st Century Act (PL 115-224, Enacted July 31, 2018)](#) (Perkins V)

Subsequent Reporting

Data submitted through postsecondary CTE data collections are published on or in:

MDCTEDATA.ORG

The [MDCTEDATA.ORG](#) website is a collection of data compiled on an annual basis to provide information on Career and Technical Education enrollment and outcomes to all education stakeholders; provide information to support program improvement efforts; and to provide accountability at the state and college level for reporting educational progress.

Contact Information

For questions regarding this document and other issues related to CTE Data and Accountability, please contact:

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Data Collection Process

Each community college recipient of Perkins funds must collect and annually report student-level enrollment and outcome data, including race, ethnicity, gender, and special population demographics, to MSDE. Under section 113 of the [Strengthening Career and Technical Education for the 21st Century Act (PL 115-224, Enacted July 31, 2018)](#) (Perkins V), MSDE is required to submit enrollment and performance data on all CTE participants and CTE concentrators disaggregated by gender, race, and special population to the Federal government. Postsecondary CTE enrollment and outcome data reporting requires the submission of the CTE Enrollment and Outcome File and the Technical Skills Assessment File.

Each community college must submit CTE enrollment data for all students designated as CTE participants, i.e., an individual who completes at least one course in a state-approved CTE program of study, whether in a for-credit or non-credit program. All reported programs of study must be approved by the Maryland Higher Education Commission (MHEC) and the MSDE, Division of Career and College Readiness. Additionally, each community college must submit CTE outcome data for all students, including cumulative credits completed in CTE programs of study and TSA attainment.

The data collected are used to calculate the following Core Indicators of Performance ([Appendix D](#)) which are used to assess the effectiveness of postsecondary Perkins recipients and the State in achieving progress in CTE:

> **1P1:** Postsecondary Retention and Placement;
> **2P1:** Credential, Certificate, or Degree; and
> **3P1:** Non-traditional program enrollment.
> **4P1:** Industry-Recognized Credential Attainment
> **5P1:** Certificate or Degree Completion

Maryland's postsecondary CTE enrollment and outcome data are submitted via the MSDE Secure Transport Server (***https://sst.msde.maryland.gov***) in an Excel spreadsheet (.xlsx) or a flat-file (.csv or .txt). All submissions must adhere to the specifications and requirements that appear in both the CTE Enrollment and Outcome File Layout and Technical Skills Assessment File ([Appendix E](#)).

Due Date for File Submission
Table 1. Deadline for submitting CTE data elements via the CTE Enrollment and Outcome File to DCCR.

Date	Activity
October 15, 2021	Deadline to submit CTE enrollment and outcome data via the CTE Enrollment and Outcome File to DCCR.
October 15, 2021	Deadline to submit TSA data via the Technical Skills Assessment File to DCCR.

Changes from the Prior Years

- Starting in the 2020-2021 academic year, select non-credit programs have been approved as CTE programs of study. These programs will be required to report all students enrolled in their program and any related outcomes (e.g., course or sequence completion, Technical Skill Assessment attempt, or attainment).
- Four new variables have been added to the CTE Enrollment and Outcome File for these programs.
    - Non-Credit Program
    - Sequence Date Completed
    - Sequence Start Date
    - Date Conferred
- Submission of the Technical Skills Assessment File will be required for the 2020-2021 academic year, including Technical Skills Assessment (TSA) information and codes for students attempting and/or passing TSAs after exiting the prior year or for students enrolled in 2020-2021 academic year.

- Retention of a postsecondary CTE student is now defined as "A student still enrolled in any Maryland College or University in a for-credit program or noncredit workforce training program as denoted by appearing in the subsequent Maryland Higher Education Commission (MHEC) Fall Enrollment Information System file or Noncredit Workforce Completers System file."
- New Perkins V Core Indicators of Performance (Appendix D).

Technical Assistance

Technical assistance on data quality issues or the analysis and use of CTE data for program improvement is always available from the Division of Career and College Readiness.

Such technical assistance includes:

- Customized troubleshooting of data file construction and submission;
- Large or small group interpretation of performance results; and
- Presentation of custom performance reports to local stakeholder groups.

To access any of these technical assistance resources, please contact your Career Programs and Grants Specialist, Coordinator of Finance and Legislation for Career Programs (Appendix F), Director of Data and Accountability for Career Programs, or Acting Coordinator of Data and Accountability.

Career Programs and Grants Specialists:
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Things to Consider When Collecting and Submitting CTE Data

College Identification Number

The Community College Identification Number is the number assigned to the institution by the DCCR for identification purposes. To ensure that data are reported accurately, this number must appear on all records submitted to DCCR.

Table 2. List of College Identification Numbers for Maryland Community Colleges

College ID	Community College Name
010042	Allegany College of Maryland
020063	Anne Arundel Community College
030146	Community College of Baltimore County
070060	Cecil College
080052	College of Southern Maryland
100065	Frederick Community College
110070	Garrett College
120302	Harford Community College
130077	Howard Community College
150057	Montgomery Community College
160075	Prince George's Community College
170076	Chesapeake College
210053	Hagerstown Community College
220090	Wor-Wic Community College
300048	Baltimore City Community College

Classification for Instruction Programs (CIP) Code

The MSDE currently collects CIP data based on the 2020 version of CIP codes. The Classification of Instructional Programs (CIP) is a taxonomic coding scheme of instructional programs. Its purpose is to facilitate the organization, collection, and reporting of fields of study and program completions. The CIP was initially developed in 1980 by the National Center for Education Statistics (NCES) in the U.S. Department of Education. The six-digit CIP code represents specific instructional programs. CTE outcome data (TSA attainment and cumulative CTE program credit completion) is only captured for students reported with an MSDE-approved CTE CIP code (Appendix B).

Social Security Number

A Social Security Number is required for each student entry. If the student does not have a social security number, enter the unique 9-digit number used by the college to identify this student. CTE enrollment and outcome data (TSA attainment and cumulative CTE program credit completion) are only captured for students reported with a unique student identifier. The unique student identifier is also how the DCCR confirms the student's degree status, retention status, and TSA attainment.

Technical Skill Assessment (TSA) Code

Technical Skill Assessments (TSA) are a measure of a CTE concentrator's technical skill attainment. In Maryland, these TSAs are uniquely identified by the six-digit TSA code (Appendix C). TSA data can only be captured for students with an MSDE-approved TSA code.

Gender

While some institutions may choose to use different gender assignments and coding systems, the Federal government mandates reporting by only male/female assignments. CTE enrollment and outcome data (TSA attainment and cumulative CTE program credit completion) are only captured for students reported as male or female.

Guidance for Submitting CTE Data

This manual addresses the specifications and procedures in reporting the CTE Enrollment and Outcome File, the Technical Skills Assessment File, and the specific CTE data elements contained in both files.

General Requirements

- It is the community college's responsibility to ensure the validity of the data reported to the DCCR. The community college must retain all supporting documentation to verify the information reported to the DCCR. Data reported in the CTE Enrollment and Outcome File and Technical Skills Assessment File is subject to audit.

CTE Enrollment and Outcome File

- Every student who was enrolled in a state-approved CTE program of study in either Fall, Winter, Summer, or Spring for the 2020-2021 academic year must be reported in the CTE Enrollment and Outcome File.
- **The file must contain only one record per student.** It is understood that some students may be enrolled under more than one CIP or may change from one program to another within the same academic year. When this happens, the following hierarchical rubric is recommended to determine the program for which the student should be reported:
    1. Program in which student graduated
    2. Program in which student attained Concentrator status and passed TSA
    3. Program in which student attained Concentrator status and did not pass TSA
    4. Program in which student accumulated the most credits
    5. Last program student declared as major.

Technical Skills Assessments File

- Every student who took and/or passed a TSA in either Fall, Winter, Summer, or Spring for the 2020-2021 academic year must be reported in the TSA file. In addition, all students **exiting in the 2019-2020 academic year** who reported having attained a TSA in the academic year 2020-2021 must be reported in the TSA file.
- **The file must contain only one record per student.** The results for up to four TSAs can be reported for each student. If a student has attempted more than four TSAs, prioritize choosing the TSAs where the student has an attained result.
- Only **"Postsecondary Eligible"** TSAs should be reported for postsecondary CTE students. Please view **the master TSA Table** or view the TSA list at the **TSA List Dashboard** for the list of "Postsecondary Eligible" TSAs.

Data Elements Required in the CTE Enrollment and Outcome File

The CTE Enrollment and Outcome File contains student-level demographics (gender, race, and special population), enrollment (CIP code), and outcome (TSA result, cumulative credits) information. Definitions and detailed specifications for each data element can be found in Appendix E. The elements are:

- Last Name
- First Name
- Middle Initial
- Social Security Number
- College ID Number
- Gender
- Hispanic/Latino Ethnicity
- American Indian/Alaskan Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- CIP Code
- Occupational Credit Hours
- State Assigned Student ID (SASID)
- Technical Skills Attempted
- Technical Skills Attained
- Limited English Proficient Indicator
- Economically Disadvantaged Indicator
- Disabled Indicator
- Single Parent Indicator
- Displaced Homemaker Indicator
- HEGIS Code
- Date of Birth
- Foster Care Status Indicator
- Military Connected Indicator
- Migrant Status Indicator
- Homelessness Status Indicator
- Non-Credit Program
- Sequence Date Completed
- Sequence Start Date
- Date Conferred

Data Elements Required in the Technical Skills Assessment File

The Technical Skills Assessment File contains unique student identifiers for each student and the TSA result and TSA code for up to four MSDE-approved TSAs taken and/or passed. Definitions and detailed specifications for each data element can be found in Appendix E. The elements are:

- College ID Number
- Social Security Number
- State Assigned Student ID (SASID)

- Technical Skills Results 1, 2, 3, and 4
- Technical Skills Codes 1, 2, 3, and 4

Key Components to Accurately Reporting CTE Data

CTE Enrollment Data Reporting

Accurately reporting the Career and Technical Education CIP code, College Identification Number, unique student identifier, and student gender (i.e., male or female) are crucial to identifying CTE participants. Only student enrollments with an assigned unique student identifier, gender (i.e., male or female), and MSDE-approved CTE programs of study assigned with an MSDE-approved CIP code (Appendix B) will be counted in the State's annual reporting of CTE participants. Additionally, it is critical that the College Identification Number, the unique six-digit code assigned by DCCR (Table 2), be used to accurately account for all CTE students enrolled in a CTE program of study at the respective community college.

CTE Concentrator Data Reporting

The essential components in the reporting of CTE concentrators are accurately reporting the Career and Technical Education CIP code, College Identification Number, cumulative Occupational Credit Hours (for credit programs), and the Non-Credit Program Flag and Course or Sequence Date Completed (for non-credit programs). Any student who is part of the CTE Enrollment and Outcome File in a for-credit CTE program of study and completed more than twelve credits (does not include prerequisite and remedial courses) **in the current reporting year or any year prior** will be identified at a CTE concentrator. Any student who is part of the CTE Enrollment and Outcome File in a non-credit program and has a Course or Sequence date completed **in the current reporting year or any year prior** will be identified as a CTE concentrator. The CTE concentrator field will now be populated by MSDE based on either the student's cumulative program credits in a for-credit program or have completed the Course or Sequence for a non-credit program. A student must be reported with an MSDE-approved CTE CIP code (Appendix B) for a student to be counted in the State's annual reporting of CTE concentrators.

Technical Skills Assessment and Industry-Recognized Credential Data Reporting

The key to accurately capturing TSA and industry-recognized credential performance data is ensuring to correctly report the College Identification Number, Career and Technical Education CIP Code, cumulative CTE program credits, Non-Credit Progam Flag, Technical Skills Attempted, Technical Skills Attained, Technical Skills Assessment Results, and Technical Skills Assessment Codes data elements for each student. Only **Postsecondary Eligible** MSDE-approved TSAs with assigned TSA codes (Appendix C) should be captured when reporting students' Technical Skills Attempted and Technical Skills Attained data elements. **Only TSAs identified as "Postsecondary Eligible" will be counted as TSAs and an industry-recognized credential for postsecondary students.** A student must be reported with an MSDE-approved CTE CIP Code (Appendix B) and be identified as a CTE concentrator for a student to be counted in the State's annual reporting of students attaining a TSA or industry certification. Note: Only students who left postsecondary education are counted in Perkins Core Performance Indicator calculations for Credential, Certificate, or Degree and Industry-Recognized Credential Attainment (Appendix D).

CTE Completion Data Reporting

Accurately reporting the Career and Technical Education CIP code, College Identification Number, Student unique identifier, cumulative CTE program credits, Non-Credit Program Flag, and TSA Attained Flag is crucial to reporting CTE completion data. Only students from the CTE Enrollment and Outcome File in a for-credit program who were identified as a CTE concentrator in an MSDE-approved program of study with an assigned CIP code, exited postsecondary education, and was included in the MHEC Degree Information System for the same exit year are counted in Perkins Core Performance Indicator calculations for Credential, Certificate, or Degree (Appendix D). If a student is in a non-credit program, identified as a CTE concentrator in an MSDE-approved program of study with an assigned CIP code, exited postsecondary education, and completed the TSA for the non-credit program **in the same exit year or one up to one year after exiting,** the student is counted in Perkins Core Performance Indicator calculations for Credential, Certificate, or Degree (Appendix D). To determine that a CTE concentrator has left postsecondary education, the student must not be enrolled in any Maryland institution of higher education in the following year. This is done by comparing CTE Enrollment and Outcome File submissions with MHEC's Fall Enrollment Information System file.

File Type

The files submitted to the DCCR can either be an Excel spreadsheet (.xlsx), a flat-text file (.txt), or a comma-separated file (.csv). The Excel spreadsheet and flat-text files are the preferred forms of submission

- ✓ All data for the entire year (i.e., summer, fall, and spring) should be included in a single file. There should not be separate tabs included for each term if an Excel spreadsheet is submitted.
- ✓ There should be only one observation per student in a submission.
- ✓ Before submitting a flat-text file, check to make sure that it follows the format in Appendix E and that there are no symbols or characters within the file that act as delimiters (e.g. ", ', etc.). The file can be checked by opening it in either text pad or notepad.
- ✓ Before submitting a comma-separated values (.csv) text file, check to ensure that all variables containing leading zeros (**e.g., race-00005)** have the zeros preserved by saving the column as text. If you are copying data from a different file that has the leading zero into a comma-separated workbook, change the column type in the workbook to text before pasting the data.

File Layout Requirements

Any file created for submission to the DCCR must match the file layouts exactly. This applies to variable formatting, variable arrangement, and values entered. If the file does not meet the specifications in this document, it will be returned for correction. Additionally, no fields should be left blank in the file (except for Middle Initial and Hegis Code for non-credit programs, which can be left blank). Each element has a default code. Insert the default code when no other code is applicable. For example, if the student is not a single parent, insert zero (0) rather than leaving the field blank. The file layouts can be found in Appendix E.

To reduce the possibility of the file submitted being returned for correction, use the checklist below. These are just some of the questions that should be asked before placing the file on the secure server.

File Check List

- Is the College ID Number in the file the same as the College ID Number in Table 2?
- Does the heading on each column of the file match the file layout? Detailed file layout specification can be found in Appendix E.
- Does the length of each variable match the file layout?
- Does the order of the variables match the file layout?
- Does the data type for each variable match the data type for the variable in the file layout?
- Has the social security number been submitted for each student or a 9-digit unique identifier created by the college if the student does not have a social security number?
- Have all extra variables been removed from the file (e.g., College's student ID)?
- Has the gender (i.e., male or female) been submitted for each student?
- If submitting a comma-delimited file, are the leading zeros present?
- Has the file naming convention been applied?

How to Name a File

When the CTE Enrollment and Outcome File and the Technical Skills Assessment File are ready to be submitted to the DCCR, the name appearing on the files must appear in this format **FY_DATA-TYPE_### ###_YYYYMMDD_###.xlsx.** Each element of the file name is explained in the table below. The use of this naming convention is intended to make it easy to identify the file's contents, especially when technical assistance is requested.

Applying the file naming convention to a 2020 CTE Enrollment and Outcome File submitted on 08.19.2020 as an Excel spreadsheet would appear **2020_EnrollOut_030049_08192020_001.xlsx.**

Note: Subsequent submissions of a data file should be incremented by one (1). Using the example above, the following submission would be **2020_ EnrollOut _030049_08192020_002.xlsx**. In this situation, the submission number changes.

Table 3. Elements of File Naming Convention for CTE Enrollment and Outcome File

Element	Definition	Length
FY	Four digits representing the last year of the Academic Year (2019-2020) record as 2020	4
DATA-TYPE	The data collection abbreviation the CTE Enrollment and Outcome File (**EnrollOut**) The data collection abbreviation for the Technical Skills Assessment File **(TechSkill)**	9
######	College ID Number	6
MMDDYYYY	The date when the file was generated in MMDDYYYY format	8
###	The number designated by the community college to uniquely identify the submission sequence (*e.g.,* 001, 002) where 001 means it's the first submission	3
.xlsx .txt .csv	Extension identifying the file format	4

Data Security and File Submission

The CTE Enrollment and Outcome File and the Technical Skills Assessment File submitted to the DCCR contain personally identifiable information (PII) and therefore should **never** be shared via email. Data should only be submitted via the MSDE Secure Transport Server (***https://sst.msde.maryland.gov***) as an Excel spreadsheet (.xlsx) or a flat-file (.csv or .txt). All submissions must adhere to the specifications and requirements that appear in the CTE Enrollment and Outcome File and Technical Skill Assessment File Layouts (Appendix E).

Accessing the MSDE Secure Server

To ensure the security of data being collected, the MSDE maintains a file transportation system called the MSDE Secure Transport Server. A separate folder for each community college has been created on the MSDE Secure Transport Server. The following is information related to the file transfer process:

1. User accounts will be created for **individuals** only (accounts are not to be shared).
2. Account passwords will expire after **90** days.
3. Password complexity includes:
   a. At least 12 characters;
   b. At least one alpha character;
   c. At least one numeric character; and,
   d. At least one special character.
4. User names **are** case-sensitive.

If you require a new account or have forgotten your password and/or username, please contact the Director of Data and Accountability for Career Programs. Please also contact the Director if you find yourself locked out of your account and need your password reset.

The URL for the MSDE Secure Server is https://sst.msde.maryland.gov/.
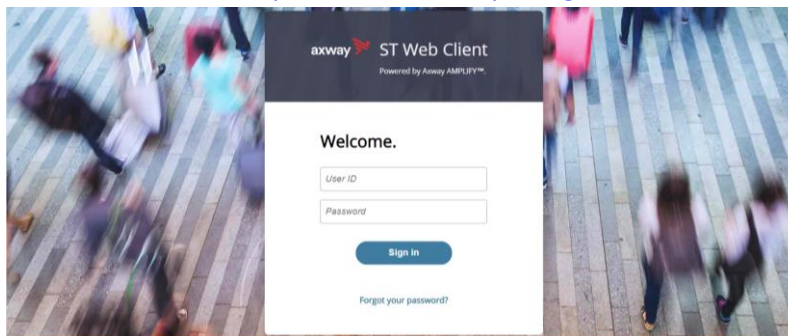
After your initial login, you will be prompted to change your password. The next screen will display the Shared Folder(s) you have access to.
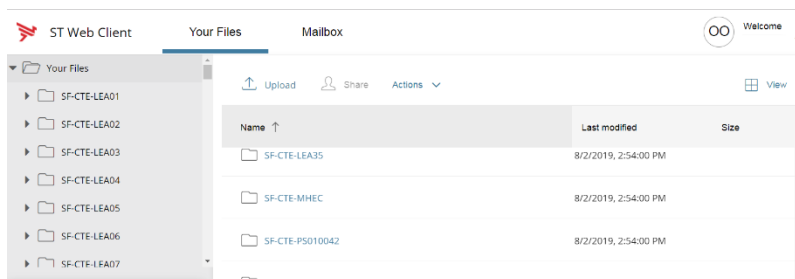
To upload files to the folder:
1. Double click on the folder;
2. Either drag and drop the file into the web browser or click the upload button; and
3. Ensure that the folder is **saved inside the folder** and not on the outside dashboard.

Guidance for Using Collected Data

A solid and well-aligned data system allows postsecondary deans and other community college leaders to answer critical questions about the quality of their CTE programs and whether learners are participating and succeeding equitably. Maryland's state data systems have been modified to allow greater confidence in the data. They are used as tools to identify barriers to success and assist with designing strategies for improvement.

To ensure Postsecondary institutions benefit from the full utility of collected performance and achievement data to assist with data-informed decision making, MSDE is committed to providing each community college with these data products:

Data Dashboards

There are several Postsecondary CTE Data Dashboards at MDCTEData.org. The Enrollment and Performance Trend Analysis Data Dashboard provides 3-year trend reports on gender, race, and special population CTE enrollment and performance by Maryland career cluster. The Enrollment data dashboard provides the overall enrollment and number of concentrators, enrollment by cluster, and program by gender, race, and special population. The Performance data dashboard provides the overall performance per indicator for each cluster and program by gender, race, and special population. These dashboards are an essential element of Community Colleges' CTE Needs Assessment Review process.

Program Quality Index (PQI)

The PQI provides data at the Career Cluster and program level for each community college. It reports on enrollment and all Perkins Core Performance Indicators (Appendix D). These data are presented in spreadsheet form for ease of manipulation. The data include:

- Enrollment data over the past three years;
- Performance for each indicator by program;
- The community college's summary of performance for each indicator showing the performance of subgroups by race, gender, and special population for the current year in comparison to the overall state's performance; and
- Trend table for each Perkins Core Performance Indicator (Appendix D) over a three-year period.

Technical Skills Assessment (TSA) Summary Report

The TSA Summary Reports will be distributed for accountability and performance analysis purposes. The data shared will include:

- Aggregated data by community college; and
- Community college, TSA title, and code, the program of study and the number of students attempting TSAs, percent attaining TSAs, and the state average.

Appendix A: Career and Technical Education Data Definitions

Table 4. Definitions used in the collection and reporting of Career and Technical Education data.

Term	Description
CIP Code	The Classification of Instructional Programs (CIP) is a taxonomic coding scheme of instructional programs. Its purpose is to facilitate the organization, collection, and reporting of fields of study and program completions. The CIP was initially developed in 1980 by the National Center for Education Statistics (NCES) in the U.S. Department of Education. The six-digit CIP code represents specific instructional programs. CTE outcome data (CTE concentrator, TSA, CTE program credit completion) is only captured for students reported with an MSDE-approved CTE CIP code (Appendix C).
College Identification Number	A unique number assigned to the Community College by the Division of Career and College Readiness (DCCR) to identify the institution. All records and/or documents submitted must contain this ID number.
CTE Concentrator	Postsecondary concentrators are those students who have: (i)　Earned at least 12 credits within a career and technical education program or program of study not to include any courses not included in the approved program/plan of study approved by the Maryland Higher Education Commission such as prerequisites; or (ii)　Completed a State-approved non-credit program that includes a sequence of two or more CTE non-credit courses.
CTE Participant	A student who completes not less than one course in a career and technical education program of study.
Disability Status	The "Disability Status" indicator is used to identify an individual with a Disability (A) In General. – The term "student with a disability" refers to an individual with any disability as defined in section 3 of the Americans with Disabilities Act of 1990 (ADA). Under section 3(2) of the ADA, the term "disability" means, with respect to an individual (a) a physical or mental impairment that substantially limits one or more of the major life activities of such individual; (b) a record of such impairment; or (c) being regarded as having such impairment (as described in paragraph ((3)). – The term "students with disabilities" means more than 1 student with a disability.
Disadvantaged	The term "Disadvantaged" includes individuals from economically disadvantaged families. Any student receiving financial aid should be denoted as economically disadvantaged in the data.
Displaced Homemaker	The term "displaced homemaker" refers to a student who – (A) (i) has worked primarily without remuneration to care for a home and family, and for that reason has diminished marketable skills; (ii) has been dependent on the income of another family member but is no longer supported by that income; or (iii) is a parent whose youngest dependent child will be ineligible to receive assistance under part A of title IV of the Social Security Act 942 U.S.C. 601 et seq.) not later than 2 years after the date on which the parent applies for assistance under such title, and (B) is unemployed or underemployed and is experiencing difficulty in obtaining or upgrading employment.
English Learner	"English Learner" data is collected using the "Limited English Proficient" indicator which refers to a student, adult, or out-of-school youth, who has limited ability in speaking, reading, writing, or understanding the English language, and – (A) whose native language is a language other than English; or (B) who lives in a family or community environment in which a language other than English is the dominant language.
Enrollment Data	The data submitted to MSDE that includes all students who enrolled in a CTE Program of Study regardless of whether or not they met concentrator status and of whether or not the CTE Program of Study was For- or Non-Credit.

Term	Description
Foster Care Status	The "Foster Care Status" indicator is used to identify "Youth in Foster Care" individuals which refers to individuals who are in, or have aged out of, the foster care system.
Homeless Status	The "Homeless Status" indicator is used to identify individuals who lack a fixed, regular, and adequate nighttime residence; and include (a) children and youths who are sharing the housing of other persons due to loss of housing, economic hardship, or a similar reason; are living in motels, hotels, trailer parks, or camping grounds due to the lack of alternative adequate accommodations; are living in emergency or transitional shelters; or are abandoned in hospitals; (b) children and youths who have a primary nighttime residence that is a public or private place not designed for or ordinarily used as a regular sleeping accommodation for human beings; (c) children and youths who are living in cars, parks, public spaces, abandoned buildings, substandard housing, bus or train stations, or similar settings; and (d) migratory children who qualify as homeless for the purpose of this subtitle because the children are living in circumstances described in the above clauses.
Industry-Recognized Credentialing Exams (or assessments)	Technical Skills Assessments identified as a Recognized Postsecondary Credential (RPC) ([Appendix D](#)).
Migrant Status	The "Migrant Status" indicator is used to identify a "migratory child". Section 1309(3) of the ESEA defines the term 'migratory child' to mean a child who is, or whose parent or spouse is, a migratory agricultural worker, including a migratory dairy worker, or a migratory fisher, and who, in the preceding 36 months, in order to obtain, or accompany such parent or spouse, in order to obtain, temporary or seasonal employment in agricultural or fishing work —(A) has moved from one school district to another; (B) in a State that is comprised of a single school district, has moved from one administrative area to another within such district; or (C) resides in a school district of more than 15,000 square miles, and migrates a distance of 20 miles or more to a temporary residence to engage in a fishing activity
Military Connected	The "Military Connected" indicator is used to identify "Youth with Parent in Active Military" individuals which refers to youth with a parent who— (a) is a member of the Armed Forces; and (b) is on active duty.
MSDE Secure Transport Server	The file transportation system maintained by the Maryland State Department of Education to ensure the security of data being collected and shared.
Non-traditional fields	The term "non-traditional fields" refers to occupations or fields of work, including careers in computer science, technology, and other current and emerging high skill occupations, for which individuals from one gender comprise less than 25 percent of the individuals employed in the occupation or field of work.
Occupational Credit Hours	The number of cumulative credit hours that directly relate to the CIP code reported.
Outcomes Data	Data that shows students who met concentrator status, attained a TSA, or completed a CTE Program of Study.
Personally Identifiable Information (PII)	Includes any data that could potentially be used to identify a particular person. Examples include a full name, Social Security number, driver's license number, bank account number, passport number, and email address.
Recognized Postsecondary Credential (RPC) Technical Skills Assessment Designation	Identified and state-approved as an assessment leading to a recognized postsecondary credential, which may include an industry-recognized certificate or certification, a certificate of completion of an apprenticeship, a license recognized by the State of Maryland or Federal Government, or an associate degree. (As defined by section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102).
Retained Student	Any student who is identified as enrolled in a Maryland Institution of Higher Learning by their Social Security Number in the relevant Fall MHEC EIS file.
Single Parent	A student who is unmarried or legally separated from a spouse, and has a minor child or children for which the parent has either custody or joint custody. This definition also applies to single pregnant women.

Term	Description
Special Populations	The term 'special populations' refers to: • Individuals with disabilities; • Individuals from economically disadvantaged families, including foster children; • Individuals preparing for non-traditional fields; • Single parents, including single pregnant women; • Out of workforce individuals; • English Language Learners; • Homeless; • Youth in foster care; • Youth with a parent who is a member of the armed services and is on active duty; and • Migrant students.
State-Approved Non-Credit Program	A program comprised of a sequence of two or more CTE non-credit courses which lead to a certification or industry-recognized credential that is acknowledged by the MSDE, Division of Career and College Readiness. (Appendix D).
State Assigned Student Identifier (SASID)	The valid 10-digit USIS assigned State-assigned Student ID Number. This number should be reported if available.
State or Federal Licensing Exams (or state/federal licensures)	Governmental entities, typically public regulatory agencies, require state and federal licensures before an individual is allowed to use an occupational or professional title or to practice an occupation or profession (e.g., Federal Aviation Administration aviation mechanic license, Cosmetologist, or a State-licensed asbestos inspector). The licensure is usually awarded upon an individual's fulfillment of educational, work experience, and/or mastery of licensure exam measuring knowledge and skill proficiency levels. *(U. S. Department of Labor/Employment and Training Administration Advisory System: Training and Employment Guidance Letter No. 07-14, August 17, 2018).*
Technical Skills Assessment (TSA)	Locally-developed end-of-course assessments that lead to college credit (school systems only) or third-party assessments that lead to a recognized postsecondary credential, which may include an industry-recognized certificate or certification, a certificate of completion of an apprenticeship, a license recognized by the State of Maryland or Federal Government, or an associate degree. *(As defined by section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102)).*Information on all TSAs attempted and attained along with the appropriate code for each TSA much be submitted in the annual High School Data Collection (HSDC) file to MSDE.
Technical Skills Attempted	It is an indication of whether a student took a technical assessment (industry certification or licensure) that was available prior to or up to one year after graduation or exit of the institution.
Technical Skills Attained	Technical skills attained is defined by a student who passed an assessment or met certification requirements.
Technical Skills Assessment (TSA) Code	The six-digit code assigned to the TSA by DCCR, MSDE.
Technical Skills Assessment TSA) Result	An indication of whether the student Attempted (A) or Attained (T) the technical skills assessment.
Youth in Foster Care	"Youth in Foster Care" data is collected using the "Foster Care Status" indicator which refers to individuals who are in, or have aged out of, the foster care system.
Youth with Parent in Active Military	"Youth with Parent in Active Military" data is collected using the "Military Connected" indicator which refers to youth with a parent who— (a) is a member of the Armed Forces; and (b) is on active duty..

Appendix B: Postsecondary Maryland CTE Programs of Study

Table 5. MSDE-approved Postsecondary CTE programs of study, associated CIP codes, and non-traditional program identification.

CIP Code	Program of Study	Cluster	Non-traditional Program	Non-traditional Gender
010000	Agriculture, General	EANR		
010101	Agricultural Business and Management, General	EANR	Y	2
010301	Agricultural Production Workers and Managers, Ge	EANR	Y	2
010601	Horticulture Services Operations and Management,	EANR	Y	2
030104	Environmental Science	EANR		
030511	Forestry Technology/Technician	EANR	Y	2
030601	Wildlife and Wildlands Management	EANR		
040601	Landscape Architecture	CD	Y	2
050211	Deaf Studies	HRS		
090199	Communications and Media Studies, Other	AMC		
090702	Digital Communications & Media/Multimedia	AMC		
100105	Communications Technology/Technician	AMC	Y	2
100202	Media Production Technology	AMC	Y	2
100203	Recording Arts Technology/Technician	AMC	Y	2
100299	Audiovisual Comm. Technology/Technician, Other	AMC	Y	2
100304	Animation, Interactive Tech, Video & Spec FX	AMC		
109999	Communications Techno/Technic & Support Services	AMC	Y	2
110101	Computer and Information Sciences, General	IT	Y	2
110103	Information Technology	IT	Y	2
110201	Computer Programming	IT	Y	2
110202	Computer Programming Special Applications	IT	Y	2
110203	Computer Prgrmg, Vendor/Product Cert.	IT	Y	2
110301	Data Processing Tech./Technician	IT	Y	2
110501	Computer Systems Analysis	IT	Y	2
110601	Data Entry/Microcomputer Applications, General	IT		
110801	Web Page Digital/Multimedia & Info Research Design	AMC		
110899	Computer Software and Media Applications, Other	IT	Y	2
110901	Computer Systems Networking & Telecomm	IT	Y	2
111003	Computer & Information Systems Security	IT	Y	2
119999	Computer and Information Sciences, Other	IT	Y	2
120301	Funeral Services and Mortuary Science	HRS		
120501	Baker/Pastry Chef	CSHT	Y	2
120503	Culinary Arts/Chef Training	CSHT	Y	2
120504	Restaurant, Culinary, and Catering Management	CSHT	Y	2

CIP Code	Program of Study	Cluster	Non-traditional Program	Non-traditional Gender
130101	Education, General	HRS	Y	1
131001	Special Education, General	HRS	Y	1
131003	Education of the Deaf and Hearing Impaired	HRS	Y	1
131210	Early Childhood Education Child Development Associate - Infants/Toddlers	HRS	Y	1
131501	Teacher Assistant/Aide	HRS	Y	1
139999	Education, Other	HRS	Y	1
141001	Electrical, Electronics and Communication Engineer	MET	Y	2
144201	Mechatronica, Robotics, and Automation Engineering	MET	Y	2
150000	Engineering Technology	MET	Y	2
150303	Electrical, Electronic and Communications Engineering Technology/Technician	MET	Y	2
150401	Biomedical Engineering-Related Tech./Technician	HB	Y	2
150403	Electromechanical Tech./Technician	MET	Y	2
150404	Instrumentation Tech./Technician	MET	Y	2
150405	Robotics Tech./Technician	MET	Y	2
150501	Heating, Air Conditioning and Refrigeration Tech	MET	Y	2
150507	Environmental and Pollution Control Tech./Technician	MET	Y	2
150612	Industrial Technology/Technician	MET	Y	2
150613	Manufacturing Engineering Technology (MSSC)	MET	Y	2
150702	Quality Control Tech./Technician	MET		
150805	Mechanical Engineering/Mechanical Tech./Technician	MET	Y	2
151102	Surveying	CD	Y	2
151202	Computer Technology/Computer Sys Technology	IT	Y	2
151301	Drafting and Design	MET	Y	2
151302	CAD/CADD Drafting and/or Design Tech	CD	Y	2
151303	Architectural Drafting & Architectural CAD/CADD	CD	Y	2
151399	Drafting/Design Engnrg Technology/Technic, Other	MET	Y	2
151401	Nuclear Engineering Technology/ Technicians	MET	Y	2
159999	Engineering-Related Technol./Technicians, Other	MET	Y	2
161603	Sign Language Interpretation & Translation	AMC		
190505	Food Systems Administration	EANR	Y	1
190708	Child Care & Support Services Management	HRS	Y	1
190709	Child Care Provider/Assistant	HRS	Y	1
220000	Justice, Law and Society	HRS	Y	1
220302	Legal Assistant/Paralegal	HRS	Y	1
231303	Professional, Technical, Business, and Scientific Writing	AMC		
240102	General Studies	MET		
310301	Parks, Recreation and Leisure Facilities Management	CSHT		

CIP Code	Program of Study	Cluster	Non-traditional Program	Non-traditional Gender
310501	Health and Physical Education, General	CSHT		
310504	Sport and Fitness Administration/Management	HB		
310505	Exercise Sciences/Physiology and Movement Studies	HB		
310507	Physical Fitness Technician	HB		
310599	Health and Physical Education/Fitness, Other	CSHT		
319999	Parks, Recreation, Leisure and Fitness Studies, General	CSHT		
410101	Biological Tech./Technician	MET		
419999	Science Technol./Technicians, Other	MET		
430102	Corrections/Correctional Administration	HRS	Y	2
430103	Criminal Justice/Law Enforcement Administration	HRS	Y	2
430406	Forensic Tech./Technician	HRS		
430107	Law Enforcement/Police Science	HRS	Y	2
430403	Cyber/Computer Forensics and Counterterrorism.	HRS	Y	2
430199	Criminal Justice and Corrections, Other	HRS		
430201	Fire Protection and Safety Tech./Technician	HRS	Y	2
430202	Fire Services Administration	HRS	Y	2
430203	Fire Science/Firefighting	HRS	Y	2
430301	Homeland Security	HRS	Y	2
430302	Crisis/Emergency/Disaster Management	HRS	Y	2
439999	Homeland Security, Law Enforcement, Firefighting and Related Protective Services, Other	HRS		
440000	Human Services, General	HRS		
440401	Public Administration	BMF	Y	2
450701	Geography	MET	Y	2
450799	Geography, Other	MET		
460302	Local Construction Trades- Electrical	CD	Y	2
460303	Lineworker	CD	Y	2
460401	Local Construction Maintenance- Building/Property Maintenance	CD	Y	2
460412	Bldg/Constr Site Mngmnt/Mgr	CD	Y	2
460499	Construction and Building Finishers and Managers	CD	Y	2
469999	Construction Trades, Other	CD	Y	2
470104	Computer Installer and Repairer	IT	Y	2
470105	Industrial Electronics Installer and Repairer	MET	Y	2
470201	Local Construction Maintenance- HVAC	CD	Y	2
470604	Auto/Automotive Mechanic/Technician	TT	Y	2
480501	Machinist/Machine Technologist	MET	Y	2
480510	Computer Numerically Controlled (CNC) Machinist Technology	MET	Y	2

CIP Code	Program of Study	Cluster	Non-traditional Program	Non-traditional Gender
490101	Aeronautics, Aviation, Aerospace Science and Technology	TT	Y	2
490102	Aircraft Pilot and Navigator (Professional)	TT	Y	2
490104	Aviation Management	TT	Y	2
490105	Air Traffic Controller	TT	Y	2
490205	Truck, Bus and Other Commercial Vehicle Operator	TT	Y	2
500102	Digital Arts	AMC		
500401	Design and Visual Communications	AMC		
500402	Graphic Design, Commercial Art and Illustration	AMC		
500406	Commercial Photography	AMC		
500407	Fashion Design and Illustration	AMC		
500408	Interior Design	AMC		
500409	Graphic Design	AMC		
500411	Computer Gaming and Simulation	AMC		
500502	Technical Theater/Theater Design and Stagecraft	AMC		
500602	Film-Video Making/Cinematography and Production	AMC	Y	2
500605	Photography	AMC		
500903	Music - General Performance	AMC		
500913	Music Technology	AMC	Y	2
509999	Visual and Performing Arts, Other	AMC		
510000	Health Professions/Allied Health Professions and Related Sciences	HB		
510601	Dental Assistant	HB	Y	1
510602	Dental Hygienist	HB	Y	1
510707	Medical Records Tech./Technician	BMF	Y	1
510713	Med. Insurance Coding Specialist/Coder	BMF	Y	1
510716	Medical Administrator/Executive Assistant	BMF	Y	1
510799	Health and Medical Administrative Services, Other	HB		
510801	Medical Assistant	HB	Y	1
510802	Medical Laboratory Assistant	HB		
510803	Occupational Therapy Assistant	HB	Y	1
510805	Pharmacy Technician/Assistant	HB	Y	1
510806	Physical Therapy Assistant	HB		
018301	Veterinarian Assistant/Animal Health Technician	EANR	Y	1
510809	ANESTHESIOLOGIST ASSISTANT	HB	Y	1
510901	Cardiovascular Tech./Technician	HB		
510902	Electrocardiograph Tech./Technician	HB		
510904	Emergency Medical Tech./Technician	HRS		
510905	Nuclear Medical Tech./Technician	HB		
510907	Medical Radiologic Tech./Technician	HB		

CIP Code	Program of Study	Cluster	Non-traditional Program	Non-traditional Gender
510908	Respiratory Therapy Technician	HB		
510909	Surgical/Operating Room Technician	HB	Y	1
510910	Diagnostic Medical Sonography	HB		
510911	Radiologic Technology/Science - Radiographer.	HB		
510912	Physician Assistant	HB		
510920	Magnetic Resonance Imaging (MRI) Technology/Technician.	HB		
510999	Health and Medical Diagnostic and Treatment Services	HB		
511004	Medical Laboratory Technician	HB		
511007	Histologic Technology/Histotechnologist.	HB		
511099	Health and Medical Laboratory Technol./Technician	HB		
511501	Alcohol/Drug Abuse Counseling	HB	Y	1
511502	Psychiatric/Mental Health Services Technician	HB	Y	1
511599	Mental Health Services, Other	HB	Y	1
512299	Public Health, Other	HB		
512306	Occupational Therapy	HB	Y	1
512706	Medical Informatics	HB	Y	2
513104	Dietician Assistant	CSHT	Y	1
513501	Massage Therapy/Therapeutic Massage	HRS	Y	1
513801	Registered Nursing	HB	Y	1
513901	Licensed Practical Nursing	HB	Y	1
513902	Nursing Assistant/ Aide	HB	Y	1
519999	Health Professions and Related Sciences, Other	HB		
520101	Business, General	BMF	Y	2
520201	Business Administration and Management	BMF	Y	2
520202	Purchasing, Procurement and Contracts Management	BMF	Y	2
520209	Transportation/Transportation Mngmnt	TT	Y	2
520212	RETAIL MANAGEMENT	BMF		
520299	Business Administration and Management, Other	BMF	Y	2
520301	Accounting	BMF		
520302	Accounting Technician	BMF	Y	1
520305	Accounting and Business Management	BMF		
520401	Administrative Assistant/Secretarial Science, Ge	BMF	Y	1
520402	Executive Assistant/Secretary	BMF	Y	1
520701	Enterprise Management and Operation, General	BMF		
520901	Hospitality Administration and Management	CSHT		
520904	Hotel/Motel Administration Management	CSHT		
520907	Event Management	CSHT	Y	1
520999	Hospitality Services Management, Other	CSHT		

CIP Code	Program of Study	Cluster	Non-traditional Program	Non-traditional Gender
521001	Human Resources Management	BMF	Y	1
521201	Management Information Systems	BMF	Y	2
521299	Business Information and Data Processing Service	IT	Y	2
521302	Business Statistics	BMF		
521401	Business Marketing and Marketing Management	BMF		
521803	Retailing and Retail Operations	BMF		
522001	Construction Management	CD	Y	2
529999	Business Management and Administrative Services,	BMF		
511508	Mental Health Counseling/Counselor.	HB	Y	1
011003	Brewing Science	EANR	Y	2
309999	College Maryland Apprenticeship Program	CRD		
150001	Applied Engineering Technologies/Technicians	MET	Y	2
151704	Wind Energy Technology/Technician	MET	Y	2
151706	Geothermal Energy Technology/Technician	MET	Y	2
151799	Energy Systems Technologies/Technicians, Other	MET	Y	2
110902	Cloud Computing	IT	Y	2
511012	Sterile Processing Technology/Technician	HB		

Appendix C: Maryland Technical Skills Assessments

Only MSDE-approved Technical Skills Assessments (TSA) **identified as "Postsecondary Eligible" will be counted as TSAs and an industry-recognized credential for postsecondary students.**

Please view the master TSA Table or view the TSA list at the TSA List Dashboard. There will be ongoing additions made to the TSA Table as additional approval requests are received from community colleges. Further updates to the list will be listed on the "Updates to TSA List" tab of TSA Table document as new TSAs are added.

Appendix D: Postsecondary Perkins V Core Indicators of Performance

Under Perkins V, Maryland is required to report annually on the following core indicators of performance. Maryland is also required to report disaggregated data on the performance of students by race, ethnicity, gender, and special population categories.

Table 6. Maryland Postsecondary Perkins Core Performance Indicators, measurement defections, formulas, data sources, and reporting guidance.

PERFORMANCE INDICATOR	MEASUREMENT DEFINITION	FORMULA	DATA SOURCE	GUIDANCE
1P1: Postsecondary Retention and Placement	The percentage of **CTE Concentrators** who, during the second quarter after program completion, remain enrolled in postsecondary education, are in advanced training, military service, or a service program that receives assistance under title I of the National and Community Service Act of 1990 (42 U.S.C. 12511 et seq.), are volunteers as described in section 5(a) of the Peace Corps Act (22 U.S.C. 2504(a)), or are placed or retained in employment.	**Numerator:** Number of CTE concentrators **from the prior reporting year** who in the second quarter after program completion are in a postsecondary education or advanced training, military service or a service program, that receives assistance under Title I of the National Community Service Act or are employed. **Denominator:** Number of CTE Concentrators who completed their CTE program in the **prior** reporting year.	• CTE Enrollment & Outcome File • MHEC Degree Information System • MLDS Center (Student Clearing House, MD Dept. of Labor Administrative Record Exchange, and MVA records)	**Numerator:** All students from the denominator who were enrolled in postsecondary education, employed, in the military, or in an apprenticeship program between October and December of the exit year. **Denominator:** All CTE Concentrators in the CTE Enrollment and Outcome File that were included in the MHEC Degree Information System with a CTE Certificate or Degree.

PERFORMANCE INDICATOR	MEASUREMENT DEFINITION	FORMULA	DATA SOURCE	GUIDANCE
2P1: Credential, Certificate or Diploma	The percentage of **CTE Concentrators** who receive a recognized postsecondary credential during participation in or within 1 year of program completion.	**Numerator:** Number of CTE Concentrators who received a degree, certificate, or industry-recognized credential approved for a specific CTE program in the **prior reporting year or within one year of program completion**. **Denominator:** Number of CTE Concentrators who left postsecondary education **during the prior reporting year**.	• CTE Enrollment and Outcome File • Technicall Skills Assessment File • MHEC Degree Information System • MHEC Enrollment Information System • Noncredit Workforce Completers System	**Numerator:** All prior reporting year CTE Concentrators who exited postsecondary education (who are not in the Fall MHEC Enrollment Information System file) who are included in MHEC's Degree Information System **and/or** who appeared in the CTE Enrollment and Outcome File **and** were classified as having attained an industry-recognized credential. **Denominator:** All students from the prior reporting year CTE Enrollment and Outcome File who were classified as a CTE Concentrator **and** exited postsecondary education.
3P1: Non-traditional Program Enrollment	The percentage of **CTE Concentrators** in career and technical education programs and programs of study that lead to non-traditional fields.	**Numerator:** Number of underrepresented CTE Concentrators in non-traditional CTE programs during the reporting year. **Denominator:** Number of CTE Concentrators in non-traditional CTE programs during the reporting year.	• Maryland Nontrad Data File • CTE Enrollment and Outcome File	**Numerator:** All CTE concentrators of under-represented gender who were enrolled in a CTE program identified as a non-traditional program in the Maryland Nontrad Data file. **Denominator:** All CTE concentrators enrolled a CTE program identified as a non-traditional program in the Maryland Nontrad Data file.

PERFORMANCE INDICATOR	MEASUREMENT DEFINITION	FORMULA	DATA SOURCE	GUIDANCE
4P1: Industry-Recognized Credential Attainment	The percentage of **CTE Concentrators** who receive a recognized postsecondary credential during participation in program of completion.	**Numerator:** Number of CTE Concentrators who received an industry-recognized credential approved for a specific CTE program in the **current reporting year or within one year of program completion**. **Denominator:** Number of CTE Concentrators who left postsecondary education **during the current reporting year**.	• CTE Enrollment and Outcome File • Technicall Skills Assessment File • MHEC Enrollment Information System • Noncredit Workforce Completers System	**Numerator:** All **current reporting year** CTE Concentrators who exited postsecondary education (who are not in the Fall MHEC Enrollment Information System file) who appeared in the CTE Enrollment and Outcome File **and** were classified as having attained an industry-recognized credential. **Denominator:** All students from the **current reporting year** CTE Enrollment and Outcome File who were classified as a CTE Concentrator **and** exited postsecondary education.
5P1: Certificate or Degree	The percentage of **CTE Concentrators** who receive a lower division certificate or a degree during participation in program of completion.	**Numerator:** Number of CTE Concentrators who received a degree or certificate for a specific CTE program in the **current reporting year or within one year of program completion**. **Denominator:** Number of CTE Concentrators who left postsecondary education **during the current reporting year**.	• CTE Enrollment and Outcome File • MHEC Degree Information System • MHEC Enrollment Information System • Noncredit Workforce Completers System	**Numerator:** All **current reporting year** CTE Concentrators who exited postsecondary education (who are not in the Fall MHEC Enrollment Information System file) who are included in MHEC's Degree Information System. **Denominator:** All students from the **current reporting year** CTE Enrollment and Outcome File who were classified as a CTE Concentrator **and** exited postsecondary education.

Appendix E: File Layout

CTE Enrollment and Outcome File Layout

Table 7. Data elements and file layout specifications for the CTE Enrollment and Outcome File Layout.

Element #	Data Element Name	Start	Length	End	Type	Definition	Permitted Values
1	Last Name	1	25	25	String	The full legal last name held in common by members of a family, as appears on the evidence of the birth document. Up to twenty-five (25) characters long. Do not include punctuation.	This field cannot be left blank.
2	First Name	26	15	40	String	The full legal first name was given to a person at birth, baptism, or through legal change, as appears on the evidence of birth document. Up to fifteen (15) characters long. Do not include punctuation.	This field cannot be left blank.
3	Middle Initial	41	1	41	String	Student's Middle Initial	
4	Social Security Number	42	9	50	String	The student's Social Security Number. If the student does not have a social security number, enter the unique number used by the college to identify this student. The number used must be consistent on **ALL** records submitted to DCCR for this student.	This field cannot be left blank. No hyphens or other separators are permitted. (Default = 000000000)
5	College ID Number	51	6	56	String	The six-digit code assigned to the college by DCCR (Table 2). Must be a valid college number for the reported academic year.	This field cannot be left blank.
6	Gender	57	1	57	String	The one-digit code for gender of the student. Students without a male or female assignment will not be counted in State's valuation of CTE participants or completers.	1=Male 2=Female This field cannot be left blank.
7	Hispanic or Latino	58	1	58	String	An indication that the student traces his or her origin or descent to Mexico, Puerto Rico, Cuba, Central and South America, and other Spanish cultures, regardless of race.	Y=Yes, of Hispanic or Latino origin N=No, not of Hispanic or Latino origin

Element #	Data Element Name	Start	Length	End	Type	Definition	Permitted Values
8	American Indian/Alaskan Native	59	1	59	String	A person having origins in any of the original peoples of North and South America (including Central America), and who maintains cultural identification through tribal affiliation or community attachment.	0=No; 1=Yes
9	Asian	60	1	60	String	A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian Subcontinent. This area includes, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.	0=No; 2=Yes
10	Black or African American	61	1	61	String	A person having origins in any of the black racial groups of Africa.	0=No; 3=Yes
11	Native Hawaiian or Other Pac. Isle	62	1	62	String	A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.	0=No; 4=Yes
12	White	63	1	63	String	A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.	0=No; 5=Yes
13	CIP Code	64	6	69	String	Classification of Instructional Program (CIP) code. Include the six-digit code as designated by MSDE/ MHEC.	Each student must be identified by the appropriate Classification of Instructional Programs (CIP) code. This field cannot be left blank. This is the Classification of Instructional Programs (CIP) from the state-approved program list (Appendix B).

Element #	Data Element Name	Start	Length	End	Type	Definition	Permitted Values
14	Occupational Credit Hours	70	2	71	String	The number of <u>cumulative</u> (within current year or previous years) credit hours that directly relate to the CTE program of study and CIP code reported for the student (prerequisites and remedial courses not included). This allows all CTE certificate or degree program required academic and general education courses such as English and math to count as long as they are at the college level (course number >= 100).	This field cannot be left blank. The field is right justified and filled with leading zeroes.
15	SASID	72	10	81	String	The valid Maryland State Assigned Student ID number assigned through USIS. Cannot contain pseudo numbers and cannot be BLANK. This number must be the same on all data files submitted to MSDE.	The valid State Assigned Student ID Number. Report if available. (Default = 0000000000)
16	FILLER	82	1	82			This field is left blank.
17	Technical Skills Attempted	83	1	83	String	A yes/no designation to indicate whether an individual student attempted/took an MSDE-approved technical skills assessment (industry certification). Students should only be identified with "Y" (having attempted/took a technical skills assessment) if the technical skills assessment is included on MSDE's list of approved technical skills assessments with an assigned technical skills assessment code (Appendix C).	Y= Yes N= No
18	Technical Skills Attained	84	1	84	String	A yes/no designation to indicate whether an individual student has passed/met certification requirement for an MSDE-approved technical skills assessment. Students should only be identified with "Y" (having passed/met certification requirements) if the technical skills assessment is included on MSDE's list of approved technical skills assessments with an assigned technical skills assessment code (Appendix C).	Y= Yes N= No

Element #	Data Element Name	Start	Length	End	Type	Definition	Permitted Values
19	FILLER (Concentrator Designation populated by MSDE)	85	1	85	String		This field should be left blank. Concentrator student field will be populated by MSDE.
20	Limited English Proficient Indicator	86	1	86	String	Include all students who after placement testing were considered to have ESL status at admission or took an ESL course.	Y=Yes, Limited English Proficient N=No, not Limited English Proficient U=Unknown (Default =U)
21	Economically Disadvantaged Indicator	87	1	87	String	The basis for determining the status is FAFSA household income compared to the low income threshold from the U.S. Department of Education; a student of a particular family size should be considered low income if his/her family income at or below the corresponding value in the schedule below (This schedule will be updated every year). Colleges' internal financial aid request documents can be used for status determination if the student does not submit a FAFSA.	Y=Yes N=No U=Unknown (Default =U)
22	Disabled Indicator	88	1	88	String	Include all students who provide documentation required to receive special services. The basis for reporting should employ the same methodology used to report disability in the MACC Databook and to IPEDS.	Y=Yes N=No U=Unknown (Default =U)

Element #	Data Element Name	Start	Length	End	Type	Definition	Permitted Values
23	Single Parent	89	1	89	String	Include all students identified as unmarried or legally separated from a spouse, and has a minor child or children for which the parent has either custody or joint custody. This definition also applies to single pregnant women. **Data can be captured from FASFA, Questions. 16 and 50.**	Y=Yes N=No U=Unknown (Default =U)
24	FILLER (Nontraditional Career Program populated by MSDE)	90	1	90	String		This field should be left blank. Non-traditional Career Program students field will be populated by MSDE.
25	Displaced Homemaker	91	1	91	String	Include all students who have worked primarily without renumeration to care for a home or family, is a parent whose youngest dependent child will become ineligible to receive Social Security assistance, or is unemployed or under employed and is experiencing difficulty in obtaining or upgrading employment. **If not currently collected, data systems should be created to capture this information.**	Y=Yes N=No U=Unknown (Default =U)
26	HEGIS Code	92	6	97	String	6-digit code assigned by MHEC.	6-digit code (include the leading zeros, but no decimal point). Field should be left blank **ONLY** for non-credit programs.
27	Date of Birth	98	8	105	Numeric	Student's date of birth in month, day, year format (MMDDYYYY).	MMDDYYYY No hyphens or other separators are permitted.

Element #	Data Element Name	Start	Length	End	Type	Definition	Permitted Values
28	Foster Care Status	106	1	106	String	Include all students identified as being in foster care, or who have aged out of the foster care system. Foster care means 24-hour substitute care for children placed away from their parents or guardians and for whom the child welfare agency has placement and care responsibility. This includes, but is not limited to, placements in foster family homes, foster homes of relatives, group homes, emergency shelters, residential facilities, child care institutions, and pre-adoptive homes. A child is in foster care in accordance with this definition regardless of whether the foster care facility is licensed, and payments are made by the State, Tribal or local agency for the care of the child, whether adoption subsidy payments are being made prior to the finalization of an adoption, or whether there is Federal matching of any payments that are made. (45 C.F.R. § 1355.20(a)). **Data can be captured from FASFA, Question 52. USIS matching is also recommended.**	Y=Yes N=No U=Unknown (Default =U)
29	Military Connected Indicator	107	1	107	String	Include all students whose parent or guardian is a member of the Active Duty Forces (full-time) Army, Navy, Air Force, Marine Corps, or Coast Guard, National Guard or Reserve Forces (Army, Navy, Air Force, Marine Corps, or Coast Guard). **Data may be captured for students who indicate parents had untaxed income for housing, food, and other living allowances paid to members of military in FASFA. USIS matching is also recommended.**	Y=Yes N=No U=Unknown (Default =U)

Element #	Data Element Name	Start	Length	End	Type	Definition	Permitted Values
30	Migrant Status	108	1	108	String	Include all students 21 and under who have moved across a school district line with/or to join a migrant parent or guardian, or on their own, within the preceding 36 months, in order to obtain temporary or seasonal employment in qualifying agricultural or fishing work including agri-related businesses such as meat or vegetable processing. **Colleges that currently can identify Migrant students should continue to do so, but others are not encouraged to create new data systems to capture this information. USIS matching is recommended.**	Y=Yes N=No U=Unknown (Default =U)
31	Homelessness Status	109	1	109	String	Include all students who lack fixed, regular, and adequate nighttime residence. Homeless students include: (1) students who are sharing the housing of other persons due to loss of housing, economic hardship, or a similar reason; are living in motels, hotels, trailer parks, or camping grounds due to the lack of alternative adequate accommodations; are living in emergency or transitional shelters; are abandoned in hospitals; (2) students who have a primary nighttime residence that is a public or private place not designed for or ordinarily used as regular sleeping accommodation for human beings (within the meaning of section 103(a)(2)(C)); (3) students who are living in cars, parks, public spaces, abandoned buildings, substandard housing, bus or train stations, or similar settings; and (4) migratory students who qualify as homeless for the purposes of this subtitle because they are living in circumstances described in (1) through (3) above. **Data can be captured from FASFA, Questions 55, 56, & 57. USIS matching is recommended.**	Indicates the student is Homeless Student (default =U) Y=Yes N=No U=Unknown

Element #	Data Element Name	Start	Length	End	Type	Definition	Permitted Values
32	Non-Credit Program	110	1	110	String	Student is enrolled in a Non-Credit Program	Y=Yes N=No (Default =N)
33	Sequence Date Completed	111	8	118	Numeric	Date upon which the student successfully completed all requirements for all courses in CTE non-credit program sequence.	Required if the value for Non-Credit Program is Y. Must be 8 digits. MMDDYYYY No hyphens or other separators are permitted. If institution cannot report a day, enter YYYYMMM00. If all courses in non-credit program sequence not completed enter 00000000. Must not be Blank.
34	Sequence Start Date	119	8	126	Numeric	Start date is the date of the earliest required course completed in the sequence.	Required if the value for Non-Credit Program is Y. Must be 8 digits. MMDDYYYY No hyphens or other separators are permitted. If institution cannot report a day, enter YYYYMMM00. If first course in non-credit program sequence is not completed enter 00000000. Must not be Blank.

Element #	Data Element Name	Start	Length	End	Type	Definition	Permitted Values
35	Date Conferred	127	8	134	Numeric	Date upon which the institution confers an award for non-credit program, e.g., Certificate, if appropriate.	Required if the value for Non-Credit Program is Y. Must be 8 digits. MMDDYYYY No hyphens or other separators are permitted. If institution cannot report a day, enter YYYYMMM00. If program does not have a conferral date enter 00000000. Must not be blank. Note, for all CTE non-credit programs students are required to complete the program sequence consisting of two or more courses and an industry credential.

Technical Skills Assessment File Layout

Table 8. Data elements and file layout specifications for the Technical Skills Assessment File Layout.

Element #	Data Element Name	Start	Length	End	Type	Definition	Permitted Values
1	College ID Number	1	6	6	String	The six-digit code assigned to the college by DCCR (Table 2). Must be a valid college number for the reported academic year.	This field cannot be left blank.
2	Social Security Number	7	9	15	String	The student's Social Security Number. If the student does not have a social security number, enter the unique number used by the college to identify this student. The number used must be consistent on **ALL** records submitted to DCCR for this student.	This field cannot be left blank. No hyphens or other separators are permitted. (Default = 000000000)
3	SASID	16	10	25	String	The valid Maryland State Assigned Student ID number assigned through USIS. Cannot contain pseudo numbers and cannot be BLANK. This number must be the same on all data files submitted to MSDE.	The valid State Assigned Student ID Number. Report if available. (Default = 0000000000)
4	Technical Skills 1 Result	26	1	26	String	A description of the student's results on the technical skills assessment	A=Attempted T=Attained N=Not Applicable
5	Technical Skills 1 Code	27	6	32	String	The six-digit code assigned to the TSA by DCCR, MSDE	TSA Code Blank=Valid value if TSA Result is "N"
6	Technical Skills 2 Result	33	1	33	String	A description of the student's results on the technical skills assessment	A=Attempted T=Attained N=Not Applicable
7	Technical Skills 2 Code	34	6	39	String	The six-digit code assigned to the TSA by DCCR, MSDE	TSA Code Blank=Valid value if TSA Result is "N"

8	Technical Skills 3 Result	40	1	40	String	A description of the student's results on the technical skills assessment	A=Attempted T=Attained N=Not Applicable
9	Technical Skills 3 Code	41	6	46	String	The six-digit code assigned to the TSA by DCCR, MSDE	TSA Code Blank=Valid value if TSA Result is "N"
10	Technical Skills 4 Result	47	1	47	String	A description of the student's results on the technical skills assessment	A=Attempted T=Attained N=Not Applicable
11	Technical Skills 4 Code	48	6	53	String	The six-digit code assigned to the TSA by DCCR, MSDE	TSA Code Blank=Valid value if TSA Result is "N"

Appendix F: DCCR Career Programs and Grants Specialists

Table 9: Career Programs and Grants Specialists in the Division of Career and College Readiness and associated region assignments.

Pamela Clay
410-767-0175
pamela.clay@maryland.gov

Lower Shore Region

Somerset County Public Schools
Wicomico County Public Schools
Wor-Wic Community College
Worcester County Public Schools

Upper Shore

Caroline County Public Schools
Chesapeake College
Dorchester County Public Schools
Kent County Public Schools
Queen Anne's County Public Schools
Talbot County Public Schools

Dean Kendall
410-767-0164
dean.kendall1@maryland.gov

Baltimore City

Baltimore City Public Schools System
Baltimore City Community College

Baltimore County

Baltimore County Public Schools
Community College of Baltimore County

Carroll County

Carroll County Public Schools
Carroll Community College

Frederick County

Frederick County Public Schools
Frederick Community College

Susquehanna Region

Cecil County Public Schools
Cecil College
Harford County Public Schools
Harford Community College
Western Maryland Region
Allegany County Public Schools
Allegany College of Maryland
Garrett County Public Schools
Garrett College
Hagerstown Community College
Washington County Public Schools

Barbara Poindexter Webb
410-767-0185
barbara.webb@maryland.gov

Anne Arundel County

Anne Arundel Community College

Howard County

Howard County Public Schools
Howard Community College

Montgomery County

Montgomery County Public Schools
Montgomery College

Southern Maryland Region

Calvert County Public Schools
Charles County Public Schools
College of Southern Maryland
St. Mary's County Public Schools

Prince George's County

Prince George's Community College

Appendix G: Listing of Staff in the Division of Career and College Readiness

Tiara Booker-Dwyer, Assistant State Superintendent

Marquita Friday, Director of Career Programs

Charles (Scott) Nichols, Interim Coordinator Career Programs, STEM, and Computer Science Charles (Chuck) Wallace, Coordinator of Career Programs and Student Organizations Michelle Brownson, Management Associate

Jennifer Griffin, Career Programs and Apprenticeship Specialist

Elissa Hozore, Computer Science Specialist

Kent Seuferer, Career Programs and Student Organization

Teresa Shank, FFA Executive Director

Nina Roa, Director of Finance and Legislation for Career Programs

Traci Verzi, Coordinator of Finance and Legislation for Career Programs

Dean Kendall, Career Programs and Grants Specialist

Barbara Poindexter Webb, Career Programs and Grants Specialist

Pam Clay, Career and Technical Education Associate – Eastern Shore

Nicassia Belton, Ed.D., Director of Data and Accountability for Career Programs

Katherine Stewart, Ph.D., Acting Coordinator of Data and Accountability

China Wilson, Ph.D., Equity and Civil Right Compliance Specialist

Office of Leadership Development and School Improvement

Ed Mitzel, Executive Director of Leadership Development and School Improvement

Lori Ellis, Ed.D, Coordination of Leadership Development

Laura Liccione, Coordinator of Academic Improvement

Morrall Thompson, Coordinator of Systematic Improvement

Anders Alicea, Instructional Transformation Specialist

Tara Corona, Continuous Improvement Specialist

Felicia Lanham Tarason, Ed.D., School Leadership Support Specialist

Mary Minter, Ed.D., School Leadership Support Specialist

Thomas Fingado, Leadership Effectiveness Consultant