Career and Technical Education: Comprehensive Local Needs Assessment

A Systemic Review Guidebook for Postsecondary Schools

Office of College and Career Pathways

2024 - 2026

MARYLAND STATE DEPARTMENT OF EDUCATION

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1.0	February 2024	Initial Document
2.0	April 2024	Modified data tables in Activity B.1

Purpose

The federal Strengthening Career and Technical Education for the 21st Century Act (Perkins V), provides funding to support educators in developing the technical and employability skills and academic knowledge of secondary and postsecondary education students enrolling in career and technical education (CTE) programming.

Perkins V requires that grant recipients complete a Comprehensive Local Needs Assessment (CLNA) every other year to identify needs or gaps that should be addressed to strengthen the delivery of high-quality CTE programming.

The Maryland State Department of Education (MSDE) has created this document to assist you in conducting your CLNA. Information contained within it also will help you to align your improvement efforts with the College and Career Readiness Pillar contained in the Blueprint for Maryland's Future. Key action steps include assessing the alignment of CTE programs of study (POS) to labor market needs; reviewing student participation and performance in CTE coursework; evaluating site progress in making CTE offerings accessible to students; and considering efforts to recruit, train, and retain CTE instructors.

Results from this CLNA should be incorporated into your Perkins V Local Application, which details how you plan to use federal funds to improve CTE instruction and expand equitable student access to quality programs.

The Comprehensive Local Needs Assessment and the Local Application will be reviewed and approved on a rolling basis, and must be fully completed by the Community College, negotiated (CC and MSDE), and approved by the State Director of Career and Technical Education or their designee prior to July 1st of each year.

If you have questions about how to use this guide, please contact your designated Postsecondary Program Coordinator in the Office of College and Career Pathways.

Instructions

Conducting this needs assessment will take several months to complete and must precede the creation of your 2024-25 Perkins V Local Application.

This guide provides a framework to help you investigate the status of your CTE programming and identify areas for improvement. It is organized into six sections:

- Guiding Principles
- Assembling a Stakeholder Team
- Component A: Labor Market Alignment
- Component B: Student Participation and Persistence
- Component C: Program Performance
- Component D: Professional Development

While you may choose to cover topics in any order, you should begin by assembling a stakeholder team to inform your effort. This group must include representatives from the stakeholder groups that are identified in the Perkins V legislation.

You may complete this document online or electronically by typing directly into the provided fillable fields. Alternatively, you may print out a copy of this form and enter information by hand. Do not alter or remove sections. Those choosing to complete the document offline should upload a completed copy using SharePoint.

Guiding Principles and Logic Model

OVERVIEW

MSDE has identified a set of guiding principles to inform the creation of CTE programming. It includes the expectation that all learners should have access to high-quality CTE coursework that:

- aligns to high-skill, high-wage, in-demand careers,
- leads to industry-recognized and/or postsecondary credentials that supports entrance or advancement in a specific career cluster, and
- offers career-based learning experiences (e.g., work-based learning, apprenticeship) that require the application of academic and technical knowledge and skills in a work setting.

LOGIC MODEL

Despite the growing emphasis on CTE as a pivotal pathway for students in Maryland, there is a significant gap in the systematic evaluation of current CTE programs. Maryland's dedication to aligning educational experiences with the demands of the real-world labor market faces challenges:

1. Lack of Comprehensive Oversight: There isn't a unified method to holistically assess the state's CTE programming capacity. This absence has led to disparities among various student groups across CTE clusters, hindering equitable access to quality education.
2. Inefficient Funding Application Process: Potential CTE grantees in Maryland lack a structured Local Application process for Perkins V grant funds, affecting their ability to optimally leverage these resources for student outcomes.

The combined effect of these challenges puts Maryland's CTE programs at risk of not fully aligning with the Perkins V requirements and, more importantly, not meeting the evolving needs of students and the labor market. Consequently, there is an urgent need for a systematic approach to bridge these gaps, ensuring the delivery of equitable, high-quality career and technical training that truly mirrors labor market demands.

Resources	Strategies	Outputs	Short-Term Outcomes	Long-Term Outcomes	Impacts
Tangible: Funding from Perkins V	Develop a CLNA	Comprehensive report detailing current state of CTE programs	Identification of gaps and disparities in CTE programs	Enhanced quality and inclusivity of CTE programs	A workforce better prepared for Maryland's labor market demands
Tangible: Labor Market Information (LMI) Data	Analyze LMI to align CTE programs with labor market demands	List of high-demand sectors and occupations in Maryland	CTE curriculum adjustments based on labor market needs	Improved alignment of CTE tracks with workforce demands	Higher employment rates for CTE program graduates
Tangible: Interview and Focus Group	Conduct interviews and focus groups with stakeholders	Collection of feedback and insights from stakeholder groups	Immediate feedback loop established with stakeholders	Strengthened collaboration and partnerships	Enhanced stakeholder trust and investment in CTE programs
Intangible: Expertise in CTE Programming	Design a structured Local Application process for Perkins V funding	Guideline document for potential CTE grantees	Streamlined application process for Perkins V funding	Increased number of high-quality grant applications, earlier in the process	Optimal leverage of grant funds for improved student outcomes
Intangible: Stakeholder Relationships	Engage regularly with stakeholders for continuous feedback	Periodic stakeholder engagement sessions	Fostered sense of community ownership and involvement	Stronger community ties and support for CTE programs	CTE programs that resonate more deeply with community needs
Intangible: Knowledge of federal and state education guidelines	Ensure CTE programs align with Perkins V, the Blueprint for Maryland's Future, and other relevant guidelines	Regular compliance checks and reports	Immediate course correction when misalignments are found	Consistent alignment with state and federal guidelines	Sustained funding and support for CTE programs due to compliance

INTERPRETATION

1. **IF** we intentionally and strategically allocate Perkins funding in the planning process, **THEN** we can develop a CLNA leading to a comprehensive report that identifies gaps in the CTE programs, ultimately enhancing the quality and inclusivity of CTE programs and preparing the workforce better for Maryland's labor market demands.

2. **IF** we utilize LMI data, **THEN** we can better align CTE programs with current labor market demands, leading to adjustments in the CTE curriculum, improving the alignment of CTE tracks with workforce demands, and resulting in higher employment rates for CTE program graduates.

3. **IF** we employ interview and focus groups effectively, **THEN** we can gather valuable feedback from stakeholders, establishing an immediate feedback loop, strengthening collaboration, and enhancing stakeholder trust and investment in CTE programs.

4. **IF** we leverage our expertise in CTE programming, **THEN** we can design a structured Local Application process for Perkins V funding, streamlining the application process, increasing the number of successful grant applications, and optimizing the use of grant funds for improved student outcomes.

5. **IF** we nurture and maintain stakeholder relationships, **THEN** we can engage more deeply and regularly for feedback, fostering a sense of community ownership, strengthening community ties, and creating CTE programs that resonate more deeply with community needs.

6. **IF** we stay updated on federal and state education guidelines, **THEN** we can ensure consistent alignment of CTE programs with these guidelines, leading to immediate course corrections when needed, sustained alignment, and thereby securing sustained funding and support for CTE programs

PROGRAM DESIGN

All CTE programming in Maryland must be delivered through Programs of Study (POS) developed by the state or a local school system. To be considered "state approved," each program of study must meet these criteria:

- Strengthens the academic, career, and technical skills of students to prepare them for careers and further education.
- Incorporates input from diverse stakeholder groups, including industry and postsecondary partners
- Fits within one of 10 state-recognized career clusters that help students learn about their work options so that they may make informed career decisions.
- Includes opportunities for students to earn industry or postsecondary credentials and participate in career-based learning experiences.
- Prepares students for both college and careers through the completion of a planned sequence of coursework that blends academic, technical, and workplace skills.
- Incorporates a coherent set of academic, employability, and technical skills based on national and state standards that offer students a competitive advantage in the workplace.
- Offers multiple options to prepare students for entry into careers and further education through articulation agreements, supervised career-based learning experiences (e.g., work-based learning, internship, apprenticeship, etc.), and/or industry-mentored or capstone projects.
- Is based on enrollment and outcome data to inform program improvement and increase student performance.

Refer to these criteria as you conduct your CLNA to ensure your programming is rigorous and of uniformly high quality.

STUDENT ENGAGEMENT

A CTE POS includes a course sequence from grades nine through 12 and two or more years of postsecondary education courses. A student may meet the following thresholds of engagement:

> **Participant** — Student completing not less than one credit in a MSDE approved CTE POS.

Concentrator — Students who have earned at least 12 credits in a CTE POS or completed such a program if the program encompasses fewer than 12 credits or the equivalent in total in a MSDE approved CTE POS.

Completer — Student who meets all requirements in a state approved CTE POS.

PROGRAM DELIVERY

Local school systems must meet **Size, Scope, and Quality** criteria to qualify for federal funding. Detailed information on these and additional expectations relating to CTE programming can be found in Maryland's <u>Policies & Procedures for the Development & Continuous Improvement of Career and Technical Education Programs of Study</u>.

Any program that fails to meet all the following criteria will need to be brought into compliance or removed from your program approval request, invalidating it for Perkins V funding. While you are not expected to develop plans to address deficiencies as part of the CLNA process, you are encouraged to assess each CTE POS against these criteria to help prepare for developing your local application.

SIZE
At least two state-approved CTE POSs are offered in recognized clusters.
Each POS consists of a coordinated, non-duplicative sequence of academic and technical coursework comprising at least 3 credits.
Each CTE concentrator-level course (typically the 3rd in a program) has a minimum of 10 concentrators over a 4-year period. If not, evidence must be offered of continued progress toward meeting this requirement.
Each POS has the required number of staff, availability of equipment, and student access to facilities.

SCOPE
Curricula are aligned to state-approved industry standards that allow students to earn recognized credentials, certifications, licenses, college credit, or degrees
Curricula offer a progression from secondary to postsecondary education and/or employment (including attainment of an industry-recognized credential or apprenticeship), and from community college to bachelor's degree programs
Curricula allow students to learn and demonstrate academic, technical, and employability skills
Curricula include differentiated supports and modifications to meet the needs of diverse learners
Each CTE student has a written career and academic plan in place that includes the: - required courses to complete a POS and graduate   - required assessments to earn a certification, license, credential, or degree   - required academic assessments to graduate   - timeline to take courses, assessments, and complete career-based learning experiences.
All students, regardless of race, color, national origin, sex, or disability, have equitable access to high-quality CTE programs as required by <u>Code of Maryland Regulation 13A.04.02.04</u>
Approved POSs are guided by Local Advisory Councils and Program Advisory Committees according to the CTE Local Advisory Council and Program Advisory Committee Policies and Procedures (COMAR EA Title 21. Sec.101)
All CTE POS adhere to CTE Development Standards, which are required by <u>Code of Maryland Regulations 13A.04.02.03</u>
All programs meet the definitions for high-skill, high-wage, in-demand occupations

QUALITY
The site achieves or consistently makes progress towards local targets established for state and federal core indicators of performance
POS are delivered by instructors who meet state requirements to teach content at the secondary level
CTE POS are delivered by instructors who earned a minimum of effective on their teacher evaluation as defined by Code of Maryland Regulation 13A.07.09 within three years
Each CTE POS meets all the requirements of the MSDE evaluation criteria found in the Policies and Procedures for the Development and Continuous Improvement of CTE Programs of Study (page 45).
All students, including students in special populations, are offered the opportunity to: • Participate in at least one career-based learning experience (e.g., work-based learning, internship, apprenticeship, etc.) • Earn college credit and/or industry credentials • Participate in CTSOs
Professional learning opportunities, informed by data, are provided for administrators, instructors, faculty, counselors and support personnel to improve student learning outcomes. All secondary professional learning must be guided by the Maryland-endorsed National Learning Standards
Local and state annual data-reporting requirements are met, and reviews conducted of all annual Program Quality Index reports to inform improvement
Human resources are included in the recruitment process to ensure a diverse CTE teacher and faculty member candidate pool
Metrics are used to ensure that CTE teacher and faculty member recruitment strategies are successful
Teacher retention rates are reviewed annually, for the most recent 3 years, with data used to identify the top three contributing factors to CTE teacher and faculty member turnover

Assembling a Stakeholder Team

Assemble a diverse stakeholder team to assist you in conducting your CLNA. Representation in the listed categories is required by federal statute, except where indicated. While Perkins V requires more than one representative for each group (with an exception for CTE coordinators and data analysts), it is permissible for one person to fulfill up to two roles.

STAKEHOLDER TEAM COORDINATOR

[This is the individual responsible for planning and holding stakeholder meetings and completing CLNA]

Name	Jason Mullen
Organization	Chesapeake College
Title	Dean for Workforce
Email	jmullen@chesapeake.edu

STAKEHOLDER TEAM MEMBERS

When Selecting Stakeholders, consider:

- Recruit individuals who are knowledgeable about CTE at your site and influential in the field.
- Ensure that members understand the time commitment and can attend all scheduled meetings.
- Perkins V requires *more than one representative for each group* (with an exception for the coordinators and data analyst)*.* Members may not represent more than two stakeholder groups.
- If you are unable to recruit a member to fulfil a required role you should keep a record of your outreach efforts to demonstrate you acted in good faith.

Stakeholder Team Responsibilities

- Review Maryland Department of Labor employment and projections data, college student participation and performance data, and educator support efforts to identify priority areas for improvement.
- Ensure that program offerings are aligned to local, regional, and/or state employment priorities.
- Help to communicate the importance of delivering high-quality CTE POS in your site and champion local efforts to achieve improvement goals.
- Meet on a quarterly basis to track your progress in improving CTE programming and make annual updates to this needs assessment.

Note that stakeholder team meetings may be held in person, virtually, or using a hybrid approach. If scheduling conflicts make holding a full team meeting impractical, stakeholders may meet in subgroups to review data and consider strategies to strengthen programming. Ultimately, all stakeholders should contribute to identifying challenges and formulating solutions, and publicly support your findings.

Stakeholder Team Roster

SECONDARY FEEDER SCHOOLS

Role	Name	Title	Affiliation
Administration (e.g., principal, assistant principal)	Anna Howie	Principal, Dorchester Career & Technology Center	Dorchester County Public Schools
	Lindsey McCormick	Director of College and Career Readiness	Caroline County Public Schools
	Robin Werner	CTE Navigator	Talbot County Public Schools
	Adam Tolley	CTE Navigator	Queen Anne's County Public Schools
	Thomas Porter	Director of CTE	Kent County Public Schools
Professional career or academic counselor	Adam Tolley	CTE Director	Queen Anne's County Public Schools
	Brad Plutschak	Counselor	Caroline County Public Schools
	Robin Werner	CTE Director	Talbot County Public Schools
Instructors	Thomas Porter	Director of CTE	Kent County Public Schools
	Corey Dion	Welding Instructor	Queen Anne's County Public Schools
Instructional Support and Paraprofessionals (Psychologists, Social Workers, etc.)			

POSTSECONDARY

Role	Name	Title	Affiliation
Administration (e.g., dean, division chair)	Jason Mullen	Dean of Workforce	Chesapeake College
	Juliet Smith	Dean for Arts & Sciences	Chesapeake College
	David Harper	VP for Workforce & Academics	Chesapeake College
	Amber McGinnis	Executive Director, Chesapeake College Foundation	Chesapeake College
Faculty	Dr. Heather Westerfield	Professor / Nursing	Chesapeake College
	Dr. Lanka Elson	Professor / Computer Science	Chesapeake College
	Bridget Lowrie, Esq.	Asst. Professor / Criminal Justice	Chesapeake College
	David Timms	Simulation Director / Health Professions Chair	Chesapeake College

WORKFORCE

Role	Name	Title	Affiliation
Local Workforce Development board member	Dan Schneckenberger	Executive Director	Upper Shore WIB
	Ellen LaFrankie	Assistant Director	Upper Shore WIB
	Shirley Lake	Navigator	Upper Shore WIB
*Regional Economic Development organization member	Scott Warner	Executive Director	Midshore Regional Council
	Jack Wilson	Commissioner & Board Member	Queen Anne's County Economic Development Council
Local business & industry representative	Donna Saathoff	Owner/Operator	Family Affair Farm
	Jenny Bowie	Sr. VP of Patient Care Services and Chief Nursing Officer	UMMS, Shore Regional Health

OTHER

Role	Name	Title	Affiliation
Parent or caretaker			
Student			
Representative of Special Populations			
Out-of-School youth / unhoused youth / corrections	Beth Anne Langrell	Executive Director	For All Seasons

* Not required under Perkins V but recommended to include.

Component A: Labor Market Alignment

OVERVIEW

Career programming in Maryland must address the economic and workforce development needs of the state and align to high-skill, high-wage, and/or in-demand (HS/HW/ID) careers. These are defined as:

High-Skill — Careers that: (1) require previous work-related skills, knowledge, or experience of one or more years; (2) have a Specific Vocational Preparation (SVP) rating of at least six as defined by O*Net; (3) require state or federal licensing or industry-recognized certification; or (4). require a recognized postsecondary credential or degree.

High-Wage — Careers that exceed the state average annual wage of $69,750 in 2022.

In-Demand — Careers with a growth rate over ten years of at least 7% or a two-year occupational projected growth of 2.5%.

The Division of Career and College Readiness has evaluated all secondary and postsecondary State and Local approved POS against these HS/HW/ID criteria. Ideally, your CTE POS will meet all three of the criteria, or at least one to qualify for funding. You may access additional information on these programs at the Maryland CTE Data website. The Maryland Department of Labor has also developed Long Term Occupational Projections thru 2030, which can help you to identify high demand careers and the education and job training necessary to secure them.

ACTIVITY A.1 : TAKING STOCK

The following table details the CTE POS offered at your college in the 2022-23 school year, their alignment with high-skill, high-wage, and in-demand careers, and the relative proportion of students concentrating in each area. Although it is not *required* that each POS meet the criteria for high-skill, high-wage, *and* in-demand, it should be the goal of each POS to do so.

> *Note*: *Prior to sharing this table with your stakeholder team, you will need to suppress numbers and percentages in cell that do not include the minimum number of students required to protect student confidentiality. Maryland state policy is to suppress data for cells or percentages that are based on fewer than 35 students. Please consult your college policies to determine which data cells should be suppressed and how this information should be communicated (e.g., by entering 'LOW N' or '<35 students' in effected cells.*

Program	Alignment to current statewide industries (enter ✓)			Number of CTE 2022-23	Percent of all CTE 23
Example	HS	HW	ID	###	100%
AGRICULTURE AA 175		X	X	<10	N<2%
ENVIRONMENTAL SCIENCE AAS360		X	X		
COMPUTER SCIENCE TECHNOLOGY AAS470		X	X	48	5.3%
INFORMATION TECHNOLOGY AAS371		X	X		
FOOD SERVICE MANAGEMENT CT655					
TEACHER AIDE CT345		X	X	N<10	<2%
DRAFTING AND DESIGN CT742		X		N<10	<2%
WELDING/FABRICATION - MIG & TIG CERTIFICATE CT777		X	X	21	2.3%
WELDING/FABRICATION - STICK & FLUX-CORED CERTIFICATE CT778		X	X	21	2.3%
WELDING/METAL FABRICATION TECHNOLOGIES CT779		X	X	21	2.3%
EARLY CHILDHOOD DEVELOPMENT AAS641		X	X	17	1.9%
EARLY CHILDHOOD DEVELOPMENT-ADVANCED CT642		X	X	17	1.9%
EARLY CHILDHOOD DEVELOPMENT-BASIC CT645		X	X	17	1.9%
TECHNICAL/PROFESSIONAL STUDIES AAS400			X		
HEALTH, FITNESS AND EXERCISE SCIENCE AA160		X	X	N<10	<2%
CRIMINAL JUSTICE AAS602		X	X	N<10	<2%
CRIMINAL JUSTICE CT606		X	X	N<10	<2%

PHYSICAL THERAPIST ASSISTANT AAS141			X		
EMERGENCY MEDICAL SERVICES AAS 518			X		
EMERGENCY MEDICAL SERVICES CT519			X		
Medical Radiologic Technology/Science - Radiation Therapist AAS503		X	X		
Surgical Technology/Technologist AAS511		X	X	18	2.0%
Substance Abuse/Addiction Counseling CT685 (Human Services/Addition Counseling)			X	N<10	<2%
Mental and Social Health Services and Allied Professions, Other AAS682 (Human Services/Behavioral Health Area of Concentration)			X	22	2.4%
Registered Nursing/Registered Nurse AAS132		X	X	186	21%
Business Administration and Management, General AAS401		X	X	31	3.5%
Business Administration and Management, General CT402		X	X	31	3.5%
Accounting Technology/Technician and Bookkeeping AAS410	X		X	12	1.3%
Accounting Technology/Technician and Bookkeeping CT411			X	12	1.3%
Hospitality Administration/Management, Other					

Are you planning on adding any new or phasing out any existing POS in the upcoming year? If so, which CTE POS(s) are you considering and why?

Program/CIP Code	Adding or deleting	Rational for change

Hospitality Administration/Management, Other	Deleting	Does not have an industry recognized credential, add value to a candidate, Is not high wage, High percentage of low paying seasonal positions
FOOD SERVICE MANAGEMENT CT655	Deleting	Does not have an industry recognized credential, add value to a candidate, Is not high wage, High percentage of low paying seasonal positions

ACTIVITY A.2: ASSESSING PROGRAM ALIGNMENT TO LABOR MARKET AND INDUSTRY NEEDS

Based on a review of the CTE POS data for high-skill, high-demand, and in-demand standards, rate each statement as a strength or area for improvement. Provide an explanation for any answer with which you identify as an 'area for improvement.'

	Meets	Area for Improvement	Explanation
Our CTE stakeholders review workforce and economic data to assess current and anticipate future local employment needs in HS/HW/ID industries		**X**	While access to data is available, stakeholders find it challenging to understand how to interpret. Suggest PD to learn how to use economic development and workforce data such as Lightcast.
Processes are in place to identify and expand college level registered apprenticeship opportunities.	X	X	The College, in partnership with the LEAs, formed a Youth & Adult Apprenticeship workgroup to include Chesapeake College, all 5 LEAs, USWIB, MSDE and MD Labor reps
Processes are in place to update or phase out CTE POS that do not align with HS/HW/ID industries	X		All CTE POS are on a 5-year program review cycle, which includes assessment of program performance economic outlook and enrollment data.
A majority of our students are concentrating in POS aligned to HS/HW/ID industries		X	The addition of 2 CTE Navigators to the Admissions and Advising Office has helped to start moving the needle. In addition, Workforce training and CTE are a focus of the College Strategic plan.
Processes are in place to recruit business and industry stakeholders to participate on Program Advisory Committees	X	X	A regional PAC is held for all CTE programs; the USWIB operates a Local AC for the region. One LEA has created and shared a PAC manual that can be used in all LEAs and at the college.

ACTIVITY A.3: REFLECTION

Based on your responses in this component of the needs assessment guide, consider the following questions:

1. What is your rationale for offering programming that is not fully aligned with HS/HW/ID criteria you rated in Activity 1.1)? While the Heat map data does not show that any of the programs offered are HS (High Skilled) we believe that is in error. All offered programs require a great deal of technical and subject-specific skills. Program that are not HW such as addictions counseling and mental health counseling are often volunteer and grant funded in this region; however, the need is still present and there is interest from students for these programs. It is unclear why Accounting would be considered low wage.

2. What are the top five priorities you will address in the coming year to update or phase out misaligned CTE programs and/or expand student participation in CTE programming aligned with HW/HS/ID careers?

    1. Enroll more/a higher percentage of students from special population groups in programs aligned with HW/HS/ID careers
    2. Provide supports to students, particularly those in BMF, EANR, IT, MET, CSHT, HRS/H&B CTE clusters from underrepresented populations, to help ensure that they complete programs of study and enter the workforce
    3. Ensure that faculty/staff effectively and continuously improve inclusiveness of special populations
    4. Ensure that LEA-CC connections are robust to encourage CTE students, particularly those from underrepresented groups, to enroll in and complete CTE programs

    5. Strengthen and build enrollment in new Skilled Trades, Advanced Manufacturing and Marine Service Technician (Transportation) programs and courses as recognized high-demand industries. CTE programs are in development in all three of these areas.

Component B: Student Participation and Persistence

OVERVIEW

To ensure that all students have equitable access to CTE programming, MSDE encourages colleges to assess rates of student participation and persistence in CTE overall, as well as within each POS offered for the state approved Career Clusters. Enrollments also should be tracked using the disaggregates for student gender, race-ethnicity, and special population status detailed in Perkins V.

ACTIVITY B.1: TAKING STOCK

The following table asks you to enter the number and percentage of 2023 graduates statewide and in your college who participated in CTE coursework and persisted to achieve concentrator status in CTE programming, disaggregated by selected student demographics.

Please use the disaggregated 2023 data postsecondary heat maps, provided by MSDE, to fill in the requested information. You may contact staff at MSDE if you have questions about the data to be entered.

Once you have entered the data, review the information to determine whether there are any concerning gaps in student participation and/or persistence. Note that small numbers of students may have large impacts on your participation and concentrator status rates; consequently, use care in interpreting data with cell sizes less than 10 students.

> *Note*: Prior to sharing this table with your stakeholder team, you will need to suppress numbers and percentages in cell that do not include the minimum number of students required to protect student confidentiality. Maryland state policy is to suppress data for cells or percentages that are based on fewer than 35 students. Please consult your college policies to determine which data cells should be suppressed and how this information should be communicated (e.g., by entering 'LOW N' or '<35 students' in effected cells.

Student Group	2023 Graduates Statewide				2023 Graduates in Your College			
	Number	Percent	Percent participating in CTE	Percent of participants who achieved concentrator status	Number	Percent	Percent participating in CTE	Percent of participants who achieved concentrator status
All 2023 Graduates	20,213	100			248	100%	44%	59%
Gender								
Male	6157	30.46			67	27%	23%	19%
Female	14056	69.54			181	73%	77%	40%
Race-ethnicity								
American Indian	77	0.38			1	0%	1%	0%
Asian	1,502	7.43			5	2%	1%	6%
Black	5,129	25.37			24	10%	8%	11%
Hispanic	2,127	10.52			13	5%	2%	6%
Multi-race	785	3.88			6	2%	3%	3%
White	9,153	45.28			192	80%	86%	74%
Special Populations								
Economically disadvantaged	-	-			28	11%	26%	21%
English learners	-	-			0	0%	0%	1%
Individuals with disabilities	-	-			9	4%	8%	0%
Nontraditional fields	-	-			16	6%	15%	11%
Single parents	-	-			3	1%	3%	7%
Out of workforce	-	-			0	0%	0%	0%
Unhoused Individuals	-	-			0	0%	0%	0%
Youth in foster care	-	-			0	0%	0%	0%
Youth with parent in military	-	-			2	1%	2%	1%
Migrant students	-	-			0	0%	0%	0%

Note that since special population status is not mutually exclusive (i.e., a student may belong to more than one category), these data may not sum to 100%.

**Note: 7.14% of students are not included. The race-ethnicity associated with these students is Foreign/Non-Resident Alien or Unknown/Not Reported.

ACTIVITY B.2: ASSESSING YOUR PROGRAM

Based on a review of the overall CTE program data—relative to the state and across student groups—rate each statement as a strength or area for improvement. Provide an explanation for any answer with which you identify as an 'area for improvement.'

	Meets	Area for Improvement	Explanation
Our college ensures all students—irrespective of gender, race, or special population status—are provided unbiased, inclusive, and non-discriminatory information about CTE courses and POS	x		
Our college has processes in place to recruit students traditionally underrepresented in CTE to improve diversity in CTE POS		x	Create additional plans for targeted outreach and recruitment of diverse and special population groups on and off campus.
Processes are in place to ensure that students traditionally underrepresented in CTE have options to <u>enroll</u> in CTE POS	x		
Processes are in place to ensure that students traditionally underrepresented in CTE <u>persist</u> in CTE POS once enrolled		x	Identify diverse and special population students in CTE programs and collaborate with faculty advisors, CTE Program Directors, and academic support and student services to provide intrusive advising, tutoring, career services, and monitor progress and performance.
Processes are in place to ensure that all eligible students have equitable access to career-based learning experiences	x		
Career guidance and advisement services are provided to student prior to enrolling in a CTE POS	x		
All students have access to career planning and support services to help them successfully transition to advanced education and/or the workforce	x		

ACTIVITY B.3: REFLECTION

Based on your review of your data and responses in Activity B.2, consider the following questions:

1. Are there any student groups in your college that have concerning gaps in their CTE participation or persistence rates? If so, which groups are underperforming?
    Economically Disadvantaged
    Surg. Tech. economically disadvantaged and underperforming

2. What are the top five priorities you will address in the coming year to expand student participation in CTE programming and reduce participation and/or persistence gaps among students? [*Note: At least one priority area you identify should address the needs of gender, race-ethnicity, or special population groups.*]
    1. Increase participation of Black students in CTE generally
    2. Increase participation of economically disadvantaged students in Health Professions (Surg. Tech. in particular) and economically disadvantaged females in CST in particular
    3. Via campus events and programs, encourage CTE students from diverse and special populations to enroll and persist in CTE programs
    4. Via external outreach events, invite CTE students from diverse backgrounds and special populations to enroll in CTE programs at the College
    5. Ensure that role models included in outreach materials and events clearly explain programs and are designed to attract more students, particularly those from special populations, to enroll in and complete CTE courses and programs

ACTIVITY B.4: CAREER CLUSTER PARTICIPATION AND PERSISTENCE

Student participation and persistence rates may differ across Career Clusters. The following table asks you to enter the number and percentage of 2023 college graduates in your college who participated in CTE coursework and persisted to achieve concentrator status a given Career Cluster, disaggregated by selected student demographics. Create a separate table for each CTE Career Cluster offered.

Work with your college data team to find the requested information. You may contact staff at MSDE if you have questions about the data to be entered.

Note: Prior to sharing this table with your stakeholder team, you will need to suppress numbers and percentages in cell that do not include the minimum number of students required to protect student confidentiality. Maryland state policy is to suppress data for cells or percentages that are based on fewer than 35 students. Please consult your college policies to determine which data cells should be suppressed and how this information should be communicated (e.g., by entering 'LOW N' or '<35 students' in effected cells.

Career Cluster Name: Business Management & Finance

PROGRAMS OF STUDY WITHIN CLUSTER:

Name	Number Program Graduates 2023

Business Management & Finance – Accounting	4
Business Management & Finance – Bus. Management	4
Business Management & Finance – Bus. Mgmt. Certificate	3

CLUSTER-LEVEL DATA   BUSINESS MANAGEMENT & FINANCE

Student Group	Participation Rate			Persistence Rate
	2023 College Graduates (A)	2023 College graduates participating in this cluster (B)	Percentage difference (A-B)	2023 College graduates who participated in this cluster and achieved CTE concentrator status
All 2023 Graduates	100%	10%	90%	11
Gender				
Male	27%	27%	0%	
Female	73%	73%	0%	
Race-ethnicity				
American Indian	0%	0%	0%	
Asian	2%	0%	2%	
Black	10%	18%	-8%	
Hispanic	5%	0%	5%	
Multi-race	2%	9%	-7%	
White	80%	73%	7%	
Special Populations				
Economically disadvantaged	11%	36%	-25%	
English learners	0%	0%	0%	
Individuals with disabilities	4%	0%	4%	
Nontraditional fields	8%	0%	8%	
Single parents	1%	9%	-8%	
Out of workforce	0%	0%	0%	
Unhoused Individuals	0%	0%	0%	
Youth in foster care	0%	0%	0%	
Youth with parent in military	1%	9%	-8%	
Migrant students	0%	0%	0%	

Based on your responses in this component of the needs assessment guide, consider the following questions:

1. Does it appear that students in your college are participating at rates equivalent to their representation in the population for this CTE cluster? If not, what factors might be affecting their decisions?

   CTE cluster representation similar to that of the College at large. An exception is that cluster participation is 25% greater for economically disadvantaged students than for the College at large.

2. Does it appear that all students participating in this cluster are persisting at equivalent rates? If not, what factors might be affecting their decisions?

   Data provided appears to be insufficient to answer this question.

3. How might student participation and persistence in this cluster differ by program of study? Might there be some programs of study that are under- or over-performing the cluster average?

   Data provided appears to be insufficient to answer this question.

4. What are the top five priorities you will address in the coming year to expand student participation in CTE programming and reduce participation and/or persistence gaps among students? [*Note: At least one priority area you identify should address the needs of gender, race-ethnicity, or special population groups.*]

   The intent is to establish an early advising relationship between the accounting and business management program coordinators and potential accounting and business management students.

Career Cluster Name: Consumer Services, Hospitality, and Tourism

PROGRAMS OF STUDY WITHIN CLUSTER:

Name	Number Program Graduates 2023
Health, Fitness, & Exercise Science	2

CLUSTER-LEVEL DATA   CONSUMER SERVICES, HOSPITALITY, AND TOURISM

Student Group	Participation Rate			Persistence Rate
	2023 College Graduates (A)	2023 College graduates participating in this cluster (B)	Percentage difference (A-B)	2023 College graduates who participated in this cluster and achieved CTE concentrator status
All 2023 Graduates	100%	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed	2
Gender				
Male	27%	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed
Female	73%	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed
Race-ethnicity				
American Indian	0%	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed
Asian	2%	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed
Black	10%	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed
Hispanic	5%	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed
Multi-race	2%	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed
White	80%	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed
Special Populations				
Economically disadvantaged	11%	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed
English learners	0%	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed
Individuals with disabilities	4%	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed

Nontraditional fields	8%	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed
Single parents	1%	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed
Out of workforce	0%	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed
Unhoused Individuals	0%	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed
Youth in foster care	0%	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed
Youth with parent in military	1%	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed
Migrant students	0%	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed	NR=fewer than 5 students suppressed

Based on your responses in this component of the needs assessment guide, consider the following questions:

1. Does it appear that students in your college are participating at rates equivalent to their representation in the population for this CTE cluster? If not, what factors might be affecting their decisions?
   The enrollment in the exercise science transfer degree program is historically low but the typical student is a first-time, full-time, male, and white and in the 18-19 year old age range. Often times this program also attracts athletes. Exercise Science is a broad field with many possible occupational tracks.

2. Does it appear that all students participating in this cluster are persisting at equivalent rates? If not, what factors might be affecting their decisions?
   Overall students are not persisting in this program. Many students drop out or change their major at around the 30 credit mark. Difficulty with program requirements including math and anatomy & physiology are impacting this decision.

3. How might student participation and persistence in this cluster differ by program of study? Might there be some programs of study that are under- or over-performing the cluster average?
   The students that drop out of this program often select the Liberal Arts & Sciences degree to finish their Associate's Degree; there is more flexibility with regard to electives; Anatomy & Physiology is not required and the Math requirement is limited to 3 credits.

4. What are the top five priorities you will address in the coming year to expand student participation in CTE programming and reduce participation and/or persistence gaps among students? [*Note: At least one priority area you identify should address the needs of gender, race-ethnicity, or special population groups.*]
   Based on a recent program review - the program director has committed to working with Marketing, Advising, articulating universities, Assessment and Institutional Research in an attempt to increase enrollment and persistence in this program.

Career Cluster Name: Environmental, Agriculture, and Natural Resources

PROGRAMS OF STUDY WITHIN CLUSTER:

Name	Number Program Graduates 2023
Agriculture	3
Environmental Science Degree	5

CLUSTER-LEVEL DATA   ENVIRONMENTAL, AGRICULTURE, AND NATURAL RESOURCES

Student Group	Participation Rate			Persistence Rate
	2023 College Graduates (A)	2023 College graduates participating in this cluster (B)	Percentage difference (A-B)	2023 College graduates who participated in this cluster and achieved CTE concentrator status
All 2023 Graduates	100%	7%	93%	8
Gender				
Male	27%	25%	2%	
Female	73%	25%	48%	
Race-ethnicity				
American Indian	0%	0%	0%	
Asian	2%	0%	2%	
Black	10%	0%	10%	
Hispanic	5%	0%	5%	
Multi-race	2%	0%	2%	
White	80%	88%	-8%	
Special Populations				
Economically disadvantaged	11%	50%	-39%	
English learners	0%	0%	0%	
Individuals with disabilities	4%	0%	4%	
Nontraditional fields	8%	0%	8%	
Single parents	1%	0%	1%	
Out of workforce	0%	0%	0%	
Unhoused Individuals	0%	0%	0%	
Youth in foster care	0%	0%	0%	
Youth with parent in military	1%	0%	1%	
Migrant students	0%	0%	0%	

Based on your responses in this component of the needs assessment guide, consider the following questions:

1. Does it appear that students in your college are participating at rates equivalent to their representation in the population for this CTE cluster? If not, what factors might be affecting their decisions?

Students in the this CTE cluster do not participate at rates equal to their representation, this may have to do with how Agriculture and Environmental industries in our region are dominated by multi- generational white families. Despite local, state and federal initiatives, it continues to be a steep lift to create impactful change for this cluster when it comes to race and nontraditional special populations.

2. Does it appear that all students participating in this cluster are persisting at equivalent rates? If not, what factors might be affecting their decisions?

    Students who are participating persist at equivalent rates. The program showcases areas for all students.

    How might student participation and persistence in this cluster differ by program of study? Might there be some programs of study that are under- or over-performing the cluster average? No there are to POS in this cluster both with very small cohorts. Both POS are performing relatively equally.

3. What are the top five priorities you will address in the coming year to expand student participation in CTE programming and reduce participation and/or persistence gaps among students? [*Note: At least one priority area you identify should address the needs of gender, race-ethnicity, or special population groups.*]

    Participate in open houses, continue to showcase all different areas of agriculture, increase marketing to urban areas, hold community outreach programs, continue partnerships with local schools

Career Cluster Name: Health and Biosciences

PROGRAMS OF STUDY WITHIN CLUSTER:

Name	Number Program Graduates 2023
Physical Therapist Assistant Degree	5
Nursing: Registered Nurse	27
Radiologic Sciences	9
Surgical Technology AAS. Degree	6

CLUSTER-LEVEL DATA   HEALTH AND BIOSCIENCES

Student Group	Participation Rate			Persistence Rate
	2023 College Graduates (A)	2023 College graduates participating in this cluster (B)	Percentage difference (A-B)	2023 College graduates who participated in this cluster and achieved CTE concentrator status
All 2023 Graduates	100%	44%	56%	47
Gender				
Male	27%	9%	19%	
Female	73%	91%	-19%	
Race-ethnicity				
American Indian	0%	2%	-2%	
Asian	2%	2%	0%	
Black	10%	4%	6%	
Hispanic	5%	0%	5%	
Multi-race	2%	2%	0%	
White				
Special Populations				
Economically disadvantaged	11%	10%	1%	
English learners	0%	0%	0%	
Individuals with disabilities	4%	10%	-6%	
Nontraditional fields	8%	0%	8%	
Single parents	1%	0%	1%	
Out of workforce	0%	0%	0%	
Unhoused Individuals	0%	0%	0%	
Youth in foster care	0%	0%	0%	
Youth with parent in military	1%	10%	-9%	
Migrant students	0%	0%	0%	

Based on your responses in this component of the needs assessment guide, consider the following questions:

1. Does it appear that students in your college are participating at rates equivalent to their representation in the population for this CTE cluster? If not, what factors might be affecting their decisions?
   CTE Healthcare programs are dominated by white females this is reflective of the Healthcare industry in our region. Efforts through Perkins and college based DEI initiatives have been working to change this over the last several years.

2. Does it appear that all students participating in this cluster are persisting at equivalent rates? If not, what factors might be affecting their decisions?
   Special populations including race and non traditional are too small to determine a true persistence value. A loss of one completer for this group has a significant impact on percent change.

3. How might student participation and persistence in this cluster differ by program of study? Might there be some programs of study that are under- or over-performing the cluster average?
   Participation and persistence rates in the cluster when considered by individual POS's do not show sufficient differentiation to determine if an individual POS stands out as under or over performing. This is partially due to small cohort size limitations required by individual accreditation agencies.

4. What are the top five priorities you will address in the coming year to expand student participation in CTE programming and reduce participation and/or persistence gaps among students? [*Note: At least one priority area you identify should address the needs of gender, race-ethnicity, or special population groups.*]
   All of the CTE Health Professions programs are highly competitive and use a points system for acceptance once candidates have completed. The use of CTE Navigators through Case Management allows us to better support special population candidates prior to application for acceptance into their chosen CTE POS. Case management includes ensuring connections to persistence programs found in Student Support Services like TRIO, academic tutoring, Corner of Care, transportation vouchers and mental health counseling.

Career Cluster Name: Human Resource Services

PROGRAMS OF STUDY WITHIN CLUSTER:

Name	Number Program Graduates 2023
Education, General	0
Child Care & Support Services Management	6
Legal Assistant/Paralegal	1
Law Enforcement/Police Science	0
Criminal Justice and Corrections, Other	7
Behavioral Health Area of Concentration Degree	2
Addictions Counseling Certificate	3
Emergency Medical Services Paramedic / EMT	8

CLUSTER-LEVEL DATA   HUMAN RESOURCE SERVICES

Student Group	Participation Rate			Persistence Rate
	2023 College Graduates (A)	2023 College graduates participating in this cluster (B)	Percentage difference (A-B)	2023 College graduates who participated in this cluster and achieved CTE concentrator status
All 2023 Graduates	100%	24%	76%	27
Gender				
Male	27%	36%	-9%	
Female	73%	64%	9%	
Race-ethnicity				
American Indian	2%	0%	2%	
Asian	0%	0%	0%	
Black	10%	0%	10%	
Hispanic	5%	0%	5%	
Multi-race	2%	0%	2%	
White	80%	100%	-20%	
Special Populations				
Economically disadvantaged	11%	19%	-8%	
English learners	0%	0%	0%	
Individuals with disabilities	4%	4%	0%	
Nontraditional fields	8%	4%	4%	
Single parents	1%	0%	1%	
Out of workforce	0%	0%	0%	
Unhoused Individuals	0%	0%	0%	

Youth in foster care	0%	0%	0%	
Youth with parent in military	1%	0%	1%	
Migrant students	0%	0%	0%	

Based on your responses in this component of the needs assessment guide, consider the following questions:

1. Does it appear that students in your college are participating at rates equivalent to their representation in the population for this CTE cluster? If not, what factors might be affecting their decisions?
   Gender participation in this cluster does reflect the college population. Race specifically blacks do not 10 percent for the college pop vs. 0% in the cluster. Whites are overrepresented by 20% in the cluster. Economically disadvantaged special population is overrepresented when compared to the college general population. With the exception of Paramedic/EMT the programs are primarily identified as general education and most are available as Dual enrollment options as well. With the continued implementation and development of Blueprint improving DE access for all, we expect participation in POS found in this cluster to continue movement toward a better reflection of the college wide population.

2. Does it appear that all students participating in this cluster are persisting at equivalent rates? If not, what factors might be affecting their decisions?
   Yes it appears students are persisting at equivalent rates. The (n) for this cluster is so small it is difficult to verify with certainty.

3. How might student participation and persistence in this cluster differ by program of study? Might there be some programs of study that are under- or over-performing the cluster average?
   Participation and persistence rates in the cluster when considered by individual POS's do not show sufficient differentiation to determine if an individual POS stands out as under or over performing. Paramedic/EMT is the only program within the cluster that is competitive.

4. What are the top five priorities you will address in the coming year to expand student participation in CTE programming and reduce participation and/or persistence gaps among students? [*Note: At least one priority area you identify should address the needs of gender, race-ethnicity, or special population groups.*]
   1. Improved access to POS within this cluster by DE students as a result of Blueprint. The addition of a DE Admissions/ Advising staff person should allow for an increase in special populations across all POS in this cluster by allowing for increased advising, more on campus visit opportunities as well as off campus connections to potential students for this cluster.
   2. Paramedic/EMT more tuition assistance needs to be identified.
   3. Continue to expand simulation and lab activities to increase medical competency along with alignment to our tutoring.
   4. Create pathways from the ESL and Adult Basic Education Pathways into POS within this cluster.

5 . Ensure visual presence of special populations especially nontraditional and economically disadvanted in marketing materials, as well as outreach activities.

Career Cluster Name: Information Technology

PROGRAMS OF STUDY WITHIN CLUSTER:

Name	Number Program Graduates 2023
Computer Science Technology (CST)	6

CLUSTER-LEVEL DATA   INFORMATION TECHNOLOGY

Student Group	Participation Rate			Persistence Rate
	2023 College Graduates (A)	2023 College graduates participating in this cluster (B)	Percentage difference (A-B)	2023 College graduates who participated in this cluster and achieved CTE concentrator status
All 2023 Graduates	100%	6%	94%	6
Gender				
Male	27%	67%	-40%	
Female	73%	33%	40%	
Race-ethnicity				
American Indian	0%	0%	0%	
Asian	2%	0%	2%	
Black	10%	17%	-7%	
Hispanic	5%	0%	5%	
Multi-race	2%	0%	2%	
White	80%	83%	-4%	
Special Populations				
Economically disadvantaged	11%	17%	-5%	
English learners	0%	0%	0%	
Individuals with disabilities	4%	17%	-13%	
Nontraditional fields	8%	33%	-26%	
Single parents	1%	0%	1%	
Out of workforce	0%	0%	0%	
Unhoused Individuals	0%	0%	0%	
Youth in foster care	0%	0%	0%	
Youth with parent in military	1%	0%	1%	
Migrant students	0%	0%	0%	

Based on your responses in this component of the needs assessment guide, consider the following questions:

1. Does it appear that students in your college are participating at rates equivalent to their representation in the population for this CTE cluster? If not, what factors might be affecting their decisions?

   A.A.S. CST program - graduation rates are fairly consistent year over year, around 5 - 7 per year. In fall we got approved to add the A.S. IT program. Students have registered for the new program, no graduates as of 5/9/2024.

2. Does it appear that all students participating in this cluster are persisting at equivalent rates? If not, what factors might be affecting their decisions?

   The female population the A.A.S. CST program has increased each year since 2021. This is likely a direct result of CTE Navigator activities.

   CST students that struggle tend not to attend on a regular basis and do not turn in work. On the flip side, those that attend, ask questions, and submit work overall are doing well and learning new skills. All courses are laid out the same in Canvas with categories in the same order, and grading rubrics for the bigger assignments. The content is there for students along with many lecture pages of content on skills, etc. Improved or increased focus on case management strategies by CTE Navigators is expected to help with this

3. How might student participation and persistence in this cluster differ by program of study? Might there be some programs of study that are under- or over-performing the cluster average?

   There are just 2 POS available in this cluster. Both are male dominated for the industry, showing this cluster reflects the industry but it does not reflect the college pop. this is reflective of cluster but is reversed when com CST program tends to reflect the opposite in student population by gender when compared to the college stats. CTE Navigator recruiting and case management strategies have shown an impact. Continued activities by the CTE Navigator for this cluster and appropriate special populations should demonstrate additional movement toward reflecting the college general population.

4. What are the top five priorities you will address in the coming year to expand student participation in CTE programming and reduce participation and/or persistence gaps among students? [*Note: At least one priority area you identify should address the needs of gender, race-ethnicity, or special population groups.*]

   1. Increased outreach and events that create interest for nontraditional and other special populations by both CTE Navigators, POS leads and Instructors.
   2. CTE Navigator Case management including referals to Student Support Services reosurces and assuring attentive advising is in place.
   3 Additional activities in partnership with Blueprint Career Coaches
   4. Hands on activities including better connection to Upward Bound participants.

Career Cluster Name: Manufacturing, Engineering, and Technology

PROGRAMS OF STUDY WITHIN CLUSTER:

Name	Number Program Graduates 2023
Technical/Professional Studies	5
Welding/Fabrication – Mig & Tig Certificate	2
Welding/Fabrication – Stick & Flux-Cored Certificate	1

CLUSTER-LEVEL DATA   MANUFACTURING, ENGINEERING, AND TECHNOLOGY

Student Group	Participation Rate			Persistence Rate
	2023 College Graduates (A)	2023 College graduates participating in this cluster (B)	Percentage difference (A-B)	2023 College graduates who participated in this cluster and achieved CTE concentrator status
All 2023 Graduates	100%	7%	93%	8
Gender				
Male	27%	63%	-35%	
Female	73%	38%	35%	
Race-ethnicity				
American Indian	0%	0%	0%	
Asian	2%	0%	2%	
Black	10%	13%	-3%	
Hispanic	5%	0%	5%	
Multi-race	2%	0%	2%	
White	80%	88%	-8%	
Special Populations				
Economically disadvantaged	11%	13%	-1%	
English learners	0%	0%	0%	
Individuals with disabilities	4%	13%	-9%	
Nontraditional fields	8%	0%	8%	
Single parents	1%	0%	1%	
Out of workforce	0%	0%	0%	
Unhoused Individuals	0%	0%	0%	
Youth in foster care	0%	0%	0%	
Youth with parent in military	1%	0%	1%	
Migrant students	0%	0%	0%	

Based on your responses in this component of the needs assessment guide, consider the following questions:

1. Does it appear that students in your college are participating at rates equivalent to their representation in the population for this CTE cluster? If not, what factors might be affecting their decisions?
   Students do not reflect the college population but do reflect the male dominate industry.

2. Does it appear that all students participating in this cluster are persisting at equivalent rates? If not, what factors might be affecting their decisions?
   Persistence continues to be a concern in this cluster. The industry demand for students with the skills developed while participating in the cluster often allows them to enter the workforce early in the POS and often making money wins over completing the POS.

3. How might student participation and persistence in this cluster differ by program of study? Might there be some programs of study that are under- or over-performing the cluster average?
   N/A

4. What are the top five priorities you will address in the coming year to expand student participation in CTE programming and reduce participation and/or persistence gaps among students? [*Note: At least one priority area you identify should address the needs of gender, race-ethnicity, or special population groups.*]
   1. Skilled Trades has hired a Business and Industry Navigator through a different funding source. Their role is similar to the CTE Navigators but with a focus on Workforce and CTE training in the cluster.
   2. In addition to the Position in 1. PT Navigators are working to assist with recruitment and persistence for student in the cluster and Skilled Trades programs. Special attention is focused on outreach and connection to non traditional students, second language learners, economically disadvantaged persons.
   3. Numerous outreach programs are slated to start in the fall to serve as broader recruitment efforts to reach student groups that generally are underrepresented in the trade, Including Expanded dual enrollment, Community partnerships and casual workshops and a mobile classroom to reach students that may have logistical issues with traveling to campus.
   4. A Blueprint supported partnership with a local LEA will add access for DE students that were waitlisted by the LEA for the own Welding Program.

Component C: Program Performance

Federal law requires that you collect data on the performance of CTE concentrators. The accountability indicators cover a range of outcomes to help you assess whether students are making educational progress, earning recognized postsecondary credentials, concentrating in programs that prepare individuals for non-traditional occupations. These include:

1P1: Postsecondary 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.

2P1: Earned recognized postsecondary credential: The percentage of CTE concentrators who receive a recognized postsecondary credential during participation in or within 1 year of program completion.

3P1: Non-traditional program concentration: The percentage of CTE concentrators in career and technical education programs and programs of study that lead to non-traditional fields.

To establish performance expectations, MSDE has set performance targets for each indicator based on an analysis of statewide data. All providers are expected to achieve the performance targets established for each indicator. Moreover, to ensure that all students make progress, you are expected to monitor performance on an annual basis.

In the following table, use your heatmap to fill in your college's performance on the federal measures. On the heatmap, cells highlighted in green indicate your college met or exceeded the statewide performance level; yellow indicates your college performance did not meet the performance level but was within 90% of the target; and red indicates that your college did not meet the performance level and was less than 90% of the target.

Colleges failing to achieve the state performance level are expected to develop a program improvement plan to bring them into compliance.

COLLEGE PERFORMANCE BY STUDENT GROUP

	Federal Accountability Indicator 2023 Graduates		
	1P1	2P1	3P1
State Performance Target	71.33%	44.4%	24.85%
College Performance	74%	46%	15%
Gender			
Males	73%	44.3%	22.2%
Females	74%	47%	13%
Race-ethnicity			
American Indian			100%
Asian			13%
Black			14%
Hispanic			0%
Multi-race			40%
White	61%	40%	14%

SPECIAL POPULATIONS

	Federal Accountability Indicator 2023 Graduates		
	1P1	2P1	3P1
State Performance Target	71.33%	44.4%	24.85%
College Performance	74%	46%	15%
Economically disadvantaged	61%	40%	14%
English learners			17%
Individuals with disabilities			0%
Nontraditional fields			100%
Single parents			6%
Out of workforce			0%
Homeless individuals			0%
Youth in foster care			0%
Youth with a parent in active military			20%
Migrant students			

* Data for the 3S1 indicator reflect outcomes for 2022 graduates 6-months following their graduation.

Please note that for some indicators, the College does not collect data in exactly the format requested, partly because numbers reported would likely be below 10 for some categories. These cells were left blank in the tables above. The College will work toward collecting these data in future years, particularly for students with disabilities.

ACTIVITY C.1: ASSESSING PROGRAM PERFORMANCE

	List
Looking at *overall performance*, on which indicators are you <u>substantially underperforming</u>* the college performance target?	1P1 Asian, Black, Hispanic, Economically disadvantaged, English learners, Individuals with disabilities, Single parents, Out of workforce, Homeless individuals, Youth in foster care, Youth with a parent in active military, Migrant students
	2P1 Males, Asian, Black, Hispanic, White, Economically disadvantaged, English learners, Individuals with disabilities, Single parents, Out of workforce, Homeless individuals, Youth in foster care, Youth with a parent in active military, Migrant students
	3P1 Males, Females, Asian, Black, Hispanic, White, Economically disadvantaged, English learners, Individuals with disabilities, Single parents, Out of workforce, Homeless individuals, Youth in foster care, Youth with a parent in active military, Migrant students
Looking at *overall performance*, on which indicators are you <u>substantially exceeding</u> the college performance target?	1P1 Overperforming, White, male and female.
	2P1 Overperforming as a college, females overperforming,
	3P1 Overperforming American Indian and Multi-race, nontraditional fields

* Substantially underperforming is defined as achieving an outcome that is less than 90% of the college performance target, and substantially over-performing is achieving an outcome that is more than 110% of the college performance target.

ACTIVITY C.2: DETERMINING ROOT CAUSES

1. For each indicator for which you are substantially under performing the college performance target, identify the key factors that might affect student performance, including any disparities or gaps in performance by program. Ideally, these factors should be the primary drivers of the results that you see.

    The greatest challenge to improving performance with all of the special populations the college is under-performing in is to target special populations without requiring them to identify themselves. Our use of CTE Navigators is improving access and equity for the populations they are focused on; i.e., Blacks, Males in Health professions, females in CST. Under-peformance for the economically disadvantaged special population is particularly concerning because 2 of the 5 counties we support are considered entirely economicallydisadvantaged and the other 3 have significant pockets of economic disadvantage. We need further research to determine why CTE is underperforming in terms of serving special populations.

2. The data provided reflect the performance of all students within your college. Remember that aggregate data can hide considerable variation. As you think about strategies to improve performance, consider how program performance might differ within programs of study. Might some programs be performing above or below the site average? Ideally, we would be able to see variation when detailing into specific programs; however, as a small rural regional college the n in most of our CTE programs is so small it removes statistical value from the outcome. Our largest CTE program areas, health professions and CST, were chosen as a focus for improving performance because their larger "n" give us an opportunity to see change when applying strategies and there is less dramatic and potentially misleading shift in percentages when a few students enter or leave programs. Strategies that prove successful will ultimately be applied to the smaller programs, resulting in better performance across all programs.

3. Resource constraints may affect the activities you might undertake. What might be the most efficient and effective approach to making change (e.g., taking into consideration the relative size of your program enrollments? By continuing to utilize CTE Navigators that are initially focused on specific larger programs and identified priority special populations like Economically Disadvantaged or Blacks, we will potentially see performance improvement in other special populations. For example, Blacks historically are overrepresented in economically disadvantaged, single parent, homeless and out of workforce groups. By targeting the Black population for Health Professions and Computers, it could improve the performance of related special populations as well.

4. What are the top five priorities you will address in the coming year to improve student performance outcomes on indicators on which you are substantially underperforming? [*Note: At least one priority area you identify should address the needs of gender, race-ethnicity, or special population groups.*]

1. Increased enrollment and completion of Blacks in Health Professions and Computers.

2. Increase Males in Health Professions (Nursing, surgical Tech, Rad.Tech)

3. Increase females in Computer/IT

4. Improved partnership between LEAs and CCs through PD (NACEP conference) and joint committees (Early College and Youth/Adult Apprenticeship)

5. Faculty PD for Surge tech and Rad Tech instructors that includes nationally recognized best practices that support DEI

Component D: Recruiting, Developing, and Retraining CTE Educations

The quality of your CTE programming depends upon the skills of your workforce. This extends to all members of your educational team, including full-time faculty, part-time faculty, additional support staff available, and more. Ideally, faculty and staff should also be representative of the populations served and retained over time to promote program sustainability.

ACTIVITY D.1: REVIEW DATA ON CURRENT STAFF

Reviewing current staff demographics is critical to understanding where there are opportunities to strengthen staff skills and diversify your workforce.

CHESAPEAKE COLLEGE					
Faculty / Staff demographic	Percentage of 2022-23 faculty / staff	Percentage of students participating in CTE programming 2022-23	5-year faculty / staff turnover rate (Percentage of faculty / staff who did not return for years 2018-19 thru 2022-23)		
			Full-time Faculty	Part-time Faculty	Counselors / Support Staff
Gender			**FY18 – 3.21%**		
Male	31.17%		**FY19 – 2.24%**		
Female	68.83%		**FY20 – 1.37%**		
Race-ethnicity			**FY21 – 0.92%**		
American Indian	<1%		**FY22 – 1.43%**		
Asian	<1%		**FY23 – 0.94%**		
Black	6.7%				
Hispanic	1.2%				
Multi-race	<1%				
White	90.27%				
Credential					
Properly Licensed	N/A				
Granted Temporary Waiver	N/Q				

Notes: Chesapeake College currently does not collect data in the formats required to fill empty cells in the table above. The College team, to include Workforce/Academics, Human Resources, Institutional Research, Assessment, and Admissions, is committed to continual improvement in data collection for more comprehensive analysis.

ACTIVITY D.2: ASSESS EDUCATOR SUPPORT OPPORTUNITIES

It's critical to create consistent opportunities that allow your faculty/staff to maintain licensure and grow within this field. Professional development is a key strategy for retention and ensuring a high-quality workforce.

Based on your knowledge of professional licensure requirements and the availability of content-specific professional development opportunities across clusters, rate the extent to which you strongly agree or disagree with each statement. Where applicable, please add an explanation for your assessment with examples.

	Strength	Area for Improvement	Explanation
Faculty/staff acquire content-specific professional development required to maintain licensure.	X	X	Strength: Faculty, TLC and leadership have worked over the past year to give more freedom for faculty to determine what PD is most important for the success of their programs. Weakness: Funding for PD is a continuous challenge. Programs have worked to incorporate financial support for PD into operational budgets but in years where there are tighter budgets this support is often the first to be reduced. This coming year due to state funding reductions insufficient funds are available for Surge Tech and Rad Tech to attend appropriate conferences for PD.
Faculty/staff are aware of the requirements to maintain endorsement.	X		All faculty and staff are aware of requirements particularly in HP where all programs are accredited oversight by state and or national boards is required.
Faculty/staff have equal access to content-specific professional development opportunities across industries.	X		The college has a Teaching and Learning Committee that actively identified PD opportunities. All technical staff/ faculty also monitor related national organizations for PD opportunities.
Data is collected on the effectiveness of professional development to ensure it meets the needs of educators.	X		TLC collects and monitors Faculty PD completion. Provides technical support for instruction and ensures accessible content is delivered in all mode through the use of a variety of student, staff and faculty surveys and needs assessments in addition to monitoring industry trends.

ACTIVITY 4.3: REFLECTION

Based on your responses in this section of the needs assessment guide, consider the following questions:

1. Does your faculty/staff demographic characteristics reflect the students they serve across programs of study?   Yes, while demographic data for faculty is limited in scope it does in general reflect the students on race and gender. The College seeks to ensure that faculty representation for underrepresented groups remains or becomes consistent with student characteristics.

2. Are instructors adequately credentialed, including licenses, certifications, or endorsements for the courses they're teaching? If not, what mechanisms can be put in place to get them endorsed, or what recruitment efforts are necessary to attract properly credentialed instructors? Yes, all faculty are hired with appropriate credentialing and are supported in maintaining and updating their credentials.

3. To what extent does your institution offer regular, substantive content-specific professional development opportunities? Do all faculty/staff members have equal awareness of, and opportunities to participate in content-specific professional development opportunities, necessary to maintain their industry credentials and endorsements? The college has an established Teaching and Learning Committee that ensures all faculty are have access to appropriate professional development. CTE faculty in HP are monitored by accrediting bodies and oversight boards and must maintain PD in for compliance purposes.

4. What barriers exist to offering and participating in content-specific professional development?
Funding and scheduling constitute barriers to content-specific professional development, Efforts are being made to move toward including funds for PD in each program's operational budget; however, it is often insufficient. Content Specific PD is seldom held locally which adds to the costs. As a small rural college there is often only one faculty member per CTE program, so content specific PD held during the college semesters presents its own challenge by removing the instructor from the CTE courses they need to teach in order to travel to, attend and return from nationally available conferences and PD.

5. What are the top five priorities you might wish to address in the coming year to recruit, develop, and retain CTE instructors and improve their professional skills?
To recruit and retain CTE instructors: the College will prioritize student recruitment and supports for success. These efforts are essential for maintaining viable CTE programs, with sufficient class sizes and graduates to satisfy partnerships with local business and industry. Toward this end, specialized marketing strategies and recruitment teams are being developed and expanded in order to better attract and serve a diverse cross-section of local students. Instructors also need to see professional opportunities to develop and grow at the College.

To develop and improve CTE instructor skill: the College will prioritize PD funding, including conference attendance (remote and in person) and internal offerings. Internal offerings include course design for student accessibility, engagement, and success.

1. Student recruitment and support for success—under the theory that having sufficient enrollment supports instructor recruitment and retention.
2. Specialized Marketing -- see above.
3. External professional development for instructors, through conference attendance.
4. Internal professional development.
5. Enhanced partnerships with PAC groups and local CTE programming at secondary schools

Next Steps

With the completion of the CLNA), you are now poised to embark on the crucial next phase of securing Perkins V funding. This stage involves translating the insights and findings from the CLNA into actionable and strategic plans.

UTILIZING CLNA ANALYSIS FOR LOCAL PERKINS APPLICATION S.M.A.R.T.I.E. GOAL SETTING

The first step for postsecondary schools is to use their CLNA analysis to formulate S.M.A.R.T.I.E. goals. These goals should be Specific, Measurable, Achievable, Relevant, Time-bound, Inclusive, and Equitable. The essence of this process is to ensure that the goals set for CTE programs are not only aligned with the identified needs and opportunities but are also focused on inclusivity and equity.

Postsecondary schools should look at areas highlighted in the CLNA, such as skill gaps, program areas needing enhancement, and disparities in student participation and success rates. From here, specific goals can be set. For example, if the CLNA indicated a gap in technology-related skills among students, a S.M.A.R.T.I.E. goal could be to increase enrollment in technology-focused CTE programs by 15% within the next two years while ensuring equitable access for all student groups.

CONNECTING GOALS TO AN ANNUAL BUDGET FOR PERKINS FUNDING

Once S.M.A.R.T.I.E. goals are established, postsecondary schools must then align these objectives with an annual budget for Perkins funding. This budgeting should be a reflective exercise, considering not just the cost of program enhancements but also the broader resources required to meet these goals. This includes faculty development, curriculum updates, equipment purchases, and any necessary infrastructure improvements.

For instance, if one of the goals is to enhance a manufacturing CTE program, the budget may include expenses for new machinery, professional development for educators to teach advanced manufacturing techniques, and outreach initiatives to increase program enrollment.

ENSURING ALIGNMENT WITH PERKINS REQUIREMENTS

Throughout this process, postsecondary schools need to ensure that their plans align with the requirements of the Perkins V Act. This means that the goals, strategies, and budgeted activities should contribute to developing more effective and equitable CTE programs, as stipulated by Perkins V.