Maryland
STATE DEPARTMENT OF EDUCATION

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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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 Policies & Procedures for the Development & Continuous Improvement of Career and Technical Education Programs of Study.

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

SCOPE
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 Code of Maryland Regulation 13A.04.02.04
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 Code of Maryland Regulations 13A.04.02.03
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	Marc D. Minnick, DBA
Organization	Harford Community College
Title	Dean, Business and Applied Technology (BAT)
Email	mminnick@harford.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	Email
Administration (e.g., principal, assistant principal)	Joe Connolly	Coordinator of CTE and Magnet Programs	Harford County Public Schools	Joseph.Connolly@hcps.org
	Erin Mock (or designee)	Principal	Harford Technical High School	Erin.mock@hcps.org
Professional career or academic counselor	Jeanne Donlick	School admissions	Harford Technical High School	jeanne.donlick@hcps.org
	Dr. Shomari Zachary	Coordinator of P-Tech Program	Joppatowne High School	Shomari.Zachary@hcps.org
Instructors	Rob Scott	IT Academy/Oracle Coordinator	Havre de Grace High School	Robert.scott@hcps.org
	Sarah Paquin	Curriculum Specialist for CTE/Career Workforce	Harford County Public Schools	Sarah.Paquin@hcps.org
Instructional Support and Paraprofessionals (Psychologists, Social Workers, etc.)	Dr. Paula Stanton	Director of Equity and Cultural Proficiency	Harford County Public Schools	Paula.Stanton@hcps.org
	Martha Barwick	Education technology	Harford County Public Schools	Martha.barwick@hcps.org

POSTSECONDARY

Role	Name	Title	Affiliation	Email
Administration (e.g., dean, division chair)	Marc Minnick	Dean, Business and Applied Technology	Harford Community College	mminnick@harford.edu
	Dr. Diane Ryan	Vice President of Academic Affairs	Harford Community College	diryan@harford.edu
Faculty	Jaclyn Madden	Professor of STEM	Harford Community College	jmadden@harford.edu
	Nicholas Schoeb	Assistant Professor of CIS and IAC	Harford Community College	nschoeb@harford.edu

WORKFORCE

Role	Name	Title	Affiliation	Email
Local Workforce Development board member	Kim Justus	Executive Director	Susquehanna Workforce Network	kjustus@swnetwork.org
	Mary Ann Bogarty	Board Chair	Susquehanna Workforce Network Board of Directors, Jarrettsville Federal	mbogarty@jarrettsvillefederal.com
*Regional Economic Development organization member	Patrick Mullin	Sr. Program Manager	Harford County Economic Development Advisory Board, QED Systems, LLC	pmullin@qed-sys.com
	Mary Morris	Director, Baltimore Fund	Harford County Economic Development Advisory Board, University of Maryland Baltimore Office of Research & Development	mary.morris@umaryland.edu
Local business & industry representative	Chris Cosgrove	Manager, Metrology	SURVICE Engineering	Chris.cosgrove@survice.com
	Heather Lufborrow	CEO	LufCo	heather@lufburrow.com

OTHER

Role	Name	Title	Affiliation	Email
Parent or caretaker	Keri Otto	Parent of business student	HCC	kotto@gmail.com
Student	Jessica Delos-Santos	STEM/Nursing Student	HCC	jdelossantos2@owlmail.harford.edu
Representative of Special Populations	Sue Rattman	Board Member	Harford Center	
Out-of-School youth / unhoused youth / corrections		Youth Coordinator	Susquehanna Workforce Network	

* 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*

Program	Alignment to current statewide industries (enter ✓)			Number of CTE participants 2022-23	Percent of all CTE Participants 2022-23
Example	HS	HW	ID	###	100%
Accounting (AAS, AS, & CERT), *n<35*	✓	✓	✓	LOW N (n<35)	
Biotechnology, *n<35*	✓	✓	✓	LOW N (n<35)	
Business Administration (AS, AAS)	✓	✓	✓	102	23.94%
Communication Studies, AA, *n<35*	✓	✓	✓	LOW N (n<35)	
Computer Information Systems, AAS, *n<35*	✓	✓	✓	LOW N (n<35)	
Computer-Aided Design and Drafting (AAS, Cert), *n<35*	✓	✓		LOW N (n<35)	
Cyber Defense, Cert, *n<35*	✓	✓	✓	LOW N (n<35)	
Digital Arts (AA, AFA), *n<35*	✓	✓	✓	LOW N (n<35)	
Early Childhood Education (AAS, AST), *n<35*	✓	✓	✓	LOW N (n<35)	
Engineering Technology, AAS, *n<35*	✓	✓	✓	LOW N (n<35)	
Entrepreneurship Cert, Cert, *n<35*	✓	✓	✓	LOW N (n<35)	
Exercise Science, AS, *n<35*	No data	No data	No data	LOW N (n<35)	
Geospatial Technology, AAS, *n<35*	✓	✓	✓	LOW N (n<35)	
Human Resources Cert, Cert, *n<35*	✓	✓	✓	LOW N (n<35)	
Information Assurance and Cybersecurity (AAS, Cert, *n<35*	✓	✓	✓	LOW N (n<35)	
Information Systems Management, *n<35*	✓	✓	✓	LOW N (n<35)	

Medical Assistant, AAS, *n<35*	✓			LOW N (n<35)	
Nursing (RN), AS	✓	✓	✓	123	28.87%
Paralegal Studies (AAS, Cert), *n<35*	✓	✓	✓	LOW N (n<35)	
Photography (AA, AFA), *n<35*	✓	✓	✓	LOW N (n<35)	
Theatre, AA, *n<35*	✓	✓	✓	LOW N (n<35)	

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
NA		

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	Yes	Strive to stay abreast of novel workforce requirements driven by technology advancement.	HCC recently reconstituted three advisory boards to update membership with new industry representation. These boards guide HCC Computer and Information Systems, Business, and Workforce Development (non-credit) programs.
Processes are in place to identify and expand college level registered apprenticeship opportunities.	Yes	Adjust offerings to meet demand.	Apprenticeship programs at HCC are in review. As industry needs change, HCC's offerings must adjust. For instance, in the manufacturing sector, many companies prefer a set of NIMS certifications than a full registered apprenticeship. HCC consults with industry partners and workforce development organizations to review and update programs as needed.
Processes are in place to update or phase out CTE POS that do not align with HS/HW/ID industries	Yes	Evaluation and refresh.	HCC's new VP for Academic Affairs has launched a review of CTE programs to ensure they are performing to salary and participation standards and to ensure HCC's program include new HS/HW/ID industry requirements.
A majority of our students are concentrating in POS aligned to HS/HW/ID industries	Yes	In review.	As stated above, HCC is currently reviewing programs of study for alignment.
Processes are in place to recruit business and industry stakeholders to participate on Program Advisory Committees	Yes	Always recruiting.	HCC's administrative and academic leaders are highly involved in local community organizations and events where they are able to recruit new employers to provide input through PACs and other input sources.

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)?

HCC offers only two programs that demonstrate partial alignment with HS/HW/ID criteria representing 30 students – Medical Assistant and CAD. These are offered due to local demand. However, all programs

will be reviewed for alignment with HS/HW/ID criteria, participation, and local demand. Programs not meeting minimum standards will be phased out.

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. The first priority of the new VP for Academic Affairs is to evaluate all credit and non-credit academic programs against labor market, participation, and salary standards. Programs will be provided additional resources or phased out, depending on the results of this comprehensive review.
    2. The local demand for software developers, computer systems engineers, and cyber security expertise continues to grow in Harford County, due to the presence of Army organizations at Aberdeen Proving Ground and many science and technology firms in the community. HCC will continue to expand programs related to these careers and actively recruit new students, particularly among underrepresented groups. Additionally, HCC is forming partnerships with employers and the Harford County Public Schools to create pathways.
    3. Harford Community College is expanding and promoting opportunities for dual enrollment with underrepresented Harford County Public Schools students.
    4. In partnership with the local workforce development system and HCPS guidance counselors, HCC is working to increase awareness among high school students of CTE programs.
    5. HCC's initiative "My College Success Network" provides additional support, resources, and coaching to help students increase persistence and retention. This program, while open to all students, is focused on addressing achievement gaps in underrepresented students.

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 statewide graduate data and 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*

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	Statewide Data not Available				868	100	49.08%	Graduate data not available
Gender								
Male					359	41.36%	28.57%	Not available
Female					509	58.64%	20.51%	Not available
Race-ethnicity								
American Indian					2	0.23%	0.00%	Not available
Asian					32	3.69%	1.84%	Not available
Black					121	13.94%	7.03%	Not available
Hispanic					55	6.34%	2.42%	Not available
Multi-race					44	5.07%	2.19%	Not available
Unknown					3	0.35%	0.00%	Not available
White					611	70.39%	35.60%	Not available
Special Populations								
Economically disadvantaged					Not available		Not available	Not available
English learners					Not available		Not available	Not available
Individuals with disabilities					Not available		Not available	Not available

Nontraditional fields					Not available		Not available	Not available
Single parents					Not available		Not available	Not available
Out of workforce					Not available		Not available	Not available
Unhoused Individuals					Not available		Not available	Not available
Youth in foster care					Not available		Not available	Not available
Youth with parent in military					Not available		Not available	Not available
Migrant students					Not available		Not available	Not available

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%.

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	Meets	Aligned with strategic plan	HCC is rolling out a new strategic plan on July 1. This was developed with input from numerous community organizations. The Strategic Plan is heavily focused on developing better connections with underrepresented student groups, to include outreach through the schools and a variety of organizations already serving these students.
Our college has processes in place to recruit students traditionally underrepresented in CTE to improve diversity in CTE POS	Meets	Increase participation	Underrepresented students in Harford County Public Schools participate less in dual enrollment than other students. Initiatives are in place to engage students and increase awareness of HCC CTE programs while students are in high school and to start these students on pathways – noncredit or credit – through dual enrollment programs.
Processes are in place to ensure that students traditionally underrepresented in CTE have options to enroll in CTE POS	Meets	Specific areas of study	HCC is focused on enrolling underrepresented students in dual enrollment programs while in high school.
Processes are in place to ensure that students traditionally underrepresented in CTE persist in CTE POS once enrolled	Meets	Additional supports	HCC's initiative "My College Success Network" provides additional support, resources, and coaching to help students increase persistence and retention. This program, while open to all students, will address achievement gaps in underrepresented students.

Processes are in place to ensure that all eligible students have equitable access to career-based learning experiences	Meets	Additional focus	HCC is exploring ways to improve career advising and guidance to all students, including underrepresented.
Career guidance and advisement services are provided to student prior to enrolling in a CTE POS	Meets	Alignment with labor market	HCC career guidance and advising personnel are provided information about local labor market.
All students have access to career planning and support services to help them successfully transition to advanced education and/or the workforce	Meets	Partnerships	HCC provides access to career planning and support services and is looking to increase its partnerships with community-based organizations, such as Susquehanna Workforce Network, to transition students into successful careers.

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?
   Women remain underrepresented in communications technology, computer science, construction, MET, engineering, and business management fields.

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.]*
   a. Women remain underrepresented in computer science and engineering. This problem is not unique to HCC, but is one HCC recognizes as needing correction because of the opportunities for family-supporting wages in computer science and engineering fields and the high demand in our region. The solution to this imbalance relies upon interventions in the elementary grades, so HCC is partnering with community-based organizations, such as the Discovery Center at Water's Edge, to help to increase their offerings, As a result, HCC will see more gender equity in coming years.
   b. We see a small gap in Black student participation in construction and business management and finance, which we will address this as part of our overall outreach efforts under the Perkins grant.
   c. Underrepresented students in Harford County Public Schools participate less in dual enrollment than other students. Initiatives are in place to engage students and increase awareness of HCC CTE programs while students are in high school and to start these students on pathways – noncredit or credit – through dual enrollment programs.
   d. HCC's initiative "My College Success Network" provides additional support, resources, and coaching to help students increase persistence and retention. This program, while open to all students, will address achievement gaps in underrepresented students.
   e. HCC will collaborate with HCPS administrators and guidance counselors to expand awareness of HCC CTE program opportunities among high school students.

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*

Career Cluster Name: Arts, Media, and Communication

PROGRAMS OF STUDY WITHIN CLUSTER:

Program of Study Name	**Number Program Graduates 2023**
AA Communication Studies	**11**
AA, AFA Digital Arts	**6**
AAS Interactive Media Production	
AA, AFA, Cert Photography	**4**
AAS, AA Theatre	**1**
Total	**22**

CLUSTER-LEVEL DATA

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%	100%		Graduate Data Not available
Gender				
Male	41.36%	36.36%	5.00%	Not available
Female	58.64%	63.64%	-5.00%	Not available
Race-ethnicity				
American Indian	0.23%	0.00%	0.23%	Not available
Asian	3.69%	4.55%	-0.86%	Not available
Black	13.94%	9.09%	4.85%	Not available
Hispanic	6.34%	4.55%	1.79%	Not available
Multi-race	5.07%	4.55%	0.52%	Not available
White	70.39%	77.27%	-6.88%	Not available
Unknown	0.35%	0.00%	0.35%	Not available

Special Populations				Special Populations Graduate Data
Economically disadvantaged				Not available
English learners				Not available
Individuals with disabilities				Not available
Nontraditional fields				Not available
Single parents				Not available
Out of workforce				Not available
Unhoused Individuals				Not available
Youth in foster care				Not available
Youth with parent in military				Not available
Migrant students				Not available

Career Cluster Name: Business Management and Finance

PROGRAMS OF STUDY WITHIN CLUSTER:

Program of Study Name	Number Program Graduates 2023
AS, AAS, Cert – Accounting	**34**
As, Cert Business Administration	**97**
AAS Business Management	**5**
AAS, Cert Administrative Office Professional	
Entrepreneurship Cert	**2**
Marketing Cert	
Total	**138**

CLUSTER-LEVEL DATA

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%	100%		Graduate Data Not available
Gender				
Male	41.36%	56.52%	-15.16%	Not available
Female	58.64%	43.48%	15.16%	Not available
Race-ethnicity				
American Indian	0.23%	0.00%	0.23%	Not available
Asian	3.69%	4.35%	-0.66%	Not available
Black	13.94%	13.77%	0.17%	Not available
Hispanic	6.34%	5.80%	0.54%	Not available
Multi-race	5.07%	1.45%	3.62%	Not available
White	70.39%	74.64%	-4.25%	Not available
Unknown	0.35%	0.00%	0.35%	Not available
Special Populations				Special Populations Graduate Data
Economically disadvantaged				Not available
English learners				Not available
Individuals with disabilities				Not available

Nontraditional fields				Not available
Single parents				Not available
Out of workforce				Not available
Unhoused Individuals				Not available
Youth in foster care				Not available
Youth with parent in military				Not available
Migrant students				Not available

Career Cluster Name: Construction and Development

PROGRAMS OF STUDY WITHIN CLUSTER:

Program of Study Name	**Number Program Graduates 2023**
AAS, Cert Computer-Aided Design and Drafting	**13**
AAS, Cert Geospatial Technology	**4**
Total	**17**

CLUSTER-LEVEL DATA

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%	100%		Graduate Data Not available
Gender				
Male	58.82%	-17.46%	58.82%	Not available
Female	41.18%	17.46%	41.18%	Not available
Race-ethnicity				
American Indian	0.23%	0.00%	0.23%	Not available
Asian	3.69%	0.00%	3.69%	Not available
Black	13.94%	0.00%	13.94%	Not available
Hispanic	6.34%	0.00%	6.34%	Not available
Multi-race	5.07%	0.00%	5.07%	Not available
White	70.39%	100.00%	-29.61%	Not available
Unknown	0.35%	0.00%	0.35%	Not available
Special Populations				Special Populations Graduate Data
Economically disadvantaged				Not available
English learners				Not available
Individuals with disabilities				Not available
Nontraditional fields				Not available
Single parents				Not available
Out of workforce				Not available
Unhoused Individuals				Not available

Youth in foster care				Not available
Youth with parent in military				Not available
Migrant students				Not available

Career Cluster Name: Health and Biosciences

PROGRAMS OF STUDY WITHIN CLUSTER:

Program of Study Name	**Number Program Graduates 2023**
AAS, Cert Biotechnology	**3**
AS, Cert Exercise Science	**15**
AAS, Cert Medical Assistant	**17**
AS Nursing	**123**
Total	**158**

CLUSTER-LEVEL DATA

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%	100%		Graduate Data Not available
Gender				
Male	41.36%	19.62%	21.74%	Not available
Female	58.64%	80.38%	-21.74%	Not available
Race-ethnicity				
American Indian	0.23%	0.00%	0.23%	Not available
Asian	3.69%	3.80%	-0.11%	Not available
Black	13.94%	18.99%	-5.05%	Not available
Hispanic	6.34%	4.43%	1.91%	Not available
Multi-race	5.07%	4.43%	0.64%	Not available
White	70.39%	68.35%	2.04%	Not available
Unknown	0.35%	0.00%	0.35%	Not available
Special Populations				Special Populations Graduate Data Not Available
Economically disadvantaged				Not available
English learners				Not available
Individuals with disabilities				Not available
Nontraditional fields				Not available

Single parents				Not available
Out of workforce				Not available
Unhoused Individuals				Not available
Youth in foster care				Not available
Youth with parent in military				Not available
Migrant students				Not available

Career Cluster Name: Human Resource Services

PROGRAMS OF STUDY WITHIN CLUSTER:

Program of Study Name	**Number Program Graduates 2023**
AAS, AAT Early Childhood Education	**25**
Human Resources Cert	**1**
AAS, Cert Paralegal Studies	**5**
Total	**31**

CLUSTER-LEVEL DATA

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%	100%		Graduate Data Not available
Gender				
Male	41.36%	3.23%	38.13%	Not available
Female	58.64%	96.77%	-38.13%	Not available
Race-ethnicity				
American Indian	0.23%	0.00%	0.23%	Not available
Asian	3.69%	3.23%	0.46%	Not available
Black	13.94%	3.23%	10.71%	Not available
Hispanic	6.34%	6.45%	-0.12%	Not available
Multi-race	5.07%	6.45%	-1.38%	Not available
White	70.39%	80.65%	-10.25%	Not available
Unknown	0.35%	0.00%	0.35%	Not available
Special Populations				Special Populations Graduate Data
Economically disadvantaged				Not available
English learners				Not available
Individuals with disabilities				Not available
Nontraditional fields				Not available
Single parents				Not available
Out of workforce				Not available

Unhoused Individuals				Not available
Youth in foster care				Not available
Youth with parent in military				Not available
Migrant students				Not available

Career Cluster Name: Information Technology

PROGRAMS OF STUDY WITHIN CLUSTER:

Program of Study Name	**Number Program Graduates 2023**
AAS, Computer Information Systems	**18**
AAS, Cert Information Assurance and Cybersecurity	**29**
AS Information Systems Management	**3**
Cert Cyber Defense	**6**
Total	**56**

CLUSTER-LEVEL DATA

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%	100%		Graduate Data Not available
Gender				
Male	41.36%	82.14%	-40.78%	Not available
Female	58.64%	17.86%	40.78%	Not available
Race-ethnicity				
American Indian	0.23%	0.00%	0.23%	Not available
Asian	3.69%	3.57%	0.12%	Not available
Black	13.94%	14.29%	-0.35%	Not available
Hispanic	6.34%	5.36%	0.98%	Not available
Multi-race	5.07%	10.71%	-5.65%	Not available
White	70.39%	66.07%	4.32%	Not available
Unknown	0.35%	0.00%	0.35%	Not available
Special Populations				Special Populations Graduate Data
Economically disadvantaged				Not available
English learners				Not available
Individuals with disabilities				Not available
Nontraditional fields				Not available
Single parents				Not available

Out of workforce				Not available
Unhoused Individuals				Not available
Youth in foster care				Not available
Youth with parent in military				Not available
Migrant students				Not available

Career Cluster Name: Manufacturing, Engineering, and Technology

PROGRAMS OF STUDY WITHIN CLUSTER:

Program of Study Name	**Number Program Graduates 2023**
AAS Engineering Technology	**4**
Total	**4**

CLUSTER-LEVEL DATA

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%	100%		Graduate Data Not available
Gender				
Male	41.36%	100.00%	-58.64%	Not available
Female	58.64%	0.00%	58.64%	Not available
Race-ethnicity				
American Indian	0.23%	0.00%	0.23%	Not available
Asian	3.69%	0.00%	3.69%	Not available
Black	13.94%	0.12%	13.82%	Not available
Hispanic	6.34%	0.00%	6.34%	Not available
Multi-race	5.07%	0.12%	4.95%	Not available
White	70.39%	0.23%	70.16%	Not available
Unknown	0.35%	0.00%	0.35%	Not available
Special Populations				Special Populations Graduate Data
Economically disadvantaged				Not available
English learners				Not available
Individuals with disabilities				Not available
Nontraditional fields				Not available
Single parents				Not available
Out of workforce				Not available
Unhoused Individuals				Not available

Youth in foster care				Not available
Youth with parent in military				Not available
Migrant students				Not available

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?

   Some clusters do not appear to have equivalent participation rates compared to the population. Many of these differences reflect long standing assumptions about which career types are more suited for each gender:
   - For Health and Biosciences, female participation is 21.74% greater than the average for females.
   - Construction and Development had 17.46% more male participation that the population.
   - Human Resources Services is also heavily skewed toward female participation, with females represented 38.01% more than the general population (30 female v. 1 male).
   - Information Technology had 40.78% more male participation than average.
   - Business Management and Finance had a 15.16% greater male participation rate than the average (78 male v. 60 female).
   - Construction Development's ethnicity participation was 100% white (all 17 participants).

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 persistence data were not available for these analyses.

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 Health and Biosciences cluster is heavily influenced by the predominance of females in the Nursing POS.
   - Human Resource Services is mostly made up of participants in Early Childhood Education, with only one male in this cluster.

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.]*
   - Concentrate resources on reducing participation and performance gaps in high-demand, high-wage growing career program areas.

- Identify and address factors that continue to affect low female participation in computing and information systems.
- Increase female participation in Business Management and Finance.
- Increase Black performance in computing and information systems

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	44.40	24.85
College Performance	83.0	47.0	23.0
Males	77	99	125
Females	140	193	138
Race-ethnicity			
American Indian			
Asian		14	16
Black	33	47	63
Hispanic	13	19	18
Multi-race		11	12
White	153	201	154

SPECIAL POPULATIONS

	Federal Accountability Indicator 2023 Graduates		
	1P1	2P1	3P1
State Performance Target	71.33	44.40	24.85
College Performance	83.0	47.0	23.0
Economically disadvantaged	10	11	4
English learners			
Individuals with disabilities	10	19	20
Nontraditional fields	34	47	263
Single parents			2
Out of workforce			
Homeless individuals			
Youth in foster care			
Youth with a parent in active military			
Migrant students			

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

ACTIVITY C.1: ASSESSING PROGRAM PERFORMANCE

	List
Looking at *overall performance*, on which indicators are you substantially underperforming* the college performance target?	1P1 Enrollee Categories: • Black/African American • Students with disabilities • Non-traditional 2P1 Enrollee Categories: • Black/African American • Non-traditional 3P1 Enrollee Categories: • Female • Economically disadvantaged
Looking at *overall performance*, on which indicators are you substantially exceeding the college performance target?	1P1 Enrollee Category: • Economically disadvantaged 2P1 Enrollee Categories: • Asian • Students with disabilities 3P1 Enrollee Categories: • Male • Asian • Non-traditional • Foster care (in or aged-out) • Parent in Armed Forces

* 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 underperforming 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.
    a. Systemic barriers and access to resources are two key factors that might affect student performance in the areas where HCC is substantially underperforming. For Black/African American students and non-traditional students, cultural and societal biases can impact their experiences, expectations, and outcomes. Additionally, students with disabilities often face challenges related to accessibility and adequate support services. Female students and economically disadvantaged students may encounter barriers such as gender biases in nontraditional fields and financial constraints that limit their educational opportunities and success.

   b. These disparities highlight the need for targeted support systems, inclusive practices, and resource allocation to address the specific needs of these student groups. HCC's FY25 Strategic Plan includes new and improved initiatives targeted at thoroughly addressing these needs.

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?
   a. Overall, HCC is performing much better than the state performance target in 1P1 and 2P1. In 3P1, HCC is just under the state performance target. But captured in 3P1 is HCC's substantial underperformance of women in computing sciences. This is a persistent issue in which HCC has not seen much progress. Women are exposed to gender stereotypes from a young age that portray computing and technology fields as male-dominated, which can be discouraging to girls. By the time the students arrive at HCC, many young women have opted out of computing and technology.
   b. Nevertheless, there are activities that HCC can do to retain and expand the number of women in computing. First, teachers need training to recognize unconscious biases they may possess. Mentorship programs where students can connect with female professionals help form supportive relationships important for retention. Targeted recruiting of women can include scholarships and partnerships with organizations that promote women in tech.

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?

To address resource constraints effectively while making changes, it is crucial to adopt a strategic and focused approach that maximizes impact with available resources. To do this, we will:

   a. Prioritize high-impact areas, such as improving support services for underrepresented groups.
   b. Leverage data-driven decision making to identify the most pressing needs and target interventions where they can be most effective.
   c. Optimize resource allocation by reallocate funds from less critical areas to high-priority projects.
   d. Enhance collaboration and partnerships with government, industry, and nonprofits to provide access to additional resources, such as funding, training opportunities, and mentoring programs.

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. Increasing female participation in computing science programs
2. Provide support services to Black/African American CTE students to increase retention and placement in careers

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.

HCC does not collect Faculty/staff data needed to complete this section.

NAME OF CAREER CLUSTER OR CTE POS:					
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	HCC does not collect Faculty/staff data needed to complete this section.				
Male					
Female					
Race-ethnicity					
American Indian					
Asian					
Black					
Hispanic					
Multi-race					
White					
Credential					
Properly Licensed					
Granted Temporary Waiver					

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.	10/10		All faculty reviewed annually for licenses, renewals, and endorsements.
Faculty/staff are aware of the requirements to maintain endorsement.	10/10		All faculty reviewed annually for licenses, renewals, and endorsements.
Faculty/staff have equal access to content-specific professional development opportunities across industries.	7/10		HCC's new leadership is examining and expanding internal professional development through its Center for Excellence in Teaching and Learning (CETL) initiatives.
Data is collected on the effectiveness of professional development to ensure it meets the needs of educators.	10/10		Data collected to make informed decisions for professional development. Includes data on industry partnerships, inclusive learning, underrepresented learning opportunities, and other data points.

ACTIVITY 4.3: REFLECTION

1. Does your faculty/staff demographic characteristics reflect the students they serve across programs of study?

   In part, HCC faculty and staff demographics are representative of the students they serve. Some programs are fully reflective while others lag due to a very small selection of candidates.

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, instructors are credentialed, licensed, and/or endorsed for courses they teach. This is reviewed on an annual basis to ensure compliance.

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?

   HCC offers professional development to its faculty and staff to maintain industry credentials. Industry events, job shadowing, on-line technical certifications or advanced studies at a four-year institution are all tactics faculty use to enhance their knowledge and skills.

4. What barriers exist to offering and participating in content-specific professional development?

   HCC prioritizes professional development and supports faculty in pursuing continuous learning opportunities from a variety of sources.

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?
   a. **To expand high-wage, high-skill, in-demand programs such as computer science, engineering, or manufacturing, we must have skilled instructors. First priority is to streamline our recruiting and onboard process for new instructors coming from industry.**
   b. **We will increase cross-program collaboration and interaction to increase awareness across all staff of CTE program opportunities.**
   c. **HCC is continuously developing new partnerships with industry and in the coming year will place additional emphasis on partnering with industry to provide skilled instructors working in fields of high demand.**

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.