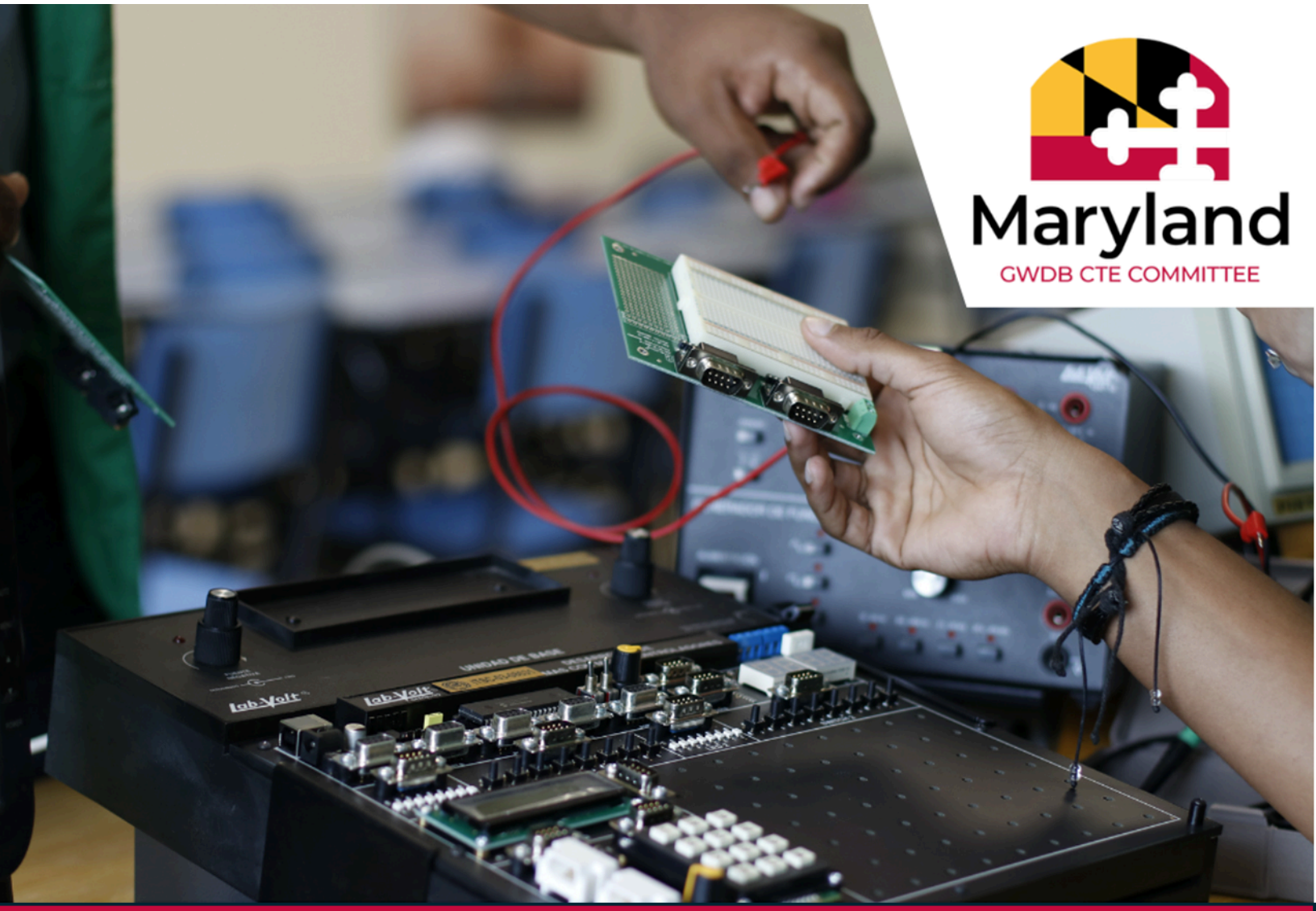

Maryland
GWDB CTE COMMITTEE

Career & Technical Education Expert Review Team

Post-Visit Report
CAROLINE COUNTY PUBLIC SCHOOLS

Governor's Workforce Development Board
Career and Technical Education Committee

September 2025

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The Governor's Workforce Development Board is grateful to the CTE Expert Review Team members that participated in the exploration of this district's CTE programs, as well as central office and school leadership, staff, and students that contributed valuable insights regarding CTE programs in their Local Education Agency (LEA).

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Executive Summary

The *Blueprint for Maryland's Future* ("the *Blueprint*") established the Career and Technical Education (CTE) Committee within the Governor's Workforce Development Board (GWDB) to develop an integrated, globally competitive framework for providing CTE to Maryland students in public schools, postsecondary institutions, and the workforce. As part of this effort, the *Blueprint* calls on the CTE Committee to establish, administer, and supervise Expert Review Teams (ERT) to visit schools offering CTE pathways. CTE ERTs are a key tool through which the state observes and tracks the progress of local education agencies (LEAs) in implementing CTE programs that align with the *Blueprint*'s vision and the CTE Committee's framework and policies. In addition to reviewing progress, the visits are intended to provide support and identify technical assistance needs as LEAs build their CTE systems.

This CTE ERT visited Caroline County Public Schools (CCPS), located in the Eastern Shore, on October 3, 2024. This was the first CTE ERT visit conducted by the CTE Committee during the 2024-2025 School Year (SY). CCPS offers CTE programs at three locations: the Caroline Career & Technical Center (CCTC), North Caroline High School (NCHS), and Colonel Richardson High School (CRHS). This CTE ERT visited NCHS and CCTC, both of which are located on the same campus in Ridgely, Maryland. Teachers from CRHS also joined focus groups virtually.

One apprenticeship sponsor, two neighboring CTE Directors, one neighboring CTE administrator, one CTE teachers, one community college representative, the Executive Director of the Upper Shore Workforce Investment Board, one Board Member for the Upper Shore Workforce Investment Board, one CTE Committee staff member, one AIB representative, and one MSDE representative, participated in the CTE ERT visit for Caroline County. The CTE ERT included all required participants for the CTE ERT visit for Caroline County. Using the LEA's self-reported data, interviews, focus groups, school tours, and classroom visits, the CTE ERT organized their observations and preliminary analysis in this report.

CCPS's progress towards the *Blueprint's* goal that by the 2030-2031 SY, 45% of high school graduates shall complete the high school level of a Registered Apprenticeship or another industry-recognized credential (45% goal) is at 15.6%, according to the previous IRC guidelines, not the updated IRC guidelines approved by the CTE Committee in December 2024.[1] This self-reported data is accurate for the 2023-2024 SY, but it will not accurately depict year-to-year or cross-LEA comparisons as MSDE updates data collection and measurements across the State and the updated list of approved-IRCs does not go into effect until the 2025-2026 SY. CCPS achieved 15.6% progress toward the 45% goal through a combination of mostly IRC attainment - 13.6% of graduating students earned an IRC - and graduating students completing a Registered Apprenticeship.

Below is a summary of the observations and findings from this visit:

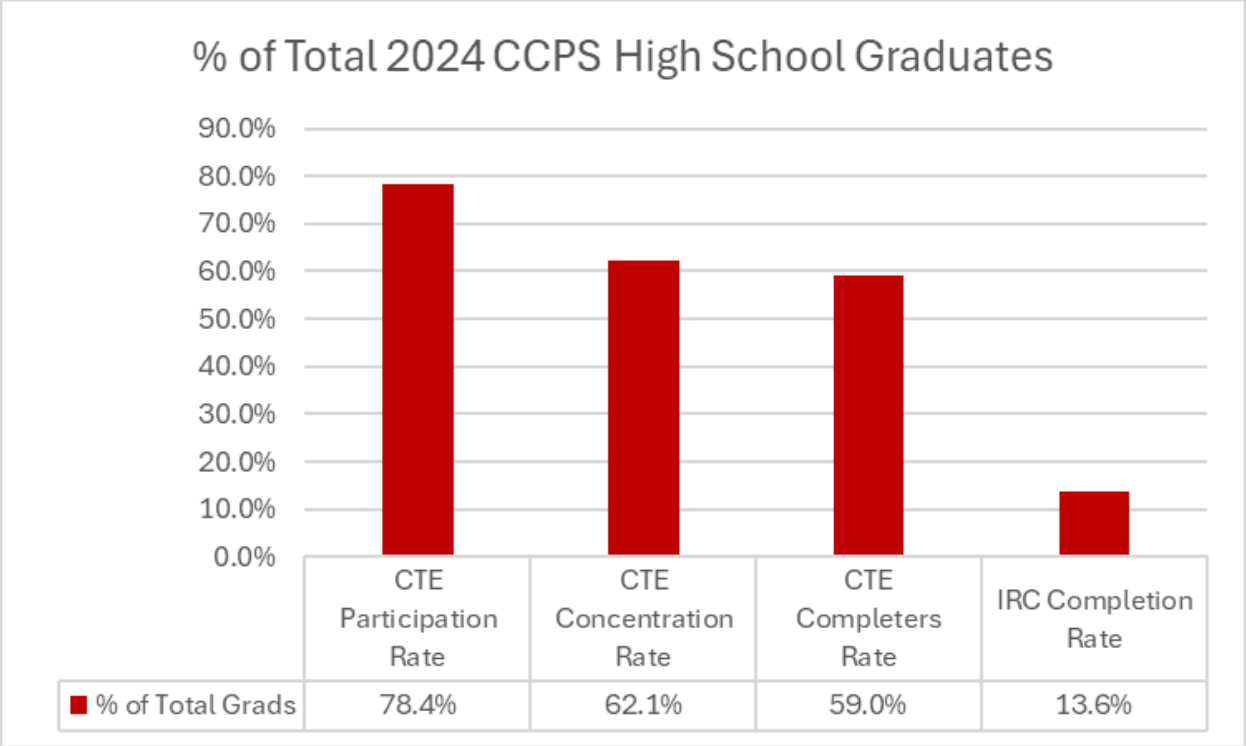
[1] Career and Technical Education. (December 2024). "GWDB CTE Committee Industry Recognized Credentials". *Governor's Workforce Development Board*. https://tinyurl.com/3hxuw2ub

CCPS Internal Strengths
• High Participation Rate of Students Involved in CTE • Teacher Dedication, Industry Expertise, and Supportive Relationships • Effective Use of Limited Funding • Development of a Tiered Career Coaching Framework for Implementation
CCPS Internal Challenges
• Access and Transportation Barriers • Fully Utilizing CCTC Facilities in the Afternoon • Counselor and Career Coach Caseloads
CCPS External Factors
• Strength: Collaborations with Neighboring LEAs • Strength: Connection to the Community • Challenge: Negative Perceptions of CTE Offerings • Challenge: Teacher Certifications Create Hurdles for Recruitment and Retention of Instructional Staff
CCPS Potential Next Steps
• Maximize Utilization of CCTC Facilities • Consider Hybrid and School-Based WBL Experiences to Address Transportation Challenges • Extend the Power of Individualized Career Coaching • Revisiting the Sunsetting of Criminal Justice • Brainstorm Collaborations with Regional Institutions and Employers on Instructional Space and Equipment • Explore Technical Assistance with MSDE and Maryland Department of Labor (MD Labor) to Establish and Expand High School Level Registered Apprenticeships (RAs)

The CTE Committee staff and CTE ERT members collaborated on this report to provide observations and preliminary analyses. In this document, readers will find the purpose of the CTE ERT, a brief explanation of CCPS, a summary of the CTE ERT visit, Strengths, Challenges, and External (SCE) analysis, and Potential Next Steps for the LEA to consider.

Please feel free to reach out to the CTE Committee or CTE Committee staff to answer any questions, comments, or concerns at GWDB.CTE@maryland.gov.

Figure 1: CCPS CTE and IRC completion rates for the 2023-2024 SY.[2 3 4 5]



[2] CTE Participants are students completing not less than one credit in a MSDE-approved CTE program of study.
[3] CTE Concentrators are students who have completed at least two courses and are enrolled in a third course in a single MSDE-approved CTE program of study.
[4] CTE Completers are students who meet all requirements in a state-approved CTE program of study, typically three or four courses.
[5] Defined as the percentage of all graduating students who have earned an IRC (as defined by MSDE)

Purpose of the CTE ERT

The *Blueprint for Maryland's Future (*"the *Blueprint"),* Md. Ann. Code, Ed. Art. §21-209, established the Career and Technical (CTE) Committee as a unit within the Governor's Workforce Development Board (GWDB).[6] The GWDB serves as the Governor's chief strategic and policy-making body for workforce development in the State of Maryland.[7] The purpose of the CTE Committee is to build an integrated, globally competitive framework for providing CTE to Maryland students in public schools, institutions of postsecondary education, and the workforce. The CTE Committee aims to fundamentally reimagine and redesign career-connected learning and career pathways to ensure all of Maryland's students have real access to fulfilling and family-sustaining careers.

The *Blueprint* requires the CTE Committee to establish, administer, and supervise CTE ERTs to visit schools with CTE pathways.[8] The goals of these visits are to: 1) review alignment of district programs and practices with *Blueprint* vision and policies, 2) assure an LEA's CTE programs and practices are consistent with the e Maryland CTE Framework and policies on the high school level of a Registered Apprenticeship (RA) and Industry-Recognized Credentials (IRCs), and 3) support technical assistance needs for LEAs as they create new systems, programs and practices in order to support *Blueprint* goals and expand career-connected learning, especially registered apprenticeship and other IRC attainment, for their students. Ultimately, the CTE ERTs report back to the CTE Committee on district progress toward *Blueprint* goals, common challenges, and opportunities for policy change, technical assistance, or other support to meet those goals. The CTE Committee staff will publish a summary of findings from CTE ERT visits within the CTE Committee's annual report.[9]

The CTE ERT Program has three phases that transition from Phase 1: Discovery, to Phase 2: Analyze and Assist, and Phase 3: Evaluate. The primary goal in Phase 1 is to visit all 24 LEAs and build a baseline set of observations to understand the state of CTE in Maryland, along with common challenges LEAs face in creating a robust CTE system. The common challenges will inform what technical assistance sessions will be offered in Phase 2, which will focus on alignment, systemic data collection, and assistance. Phase 2 is set to begin in the 2026-2027 SY, so the specifics for Phase 2 will be planned in Spring 2026. Phase 3 will begin in the 2028-2029 SY and will focus on evaluating progress towards *Blueprint* goals, but will be more specifically planned during Phase 2.

The CTE Expert Review Team visit to CCPS consisted of members from various backgrounds and brought expertise in areas such as student learning, workforce development, and CTE, ensuring a comprehensive review of the LEA's CTE programs (see Appendix A).

[6] Md. Ann. Code, Ed. Art. §21-209, https://bit.ly/3W0JoeU
[7] Executive Order No. 01.01.2023.22. (2023). https://tinyurl.com/execorder01012023
[8] Md. Ann. Code, Ed. Art. §5-412 https://tinyurl.com/5cb36cvy
[9] Md. Ann. Code, Ed. Art. §21-209, https://bit.ly/3W0JoeU

About Caroline County Public School System

Caroline County Public Schools (CCPS), located on the Eastern Shore, enrolls 1,784 high school students, and has made 15.6% progress toward the *Blueprint*'s 45% goal among graduating students. The LEA offers 14 CTE programs covering a wide range of areas of specialization, from Construction to Biomedical Sciences. CCPS is in alignment with the Eastern Shore Regional Workforce Plan's and the State's focus on building key sectors in healthcare, construction including skilled trades, and hospitality and food services.[10] CTE programs in Biomedical Sciences, Academy of Health Professions, Construction, and Food and Beverage management are all at or near maximum enrollment. The three highest enrolled programs are Automotive, Biomedical Sciences, and Criminal Justice. This demonstrates CCPS's focus on developing a robust workforce targeting key sectors identified by the Upper Shore Workforce Investment Board. Two unique aspects about CTE in CCPS are how Automotive shifted to a cohort block schedule and the Food and Beverage Program has students shadow Shore Gourmet and prepare Wednesday night dinners for sale to the Caroline community.

Students enrolled in CTE programs have the opportunity to earn industry-recognized credentials (IRC). At CCPS, 13.6% of graduating students earned an IRC, based on the previously-approved MSDE list, not the updated list of approved IRCs issued by the CTE Committee in a policy dated December 2024, which goes into effect starting in the 2025-2026 SY.[11] CCPS has 78.4% of graduating students participate in a CTE program, meaning they earn at least one CTE credit.

CCPS has CTE offerings at both high schools and at the CTE Center, Caroline Career and Technology Center (CCTC). CCPS has a total of 21 CTE teachers with a combined 247 years of teaching experience, averaging over 11 years of experience per teacher.

Students enroll into CTE at CCPS by choosing a CTE Program of Study when they are transitioning from 8th to 9th grade and discussing it with their school counselor. All CTE Programs are available to all students; however, if a Program is overenrolled, administrators evaluate students using attendance, GPA, students' grade level, and preferential seating to non-traditional students.[12] CCPS students interested in the Navy Junior Reserve Officers' Training Corps (NJROTC) may enroll in Talbot County Public Schools' Program and students interested in the Maryland Fire and Rescue Institute may enroll in Queen Anne's County Public Schools' Program.

[10] Upper Shore Workforce Investment Board and the Lower Shore Workforce Alliance. (2024). *Eastern Shore Regional Plan*. www.uswib.org/_files/ugd/fdb3f6_8274d54de0784885a4c00424fdafba46.pdf: pg. 4-6.
[11] GWDB CTE Committee. (December 2024). *Career and Technical Education: Industry-Recognized Credentials*. www.gwdb.maryland.gov/policy/gwdbcte2024commindustrycredentialpolicy.pdf
[12] Individuals from their gender comprise less than 25% of the individuals employed in the related field of work.

Summary of Visit

Prior to the visit, the Career and Technical Education (CTE) Expert Review Team (ERT) members attended a virtual orientation to review the visit agenda, materials, and tools. During this session, Caroline County Public Schools' (CCPS's) CTE Lead Staff provided an overview of the Local Education Agency's (LEA's) CTE system, highlighting key strengths and challenges. The Lead CTE administrator presented data on CCPS's progress toward the 45% goal, CCPS's highest-enrolled Programs, and CCPS's CTE Participation rates. This pre-visit orientation helped the team understand the specific context and priorities of CCPS's CTE programs, setting the stage for focused observations and discussions during the visit.

During the visit, the CTE ERT visited CCPS's sole CTE center, Caroline Career and Technical Center (CCTC) and one comprehensive high school with CTE offerings, North Caroline High School (NCHS), both of which are located on the same campus in Ridgely, Maryland. The CTE ERT separated into two teams and observed classrooms, conducted focus groups and interviews, and learned about the state of CTE in CCPS. The team conducted a focus group with CTE administrators, teachers, students, school counselors, and career counselors/coaches.

At each site, the team engaged in discussions with stakeholders to gain insights into the strengths and challenges of the CTE programs. These conversations revealed valuable information about how CTE supports students' postsecondary pathways and career goals, as well as areas where the LEA could enhance program access and resources.

The CTE Expert Review Team visit to CCPS consisted of members from various backgrounds, and brought expertise in areas such as student learning, workforce development, and CTE, ensuring a comprehensive review of the LEA's CTE programs (see Appendix A). Throughout the day, the team engaged in observations, interviews, and focus groups with stakeholders to gain insights into the strengths and challenges of the CTE programs. The CTE Committee staff created a set of questions for each focus group: leadership, teachers, students, career counselors/coaches, and school counselors (see Appendix D). These questions aimed to uncover the experience these parties have in CTE by asking questions about professional development opportunities, their opinions on their experience in CTE classes, their perspective on hurdles, *etc.* (see Appendix D).

After the visit, the CTE ERT compiled all their individual notes and shared it with CTE Committee staff. A week after the visit, the CTE ERT gathered together for a debrief, where the team members collaborated, reviewed, and discussed their compiled observations. These conversations revealed valuable information about how CTE in CCPS supports students' postsecondary pathways and career goals, as well as areas where the LEA could enhance program access and resources. Together, these data, observations, focus groups, interviews, and debrief help inform the following SCE analysis and Potential Next Steps.

OBSERVATIONS FROM THE EXPERT REVIEW TEAM VISIT

ABOUT THE SCE ANALYSIS

A SCE Analysis is meant to organize the CTE ERT's observations and notes into internal factors - Strengths and Challenges - and External factors. This method of analysis is based on the SWOT analysis method, which also differentiates between internal and external factors. This SCE analysis will help readers differentiate among internal Strengths, internal Challenges, and External factors, which are conventionally Opportunities and Threats. The CTE ERT did not have the opportunity to observe and coordinate with external stakeholders, but external factors came up in interviews, focus groups, debrief, and orientation that must be communicated. With a SCE Analysis, readers may use this section to target changes and best practices internally.

INDICATORS OF STRENGTHS AND CHALLENGES

Strength: High Participation Rate of Students Involved in CTE

Caroline County Public Schools have high percentages of students participating and concentrating in CTE programs. In 2024, nearly 80% of CCPS students who graduated participated in CTE, and 62% of students were considered CTE concentrators, compared to 33% state-wide (see Appendix B for more LEA information). While the statewide CTE completion rate was 26% as of 2022, Caroline County Public Schools exceeded this with a completion rate of 59%, indicating that the programs effectively get students "in the door" of CTE, but also support them through to completion.

During the visit, the CTE ERT noticed the dedicated and caring staff and hands-on opportunities that have likely contributed to the high participation of students in CCPS who have exposure to CTE, through a strong reputation and word of mouth between students and families.

Strength: Teacher Dedication, Industry Expertise, and Supportive Relationships

Caroline County's CTE teachers were deeply committed to student success and brought extensive industry experience into the classroom. As one of the CTE teachers was introducing herself to the group, she stated "I love my job." Another teacher worked full-time teaching at the Caroline Career and Technical Center, and was an Electronics Technician as well as an instructor at Delaware Technical Community College. Yet another teaches full-time at the school, then works in her salon in the evenings. This combination of dedication, passion and expertise enables them to provide hands-on, real-world learning that equips students with skills directly applicable in the workforce.

The supportive relationships between students and teachers were frequently mentioned by students as key to their success in CTE programs. One student said that his CTE course experience felt "like a family." The students acknowledged the importance of networking and the opportunities that were afforded to them simply because of the relationship they had with their CTE teacher. This also was evident in student feedback when discussing their motivation to do well in their program of study. Students knew that their teachers'

connections to the industry were the building blocks to their own success during and after high school graduation.

Strength: Effective Use of Limited Funding

CCPS has effectively utilized increased Perkins State Plan funding to enhance and expand on initiatives that directly impact student success and career readiness in the LEA.[13] One example was the use of Perkins State Plan funding to assist in the recent hiring of a much-needed Work-Based Learning Navigator, a role specifically designed to connect students with local businesses for internships, apprenticeships, and job shadowing. This navigator is a new role that was hired in late September of the 2024-25 SY. The vision was that the role will let Caroline County start "earlier on the work-based learning continuum." The Work-Based Learning Navigator came "with a wealth of knowledge of the work-based learning continuum, working with businesses and partnering school systems with businesses," per the Director. Organizing work-based learning in a small rural community is a particular challenge.

CCPS also showcased creative problem-solving by using *Blueprint* career coaching funds to purchase a van to support their coaching initiative. In an agreement between the Upper Shore Workforce Development Board and Chesapeake College, the van was purchased and will be used to transport students on visits to colleges, universities, and businesses for Tier 2 and Tier 3 career coaching, as transportation is a key issue in a small rural LEA. [14] [15]

Both of these creative uses of braiding funding to solve challenges common to small, rural LEAs are notable, promising practices that other small LEAs may learn from.

Strength: Development of a Tiered Career Coaching Framework for Implementation

CCPS developed an innovative tiered framework for designing career coaching services:

- Tier 1: provide information and have students take strength, value and interest surveys through Naviance to get a better understanding of self. Tier 1 services are push-in sessions into content classes.
- Career Coaches then pull small groups (Tier 2) and individual students (Tier 3) based on the survey information. These individualized interactions provide more focused career exploration opportunities. Tier 2 and Tier 3 services take place at various times during the day - before school, lunch, after school or as a brief pull-out during class time.

CCPS developed this framework and individualized delivery system despite minimal statewide guidance on career coaching implementation and expectations. As such, CCPS was able to start the school year with an effective framework for services guiding their work.

Challenge: Access and Transportation Barriers

[13] Beginning in SY 2024-25, the Maryland State Department of Education (MSDE) created a mandatory minimum, of $250,000, that LEAs would receive in Perkins State Plan funding. Prior to SY 2024-25, the formula for distributing Perkins State Plan funding to LEAs was dependent solely on student enrollment
[14] Tier 2 career coaching involves guiding small groups of students with similar career interests.
[15] Tier 3 career coaching offers individualized career coaching, focused on each individual student.

According to members of the school counselor/career coach focus group, lack of transportation was a "big concern" for students in Caroline County, especially those who live in rural areas or need to travel to off-site work-based learning experiences. Additionally, public transit options in the area were limited or non-existent, and the cost of private transportation can be prohibitive for some families. This lack of accessibility reduces the number of students who can take advantage of work-based learning opportunities.

This also means that CTE students must participate in extra-curricular and co-curricular activities during school hours at the CCTC. If these activities were held after school, students from the comprehensive high schools would have to travel back to the CCTC at the end of the day and may not have consistent, reliable transportation to do so.

Currently, CCPS serves as an apprenticeship sponsor and employs four youth apprentices: three in Information Technology (IT) and one in food services. According to a staff member, "only one of those four students" has reliable transportation, so being able to offer more apprenticeships would also depend on students being able to get to those opportunities consistently and independently.

Challenge: Fully Utilizing CCTC Facilities in the Afternoon

CCTC was underutilized during the afternoon, as students typically leave by 12:30 PM. This scheduling gap leaves classrooms, labs, and specialized equipment unused for part of the school day, limiting the number of students who could benefit from these resources. The reason for this is because CCTC teachers have their 30-minute lunch and 88-minute planning period at the end of the day. Teachers at CCTC work the same number of hours as comprehensive school teachers, but this is just how CCTC's schedule was created.

For example, advanced manufacturing and cosmetology labs remained vacant in the afternoon despite student demand for these programs. It should be noted that Chesapeake College offers an afternoon welding course at CCTC, which is a noted strength of CCPS utilizing local community resources to expand offerings for students..

Challenge: Counselor and Career Coach Caseloads

Caroline County's school counselors and career coaches faced high caseloads, which restricted their ability to provide individualized support to CTE students. In CCPS, two middle schools with a combined enrollment of 1,222 students are served by a single career coach. At the high school level, two comprehensive high schools with a combined enrollment of 1,761 students were supported by only 1 career coach. With responsibilities that often extend beyond career planning, career coaches could potentially have limited time to promote CTE pathways, help students understand different career options, or guide them through the certification and work-based learning processes. The CTE ERT does note that this caseload to career coach ratio was common across the State during the 2024-2025 SY, as the career coach hiring is based on the allocated funds each area receives.[16]

[16] Maryland General Assembly. (n.d.). *Maryland education statute §7-127*. From https://tinyurl.com/ctecareercouns

INDICATORS OF EXTERNAL FACTORS AND INFLUENCES

A SCE Analysis is meant to organize the CTE ERT's observations and notes into internal factors - Strengths and Challenges - and External factors. This method of analysis is based on the SWOT analysis method, which also differentiates between internal and external factors. With a SCE Analysis, readers may use this section to advocate for change with external partners.

External Strength: Collaborations with Neighboring LEAs

The CTE ERT observed how students interested in participating in the Navy Junior Reserve Officer Training Cadet (NJROTC) Program could enroll in the Program at Talbot County Public Schools and students interested in participating in the Maryland Fire and Rescue Institute (MFRI) Program could enroll in the Program at Queen Anne's Public Schools. CCPS offered students transportation to the NJROTC Program in Talbot County Public Schools, but students enrolled in MFRI are expected to find their own transportation. Four students were in the NJROTC Program and one student was in the MFRI Program, and students in both Programs had 100% completion rate. Both Programs also require students to earn an IRC in order to complete the Program.

This example of an external collaboration demonstrates CCPS's strong leadership in finding unique solutions to problems. This collaboration means CCPS can expand their CTE offerings without having to hire new instructional staff and finding instructional or lab space, but CCPS still has to provide transportation. This kind of problem-solving is evidence for the type of effective leadership at CCPS.

External Strength: Connection to the Community

Student and teacher focus groups revealed how both CCTC and NCHS have a strong connection to the Caroline County community, the Eastern Shore communities, and some Delaware communities. Students talked about how teachers knew people in their respective industries and would find industry connections for students interested in WBL opportunities or employment after graduation. Students told the CTE ERT about how teachers are networked with businesses and that it made them listen to everything the teachers would say. In particular, students spoke of the soft skills they developed with the teachers' guidance; skills like confidence, communication, and problem-solving. This kind of career-connected learning with practical connections to industry partners helped students see the connection between what they are learning and how they will apply those skills in a workplace setting.

In addition to industry connections, the CTE ERT observed how CCPS has developed a strong alumni network. Multiple CTE teachers graduated from CCPS and came back to teach in the CTE Program they completed. CTE teachers also leveraged their alumni network when working with students to find WBL opportunities or employment opportunities.

External Challenge: Negative Perceptions of CTE Offerings

During the visit, the CTE ERT learned about how there are lingering biases towards CTE offerings and that there is a perception that CTE is for students who do not perform well in traditional schooling. This type of mixed messaging is a challenge when CCPS is expanding

their CTE offerings and attempting to achieve the 45% goal. Whether it were parents, family, teachers, school administrators, community members, or someone else, students told the CTE ERT that there are negative perceptions towards students in CTE compared to general education students. This challenge is not unique to Caroline County, but it is a factor for CCPS to consider moving forward. As the *Blueprint* continues to be implemented across the State of Maryland and CTE Completors find gainful employment, these kinds of negative perceptions will be alleviated.

CCPS has already taken steps to alleviate negative perceptions towards CTE. CTE teachers have developed strong relationships with industry representatives. CTE Programs in CCPS have also leveraged projects, like the Food and Beverage Program shadowing Shore Gourmet and preparing Wednesday night dinners for sale to the Caroline community, to demonstrate the skills CTE students learn. During Phase 2, the CTE ERT will continue to examine how CCPS challenges some of the general misconceptions about the value of CTE.

External Challenge: Teacher Certifications Create Hurdles for Recruitment and Retention of Instructional Staff

In the teacher focus groups, the CTE staff and school administrator focus group, and during the school and career counselor focus group, participants spent a significant amount of time talking about the challenges and misalignment associated with teacher certifications. CTE staff and school administrators talked about how teacher certification requirements make recruiting CTE teachers difficult. Someone who has decades of industry experience will still need teacher certifications, which is a meaningful barrier when CCPS wants to expand their CTE offerings.

In addition to recruitment barriers, the teacher career ladder does not align with the outcomes and skills necessary for teaching CTE courses. CTE teachers went into great detail about how frustrating it is to watch their peers who teach general education classes climb their respective career ladders while teacher certifications like the National Board Certification do not fit the kinds of skills CTE teachers need. Whether it is finding new CTE teachers to expand CTE offerings or retaining experienced CTE teachers, teacher certifications have created hurdles for CCPS. This challenge is not unique to CCPS, but it is a challenge the CTE ERT will continue to examine into Phase 2.

POTENTIAL NEXT STEPS

Although the CTE ERT has presented its observations in this report, these observations and potential next steps are preliminary. The purposes of Phase 1 of the CTE ERT are to establish a baseline for progress towards *Blueprint* goals across Maryland and identify key challenges. While the following Potential Next Steps are preliminary, they are areas CCPS may look for improvement in and something the CTE ERT will look at more closely as the CTE Committee transitions into Phase 2 in the 2026-2027 SY. In other words, these potential next steps are not a directive, but opportunities of improvement to explore. These Potential Next Steps are meant to be the beginning of a conversation with CCPS that will continue into Phase 2, and for this reason, these Potential Next Steps do not comprehensively address the challenges the CTE ERT notes in this report. In Phase 2, the CTE ERT will target specific areas to gain a more comprehensive understanding of the state of CTE.[17] While Phase 2 is focused on analysis and assistance, it should be noted that is also when the CTE ERT can make recommendations to the AIB to withhold funding if there is resistance complying with the *Blueprint*.[18]

Maximize Utilization of CCTC Facilities with Flexible Scheduling

Caroline County Public Schools could address the afternoon underutilization of CCTC facilities by implementing flexible scheduling that expands program options for students and community members alike. Currently, Chesapeake College offers an afternoon welding course at CCTC, which is a start to this type of scheduling, but continuing to build on that could be key.

For instance, additional afternoon sessions at CCTC could focus on in-demand certifications or skill-building courses in areas like digital design, welding, or basic coding, which can be completed within shorter timeframes. These programs could attract students who are unavailable in the mornings due to their high school schedules at North Caroline High School and Colonel Richardson High School. Additionally, CCTC could partner with local adult education providers or workforce development agencies to offer workforce training or community-based classes in fields such as personal finance, basic automotive skills, or Microsoft Office proficiency. This would allow the LEA to not only optimize facility use but also strengthen ties with local workforce providers and potentially generate additional funding.

With afternoon programming or alternative uses, the LEA could maximize its investment in the facility. This underutilization presents an opportunity for restructuring, such as offering afternoon sessions, short-term certifications, or adult education courses that could serve a broader community and provide students with more flexible learning options. However, it should be noted that the CTE ERT recognizes that this shift would require a significant amount of logistics planning in the area of transportation, student schedules, budget for extended hours, and instructor availability.

[17] GWDB CTE Committee. (July 1, 2024). CTE Committee Expert Review Team Deployment Plan School Year 2024-2025. https://gwdb.maryland.gov/ctecomm/ctecomm-ctedeploymentplan_draftsy24-25_62624.pdf
[18] AIB's Updated Comprehensive Implementation Plan, August 2023, https://drive.google.com/file/d/1PsYQGhld5Qwk7PgK2cEubr68SSKrG5dH/view?usp=sharing.

Consider Hybrid and School-Based WBL Experiences to Address Transportation Challenges

The CTE ERT commends Caroline County Public Schools for the creative solutions already put in place around some of the transportation challenges faced by students, particularly the van for students.

CCPS could also consider transportation strategies that have worked in other LEA CTE programs. Some LEAs and schools have created hybrid work-based learning experiences that expose students to aspects of a job site or to job training virtually, cutting down on the frequency of off-campus visits. Other LEAs have found success creating businesses (such as a school store) within the school building itself, effectively bringing the work-based learning into the student's school.

Extend the Power of Individualized Career Coaching

Unfortunately, a high ratio of students-to-career coaches and school counselors is a common challenge in public school LEAs in Maryland and across the country. CCPS is already thinking about using technology and other tools to reach more students with individualized career coach touches, including a tailored page in PowerSchool. The CTE ERT encourages CCPS to consider ways to extend that idea. Other LEAs have found success sending an individualized guide to career and college-prep options to students' homes annually throughout their years in the secondary grades. DC Public Schools' "Guide to High School, College and Career" also shares information with students and families about their progress toward graduation requirements.[19]

The CTE ERT commends Caroline County Public Schools on its work building an accessible, engaging CTE program for students, and using creative approaches to common challenges that mean more robust, richer experiences for students enrolled in CTE opportunities.

Revisiting the Sunsetting of Criminal Justice

Given the recent addition of LAPSEN credentials in Criminal Justice to Maryland's approved list of industry-recognized credentials, Caroline County Public Schools may choose to revisit the decision to sunset its Criminal Justice courses and completer program.[20] These newly recognized IRCs offer students workforce-aligned pathways in public safety and law enforcement. These IRCs could provide a renewed foundation for a revised Criminal Justice program aligned to the *Blueprint's* emphasis on career readiness and family-sustaining wages. Reintroducing the program with a focus on LAPSEN-aligned coursework and credential attainment could also support workforce development needs in the region, especially if paired with work-based learning experiences in local public safety agencies. This reconsideration would allow CCPS to capitalize on emerging opportunities and ensure students have access to a diverse array of high-quality CTE options.

[19] District of Columbia Public Schools. (n.d.). *Guide & resources*. Retrieved from https://dcpsgoestocollege.org/guide-resources/
[20] Governor's Workforce Development Board. (2025). *CTE Committee: Final 2025 industry-recognized credential recommendations (pp. 18-19)*. https://gwdb.maryland.gov/ctecomm/ctecomm-finalmsde2025ircrec.pdf

Brainstorm Collaborations with Regional Institutions and Employers on Instructional Space and Equipment

One of CCPS's biggest hurdles in expanding their CTE offerings is finding the available space, equipment, and instructional staff. As a potential next step, CCPS should consider collaborating further with the Chesapeake College, Salisbury University, and other postsecondary institutions to expand CTE offerings. CCPS already has connections with Chesapeake College for career exploration opportunities and welding, so CCPS can leverage those connections to come up with creative solutions to offer more CTE seats, classes, and possibly Programs of Study.

CCPS should also consider collaborating with employers on instructional space, equipment, *etc.* CCPS has developed a strong relationship with industry experts and could leverage that relationship as a way to find creative solutions to expanding CTE offerings. Collaborating with industry experts to overcome the space, equipment, and instructional staff challenges CCPS faces may lead to positive results while also strengthening CCPS's industry connections. CCPS should also consider additional collaboration with the Upper Shore Workforce Investment Board (USWIB) to strategize how to expand CTE offerings. Collaborating with the USWIB may be an opportunity for CCPS to find practical solutions to the space, equipment, and staff challenges in meaningfully expanding CTE.

Explore Technical Assistance with MSDE, the Maryland Department of Labor (MD Labor), and the CTE Committee in meeting the *Blueprint*'s 45% Goal.

In order to achieve the *Blueprint*'s 45% goal, establishing and expanding RAs should be one of CCPS' priorities. CCPS should explore closer collaboration with MD Labor's Apprenticeship Navigators on what opportunities are available for high school students in the county. CCPS should work with MD Labor's Apprenticeship Navigators to ensure employers understand scheduling options for students, as well as accessing available incentives such as grants and tax credits. At the time of the visit, CCPS's true IRC attainment rate was difficult to quantify given it is based on a prior approved IRC list, but nevertheless, CCPS can seek technical assistance from MSDE and similar LEAs in strategies to increase IRC attainment. The change in the automotive class to a block schedule reportedly increased the IRC pass rate, so CCPS should continue this analysis wherein innovative changes support IRC attainment. The CTE Committee will also be developing more targeted technical assistance around this topic in Phase 2, and facilitating a community of practice utilizing findings from CTE ERT visits. The CTE Committee recognizes that policies defining the 45% goal were not issued until December 2024, and this CTE ERT visit took place in October 2024, so all of those implementing this work and the partnerships required are still in the early stages of development. Exploring technical assistance with MSDE, MD Labor, and the CTE Committee will prove to be a useful addition to meeting the 45% goal.

APPENDIX GUIDE

A. Visit Participants
B. LEA Brief
C. Visit Agenda
D. Interview & Focus Group Questions

Appendix A | Visit Participants

Name	Role
John Strickland	CTE ERT Manager, Governor's Workforce Development Board
Adam Tolley	CTE Director, Queen Anne's County Public Schools
Bill Forrester	School Support Coordinator, Office of College and Career Pathways, MSDE
Dan Schneckenburger	Executive Director, Upper Shore Workforce Investment Board
Dr. Billie Brice	Academic Dean, Queen Anne's County Public Schools
Dr. Dave Harper	VP of Academic Affairs, Chesapeake College
Ashley Robinson	CTE Director, Principal, Dorchester County Public Schools
Dr. James Bell	Director of Instruction, Academic Support & Well-Being, Building African American Minds (B.A.A.M)
Lisa Darby	Cosmetology Teacher, Queen Anne's County Public Schools
Matt Taffeau	Manager of Government Affairs and Economic Development, Choptank Electric
Rachel Amstutz	Policy Director, Accountability and Implementation Board

Appendix B | LEA Brief

CTE LEA LEAD STAFF		
Name	**Role(s)**	**Contact Info**
Lindsey McCormick	Director of College and Career Readiness	mccormick.lindsey@ccpsstaff.org
Eric Cook	Coordinator of Career Readiness	cook.eric@ccpsstaff.org
Courtney Handte	Principal of CCTC	handte.courtney@ccpsstaff.org

COMPREHENSIVE HIGH SCHOOLS WITH CTE	
North Caroline High School	Colonel Richardson High School

LEA CTE CENTER(S)
Caroline Career and Technology Center

CTE ERT VISIT	
Date	**School(s)**
Thursday, October 3rd, 2024	CCTC/NCHS

LEA CTE ENROLLMENT, PARTICIPATION, AND COMPLETION RATES

	Caroline County	School #1 (NCHS)	School #2 (CRHS)	School #3 (CCTC) Fall 2024
Enrollment				
Total Enrollment *(# of all **HS students**)*	**1784**	1247	537	196[21]
Total Enrollment *(# of all **graduating students**)*	**442**	291	151	196
CTE[22]				
CTE Participation Rate *(% of all **graduating students**)*	**78.4%**	75.6%	84%	100%
CTE Concentration Rate *(% of all **graduating students**)*	**62.1%**	63.5%	59.3%	92.3%
CTE Completers Rate *(% of all **graduating students**)*	**59%**	15.1%	17.2%	n/a
IRC Completion Rate *(% of all **graduating students**)*[23]	**13.6%**	10.3%	20%	21.9%*
Apprenticeship and Other Work-Based Learning[24]				
Work-Based Learning Participants[25] *(# of all **graduating students**)*	**123**	25	15	83
Dual Enrollment Participants[26] *(# of all **graduating students**)*	**201**	157 (Fall 2024)	44 (Fall 2024)	N/A
Dual Enrollment Completers[27] *(# of all **graduating students**)*	**100**	66	34	n/a

[21] This number refers to the number of all students enrolled at CCTC as of Fall 2024
[22] CTE Participants are students completing not less than one credit in a MSDE-approved CTE program of study. CTE Concentrators are students who have completed at least two courses and are enrolled in a third course in a single MSDE-approved CTE program of study. CTE Completers are students who meet all requirements in a state-approved CTE program of study, typically three or four courses.
[23] Defined as the percentage of all graduating students who have earned an IRC (as defined by the CTE Committee)
[24] Participation is defined as the number of all high school students or all graduating students who have participated in the high school portion of a registered apprenticeship (RA) or an AMP youth apprenticeship (YA). Completion is defined as the number of all graduating students who have completed the high school level of a Registered Apprenticeship (RA) or have completed both an AMP youth apprenticeship (YA) and an IRC (YA completers who don't earn an IRC will not count toward 45% goal).
[25] Work-based learning includes internships, registered apprenticeships, youth apprenticeships and other work-based learning experiences.
[26] Participation is defined as the number of all graduating students participating in dual enrollment (does not count toward the 45% goal unless they earn an IRC).
[27] Dual enrollment completers is defined as the number of all graduating students who earned college credit through dual enrollment.

Apprenticeship Participants *(# of all **HS students**)*	**RA: 1** **YA: 10**	RA: 0 YA: 5	RA: 1 YA: 3	RA: 0 YA: 2
Apprenticeship Participants *(# of all **graduating students**)*	**RA: 0** **YA: 8**	RA: 0 YA: 4	RA: 0 YA: 3	RA: 0 YA: 1
Apprenticeship Completers *(# of **graduating students**)*	**RA: 0** **YA: 8**	RA: 0 YA: 4	RA: 0 YA: 3	RA: YA: 1
Progress toward 45% Goal[28]	**15.6%**	12.7%	21.3%	n/a

LEA CTE OFFERINGS

CTE Program Enrollment - Class of 2025

Program Name	Total Enrollment	Overenrolled?	Number of Students on Waitlist
Academy of Health Professions	24	yes	23
CASE	21	n/a	n/a
Cosmetology	18	yes	15
Construction/CADD	23	n/a	n/a
Advanced Manufacturing (AMP)	18	n/a	n/a
Automotive	31	n/a	n/a
Food and Beverage Management	16	n/a	n/a
Criminal Justice	47	-	-
Biomedical Science	31	n/a	n/a
Computer Science	21	n/a	n/a
Teacher Academy	25	n/a	n/a
Engineering	19	n/a	n/a

[28] This metric is calculated by adding together the Apprenticeship Completion Rate (RA completers plus YA completers who also earn an IRC) and the IRC Completion Rate (based on draft guidance from the CTE Committee), divided by the total number of graduating students.

Firefighter - MFRI	2	0	0
Military Service	5	0	0

Progress Toward the 45% Goal:

1. What are you projecting, for next school year, in growth toward the 45% goal for your LEA? CCPS is currently at 15.6%.
    a. Next 3 years? In the next 3 years, CCPS hopes to increase the number of Registered Apprenticeship opportunities and Youth Apprenticeship opportunities with an IRC. In addition, we hope to have more IRC opportunities added into CTE programs that do not currently have one. Therefore, we hope to increase by 10% within the next 3 years to about 25%.
    b. Next 5 years? In the next 5 years, CCPS will continue to increase IRC opportunities and ensure classroom instruction is aligned to the IRC. Therefore, we hope to increase an additional 10% to 35%
    c. By SY 2030-2031? We hope to be at 45% which would be a significant increase.
2. What are your plans for expanding Registered Apprenticeships in your LEA?
    a. CCPS has been promoting Youth Apprenticeship to businesses and students. Recent guidance from the Governor's Workforce Development Board and MSDE states, the CTE committee will ensure the largest number of students complete a high school level of a Registered Apprenticeship. CCPS believes having 22.5% of our graduating seniors involved in an STA will be a significant challenge. Access to STAs is our largest concern. In rural Caroline County, there is a lack of businesses that have the capacity to be a Registered Apprenticeship company, there are no union training facilities within 45 - 60 minutes of our county and many skilled trade businesses require an employee to be 18+ years old. Guidance shows that accountability of STA may fall to the Department of Labor. We have met with our new Department of Labor Navigator and discussed next steps. These plans include a joint effort in encouraging Youth Apprenticeship businesses to shift to Registered Apprenticeship. The Navigator will begin employer recruitment and CCPS will continue to inform students, staff and families of Apprenticeship opportunities. CCPS plans to expand their Work Based Learning Continuum to include guest speakers, job shadowing, career internships (paid and unpaid), Youth Apprenticeship and STA.

Program Plans for Future

1. Are there any new programs you plan on adding to your current programming within the next 2 school years? Not at this time.
    a. Why are you adding/not adding the program(s)? N/A
2. Are there any current programs you plan on expanding upon within the next 2 school years?
    a. At this time, we are awaiting MSDE to provide the new POSs. Once we receive this, we will review each program we offer and make changes accordingly. Currently we have 7 POSs without an IRC.
        i. Criminal Justice- no longer offer
        ii. CASE- adopt new curriculum and add an approved IRC

iii. Engineering- move away from PLTW and add an approved IRC
iv. Computer Science- move away from PLTW and add an approved IRC
v. Biomedical- move away from PLTW and add an approved IRC
vi. Advanced Manufacturing- move to a state approved program add an approved IRC
vii. NJROTC- confirm IRC with Talbot Co.

3. Why are you expanding upon the program(s)? N/A
4. Are there any programs you are taking away within the next 2 school years?
    a. Yes. Criminal Justice
5. Why are you taking away the program(s)?
    a. Criminal Justice has no IRC. We had a teacher resign during the summer of 2024. We chose to have students in the POS finish the last 2 courses, but not hire and not allow new enrollments.

Enrollment Practices

1. How do students enroll in programs?
    a. Students choose a "Major", CTE or Liberal Arts when they are transitioning from 8th to 9th grade. If they choose CTE, they choose their POS at that time. Each year, they review their course requests with their school counselor.
2. Are all CTE programs offered to all students?
    a. Currently, all CTE programs are offered to all students. However, if a program is overenrolled, we look at attendance, GPA and grade level of the student, with preferential seating to non-trad students.
3. Can a student participate in a CTE program at another school?
    a. Comprehensive high school programs are offered at both high schools. Students choose a program at their home school or a program at CCTC (combined with both schools). In addition, we have students enrolled in Talbot County Public School NJROTC program where students ride a CCPS bus to TCPS. In addition, students provide their own transportation to Maryland Fire & Rescue Institute (MFRI) in Queen Anne's County Public Schools.

Program Design

4. What are some best practices from CTE in your LEA that you think are worth sharing with other CTE programs across the state?
    a. CCPS Automotive shifted to a cohort block schedule with cohorted students taking the 6 classes instead of 6 single classes. This improved the IRC pass rate.
    b. CCPS adds additional credits into a student schedule in order to include hour requirements for licensure within class time (AHP, Cosmetology, F&B, Construction).
    c. F&B- CCPS students worked closely with Shore Gourmet for shadowing opportunities as well as working to prep Wednesday night dinners which are for sale to the Caroline Community.

LEA Support for Schools

5. How is CTE financial support structured within the LEA?
    a. Local funding is provided based on Maintenance of Effort.
6. How is CTE staffing structured within the LEA?
    a. Each of our programs have a dedicated teacher that teaches all courses in the program. However, at the comprehensive schools, we have teachers that teach the 1st course in Computer Science (Computer Science Essentials) as a tech ed credit. If a student chooses to continue with CS, they would switch to the POS teacher for the remaining classes.

b. At CCTC, students have a block schedule, where they take 2 or 3 classes blocked together.

Career Exploration

1. What career exploration is available to students in your LEA?
    a. We have a middle school and a high school career coach that serve our 4 secondary schools and CCTC.
2. How do the students access their career coach(es)?
    a. Career coaches provide classroom lessons and meet with students in small groups and 1 on 1. There is a referral form that any adult can complete to refer a student for career coaching.
3. How does/do the career coach(es) serve students in your LEA?
    a. The Career Coaches are using a tiered approach where they meet with all students (Tier 1) to provide information and have students take strength, value and interest surveys through Naviance to get a better understanding of self. Tier 1 services are push-in sessions into content classes. Career Coaches then pull small groups (Tier 2) and individual students (Tier 3) based on the survey information to provide more focused career exploration opportunities. Tier 2 and tier 3 services take place at various times during the day; before school, lunch, after school or as a brief pull-out during class time. CCPS created a Career Coach referral form that was shared with staff in all secondary schools so that individual teachers/counselors could refer students for career coaching. The goal of career coaching was for students to understand the options and choose a post-CCR pathway to best meet their needs. Through coaching opportunities, students could better understand themselves in order to make their post secondary plan as well. Career Coaches have collaborated with other partners (Upward Bound/Next Gen Scholars) to assist with career fairs, CTE tours and parent nights. 6th grade students have also explored careers through the use of Beable, a platform that links students' personal interests and aspirations to literacy growth, personal growth, career exploration, and academic rigor. Students in 6th, 7th, and 8th grade as well as high school students have participated in Junior Achievement opportunities where hands-on programming was offered on financial literacy, work readiness, and entrepreneurship that inspires students to understand the opportunities provided by education. CCPS has also partnered with Tiggbee, a free platform that provides students with invaluable first-hand experiences of what it takes to succeed in their desired careers and helps them explore and plan the educational path necessary to achieve their goals. The CCPS CCR team meets routinely with Chesapeake College, the WIB and other eastern shore career teams to provide updates and discuss best practices. In addition, CCPS, the WIB and CC met to review our current MOU. We discussed 23-24 SY accomplishments and areas for improvement during the 24-25 SY.

INFORMATION FOR VISITING SCHOOLS

Caroline CTE Website

https://www.carolineschools.org/page/career-technology-education

School #1 Caroline Career and Technology Center (CCTC)

School Leadership: Courtney Handte, Principal
School Contact:
10855 Central Ave
Ridgely, MD 21660
Phone: 410.479.0100
Fax: 410.479.1308

School Website
https://www.carolinetech.org/o/cctc

School #2 North Caroline High School

School Leadership: Matt Spiker, Principal
School Contact:
North Caroline High School
10990 River Road
Ridgely, MD 21660
Phone: 410.479.2332

School Website
https://www.northcarolinehs.org/o/nchs

CTE Lead, School Administrators & Staff

Name	Role	Location
Lindsey McCormick	Director of CCR	Central office
Eric Cook	Coordinator of Career Readiness	Central Office
Courtney Handte	Principal	CCTC
Matt Spiker	Principal	NCHS
Jaren Sherman	Principal	CRHS
Derek Nepert	MS Career Coach	LMS/CRMS
Rob Gowen	HS Career Coach	NCHS/CRHS

Teachers and Faculty

Caroline County Technical Center

Name	Subject	Years in Position	Classes
Molly Mellor	Academy of Health Professions	1	1. Structure & Functions Human Body 2. Clinical Internship 3. Clinical Internship 4. Prep
Jodi Neal	CASE	15	1. Agribusiness Research & Development 2. Animal and Plant Biotechnology 3. Agriculture Technology 4. Prep
Kristi Hall	Cosmetology	6	1. Cosmetology Practicum 2. Cosmetology Practicum 3. Cosmetology Practicum 4. Prep
Christine Wright-Gadow	Cosmetology	15	1. AdvCosmetologyTheory & Application 2. AdvCosmetologyTheory & Application 3. AdvCosmetologyTheory & Application 4. Prep
Dennis Hall	Construction/ CADD	11	1. CADD II 2. Fundamentals Construction & Drafting 3. Res&LightCommercialConstrTechII 4. Prep
Keith Hale	Advanced Manufacturing (AMP)	16	1. Financial Literacy 2. Appl of Adv Manufacturing I 3. Appl of Adv Manufacturing II 4. Prep
Kevin Cahall	Automotive	18	1. Auto-Suspension & Steering 2. Auto-Brakes 3. Auto-Engine Performance:Part A 4. Prep
Greg Butler	Automotive	14	1. Auto-Electrical/Electronic Sys 2. Auto-Heating/Air Conditioning Sys 3. Auto-Engine Performance:Part B 4. Prep
Larry Ogden	Food and	6	1. FoodServ Professional II

	Beverage Management		2. FoodServ Professional II 3. FoodServ Prof Practicum II 4. Prep
Culver Rausch (filling in)	Criminal Justice	24	1. Prep 2. Administration of Justice 3. Internship/Capstone Experience 4. Business Law

Teachers and Faculty

North Caroline High School

Name	Subject	Years in Position	Classes
Chrissy Yoxall	Computer Science	8	1. Prep 2. Computer Science Principles (CSP) 3. Cybersecurity (SEC) 4. Computer Science Essentials (CSE)
Glenn Brainer	Computer Science	1	1. Computer Science Essentials (CSE) 2. Prep 3. Computer Science Essentials (CSE) 4. Computer Science Essentials (CSE)
Hannah Odom	Computer Science	1	1. Prep 2. Computer Science Essentials (CSE) 3. Computer Science Essentials (CSE) 4. Computer Science Essentials (CSE)
Kevin Webster	Engineering	28	1. Principles of Engineering 2. Aerospace Engineering 3. Intro to Engineering Design 4. Prep
Jennifer Dvorak	Teacher Academy	21	1. Human Growth & Development 2. Prep 3. FoundationsCurriculum/Instruction 4. Education Academy Internship
Kelly Larkin	BioMed	19	1. Principles of Biomedical Sciences 2. Medical Interventions 3. Prep 4. AP Biology SI

Teachers and Faculty

Colonel Richardson High School

Name	Subject	Years in Position	Classes
Mark Robuck	Computer Science	11	1. Computer Science Essentials (CSE) 2. Prep 3. Computer Science Essentials (CSE) 4. Cybersecurity (SEC)
Dan Newberry	Engineering	2	1. Aerospace Engineering 2. Intro to Engineering Design 3. Principles of Engineering 4. Prep
Stephanie Veredery	Teacher Academy	12	1. Human Growth & Development 2. Physical Education I 3. Prep 4. FoundationsCurriculum/Instruction
Chad Shelly	BioMed	17	1. Medical Interventions 2. Physics 3. Prep 4. Principles of Biomedical Sciences
Amber Knoepfel	Computer Science	1	1. Financial Literacy 2. Financial Literacy 3. Prep 4. Computer Science Essentials (CSE)

CTE PROGRAMS AND ENROLLMENT AT VISITING SCHOOLS

Class of 2024 Data

Schools with CTE Programs	CLUSTER	CTE PROGRAM	ENROLLMENT NUMBER		COMPLETION RATE[29]	IRC ATTAINMENT RATE
			NCHS	CRHS		
Comprehensive High Schools	Information Technology	PLTW Computer Science	9	4	92.8%	n/a
	Health & Biosciences	PLTW Biomedical Sciences	12	14	76.4%	n/a
	Manufacturing , Engineering & Technology	PLTW Engineering	20	8	96.5%	n/a
	Human Resources Services	Teacher's Academy of Maryland	16	7	95.8%	82.6%
	Human Resources Services	Military Service	3	1	100%	n/a
	Human Resources Services	Firefighter/Emergency Medical Responder (MFRI)	1	0	100%	100%
		Apprenticeship Maryland Program	3	1	100%	n/a
Caroline Career and Technology Center	Health & Biosciences	Academy of Health Professions	14	8	100%	100%
	Manufacturing, Engineering & Technology	Advanced Manufacturing Professionals (AMP)	13	1	93.3%	n/a
	Transportation Technologies	Automotive Technology	20	7	96.4%	88.8%
	Consumer Services, Hospitality & Tourism	Careers in Cosmetology	11	4	100%	53.3%

[29] Completion Rate refers to the percentage that complete that CTE program.

	Environmental, Agricultural & Natural Resources	CASE (Curriculum for Agricultural Sciences)	10	3	100%	n/a
	Construction & Development	Computer Aided Drafting & Design (CADD)	3	3	100%	100%
	Construction & Development	Construction Technology	8	1	100%	88.8%
	Consumer Services, Hospitality & Tourism	Food & Beverage Management (Prostart)	3	1	100%	100%
	Human Resources Services	Homeland Security - Criminal Justice	23	0	100%	n/a

Overview of CTE Programs

Construction & Development

Advances in science and technology will continue to drive innovation in the design, construction, and maintenance of buildings and infrastructure, including new design concepts, construction materials and methods, and the application of information technology. Construction-related programs allow students to advance their knowledge in specific construction trades, design or construction management.

Computer Aided Drafting & Design

1. Foundations of Building and Construction Technology - CORE
2. Computer Aided Drafting and Design – CADD I
3. Residential and Light Commercial Construction Technology I
4. Fundamentals of Construction and Drafting
5. Computer Aided Drafting and Design II – CADD II
6. Recommended - Residential and Light Commercial Construction Technology II
    a. ✶Must complete NCCER & CADD assessments

Construction Technology

1. Foundations of Building and Construction Technology - CORE
2. Computer Aided Drafting and Design – CADD I
3. Residential and Light Commercial Construction Technology I
4. Fundamentals of Construction and Drafting
5. Residential and Light Commercial Construction Technology II

6. Recommended - Computer Aided Drafting and Design II – CADD II
    a. ✶Must complete NCCER & CADD assessments

Consumer Services, Hospitality & Tourism

Programs in consumer services, hospitality and tourism prepare students for a variety of career options. Each program includes options for students to earn industry certifications and college credit in the career field. Students, who are interested in culinary arts, restaurant management, lodging management, or cosmetology, engage in real-world experiences through internships and mentoring opportunities. These options allow students to apply their classroom instruction in meaningful ways and give them (through licensure or certification) a head start into the profession.

Careers in Cosmetology

1. Principles & Practices of Cosmetology
2. Advanced Cosmetology
3. Mastery of Cosmetology
4. Cosmetology Practicum

Food & Beverage Management (Prostart)

1. Food Service Professional I
2. Food Service Practicum I
3. Food Service Professional II
4. Food Service Practicum II
    a. ✶Must complete Prostart assessments

Environmental, Agricultural & Natural Resources

The agricultural sector is a highly competitive global industry creating new challenges in identifying global and domestic markets, improving business planning, financing, risk management, and productivity; and reducing costs. Advances in science and technology, in particular biotechnology, will continue to drive innovation and growth in this career cluster. Growing public concerns over natural resources, environmental quality, and public health will continue to expand the role and scope of the natural resource management and environmental services sectors.

CASE (Curriculum for Agricultural Science)

1. Agriculture, Food and Natural Resources
2. Principles of Agriculture
    a. Animal Science
    b. Plant Science
3. Animal and Plant Biotechnology
4. Agriculture Business, Research & Development – Capstone

a. ✶Must complete CASE assessment

Health & Biosciences

Career and Technology Education programs in the Health and Biosciences cluster focus on preparing dedicated professionals with the knowledge and skills necessary to pursue challenging and rewarding careers and further education. These programs require students to apply knowledge learned in science and mathematics to professions in the health and biosciences field. These careers are among the fastest growing and highest in demand in the country as the population ages and health care needs continue to increase. These CTE programs prepare students for positions in direct patient care settings, research and laboratory facilities, as well as for opportunities in business and management related to health care. These programs also provide career development experiences for students in a wide variety of exciting careers.

PLTW Biomedical Sciences

1. Principles of Biomedical Science
2. Human Body Systems
3. Medical Interventions
4. Biomedical Innovations
    a. ✶Must complete end of course assessment.

Academy of Health Professions

1. Foundations of Medicine & Health Science
2. Medical Specialty
3. Allied Health Internship
4. Structures and Functions of the Human Body
5. Clinical Internship
    a. ✶Must complete CNA assessment

Human Resources Services

Advances in scientific knowledge, and increased public awareness of social problems and issues are contributing to a demand for high-quality social services. Public concerns over crime, security and emergency response, and the increased demand for legal intervention in business and communities will continue to drive the growth of law enforcement, emergency and legal services. The continuous need for education professionals, especially in the critical shortage areas, offers creative ways to engage young people early on in the teaching profession.

Teacher Academy of Maryland (TAM)

1. Human Growth and Development
2. Teaching as a Profession

3. Foundations of Curriculum and Instruction
4. Education Academy Internship
    a. ✶Must complete ParaPro assessment

Fire Fighter and Emergency Medical Responder (MFRI)
(Located in Queen Anne's)

1. Firefighter I
2. Emergency Medical Care
3. Hazardous Materials/Operations
4. Truck Company Fireground Operations/RTVMR
5. Firefighter II
    a. ✶ Must pass Firefighter I assessment to continue in program

Homeland Security – Criminal Justice

1. Foundations of Homeland Security and Emergency Preparedness
2. Law Enforcement and Emergency Preparedness
3. Administration of Justice
4. Capstone

Military Service-Navy Junior Reserve Officers Training Course (NJROTC)
(Located at Easton High School-Talbot County)

1. Naval Science I
2. Naval Science II
3. Naval Science III
    a. *Must complete ASVAB assessment

Information Technology

Information Technology (IT) professionals will face increasing pressure to design, develop, implement, and support complex and reliable IT solutions that will meet the needs of external and internal customers. This will require that IT professionals have the skills to determine customer business needs and requirements, manage complex projects, and integrate software and hardware solutions. Maryland CTE programs include opportunities for students to focus on software development, programming, IT hardware and networking technologies. Cyber Security is an increasingly important part of IT programs and represents expanding opportunities for employment and advanced education and training in Maryland.

PLTW Computer Science

1. PLTW Computer Science Essentials
2. PLTW Computer Science Principles (AP)
3. PLTW Computer Science A (AP)
4. PLTW Cybersecurity
    a. *Must complete AP testing for Computer Science Principles

b. *Must complete AP testing for Computer Science A

Manufacturing, Engineering & Technology

Programs in the Manufacturing, Engineering, and Technology Cluster prepare students for a variety of career options through Maryland's Career and Technology Education Programs of Study that lead to postsecondary education and employment. Students engage in real world projects that strengthen their understanding of science, technology, engineering, and mathematics (STEM). They work in teams to complete challenging projects related to design, manufacturing process applications, and quality improvements. Graduates are being educated for the high-performance workplace using advanced technologies. Employers in the manufacturing and engineering sectors need a pipeline of highly qualified employees to remain internationally competitive, to develop and use new technologies, and to continuously improve the quality of life for Marylanders.

Advanced Manufacturing Professionals

1. Foundations of Advanced Manufacturing Production I
2. Foundations of Advanced Manufacturing Production II
3. Applications of Advanced Manufacturing I
4. Applications of Advanced Manufacturing II
    a. *Must complete MSSC assessments in Safety
    b. *Must complete MSSC assessments in Manufacturing Processes and Production

Project Lead the Way (PLTW) – Engineering

1. Introduction to Engineering Design
2. Principles of Engineering
3. Digital Electronics
4. Focus
    a. Civil Engineering
    b. Aerospace Engineering
5. Engineering Design and Development
    a. ✶Must complete end of course assessment

Transportation Technologies

Advances in science and engineering are producing major innovations in transportation technology, resulting in faster movement of people and goods at lower costs and with less environmental and safety risks. These innovations require higher skills to manage and maintain transportation equipment. High school programs provide opportunities for students to prepare for careers in the transportation industry.

Automotive Technician

1. Maintenance and Light Repair I (all three classes taken as a cohort)
    a. 880 Automotive – Suspension and Steering
    b. 881 Automotive Engine Performance A
    c. 883 Automotive – Brakes
    ✶ Must complete ASE industry assessments

2. Maintenance and Light Repair II (all three classes taken as a cohort)
    a. 882 Automotive – Electrical/Electronic Suspension
    b. 884 Automotive Heating and Air Conditioning Systems
    c. 885 Automotive Engine Performance B
    ✶ Must complete ASE industry assessments

LEA STUDENT DEMOGRAPHICS

	Maryland	Caroline County
LEA Student Demographics (2023)	276,495	5,580
% Asian	7%	13%
% American Indian / Alaska Native	<1%	<1%
% African American	33%	14%
% Hispanic	21%	21%
% Native Hawaiian / Other Pacific Islander	<1%	<1%
% Two or More Races	4%	9%
% White	34%	55%
% Students with Disabilities	11%	9.5%
# of Multi-Lingual Learners	9%	10%
% Free and Reduced Meals (FARMS)	47%	63%
Child Poverty Rate % (2022)	12%	13% (2023)[30]
Unemployment Rate % (2024)	3%	2%[31]

[30] https://www.marylandfamilynetwork.org/sites/default/files/2024-01/Caroline.pdf; p. 4
[31] https://www.marylandfamilynetwork.org/sites/default/files/2024-01/Caroline.pdf; p. 5

COMMUNITY CONTEXT

Nearby Universities & Community Colleges

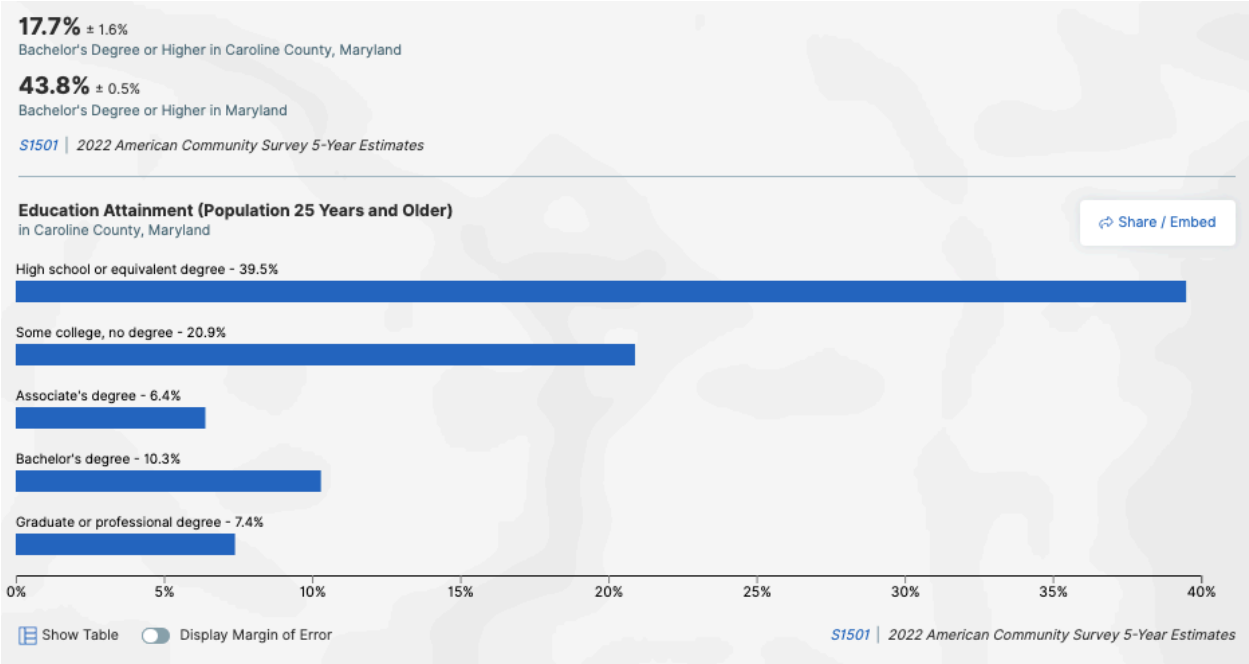
Chesapeake College
Salisbury University

Economic Profile

Caroline County[32] is a strong economic center on Maryland's Eastern Shore. Its leading industries include manufacturing, transportation and logistics, and traditional and value-added agriculture, with private sector industries generating $1.1 billion in economic output. The county offers a sizable technical workforce that is well suited to meet the needs of business in the leading industry sectors. Its location on major transportation arteries that serve the Mid-Atlantic region has helped Caroline County become a major logistics hub, especially for the agricultural industry. Industrial development is located strategically throughout Caroline County: three parks in the town of Federalsburg, three industrial areas in the town of Denton, and a shovel ready technology specialty park in Ridgely. The county offers a manufacturing tax credit, Enterprise Zone advantages, and federal Opportunity Zone designations. Caroline County offers high quality of life as a serene refuge in the middle of the Washington DC, Baltimore, and Philadelphia Metropolitan Statistical Areas. Here is an example to give some perspective - in the same amount of time for a normal commute by car or train in the DC metro area, residents in Caroline County can be in Philadelphia or at the Delaware Beaches.

[32] https://www.carolinebusiness.com/wp-content/uploads/2023/07/CarolineBef_CountyReview_2023v1EDITS0-1.pdf; p. 2

Educational Attainment[33]



[33] https://data.census.gov/profile/Caroline_County,_Maryland?g=050XX00US24011

Leading Business Groups[34]

Company	Industry	Size Category
Benedictine Open Community	Educational Services	259-499
Benedictine Habilitation Ctr	Educational Services	259-499
Burris Logistics Custom	Transportation and Warehousing	100-249
Caroline Nursing & Rehab Ctr	Health Care and Social Assistance	100-249
Choptank Electric Co-Op	Utilities	100-249
Choptank Electric Co-Op Inc	Utilities	100-249
Dart Container Solo	Manufacturing	500-749
Denton Elementary School	Educational Services	100-249
Envoy of Denton	Professional, Scientific, and Technical Services	100-249
Greensboro Elementary School	Educational Services	100-249
Hanover Foods Corp	Manufacturing	100-249
Jason Pharmaceuticals Inc	Wholesale Trade	100-249
Mc Donald's	Accommodation and Food Services	100-249
North Caroline High School	Educational Services	100-249
Pearson's Care Home Inc	Health Care and Social Assistance	100-249
Roto-Rooter Plbg-Water Cleanup	Construction	100-249
Tri Gas & Oil Co Inc	Wholesale Trade	100-249

[34] Maryland Department of Labor, Division of Workforce Development and Adult Learning https://www.labor.maryland.gov/lmi/emplists/caroline.shtml

Appendix C | Visit Agenda

Team 1: CCTC to NCHS John Strickland, James Bell, Bill Forrester, Billie Brice, Rachel Amstutz, Dan Schneckenburger,		**Team 2: NCHS to CCTC** Adam Tolley, Lisa Darby, Matt Teffeau, Dave Harper, Dr. Donald Boyd, Ashley Robinson	
Time	Activity	Time	Activity
8:00am-8:30am (30)	**Meet and Greet**	8:00am-8:30am (30)	**Meet and Greet**
8:30am-9:10am (40)	**Classroom Visits - CCTC** *Cosmetology (Hall)* *Cosmetology (Wright)* *Adv. Manufacturing (Hale)*	8:30am-9:10am (40)	**Classroom Visits - NCHS** *BioMed (Larkin)* *Teacher Academy (Dvorak)* *Engineering (Webster)*
9:10am-9:20am (10)	**Break**	9:15am - 10:05am (50)	**School Counselor & Career Coach Focus Group** *Location: Conference Room/ Google Meet*
9:20am - 9:50am (30)	**Classroom Visits - CCTC** *Automotive (Butler)* *Automotive (Cahall)* *Construction/CADD (Hall)*	10:05am-10:15am (10)	**Break**
9:50am - 10:50am (60)	**CCTC CTE Student Focus Group** *Location: Conference Room*	10:15am-10:50am (35)	**Classroom Visits** *Computer Science (Yoxall)* *Computer Science (Odom)*
10:50am -11:00am (10)	**Break**	10:50am-11:00am (10)	**Transition to CCTC**
11:00am-11:30pm (30)	**Classroom Visits - CCTC** *Criminal Justice (Rausch)* *CASE (Neal)* *AHP (Mellor)*	11:00am-11:30pm (30)	**Classroom Visits - CCTC** *Cosmetology* *Automotive* *Group Choice*
11:30am - 12:30pm (60)	**CTE Staff/School Admin Mtg.** *Location: NCHS Media Center*	11:30am - 12:30am (60)	**CTE Staff/School Admin Mtg.** *Location: NCHS Media Center*
12:30pm - 1:00pm (30)	**Lunch**	12:30pm - 1:00pm (30)	**Lunch**
1:00pm - 2:00pm (60)	**CCTC Teacher Focus Group** *Location: CCTC Conference Room*	1:00pm - 2:00pm (60)	**NCHS/CRHS CTE Student Focus Group** *Location: NCHS Conference Room/ Google Meet*
2:00pm - 2:30pm (30)	**Classroom Visits - NCHS** *Teacher Academy (Dvorak)* *Computer Science (Yoxall)*	2:00pm - 2:10pm (10)	**Break**
2:30pm - 3:00pm (30)	**Break**	2:15pm - 3:00pm (45)	**NCHS/CRHS Teacher Focus Group** *Location: NCHS Conference Room/ Google Meet*
3:00pm - 3:30pm	**End of Day Debrief &**	3:00pm - 3:30pm	**End of Day Debrief &**

(30)	**Gathering**	(30)	**Gathering**

Team Member Roles			
Team 1		**Team 2**	
Facilitator/Recorder	John Strickland	Facilitator/Recorder	Ashley Robinson
Notes/Time	Billie Brice	Notes/Time	Dave Harper

LEA CTE Staff/School Administration	
Facilitator/Recorder	John Strickland
Notes/Time	Dave Harper

Appendix D | Interview & Focus Group Questions

Focus Group Reminders

To be used by team facilitator for focus group participants before starting

- We're here on behalf of the CTE Committee, committed to improving CTE programs in line with Maryland's goals outlined in the *Blueprint*.
- Our team represents a variety of different perspectives. Our members here today are teachers, administrators, school leaders, researchers, employers, local workforce board members, and CTE Committee staff and board members.
- Our purpose in this visit is to try to understand what is in place now in your LEA, including plans for expanding or strengthening existing programs and current challenges. We also want to identify any strong practices in place that we might be able to highlight statewide. These visits will also inform the CTE Committee's development of the statewide CTE framework.
- We are not here to "assess" or grade CTE programming or CTE teachers in schools or LEAs.
- After the visit, CTE Committee staff will draft a LEA report summarizing what we saw and heard, including our understanding of the LEA's CTE strategy, current strengths and challenges, and suggestions to help the LEA reach its goals.
- We look forward to hearing about your experiences and your thoughts on what's working and where we can support CTE here in your LEA.
- We would like to record this session (except student groups) to capture your thoughts accurately—does that work for you all? To be clear, this recording is only for note-taking purposes; we ensure confidentiality meaning no names will be cited in our reports.
- Your contributions today will help us improve CTE programs both here and statewide. Any questions before we start?

Questions for School Leadership

Priority Questions:

1. How long have you been in your role? What is your background in CTE?
2. Can you give us an overview of the structure of CTE programs in your school / LEA? *If not addressed, ask about: Dual enrollment, WBL, Range of programs, Application process, Transportation*
3. What are the school's current priorities for CTE in your school/LEA? *If not addressed, ask about: Eliminate/add programs, Apprenticeship, Increasing enrollment, Working with industry*
4. In your opinion, how well does the programming at your school align with key *(high-growth, high-wage)* industries in your community and statewide?
5. Is there capacity for all interested students to participate in CTE programs? Are there any barriers to enrollment?
6. For those students who are not able to enroll and stay on a waitlist, what's the process for those students? What happens if they don't get off the waitlist?
7. How does the LEA/district update CTE programs? What are some current plans you have for adding new programs, expanding existing programs or eliminate current programs?
8. From your perspective, what are the strengths of your LEA/school's CTE program, and what have you made the most progress on recently?
9. What do you see as the key challenges facing your LEA/school now?
10. Where would you like the LEA to be in five years in regards to CTE?

Additional Questions:

- Are any CTE teachers earning National Board Certification? If so, have they been able to move into differentiated roles?
- How do you collaborate with local business and industry and community colleges?
- Do you have sufficient teachers for current programs? If not, what are the issues in recruiting them?

- What's your process for reviewing the IRCs currently offered to students as part of their CTE program?
- What measures are in place to assess the long-term impact of CTE programs on students' career trajectories and contributions to the local economy?
- Do certain programs have higher completion rates than others?
- Are there clear pathways from current CTE programs to community college certificate and degree programs?
- What strategies are employed to raise awareness and improve perceptions of CTE programs among students, parents, and the broader community?

Questions for CTE Teachers

Instructions for focus group lead: Please start by asking everyone to introduce themselves with the first question. Since there are a lot of questions to get through, ask for a few people, not everyone, to answer each of the following questions, asking for different perspectives as needed.

Priority Questions:

1. What program do you teach in? How long have you been in your role? What is your background in this area?
2. Can you give us an overview of your CTE program? *If not addressed, ask about: Dual enrollment, WBL, IRCs, completion rates, post-grad options*
3. Do you have contact with employers in your industry? If so, what partnerships have been most beneficial for students?
4. Where do students from your program go after graduating (i.e., further training, work, college, etc.)?
5. What support do you and/or the school provide to help CTE students develop post-graduation plans? *Are your students getting time with a Career Coach as part of that support?*
6. If you could redesign your subject's program of study, what would you change?
7. What professional learning opportunities are available for you?
8. From your perspective, what are the strengths of your school's CTE programs?
9. What do you need as a CTE teacher that you feel you may not be getting?
10. What do you see as the key CTE challenges facing your school now?

Additional Questions:

- How do you collaborate with your colleagues (CTE and academic teachers)?
- Do any of your programs have school-based businesses that serve the school community and/or local clients?
- Do you think the certification requirements for CTE teachers are well-aligned to what was needed to teach in the area you teach in?
- Do most students who enroll in your program intend on completing the program?
- Can you share a success story of a former student who has benefited from your program?
- How do you measure the effectiveness of your CTE program, and what data or feedback informs changes or improvements?

Questions for CTE Students

Priority Questions:

1. What year are you, what program are you enrolled in, and why did you choose the program you're in?
2. How did you learn about the program you are enrolled in now? What was the process of getting in to the program?
3. How has your experience in the classroom been for your CTE classes? Is it different from your other classes?
4. Have you had any work experience as part of your program?
5. If you have a different home school, how do you get to your CTE program and / or to your job (if applicable)?
6. Will you graduate with any certifications/credentials or college credits?
7. What is your plan post-graduation, and how did you develop it?
8. How much do you know about careers in your industry (salary, training paths)?
9. What would you say is the best thing about your program?
10. If you could change anything in your program, what would it be?

Additional Questions:

- Are there any CTE programs you think the school/LEA should offer that it does not now?
- Have you participated in any competitions or extracurricular activities related to your CTE program? If so, what was your experience like?
- How well do you feel your CTE program is preparing you for the workforce or further education in your chosen field?
- How do your family and friends perceive your enrollment in a CTE program, and has their perception changed since you started?
- How does your school promote CTE programs to students, and what improvements would you suggest to increase awareness and interest?
- Looking back on when you first enrolled in your CTE program, what advice would you give to students who are currently considering CTE as an option?

Questions for School Counselors/Career Coaches & Staff

Instructions for focus group lead: Please start by asking everyone to introduce themselves with the first question. Since there are a lot of questions to get through, ask for a few people, not everyone, to answer each of the following questions, asking for different perspectives as needed.

Priority Questions:

1. How long have you been in your role? What is your background in this role?
2. How is school counseling and career counseling organized at your school? Do the counselors work together?
3. Is there a work-based learning coordinator and if so what is their scope of work and how do they interact with counselors?
4. How does the school counseling staff and career counseling staff stay up-to-date with CTE programming and workforce trends in the LEA and the state?
5. How are students introduced to CTE programs? Do students have opportunities for career exploration/education?
6. How are CTE students supported in making post-graduation plans?

7. How are parents and families introduced to programs? Are there other efforts to publicize CTE in the community?
8. What do you see as the strengths of CTE in this school?
9. What do you see as the key challenges facing your LEA/school's CTE programs?

Additional Questions:

- Do you track post-graduation outcomes, such as enrolling in further education / training or entering the workforce?
- In what ways does the school involve parents and the community in the CTE program?
- How are students who change their mind about a career path supported?
- How do you think the CTE guidance could be improved? Is feedback on guidance and support collected from students?
- Are there issues with students being able to access CTE programs? If so, what are the reasons and what are current strategies to address access issues from a counseling perspective?

Maryland

GWDB CTE COMMITTEE

Governor's Workforce Development Board
Career and Technical Education Committee

www.gwdb.maryland.gov