



Maryland

GWDB CTE COMMITTEE

Apprenticeships for High School Students in Maryland

Policy on Apprenticeships for High School Students Under the *Blueprint for Maryland's Future*

Governor's Workforce Development Board
Career and Technical Education Committee
Policy Issuance 2024-02

December 2024



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Policy Issuance 2024-02

TO: Maryland Department of Labor; Maryland State Department of Education; Maryland Higher Education Commission; Local Education Agencies; Maryland Community Colleges; Maryland Local Workforce Development Boards; employers; and other pertinent agencies and stakeholders

FROM: Governor’s Workforce Development Board CTE Committee

DATE: December 4, 2024

SUBJECT: Policy on Apprenticeships for High School Students Under the *Blueprint for Maryland’s Future*

PURPOSE: To provide policy guidance on the apprenticeships for high school students that will support and be counted toward the *Blueprint for Maryland’s Future* “45% goal” that, by the 2030-2031 school year and each year thereafter, 45% of public high school graduates will have completed the high school level of a Registered Apprenticeship or another industry-recognized credential by the time of graduation.

ACTION: Applicable staff at the above named agencies will ensure all relevant employees, service providers, and vendors are aware of this updated policy and will issue compliant implementation or procedural guidance, if and as needed.

EFFECTIVE: Immediately (i.e. starting in the 2024-2025 School Year)

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Executive Summary

The College and Career Readiness (CCR) Pillar of the *Blueprint for Maryland's Future* (“the *Blueprint*”) aims to ensure that students graduate from high school with the knowledge and skills required to be successful as they enter college or begin their career, and that they be on a structured career pathway at the time of graduation.^{1 2} This requires the creation of a Career and Technical Education (CTE) system that offers rigorous high school apprenticeships and other industry-recognized credentials that produce graduates ready and qualified to work within in-demand fields.³ To this end, the *Blueprint* established a goal that, by the 2030-2031 School Year (SY), 45% of public high school graduates will have completed the high-school level of a Registered Apprenticeship or another industry-recognized credential, as defined by the Governor’s Workforce Development Board (GWDB) CTE Committee (“45% goal”).⁴

This policy:

1. **Defines the *Blueprint*'s term “high school level of a Registered Apprenticeship”** as a Registered Apprenticeship (RA) with the State of Maryland that a student begins during high school, and in which they complete at least 144 hours of related instruction and 250 hours of on-the-job training prior to graduation, with remaining required hours post-graduation;⁵

2. **Requires steps be taken to rapidly expand Registered Apprenticeships for high school students** as the preferred method for fulfilling the *Blueprint*'s 45% goal; and
3. **Counts Youth Apprenticeship, which in Maryland is not a Registered Apprenticeship, toward the 45% goal only under the industry-recognized credential (IRC) category when the youth apprentice earns an IRC** as defined by the CTE Committee.⁶



¹ House Bill 1300. (2021). *The Blueprint for Maryland's Future*. aib.maryland.gov/Pages/blueprint-law.aspx

² Apprenticeship 2030 Commission. (Jan. 2024). *Interim Report*. <https://bit.ly/424pf9d>

³ AIB. (2023). *Blueprint Comprehensive Implementation Plan*. <https://tinyurl.com/aibbpcmpplan2023>

⁴ The CTE Committee is responsible for setting policy around what programs count toward the *Blueprint*'s 45% goal.

⁵ As reflected in this policy, the GWDB CTE Committee and Maryland Department of Labor have agreed to discontinue use of the term School-to-Apprenticeship, or STA, effective immediately. This decision has been made in response to stakeholder feedback on this policy during the public comment period.




⁶ To view the GWDB CTE Committee’s Industry-Recognized Credential Policy Issuance 2024-01, visit www.gwdb.maryland.gov/policy.

The CTE Committee is required to establish annual statewide targets for each school year to reach the 45% goal by the 2030-2031 SY.⁷ Overall, there are projected to be roughly 70,000 public high school graduates in the 2030-2031 SY.⁸ Thus, the target number of graduates needed to meet the *Blueprint's* 45% goal in the 2030-2031 SY is approximately 31,000. The CTE Committee's annual targets to build toward the 45% goal are forthcoming.

The CTE Committee is authorized under the *Blueprint* to issue recommendations to the Accountability and Implementation Board (AIB) on whether to withhold a portion of a school district's funds, based on findings of the CTE Expert Review Teams or the CTE Committee's assessment of a district's progress toward the 45% goal.⁹ The CTE Committee will recommend funds be withheld if the district is not demonstrating compliance with CTE Committee's policies or guidance, and are not making progress to increase the number of students engaged in the high school level of a RA or another IRC pathway. The CTE Committee recognizes that targets and expectations for meeting the 45% goal need to be clearly delineated before recommendations of this nature are made, and thus will not recommend such action to the AIB until the above-mentioned targets are defined and publicly issued, the CTE Committee's statewide CTE Framework is formally issued, as well as implementation guidance to support the expansion of RAs and IRCs for high school students.

In Figure 1 below is a summary of the CTE Committee's Apprenticeship Policy and IRC Policy of which programs count toward the *Blueprint's* 45% goal. These policies have been approved by the AIB.

Figure 1: Programs that Count Toward the Blueprint's 45% Goal

Defining the <i>Blueprint's</i> 45% Goal		High school students must complete one of the following by graduation to be counted
Options	Details	In 45% Goal
Registered Apprenticeship (RA)	<ul style="list-style-type: none"> - Gold standard for fulfilling the <i>Blueprint's</i> 45% goal - Requires 144+ hours of related instruction (RI) and 250+ hours of on-the-job training (OJT) before graduation¹ - Does not require completion of entire RA during high school 	
Industry-Recognized Credential (IRC)	<ul style="list-style-type: none"> - IRC that validates skills for in-demand occupations and is recognized by employers, as approved by the GWDB CTE Committee¹ - Student must earn an IRC on the approved list - Student can also complete as part of a YA (see below) - Should be pursued when a RA is not available 	
	Youth Apprenticeship (YA) + IRC	- Student must have completed an IRC, per above, as part of their YA
YA Only	- Completion of YA without an IRC may still be a valuable experience for some students and employers, but cannot count toward the <i>Blueprint's</i> 45% goal ²	

⁷ Md. Code, Educ. § 21-204. <https://tinyurl.com/CTEComm21-204>

⁸ MD Dept. of Planning. (Aug. 2022). *Public School Enrollment Projections 2022-2031*. <https://tinyurl.com/3w27n27h>

⁹ AIB. (2023). *Blueprint Comprehensive Implementation Plan*. <https://tinyurl.com/aibbpcmpplan2023>

Policy on Apprenticeships Under the *Blueprint for Maryland's Future*

DEFINING THE *BLUEPRINT'S* “HIGH SCHOOL LEVEL OF A REGISTERED APPRENTICESHIP”

The *Blueprint* term “high school level of a Registered Apprenticeship” is defined as starting a Registered Apprenticeship (RA) program recognized by the State of Maryland before high school graduation. This must include both on-the-job training and related instruction that take place while a student is enrolled in high school. Specifically, completing the “high school level” of a RA requires that the student complete at least 144 hours of related instruction (RI) and at least 250 hours of paid on-the-job training (OJT) prior to graduation. Additional RI and OJT hours required for each RA will be completed post-graduation in accordance with the total requirements of the student’s RA program, as approved by the Maryland Apprenticeship and Training Council (MATC). The high school level of a Registered Apprenticeship, as defined here, is the preferred “gold standard” method for fulfilling the 45% goal.¹⁰

Registered Apprenticeship offers a highly structured career pathway after high school graduation for participants, and RA has been proven effective for apprentices and their employers.¹¹ Partnership, alignment, and shared accountability across partners, particularly the Maryland Department of Labor (MD Labor) and the Maryland State Department of Education (MSDE), toward RA expansion goals is critical to providing these high-quality opportunities to students. For more information on definitions, see Appendix B.

Completing the “high school level of a Registered Apprenticeship” requires completing at least 144 hours of RI and at least 250 hours of paid OJT that align to the requirements of the RA in which the student has enrolled.¹² Additional requirements may be imposed based on the specific RA arrangements between student employees and sponsors, according to the RA program parameters approved by MATC. As MATC is the approving entity, the expectation is that the RA sponsor will include in their application that the full RA will complete a minimum of 2,000 hours of OJT, 250 of which must be completed prior to high school graduation to meet the 45% goal.¹³ OJT may take place both during the typical school day, through modified

¹⁰ The *Blueprint* stipulates that of the 45% goal, “to the extent practicable, the CTE Committee shall ensure that the largest number of students achieve the requirement of this subsection by completing a high school level of a Registered Apprenticeship program...” *Md. Code, Educ. § 21-204*. <https://tinyurl.com/CTEComm21-204>

¹¹ The benefits of Registered Apprenticeship are detailed in Appendix C.

¹² In the event that the students’ RA is canceled through no fault of their own (i.e. economic downturn leads to layoffs etc.), or the student or employer opt to terminate the agreement, as long as the student has completed 144 hours of RI and 250 hours of OJT while enrolled in a RA program, they will have met the requirement of completing the “high school level of a Registered Apprenticeship.”

¹³ Per stakeholder feedback, one of the core benefits of the RA model is that RI and OJT take place concurrently (i.e. over the same time period or, if that is not possible, closely timed one after the other). The 250 OJT floor can be

student schedules, and outside school hours, inclusive of nights, weekends, and breaks (i.e. summer etc.). If an employer or program sponsor wishes to propose exceptions to these minimum requirements for the high school level of a RA based on industry- or occupation-specific needs of the employer, they may send a letter of justification to the GWDB CTE Committee and MATC for approval.

TIMELINE

This policy will be effective immediately, starting in the 2024-2025 School Year (SY). The CTE Committee is aware that planning and apprenticeship applications for the 2024-2025 SY have already been put in place before this policy was adopted. As such, the CTE Committee understands that the 2024-2025 SY will be a year of transition, and that scaling RAs will take time. The 2024-2025 SY data on progress toward the 45% goal will serve as a “true baseline” upon which to build progress in subsequent years.

achieved in one summer full-time, or part-time during the academic year, depending on the needs of the employer and apprentice. The 144 RI floor is the recommended minimum already in practice for RA and YA. It is equivalent to one standard year course or one semester course if double blocked. These floors were designed, in accordance with stakeholder feedback, to allow flexibility for a student to pursue participation in a RA beginning in either the eleventh or twelfth grade and continuing after graduation.

Expanding Registered Apprenticeship Program Offerings for High School Students

EXISTING TOOLS AND RESOURCES TO EXPAND REGISTERED APPRENTICESHIP

There are several tools and resources available to Local Education Agencies (LEAs), Local Workforce Development Boards (LWDBs), employers, intermediaries and other partners to support the implementation and expansion of Registered Apprenticeships (RAs). The CTE Committee aims to elevate awareness of these available tools and calls on all relevant parties to maximize their use toward RA expansion for high school students:

- State-approved CTE programs can provide the related instruction (RI) component of RA.¹⁴ This is inclusive of dual enrollment students, for which the local Community College can provide the RI. Additional providers of RI may include the RA sponsors and online providers.
- County boards of education should award credit toward a high school diploma for OJT and RI completed under a RA program.¹⁵
- OJT can take place during traditional school hours through schedule modifications that are already allowable, or during non-school hours to include after school, weekends, and/or non-school weekdays (i.e. summer, holidays etc.), which allows for additional flexibility in completing the hour requirement. RI should ideally be completed concurrently with OJT under the RA model. RA sponsor applications must adhere to State regulations regarding credit.¹⁶
- The U.S. Department of Education's Office of Career, Technical, and Adult Education (OCTAE) has stated that funds available under the Federal Perkins Act may be used to develop, improve, and support RA programs.¹⁷
- Maryland law prohibits employment discrimination on the basis of age for those 16 and older. In addition, age is not a factor used to set workers' compensation rates

¹⁴ RI identified in the RA Standards of Apprenticeship is at the discretion of the RA program sponsor. The final Standards of Apprenticeship will be approved by MATC and DWDAL.

¹⁵ *Md. Code, Educ. § 7-205.4*. <https://bit.ly/4b1v1Wi>.

¹⁶ COMAR 09.12.43.05, Standards of an Apprenticeship Program, states: (1) Upon a showing of satisfactory evidence, advanced standing or credit up to 50% of on-the-job training or related instruction, or both, may be granted to an apprentice for previously acquired experience, training, skills, or aptitude, provided that wages shall be commensurate for any progression step of advanced standing or credit awarded. (2) In order for a specific apprentice to obtain credit for more than 50% of these requirements, the sponsor shall: (a) Send a written request to the Council detailing why the credit should be granted; and (b) Obtain the explicit written approval of the Council to grant the credit to the apprentice. <https://dsd.maryland.gov/regulations/Pages/09.12.43.05.aspx>.

¹⁷ United States Department of Education (USDOE). (Feb. 28, 2023). *Program Memorandum OCTAE 23-1*. <https://bit.ly/3O6PTZk>.

under any rating plan approved in the State, so the employment of a minor does not impact an employer's workers compensation rates.^{18 19}

- Both State and federal law prohibit minors from performing certain hazardous work; in some instances the prohibited hazardous work involves an entire worksite, which prohibits the minor from performing work at that worksite altogether, while in other instances a particular machine or activity is prohibited, meaning a minor could complete work that does not involve those hazardous machines or activities. There are limited exceptions to the federal prohibitions for student learners.^{20 21}
- MD Labor's Maryland Apprenticeship and Training Program (MATP) maintains repositories of grants and tax credits, if available, to support expansion of RA programs:
 - [Apprenticeship Grant Funding Opportunities](#)
 - [Maryland Tax Credit for Eligible Apprentices](#)²²
- MD Labor's MATP team has expanded from 12 to 26 staff, significantly increasing the number of Apprenticeship Navigators in regions across the State to support MD Labor's strategy to recruit the considerable number of employers required to meet the State's RA expansion goals.²³
- LWDBs are vital partners in expanding apprenticeship in their local areas. To learn more, contact the Maryland Workforce Association or LWDB directly.²⁴
- In November 2024, Governor Moore launched the Governor's Apprenticeship Pledge in partnership with the Governor's Workforce Development Board (GWDB), which will commit industry leaders to creating or expanding Registered Apprenticeship programs.²⁵ The Pledge's goal is to engage 500 new employers, 5,000 new apprentices, and at least five additional public agencies to register apprenticeships within its first year. Governor Moore also announced action to help make RAs more accessible and affordable through Maryland's community colleges, leveraging the Promise Scholarship Program, wherein eligible community college students can receive up to \$5,000 to cover tuition and mandatory fee expenses after federal or state financial aid has been applied.

REQUESTED ACTIONS TO EXPAND REGISTERED APPRENTICESHIP

The CTE Committee requests the following actions to expand RA programs for high school students. These next steps were developed in consultation with MSDE, MD Labor, and other partners, and were informed by recommendations from stakeholders during the public feedback period, as well as recommendations presented in the Apprenticeship 2030

¹⁸ Maryland Insurance Agency Bulletin 24-3, posted January 24, 2024, clarifies that age does not impact workers compensation rates. <https://bit.ly/47UbOKg>.

¹⁹ Certain occupations are declared to be hazardous for minors. For more information on the employment of minor's, see this MD Labor fact sheet: <https://www.dllr.state.md.us/labor/wages/minorfactsheet.pdf>.

²⁰ A complete list of hazardous work under State law can be found in the Labor and Employment Article, Section 3 -206, Annotated Code of Maryland: labor.maryland.gov/labor/wages/minorfactsheet.pdf. For prohibitions under federal law, see www.dol.gov/sites/dolgov/files/WHD/legacy/files/childlabor101.pdf.

²¹ For employers with questions about minors and hazardous occupations, please reach out to the Employment Standards Service at dldiemploymentstandards-dllr-@maryland.gov.

²² As of the writing of this policy, this tax credit is in effect until June 30, 2025, per Chapter 643 of 2020.

²³ To view contact information for an Apprenticeship Navigator and their assigned county, visit labor.maryland.gov/employment/appr/apprnavigators.shtml.

²⁴ For a list of LWDBs and direct links, visit marylandworkforceassociation.org/about-us/.

²⁵ To learn more about the Governor's Apprenticeship Pledge, visit www.gwdb.maryland.gov/apprenticeshippledge.

Commission's Interim Report.²⁶ The CTE Committee calls on a number of partners, as specified below, to take action in five key areas:

1. Targeting Resources and Investment Toward RA Expansion
2. Increasing Employer Engagement
3. Removing Barriers to Participation for High School Students
4. Improving Data Tracking and Performance Monitoring
5. Addressing Regulatory Barriers to RA Expansion

Requested actions around these five key areas are detailed below.

1. Targeting Resources and Investment Toward RA Expansion

- 1.1. Prioritize investment toward RA growth where possible, including through existing and new or grant-based funding, to align resources that will help scale RAs to meet employers' talent needs and address challenges or barriers to participation.²⁷

Responsible Partners: All State and local agencies engaged in workforce development (inclusive of education, workforce, and economic development agencies and organizations, as well as other agencies with resources to support workforce development in specific sectors)

- 1.1.1. Resources will need to be allocated to address the barriers to accessing RAs, including, but not limited to: transportation barriers to/from job sites and the institution providing the RI; increasing availability of RI through additional instructors and RI delivery sites when a program is oversubscribed.²⁸

- 1.2. In order to manage the massive expansion of RAs starting in high school, a long-term investment in a database where MD Labor's team can track outcomes and connect employers, LEAs, students, LWDBs, and other relevant approved-partners to the RA opportunities will need to be procured. See recommendation section 4 for additional recommendations regarding data.

Responsible Partner: MD Labor

2. Increasing Employer Engagement

- 2.1. Provide training to employers and necessary staff to support the conversion and/or creation of RAs starting in high school.

Responsible Partner: MD Labor to train existing RA sponsors, new RA employers, and relevant workforce program staff.

Responsible Partner: MSDE, in collaboration with MD Labor, to train LEA/school staff (inclusive of leadership and educators).

²⁶ The Apprenticeship 2030 Commission is tasked by the Maryland General Assembly with developing a plan to reach 60,000 RAs by 2030, in partnership with the CTE Committee, MD Labor, MSDE, LWDBs, and other relevant entities. Apprenticeship 2030 Commission. (Jan. 2024). *Interim Report*. <https://bit.ly/424pf9d>

²⁷ "Funding" and "Additional Personnel" were the highest ranked support that respondents to the public feedback form indicated needing in order to implement this Apprenticeship Policy. Respondents represented a mix of stakeholders, with the top respondents representing LEAs (48.1%), employers (18.5%), and postsecondary (7.4%).

²⁸ Chapter 857 of the 2024 Maryland legislative session establishes a driver education grant program for public schools. This fund will be administered by MSDE and is intended to provide grants to public schools in offering driver education courses to students. This may be one resource in addressing transportation barriers. tinyurl.com/482

- 2.2. Share information on age restrictions, hazardous occupations, licensing, workers compensation and other age-related regulatory misinformation that may prevent employers from hiring 16- to 17-year-olds when they can.

Responsible Partners: MD Labor, GWDB

- 2.3. Recruit and support Youth Apprenticeship sponsors in transitioning to RA sponsors or RA participating employers, where feasible. Work directly with approved employers to transition their YA to RA programs beginning in 2024, where an RA is appropriate for their business needs, and report outcomes on employer transitions annually to the GWDB CTE Committee.

Responsible Partner: MD Labor

3. Removing Barriers to Participation for High School Students

- 3.1. Develop a master scheduling guide with promising practices for LEAs to consider, providing examples of ways to adjust high school student schedules.^{29,30}

Responsible Partner: MSDE with guidance and oversight from the GWDB CTE Committee

- 3.1.1. LEAs must adjust high school schedules to support student and employer participation in RA, based on employer-specific needs and MATC-approved RA program parameters.

- 3.2. Redesign CTE programs of study to better accommodate and support the integration of RA to align curriculum to meet the RI requirements. If there is not an applicable RA for the occupation at the time, the CTE program of study should ensure alignment toward completion of another IRC, as defined by the GWDB CTE Committee.

Responsible Partners: MSDE, in collaboration with LEAs, Community Colleges, and other stakeholders

- 3.3. Develop comprehensive toolkits for schools, educators, career coaches, caregivers, and students to understand the benefits and encourage participation in RA.

Responsible Partners: MSDE, in collaboration with the GWDB CTE Committee and MD Labor

- 3.4. Prepare career coaches to support students in their path toward an RA and during the RA while they are in high school.

Responsible Partners: LWDBs, LEAs, and Community Colleges

- 3.4.1. Tailor training to support a variety of students, including those with disabilities or requiring more intensive individualized career coaching, that is coordinated with other school support systems to successfully participate in the rigors of an RA.

²⁹ To view sample student schedules presented by MSDE in 2023, see slides 20-22: <https://tinyurl.com/et62t3tn>

³⁰ Delaware's Delcastle Technical High School provides students with a paid cooperative training work opportunity with a flexible scheduling model that could serve as one example. In some situations, the student employee works full-time for a two-week period and attends school full-time for two weeks alternately. delcastle.nccvt.k12.de.us/apps/pages/co-op.

- 3.4.2. Prepare career coaches to counsel students on meeting the requirements to enter an RA.³¹
- 3.4.3. Prepare career coaches and other appropriate staff to support a smooth transition for the student as they graduate and enter the next phase of their RA after high school.
- 3.5. Inform students, families, and relevant staff that earned income for students enrolled in school and under the age of 18 is excluded from household income for purposes of SNAP benefits eligibility.³²

Responsible Partners: Maryland Department of Human Services, LEAs, MD Labor, and MSDE
- 3.6. See recommendation 1.1.1 regarding targeting investments to address barriers.

4. Improving Data Tracking and Performance Monitoring

- 4.1. Enhance both quantitative and qualitative data collection to ensure alignment to the *Blueprint* goals and analysis to address challenges.

Responsible Partners: MD Labor, MSDE, GWDB CTE Committee, and LEAs
- 4.1.1. MATP shall add to the RA employer checklist a reporting requirement to confirm that the employer was informed of both RA and Youth Apprenticeship.³³
- 4.1.2. LEAs shall collect proof of employment and hours for both RA and Youth Apprenticeship participants from the employer.
- 4.1.3. LEAs shall track the reason why a student cancels or does not complete a RA or Youth Apprenticeship during high school and report this to MATP. MATP will then report this to the CTE Committee annually.
- 4.2. Develop guidance on data implications for LEAs and other partners to support implementation of recommendation 4.1.

Responsible Partners: MD Labor, in collaboration with MSDE and GWDB CTE Committee
- 4.3. Modernize data systems to ensure partner agencies, including LEAs, can access information on connecting to RA sponsors and student participation. See recommendation 1.2 on investments that will be necessary in order to complete this task.

Responsible Partner: MD Labor
- 4.4. Monitor and publicly share employment and postsecondary education outcomes for RA and Youth Apprenticeship completers.

Responsible Partners: Maryland Longitudinal Data System Center (MLDSC), in collaboration with GWDB CTE Committee, MD Labor, and MSDE
- 4.4.1. Develop a public-facing dashboard to share this information with routine updates.

³¹ For instance, there may be a requirement to complete a specific course, obtain a driver's license, submit to a background check, pass a drug test and/or physical, etc.

³² To view the SNAP Manual Code of Federal Regulation, see 7 CFR 273.9(c)(7): <https://tinyurl.com/msj46678>

³³ DWDAL will explore expanding data reporting to capture reasons why an employer chooses to solely pursue Youth Apprenticeship. This data could then be reported and analyzed to better understand employers' needs and possible constraints when hiring high school students.

- 4.5. Track and share with the GWDB CTE Committee upon request, and no less than annually, progress toward the 45% goal, and supporting data for analyses on growth and challenges.³⁴

Responsible Partners: MD Labor, MSDE, LEAs

5. Addressing Regulatory Barriers to RA Expansion

- 5.1. Streamline the RA approval and registration process, where feasible, to make it easier and faster for employers/program sponsors to establish new RAs.³⁵

Responsible Partners: MD Labor and MATC

- 5.2. Review licensing regulations for occupations where licensing boards place age requirements, and where “apprenticeship licensing” exists and where participants have an “apprentice” license, but there is not a formal RA pathway. Where possible, pursue legislative changes so that steps can be taken to develop RAs that include high school students in these occupations if/as appropriate.

Responsible Partners: MD Labor

- 5.3. Monitor master scheduling constraints with respect to students’ ability to participate in RA and simultaneously meet graduation requirements. Review the Code of Maryland Regulations (COMAR) graduation requirements and, if applicable, make recommendations to amend.³⁶

Responsible Partners: MSDE and the Maryland State Board of Education, in collaboration with AIB and GWDB CTE Committee, where appropriate

There are also matters of federal policy that currently present barriers to participation in RA for some students in public high schools. The CTE Committee recognizes that the inability for **undocumented students** to obtain employment authorization is a barrier to participating in RA, since participation in RA requires certain documentation. This is a regulatory requirement of the U.S. Department of Homeland Security’s (USDHS’s) Citizenship and Immigration Services (USCIS), and therefore outside the purview of the GWDB or its member agencies to change.³⁷ However, the GWDB and member agencies will explore opportunities to recommend certain programming exceptions or funding mechanisms to open opportunities to undocumented students that may be considered toward the 45% goal. Should appropriate solutions be reached, the GWDB CTE Committee will issue additional guidance related to this population of students.

All of the above recommendations should be implemented in close collaboration with the GWDB CTE Committee to ensure alignment across the State and fidelity to the *Blueprint*. Over 2025, the GWDB CTE Committee will work with its partners to develop a coordinated strategic plan that will incorporate the recommendations above for reaching the 45% goal.

³⁴ Pursuant to House Bill 1426, Chapter 164 of the 2024 Maryland General Assembly legislative session, on or before December 1 each year, beginning in 2024, the CTE Committee shall report on the progress toward attaining the goals established by the CTE Committee. *Md. Code, Educ. § 21-204*. <https://tinyurl.com/CTEComm21-204>

³⁵ In order to remain in compliance with the USDOL RA regulations, state agencies are limited by certain federal rules on some registration requirements. It should also be noted that the application requirements serve as a critical quality assurance function in helping to ensure that RAs meet the standard as intended.

³⁶ COMAR 13A.03.02.03: <https://dsd.maryland.gov/regulations/Pages/13A.03.02.03.aspx>

³⁷ USCIS: www.uscis.gov/green-card/green-card-processes-and-procedures/employment-authorization-document

This will require incredible collaboration between multiple partners at the state-level, with strategies that articulate down to the local areas given the varying degree of employer demand and challenges specific to local areas.

The CTE Committee is authorized under the *Blueprint* to issue recommendations to the AIB on whether to withhold a portion of a school district's funds, based on findings of the CTE Expert Review Teams or the CTE Committee's assessment of a district's progress toward the 45% goal.^{38 39} The CTE Committee will recommend funds be withheld if the district is not demonstrating compliance with CTE Committee policies or guidance, and are not making progress to increase the number of students engaged in the high school level of a RA or another IRC pathway. The CTE Committee recognizes that targets and expectations for meeting the 45% goal need to be clearly delineated before recommendations of this nature are made, and thus will not recommend such action to the AIB until the above-mentioned targets are defined and publicly issued, and until the CTE Committee's CTE Framework and all policies associated with the 45% goal are formally issued as well. The CTE Committee will further recommend that, in instances where a jurisdiction is not making progress on these goals or fully complying with relevant policy or guidance, that the CTE Committee and its partner agencies first provide these jurisdictions with targeted technical assistance to address the identified challenges in growing high school RAs or the attainment of IRCs, before the mechanism of withholding funds is enforced. As new policies on RAs and IRCs are put in place, the CTE Committee acknowledges that there will be several years of building programming and capacity, and it will take several school years before data is available to effectively identify areas struggling with growth.

STRENGTHENING YOUTH APPRENTICESHIP TO ENSURE POSITIVE EMPLOYMENT OUTCOMES

Registered Apprenticeship is the preferred method of fulfilling the *Blueprint's* goals. The CTE Committee recognizes that, while Youth Apprenticeship is not a Registered Apprenticeship in Maryland and does not continue after graduation or always culminate in an IRC as RA does, Youth Apprenticeship provides value, given the varying needs and preferences of students and employers.⁴⁰ This can be a way to provide paid OJT, mentorship, and professional networking opportunities for students.⁴¹

As such, the CTE Committee recommends that Youth Apprenticeship count toward the *Blueprint's* 45% goal under the industry-recognized credential (IRC) category only when the apprentice earns, by graduation, an IRC as defined by the CTE Committee.⁴² This better aligns Youth Apprenticeship to *Blueprint* goals and ensures participating students have advanced standing on a structured career pathway that they can continue after

³⁸ AIB. (2023). *Blueprint Comprehensive Implementation Plan*. <https://tinyurl.com/aibbpcompplan2023>

³⁹ It should be noted that the CTE Committee recognizes the conflicting messaging within this requirement - that while the *Blueprint* necessitates a jurisdiction-level collaborative approach between LEAs, Community Colleges, LWDBs, and State Agencies, as written under the law, only LEAs face potential fiscal consequences.

⁴⁰ More information on youth apprenticeship in Maryland as well as national and global best practices can be found in Appendix D.

⁴¹ MD Labor and MSDE Youth Apprenticeship policy issuance describes how occupations are determined to be apprenticeable: www.labor.maryland.gov/employment/mpi/mpi12-22.pdf

⁴² To view the GWDB CTE Committee's Industry-Recognized Credential Policy Issuance 2024-01, visit www.gwdb.maryland.gov/policy.

graduation. MSDE and LEAs are generally responsible for aligning the RI and curriculum to the Youth Apprenticeship, which is included in the Youth Apprenticeship program's application for approval presented to MATC. Youth Apprenticeships without an aligned IRC can continue to be approved by MATC; however, they will not count toward the *Blueprint's* 45% goal.

The CTE Committee will review data reports being gathered by MD Labor in partnership with MSDE and MLDSC on employment offered to youth apprentices after graduation, and may make future recommendations to MD Labor, MATC, the AIB and/or the Maryland General Assembly based on analysis of the data reported.

Additional Resources

POLICIES TO REFERENCE

- **Maryland Department of Labor and Maryland State Department of Education Policy Issuance 2022-12** (December 2022): current Youth Apprenticeship policy. www.labor.maryland.gov/employment/mpi/mpi12-22.pdf
- **Governor's Workforce Development Board CTE Committee Industry-Recognized Credential (IRC) Policy Issuance 2024-01** (December 2024): IRC definition, core criteria, process, and approved list of IRCs that will count toward the *Blueprint's* 45% goal. www.gwdb.maryland.gov/policy

APPENDIX GUIDE

- A. Background on Apprenticeship and the *Blueprint for Maryland's Future*
- B. Summary of Definitions for Programs to Count Toward the *Blueprint's* 45% Goal
- C. Background Information on Registered Apprenticeship
- D. Background Information on Youth Apprenticeship
- E. 2023 Data on Registered Apprenticeship, Youth Apprenticeship, and Industry-Recognized Credential Participation and Completion by Maryland High School Graduates

Appendix A | Background on Apprenticeship and the *Blueprint For Maryland's Future*

The *Blueprint for Maryland's Future* ("the *Blueprint*") set a statewide goal that by the 2030-2031 School Year, 45% of Maryland high school graduates shall complete "the high school level of a Registered Apprenticeship or another industry-recognized occupational credential." The *Blueprint* clarifies that "to the extent practicable, the CTE Committee shall ensure that the largest number of students achieve the requirement of this subsection by completing the high school level of a Registered Apprenticeship program approved by the Division of Workforce Development and Adult Learning within the Maryland Department of Labor." The Accountability and Implementation Board's (AIB) Comprehensive Implementation Plan clarifies that the main objective of the *Blueprint's* Pillar 3 is the creation of rigorous high school apprenticeships as the primary industry-recognized credential for high school graduates.⁴³

There is no state or federal definition of the "high school level of a Registered Apprenticeship" term used in the *Blueprint*.⁴⁴ As such, the CTE Committee is responsible for defining this term and issuing policy and guidance based on this definition. While developing this policy, the CTE Committee took into consideration federal and state regulations, Kirwan Commission reports, existing Maryland programs, lessons from comparable programs nationally and globally, and input from stakeholders.

There are currently two types of apprenticeships for high school students in Maryland:

- Registered Apprenticeship (RA) which begins in high school and continues after graduation (formerly referred to as "School-to-Apprenticeship" in Maryland), or
- Youth Apprenticeship (also known as the Apprenticeship Maryland Program (AMP)), which has been modeled to mirror elements of the RA model - specifically, paid on-the-job learning with concurrent related instruction - and is completed while the student is in high school.

The inspiration for the *Blueprint* making apprenticeship a widely available route to careers comes from the effective apprenticeship systems in certain European countries, notably Austria, Denmark, Germany, and Switzerland. These countries demonstrate that advanced economies can hire, train, and retain young people so that they become highly skilled workers throughout their careers. In Switzerland, 95% of 25-year-olds have either an apprenticeship or a Bachelor of Arts (BA) degree.⁴⁵ Apprenticeships in these countries are

⁴³ AIB. (2023). *Blueprint Comprehensive Implementation Plan* (p. 122). <https://tinyurl.com/aibbpcompplan2023>

⁴⁴ On January 17, 2024, USDOL issued a Notice of Proposed Rulemaking (NPRM) to revise the regulations for Registered Apprenticeship. The NPRM included the creation of a "registered CTE apprenticeship." However, the NPRM was withdrawn on November 27, 2024, by the Office of Information and Regulatory Affairs. The GWDB CTE Committee will continue to monitor the development of any new federal apprenticeship regulations.

⁴⁵ Nancy Hoffman and Robert Schwartz, "Gold Standard: The Swiss Vocational Education and Training System" (Washington, DC: National Center on Education and the Economy, 2015). nces.org/wp-content/uploads/2015/03/SWISSVETMarch11.pdf.

embedded in their education systems through Technical Vocational Education programs beginning in late high school. In countries with the most expansive and high-quality apprenticeship systems, apprenticeships begin after the completion of compulsory education, and youth and young adults engage at much higher rates than in the U.S. In Switzerland, 70% of each youth cohort undertakes apprenticeships, for careers in a range of occupations from high-tech, human services, health, business services as well as traditional trades. The Swiss apprenticeship system is strongly supported by Swiss employers, who credit it with being a major contributor to the continuing vitality and strength of the Swiss economy.⁴⁶ In Germany, about 60% of German workers have completed apprenticeship training and 1.5 million apprentices were in vocational education in 2017. Germans typically start an apprenticeship after finishing secondary school when they are between 16 and 20 years old.⁴⁷

While the *Blueprint's* 45% goal is modeled on elements that have contributed to the successes seen in these countries, it is worth noting some key differences between these countries and the U.S. In Switzerland, compulsory education ends with the equivalent of the U.S. high school 10th grade, so all students are choosing next steps on career pathways including apprenticeships, around the age of 16. These countries also make significant financial investments to support apprenticeships. Furthermore, these countries also have much higher rates of labor organization than Maryland or other states in the U.S., as well as varying regulatory features to promote employer engagement, all of which further supports apprenticeship as a cornerstone to talent development.

It is for these reasons that the strides Maryland plans to make under the *Blueprint* are unprecedented in the U.S. To demonstrate: Wisconsin hosts by far the largest and most developed high school apprenticeship program, which has been in place for 30 years. As of the 2022-2023 Fiscal Year, nearly 8,200 Wisconsin high school students participated in a youth apprenticeship, but few are Registered Apprenticeships.⁴⁸ These non-registered youth apprentices constitute a modest share (6.5%) of the combined enrollment of about 122,000 students in Wisconsin high schools.

Overall, the *Blueprint* envisions the realignment of high school CTE to serve as related instruction for Registered Apprenticeships as one method for increasing public investment to support apprenticeship under the existing U.S. education model.

⁴⁶ Nancy Hoffman and Robert Schwartz. (2015). *Gold Standard: The Swiss Vocational Education and Training System*. National Center on Education and the Economy. <https://ncee.org/wp-content/uploads/2015/03/SWISSVETMarch11.pdf>

⁴⁷ CESifo. (2023). *The Value of Early-Career Skills*. www.cesifo.org/en/publications/2023/working-paper/value-early-career-skills

⁴⁸ Wisconsin Youth Apprenticeship dashboard: <https://dwd.wisconsin.gov/apprenticeship/ya/yoda.htm>







Appendix B | Definitions of Programs To Count Toward the *Blueprint's* 45% Goal

The underlying purpose of the *Blueprint's* 45% goal is to provide every student with multiple high-quality pathways leading to a good job. To accomplish this goal, RA should be considered the gold standard of work-based learning experiences. As such, LEAs should follow several orders of operation when advising students and scheduling them into these experiences. These orders of operations act as a filter to determine the optimal placement of the student into the work-based learning experience.

The **RA** is the gold standard and should be the **first consideration** for students moving into an apprenticeship program. If a RA isn't available for a particular pathway or isn't the right choice for a particular student, the LEA must document the reason(s) why a RA wasn't selected and then move forward to the next best option.

Once the decision has been made to move beyond the RA and the reason has been documented, then another **IRC** should be the **second consideration**. A **YA + IRC may be particularly beneficial**, as it provides paid work experience alongside the IRC. If the YA + IRC isn't available for a particular pathway or isn't the right choice for a particular student, the LEA must document the reason(s) why and then move forward to the IRC option. YAs that include IRCs will be counted toward the 45% goal under the IRC category, *not* under the RA category.

The GWDB CTE Committee will collect and summarize findings and trends from this documentation as part of its annual reporting on progress toward *Blueprint* goals and as part of ongoing refinement of policy.

Defining the <i>Blueprint's</i> 45% Goal		High school students must complete one of the following by graduation to be counted			
Options	Details	In 45% Goal			
Registered Apprenticeship (RA)	<ul style="list-style-type: none"> - Gold standard for fulfilling the <i>Blueprint's</i> 45% goal - Requires 144+ hours of related instruction (RI) and 250+ hours of on-the-job training (OJT) before graduation¹ - Does not require completion of entire RA during high school 				
Industry-Recognized Credential (IRC)	<ul style="list-style-type: none"> - IRC that validates skills for in-demand occupations and is recognized by employers, as approved by the GWDB CTE Committee¹ - Student must earn an IRC on the approved list - Student can also complete as part of a YA (see below) - Should be pursued when a RA is not available 				
	<table border="1"> <tr> <td>Youth Apprenticeship (YA) + IRC</td> <td>- Student must have completed an IRC, per above, as part of their YA</td> <td></td> </tr> </table>	Youth Apprenticeship (YA) + IRC	- Student must have completed an IRC, per above, as part of their YA		
Youth Apprenticeship (YA) + IRC	- Student must have completed an IRC, per above, as part of their YA				
YA Only	- Completion of YA without an IRC may still be a valuable experience for some students and employers, but cannot count toward the <i>Blueprint's</i> 45% goal ²				

DEFINITIONS

High School Level of a Registered Apprenticeship: The CTE Committee defines the *Blueprint* term “high school level of a Registered Apprenticeship” to allow high school students 16 years old and above to enter a Registered Apprenticeship while in high school and continue after graduation, with graduation credits awarded for the portion of the RA completed while in high school. RAs are registered with the Maryland Apprenticeship and Training Program (MATP) in the Maryland Department of Labor’s (MD Labor) Division of Workforce Development and Adult Learning (DWDAL) and/or the U.S. Department of Labor, and successful completion of a RA includes earning an industry-recognized credential. More information on RA can be found in Appendix C.

The specific number of on-the-job training (OJT) hours required while the apprentice is in high school will vary based on the employer’s hiring needs, job requirements, and the student’s schedule. **At a minimum, a student must complete 250 hours of OJT and 144 hours of related instruction (RI) prior to graduation to be counted toward the 45% goal.** The OJT is paid and the apprentice is under a mentor’s supervision during working hours. A RA requires that a student complete a minimum of 144 hours of concurrent RI per year, provided by a high school, trade school, community college, or the employer/sponsor. This 144 hours can be delivered through a State-approved CTE program of study, or outside of a CTE program of study if appropriate and approved by the RA sponsor, and generally equates to two semesters per year of curriculum.

Youth Apprenticeship (YA): Youth Apprenticeship is jointly administered by MD Labor and the Maryland State Department of Education (MSDE). It is modeled to include several elements of Registered Apprenticeship but is not a Registered Apprenticeship with the U.S. Department of Labor or MD Labor. Youth Apprenticeship is currently categorized as a State-approved CTE program of study. Students complete 450 paid OJT hours under the direction of a mentor, and at least one year of RI prior to high school graduation. While Youth Apprenticeship does not meet all of the standards of a traditional RA, it requires meaningful engagement of both employers and students, and goes through an approval process with MD Labor, MSDE, and MATP. Successful completion of a Youth Apprenticeship is not itself an IRC in the way that completion of a RA is, but IRCs (defined below) can be included in Youth Apprenticeship programs. Youth Apprenticeships can be counted toward the *Blueprint*’s 45% goal only when the youth apprentice completes an IRC, with qualifying credentials and “completion” both defined by the GWDB CTE Committee.⁴⁹

Industry-Recognized Credential (IRC): The GWDB CTE Committee developed and adopted a definition and set of quality criteria for IRCs under the *Blueprint* in 2024, concurrent to the adoption of this apprenticeship policy. The definition, criteria, assessment and approval process, and list of approved credentials can be accessed at www.gwdb.maryland.gov/policy.

⁴⁹ To view the GWDB CTE Committee’s Industry-Recognized Credential Policy Issuance 2024-01, visit www.gwdb.maryland.gov/policy.

Figure 2: Comparison of Registered Apprenticeship and Youth Apprenticeship in Maryland

	Registered Apprenticeship	Youth Apprenticeship
Approval	<ul style="list-style-type: none"> • Maryland Department of Labor • U.S. Department of Labor 	<ul style="list-style-type: none"> • Maryland State Department of Education • Maryland Department of Labor
Monitoring of Apprenticeship Programs/Employers	<ul style="list-style-type: none"> • Maryland Department of Labor • Maryland Apprenticeship and Training Council 	<ul style="list-style-type: none"> • Local Education Agency • Maryland State Department of Education • Maryland Department of Labor • Maryland Apprenticeship and Training Council
Approval of Related Instruction (RI)	<ul style="list-style-type: none"> • Maryland Department of Labor • Maryland Apprenticeship and Training Council • Maryland State Department of Education, when developing CTE course alignment to RI 	<ul style="list-style-type: none"> • Local Education Agency • Maryland State Department of Education
Registration and Tracking of Apprentices	<ul style="list-style-type: none"> • Maryland Department of Labor 	<ul style="list-style-type: none"> • Local Education Agency • Maryland Department of Labor
Employer/Sponsor Recruitment	<ul style="list-style-type: none"> • Maryland Department of Labor • Local Workforce Development Boards 	<ul style="list-style-type: none"> • Local Education Agency • Maryland State Department of Education • Maryland Department of Labor • Local Workforce Development Boards
Managing and Adjusting Student Academic Schedules	<ul style="list-style-type: none"> • Local Education Agency • Maryland State Department of Education 	<ul style="list-style-type: none"> • Local Education Agency • Maryland State Department of Education



Apprenticeships and Industry-Recognized Credentials for High School Students Under the *Blueprint for Maryland's Future*

Summary of Policy Issuances
2024-01 and 2024-02



The *Blueprint for Maryland's Future* ("the *Blueprint*") established a goal that, by the 2030-31 school year, 45% of public high school graduates will have completed the high school level of a Registered Apprenticeship or another industry-recognized credential, as defined by the CTE Committee of the Governor's Workforce Development Board ("45% goal"). The CTE Committee has issued two policies to define minimum standards and quality criteria for both the "high school level of a Registered Apprenticeship" and other "industry-recognized credentials" (IRCs) that will be counted toward the *Blueprint's* 45% goal.

Defining the *Blueprint's* 45% Goal

High school students must complete one of the following by graduation to be counted

Options	Details	In 45% Goal
Registered Apprenticeship (RA)	<ul style="list-style-type: none"> - Gold standard for fulfilling the <i>Blueprint's</i> 45% goal - Requires 144+ hours of related instruction (RI) and 250+ hours of on-the-job training (OJT) before graduation¹ - Does not require completion of entire RA during high school 	✓
Industry-Recognized Credential (IRC)	<ul style="list-style-type: none"> - IRC that validates skills for in-demand occupations and is recognized by employers, as approved by the GWDB CTE Committee¹ - Student must earn an IRC on the approved list - Student can also complete as part of a YA (see below) - Should be pursued when a RA is not available 	✓
	Youth Apprenticeship (YA) + IRC <ul style="list-style-type: none"> - Student must have completed an IRC, per above, as part of their YA 	✓
YA Only	<ul style="list-style-type: none"> - Completion of YA without an IRC may still be a valuable experience for some students and employers, but cannot count toward the <i>Blueprint's</i> 45% goal² 	✗

High School Level of a Registered Apprenticeship

Registered Apprenticeship (RA) provides a structured career pathway and is an earn-and-learn training model proven to have a strong return-on-investment for both apprentices and employers. In Maryland, RAs must be approved by the Maryland Apprenticeship and Training Council (MATC).

A "high school level of a Registered Apprenticeship" is defined as a MATC-approved RA program that begins while an apprentice is in high school, and **requires that students complete a minimum of 144 hours of related instruction (RI) and 250 hours of paid on-the-job training (OJT) before their high school graduation.** Further RA requirements continue post-graduation, in accordance with total program standards approved by MATC.

1. To view the GWDB CTE Committee's Apprenticeship Policy and IRC Policy, visit www.gwdb.maryland.gov/policy.
2. YA only cannot be included in the 45% goal given statutory definitions and interpretation of the law from the AIB.

Industry-Recognized Credential

An industry-recognized credential (IRC) is **a formal validation of an individual's skills and/or competencies that align with state or regional in-demand occupations and is recognized by industry and employers. It may be a certification, license, or credential that is obtained through an assessment process, is portable, and may be stackable. The IRC leads to documented positive employment outcomes, ensures relevance in the labor market, and supports career advancement and economic development for credential holders.**

The CTE Committee and the Maryland State Department of Education (MSDE) have developed a coordinated IRC vetting process to ensure that State efforts through the *Blueprint* as well as through federal Perkins CTE funding are focused on quality IRCs that fit the above definition.

Specifically, each IRC on the State-approved list used by both the CTE Committee and MSDE must meet the following required quality criteria:



It is also preferred, but not required, that IRCs also meet the following quality criteria:



Applications for new IRCs to be considered that are not on the approved list will be open annually August 1 through October 31. The IRCs will be reviewed by MSDE and submitted to the GWDB CTE Committee for approval to go into effect the following school year.

Additional information can be found in the GWDB CTE Committee's Apprenticeship Policy and IRC Policy, which can be viewed at www.gwdb.maryland.gov/policy.

ABOUT THE GWDB

The GWDB serves as the Governor's chief strategy and policy-making body for workforce development by engaging key business, labor, education, community, and State and local government leaders to collaborate and advise the Governor on business-led workforce approaches that advance Maryland's economic competitiveness and build pathways to work, wages and wealth for all Marylanders. The GWDB is a business-led board, with a majority of members representing the business community. Other members include the governor, cabinet secretaries, college leaders, the state superintendent of schools, elected officials, and representatives of labor organizations and community-based nonprofit organizations. More information can be found at www.gwdb.maryland.gov

ABOUT THE CTE COMMITTEE

The CTE Committee was established under the *Blueprint for Maryland's Future*, Md. Code, Educ. § 21-209, as a unit within the GWDB. The CTE Committee's mission is to build an integrated, globally-leading framework for providing CTE to Maryland students in public schools, institutions of postsecondary education, and the workforce. The *Blueprint* envisions a system where academic knowledge and occupational competencies are integrated to enable students to develop the critical thinking, problem solving, employability, and technical skills required to meet the workforce and economic development needs of the 21st century. The CTE Committee is responsible for strategy and policy for core elements within Pillar 3 of the *Blueprint*, and its work falls under the oversight authority of the Accountability and Implementation Board (AIB). More information can be found at www.gwdb.maryland.gov/ctecomm

Appendix C | Background on Registered Apprenticeship

Registered Apprenticeship (RA) is a proven model of career preparation that combines classroom instruction with hands-on training under the guidance of a mentor (“journey worker”). The trainee (“apprentice”) is a paid employee whose wages progressively increase as they make skill gains. What they learn in the classroom (“related instruction”) complements and reinforces what they learn by doing (“on-the-job training”). RAs consist of 5 core elements:

1. Employer involvement
2. On-the-job training (2000 hours or more)
3. Related instruction (144 hours per year)
4. Rewards for skill gains
5. Industry-recognized credential

RAs are effective at addressing challenges on both the supply and demand sides of the labor market. Completing a RA ensures the apprentice access to a high-quality career pathway by providing them paid work experience, progressive wage increases, classroom instruction, and a nationally recognized credential upon completion. Employers benefit from meeting their workforce needs by directly developing and preparing their workforce. Employers are more likely to create productive and well-paying jobs where they can rely on apprentices to master an array of relevant skills. Apprenticeships have also been shown to reduce turnover, improve company morale, and improve co-worker productivity, among other benefits.^{50 51} Additionally, groups of employers or intermediaries such as unions, community organizations, trade associations, or institutions of higher education can jointly apply to sponsor RAs, easing the administrative burden on individual employers.

RAs can provide young people with work experience and employability skills and help offset the observed decline in youth employment. Evidence suggests that early work experience pays off in terms of higher lifetime income.⁵² Slow growth in earnings of the 60% of workers with less than a Bachelor of Arts (BA) degree is an economic problem with serious social consequences.⁵³ RAs provide opportunities for good jobs with strong wage outcomes and rewarding careers.⁵⁴ Starting a RA in high school offers several advantages:

- By continuing a RA after high school graduation, the student graduates with a job and a clear next step on a structured career pathway;
- Links between classroom learning and real-world application improve academic achievement and employment outcomes;
- Lost earnings during training are minimized compared to other training options because apprentices are employed and earn wages; and,
- Existing funding for related high school courses, especially CTE courses, reduce the costs to employers by providing much or all of the RI required for an apprenticeship.

⁵⁰ USDOL TEGL 13-16 Attachment III: <https://tinyurl.com/yu555m6n>

⁵¹ Marotta, John, Robert Lerman, Daniel Kuehn, and Myca San Miguel. (2022). *Beyond Productivity: How Employers Gain More from Apprenticeship*. Brief prepared for USDOL ETA. Urban Institute. <https://tinyurl.com/4wi7x62n>

⁵² Carr, R. V., Wright, J. D., & Brody, C. J. (1996). *Effects of High School Work Experience a Decade Later: Evidence from the National Longitudinal Survey*. *Sociology of Education*, 69(1), 66-81. <https://doi.org/10.2307/2112724>

⁵³ Business Insider. (2017). *Americans who haven't gone to college are way worse off today than 40 years ago*. www.businessinsider.com/high-school-graduates-worse-off-today-2017-11

⁵⁴ Maryland Longitudinal Data System Center. (2021). *Exploring Workforce Outcomes of Maryland Apprenticeship and Training Program Completers*. mldscenter.maryland.gov/ApprenticeshipReport.html

Appendix D | Background on Youth Apprenticeship

Youth Apprenticeship is a model of earn-and-learn career-connected learning that is closely modeled after Registered Apprenticeship. The U.S. has a highly varied national landscape of definitions, quality, and performance across different states, and the model has been evolving and growing across the country for nearly three decades. National thought leaders who seek to apply international best practices for youth apprenticeship in the U.S. encourage adoption of youth apprenticeship programs that meet four quality criteria, which mirror core criteria for Registered Apprenticeships. These were identified by a consortium of national subject matter experts through the Partnership to Advance Youth Apprenticeship (PAYA) and acknowledged by the Maryland Department of Labor and the Maryland State Department of Education in a Youth Apprenticeship joint policy issuance in 2022:^{55 56}

1. Paid, on-the-job training under the supervision of skilled employee mentors
2. Related classroom-based or technical instruction
3. Ongoing assessment against established skills and competencies
4. Culmination in a portable, industry-recognized credential and postsecondary credit

Across the country, states are testing and expanding youth apprenticeship opportunities and working toward the development of programs that meet all four of these criteria. Maryland has an opportunity to lead the nation on youth apprenticeship, with the first two criteria already being delivered. The GWDB CTE Committee Apprenticeship Policy includes the addition of one component of the fourth criteria as a requirement to ensure more Youth Apprenticeships can align toward *Blueprint* goals when a RA is not available.

Studies of the impact of youth apprenticeship programs that meet the above quality criteria indicate positive outcomes for students and employers. For instance, studies of Wisconsin's youth apprenticeship program found that youth apprentices demonstrated lower rates of absenteeism than their high school peers, and that after graduation they were more likely to be employed in the industry associated with their youth apprenticeship than their peers who completed CTE courses in the same industry. They were also more likely to have long-term career plans and long-term educational plans than their high school peers. Employers rated youth apprentices more favorably than other entry-level workers and a large majority reported benefits to their companies.⁵⁷

The recommendations put forward in the GWDB CTE Committee's Apprenticeship Policy aims to further ensure that Youth Apprenticeship delivers quality employment and career outcomes for students and positive business impacts for employers, and to ensure that such outcomes are more consistently measured and reported going forward.

⁵⁵ MD Labor and MSDE Policy Issuance 2022-12. (December 2022).

www.labor.maryland.gov/employment/mpi/mpi12-22.pdf

⁵⁶ National Governors Association. (2022). *State Policy Playbook to Advance Youth Apprenticeship*.

<https://bit.ly/3I3cUss>

⁵⁷ Robert Lerman & Lindsey Tyson. (2023). *Wisconsin's Well-Structured Youth Apprenticeship Program*.

<https://urbn.is/48f3ntb>

Appendix E | 2023 Data on Registered Apprenticeship, Youth Apprenticeship, and Industry-Recognized Credential Completion by Maryland High School Students

Based on projected growth in public school enrollment, there will be approximately 70,000 high school graduates in the 2030-2031 School Year.⁵⁸ Thus, roughly 31,000 graduates will need to complete the high school level of a Registered Apprenticeship or another industry-recognized credential (IRC) in order to meet the *Blueprint's* 45% goal.

As of December 31, 2023, Maryland had 201 active Registered Apprenticeship (RA) programs which enrolled primarily adults aged 18 and over. These active RAs consist of individual employer programs as well as large group joint and non-joint programs with hundreds of participating employers. Of the approximately 12,000 active RAs, approximately 51 were RAs that were of high school age and just over 100 total, including these 51, started their RA during high school.⁵⁹ As of December 31, 2023, there were also 831 high school students enrolled in non-registered Youth Apprenticeship programs; however, current available data does not indicate how many of these students would meet the requirements within this policy of earning an IRC as part of their Youth Apprenticeship.

In 2023, approximately 4,000 CTE concentrators obtained an IRC, which was 7% of the graduating high school students. It should be noted however that this attainment rate is based on MSDE's original list of approved IRCs, which was approximately 600, and the updated CTE Committee approved list is approximately 210 credentials, as of the writing of this report.⁶⁰ Given that the updated list of approved IRCs wasn't approved until the summer of 2024, the IRC attainment from 2023 cannot be broken down by which students earned credentials on the new approved list.

Overall in 2023, approximately 7% of students would have potentially qualified toward the *Blueprint's* 45% goal when including RA and IRC attainment. The majority of these students earned non-Registered Apprenticeship IRCs. Maryland is making historic investments in scaling RA, as emphasized within the Moore-Miller Administration's 2024 State Plan and the Governor's Apprenticeship Pledge.⁶¹ ⁶² Additionally, the Apprenticeship 2030 Commission is tasked by the Maryland General Assembly with developing a plan to reach 60,000 RAs by 2030, in partnership with the GWDB CTE Committee, MD Labor, MSDE, Local Workforce Development Boards, and other relevant stakeholders. Goals and support for reaching both the *Blueprint's* 45% goal and the 60,000 goal will be developed through close coordination across State partners and stakeholders.

⁵⁸ MD Dept. of Planning. (Aug. 2022). *Public School Enrollment Projections 2022-2031*. <https://tinyurl.com/3w27n27h>

⁵⁹ Since the design of RAs are that they continue after high school, there is currently no data indicator when a student has graduated high school. Therefore age was used as a proxy to determine those most likely still in high school.

⁶⁰ To view the GWDB CTE Committee's IRC Policy Issuance 2024-01, visit www.gwdb.maryland.gov/policy.

⁶¹ Moore-Miller Administration. (2024). *2024 State Plan*
governor.maryland.gov/priorities/Documents/2024%20State%20Plan.pdf

⁶² To learn more about the Governor's Apprenticeship Pledge, visit www.gwdb.maryland.gov/apprenticeshippledge.



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