



Apprenticeships for High School Students in Maryland

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

CTE Committee, Governor's Workforce Development Board

Spring 2024

**GOVERNOR'S WORKFORCE DEVELOPMENT BOARD
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The Governor's Workforce Development Board CTE Committee also thanks Erin Roth, Chris Maclarion, and Logan Dean of the Maryland Departments of Labor's Division of Workforce Development and Adult Learning for their extensive contributions to this framework.

Purpose

The purpose of this document is to provide a framework for forthcoming CTE Committee guidance defining apprenticeship programs that will support the *Blueprint for Maryland's Future* ("the *Blueprint*") goal that, by the 2030-31 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.

Summary

The College and Career Readiness (CCR) Pillar of the *Blueprint for Maryland's Future* 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 creation of a CTE system that offers rigorous high school apprenticeships as the primary industry-recognized credential that produces graduates ready and qualified to work within in-demand fields.³

To support this goal, the CTE Committee of the Governor's Workforce Development Board (GWDB) will:

1. Define the *Blueprint's* "high school level of a Registered Apprenticeship" as completing the high school portion of a School-to-Apprenticeship (STA) program;^{4 5}
2. Require meaningful steps be taken to rapidly expand STA as the preferred method for fulfilling the *Blueprint's* 45% goal, with other industry-recognized credentials supporting the goal when an STA is not available for an in-demand occupation; and
3. Count Apprenticeship Maryland Program (AMP) Youth Apprenticeships, which is not a Registered Apprenticeship and therefore differs from STA, toward the *Blueprint's* 45% goal when the youth apprentice earns an industry-recognized credential (IRC), or credit toward an IRC, as defined by the CTE Committee.⁶

The CTE Committee is also recommending enhanced data tracking in order to assess the employment outcomes of STA, AMP, and IRC programs. Once this framework has been approved by the CTE Committee, final guidance will be issued by the Committee following a public comment period. The CTE Committee is also required to establish statewide goals for each school year to reach the 45% goal by the 2030-2031 school year.⁷ Additional background information, definitions and data are presented in the appendix.

¹ The *Blueprint for Maryland's Future* statute, <https://aib.maryland.gov/Pages/blueprint-law.aspx>

² Apprenticeship 2030 Commission Interim Report, January 2024, <https://bit.ly/424pf9d>

³ AIB's Comprehensive Implementation Plan, updated August 2023, <https://bit.ly/3U0YBf9>

⁴ In STA, a student/apprentice begins a Registered Apprenticeship program while in their junior or senior year of high school and continues the program after graduation.

⁵ The CTE Committee is responsible for determining what programs count toward the *Blueprint's* 45% goal.

⁶ In instances in which a youth apprentice or other student is not able to participate in an STA or earn an IRC prior to graduation but has earned credit that an LEA believes should be considered under the *Blueprint's* 45% goal, such as credit toward a Registered Apprenticeship or another IRC that is completed after high school, the LEA may submit a letter to the CTE Committee for consideration.

⁷ The AIB has submitted Senate Bill 1102 for the Maryland General Assembly to make this be due June 1, 2024.

Achieving the *Blueprint* Goal of Expanding Access to Quality Career Pathways

1. DEFINING THE BLUEPRINT’S “HIGH SCHOOL LEVEL OF A REGISTERED APPRENTICESHIP” AS SCHOOL-TO-APPRENTICESHIP

For the purposes of meeting the *Blueprint*’s goals, the “high school level of a Registered Apprenticeship” will be defined as completing the high school portion of a School-to-Apprenticeship (STA) program before graduation. Furthermore, STA will be the preferred “gold standard” method of fulfilling the 45% goal.⁸ STA offers a highly structured career pathway after high school graduation for participants, and Registered Apprenticeship (RA) has been proven effective for apprentices and their employers.⁹ Partnership, alignment and shared accountability across partners, particularly the Maryland State Department of Education (MSDE) and MD Labor, toward STA expansion goals will be critical to providing these high-quality opportunities to students. For more information on definitions, see appendix 2.

2. EXPANDING SCHOOL-TO-APPRENTICESHIP PROGRAM OFFERINGS

Existing Tools and Resources to Expand STA

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 STAs:

- State-approved CTE programs can provide the Related Instruction (RI) of STA.
- County boards of education should award credit toward a high school diploma for on-the-job training (OJT) and RI completed under an STA program.¹⁰
- The U.S. Department of Education Office of Career, Technical, and Adult Education (OCTAE) has clarified that funds available under the Federal Perkins Act may be used to develop, improve, and support Registered Apprenticeship programs.¹¹
- Maryland State law prohibits employment discrimination based on age for those 16 and older, and hiring 16- and 17-year olds does not impact workers compensation rates.^{12 13}
- MD Labor’s Maryland Apprenticeship and Training Program (MATP) maintains repositories of grants and tax credits, if available, to support expansion of RA programs including STA:
 - [Apprenticeship Grant Funding Opportunities](#)
 - [Maryland Tax Credit for Eligible Apprentices](#)
- LWDBs are important partners in expanding apprenticeship in their local areas. To learn more, contact the [Maryland Workforce Association](#) or your LWDB.

⁸ 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://bit.ly/3Uv686c>

⁹ Benefits of Registered Apprenticeship, such as STA, are detailed in Appendix 3

¹⁰ Md. Code, Educ. § 7-205.4, <https://bit.ly/4b1v1Wj>

¹¹ Program Memorandum OCTAE 23-1, <https://bit.ly/3O6PTZk>

¹² Maryland Insurance Agency Bulletin 24-3, posted January 24, 2024, clarifies that age does not impact workers compensation rates, <https://bit.ly/47UbOKg>

¹³ Certain occupations are declared to be hazardous for minors. For more information on the employment of minor’s, see this Maryland Department of Labor fact sheet: <https://www.dllr.state.md.us/labor/wages/minorfactsheet.pdf>

Recommended Actions to Expand STA

The CTE Committee recommends the following actions to expand STA programs. These recommendations were developed in consultation with MSDE and MD Labor, and were informed by recommendations presented in the Apprenticeship 2030 Commission's Interim Report.^{14 15}

MSDE and LEAs: Adjust high school student schedules

- Adjust high school schedules to support student and employer participation in STA.¹⁶

MD Labor, Maryland Apprenticeship and Training Council (MATC): Streamline the Registered Apprenticeship approval and registration process

- Modernize the state's RA approval process to make it easier and faster for employers/program sponsors to establish new STAs.

MD Labor: Improve marketing and outreach

- Revamp marketing materials, in consultation with the CTE Committee and MSDE, to clarify STA opportunities and value-add for employers, students, educators and caregivers.
- Offer training to LEA staff and to existing RA sponsors on STA.
- 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-old youth when they are able to do so.¹⁷

MD Labor: Convert AMP Youth Apprenticeship sponsors to STA sponsors, where feasible

- Work directly with approved AMP employers to convert their AMP Youth Apprenticeships to STA programs beginning in 2024, reporting outcomes annually to the CTE Committee.

MD Labor, MATC: Improve data and reporting on programs and outcomes

- Add to the new employer checklist a reporting requirement to confirm that the employer has been informed of both STA and AMP Youth Apprenticeship. Employers who choose to solely pursue AMP Youth Apprenticeship will describe why they did so. This data will be collected by MD Labor and reported to the CTE Committee annually.
- Track and share with the CTE Committee upon request, no less than annually:
 - STA and AMP Youth Apprenticeship enrollment and completion rates
 - Employment and postsecondary education outcomes for STA and AMP Youth Apprenticeship completers, in collaboration with the Maryland Longitudinal Data System (MLDS) Center

All relevant agencies: Prioritize investment towards STA growth, including existing and new or grant-based funding where possible, to align resources that will help scale STAs.

¹⁴ Apprenticeship 2030 Commission Interim Report, January 2024, <https://bit.ly/424pf9d>

¹⁵ The Apprenticeship 2030 Commission is tasked by the Maryland General Assembly with developing a plan to reach 60,000 RAs by 2031, in partnership with the CTE Committee, MD Labor, MSDE, Local Workforce Development Boards, and other relevant entities. Part of this plan will address the need to properly resource an entity to recruit employers and intermediaries.

¹⁶ Sample student schedules provided by MSDE (slides 20-22):

<https://dls.maryland.gov/pubs/prod/NoPblTabMtg/AppCmsn2023/MSDE-Apprenticeship-Presentation-v5.pdf>

¹⁷ Maryland Insurance Agency Bulletin 24-3, posted January 24, 2024, clarifies that age does not impact workers compensation rates, <https://bit.ly/47UbOKg>

3. STRENGTHENING AMP YOUTH APPRENTICESHIP TO ENSURE POSITIVE EMPLOYMENT OUTCOMES

STA is the preferred method of fulfilling the *Blueprint's* goals. The CTE Committee recognizes that, while AMP Youth Apprenticeship does not continue after graduation or necessarily culminate in an industry-recognized credential as STA does, AMP Youth Apprenticeship also provides value, given the varying needs and preferences of students and employers.¹⁸ This can be a way to provide paid on-the-job training (OJT), mentorship, and professional networking opportunities to students.¹⁹

As such, the CTE Committee recommends that AMP Youth Apprenticeship count toward the *Blueprint's* 45% goal so long as the following quality criteria are met to ensure participating students have advanced standing on a structured career pathway they can continue after graduation. Specifically, the CTE Committee recommends that AMP Youth Apprenticeships be **counted toward the *Blueprint's* 45% goal only when the apprentice earns, by graduation, an industry-recognized credential (IRC)** as defined by the CTE Committee.²⁰ Examples of scenarios that would meet this criteria can be found in Appendix 2.

The CTE Committee will review data being gathered by MD Labor in partnership with MSDE and MLDS on employment offered to AMP youth apprentices after graduation, and may make recommendations to MD Labor and MATC to increase employment of youth apprentices.

OTHER RESOURCES

- Maryland Department of Labor and Maryland State Department of Education joint Policy Issuance 2022-12 (December, 2022), Youth Apprenticeship:
<https://www.labor.maryland.gov/employment/mpi/mpi12-22.pdf>
- GWDB CTE Committee and MSDE draft definition and core criteria for industry-recognized credentials (IRCs) for CTE programming under the *Blueprint*:
<http://www.gwdb.maryland.gov/ctecomm/ctecomm-ircnov2023.pdf>

APPENDICES

1. Background on Apprenticeship and the *Blueprint for Maryland's Future*
2. Definitions of Programs to Count Toward the 45% Goal
3. Background Information on the Benefits of Registered Apprenticeship
4. Background Information on the Benefits of Youth Apprenticeship
5. Current Data on STA, AMP Youth Apprenticeship, and Industry-Recognized Credential Participation and Completion by Maryland High School Graduates

¹⁸ More detail on youth apprenticeship in Maryland as well as national and global best practices can be found in Appendix 4

¹⁹ MD Labor & MSDE policy issuance describes how occupations are determined to be apprenticeable
<https://www.labor.maryland.gov/employment/mpi/mpi12-22.pdf>

²⁰ In instances in which a youth apprentice or other student is not able to participate in an STA or earn an IRC prior to graduation but has earned credit that an LEA believes should be considered under the *Blueprint's* 45% goal, such as credit toward a Registered Apprenticeship or another IRC that is completed after high school, the LEA may submit a letter to the CTE Committee for consideration.

Appendix

APPENDIX 1: 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 2030-31 school year, 45% of Maryland high school graduates shall complete “the high school level of a Registered Apprenticeship or an 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 a 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) updated 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.²¹

There is no state or federal definition of the “high school level of a Registered Apprenticeship” term used in the *Blueprint*.²² As such, the CTE Committee is responsible for defining this term and issuing guidance based on this framework. While developing this framework, 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 ways that a high school student may become an apprentice in Maryland:

- by entering a Registered Apprenticeship (RA) under a School-to-Apprenticeship (STA) program, which begins in high school and continues after graduation, or
- by enrolling as a Youth Apprentice through the Apprenticeship Maryland Program (AMP), which has been modeled to provide several benefits of the RA model and is completed while the student is in high school.

This framework has been developed by the CTE Committee to define the criteria for a high school level of a Registered Apprenticeship, taking into consideration what opportunities meet the underlying objectives of the *Blueprint* and therefore should count toward its 45% goal. Once this framework is adopted by the CTE Committee, the Committee will draft accompanying guidance to support the implementation of this framework among partners.

The following is an excerpt from the CTE Committee’s Initial Implementation Plan on national and global best practices for starting apprenticeships in high school:²³

“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

²¹ AIB’s Comprehensive Implementation Plan, updated August 2023, <https://bit.ly/3UOYBf9>

²² In December 2023, the U.S. Department of Labor (USDOL) issued a Notice of Proposed Rulemaking (NPRM) on the regulatory framework for Registered Apprenticeship. Included in the NPRM is the creation of a “registered CTE apprenticeship.” As currently written, this will be optional for states to participate in. On January 17, 2014, the NPRM was posted to the federal register for a 60-day comment period. The CTE Committee will continue to monitor the development of this new apprenticeship program. <https://bit.ly/47G2WHO>

²³ CTE Committee Initial Phase One Implementation Plan, March 2023, <http://www.gwddb.maryland.gov/ctecomm/ctecommitteeinitialphaseoneplanmar2023.pdf>

advanced economies can hire, train, and retain young people so that they become highly skilled workers throughout their careers. The case of Switzerland is especially notable: 95% of Swiss 25-year-olds have either an apprenticeship or a Bachelor of Arts (BA) degree. Apprenticeships in these countries are embedded in their education systems through Technical Vocational Education programs beginning in late high school. In Switzerland, 70% of each youth cohort undertakes apprenticeships, for careers in a range of occupations – high-tech, human services, health, business services as well as traditional trades and crafts – white-collar as well as blue-collar. As Nancy Hoffman, a noted author and U.S. expert on apprenticeship, points out, the Swiss apprenticeship system, “...enjoys very strong support from Swiss employers, who credit it with being a major contributor to the continuing vitality and strength of the Swiss economy.”²⁴

In Germany, apprenticeship graduates account for a large part of the German labor force. As Langer and Weiderhold report, about 60% of German workers have completed apprenticeship training and 1.5 million apprentices were in vocational education in 2017, the last year of their observation window. Individuals typically start an apprenticeship after finishing secondary school when they are between 16 and 20 years old.²⁵ Graduates from higher-track or lower-track secondary schools directly apply for an apprenticeship at a training firm. The average duration of a German apprenticeship is three years.

In the U.S., Wisconsin hosts by far the largest and most developed high school apprenticeship programs. It began in the early 1990s and has remained a popular program for 30 years. As of early 2023, nearly 7,950 Wisconsin high school students participated in a formal apprenticeship, though few are part of what would be defined as the federally recognized registered apprenticeship system.²⁶ This figure represents more than a doubling from 3,428 apprentices in 2016-2017. However, these apprentices constitute a modest share (6.5%) of the combined enrollment of about 122,000 students in Wisconsin high schools. About 5,469 employers currently train apprentices, implying that each program involves only one or two apprentices. The Wisconsin youth apprenticeships require students to engage either at least 450 or 900 hours of work-based learning in the occupation. Manufacturing, healthcare, and agriculture are the largest sector contributors, though there are other major groups such as marketing, which has nearly 1,000 apprentices.

In countries with the most extensive and high-quality apprenticeship systems, apprenticeships begin in late high school. Austria, Germany, and Switzerland attract 50-70% of 17- to 19-year-olds in productive apprenticeships that lead to productive careers.²⁷

²⁴ Nancy Hoffman and Robert Schwartz, “Gold Standard: The Swiss Vocational Education and Training System” (Washington, DC: National Center on Education and the Economy, 2015).

<https://ncee.org/wp-content/uploads/2015/03/SWISSVETMarch11.pdf>

²⁵ CESifo, The Value of Early-Career Skills, 2023,

www.cesifo.org/en/publications/2023/working-paper/value-early-career-skills

²⁶ Wisconsin Youth Apprenticeship dashboard, <https://dwd.wisconsin.gov/apprenticeship/ya/yoda.htm>

²⁷ Nancy Hoffman, *Schooling in the Workplace*, November 2011

APPENDIX 2: Definitions of Programs to Count Toward the *Blueprint's* 45% Goal

High School Level of a Registered Apprenticeship: School-to-Apprenticeship (STA): The CTE Committee proposes defining the *Blueprint* term “high school level of a Registered Apprenticeship” as a School-to-Apprenticeship (STA) program. STA is a type of Registered Apprenticeship (RA) that allows 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 completed while in high school. Like other Registered Apprenticeships, STAs are registered with the Maryland Apprenticeship and Training Program (MATP) in the Maryland Department of Labor (MD Labor) 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 3.

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. The OJT is paid and the apprentice is under a mentor’s supervision during working hours. A STA requires that a student complete a minimum of 144 hours of concurrent related instruction (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 generally equates to two semesters per year of curriculum.

Apprenticeship Maryland Program (AMP) Youth Apprenticeship: AMP Youth Apprenticeship, which was first piloted in Maryland in 2016, 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. AMP is currently categorized as a State-approved CTE program of study. Students complete 450 paid on-the-job training (OJT) hours under the direction of a mentor, and at least one year of related instruction (RI) prior to high school graduation. While AMP 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 the MD Labor, MSDE, and the MATP. Successful completion of a Youth Apprenticeship is not itself an industry-recognized credential in the way that completion of RA is, but industry-recognized credentials (defined below) can be included in Youth Apprenticeship programs. The CTE Committee is recommending that AMP Youth Apprenticeships be counted toward the *Blueprint's* 45% goal only when the apprentice earns, by graduation, an industry-recognized credential (IRC), or credit toward an IRC, as defined by the CTE Committee. Below are two examples that would qualify.

Example of an AMP Youth Apprenticeship program that delivers credit toward a Registered Apprenticeship:

Several electrical contractors participate in the AMP program and are dually members of group Registered Apprenticeship programs. Youth Apprentices in these programs begin working in the electrical industry while in high school and receive electrical Related Instruction from either their school's CTE program or a Registered Apprenticeship's training center. Many of these Youth Apprentices will complete their AMP Youth Apprenticeship at graduation and continue into the connected Registered

Apprenticeship, carrying with them credit and advanced standing in a program that could earn them a Maryland electrical license.

An example of an AMP Youth Apprenticeship that delivers credit toward another industry-recognized credential:

The Maryland Department of Transportation State Highway Administration (MDOT SHA) is a Youth Apprenticeship employer participating in AMP. MDOT SHA does not currently offer a Registered Apprenticeship pathway, but instead leverages compatible CTE courses available in their partner high schools and AMP. MDOT SHA's Youth Apprentices can earn industry-recognized diesel and automotive credentials through their school-based CTE programs, while receiving paid wages, and valuable work experience with one of Maryland's largest employers.

Industry-Recognized Credential: The CTE Committee developed and adopted a definition and set of quality criteria for industry-recognized credentials under the *Blueprint* in Spring 2024, concurrent to the adoption of this apprenticeship framework. The definition, criteria, assessment and approval process, and list of approved credentials can be accessed [here](#).

	Registered Apprenticeship (Including School-to-Apprenticeship)	Youth Apprenticeship (Apprenticeship Maryland Program)
Approval and Monitoring of Apprenticeship Programs/Employers	<ul style="list-style-type: none"> • Maryland Department of Labor • Maryland Apprenticeship and Training Council (MATC) 	<ul style="list-style-type: none"> • Local Education Agency • Maryland State Department of Education (MSDE) • Maryland Department of Labor • Maryland Apprenticeship and Training Council (MATC)
Approval of Related Instruction (RI)	<ul style="list-style-type: none"> • Maryland Department of Labor • Maryland Apprenticeship and Training Council (MATC) 	<ul style="list-style-type: none"> • Local Education Agency • Maryland State Department of Education (MSDE)
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 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 (MSDE) • 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 (MSDE) 	<ul style="list-style-type: none"> • Local Education Agency • Maryland State Department of Education (MSDE)

APPENDIX 3: Background and Benefits of 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 (“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

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.

RAs are effective at addressing challenges on both the supply and demand sides of the labor market. 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 thus reduce the frictions that arise with skill mismatches. Apprenticeships have also been shown to reduce turnover, improve company morale, and improve co-worker productivity, among other benefits.^{28 29} Additionally, groups of employers or intermediaries such as unions, community organizations, trade associations, or institutions of higher education can jointly apply to sponsor RA, 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.³⁰ 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.³¹ RAs provide opportunities for good jobs with strong wage outcomes and rewarding careers, whether a worker does or does not complete a BA.³² Starting RA in high school, such as through STAs, offers several advantages:

- By continuing an 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

²⁸ USDOL TEGL 13-16 Attachment III,

www.dol.gov/sites/dolgov/files/ETA/advisories/TEGL/2017/TEGL_13-16_Attachment_III_acc.pdf

²⁹ Marotta, John, Robert Lerman, Daniel Kuehn, and Myca San Miguel. 2022. Beyond Productivity: How Employers Gain More from Apprenticeship. Brief prepared for USDOL ETA. Rockville, MD: Abt Associates; and Washington, DC: Urban Institute.

https://wdr.doleta.gov/research/FullText_Documents/ETAOP2022-40_AAI_Brief-Indirect_Benefits_Final_508_9-2022.pdf

³⁰ 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>

³¹ Business Insider, Americans who haven't gone to college are way worse off today than 40 years ago, Nov. 2017, <https://www.businessinsider.com/high-school-graduates-worse-off-today-2017-11>

³² Maryland Longitudinal Data System Center, Exploring Workforce Outcomes of Maryland Apprenticeship and Training Program Completers, Nov. 2021, <https://mldscenter.maryland.gov/ApprenticeshipReport.html>

- Lost earnings during training are minimized compared to other training options because apprentices are employed and earn wages
- Existing funding for related high school courses, especially CTE courses, reduce the costs to employers by providing much or all of the related instruction (RI) required for an apprenticeship

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APPENDIX 4: Background and Benefits of Youth Apprenticeship

Youth Apprenticeship is a model of earn-and-learn career-connected learning that is closely modeled after Registered Apprenticeship. The United States 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 United States 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 and acknowledged by the Maryland Department of Labor and the Maryland State Department of Education in an AMP Youth Apprenticeship joint policy issuance in 2022:^{33 34}

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

Across the country, states are testing and expanding youth apprenticeship opportunities and working toward 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 through AMP. The proposed guidance by the CTE Committee includes the addition of the fourth criteria as a requirement to ensure more AMP Youth Apprenticeships can align toward *Blueprint* goals when STA 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.³⁵

The recommendations put forward in the CTE Committee's framework aims to further ensure that AMP 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.

³³ MD Labor & MSDE Policy Issuance 2022-12, December 2022, <https://www.labor.maryland.gov/employment/mpi/mpi12-22.pdf>

³⁴ National Governors Association, State Policy Playbook to Advance Youth Apprenticeship, 2022, <https://bit.ly/3I3cUss>

³⁵ Robert Lerman & Lindsey Tyson, Wisconsin's Well-Structured Youth Apprenticeship Program, July 2023, <https://urban.is/48f3ntb>

APPENDIX 5: Current Data on STA, AMP Youth Apprenticeship, and Industry-Recognized Credential Participation and Completion by Maryland High School Graduates

Nearly 60,000 students graduate from Maryland public schools every year.³⁶ To meet the *Blueprint's* 45% goal, roughly 27,000 students of each senior class will need to complete the high school portion of an STA (as the “high school level of a Registered Apprenticeship”) or another industry-recognized credential (IRC). Based on projected growth in public school enrollments, there will be approximately 66,840 twelfth graders in public schools in 2030.³⁷ Thus, by 2030, the target number of seniors completing one of the qualifications - either the high school level of an STA or another industry-recognized credential - is expected to reach 30,000.

As of December 31, 2023, the State of Maryland had 201 active Registered Apprenticeship programs which enrolled primarily adults aged 18 and over. These active Registered Apprenticeships consist of individual employer programs as well as large group joint and non-joint programs with hundreds of participating employers. In addition, there were 831 high school students enrolled in AMP Youth Apprenticeship programs, and 96 apprentices participating in STA (approximately 40% of active STAs are or were also AMP Youth Apprenticeship participants). As of 2022, around 7% of students qualify toward the *Blueprint's* 45% goal when including STA, AMP, and IRC attainment. The majority of these students are currently earning non-Registered Apprenticeship IRCs. It should be noted that this 7% may temporarily decrease immediately following the CTE Committee's updates increasing the rigor of IRCs.

The *Blueprint* requires the CTE Committee to establish annual statewide goals to build toward the 45% goal by the 2030-2031 school year. The AIB has recommended June 1, 2024 as the CTE Committee's deadline for these goals in its Comprehensive Implementation Plan, which is currently under consideration by the Maryland General Assembly.³⁸

Progress toward the *Blueprint's* 45% goal will advance with a coordinated effort across State agencies, employers, Local Workforce Development Boards and other entities, as guided by the CTE Committee and including those activities outlined in this framework (page 4). Maryland is making historic investments in scaling Registered Apprenticeships, which is emphasized within the Moore-Miller 2024 State Plan.³⁹ Additionally, the Apprenticeship 2030 Commission is tasked by the Maryland General Assembly with developing a plan to reach 60,000 Registered Apprentices by 2031, in partnership with the CTE Committee, MD Labor, MSDE, Local Workforce Development Boards, and other relevant stakeholders. Part of this plan will address the need to properly resource an entity for the recruitment of employers and intermediaries, further ensuring that the burden of recruiting employers and developing new STAs does not fall to LEAs.

³⁶ MSDE press release, March 2022, <https://bit.ly/4bD7yln>

³⁷ MD Dept. of Planning, Public School Enrollment Projections 2021-2030, <https://bit.ly/48pK4gC>

³⁸ AIB's Comprehensive Implementation Plan, updated August 2023, <https://bit.ly/3U0YBf9>

³⁹ Moore-Miller Administration 2024 State Plan, governor.maryland.gov/priorities/Documents/2024%20State%20Plan.pdf