



# College and Career Pathways: Apprenticeships

Maryland State Department of Education

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# Presentation Outline

1. Apprenticeship Overview
2. Apprenticeships in Maryland and The Blueprint
3. Sample Schedules
4. Student Spotlights
5. Next Steps
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# Apprenticeship Overview

*Offering Earn and Learn paid job opportunities with related instruction*

# What is an Apprenticeship?

Apprenticeships **combine paid on-the-job training with classroom instruction to prepare workers for highly-skilled careers.** Apprentices receive a skills-based education that prepares them for good-paying jobs.

## What are the differences between an internship and an apprenticeship?

- **Length of Time:** Apprenticeships are over a significant period (1-3 years), rather than just a few months for an internship.
- **Structure:** Apprenticeships include a structured training plan, with a focus on mastering specific high-demand skills. Internships often aren't structured and focus on entry-level work experience.
- **Mentorship:** Apprentices receive individualized training with an experienced mentor who guides them through their entire process. Internships do not always include mentorship.
- **Pay:** Apprentices are paid a standard wage, similar to any other employee.
- **Credential:** Apprenticeships often lead to an industry-recognized credential.

# How is apprenticeship defined in Maryland?

- The Blueprint specifies that, by 2030, 45% of all high school graduates must earn an **industry-recognized credential and/or complete the high school level of a registered apprenticeship.**
- The CTE Committee is tasked with determining how industry-recognized credential and the high school level of a registered apprenticeship are defined. **MSDE will collaborate with the Committee and the Maryland Department of Labor throughout this process.**
- While several models currently exists across the state, changes in how apprenticeship programs are defined and implemented **could require local education agencies to reimagine their apprenticeship programming and Blueprint Implementation Plans.**

# MSDE Grants Supporting Apprenticeships

## Maryland Works

A competitive MSDE grant program established to leverage one-time American Rescue Plan ESSER III funds by establishing and scaling apprenticeship systems, intermediaries, and infrastructure aligned with Maryland's CTE programs and high wage, high skill, and in-demand employment sectors.

## Carl D. Perkins Formula and Carl D. Perkins Reserve

The Carl D. Perkins Grant provides federal funding (both formula and competitive options) to enhance career and technical education programs in secondary and postsecondary institutions, providing students the opportunity to enroll into postsecondary training and/or enter high wage, high skill, and in-demand jobs. The application process has been redesigned to align Blueprint and federal CTE priorities with Maryland's apprenticeship participation and industry-recognized credential attainment goals.

## CTE Innovation Grant

Going forward, this competitive grant program incentivizes the creation, development, and implementation of new and innovative CTE programs. In 2023-24, the most competitive applications will build apprenticeship and industry-recognized credential support systems and related programming.

# Spotlight: Maryland Works Grantees

See how Maryland Works grantees are utilizing the one-time recovery funds to **develop, implement, and scale apprenticeship program.**

## GRANTEE NAME

**Anne Arundel County  
Public Schools**

## GRANT USAGE SUMMARY

**Increase registered apprentices to 600** by focusing on staffing, transportation, resources, and marketing.

## GRANTEE NAME

**Montgomery County  
Public Schools**

## GRANT USAGE SUMMARY

Create centralized systems for equitable apprenticeship opportunities aiming for **1,100 apprenticeships by 2025.**

# Spotlight: Maryland Works Grantees

## GRANTEE NAME

**Prince George's County  
Public Schools**

## GRANT USAGE SUMMARY

**Expand school-to-work model and infrastructure aiming for 800 apprenticeships by 2025.**

## GRANTEE NAME

**Institute for American Apprenticeships**

## GRANT USAGE SUMMARY

**Implement non-traditional apprenticeships in finance, HR, and cybersecurity aiming for 100 apprenticeships by 2025. To address transportation and scheduling barriers, 75 percent of instruction for these apprenticeship opportunities will be available online and yearlong.**



# Spotlight: Maryland Works Grantees

If each of the **six awarded LEAs** achieve the **success criteria** identified in their grant applications, the resulting Maryland Works infrastructure should **generate more than 3,000 new apprenticeship opportunities** and result in the addition of **more than 400 new businesses partnering** with local education agencies.

Maryland Works would **effectively increase apprenticeship opportunities to 30 times the current number of participating students.**

The full listing of grantees are available in the official MSDE press release: <https://news.maryland.gov/msde/maryland-works-investment/>



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# Apprenticeships in Maryland and The Blueprint

*Local context and opportunities to expand Apprenticeships in Maryland*

# History of Youth Apprenticeships in Maryland

- In 2015, House Bill 942 established a pilot program for **Youth Apprenticeships** to prepare students to enter the workforce by providing on-site employment training and related classroom instruction needed to obtain a license or certification for a skilled occupation. The pilot **program began in the summer of 2016 and lasted for two years.**
- In 2018, MSDE and the Department of Labor expanded **the Apprenticeship Maryland Program (AMP) to be a permanent state-wide program** as a Career and Technical Education (CTE) Program of Study.
- The Apprenticeship Maryland Program quickly **expanded from the 2 pilot counties to ALL of the 24 districts** across Maryland.

## Partner Organizations

- MSDE
- Maryland Department of Labor
- Local Education Agencies (LEA)
- Community Colleges (CC)
- Maryland Apprenticeship Training Council (MATC)
- Youth Apprenticeship Advisory Council (YAAC)
- Maryland Department of Commerce
- Youth Apprenticeship Sponsors/  
Employers
- Blueprint CTE Committee

# Youth/High School Apprenticeships in Maryland

- The Apprenticeship Maryland Program (AMP) is a **Maryland CTE Program of Study**
- LEAs complete the **CTE Program of Study proposal form**, which is an agreement between MSDE and the local school system. Each LEA needs to create a **local advisory committee to oversee the program and develop policies** for its implementation.
- A youth apprentice receives **supervised, structured, on-the-job training from a mentor** in a specific in-demand occupation.
- Youth apprentices **work a minimum of 450 hours** with a certified employer. Participating students typically work during the summer after their junior year and during their senior year.
- Youth apprentices also **participate in a classroom-setting related instruction, as set by the employer.**

## PROGRAM REQUIREMENTS



# Steps for an Employer to Sponsor a Registered Apprenticeship



To learn more, visit:  
<https://labor.maryland.gov/employment/appr/youthappr.shtml>

# Career and Technical Education (CTE) Committee

- Establishes a new **CTE Committee** within the Governor's Workforce Development Board.
  - Members include representatives from the Departments of Education, Labor, and Commerce; the Higher Education Commission; labor organizations; trade associations; and other experts.
- **Post-CCR Pathways create connections to the workforce** and for students to earn meaningful credentials while still in high school.
- Sets yearly incremental **statewide goals to achieve 45% of high school students completing an apprenticeship** or industry credential by 2030.
- **CTE Committee helps to oversee** successful implementation of these initiatives.

# 45% Goal

(a)(1) On or before December 1, 2022, the CTE Committee shall establish, for each school year between the 2023-2024 school year and the 2030-2031 school year, inclusive, statewide goals that reach **45% by the 2030-2031 school year, for the percentage of high school students who, prior to graduation, complete the high school level of a registered apprenticeship or an industry-recognized occupational credential.**

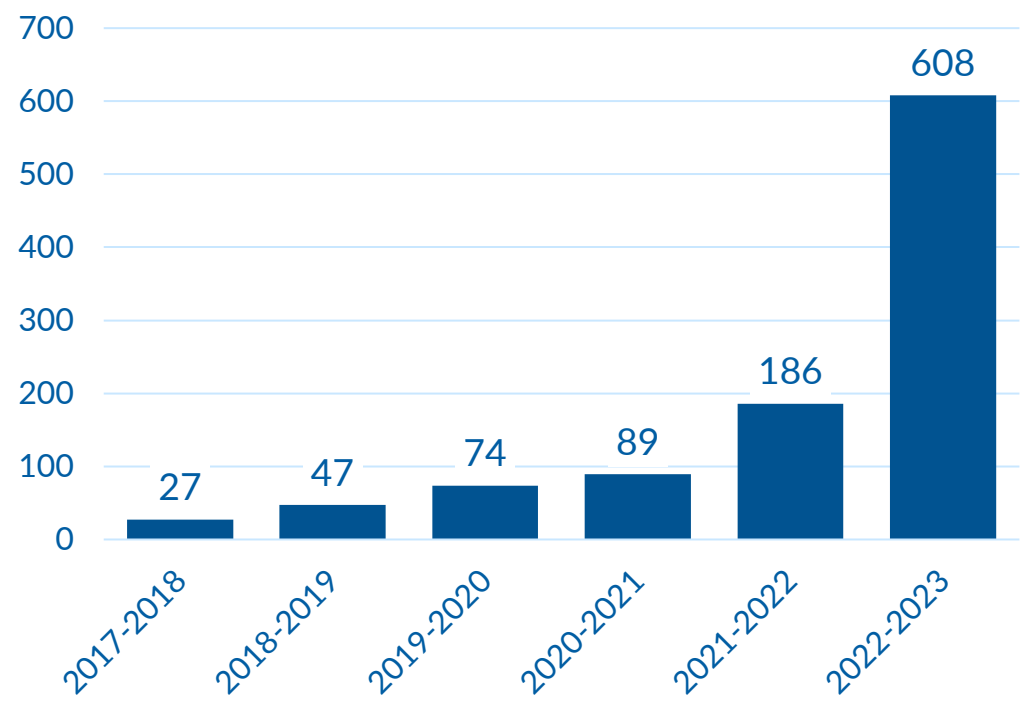
(2) To the extent practicable, the CTE Committee shall ensure that the **largest number of students achieve the requirement of this subsection by completing a high school level of a registered apprenticeship program** approved by the Division of Workforce Development and Adult Learning within the Maryland Department of Labor.

MD Code, Education, § 21-204

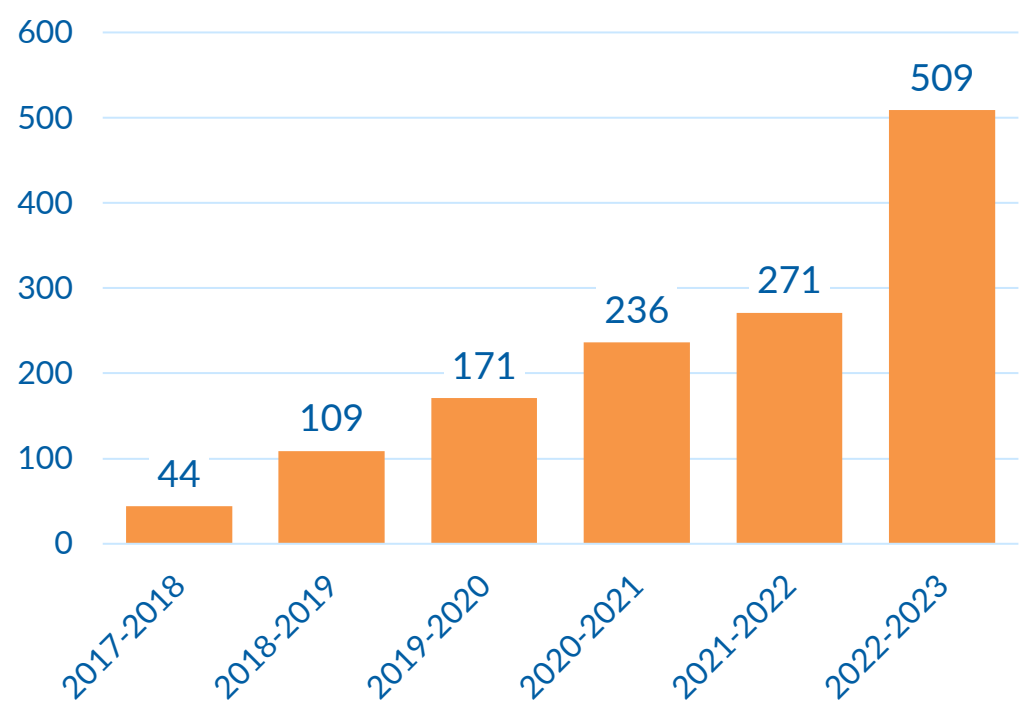
- In 2022, Maryland had **57,860 graduates.**
- To meet the **45% goal, 26,037 of these graduates** would have needed to complete an apprenticeship or industry credential.
- **In 2022, about 7% of graduates met these criteria.**

# Expansion of Youth/High School Apprenticeships

Number of Students Participating in Apprenticeships



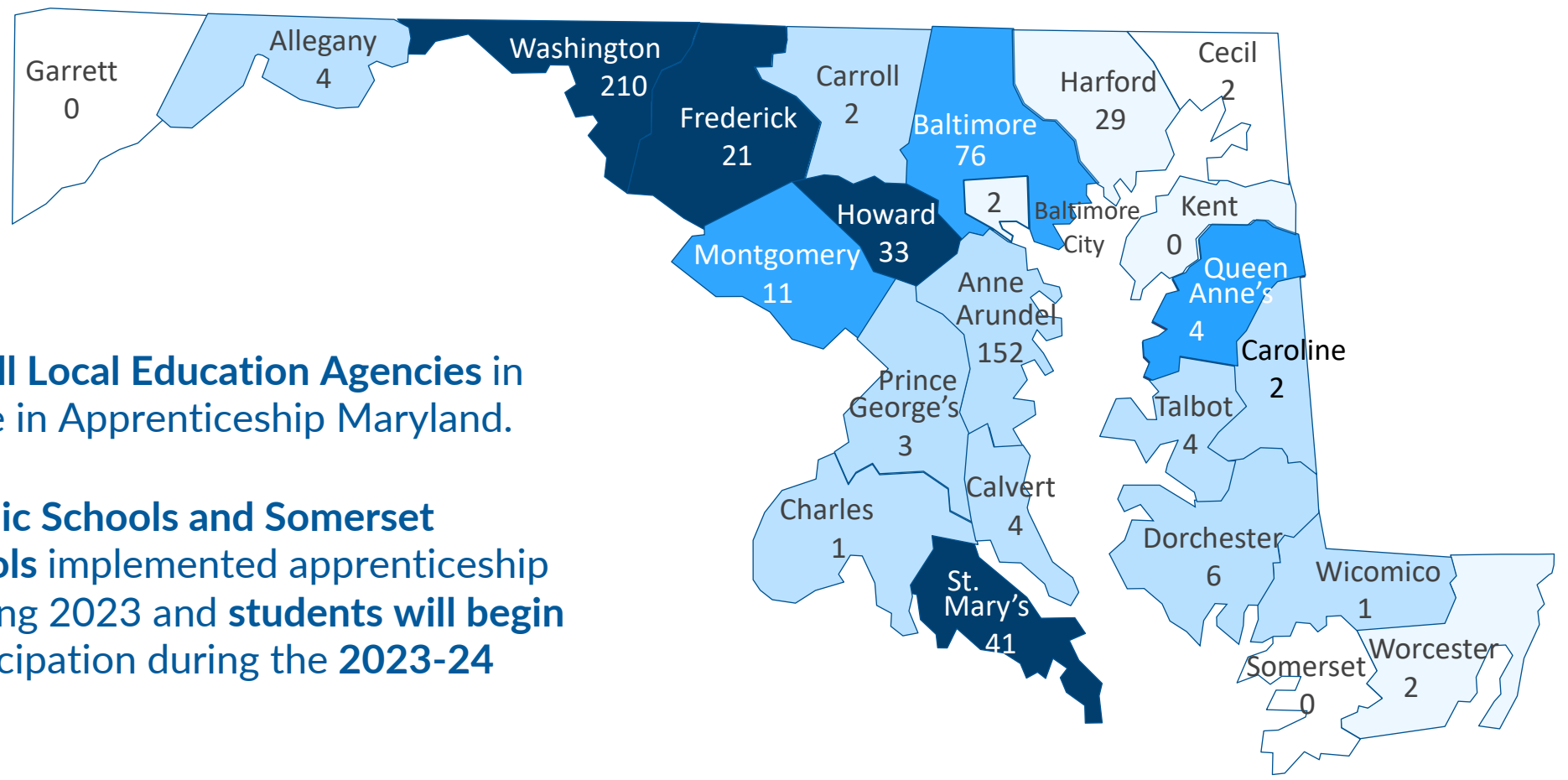
Number of Employers Participating in Apprenticeships



Data as of June 30, 2023



# Apprentices by County



As of Spring 2023, all **Local Education Agencies** in Maryland participate in Apprenticeship Maryland.

**Garrett County Public Schools and Somerset County Public Schools** implemented apprenticeship programming in Spring 2023 and **students will begin apprenticeship** participation during the **2023-24** school year.

Data as of June 30, 2023

# Industry Sectors of Employers for Youth/High School Apprentices

Data as of June 30, 2023

<i>Industry Sector</i>	<i># of Youth Apprentices</i>	<i>% of Total</i>
Government	169	27.7%
Education	112	18.4%
Construction	89	14.6%
Healthcare	63	10.3%
Manufacturing	54	8.8%
Hospitality and Tourism	33	5.4%
Automotive	32	5.2%
Business	25	4.1%
Information Technology	10	1.6%
Telecommunications	4	0.6%
Culinary	3	0.4%
Engineering	3	0.4%
Finance	3	0.4%
Agriculture	2	0.3%
Maritime	2	0.3%
Personal Services	2	0.3%
Aviation	1	0.1%
Retail	1	0.1%
<b>Total</b>	<b>608</b>	<b>100.0%</b>



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## Sample Schedules

*Expanding opportunities for students to participate in academics and apprenticeships*

# Reimagining Student Schedules

- These **examples of the flexibility** needed to balance the different components show how a school and a student can **work together to make an apprenticeship happen.**
- As a state, **Maryland needs policies that support LEAs to be creative and strategic at scale** to maximize students' **apprenticeship opportunities** while finishing high school successfully.
  - The State Board and MSDE are **committed to ensuring that this policy landscape exists.**
- **Possible innovations** to support students include:
  - Altering the **length of a course** (e.g., semesterizing a one-year course, etc.).
  - Offering **virtual courses**, either synchronously or asynchronously.
  - Scheduling courses **outside of the normal school day.**
  - **Coordinating with the community college** to offer courses there.
  - Encouraging **working at the apprenticeship during the weekend**, when appropriate.
  - Hiring **apprentices at the LEA** central office (e.g., Graphics and Printing, Operations, etc.)
  - Earning **high school credit over the summer.**

# Student Apprentice Sample Schedules: Washington County

There are three scheduling options for Student Apprentices:

- Student A may **attend school for two or three morning periods** for required core academic or CTE classes, and **then attend their apprenticeship in the afternoon.**
- **Student B is on an alternating schedule**, taking their core academic courses **on A Day** and every other Friday, and **CTE courses on B Day** and every other Friday.
- Student C **will attend school full day and attend their apprenticeship on employer's 2<sup>nd</sup> shift in the afternoon.**

# Student Apprentices Sample Schedules: Howard County

Student apprentices **typically attend work first thing in the morning, 6:00-11:00 am, and then go to their high school for English and Math courses in the afternoon.**

- **Students could also attend school first and then go to work in the afternoon.**

The student's **exact schedule will depend on the industry and employer** and what time they are most needed.

- **Students also have the option to take their graduation requirement classes at Howard Community College.**



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## Student Spotlights

*Getting to know a few Apprenticeship participants*

# Student Spotlight: Jeremiah F.

*Baltimore City Public Schools*

- Completed an **apprenticeship with Efficiency Enterprise**, a diesel mechanic company.
- **City Schools' first student** to begin as a youth apprentice.
- Worked closely with various employees to **build his foundational automotive skills** and **apply it to the maintenance and repair** of diesel fleets performing tasks such as tire rotations, oil changes, etc.
- He was **hired full-time upon graduation** in May 2023.





# Student Spotlight: Suzanne H.

*Frederick County Public Schools*

- Completed an **apprenticeship with Insul-Tech, which insulates commercial and industrial ductwork**, during her senior year.
- At Insul-Tech, she apprenticed as an estimator, completing **nearly 40 individual jobs during the school year.**
- She had previous experience though the **Frederick County Career and Technology Center, where she studied architecture and worked with blueprints.**
- She graduated in **2016 and continued to work part-time at Insul-Tech** while attending WVU.
- **Management Team** member.



**INSUL-TECH INC.**  
COMMERCIAL & INDUSTRIAL MECHANICAL INSULATION

# Employer Spotlight: Dynamic Auto

- Dynamic Auto, in Frederick Maryland, needed **highly educated technicians** to maintain and repair the vehicles of today and tomorrow.
- They have robust High School and adult Apprenticeship programs, which are the **exclusive options for recruiting talent**.
- Their High School Apprenticeship Program is the **door for someone that is considering a career in the Automotive Repair and Service industry**.



*“There are more lines of computer code in today’s car than in the F35 strike fighter, a lot more.”*

Learn more about Dynamic Auto’s apprenticeship programs: <https://dynamicautomotive.net/about/apprenticeship/>



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## Next Steps

*Continuing to support apprenticeships across Maryland*

# Next Steps

MSDE is committed to **ensuring that apprenticeship opportunities** are available for **all high school students in a high-growth and high-demand industry**. To achieve the 45% goal by 2030, Maryland will need a **coordinated concerted effort to expand opportunities**. MSDE's role in this effort will include:

- Working with the Department of Labor and the CTE Committee to **encourage and incentivize full participation in the apprenticeship system**.
- Supporting school districts to **develop schedules that facilitate the flexibility needed to complete the apprenticeship and graduation requirements**.
- Prioritizing that apprenticeship opportunities are **focused in high-growth and high-demand industry and aligned to MSDE-approved programs of study**.

A **prerequisite to success** is ensuring **employers provide enough apprenticeship opportunities** for high school students across the state. LEAs can have all the **innovative schedules** in the world, but **if there aren't enough apprenticeship slots, then schedules won't matter**.

# Questions