

ANNUAL 2024 REPORT



**EARN
MARYLAND**



Maryland

DEPARTMENT OF LABOR

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The Honorable Wes Moore, Governor
The Honorable Pamela G. Beidle, Chair, Senate Finance Committee
The Honorable C.T. Wilson, Chair, House Economic Matters Committee

Re: MSAR 9663

Dear Governor Moore and Chairs Kelley and Wilson:

It is my pleasure to share the 2024 annual report for the Employment Advancement Right Now (EARN) Maryland program. EARN Maryland continues to provide access to quality, industry-driven training that leads to good jobs, increasing pathways to economic growth and prosperity for the state's workforce. The program reached an exciting milestone in 2024: more than 26,000 Marylanders have been positively impacted by the program since its inception in 2014, with nearly 11,000 individuals obtaining employment and more than 15,000 incumbent workers participating in upskilling opportunities.

Through the first three quarters of 2024, just over 1,400 individuals obtained new employment as a result of their participation in EARN. Over that same time period, more than 2,100 incumbent workers have benefitted from training, growing the skillsets of the workforce and thus, increasing the economic competitiveness of the state. In addition to providing opportunities to the workforce, the utilization of an industry-driven model has continued to bridge skills gaps identified by the estimated 1,500 employers that have participated in the program.

While the program continues to connect the workforce to meaningful opportunities in growth industries, it also continues to be a sound investment for the State. In a recent study on the economic impact of EARN, the Business Economic and Community Outreach Network (BEACON) at Salisbury University found that for every dollar the state invests into the program, an additional \$18.16 in economic activity is created.

As evidenced in the pages of this report, EARN Maryland continues to execute on the Moore-Miller administration's vision of leaving no Marylander behind while positively contributing to the State's economy. The Department is proud of the program's progress in 2024 and looks forward to sharing the continued growth and success in the years to come.

Best Regards,



Portia Wu
Secretary

JARC SUCCESS STORY

Deonte was a resident at Helping Up Mission and had been sober for 14 months when he learned about the Jane Addams Resource Corporation (JARC). He wanted to pursue a career in welding, but was worried his lack of a high school diploma would prevent him from being accepted.

Deonte applied and was accepted and entered JARC as a Fundamentals of Manufacturing (FOM) trainee so that he could receive a refresher on basic math skills. He had not been in a classroom in 17 years - since he made the decision to drop out of high school in ninth grade. Though he was nervous, he credits his instructor with providing the support he needed, both academic and on a personal level, to complete the FOM program. With a new confidence, he also enrolled in a GED® class with South Baltimore Learning Center, located in the same building as JARC.

After completing FOM, he matriculated into his welding course. Though he still had doubts about whether he had the aptitude to complete training, he remembers the sense of pride he felt when he earned his first American Welding Society (AWS) credential.

While at JARC, Deonte worked closely with the financial coach, who taught him basic financial literacy skills, including how to create a budget plan and the importance of saving. He recently opened savings and checking accounts with M&T Bank. He also worked with a benefits coach who helped him to receive toiletries and support accessing healthy foods. He received a new iPad so that he could improve his digital literacy.



As he neared the end of his time at JARC, he began to work with an employment coach who helped him develop a professional resume and cover letter, supported him in mock interviews, and secured professional attire for him to wear on interviews. He credits this support as the reason he secured a position as a welder with Dejana Trucking.

He currently earns \$18 per hour, and with overtime, averages \$27 per hour. Since enrolling at JARC, Deonte has a newfound confidence, continues to maintain his sobriety, is working towards earning his high school diploma, and has a career.

“Don’t Give Up. Do not let life obstacles stand in your way of what you want to become.”

Deonte’s advice for other trainees

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COMMONLY USED ABBREVIATIONS

ASE	Automotive Service Excellence
AWS	American Welding Society
BEACON	Business Economic and Community Outreach Network
CCBC	Community College of Baltimore County
CDL	Commercial Driver's License
CNA	Certified Nursing Assistant
DHS	Department of Human Services
DSP	Direct Support Professional
EARN	Employment Advancement Right Now
FY	Fiscal Year
GNA	Geriatric Nursing Assistant
GWIC	Goodwill Industries of the Chesapeake
ICET	Intrusion Countermeasures Education and Training
JARC	Jane Addams Resource Corporation
MEP	Maryland Manufacturing Extension Partnership
MND	Maryland New Directions
MEA	Maryland Energy Administration
MWW	Maryland Works for Wind
NCCER	National Center for Construction, Education & Research
NCIA	National Center for Institutions and Alternatives
RA	Registered Apprenticeship
SNAP	Supplemental Nutrition Assistance Program
SIP	Strategic Industry Partnership
WTP	Workforce Training Plan





MARYLAND'S NATIONALLY RECOGNIZED WORKFORCE SOLUTION

Established in 2014, Employment Advancement Right Now (EARN) Maryland, is the state's nationally-recognized workforce solution. EARN is industry-led, designed with the flexibility to ensure that Maryland employers have the talent they need to compete and grow, while preparing Marylanders for meaningful careers. EARN builds upon the Moore-Miller administration's priorities of connecting Marylanders to jobs while increasing the State's economic competitiveness.

EARN is specifically designed to fulfill the following goals:

- Address business workforce needs by focusing on industry sector strategies that seek long-term solutions to sustained skills gaps and personnel shortages;
- Address the needs of workers by creating formal career paths to good jobs, and sustaining or growing middle class jobs;
- Encourage mobility for Maryland's most hard-to-serve jobseekers through targeted job readiness training; and
- Foster better coordination among the public and private sectors and workforce, economic development, and education partners around the State.

The success of EARN is seeded in meaningful collaboration among a diverse group of stakeholders who make up a Strategic Industry Partnership (SIP) and includes employer and industry partners, non-profit and community-based organizations, and workforce, economic development, and education partners. Together, the SIP is tasked with developing and implementing a Workforce Training Plan (WTP). These plans:

- Support SIPs in a target industry to include multiple employers and a diverse array of other partners;
- Are driven by industry leaders, identify critical skills gaps and other workforce needs and develop industry-led strategies to meet those workforce needs, particularly in high-demand occupations;
- Provide industry-led, responsive and innovative training programs aimed at improving employment opportunities at all skill levels including, but not limited to job readiness, barrier-removal or academic remediation strategies and/or career advancement for incumbent workers; and

- As needed, develop any other human resource or management strategies that are responsive to industry partnerships' critical occupations and skill shortages.

Recognizing that a workforce system disconnected from business fails to meet the needs of jobseekers, EARN places employers in the center of the identification of workforce needs and skills gaps. While traditional workforce programs look to training entities or higher education to fill this role, the EARN model requires industry partners to drive this process. Based upon industry-identified skills gaps, employers are challenged to develop responsive curriculum that will effectively meet their workforce needs. Leading program development breeds confidence from employers that program participants will possess the relevant skills to become contributing employees who will help improve their business.

In addition to identifying current skills gaps, employers and industry partners are encouraged to analyze the diverse evolving needs within their industry, too, such as training needs associated with keeping pace with increasingly sophisticated technology, and shifting workforce demographics caused by retirements. By anticipating the changing landscape of training needs, curriculum can be designed flexibly to perform over time as an effective workforce solution.

In addition to identifying current and future skills gaps, employers are also tasked with identifying training strategies and techniques that are most effective in effectively teaching the skill sets they need in workers. For instance, some employers indicate that hands-on, on-the-job learning experiences, rather than classroom training, or some combination of both, are needed to truly master a skill. Finally, employers and industry partners are encouraged to participate in training. This occurs in a variety of ways, including teaching specific courses or modules, providing tours of their facilities, and participating in mock interviews. This level of participation not only allows employers to ensure the training meets their vision, but also provides exposure to potential employment candidates.

Once training needs and a responsive curriculum have been developed, members of the SIP set out to implement their WTP. It is important to note that a WTP is much more than a curriculum. A comprehensive WTP outlines the recruitment to placement framework and identifies the strategies and partners that will be responsible for recruitment, screening, assessment, occupational training, supportive services, and job placement activities. Because partnerships are composed of diverse organizations with unique strengths, each is able to leverage their central expertise, which yields the greatest level of success for program implementation.

EARN is meant to encourage the economic mobility of all Marylanders. Thus, many individuals who participate in EARN experience barriers which make it difficult to obtain and maintain employment, such as criminal justice involvement, low levels of literacy, lack of transportation or childcare, and limited work history. Because EARN was designed in the spirit of collaboration, most SIPs include non-profit organizations or Local Workforce Development Boards who are especially adept at barrier removal. To maximize the odds for success, partners are expected to take a holistic, whole-person approach to address barriers prior to an individual entering employment. Examples of barrier removal include record expungement, stipends for training, help with transportation and childcare costs, and mental health supports.

EARN's unique program design and implementation of sector strategies has been recognized as a best practice by numerous organizations since the program began in 2014, including the National Skills Coalition, the Urban Alliance, and the Ash Center for Democratic Governance and Innovation, a leading research center at the John F. Kennedy School of Government at Harvard University. Additionally, the Deloitte Center for Government Insights cited EARN as a best practice for public-private partnership. Finally, in September 2024, the Department was invited to present at the National Association of State Workforce Agencies (NASWA) Summit to showcase Maryland's work on sector strategies, including the success of the EARN program.



OVER 15,000 INCUMBENT WORKERS HAVE BEEN TRAINED THROUGH THE EARN PROGRAM

Since its inception in 2014, EARN has played a critical role in improving the lives of Marylanders. Ten years later, in 2024, it is estimated that more than 26,000 individuals have been positively impacted by their participation in the EARN program. EARN continues to focus primarily on two distinct subsets of the workforce: unemployed and underemployed individuals and incumbent workers.

Historically, employers across the state, regardless of industry, identify challenges around recruitment, especially for entry-level positions. As the state has experienced historically low unemployment rates in 2024, the challenge to find qualified candidates for open positions has been amplified. EARN programming provides a consistent pipeline of qualified candidates with relevant skill sets who are ready and able to work. Since the program began in 2014, more than 10,600 individuals have obtained employment, with just over 1,400 entering new employment during the first three quarters of 2024.

Employers identify incumbent worker training as a costly yet indispensable tool that is critical for expansion, retention, and increased economic competitiveness. Due to competing priorities, many companies, particularly those smaller in size, choose to forgo these professional development opportunities due to cost. EARN supports training for incumbent workers at little-to-no cost to employer partners. **In 2024, nearly 2,200 incumbent workers participated in training, bringing the total since program inception to over 15,000 individuals.** As a direct result, employer partners report improved productivity, cost savings, wages, and job retention.

Final reporting data submitted in FY24 shows that **80% of individuals who completed entry-level programming obtained employment and nearly 94% of incumbent workers report a new skill, certification, or credential as a result of their participation in EARN-funded training.** FY25 data is showing a similar trend for entry-level programming and a slight improvement in the number of incumbent workers who report increased skills or credentials as a result of participation in training.

Since the program began in 2014, more than 10,600 individuals have obtained employment, with just over 1,400 entering new employment during the first three quarters of 2024.

Approximately 1,500 employers have participated in EARN since its inception. To ensure the program continues to meet the needs of industry, staff solicits feedback from employer partners. In a recent survey, when asked to rate the competitive advantage of EARN participants, 71% of employers stated that they have a significant competitive advantage over their peers, with 26% responding that EARN participants have at least some competitive advantage. A mere 1% of employers surveyed responded that EARN participants had no competitive advantage over their counterparts. Employers highlighted that alignment with industry needs is a critical key to the program's success, and several mentioned that the availability of professional development opportunities at a reduced cost is particularly helpful for smaller businesses.

In addition, 98% of respondents affirmed that their participation in EARN is worth the investment. Open-ended responses noted increases in employee engagement, retention, and productivity. Finally, 96% of employers surveyed agreed that EARN has had a positive impact on their business, with several respondents noting training has led to improvements in employee performance and increased operational efficiencies. The survey results resoundingly demonstrate that EARN continues to provide strong value to employer and industry partners.

The Department contracted with the Business, Economic, and Community Outreach Network (BEACON) of Salisbury University to perform an independent evaluation of EARN, which includes an economic impact study and Return on Investment (ROI) analysis for EARN. The ROI is utilized to determine the effectiveness and efficiency of the public funding invested into the program. More information on BEACON's evaluation can be found later on in the report. **The analysis for FY24 shows that for each dollar the State invests in EARN, an additional \$18.16 is created in economic impact.**

EARN AWARDED NEARLY \$3.3M IN 2024

2024 was a year of considerable growth for EARN. In December 2023, the Department released the *Winter 2023 Solicitation for Implementation Grant Proposals*. Proposals were due in March 2024, and the Department received 58 proposals, the largest number of requests since the program began in 2014. Each proposal was thoroughly vetted and underwent a comprehensive technical, fiscal, and programmatic review by EARN staff.

Proposals that met all technical requirements were reviewed by a panel of industry and workforce subject matter experts. Review teams were comprised of staff from sister agencies, including the Maryland Energy Administration (MEA) and the Departments of Health and Commerce, in addition to internal Labor staff. Representatives from the Annie E. Casey Foundation and Maryland Philanthropy Network also participated. Review teams considered whether each proposal met program requirements, examined the innovation being proposed, gauged industry engagement and commitment, and vetted the partnership's plan for sustainability in the absence of EARN funding. Scores were compiled and recommendations were made for the Secretary's review. This proven process ensures that quality partnerships, which are truly employer and industry-driven, and stand to provide the greatest benefit to the current and future workforce, receive EARN funding.

In July of 2024, the Department awarded nearly \$3.3M in funding to 23 new SIPs. These partnerships include nearly 150 employers and will train more than 1,600 individuals. The SIPs awarded through the Solicitation process can be found below, and a more detailed description of their projects can be found on page 24.

SIP NAME	LEAD APPLICANT	TARGET INDUSTRY
Anne Arundel Healthcare Collaborative	Anne Arundel Workforce Development Corporation	Healthcare
Auto EVOlveTech Hub	Carroll Community College	Green/Clean
BioHub Maryland, an initiative of Maryland Tech Council	Maryland Tech Council	Biotechnology
Building Maintenance Certification Partnership	Goodwill Industries of the Chesapeake	Skilled Trades
Central Maryland Logistics Workforce Pipeline Partnership	Howard Community College	Transportation and Logistics
Chesapeake Bay Restoration Workforce Initiative	Maryland Reentry Resource Center	Green/Clean
Connecting Students to Careers in the Dental Industry	Community College of Baltimore County (CCBC)	Healthcare
Construction Skilled Trades Employment Pathways	Hagerstown Community College	Skilled Trades
Dignity Plates Training Academy	Franciscan Center of Baltimore	Hospitality
DSP Skill Up for Success	Ardmore	Other: Human Services
Early Education Empowerment Alliance: Bridging Paths to Success for Maryland's Early Childhood Educators	Abilities Network, Inc.	Childcare
Hospitality to Possibility	Montgomery College	Hospitality
Introduction to Electrical Career Pathways	IBEW Local 26 National Electrical Contractors Association (NECA) Labor Management Cooperation Committee Trust Fund	Green/Clean, Energy
Jordan Peer Recovery Registered Apprenticeship Program	Dr. MJ LLC	Healthcare

Maryland Cannabis Administration Workforce Development Training Program	Maryland Cannabis Administration	Cannabis
Pathways for Peers: Recovery Careers Industry Collaborative	Associated Catholic Charities, Inc.	Healthcare
Second Chance Collaborative	HTP Homes, Inc.	Skilled Trades
Sign Language Interpreters Professional Advancement Initiative	CCBC	Healthcare and Supportive Services/Communication Arts
Southern Maryland Manufacturing Works	Tri-County Council for Southern Maryland	Manufacturing
Sunflower Bakery Workforce Development Program	Sunflower Bakery	Hospitality
Transportation and Logistics Consortium	Employ Prince George's	Transportation and Logistics
Upper Shore Skilled Trades Partnership	Chesapeake College	Skilled Trades
Wor-Wic Cyber Initiative	Wor-Wic Community College	Cybersecurity/Information Technology



New EARN partners at the EARN orientation meeting

New grantees attended an in-person, day-long orientation in July of 2024. Grantees learned about reporting requirements, the external evaluation of the program, and had an opportunity to hear from veteran grantees who imparted advice and highlighted best practices and lessons gleaned from their experience with EARN. The day concluded with a peer-to-peer learning opportunity where new grantees had the opportunity to meet their peers, discuss industry trends, and talk in detail about the

implementation of their project plans. In the early months of implementation, the EARN team provided in-depth technical assistance and support to ensure projects got off to a successful start.

EARN'S POSITIVE IMPACT ON MARYLAND

EARN'S IMPACT ON WORKERS

Aligned with the Moore-Miller administration's vision to leave no one behind, EARN encourages mobility for Maryland jobseekers experiencing multiple barriers to employment, deploying a holistic approach that blends in-demand occupational training while addressing barriers to employment. At the same time, Maryland is experiencing both record low unemployment rates and an increased demand for workers in many of EARN's target industries. This makes it critical to expand the pool of trained workers. EARN partners deploy creative strategies to remove barriers to employment which may inhibit success in the workplace, such as a lack of reliable transportation, housing insecurity, childcare needs, and criminal justice involvement.

Below is a small sampling of EARN participants who have overcome barriers to employment such as long-term unemployment, periods of incarceration, and a lack of reliable transportation successfully enter the workforce.

Before joining the training offered by Civic Works, Ryan described life as being “...at a dead end or a crossroads, or both.” He continued, “I knew what I wanted to do but had no support in going forward. Civic Works opened a door for me.” Ryan’s previous involvement with the criminal justice system coupled with his lack of a driver’s license or vehicle made it difficult to land a good job. Since graduating from Civic Works, Ryan has gained employment at Maryland Environmental Services as an Environmental Field Technician, with a starting wage of \$24 per hour. He already has his next advancement in sight, declaring “the goal would be the lead Environmental Specialist - running a team of five.” Ryan’s immediate goal is to utilize Civic Works’ Car Match program, which will assist with the purchase or repair of a vehicle. “Long term,” he says, “I want to buy a house and become an established professional.”

Patrick, a returning citizen, was homeless and unemployed when he learned about Anne Arundel Workforce Development Corporation (AAWDC). He enrolled in EARN-funded Commercial Driver’s License (CDL) training where he benefited from one-on-one case management, supportive services, and received stipends to support his living expenses while enrolled in training. When he completed training, Patrick earned his CDL-A license and secured full-time employment.

Charae was receiving Supplemental Nutrition Assistance Program (SNAP) benefits and was eager for an opportunity to land a career with a family-sustaining wage. She enrolled in training offered by BCR Cyber, and upon successful completion of the program earned several industry recognized credentials. Charae was offered and accepted a position with the State of Maryland as a Cyber Preparedness Coordinator where she is earning nearly \$85k annually. She was able to transition off of benefits and looks forward to continuing to progress in her career.

James first learned about Maryland New Directions (MND) at the ROCA Resource Fair where he met a MND job coach. He shared many of the challenges he was facing - being a new father, the trauma of gun violence, and the barriers imposed by systemic challenges. Despite it all, he embraced the opportunity MND provided and immersed himself in the training. With the support of his job coach, he polished his interview techniques and enhanced his resume. He was able to secure professional clothing thanks to MND’s partnership with Sharp Dressed Man, and during a mock interview session, he caught the eye of a representative from CHEP. His ambition, combined with the skills he gained while at MND positioned him to secure a job offer before graduation. The following week he earned his forklift license and started his position at CHEP, a job he proudly describes as “hands down the best job (he’s) ever had.” As a dedicated father, he can now provide for both his child and himself, not just with material essentials but as a role model for the value of perseverance in overcoming systemic barriers.

Raneshia enrolled in virtual reality automotive training while incarcerated at the Maryland Correctional Institution for Women (MCIW). Upon release in July 2024, she enrolled in the Automotive Technicians for Change program, offered by Vehicles for Change. She took advantage of the supportive services and wraparound supports provided, and her hard work paid off as she achieved an impressive four Automotive Service Excellence (ASE) certifications—an accomplishment that reflects her skill, dedication, and potential. Soon after completing the program, she obtained employment and currently works as a truck driver.

Upon his release, Kevin, who spent significant time in the penal system, enrolled in training offered by the National Center for Institutions and Alternatives (NCIA). He was interested in earning his Maryland Class B CDL (CDL-B) so that he could become a professional driver. The staff at NCIA provided transportation supports and helped Kevin learn how to operate new technologies that had evolved during his incarceration. Kevin successfully completed his course and obtained a CDL-B. Soon after, Kevin obtained employment as a driver. Unfortunately, he was let go after the results of his background check were returned. He continued to work with NCIA, where he was matched with a second chance friendly employer and is currently gainfully employed.

When she learned about the Biotech Bootcamp offered by the Maryland Manufacturing Extension Partnership (MEP), Kerry had no experience in the industry, having previously worked in customer service roles. She excelled in the bootcamp and took advantage of the mock interviews and networking offered. Of her experience she says, “I was able to graduate from the Biotech Bootcamp and accepted a job as a production technician, starting at \$63,000 a year. The Biotech Bootcamp gave me the training and opportunity for a career that has changed my life for the better.”

Michael’s family experienced a devastating fire, losing their home and all of their belongings. He was referred to the Groundwork Kitchen Culinary Training Program, and quickly enrolled, eager to attain financial stability. Paul’s Place connected Michael with a case manager who helped him obtain health insurance and SNAP benefits. In addition, he received transportation assistance, clothing, meals, and a stipend. During his training, Michael earned five industry recognized credentials. In addition to honing new culinary skills and learning to cook in a professional kitchen, Michael worked with staff to update his resume and practice for job interviews. Less than three months after he began training, Michael secured employment earning \$19.50 per hour.

Devorah was working part-time in education when she learned about the SANS Cyber Workforce Academy. Eager to break into the cyber industry, she enrolled in the program and successfully earned three SANS credentials. She took advantage of the services offered by the job development team and successfully secured a role as a Cyber Security Operations Specialist where she currently earns \$96k per year.

Angelo struggled with addiction from an early age. He entered the Helping Up Mission (HUM) to get support with his alcoholism. Once he was sober, he decided to pursue a career that could support his 11 year old son and learned about JARC. He enrolled in the Fundamentals of Manufacturing (FOM) program to get a refresher on basic math. While in training, he continued to access services from HUM, including supports for mental health and parenting. He also took advantage of services offered by JARC, including benefits counseling, financial literacy training, and employment coaching. He thrived in the welding training and appreciated the support of his instructor. He earned several AWS credentials and was able to secure employment earning \$22 per hour with full benefits.

EARN'S IMPACT ON INDUSTRY

EARN utilizes a dual-customer approach in that the program is meant to support Maryland's workforce and employers alike. As evidenced above, the program is succeeding in its goal to provide in-demand, meaningful training opportunities for Maryland's workforce. At the same time, because EARN uses an industry-driven model, employers have access to a consistent pipeline of highly skilled workers and a unique mechanism to upskill their current workforce. In addition to these invaluable benefits, employers identify several additional benefits to participating in EARN, such as cost savings and increased productivity.

Because employers participate in the identification of skills gaps and development of curriculum, training is tailored to meet the specific needs of employer and industry partners. Upon completion of training, successful participants are connected directly with employer partners with open positions. This steady pipeline of applicants with employer-identified knowledge, skills, and abilities has led to decreased costs around recruitment, screening, and interviewing of job applicants. In fact, some employers use EARN grantees as their preferred or primary recruitment source.

Once hired, there is also less cost associated with onboarding and training because EARN graduates have the baseline skills necessary, as identified by those employer partners, to immediately be successful in their open positions. This also leads to higher retention rates. For example, individuals who complete training offered by the Maryland Direct Support Professional (DSP) Consortium have a retention rate between 90 and 95 percent, which is nearly double the estimated turnover rate for DSPs nationwide.

Employers are also able to leverage EARN funding for incumbent worker training opportunities. Not only does this lead to cost savings as company training dollars can be used on other efforts, but the availability of EARN funding to leverage opportunities for their current workforce has been identified as a conduit for increased competitiveness, and productivity by employer partners. Some employers indicate that they have utilized EARN training as a retention and recruitment tool, allowing them to use training funds to provide professional development opportunities to their employees. Investing in upskilling opportunities has also increased employee satisfaction, with one employer correlating the upskilling opportunities offered by EARN with a 6-point increase in favorability in the "growth and development" category in a recent employee survey.

Below is a small sampling of feedback from employer partners participating in EARN.

“The 2024 Biotech Bootcamp has been an invaluable resource for us, helping to streamline our recruitment process and connecting us with highly qualified candidates. The focused approach directly addresses one of the biggest challenges we face: identifying candidates with the right blend of technical expertise and industry knowledge. The partnership has not only improved our recruitment outcomes but also provided us with a reliable pipeline of biotech professionals who are ready to contribute from day one.

We hired twelve Wor-Wic welding and metal fabrication graduates over the past year and eleven have become permanent, successful employees. Statistically, this is an astoundingly successful program from an employer's perspective. Simply put, graduates of Wor-Wic's welding and metal fabrication programs have the skills and work ethic Chesapeake Shipbuilding is seeking. These graduates outperform their counterparts four to one and are valued employees.

Rapid7 has hired nearly ten graduates of SANS programs for our Tactical Operations SOC Analyst team, all of whom are still employed here. These graduates joined our team incredibly prepared, ready to assist with difficult incidents and handle complex malware samples. When we interview and ultimately hire a SANS Academy graduate, they hit the ground running with a solid knowledge of various cybersecurity topics. I would encourage anyone starting out in cybersecurity to apply to these programs, as the quality of the training they receive is superb. Whenever I have a new open headcount, I always look for recent SANS graduates as I know our SOC and our customers will reap the benefit of their training.

“The benefit from the EARN Maryland program is invaluable. Technical training is so crucial to this area and the training has benefited many employees on my team, including myself. It has provided cost savings, of course, but more importantly an opportunity that might not have been possible if the total costs had to come out of our operating budget. The other benefit is a continued building of trust with auditors and regulators; both agencies highly value our IT employees gaining industry certifications. This again has brought good will and trust that as a community bank, you cannot put a price on.

The hands-on training and practical experience provided by the program are precisely what we need to fill essential positions in our sector. We deeply appreciate our collaboration with Montgomery College and the positive influence it has on the biotechnology industry. With many of the students starting at MilliporeSigma as lab technicians, I am confident in their ability to perform well, as I believe they are well-prepared to handle the tasks ahead.

The training under the EARN Program, without a doubt, has proven to be a worthwhile investment. It has not only increased skill level and productivity, but the impact on employee engagement has been noticeable and equally valuable.

We've been able to hire directly from MND, which has been a game changer for us. We used to struggle with a list of vacant positions and a high turnover rate. But thanks to this partnership, we now have a waiting list for job openings. When employees face challenges at work, simply mentioning that I will contact MND makes a difference. This partnership has truly been invaluable.”

KEY SECTOR IMPACTS

GROWING DIVERSITY, EQUITY, AND INCLUSION IN IT

Employers in the information technology (IT) industry have become increasingly focused on growing the number of underrepresented populations in the workplace. According to a recent study, while women make up 47% of all employed adults in the United States, as of 2022, they hold only 28% of computing and mathematical roles. It is estimated that women identifying as Asian or Pacific Islander make up just 7% of the IT workforce and Black and Hispanic women account for 3% and 2%, respectively¹.

The employer partners who participate in the Intrusion Countermeasures Education and Training (ICET) program have prioritized the inclusion of women and people of color in the cyber and IT industries. As such, BCR Cyber continues to leverage relationships with a variety of community partners, their alumni networks, and social media channels to recruit these populations. In FY24, 83% of trainees in their program identified as a person of color and more than 52% were women.

Similarly, the SANS Cyber Workforce Academy of Maryland continues to leverage strong partnerships with groups such as Women's Society of Cyberjutsu, Black Girls in Cyber, and Goodwill Industries of the Chesapeake (GWIC) to recruit traditionally underrepresented populations. These collaborations have proven fruitful as more than two-thirds of recent enrollees identify as a person of color and more than 40% identify as female. The successes of these partners underscore the profound and far-reaching impact that the strategic collaboration required by the EARN model can make.

¹ <https://www.cio.com/article/201905/women-in-tech-statistics-the-hard-truths-of-an-uphill-battle.html>

INCREASING RETENTION IN HEALTHCARE

According to the National Council of State Legislatures, workforce shortages in the healthcare industry remain one of the core obstacles to ensuring access to long-term care and supports for older adults and individuals living with disabilities. Turnover rates, which are estimated to be between 40 and 60%², coupled with the increased demand for workers due to an aging population, continue to exacerbate the shortage of workers.

Several EARN grantees are deploying strategies and programming to improve the retention rates among direct care professionals. The Specialized Nursing Bridge Program, led by Adventist Healthcare, continues to focus on improving retention among first year nurses through their nurse preceptor training program. Nurse preceptors

educate, evaluate, socialize, and serve as role models for nurses transitioning from student roles to clinical practice or those transferring from a different unit or hospital. While nurse preceptors have increased responsibility, frequently they are not provided training. This program aims to bridge the gap by providing individuals who serve in this critical role with the tools they need to be effective, while providing career advancement opportunities for those selected to participate.



SEECs's Direct Support Professionals

The Maryland Direct Support Professional (DSP) Consortium continues to implement programming meant to alleviate the high turnover rate in the profession. In close partnership with the Maryland Developmental Disabilities Administration (DDA), the consortium developed a DSP II credential, which provides opportunities for DSPs to become more highly skilled and leads to advancement opportunities and increased wages. In addition, the partnership developed a frontline supervisor and manager training program, meant to equip current and future leaders with the skillsets to effectively lead. Participants report a greater understanding of skills and competencies, higher confidence, and greater job satisfaction. This is reflected in the retention rates of participating employers, which averages over 90%. As of December 2024, nearly 600 credentialed DSP IIs along with Mentors and Frontline Supervisors have completed training funded by EARN.

INVESTING IN CLEAN JOBS

The green and clean energy sector continues to evolve at a rapid rate. The Bipartisan Infrastructure Law includes more than \$62 billion in funding to advance the clean energy future by investing in clean energy demonstration and deployment projects, developing new technologies, and modernizing the power grid. To ensure programming remains cutting-edge and meets current demand, Civic Works recently surveyed employer partners who note a pressing need for skilled labor. These employers anticipate the need to hire an average of seven workers each in the coming year. This growth is crucial, as projections show Maryland will need upwards of 15,000 solar workers by 2030 to meet demand.

To effectively address this demand, the Solar Installation Training Partnership (SITP) has developed a strong employer engagement strategy that maintains a 91% placement rate for its graduates. The program actively collaborates with industry partners to tailor its curriculum based on direct feedback regarding critical skills gaps, particularly in entry-level installer roles. This engagement facilitates seamless transitions from training to employment, as employers provide hands-on training opportunities and mentorship, ensuring that graduates are prepared for in-demand careers.

Similarly, Power52 is modifying curriculum to meet evolving trends. As solar energy systems become more integrated with storage solutions, there has been an increase in demand for expertise in energy storage and battery technology. In response, Power52 is exploring expanding their curriculum to include specialized training on battery storage systems and microgrid technology. This will ensure graduates of the program have the versatile skillset which is applicable to diverse sectors within the renewable energy field.

² https://www.bio.org/sites/default/files/2022-06/261734_BIO_22_DEI_Report_P4.pdf

CONTINUED COLLABORATION WITH KEY STAKEHOLDERS

PARTNERING WITH OTHER STATE AGENCIES

As prescribed in the Labor and Employment Article § 11-706(a)(1) of the Maryland Annotated Code, EARN should serve as a resource to state agencies to ensure a highly trained and qualified state workforce. This closely aligns with the Moore-Miller administration's goal to rebuild state government. Many EARN graduates have successfully obtained employment with state agencies since inception and EARN has directly partnered with several agencies, including the MEA, the Maryland Transit Authority, the Department of Human Services (DHS), and most recently, the Department of Information Technology (DoIT).

In response to the growing number of ransomware attacks, DoIT identified a need to provide additional training to current staff. In partnership with BCR Cyber, state employees are able to take advantage of relevant training, which elevates the workforce's ability to identify and respond to the largest cybersecurity challenge facing state government. As of October 2024, nearly 200 state employees, representing more than 20 state and independent agencies, have participated in training. The training focuses on two subsets of the state workforce. The first provides more entry-level employees with key skills in preparation for the CompTIA Security+ certification. The second track, aimed at more seasoned professionals, includes preparation for the Certified Information Security Systems Professional (CISSP) credential.

EARN also continues to partner closely with the Department of Human Services (DHS) on their implementation of the SNAP Employment and Training (E&T) program. Funded by the United States Department of Agriculture, the program connects people who receive monthly food supplement benefits (SNAP, food stamps) to industry-led training programs. SNAP E&T requires a cost match with non-federal funding. Participating programs are reimbursed up to 50 percent of allowable program costs, thus increasing the state and other non-federal funders' investment and growing the number of Marylanders that receive in-demand skills training. Because EARN is a state-funded program, SIPs have the means to provide the cost match.

In 2024, the Department began to meet bi-monthly with members of the DHS team to explore ways to improve upon and bolster the partnership between the two agencies. An information session is being planned for EARN grantees to learn more about SNAP E&T. Currently, 17 EARN grantees are utilizing SNAP E&T funding.

EXPANDING REGISTERED APPRENTICESHIPS

The Department continues to focus on Registered Apprenticeship (RA) as a key strategy to provide access to good paying jobs for all Marylanders. Labor has focused on the expansion of RA to non-traditional industries, such as healthcare and information technology and is particularly focused on increasing diversity within the RA system. Given the close ties between RA and the EARN model, Labor staff work closely to ensure that EARN grantees understand the nuts and bolts of the apprenticeship model and are able to access resources to explore developing their own program. These efforts have proved fruitful as more than 10 grantees have been approved by the Maryland Apprenticeship and Training Council to serve as Sponsors, half of which are providing training and employment focused on non-traditional industries.

“It’s wonderful to see more collaboration in Maryland to develop additional training and employment opportunities within the state, especially in a sector that desperately needs more skilled employees to meet our growing demand.”

In addition to serving as a Sponsor, many EARN grantees have partnered with apprenticeship programs to connect graduates with these earn and learn opportunities. This work has been furthered by Labor's *Maryland Works for Wind* (MWW) grant. MWW established an ecosystem of partners, which includes unions, higher education, workforce training providers, and Local Workforce Development Boards, who are working

together to build a skilled workforce to support the offshore wind industry. Seven EARN grantees are receiving funds and as a result of this project, have developed strong relationships with union partners. For instance, MND is launching a Building Trades Career Pathways Program in partnership with several union programs. As of October 2024, more than 1,000 individuals have benefitted from MWW training.

STATEWIDE TRAINING NEEDS ARE BASED ON IN-DEMAND SECTORS

The Labor and Employment Article § 11-709(b)(4) of the Maryland Annotated Code requires EARN SIPs to identify skills gaps, workforce shortages, and areas of opportunities within their industry. Based upon these needs, SIPs are challenged to develop innovative WTPs that will efficiently and effectively bridge these identified gaps. EARN grantees continue to serve two main subsets of the workforce:

- **Unemployed/Underemployed Workers**
 - Unemployed refers to an individual without a job and who is available for work.
 - Underemployed refers to an individual who is either working part-time but desires full-time employment, who works full-time but earns wages at or minimally above minimum wage, or who is working in employment not commensurate with the individual's demonstrated level of education and/or skill achievement.

- **Incumbent Workers:** An incumbent worker is an individual who is employed already in the target industry and who seeks to obtain additional training or credential. Employer partners identify incumbent worker training as a vital conduit for growth, expansion, and increased business outcomes. However, this training is costly, making it difficult for employers to invest with existing budgetary constraints. Therefore, many partnerships have been utilizing EARN funds to upskill incumbent workers, which has led to improved productivity, cost savings, wages, and job retention.

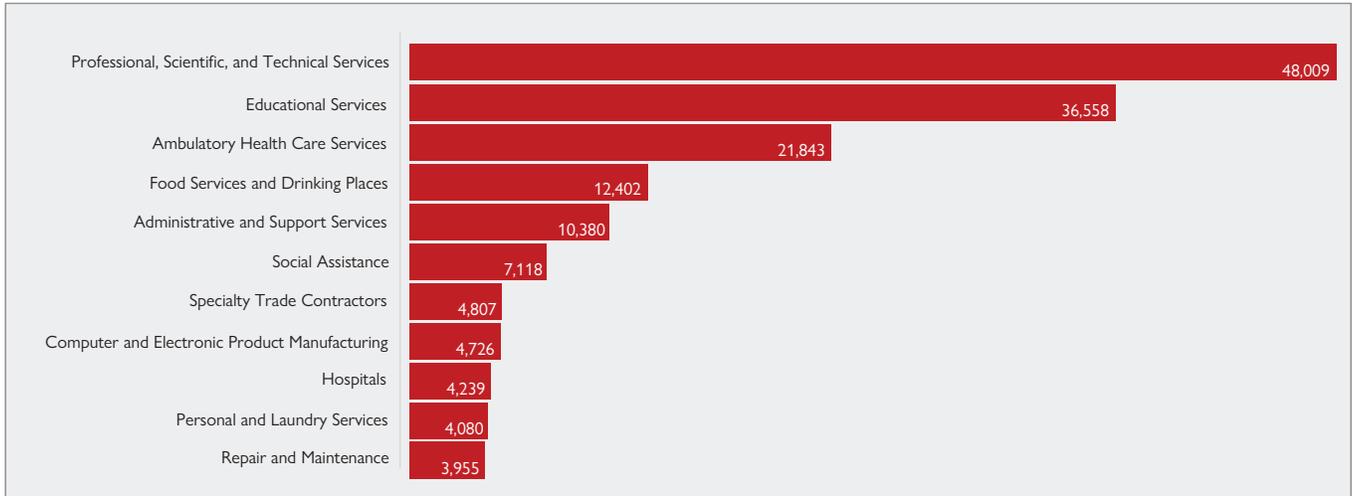
For the partnerships offering training opportunities to unemployed and underemployed individuals, a key component of the curriculum includes job readiness training. Job readiness training may include professional skills, literacy advancement, and financial coaching. Employers resoundingly identify a need for essential skills training. In fact, employer partners identify essential skills training as equally, if not more important than, technical skills in evaluating a potential candidate. Essential skills, also known as soft skills, include professionalism, communication, timeliness, and customer service.

EARN programming must be data-driven. SIPs gather data in several ways to craft WTPs. SIPs utilize qualitative data provided by the employers through varied collection methods including interviews, surveys, focus groups, and roundtable discussions. In addition, SIPs must have quantitative labor market and industry specific data. SIPs are encouraged to give consideration to high demand occupations in industry, projected job growth by occupation, analysis of gaps between supply and demand of employees, understanding the root causes of these gaps, and characterizing the needed skills to close any gaps.

The Department utilizes data to ensure the industries in which EARN is investing are growth industries with strong earning potential. Below is a sampling of labor market information (LMI), which describes long-term industry projections and long-term occupational projections of employment trends between 2022 and 2032. More detailed information can be found in Appendix B.

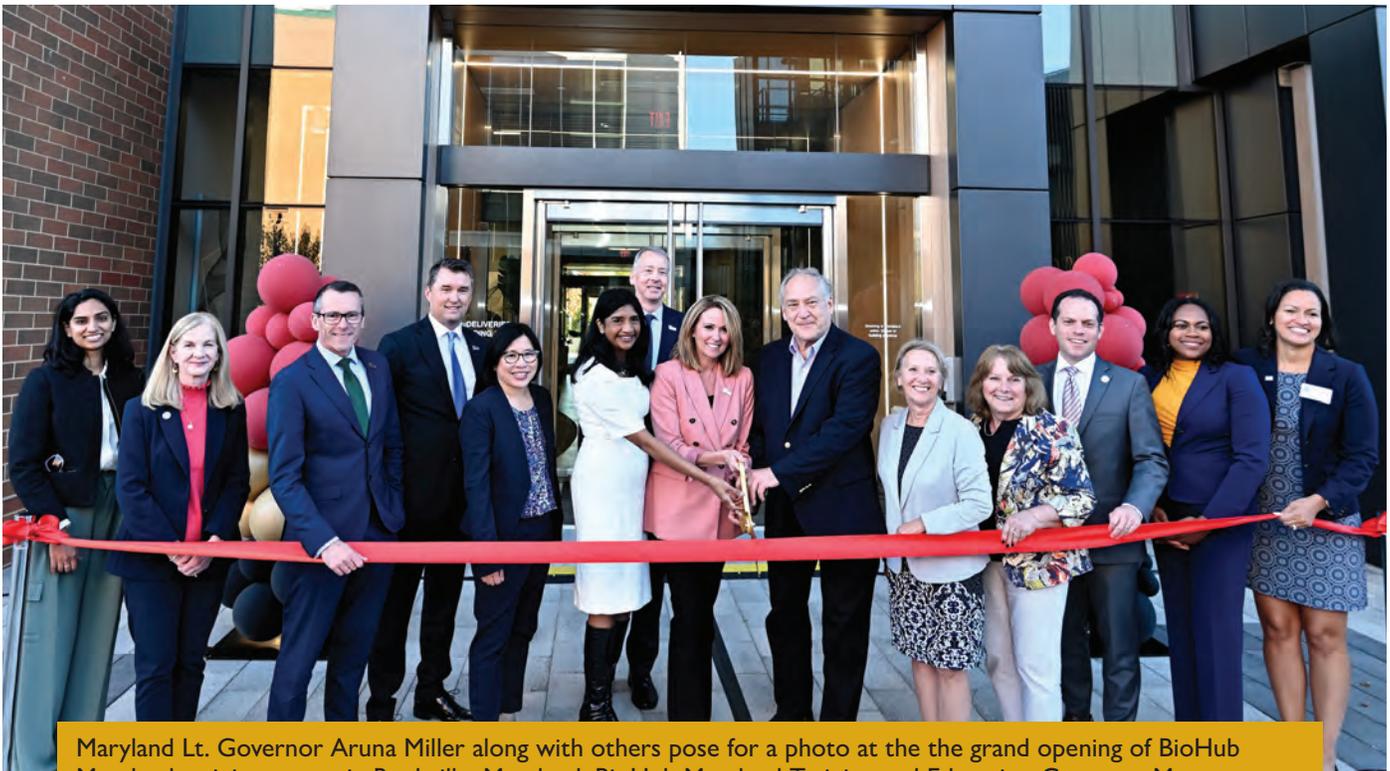
As evidenced in the chart below, EARN funding supports many industries that are expected to experience growth through 2032. These industries include Professional, Scientific, and Technical Services, Healthcare, Hospitality, and the Skilled Trades.

Industries With Highest Projected Employment Change 2022-2032



HEALTHCARE

One of the most significant industry investments through EARN is in healthcare. Ambulatory Health Care Services are projected to add 21,843 jobs, with notable increases Home Health Care Services (5,060 jobs, 18.1% growth) and Outpatient Care Centers (3,482 jobs, 14.1% growth). This aligns closely with the focus of many healthcare SIPs on growing the number of medical assistants, home health aides, nurses, and administrative staff who would support this demand. In addition, hospitals are projected to add 4,239 jobs, which reflects the ongoing need for skilled healthcare professionals, especially in specialized hospital services and patient care.



Maryland Lt. Governor Aruna Miller along with others pose for a photo at the the grand opening of BioHub Maryland training center in Rockville, Maryland. BioHub Maryland Training and Education Center at Montgomery County unlocks career opportunities for Marylanders and builds the diverse and skilled workforce needed to advance Maryland’s global life sciences leadership.

THE PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES SECTOR

The Professional, Scientific, and Technical Services sector, which includes biotechnology and information technology, is poised to experience the largest growth. Computer Systems Design and Related Services is expected to grow nearly 15%, adding an estimated 17,725 jobs. This demand closely aligns with the focus areas of EARN's cyber/IT grantees. Finally, the Management, Scientific, and Technical Consulting Services includes clean energy. It is expected that Environmental Consulting Services will experience a 15.5% growth, adding nearly 9,000 jobs. This illustrates an increased demand for clean energy roles.

As shown in the chart below, the top occupations by projected employment growth are mostly related to health, information technology, transportation, and hospitality, all key investment areas for EARN.

Top Occupations by Projected Percentage Growth in Employment, 2022-2032



Occupations such as Data Scientists (+39.3%), Information Security Analysts (+38.8%), and Software Developers (+31.2%) show considerable growth. These roles align EARN's investment in digital technology and cybersecurity. As industries increasingly rely on data-driven decision-making and cybersecurity measures, the demand for professionals in these fields is likely to remain high. High demand remains for entry-level roles like Home Health Aides (31k jobs) and Nursing Assistants (24k jobs) though wages are most modest at \$35k and \$41k respectively.

SKILLED TRADES

The skilled trades continue to experience high demand and for roles that pay family-sustaining wages. The Department continues to prioritize investment in growing RA, especially in the skilled trades.

Occupational Title	Employment 2023	Average Annual Openings	Hourly Mean Wage	Annual Mean Wage
First-Line Supervisors of Construction Trades and Extraction Worker	15,830	1,579	\$39	\$80,260
Electrician	12,930	1,446	\$33	\$69,100
Carpenter	9,670	1,248	\$28	\$58,930
Plumbers, Pipefitters, and Steamfitters	10,880	1,155	\$32	\$65,650
Operating Engineers and Other Construction Equipment Operator	6,210	600	\$28	\$58,660
Construction and Building Inspectors	3,590	511	\$34	\$71,070
Painters, Construction and Maintenance	3,240	479	\$24	\$49,710

Roofers	2,660	267	\$28	\$58,790
Cement Masons and Concrete Finishers	3,240	251	\$25	\$51,500
Sheet Metal Workers	1,840	182	\$31	\$64,310

EARN'S REPORTING SYSTEM ENSURES ACCOUNTABILITY

To ensure that each of the more than 80 EARN partnerships are successful, the program deploys industry-specific program managers to provide technical assistance and tailored support for each SIP. These individuals work closely with each partnership to develop goals and measures of success, providing tailored guidance to ensure goals are met. Staff conduct site visits, hold regular meetings with grantees, and facilitate connections with peers or outside organizations to help further foster program success.

EARN staff strive to develop strong working relationships with each grantee to better understand the challenges and successes of each partnership and industry. Working collaboratively with grantees creates an environment of trust and support, allowing for continuous improvement and innovation. As a result of these strong working relationships, staff are able to identify early on if technical assistance is necessary and work closely with grantees on improvements if outcomes are not being met.

Due to the flexible composition of EARN, each partnership is unique in its goals, and success is measured in several different ways. Many elements are considered when developing goals, including cost per participant, average industry training costs, level of services provided, length of training, and the number of participants to be served. Similarly, a variety of different means are utilized to evaluate SIP success. EARN partnerships are quantitatively evaluated based upon the number of individuals who enter new employment positions, or the number of incumbent workers trained. Program staff review metrics such as the number of new employers engaged and the amount of leveraged funding secured. Success can also be measured qualitatively. EARN staff take into consideration employer feedback, systems change brought forth as a result of the partnership, and participant success stories.

To further evaluate progress and ensure accountability, grantees are required to submit the following reports to the Department on a quarterly basis:

- Narrative Report – tracks all programmatic activity, including project activities, program highlights, challenges, and success stories;
- Financial Report – tracks projected versus actual expenditures and leveraged resources;
- Entry Report – captures all required demographic data; and
- Exit Report – captures all required outcome data.

At the conclusion of a grant period, grantees are required to submit a Final Report. This report includes a narrative that describes the effectiveness of funded training, a summary of related partnership activities, areas of opportunity or technical assistance needs, and highlights best practices. A Final Expenditure Report lists all expenditures related to the grant, including leveraged resources, and compares projections to actual expenditures. Grantees also submit a Final Entry Report which includes the demographic and pre-training employment information for each participant funded through the grant. A Final Exit Report that includes the final employment outcomes for all individuals enrolled under the grant.

To foster a feeling of community, grantees are brought together at an in-person event on an annual basis. The EARN Annual Meeting was held on December 12, 2024. Grantees received updates on EARN and learned about other grant initiatives that may be of interest. The meeting was co-hosted by BEACON, who provided updates on their independent evaluation of the program. A significant portion of the meeting was spent allowing grantees to discuss industry trends,

challenges, solutions, and best practices within their target industry. The gathering provided an excellent platform for grantees to network and collaborate.

Per the Labor and Employment Article § 11-709(b)(4) of the Maryland Annotated Code, EARN Partnerships are required to collect and track certain demographic data for all participants taking part in EARN funded training, including sex, race, national origin, income, county of residence, and education attainment. Following the completion of training, partnerships must track certain outcome data, including whether each participant obtained a new credential or certification, identifiable skill, a new employment position, or a title or wage promotion. The required metrics covering July 1, 2023 through June 30, 2024 are included as Appendix A to this report.



EARN Annual Meeting 2024

2024

EARN MARYLAND STRATEGIC INDUSTRY PARTNERSHIPS (SIPs)

The following section provides a list of the Strategic Industry Partnerships that were active in 2024, the region in which they are operating, and a brief programmatic update. *New partnerships that were awarded as a result of the Winter 2023 Solicitation process are in the gray box.*

CYBERSECURITY/INFORMATION TECHNOLOGY

IT Center of Excellence

Region: Western Maryland

Led by Allegany College, the IT Center for Excellence continues to provide in-demand training to meet the needs of employers in Western Maryland. The need to upskill incumbent workers remains a high priority for members of the partnership, which includes thirteen employer partners and an array of government, economic development, and higher education entities. Over the last year, nearly forty incumbent workers participated in training opportunities focused on CompTIA Network+, Project Management, Amazon Web Services (AWS) Security Essentials. In October, the partnership held its eighth annual Tech at the Gap conference, a professional development and networking opportunity meant to highlight Western Maryland as a thriving region for tech companies. This year's theme was "Breaking Barriers" within the tech ecosystem, and more than 200 individuals were in attendance.

Industry Feedback: "The EARN grant has been a differentiator for IBM Rocket Center to bring work to the region. Often, we are required to staff positions that require difficult to obtain certifications (i.e. CompTIA Security+), and we have had success leveraging the training provided through the IT Center to help our employees gain these much-needed industry certifications."

techfrederick

Region: Western Maryland

Based upon the results of an annual needs assessment completed by their employer partners and members of the community, techfrederick deploys relevant training opportunities to bolster the skillsets of incumbent workers in the Frederick area and beyond. More than 150 individuals completed training through the first three quarters of 2023 in topics such as Python, JavaScript, Business Analysis, and Microsoft Azure. The Strategic Industry Partnerships continues to have an impact on the Frederick community in a variety of ways. In April 2024, the SIP partnered with Frederick County Public Schools to host the third annual Day of Tech, a half-day experience meant to educate high school students on local opportunities in the industry. Additionally, the SIP hosted the ninth annual techgames, an event designed to bring together the tech community for a day of comradery, teamwork, and competition. The event raised more than \$2,500 for a local Title I school.

Participant Feedback: "As an IT manager I wear many hats. The training techfrederick offers gives me the ability to keep

The training techfrederick offers gives me the ability to keep the company I work for ahead in technology. I have implemented 100% of what I learned into production, moving 60% of the company into a cloud-based platform.

the company I work for ahead in technology. I have implemented 100% of what I learned into production, moving 60% of the company into a cloud-based platform. This would not have been possible without techfrederick. The cost savings drastically impacted my ability to attend. The many courses that I've taken, if they were full price I would not be able to afford them and the company would have requested an outside contractor to perform the tasks needed thus leaving me without the needed experience. Not only has techfrederick been helpful in the advancement in my company's IT infrastructure, It has also given me more experience and knowledge that makes me a valuable company asset."

Intrusion Countermeasures Education and Training

Region: Baltimore City

Led by BCR Cyber, the ICET Partnership continues to provide a blend of technical and hands-on training to unemployed and underemployed individuals. Students earn industry-recognized credentials, such as CompTIA A+, Network+ and Security+, and work through hyper-realistic scenarios of real-world cybersecurity threats on a state-of-the-art range. The partnership continues to focus on providing opportunities for underrepresented populations, including women and people of color. In 2024, more than 80% of trainees identified as a person of color and greater than 50% were women. More than 100 trainees secured employment over the past year earning an average starting wage of \$24 per hour. To ensure opportunities are available for participants to continue to develop in their careers, and in response to employer demand, the partnership has begun to implement training for the Cyber Maturation Model Certification (CMMC).

Participant Success Story: Looking to transition to a higher paying career to provide a better life for himself and his family, Richmond enrolled in the ICET program. Upon successful completion of the program, Richmond earned industry recognized credentials. Richmond was offered and accepted a position with a prominent financial institution as an IT Project Manager. He earns \$106,000 per year with full benefits, nearly quadrupling his previous income.

Partnership for Tech Talent

Region: Montgomery County and Baltimore City

Led by Per Scholas, the Partnership for Tech Talent provides an array of training offerings to students at their Silver Spring and Baltimore City campuses. Students have the opportunity to earn industry-recognized credentials like AWS Certified Cloud Practitioner, CompTIA A+, and CompTIA Cyber Security Analyst+. In addition to technical training, students participate in mock interviews, receive financial coaching, and are connected to mental health resources, as needed. In 2024, more than 100 individuals secured employment in roles such as Service Desk Agent and Installation Technician.

Industry Feedback: “The caliber of candidates coming from Per Scholas is exceptional. They not only possess the technical skills we need but also demonstrate strong problem-solving abilities and a commitment to continuous learning. This has significantly reduced our training costs and improved retention rates among new hires.”

Susquehanna IT/Cyber Partnership

Region: Susquehanna

Led by the Susquehanna Workforce Network, the Susquehanna IT/Cyber Partnership seeks to grow the talent pipeline in the region for a wide array of diverse employer and industry partners, including Bowhead, University of Maryland Upper Chesapeake Health System and the Aberdeen Proving Ground Army Alliance. Due to the composition of the partnership and differing needs of employer partners, customized training is offered that leads to industry-recognized credentials including CompTIA Security+, CISSP, and CompTIA Advanced Security Practitioner. To date, nearly 80 individuals have secured employment in the industry, and the partnership will continue its efforts in 2025.

Participant Success Story: Steven, a veteran, enrolled in training offered by the Susquehanna Cyber/IT Partnership with an interest in becoming a Computer IT Technician. He successfully completed training, earned CompTIA IT Fundamentals+ and A+ credentials, and is working for a local employer.

SANS Cyber Workforce Academy

Region: Statewide, with a focus on the Capital and Central Regions

The SANS Cyber Workforce Academy continues to develop a diverse talent pipeline by providing training opportunities to underrepresented populations in the industry, including women, people of color, and veterans. Students receive advanced technical training around topics such as hacker tools and techniques, incident handling, and security essentials. Training culminates with the opportunity to earn industry-recognized certifications including the Global Information Assurance Certification (GIAC) and the Global Certified Incident Handler (GCIH). SANS recently updated certification exams to incorporate lab-based questions, in addition to multiple-choice questions. This ensures that learners who achieve this credential demonstrate the ability to perform job-relevant tasks, in addition to proving their knowledge. Over the last year, nearly 40 individuals have obtained employment with average starting wages exceeding \$38 per hour. The partnership works with nearly 40 employer partners, including recent additions such as Leidos, Cisco, and Verizon.

He earned three SANS GIAC certifications and secured a position as a Detection & Response Analyst at Rapid7 where he earns more than \$80k per year.

Participant Success Story: Jose was an IT intern when he learned about the SANS Cyber Workforce Academy. Seeking to launch a career in cybersecurity, he enrolled in the program. He earned three SANS GIAC certifications and secured a position as a Detection & Response Analyst at Rapid7 where he earns more than \$80k per year.

UMBC Training Centers' Technical Career Pathways

Region: Central Maryland

Led by UMBC Training Centers, this partnership is working to address the workforce training needs of the military, intelligence community, federal civilian agencies, and the commercial sector through a blend of classroom and hands-on technical training. In 2024, the partnership focused on providing upskilling opportunities for incumbent workers, and offered training in project management, data structures, and network programming. The SIP works with more than 30 employer partners, including Accenture Federal Services, Connsci, Oracle America, and Sandy Spring Bank. Since inception, EARN funding has provided scholarships for more than 150 students. The SIP will continue its efforts in 2025 and expects to train close to 80 incumbent workers.

Baltimore Cyber Academy

Region: Baltimore City

The Baltimore Cybersecurity Academy, led by I'm Still Standing Community Development Corporation (ISSCDC), is providing training to unemployed and underemployed individuals to prepare them for careers in cybersecurity. Through training, students are prepared to earn industry-recognized credentials, such as CompTIA A+, Security+, and Network+, and receive hands-on experience through lab training. Students also receive extensive supportive services, including access to on-site childcare. In addition, ISSCDC recently began partnering with a local non-profit organization that is able to provide housing and mental health supports for students. Nearly 50 individuals obtained employment in 2024, earning an average wage of \$30 per hour.

Participant Success Story: As a mother of four young children, Nadiyah was juggling multiple responsibilities when she enrolled in training, but she was determined to learn the skills to secure a brighter future for her family. The wraparound services, especially the drop-in daycare provided onsite, was instrumental to her success. Soon after completing training, Nadiyah secured a role as a help desk agent earning \$25 per hour.

Health IT SIP

Region: Central Maryland

The Health IT SIP, led by the CCBC, continues to engage large healthcare employers, such as Frederick Memorial Hospital, Mercy Medical Center, and LifeBridge Health. These employers identify a need to continuously update the skills of their workforce to meet the emerging trends and regulatory changes in the industry. Training topics in 2024 included project management, security, and value-based care. Over the past year, more than 30 individuals have received training, many of whom report earning wage increases or title promotions as a result of participation in training. Based upon industry feedback, in 2025 the partnership will offer training in project management, artificial intelligence, and telehealth.

Participant Feedback: “The class gave me significant knowledge that improved my confidence with my current job role. I have more understanding on how to prepare and apply the different principles I learned in the class.”

Advanced Cybersecurity Training Consortium

Region: Statewide

Led by BCR Cyber, the Advanced Cybersecurity Training (ACT) Consortium is a collaboration with all 16 of Maryland’s Community Colleges and more than 20 employer and industry partners including Booze Allen Hamilton and Northrop Grumman. The training offered by the Consortium is meant to increase the employability of students by providing access to BCR Cyber’s state-of-the-art range and giving students the opportunity to work through hyper-realistic scenarios of real-world cybersecurity threats. The Consortium continues its work to diversify tech, with 80% of students identifying as a person of color and more than 40% as women. In FY2024, more than 100 individuals have been placed into employment earning an average wage of \$22.50 per hour. In addition, to support the cyber ecosystem, the partnership continues to offer training opportunities to incumbent workers related to the CISSP certification.

Participant Success Story: Oluwakemi was unemployed and looking for an opportunity to improve her life for herself and her family. Oluwakemi enrolled in the ACT program and upon successful completion of the program, earned several industry recognized credentials. She was offered and accepted a full-time position with a prominent cellular provider as a Cyber Analyst at a starting annual salary of \$72,800 per year with full benefits.



Governor Wes Moore and Labor Secretary Portia Wu during a ribbon cutting at Howard Community College

Building an IT and Cybersecurity Talent Pipeline

Region: Anne Arundel County

Led by the AAWDC, this partnership seeks to meet the needs of its diverse employer partners by providing customized training based upon industry-identified skills gaps. Candidates are assessed based on their knowledge, skills, and abilities, which are captured through technical hands-on cyber assessments. The SIP also utilizes on-the-job training and work-and-learn opportunities, and credits this practice with transforming hiring practices by emphasizing the importance of hands-on experience and practical skills in candidate evaluation. More than 30 individuals obtained employment in 2024 with average wages exceeding \$28 per hour.

Participant Success Story: After fully engaging in the program and earning industry-recognized credentials, Mariah secured employment as a Junior Cyber Security Specialist with OCT Consulting, a government contracting company, with an impressive salary of \$85k. Her transition from previous roles in banking and healthcare aid to a cybersecurity position marks a significant career milestone.

Cybersecurity Education and Certification Program

Region: Baltimore

Based upon feedback from their employer partners, the Cybersecurity Education and Certification Program, led by the CCBC is offering in-demand and relevant training to incumbent workers. In 2024, nearly 20 individuals participated in coursework which is meant to prepare them to test for CompTIA credentials including Security+, PenTest+, and Linux+. Students participate in exam preparation and receive vouchers for certification exams, which limits the financial burden. The partnership continues to bolster relationships with the Cybersecurity Association (formerly CAMI), the Maryland Tech Council, and the Fort Meade Alliance.

Industry Feedback: “During my nearly seven-year tenure at Bmore Technology, our partnership with CCBC has remained steadfast. Thanks to the EARN Grant, our technicians have been able to enhance their expertise and acquire top-notch industry certifications. Some of these certifications entail significant time and financial investments, but the EARN Grant has opened doors for our employees to participate in a reputable educational program.”

Smoothstack IT Apprenticeships

Region: Statewide

The goal of this SIP is to provide RA opportunities to underrepresented communities by removing barriers to entry. Apprentices have the opportunity to select between two different training tracks: cybersecurity or software development. The program includes immersive training, mentorship, and real-life work experience. The related instruction that is a core component of the RA model is front-loaded during the first 16 weeks of the program, allowing students to hone their newly acquired technical skills in the workplace. To date, 13 individuals have obtained employment earning an average of nearly \$30 per hour.

Participant Success Story: Before joining Smoothstack, Keshawn had no formal tech experience, relying only on self-taught coding skills and volunteer work. That changed when he entered the Hire, Train, Deploy program. Keshawn began in a full-stack development cohort and advanced his skills through cloud training, aligning with client needs in government contracting. Under Smoothstack’s structured guidance and tailored support, he gained hands-on experience in the software development lifecycle. Through the program, he refined his skills, expertise, and confidence, launching a successful career in the industry and becoming a well-rounded, highly capable professional. In Keshawn’s words “Smoothstack is not just a company; it’s a community. You meet people you wouldn’t normally meet, get to pick their brains, learn from them, and grow with them.”

Cybersecurity Operational Methods Education Training (COMET)

Region: Statewide

The COMET program is meant to provide in-demand and relevant training to State of Maryland employees who are responsible for cybersecurity preparedness across state agencies. To date, nearly 200 state employees have participated in training across more than 20 state and independent agencies. Participants receive training to test for the CompTIA Sec+ and CISSP. In 2024, the SIP began to offer CompTIA Security+ training and certification which provides more junior employees with a critical upskilling opportunity. DoIT continues to work closely with sister agencies to determine what training topics are of interest and will expand the opportunity to participate to local and county government agencies.

Industry Feedback: “We have had at least (12) MDH and local health department staff participate in these sessions, some advancing to the highest training offering and we have absolutely seen dividends in this training.”

Wor-Wic Cyber Initiative

Region: Lower Eastern Shore

Led by Wor-Wic Community College, the Wor-Wic Cyber Initiative brings together six private employers, a local municipality, and a local school system to refine the school’s cybersecurity offerings. The SIP intends to gather input from these partners to better tailor instruction to industry needs and standards. By offering a blend of in-person classes, online modules, and hybrid formats, the SIP will cater to working cyber professionals, which is the target audience for training. Various training opportunities will prepare students to test for industry-recognized credentials. It is expected that 100 individuals will benefit from training.

TRANSPORTATION AND LOGISTICS

Susquehanna Transportation and Logistics SIP

Region: Susquehanna

Led by Cecil College, the Susquehanna Transportation and Logistics SIP continues to provide in-demand training opportunities for individuals to become commercial truck drivers. Students receive scholarships to participate in training that prepares them to test for CDL-A and CDL-B licensure. New regulations recently released by the Federal Motor Carrier Safety Administration (FMCSA) significantly impacted requirements for entry-level driver training and restricted the ability for employers to provide training internally. The need to partner with an outside entity to deliver this training presented challenges for many employers, especially smaller companies with limited training budgets. As such, the SIP is offering training for incumbent workers who wish to advance to driver positions, offsetting 50% of the cost, to help smaller employers remain in compliance with these regulations. Students continue to obtain employment at a high rate, earning an average of \$29 per hour.

Participant Success Story: Prior to enrolling at Cecil College, Theresa was earning \$15 per hour. Realizing she wanted a career, Theresa began applying for jobs that would provide a family-sustaining wage. Theresa received a job offer from Harford Transit but it was contingent on her earning the CDL-B license with passenger endorsement. Harford Transit was able to use EARN funding to cover her tuition costs. With her CDL B+ Passenger license in hand, Theresa is now earning \$26 an hour with benefits, a 73% increase over her previous wage.



Student training to develop his CDL skills.

Mid-Maryland MOVE

Region: Montgomery County

Mid-Maryland MOVE, led by Montgomery College, continues to work with employer partners, such as the Washington Area Metropolitan Area Transit Authority and Montgomery County Public Schools, to provide in-demand training to meet the growing demand for CDL drivers. In 2024, the partnership offered CDL-A training, in addition to covering the cost of screening, the Maryland Department of Transportation physical, CDL preparation, and reimbursement for Maryland Vehicle Administration driving records. These additional costs are critical to helping underrepresented populations participate in and complete training. In 2024, students were placed into roles averaging \$25 per hour. The partnership will continue to offer training in 2025 in close partnership with partners like Hagerstown Community College and Worksource Montgomery.

Participant Success Story: Prior to enrolling in CDL training at Montgomery College, John was a courier working on a contractual basis with no benefits. Soon after completing training and earning his CDL-A, John obtained employment with a local employer earning \$22 per hour with full benefits. His employer says that he is doing great and “continues to impress us daily.”



Students hard at work in Hagerstown Community College's Diesel Technician training program.

Western Maryland MOVE

Region: Western Maryland

Led by Hagerstown Community College, this partnership continues to provide training to meet the needs of transportation and logistics-focused employers in Western Maryland. In 2024, the SIP offered CDL-A, CDL-B, Forklift Operator, and Diesel Technician training. HCC continues to serve English language learners through a partnership with Frederick Community College and recently conducted a bridge program, with FCC providing language support in an extended Commercial Learner's Permit preparation module and HCC providing the follow up skills training for CLP holders. The partnership has leveraged several grant awards, including funds from the Senator George C. Edwards Fund and the Appalachian Regional Commission to purchase new equipment that will ensure students receive cutting-edge skills training. HCC looks forward to the opening of the new skills trade center in early 2025 which is where all EARN-funded training will be housed.

Maritime Transportation, Distribution, and Logistics Partnership

Region: Baltimore

Led by MND, the consortium works with more than 60 employer and industry partners including Woodlawn Motor Coach, the Baltimore City Department of Public Works, and Dietz and Watson. The partnership offers two training tracks: the Maritime Transportation Distribution and Logistics (MTDL) prepares individuals for work at the Port of Baltimore, whereas the Commercial Transportation Careers (CTC) program prepares students to become commercial truck drivers. In addition to technical training, participants are offered financial literacy, mental health supports, and legal aid. In response to the Francis Scott Key bridge collapse and the anticipated need for workers in the skilled trades, the SIP is developing a Building Trades Career Pathways program which will launch in 2025.

Participant Success Story: Dwayne's dad, determined to see his son succeed and avoid the pitfalls of societal pressure, brought him to MND. But it was Dwayne's commitment and resolve that paved the way for his success. Lacking interpersonal skills and motivation, Dwayne faced significant obstacles. Yet, in the face of adversity, he refused to give in. Instead, he embraced the opportunity presented by MND's CTC training with a deep commitment to himself and his

family. From the moment he stepped into the classroom, Dwayne was driven to succeed. Though naturally quiet, his presence was powerful, making a lasting impact on his peers. He diligently worked to improve his soft skills, fine-tune his resume, and sharpen his interview techniques. After successfully completing MND's CTC training, Dwayne earned his CDL B permit and DOT card and secured a job offer from Barr Transportation. This marked the beginning of a new chapter in his life—one he described as “the best move he has made thus far.”

Anne Arundel County Transportation Industry Collaborative

Region: Anne Arundel County

Led by AAWDC, the Anne Arundel County Transportation Industry Collaborative seeks to solve the critical shortage of professional drivers in Anne Arundel County and the greater Baltimore region. In 2024, the partnership continued to provide CDL-A training, in partnership with Best CDL Training School, a local provider. To maximize student success, AAWDC is also providing supportive services, including funds to cover DOT physicals, learner's permit acquisition, and transportation costs for getting to training sessions. The SIP's most recent grant award resulted in 93% of individuals who completed training obtaining employment earning an average of nearly \$27 per hour.

Participant Success Story: After losing both of his parents, Eric became homeless and was left without any means of reliable transportation. Struggling with long-term unemployment, he was searching for an opportunity to turn his life around. He learned about the opportunities provided by AAWDC and enrolled in EARN-funded training. He received training that provided the necessary skills to earn his CDL-A. He is currently employed full-time with Western Express, a life-changing opportunity that provided him with stability and a brighter future.

Central Maryland Logistics Workforce Pipeline Partnership

Region: Central Maryland

The Central Maryland Logistics Workforce Pipeline Partnership, led by Howard Community College, will offer a scaffolded approach to support individuals with disabilities in transitioning to unsubsidized employment in the logistics industry. Participants will have the opportunity to earn the Certified Logistics Associate (CLA) or Certified Logistics Technician (CDL) certifications. Upon completion of training, each student will participate in a paid externship to further hone skills learned in the classroom and receive real-world work experience. Funds will also be utilized to provide training opportunities for employers to help them learn how to create a diverse and inclusive work environment, in addition to training for supervisors to provide them with the tools to successfully work with individuals with differing abilities. Training began in October 2024.

Transportation and Logistics Consortium

Region: Prince George's County

Led by Employ Prince George's, the Transportation and Logistics Consortium seeks to provide employer and industry partners a pipeline of highly-skilled individuals to fill vacant positions in the commercial driving industry. The SIP includes six employer partners who anticipate having nearly 70 open positions over the next two years. The H.O.P.E. Project will deliver CDL-A training and Fully Restoring Every Sons Hope (FRESH) will support community engagement and outreach. In addition to occupational training and licensure, students will receive supportive services and direct connections to employment. It is expected that 16 individuals will benefit from training.

BIOTECHNOLOGY

Baltimore BioTechnology SIP

Region: Baltimore

Led by Baltimore BioWorks, this partnership has provided training to unemployed and underemployed individuals who are interested in careers in the biotechnology industry. Nearly 35 employers have identified the need for training around basic laboratory techniques and instrumental biomanufacturing. As such, individuals have the opportunity to obtain

various positions including laboratory technician, clean room technician, and research assistants. Ninety-five percent of students have been placed into employment under their most recent grant making an average of \$17 an hour.

Participant Success Story: Austin learned about the training offered by Baltimore BioWorks in 2022. He was underemployed, working part-time as a store clerk. Upon enrolling, he quickly learned the skills necessary to complete the EARN BioWorks modules, and was hired in a part-time position earning \$17.50 per hour. He has continued to earn wage increases and in 2024, Austin advanced to a Laboratory Manager and is now earning \$24 per hour.



BioTrain students in the laboratory showcasing their newly learned skills

BioTrain

Region: Montgomery

Led by Montgomery College, BioTrain continues to work closely with twenty employer partners including AstraZeneca, Advanced Bioscience Laboratories, and MiliporeSigma to provide tailored training and upskilling opportunities to incumbent workers. Training topics in 2024 included protein purification and quality control. By offering comprehensive, hands-on training, BioTrain has not only bridged the gap between academia and industry but has also contributed to operational efficiencies, significant cost savings, and improved employee retention among their employer partners. More than 300 incumbent workers benefited from training in 2024.

Industry Feedback: “The remarkable impact of BioTrain has significantly enhanced our staff’s skill set and development. It’s a testament to the value the program brings to our organization.”

Baltimore BioPrep

Region: Baltimore

Led by the BioTechnical Institute of Maryland, (BTI) Baltimore BioPrep provides critical hands-on entry level training to unemployed and underemployed individuals to prepare them for a career in life sciences. Training consists of a combination of classroom and hands-on laboratory skills. In addition to technical training, participants receive additional supports to maximize success, including stipends and referrals for mental health services. Working closely with more than 30 employer partners, participants are connected to employment opportunities with large employers like John Hopkins University and McCormick and Company. In 2024, nearly 60 participants enrolled in training, with nearly 80% obtained employment.

Participant Success Story: Sherry came to BTI looking for a fresh start soon after completing a rehabilitation program for her addiction. Recognizing the academic intensity of the program had the ability to trigger a potential relapse, BTI staff provided additional support during the program. She successfully completed the program and is now working full time in the biotech industry.

Medicinal Cannabis Workforce SIP

Region: Statewide

Led by CannaWorkforce, this partnership provides hands-on individualized training to participants who are interested in obtaining a career in the cannabis industry. Based upon industry feedback, the partnership recently expanded training topics to prepare individuals for roles as Cultivation Technician and Dispensary Attendants. Since inception, CannaWorkforce has trained nearly 20 individuals and has placed 90% into employment earning between \$17 and \$20 per hour.

Industry Feedback: “Working with CannaWorkforce, they provided well trained ready to work employees with the very specific training in safety, protocol, and procedures, growing, as well as, precise trimming skills. This saved weeks of in house training and the mistakes that often occur.”

BioHub Maryland, an initiative of Maryland Tech Council

Region: Montgomery County

Led by the Maryland Tech Council, BioHub Maryland will focus on providing biotechnology manufacturing training opportunities to unemployed and underemployed individuals and incumbent workers. Training topics include biopharmaceutical manufacturing, contamination control, facility design, upstream processing, downstream processing, and cell culture. It is expected that 15 individuals will receive training in 2025.

Maryland Cannabis Administration Workforce Development Training Program

Region: Statewide

Led by the Maryland Cannabis Administration, the Cannabis Workforce Development Program was launched to address the demand for skilled workers within Maryland's rapidly growing cannabis industry. The program will focus on providing opportunities for individuals from underserved and disproportionately impacted communities. The eight week training is designed to provide participants with the foundational knowledge in cannabis operations and includes topics like Cannabis and the Human Body, Cultivation Basics, Dispensary Operations, Processor Fundamentals, and Entrepreneurship. Training is set to begin in 2025 and it is expected that 40 participants will benefit.

GREEN

Clean Energy Training Partnership

Region: Howard and Baltimore County

In close collaboration with 25 industry partners, the Clean Energy Training Partnership is preparing unemployed and underemployed individuals for careers in the renewable energy sector. The 16-week program, which is accredited by the National Center for Construction, Education & Research (NCCER), blends classroom instruction, hands-on learning, and job readiness training. In addition, participants receive financial literacy training, direct connections to employers via speed interviews, and case management services for up to twelve months post-graduation. As the industry rapidly evolves, Power52 is continuously updating curriculum to ensure that it remains relevant and is currently exploring the addition of a module on battery storage systems and microgrid technology.

Participant Success Story: Michael began training as one of the youngest students in his group, and was quiet and reserved. While enrolled in training, Michael was the victim of identity theft. Thanks to the guidance and support provided by the team at Power52, he was able to navigate this stressful situation with resilience. While in training, Michael received numerous industry-recognized credentials and honed his technical skills through hands-on labs. The Power52 worked extensively with Michael to overcome his nervousness around interviewing. His persistence paid off and he was one of the first of his peers to receive a job offer. Today, Mykel works as a Solar Installer, earning approximately \$20 per hour with full benefits. He has shared that his life has changed significantly since completing the program, noting that he is now financially responsible and stable. "My life changed extraordinarily after Power52," he reflects. "It has changed me as a person; I have grown. I tell people, if you want to elevate your life, if you want to grow as a person, go to Power52."

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Solar Installation Training Partnership

Region: Baltimore City

The Solar Installation Training Partnership, led by Civic Works, continues to provide in-demand training to unemployed, underemployed, and incumbent workers. The solar industry is rapidly expanding, driven by significant policy support like the Inflation Reduction Act. According to a recent survey, employers partners anticipate needing 40 entry-level installers and 30 NABCEP-certified professionals in the coming year. Entry-level training focuses on the foundational technical skills required by employers, coupled with hands-on experience to further hone those skills. Students have the opportunity to earn industry-recognized certifications, like OSHA 30, and also receive intensive job-readiness training. The program continues to yield impressive results, with 91% of graduates placed into employment. Incumbent workers are provided training to prepare for mid-level positions in topics that include leadership, project management, and customer service. Nearly 20 incumbent workers participated in training in 2024.

Participant Success Story: When Mark began training at Civic Works, he was eager to learn skills that would allow him to hold stable, long-term employment. He thrived in training and credits the staff support and stipend he received as critical aspects that helped him complete training. Soon after he completed training, Mark obtained employment and looks forward to sharing his story with future Civic Works participants.

Water and Wastewater Career Development Partnership

Region: Statewide

Led by the College of Southern Maryland, the Water and Wastewater Career Development Partnership seeks to provide water and wastewater operators with the skills necessary to pass a required certification exam. Employers such as the City of Salisbury, Easton Utilities, and several county Department of Public Works have sent workers to participate in the program. Training topics include water distribution, concepts of drinking water, and wastewater collection. In 2024, the SIP updated the curriculum to include an orientation session meant to educate participants on program requirements, scheduling, how to navigate online training, and overall program expectations. Over the last year, more than 70 individuals participated in training, many of whom are preparing to test for the certification exam.

Participant Success Story: When Richard enrolled in training offered by the SIP, he had attempted the state certification six times without success. After successfully completing training, he passed the exam and was promoted two levels. Richard expressed appreciation for the support he received from the instructor.

Remediation and Construction Industry Partnership

Region: Baltimore City

In partnership with nearly 50 employer and industry partners, the Remediation and Construction Industry Partnership, led by Civic Works is providing in-demand training to grow the pipeline of qualified workers to be Brownfields Remediation and Stormwater Management Technicians. Participants earn a wide array of certifications, including EPA Asbestos Supervisor, Lead Abatement Worker, OSHA 40 Hour Hazardous Site Worker Protection and Emergency Response, OSHA Confined Space Operations, OSHA Bloodborne Pathogens, and OSHA Fall Protection. In response to industry demand, this partnership has collaborated with the Mid-Atlantic Lineworker Training Center to develop an enhanced electrical lineworker training. In 2024, more than 60 individuals obtained employment with wages averaging \$20 per hour.

Participant Success Story: Christopher came to Civic Works looking for a reliable career. “I was limited in what I could do. I had no certifications and didn’t know how to get them,” he said. “I was stuck.” He excelled in training and took advantage of the wraparound and job placement supports offered by Civic Works. Soon after graduation, Christopher secured employment with A&I Environmental Services. Of his experience he says, “This program had an astronomical impact on my life. I owe so much to Civic Works.”

Green Infrastructure SIP

Region: Central Maryland

The goal of the Green Infrastructure SIP is to empower a diverse workforce to understand, respect, and restore our natural systems for this and future generations. With a focus on stormwater management, ecological restoration, and sustainable landscaping, the SIP is providing training in technical topics such as environmental literacy, safety, tools, and plant ecology. Participants will also have the opportunity to earn the Chesapeake Bay Landscaping Professional – Associate (CBLP-A) certification, OSHA 10, and First Aid/CPR. In addition to technical training, participants receive financial literacy training and job readiness training on topics such as professional communication, conflict resolution, and leadership. To date, 37 individuals have obtained employment.

Participant Success Story: Alex worked in sales selling cleaning chemicals but felt increasingly dissatisfied with the environmental impact of his job. Seeking a career that better aligned with his values, he joined the Uplift program at Howard EcoWorks. Through the program, Alex was introduced to the green industry and gained hands-on experience in sustainable landscaping and environmental restoration projects. He developed technical skills such as plant identification and safe tool usage, as well as leadership skills, which he demonstrated by advancing from crew member to crew leader during the program. Alex also obtained certificates such as the Chesapeake Bay Landscape Professional - Associate, OSHA 10 General Industry Training, and Red Cross First Aid / CPR. After graduating, secured employment as a Plan Healthcare Technician earning \$21 an hour.

Chesapeake Bay Restoration Workforce Initiative

Region: Anne Arundel County

Led by the Maryland Reentry Resource Center, the Chesapeake Bay Restoration Workforce Initiative will provide training, credentials, and supportive services to fifteen individuals seeking careers in the conservation landscaping field. The SIP seeks to meet two goals: to equip individuals in need of stable employment, including those with criminal justice involvement, with professional and technical landscaping knowledge and to help Maryland meet its Chesapeake Bay program goals established under the Clean Water Act. Training is set to begin in late 2024.

HEALTHCARE

Community Health Worker Partnership

Region: Western Maryland

Led by the Asian American Center of Frederick (AACF), this partnership provides Community Health Worker (CHW) training to marginalized populations in Western Maryland. Training is tailored to meet the needs of more than 20 industry partners, seven of which joined the SIP over the last year. In 2024, AACF was selected as a recipient of the United States Department of Labor's Apprenticeship Building America initiative and will receive \$3.9M to provide pre-apprenticeship and registered apprenticeship opportunities which will bolster EARN offerings. Since inception the partnership has provided training to 180 individuals.

Participant Success Story: Before coming to AACF, Angie, a mother of two children, worked long shifts in the hospitality industry. She now works at a clinic in Frederick as a CHW and is currently enrolled in CNA/GNA training. This will allow Angie to increase her earning potential to better provide for her family. Angie is grateful for the opportunity to participate in training stating, "I'd want to convey my heartfelt gratitude to AACF for being a part of my life's change. Thank you for enrolling me into the program and assisting me with my new job opportunity!"

Baltimore Healthcare Partnership

Region: Baltimore

Led by the Baltimore Alliance for Careers in Healthcare (BACH), this partnership works with major hospitals in the Baltimore region including LifeBride, University of Maryland Medical Center, and MedStar. Training topics are selected by industry partners and included Certified Nursing Assistant (CNA), Geriatric Nursing Assistant (GNA), Pharmacy Technician, Certified Medicine Aid, and Patient Assistant. BACH is a recipient of funding through the Direct Care Workforce Innovation program which allows the partnership to provide stipends and additional barrier removal to their EARN participants. BACH was awarded additional funding in 2024 to continue training and it is expected that 54 individuals will benefit.

Participant Success Story: When John learned about the CNA/GNA training program offered by BACH, he was unemployed and facing housing insecurity. For John, this opportunity was the breakthrough he needed to change his circumstances. He successfully completed the theory portion of training, but just before he was scheduled to start clinicals, he encountered another obstacle. John did not have reliable transportation and was unable to cover travel expenses to and from the clinical site. BACH stepped in to cover his transportation costs, which enabled John to successfully complete clinicals. He is currently working as a CNA/GNA making \$17 per hour.

Healthcare Mentorship Maryland

Region: Baltimore Region

Led by Pressley Ridge, this partnership works closely with young adults who have aged out of foster care and other state programs and are interested in a career in healthcare. Students are prepared to test for the CNA/GNA credential and also receive supportive services. Recently, the partnership added Certified Medical Technician training which provides an additional in-demand skillset and higher earning potential. To ensure students have the ability to progress in their careers, the SIP also offered Patient Care Technician (PCT) training. More than 200 individuals have obtained employment, including more than 30 individuals in 2024.

Participant Success Story: As Max approached his 21st birthday, he decided he wanted to pursue a career in healthcare. He enrolled in training offered by Pressley Ridge. He excelled in training and the staff was impressed by his dedication, passion, and drive to positively impact those around him. Max earned several industry recognized credentials and is currently employed as a non-therapeutic aid for Baltimore City Public Schools.

PharmaTech Connect

Region: Baltimore City

Led by GWIC, this partnership prepares students for a career as a Pharmacy Technician. GWIC works closely with their partners Baltimore City Community College, CVS, and Walgreens and to provide students with a 18 week pre-certification training program. Students complete all prerequisites to sit for Maryland's Pharmacy Technician Certification Exam, including CPR training, Pharmacy Calculations and Pharmacy Theory courses. Upon completion of classroom training, students participate in a 160-hour clinical internship with their employer partners. To date, GWIC has trained over 100 individuals.

Participant Success Story: Wanting to make a change, Linda decided to pursue a career as a pharmacy technician. She encountered a setback with her health but armed with determination and the additional support she received from GWIC, she was able to complete training and is now certified.

Healthcare Partnership of Maryland

Region: Central Maryland

Led by ItWorks Learning Center, (ItWorks) this partnership seeks to grow the number of highly qualified healthcare professionals in Maryland. The SIP provides CNA/GNA training along with intensive support services including transportation stipends, housing support, and childcare resources. The SIP has a high success rate, placing nearly 90 percent of graduates with employers such as FutureCare, LifeBridge Health, CommuniCare, and the University of Maryland Medical System. In 2024, the SIP placed more than 100 individuals into employment and will continue its work in 2025.

Participant Success Story: Morgan was interested in pursuing a career in healthcare and enrolled in training offered by ITWorks. Soon after enrolling, Morgan learned she was pregnant. As a soon-to-be mom, she was determined to complete training and earn her CNA license so that she could provide for her child. Despite transportation challenges, Morgan was able to graduate and was proud to be named valedictorian of her class. Morgan is currently employed at CommuniCare where she earns \$18 per hour.

Direct Support Professionals Consortium

Region: Montgomery County

Led by Seeking Employment, Equality and Community (SEEC), this partnership provides training for incumbent workers who are currently employed as DSPs who support people with intellectual and developmental disabilities. Since inception, this partnership has been hyper-focused on increasing the retention of DSPs through the creation of a true career pathway. This model has proven successful as employer partners report a 95% or greater retention rate for individuals who participate in this training which well exceeds the industry average. In addition, participants report greater job satisfaction and confidence in their skills. To date, the consortium has trained nearly 750 incumbent workers with the majority earning a new credential or wage increase as a result of participation.

Participant Success Story: Sarah's passion for working with adults with intellectual and developmental disabilities began as a teenager when she volunteered with the Special Olympics. Though she enjoyed her work as a DSP, she found herself working multiple jobs so that she could support her family. Sarah enrolled in the EARN-funded training where she was able to complete the DSPII credential. Once completed, Sarah received a wage increase, and is now able to live a more balanced life while supporting her family. Sarah notes, "The skills I learned in the DSPII training helped me advance to my other positions. What I learned about communication skills, problem solving, community involvement all made me a strong employment professional. They not only helped me move up the ladder professionally but also in my personal life."

Ready to Care

Region: Eastern Shore

Led by the Eastern Shore Area Health Education Center (ESAHEC), Ready to Care leverages strong relationships with Cecil College, Chesapeake College, and Wor-Wic Community College to provide training for individuals on the Eastern Shore. The consortium seeks to prepare individuals for careers as CNAs. In 2024, the partnership explored new ways to provide participants with support services and barrier removal. The SIP has placed nearly 200 individuals into healthcare roles, which has helped to make inroads on the shortage of healthcare workers in the region. The partnership will continue its work in 2025.

Participant Success Story: Karen had worked in healthcare for many years when she unexpectedly lost her CNA license due to unforeseen family obligations. She eventually returned to the healthcare field and was working as a Resident Aide when her employer encouraged her to pursue her CNA license. She completed training at Chesapeake College and earned her CNA license. Soon after, she moved into a CNA role which came with a \$2 per hour wage increase. Karen was nominated for recognition as CNA of the Year through the Mid Shore Nursing Assistant Advisory Council.



Specialized Nursing Bridge Program

Region: Montgomery County

The Specialized Nursing Bridge Program, led by Adventist, continues to focus on improving retention among first year healthcare workers through their preceptor training program. Preceptors educate, evaluate, socialize, and serve as role models for nurses transitioning from student roles to clinical practice or those transferring from a different unit or hospital. Given the high turnover among healthcare professionals, it is imperative that preceptors have the tools they need to be effective. The SIP is currently training preceptors to support Registered Nurses, CNAs, and Respiratory Therapists. More than 120 individuals participated in training in 2024.

Participant Feedback: “As a participant in the preceptor academy, I have been able to strengthen my knowledge of critical care by having the opportunity to teach this knowledge to various types of learners. I believe that this has in turn, allowed me to practice quality care and thus, safe care. Overall, I believe that this experience in the preceptor academy has allowed me to grow immensely.”

Capital Region Healthcare Training Partnership

Region: Capital Region

Led by 1199 Service Employees International Union (SEIU) Training and Upgrade Fund, the Capital Region Healthcare Training Partnership seeks to increase access to healthcare training for residents in Prince George’s and Montgomery counties. The partnership works with Montgomery College and Prince George’s Community College to prepare individuals to become CNAs. To strengthen the employability of their students, the partnership incorporated a vocational bootcamp to serve as a complement to the technical skills learned, which includes mock interviews and resume writing. To support the development of a career pathway for incumbent workers, the partnership also offers PCT training through MedCerts. In 2024, the SIP placed 20 individuals into healthcare roles.

Participant Success Story: Kiyana, an immigrant from Jamaica, sought to improve her quality of life and decided to pursue a career in healthcare. She enrolled in a CNA course offered at Prince George’s Community College. After completing the program, Kiyana was able to secure employment at a skilled nursing facility. Kiyana shared that this training has significantly elevated her family’s standard of living.

Advancing Careers in Population Health

Region: Baltimore Metro

Led by CCBC, this SIP provides training opportunities for incumbent workers so that they may better understand the multiple social determinants of community health, and how to study and leverage data to define opportunities for interventions to improve the health of populations. Curriculum is developed based on topics identified by employer partners like Johns Hopkins, University of Maryland Medical System, and Greater Baltimore Medical Center. In 2024, nearly 70 individuals were trained in topics such as health equity, patient advocacy, and medical terminology. The SIP will continue its work in 2025 and looks forward to leveraging this funding as a means to improve the quality and outcomes of healthcare services for the most vulnerable patient populations.

Participant Success Story: Dana recently completed a course with CCBC and was promoted from a Community Health Worker position to Community Healthcare Specialist and received a wage increase of nearly four dollars per hour! Dana shared the impact that the course had on their skills and leadership, “I am able to see the bigger picture of how the one need impacts so many others, this allows me to work on the other needs to tie them all together. I am helping to make the entire team remember that there is never just one issue for most patients we serve.” This is exciting because not only did the course increase their personal income and workplace opportunities, but it also highlights its impact on their role as both a patient advocate and as an ambassador of Population Health concepts and practices within their organization, a true win for all!



Dwyer Workforce Development scholars at their graduation ceremony.

Rescue 2040

Region: Baltimore

Led by Dwyer Workforce Development (DWD), Rescue 2040 seeks to develop a person-centered, supportive career pathway for unemployed and underemployed individuals to enter and maintain employment in healthcare. In addition to preparing individuals for roles as a CNA/GNA, the SIP provides intensive supportive services around barriers like childcare, transportation, housing, and access to technology. Recognizing the need for healthcare workers across the State, the SIP expanded its offerings to the Eastern Shore and Frederick County in 2024. Rescue 2040 continues to make a positive impact on the healthcare worker shortage and will continue to do so in 2025.

Participant Success Story: When Melissa enrolled in EARN-funded training, she was working full-time and trying to balance her responsibilities as a single mother. Eventually, managing work, study, and family responsibilities became overwhelming and she made the difficult decision to leave her job so that she could fully focus on training. Unfortunately, the loss of income put Melissa at risk of eviction. DWD was able to provide emergency rental assistance so that she could stay in her home. Melissa stated, “I want to express my sincere thanks. It was very kind of Dwyer to pay past due fees so I did not lose my home, I truly was shocked. I want to show my appreciation and say thank you again. Your assistance has kept me on track.”

Community Health Access, Network and Career Equity (CHANCE)

Region: Central Maryland

As technology continues to be introduced in every level of hospital operation and patient care, this SIP, led by Health Tech Alley (HTA), seeks to build a highly-skilled workforce for the niche industry that intersects healthcare and IT. The SIP works closely with 12 employer partners including Chesapeake Home Healthcare, Family Choice Healthcare, and Arvina Healthcare to provide individualized training to meet employer demand. In addition to healthcare fundamentals and digital literacy training, occupational training topics in 2024 included CNA, PCT, DSP, and Data Analysis. Since inception, the SIP has placed more than 40 individuals into employment and continues to explore the integration of pre-apprenticeship and RA into programming.

Participant Success Story: Ashley, a young woman from West Baltimore, was unemployed and seeking opportunity when she enrolled in training through the CHANCE program. She enrolled in CNA training and earned her credential. Soon after, she was able to secure employment as a patient support specialist. She also received phlebotomy training and with her new credential is earning \$19 per hour.

Jordan Peer Recovery Registered Apprenticeship Program

Region: Statewide

Jordan Peer Recovery Registered Apprenticeship Program led by Dr. Mascia Jordan LLC, (Dr. MJ) will leverage the RA model to address critical workforce shortages in Maryland's healthcare and behavioral health sectors. The partnership focuses on fostering equitable employment opportunities across Maryland by targeting underrepresented groups including justice-impacted individuals. EARN funds will be used to implement an earn-and-learn model for Peer Recovery Specialists and CHWs. The SIP includes Local Workforce Development Boards and employer partners such as Volunteers of America and UCSS Mettle Works. The SIP will also offer mentorship and supportive services to maximize completion of the RA program. Twenty-four individuals will benefit from training.

Sign Language Interpreters Professional Advancement Initiative

Region: Baltimore County

In 2023, Governor Moore signed into law the Maryland Sign Language Interpreters Act (SB 346). This law mandates that anyone who is interpreting for the deaf, within an official setting where interpretation is legally required, such as hospitals, courts, and classrooms, be legally certified by the State. While this is a positive development for the deaf community, it is estimated that several hundreds of interpreters across the State do not meet the threshold for licensure. To meet this emerging need, CCBC worked closely with multiple employers and industry associations to design courses to help interpreters prepare for certification exams. It is expected that 250 incumbent workers will benefit from training.

Connecting Students to Careers in the Dental Industry

Region: Baltimore Metropolitan Area

Led by CCBC, this SIP seeks to enable access to the Dental Assistant Training Program that leads to Dental Radiation Technologist certification and a career pathway with family-sustaining wages. Students will have the opportunity to enroll in several specialized dental assistant courses to learn skills like dental radiation technology, sterilization, x-rays, patient preparation, and dental impressions. In addition, students will receive training in work readiness, digital literacy, and customer service. It is expected that 35 individuals will benefit from this training and be connected with employment opportunities at a variety of large and small dental practices.

Pathways for Peers: Recovery Careers Industry Collaborative

Region: Baltimore City

Led by Associated Catholic Charities (ACC), this SIP is designed to address the critical shortage of Certified Peer Recovery Coaches and Peer Recovery Specialists in Maryland. Participants will begin on a career path that simultaneously supports and enhances the likelihood of others being successful in their recovery, as well as deepening the Peer's engagement with their own recovery. ACC will provide participants with classroom training, peer support coaching, job placement assistance, and barrier removal services. In addition to providing a pipeline of skilled workers to support the behavioral health labor market, the SIP will further support the state's economic and healthcare infrastructure, crucial for improving Substance Use Treatment (SUD) outcomes in Maryland. It is expected that 30 individuals will benefit from training.

DSP Skill Up for Success

Region: Montgomery College

According to a 2022 national survey conducted by the American Network of Community Resources (ANCOR), 83% of providers reported turning away people seeking services due to insufficient DSP staffing. For the disability service community to continue to serve people with disabilities to live healthy, fulfilling lives in their community, a stable and competent DSP workforce is required. Led by Ardmore, this SIP seeks to improve retention rates among DSPs by providing individualized training. Upon completion of training, DSPs will have improved job readiness, communication, and technology skills, which should lead to higher retention rates. It is expected that 250 DSPs will benefit from training.

Anne Arundel Healthcare Collaborative: Building the Healthcare Talent Pipeline

Region: Anne Arundel County

The historically low unemployment rates in Anne Arundel County and the surrounding region coupled with an increase in turnover in the healthcare industry has led to a critical workforce shortage. To determine how best to support employers facing these challenges, AAWDC formed and facilitated the Healthcare Industry Collaborative made up of local hospitals, assisted living facilities, nursing homes, and urgent and ambulatory care centers. Employers identified two entry-point occupations into healthcare careers: Certified Clinical Medical Assistant and Dental Assistant. The collaborative partners will provide job readiness and occupational training that will result in participants obtaining the industry recognized credentials necessary to secure employment and begin a career in healthcare. It is expected that 25 individuals will participate in training over the next two years.

MANUFACTURING

Wor-Wic Welding SIP

Region: Eastern Shore

The demand for welders and metal fabricators on the Eastern Shore is expected to skyrocket to meet the needs of the emerging offshore wind industry. To prepare for this demand, the Wor-Wic Welding SIP is providing relevant, in-demand training for entry-level positions. The partnership offers two training tracks. The first is an 18-week welding course that teaches stick, flux core, MIG, and TIG welding, giving students the opportunity to earn up to 12 welding qualifications. The variety of qualifications allows the SIP to meet the varying needs of many local companies, all of whom have different requirements. The second track, updated in 2023, includes both machining and metal fabrication. In this course, students have the opportunity to earn up to 12 OSHA certifications. In 2024, approximately 80% of program graduates obtained employment in the industry, earning wages that average over \$21 per hour.

Participant Success Story: “Since my graduation from the program at Wor-Wic, my life has improved immensely. Because of that program, I have a life. I got a decent paying job that has the potential of six figures, insurance, and two vehicles. I’ve been able to buy my own welder and a few nice pieces of machinery. I am currently house shopping for my first home. I thank God I have peace of mind now. I can plan a future. I haven’t reached a lot of my plans and goals yet, but again, that is why this isn’t a success story. My success is just beginning.”



JARC student practicing his new welding skills.

Careers in Manufacturing Program

Region: Baltimore City

Given the changing landscape in the industry, JARC regularly convenes their 12 member Industry Advisory Council to weigh in on industry trends, curricula, and program design. Together, the SIP seeks to help low-income individuals, many of whom have multiple barriers to employment, maintain self-sufficiency. The program offers welding and computer numerical control (CNC) tracks, in addition to bridge programming to help students gain additional math skills to meet eligibility requirements. Coupled with technical training, the Careers in Manufacturing Program offers intensive essential skills training and comprehensive wraparound services. In 2024, the partnership successfully placed more than 20 individuals into employment with recent wages nearing \$22 per hour.

Participant Success Story: After graduating from high school, Michael served seven years in the United States Army. When he completed his service, he worked several jobs that he found repetitive and was searching for a challenge. When Michael enrolled in training, he was most nervous about the math course. He credits his instructor's patience for his completion of the course. On the day he earned his CNC certification, Michael received a job offer from a local employer earning \$23 per hour. Soon after beginning and before his probation period ended, he received an increase earning more than \$25 per hour.

Maryland Manufacturing Jobs Program

Region: Statewide

Led by the MEP, the goal of this partnership is to help Maryland manufacturers grow their workforce, increase profits, and improve processes. To meet these critical goals, MEP has worked with dozens of manufacturers to identify areas of opportunity. This year, MEP supported a local employer in reviewing and updating current practices around hiring, onboarding, and training. As a result of this review, 23 new employees were successfully onboarded and trained. In 2024, the peer group discussed legal compliance, best practices in recruitment and building a positive company culture, and artificial intelligence in manufacturing. The partnership also tries to address the challenge of attracting young talent to the industry through their internship program. The goal of the program is to expose college students, a demographic that typically does not consider the industry for employment opportunities post-graduation. In June, twenty-four students began internship opportunities with eleven different employers, and will have the opportunity to participate in meaningful projects while developing professional skills and connections that will help them to be successful in the industry upon graduation.

Participant Success Story: “The Lean Six Black Belt course was a great experience for me. I learned a lot, not only from my instructor but also my classmates. It was great to see how other companies operate and we bounced ideas off each other. At the beginning of the year, the president of our company tasked all supervisors and managers with finding ways for us to become a more disciplined company. This Lean Six Black Belt course has given me strategies and ideas to lead us in the right direction. We have already seen a 60 percent reduction in wasted man hours. I think the tools learned from this training will benefit a wide range of the work force and industries.”

PrintSIP

Region: Statewide

Led by the Printing and Graphics Association Mid-Atlantic, this partnership continued to provide upskilling opportunities for incumbent workers in the printing industry. Based on learnings from the pandemic, the partnership now offers virtual courses, a strategy that has grown the geographic reach of the program. In 2024, the SIP trained 26 individuals in graphics communications.

Industry Feedback: “Just want to provide some feedback from my employee on the recent 101 training. She said it was very much worth her time and she learned a lot. The training materials were great and most importantly she passed the final.”

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Rural Maryland Manufacturing Partnership

Region: Statewide

Over the past year, the Rural Maryland Manufacturing Partnership continued to provide critical training opportunities to meet the needs of manufacturers in rural areas of the state. In 2024, the SIP reinvigorated the Biotechnology Bootcamp, meant to support Frederick County, which is one of the largest bioclusters in the United States. The most recent bootcamp yielded a 79% placement rate of graduates who are earning an average of \$27 per hour with employers such as Texcell, Thermo Fisher, and Kite Pharma. In addition to building a workforce to support entry-level positions, manufacturers participating in this partnership have identified a need to upskill their current workforce, particularly as mid-to-high level employees are retiring. In 2024, nearly 100 incumbent workers were trained in topics such as leadership development and Lean Six Blackbelt.



MEP Biotechnology Bootcamp students in the laboratory.

Participant Success Story: “The Bootcamp changed my life and opened doors I am sure I would never have been able to open by myself. The Bootcamp teaches us the basic laboratory skills necessary in the Biotech industry, and at the same time, it teaches us about teamwork, collaboration, and shared responsibility. But this is not the only important thing; the Bootcamp offers the opportunity to interact with people in the industry looking to increase and develop their workforce and teaches us how to improve our CVs and prepare for a job interview. After being interviewed by different companies, I was lucky to receive a couple of job offers, one of them being an apprentice position at Kite Pharmaceuticals, which I did not hesitate to take.”

Maryland Manufacturing Skills Program

Region: Statewide

As manufacturers continue to invest in new technologies and processes in advanced manufacturing, this SIP seeks to support employers with the adaptation, implementation, and utilization of advanced technologies. In 2024, the SIP realigned to ensure it was meeting the current and future needs of industry, focusing on supporting employees and

operations at every level of the manufacturing business. Training efforts will focus on industry-driven solutions including people, process, technology, and other advanced manufacturing topics. The SUP expects that broadening its focus to training at all levels of the manufacturing operation will result in the upskilling of the workforce, improved productivity, quality, safety, and technology. Through the first three quarters of 2024, the SIP trained nearly 100 individuals in topics such as safety, leadership, and Geometric Dimensioning and Tolerancing (GD&T) Training.

Industry Feedback: “I have two employees who completed the on-demand manufacturing safety and quality training programs. Both were appreciative of the opportunity and are looking for ways to incorporate this knowledge into their daily job functions.

Susquehanna Manufacturing Coalition

Region: Susquehanna

In 2024, the Susquehanna Manufacturing Coalition, led by Susquehanna Workforce Network provided support to two Registered Apprentices in an Heating, Ventilation, and Air Conditioning (HVAC) program. Unfortunately, the SIP has not rebounded post-pandemic and employment engagement has lessened so the SIP will not continue into 2025.

Cybersecurity for Manufacturers

Region: Statewide

Cybersecurity continues to pose significant challenges to the manufacturing sector. Manufacturers must take steps to understand the trends and challenges impacting the manufacturing cybersecurity landscape, understand what criteria to consider when exploring cybersecurity solutions and learn what it takes to achieve cyber and operational resilience. In fact, as the United States Department of Defense continues to update the policies related to the Defense Federal Acquisition Regulation Supplement and compliance with the Cybersecurity Maturity Model Certification (CMMC). As Federal requirements and regulations change, manufacturers in the partnership have identified the need to create and expand training programs to support cybersecurity compliance for manufacturing in Maryland. In 2024, more than 120 individuals received training in topics that included CMMC topics for Registered Practitioners and CMMC Level 2 Training and Mitigation Support.

Industry Feedback: “The guidance and relationships we received and developed as a result of working with MD MEP have been invaluable. MD MEP’s expertise and support have truly made a positive impact and will contribute significantly to MCN’s future success. We look forward to continuing our collaboration.”

Southern Maryland Manufacturing Works

Region: Southern Maryland

Manufacturers in Southern Maryland, many of whom are supporting the defense industry, are poised for growth. Employers in this SIP, led by the Tri-County Council of Southern Maryland, identify a critical need to upskill their current workforce. The partnership, which includes five employers, St. Mary’s County Economic Development, and the Patuxent Partnership, will provide training to nearly 100 individuals over the next two years. The SIP will offer a menu of training options to ensure programming meets the wide array of needs expressed by the diverse participating employers. Training is set to begin in early 2025.

SKILLED TRADES

Suburban Maryland Construction Initiative

Region: Central Maryland

Led by the Finishing Trades Institute, the partnership provided training to more than 150 apprentices and journeyworkers in 2024. Training topics include how to safely operate an industrial forklift, concrete coating specialist, mobile elevated work platforms, and certification to become an Architectural Metal and Glass Technician. Funds also

supported apprentices in earning basic safety certifications like OSHA and First Aid/CPR. The SIPs most recent grant yielded a total of 285 industry-recognized credentials being awarded to close to 200 individuals. Many individuals have received wage increases as a result of participation in training and employers reported increased productivity.

Industry Feedback: “The Architectural Glass and Metal (AGMT) and the Coating Applicator Specialist (CAS) certifications that we provide are both nationally recognized certifications. In many cases our Employer Partners cannot fulfill worker needs on the job unless they have personnel who have achieved these certifications. In fact our employer partners may not even be considered as potential bidders and awardees on these projects. The Finishing Trades Institute, through strategic planning with our SIP, was able to provide 24 participants with the CAS Level 2 Credential and 15 participants with the AGMT Credential during this funding program. Achievement of these certifications has bolstered our employer partners’ abilities to achieve project awards and our participants to maintain employment in the competitive and ever changing construction industry.”

Marine Trades Industry Partnership

Region: Statewide

Led by the Marine Trades Association of Maryland (MTAM), the Marine Trades Industry Partnership (MTIP) continues to work diligently to meet the needs of dozens of employers in the commercial boating industry. One of the most critical needs identified by employers is the need to develop a pipeline of skilled workers to fill the positions of retiring baby boomers. As such, the partnership continues to implement their successful internship program. Students learn technical skills and receive hands-on experience with industry employers. This immersive experience has proven successful, with more than 100 individuals securing employment as a result. Incumbent worker training remains a high priority for the partnership. In 2024, training was offered in a variety of employer-identified topics, including outboard motors and electronic fuel injection systems.

Participant Success Story: After graduating from a local high school, Hunter was unsure of his next step. He worked for a landscaping company, but he wanted to explore other opportunities where he could use the diesel mechanic skills he learned at the Anne Arundel County Public School Center for Applied Technologies North. The MTIP program placed him with Hild’s Marine, a mobile marine service specializing in diesel engine service. According to owner Ben Hild, Hunter is an excellent employee who shows up on time every day and is eager to learn. Hunter found the internship program to be a great way to train – he likes the supervision and feedback aspect of the internship program. Hunter hopes to become a certified mechanic with Hild’s. He was offered a full-time position at the conclusion of the six-week internship and continues to work for Hild’s.

Herbert J. Hoelter Vocational Training Center SIP

Region: Baltimore City

This partnership addresses the need for vocational training programs for unemployed and underemployed Baltimore City residents. With a focus on serving returning citizens and veterans, the partnership provides three different training tracks: Automotive Repair and Refinish; Commercial Driving; and Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC-R). The 17-week training program classroom theory, hands-on applications, and the opportunity to earn industry-recognized credentials. In addition, students receive wraparound services including mental health services, housing supports, and expungement services and continued case management support for up to twelve months post-graduation. The SIP’s last grant placed 81% of graduates into employment earning nearly \$20 per hour.

Participant Success Story: After attending college for some time and working at several unfilling jobs, Tyler learned about the program through a recent graduate. After speaking with program staff and taking his assessment, Tyler was accepted and decided to enroll in the Heating, Ventilation and Air Conditioning (HVAC) track. He worked closely with his case manager and received transportation support to ensure he was successful in training. When he completed training, he successfully passed national HVAC credentials and received a set of starter tools. Just weeks after graduation, Tyler was hired as an HVAC service technician earning \$50 per hour. Tyler stated that enrolling in this program was the best decision he has ever made.

Pre-Apprenticeship Construction Training Program

Region: Baltimore

Led by the Living Classrooms Foundation (LCF), this program is providing skills training to unemployed and underemployed Baltimore City residents. The students receive instruction based upon the NCCER Construction Skills Curriculum. Training topics include OSHA 10, construction math, introduction to hand and power tools, and basic carpentry and electrical skills. The partnership also provides intensive supportive services for up to one year post-training completion, which includes housing and insurance benefits, food security, transportation support, academic support and GED obtainment, expungement and legal aid, and financial wellness lessons. The SIP placed 88% of recent graduates into employment and continues to work closely with employers like Whiting Turner and Commercial Construction.

Participant Success Story: When Donte first came to LCF, he had a job at Amazon and was struggling with attendance in class as a result. Donte decided that his training experience was more valuable than the experience he was gaining at Amazon, so he made the tough decision to only move forward with LCF. Donte graduated with a certificate in OSHA 10 and obtained employment at Allen Myers, making \$21 per hour for 40 hours per week. He has been working at Allen Myers for five months and just finished his probationary period there. Donte states that he likes his job and can see himself there for a while. He appreciates LCF for providing a wonderful experience, including the learning environment, case management, and the opportunity to acquire skills from field experts.

Construction Skilled Trades Employment Pathways

Region: Western Maryland

Led by Hagerstown Community College, the Construction Skilled Trades Employment Pathways SIP will focus on expanding diversified RA opportunities in Western Maryland. Students will have the opportunity to participate in pre-apprenticeship programming that utilizes NCCER curriculum where they will be prepared for multiple onramps into the trades. To ensure students matriculate into RAs, the SIP is partnering with Independent Electrical Contractors (IEC) Chesapeake and Associated Builders and Contractors of Cumberland Valley. The Western Maryland Consortium will help recruit students for training and will be responsible for providing supportive services. It is expected that more than 200 students will receive scholarships funded by EARN over the next two years.

Introduction to Electrical Career Pathways

Region: Montgomery



IBEW Local 26 apprentices during field training class

Led by the International Brotherhood of Electrical Workers (IBEW) Local 26 NECA Labor-Management Cooperation Committee Trust Fund, this SIP will provide a six-week pre-apprenticeship program for youth. The program is meant to spur interest in the skilled trades, specifically the electrical field. The curriculum blends theoretical knowledge with practice experience as students spend two days per week in an immersive on-the-job training experience under the supervision of a licensed contractor. Students also receive mentorship, tutoring, and transportation supports. Included in the SIP are five contractors of IBEW Local 26, Montgomery College, Next Generation, Inc., and the Montgomery County Council. It is expected that 45 students will participate in the pre-apprenticeship program.

Upper Shore Skilled Trades Partnership

Region: Upper Shore

The Upper Shore Skilled Trades Partnership, led by Chesapeake College, is a robust SIP composed of ten Eastern Shore employers and several local and county economic and workforce development partners. Recognizing the breadth of the skilled trades on the Eastern Shore, the SIP will take a cohesive but flexible approach, offering training courses in an array of topics including welding, advanced manufacturing, construction skills & safety, HVAC, and marine trades. The SIP will serve a mix of incumbent and entry-level workers.

Building Maintenance Certification Partnership

Region: Baltimore City

Led by Goodwill Industries of the Chesapeake, this SIP brings together a diverse group of partners to prepare individuals for careers in HVAC. Students will receive instruction at CCBC in topics including Safety Tools & Methods, Basic HVAC Electricity, Intermediate HVACR for Building Maintenance Technicians and will be prepared to test for the EPA 608 Certification. While enrolled in classroom instruction, students will receive supportive services and job readiness training to ensure a successful transition into employment. Fourteen students are expected to enroll.



Students on the construction site learning to enhance their skills in carpentry

Second Chance Collaborative

Region: Baltimore City

With a focus on the reentry population, the Second Chance Collaborative seeks to lower the recidivism rate by providing pathways to the construction industry. Individuals will receive skills training which includes a broad array of skills from safety knowledge, painting, demolition, carpentry, and HVAC. In addition, participants will receive job readiness training, trauma informed care, emotional and behavioral health supports, and financial literacy training. It is expected that 30 students will benefit from training in the next two years.

AUTOMOTIVE

Automotive Technicians for Change

Region: Baltimore, Lower Shore, Prince George's County

Led by Vehicles for Change, this program is preparing individuals, many of whom have significant barriers to employment, for careers as automotive technicians. In 2024, Automotive Technicians for Change continued to offer programming in Baltimore, Prince George's County, and on the Lower Eastern Shore. The program operates as a simulated work environment, providing students with a paid internship at the Vehicles for Change garage. Students are prepared to test for ASE certifications and work closely with staff to mitigate barriers like reliable transportation, housing, and mental health challenges. A recent grant award yielded an 88% placement rate with students earning an average of 5.7 ASE certifications.

Participant Success Story: Ranesha enrolled in virtual reality automotive training while incarcerated at the Maryland Correctional Institution for Women (MCIW). Upon release in July 2024, she enrolled in the Automotive Technicians for Change program. Ranesha's hard work paid off as she achieved an impressive four ASE (Automotive Service Excellence) certifications—an accomplishment that reflects her skill, dedication, and potential. Soon after completing the program, she obtained employment with Volvo.

Prince George's Auto Technician Training

Region: Prince George's County

EARN funding allowed the Washington Area New Automobile Dealers Association's Auto Dealer Education Institute (ADEI) to expand their successful RA program to Prince George's County in 2022. In partnership with Prince George's County Public Schools, Employ Prince George's, and employers like Toyota, Fitzgerald Auto Mall, and DARCARS Automotive Group, the RA program is preparing students for careers as automotive technicians. Students have the opportunity to earn several ASE certifications, and upon completion of the program, have the work experience and education to become ASE-certified master technicians. The inaugural cohort of apprentices funded through EARN graduated in December 2024 and on average, apprentices experienced a 30% increase in wages. Since 2022, more than 40 apprentices have participated in training and are matriculating through the program.



ADEI apprentices hard at work learning how to work on automotive parts.

Participant Success Story: When Jeff's manager nominated him for the ADEI Registered Apprenticeship program, he was earning \$15 per hour as a lube technician. He thrived in the related instruction and appreciated the hands-on practice coupled with a supportive instructor. As his skills increased, so did his wages. He was promoted to a flat-rate technician and is currently making \$28 per hour, close to a 100% increase over his starting wage. In addition to the success he has achieved in the RA program, he recently earned his Nissan Electrical certification.

Auto EVOlveTech Hub

Region: Central Maryland

Led by Carroll Community College, the Auto EVOlveTech Hub will leverage employers, higher education, K-12, and workforce partners to prepare automotive technicians for work on emerging technologies, incorporating the newest advancements in hybrid, high tech and electrical vehicles (EV). The partnership created the High Tech and EV automotive pathway which will target both new workers and current technicians wishing to earn new ASE certifications and advance within the industry. The SIP will utilize Integrated Education and Training (IET), a proven approach in adult education, to better support English language learners who enroll in the program. Training began in September 2024 and the partnership expects 35 students will benefit.

CHILDCARE

Montgomery Alliance for Early Childhood Education

Region: Montgomery

The Montgomery Alliance for Early Childhood Education seeks to expand the number of highly-trained childcare providers in Montgomery County. Students receive the required training for the Child Development Associate® (CDA) credential from the Council for Professional Recognition. Training topics in 2024 included Child Development Theory, Child Growth and Development, and Planning Curricula for Childcare. To better meet the needs of the local community, the program addresses the needs of English language learners by providing English for Speakers of Other Language (ESOL) support in addition to various workshops on resume writing and interview skills. Nine students began training in July and are expected to complete in May 2025.

Early Education Empowerment Alliance

Region: Central Maryland

The Early Education Empowerment Alliance, led by the Abilities Network, seeks to address the critical shortage of childcare providers. In partnership with twenty employers, the Maryland Family Network, and the Maryland State Child Care Association, the Alliance will prepare 60 individuals for careers in childcare. Recognizing the disproportionate unemployment rate for persons with disabilities, the Alliance will focus recruitment efforts on this population and will provide the appropriate supports to maximize success. Training is expected to begin in January of 2025.

HOSPITALITY

FoodWorks Culinary Training Program

Region: Baltimore/ Eastern Shore

Led by the Maryland Food Bank, FoodWorks provides culinary training to individuals in Baltimore and on the Eastern Shore. Individuals have the opportunity to earn their ServSafe Food Handler certification and hone in on their kitchen skills with hands-on experience in a commercial kitchen. Expanding to the Eastern Shore has helped fill the hospitality employee shortage in and around Ocean City Maryland. FoodWorks works closely with their employer partners in both regions of the state to ensure there is a highly skilled workforce to fit their hiring needs. To date, FoodWorks has trained over 200 individuals.

Participant Success Story: Jamal spent a decade in prison and upon release was struggling to find employment. He stumbled across the FoodWorks Culinary Training Program and was able to learn new skills, obtain certification, and successfully graduate from the program. Upon graduation, Jamal was able to successfully obtain employment with one of the Maryland Food Banks employer partners. He is grateful for the help of the program and for a new start.



Paul's Place students in the kitchen as they hone in on their culinary skills.

Groundwork Culinary Kitchen

Region: Baltimore City

Led by Paul's Place, the Groundwork Kitchen Culinary Training Program provides participants with 12 weeks of intensive culinary training in preparation for careers in the hospitality industry. Students have the opportunity to earn several industry-recognized credentials including ServeSafe Food Handler, ServeSafe Manager, American Hotel & Lodging Educational Institute (AHLEI) Restaurant Server, AHLEI Kitchen Cook, and AHLEI Guest Service Professional certifications. Employer partners take an active role in training, participating in mock interviews, providing cooking demonstrations, and serving as guest speakers. To date, Paul's place has placed more than 60 individuals into employment, including 30 students in 2024.

Participant Success Story: Megan's family lost their home and belongings in a fire. She enrolled in training looking for stability and a fresh start. Soon after graduation, she began working as a chef. She has since been promoted to kitchen supervisor and is earning \$19 per hour. Since graduating, Megan has moved into a new home which is closer to her job and recently purchased her first car.

Hospitality to Possibility

Region: Montgomery County

Led by Montgomery College, the Hospitality to Possibility program is an innovative approach to providing degree-seeking students with job readiness preparation and supervisory and management skills within the hospitality industry. The 16-week training program will focus on providing the skills necessary to obtain a management role, further honed by field trips and on-the-job training. Along with an associate's degree in hospitality, students will earn their ServSafe Manager Certification. Sixty students will participate in training over a two year period.

Dignity Plates Training Academy

Region: Baltimore City

The Dignity Plates Training Academy is a 13-week course that provides students with an introduction to the fundamentals needed to build a successful culinary career. Students participate in culinary product identification and taste exploration, equipment identification, standard measurement, knife safety, and basic knife skills. Coursework covers the theory and science of heat transfer as it pertains to food cookery, soups, stocks, sauces, salads, protein fabrication, plate presentation, buffet/catering production, menu, and recipe development. Upon completion of the program, students will earn their ServSafe Manager certification. More than 70 students will participate in training.

Sunflower Bakery Workforce Development Program

Region: Montgomery County

The Sunflower Bakery Workforce Development Program is meant to prepare individuals with learning differences for careers in pastry arts, hospitality, and culinary. The 26-week program includes topics like customer service, point of sale, shipping, barista, inventory, and more. In addition, students learn about effective communication, time management, and professionalism. Students have the opportunity to test for the ServeSafe Food Handler Certification. The Maryland State Department of Education's Division of Rehabilitative Services (DORS) will play a key role in the SIP, referring individuals and providing supportive services for participants. The SIP intends to train 100 individuals over the next year.

LOOKING AHEAD

2024 was a year of milestones and marked growth for EARN. In addition to awarding 23 new partners in July 2024, the Department released a Solicitation in December 2024 for programs that support the development of leasing training programs. The Department looks forward to growing EARN in 2025 and continuing to support existing partners.

CONCLUSION

As is evident throughout the pages of this report, EARN continues to provide access to good jobs and viable career pathways that lead to economic prosperity for all Marylanders. The EARN model is increasing the state's economic competitiveness and remains a sound investment of public dollars. The Department is proud to support this program and looks forward to continued growth and success in 2025 and beyond.

APPENDIX A

In order to ensure accountability, the Department requires EARN Maryland Partnerships to comply with specific reporting requirements. These measures are meant to track the metrics set forth in the Labor and Employment Article § 11-709(b)(4) of the Maryland Annotated Code. Statutorily required data is presented below. The data included in the table covers the time period July 1, 2023 to June 30, 2024.

By Sex

SEX	# OF PARTICIPANTS	PERCENTAGE OF WHOLE
Male	2,960	57%
Female	2,200	42%
Not specified	54	1%

By Race

RACE	# OF PARTICIPANTS	PERCENTAGE OF WHOLE
White	1,614	31%
Black/African American	2,591	50%
Asian	317	6%
Native American/American Indian	26	<1%
Hawaiian/Pacific Islander	5	<1%
Hispanic/Latino	341	6%
Two or More Races	156	3%
Other	121	2%
Not Specified	77	1%

By Income

INCOME LEVEL	# OF PARTICIPANTS	PERCENTAGE OF WHOLE
Less than \$10,000	1,721	33%
\$10,000 to \$14,999	73	1%
\$15,000 to \$24,999	266	5%
\$25,000 to \$34,999	369	7%
\$35,000 to \$49,999	815	16%
\$50,000 to \$74,999	738	14%
\$75,000 to \$99,999	458	9%
\$100,000 to \$149,999	518	10%
\$150,000 to \$199,999	100	2%
\$200,000 or more	33	1%
Unreported or Incalculable	40	1%

By National Origin

NATIONAL ORIGIN	# OF PARTICIPANTS	PERCENTAGE OF WHOLE
American	3,788	73%
North American (excluding USA)	114	2%
Central and Latin America	208	4%
European	124	2%
African	475	9%
Middle Eastern	14	1%
Asian	228	4%
Oceania	2	<1%
Two or More Identified	30	<1%
Other	154	3%
Not reported	77	1%

By County of Residence

COUNTY OF RESIDENCE	# OF PARTICIPANTS	PERCENTAGE OF WHOLE
Allegany County	39	0.7%
Anne Arundel County	371	7.1%
Baltimore City	1,322	26.8%
Baltimore County	744	14.2%
Calvert County	25	0.4%
Caroline County	29	0.5%
Carroll County	75	1.4%
Cecil County	53	1.0%
Charles County	68	1.3%

COUNTY OF RESIDENCE	# OF PARTICIPANTS	PERCENTAGE OF WHOLE
Dorchester County	23	0.4%
Frederick County	406	7.7 %
Garrett County	10	0.1%
Harford County	157	3.0%
Howard County	188	3.6%
Kent County	15	0.2%
Montgomery County	592	11.3%
Prince George's County	412	7.9%
Queen Anne's County	67	1.2%
Somerset County	16	0.3%
St. Mary's County	18	0.3%
Talbot County	34	0.6%
Washington County	114	2.1%
Wicomico County	122	2.1%
Worcester County	101	1.9%
Outside of Maryland	205	3.9%
Not reported	27	0.5%

By Educational Attainment

EDUCATION LEVEL	# OF PARTICIPANTS	PERCENTAGE OF WHOLE
Some High School or Less	219	4%
High School Diploma/GED/Equivalent	1,813	35%
Some College	951	18%
Associate's Degree	306	6%
Bachelor's Degree	1,094	21%
Advanced Degree (Master's, PhD, other)	531	10%
Trade School	115	2%
Other/Undisclosed	185	4%

Credential or Certification – 2,364

Identifiable Skill – 3,440

A new Employment Position – 1,265

A Title Promotion - 267A Wage Promotion – 1,276

[1] <https://www.ncsl.org/health/strengthening-the-direct-care-workforce>

APPENDIX B

1. Introduction:

This paper provides EARN Maryland with comprehensive insights into workforce demand and earning potential across critical industries the program currently supports, including IT, healthcare, childcare, construction, manufacturing, transportation, green energy, biotech, and hospitality. To support both individuals and workforce agencies, the Maryland Department of Labor produces essential employment projections that guide career planning and training investments. These forecasts allow individuals to make informed career decisions while helping agencies strategically prioritize workforce development efforts to meet industry demand.

Four types of employment projections are available: Short-Term Industry Projections (STIP), Long-Term Industry Projections (LTIP), Short-Term Occupational Projections (STOP), and Long-Term Occupational Projections (LTOP). This analysis focuses on LTIP and LTOP data, offering a long-term perspective on employment trends anticipated between 2022 and 2032. These projections provide critical insights into the evolving labor market, ensuring that Maryland's workforce remains competitive and aligned with future industry needs.

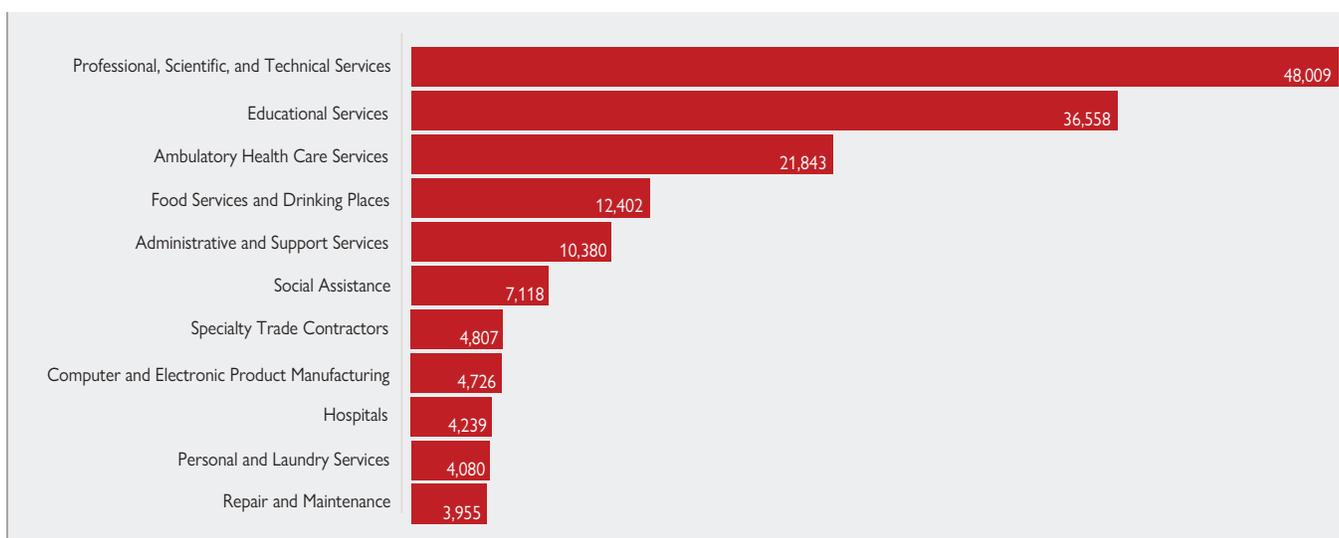
2. Long-Term Industry Projections

This section presents employment projections for Maryland from 2022 to 2032, organized by industry. Using 3-digit and 4-digit NAICS (North American Industry Classification System) codes, it provides a detailed analysis of employment trends, specifically highlighting industries prioritized by the EARN Maryland program.

2.1. Top Industries by Projected Employment Change, 2022-2032

High-demand industries are highlighted based on projected employment changes from 2022 to 2032. This analysis also examines how these industries align with the workforce development focus areas of the EARN Maryland program.

Industries With Highest Projected Employment Change 2022-2032



2.1.1. Healthcare

- Ambulatory Health Care Services are projected to add 21,843 jobs, including notable increases in Offices of Physicians (7,427 jobs, 13.1% growth), Home Health Care Services (5,060 jobs, 18.1% growth), and Outpatient Care Centers (3,482 jobs, 14.1% growth). This aligns closely with EARN Maryland's focus on healthcare, highlighting a growing need for trained professionals in outpatient care, home-based care, and primary care settings. Training programs for roles such as medical assistants, home health aides, nurses, and administrative staff would support this demand.

NAICS	Industry Title	Projected Change 2022-2032	Percent Change
6211	Offices of Physicians	7,427	13.1%
6216	Home Health Care Services	5,060	18.1%
6214	Outpatient Care Centers	3,482	14.1%
6213	Offices of Other Health Practitioners	3,017	15.9%
6212	Offices of Dentists	1,758	9.6%
6215	Medical and Diagnostic Laboratories	820	11.6%
6219	Other Ambulatory Health Care Services	289	4.6%

- Hospitals are projected to add 4,239 jobs, which reflects the ongoing need for skilled healthcare professionals, especially in specialized hospital services and patient care. EARN Maryland's focus on healthcare could be strengthened by expanding training in areas like inpatient nursing, specialized healthcare technicians, and support staff for hospital environments.

2.1.2. Construction/Skilled Trades

- Specialty Trade Contractors (NAICS 238000) are projected to add 4,807 jobs (4.4% growth), with specific sub-sectors showing strong growth:

NAICS	Industry Title	Projected Change 2022-2032	Percent Change
2382	Building Equipment Contractors	1,751	3.0%
2381	Foundation, Structure, and Building Exterior Contractors	1,538	7.0%
2389	Other Specialty Trade Contractors	1,140	7.5%
2383	Building Finishing Contractors	339	2.0%

Foundation, Structure, and Building Exterior Contractors (1,538 jobs, 7.0% growth) and Building Equipment Contractors (1,751 jobs, 3.0% growth) are essential for constructing and outfitting buildings. This aligns with EARN Maryland's focus on skilled trades, with a need for trained professionals in structural work, HVAC, electrical, and plumbing systems.

Building Finishing Contractors (339 jobs, 2.0% growth) and Other Specialty Trade Contractors (1,140 jobs, 7.5% growth) show demand for skilled trades involved in interior finishes and niche construction services. Workforce development in areas like drywall installation, painting, and specialty construction skills can address this demand.

2.1.3. Professional, Scientific, and Technical Services (Growth in Biotechnology, IT, and Construction)

Within Professional, Scientific, and Technical Services, Computer Systems Design and Related Services (17,725 jobs, 14.9% growth) highlights demand for roles in software development, cybersecurity, and IT consulting, all of which are directly aligned with EARN Maryland's IT training initiatives.

Biotechnology: The Scientific Research and Development Services (9,898 jobs, 21.3% growth) includes biotechnology R&D, which is directly relevant to EARN Maryland's focus on biotech. Growth in this sector indicates demand for trained professionals in medical research, pharmaceuticals, and emerging technologies.

NAICS	Industry Title	Projected Change 2022-2032	Percent Change
5417	Scientific Research and Development Services	9,898	21.3%
5419	Other Professional, Scientific, and Technical Services	3,247	16.4%
5416	Management, Scientific, and Technical Consulting Services	8,772	15.5%
5415	Computer Systems Design and Related Services	17,725	14.9%
5413	Architectural, Engineering, and Related Services	5,234	11.5%
5411	Legal Services	1,724	7.3%
5414	Specialized Design Services	205	6.2%
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	1,160	4.4%
5418	Advertising, Public Relations, and Related Services	32	0.6%

Construction and Skilled Trades: Architectural, Engineering, and Related Services (5,234 jobs, 11.5% growth) highlights a need for skilled professionals in design and engineering, supporting Maryland's focus on construction and skilled trades.

2.1.4. Computer/Electronic Product Manufacturing

- Computer and Electronic Product Manufacturing is projected to add 4,726 jobs, reflecting demand for technical manufacturing skills, including areas like circuit design, electronic assembly, and quality control. Though this category does not directly cover IT services, the need for skilled labor in technology-related manufacturing aligns with EARN Maryland's focus on the manufacturing industry. Training in technical manufacturing and electronics could help fill this demand.

2.1.5. Hospitality

- The Food Services and Drinking Places sector is expected to add 12,402 jobs, reflecting strong demand within the hospitality industry. EARN Maryland's focus on hospitality could support workforce training for roles in food service, culinary arts, and hospitality management.

2.1.6. Social Assistance and Childcare

Social Assistance sector shows substantial growth, projected to add 7,118 jobs across multiple areas:

NAICS	Industry Title	Projected Change 2022-2032	Percent Change
6241	Individual and Family Services	4,965	21.2%
6244	Child Day Care Services	1,839	11.0%
6242	Community Food and Housing, and Emergency and Other Relief Services	407	9.9%
6243	Vocational Rehabilitation Services	(91)	-1.6%

- Child Day Care Services (1,839 jobs, 11.0% growth) aligns directly with EARN Maryland's emphasis on childcare. Growth in this area underscores a need for caregivers, early childhood educators, and daycare managers, which can be supported through training programs focused on childcare and early education.

2.1.7. Automotive

- Repair and Maintenance (including automotive repair) is projected to add 3,955 jobs. This aligns with EARN Maryland's automotive focus, suggesting a growing need for skilled technicians in automotive repair, maintenance, and diagnostics. Training programs that emphasize modern automotive technology, including electric vehicle maintenance, could be particularly relevant as the industry evolves.

2.1.8. Green Industry and Environmental Services

- Management, Scientific, and Technical Consulting Services includes Environmental Consulting Services (8,772 jobs, 15.5% growth), showing increased demand for environmental expertise. EARN Maryland's focus on green industries is supported by the need for skills in areas like environmental compliance, sustainability consulting, and renewable energy solutions. This growth emphasizes the importance of workforce development in environmental sciences and consulting roles.

Summary

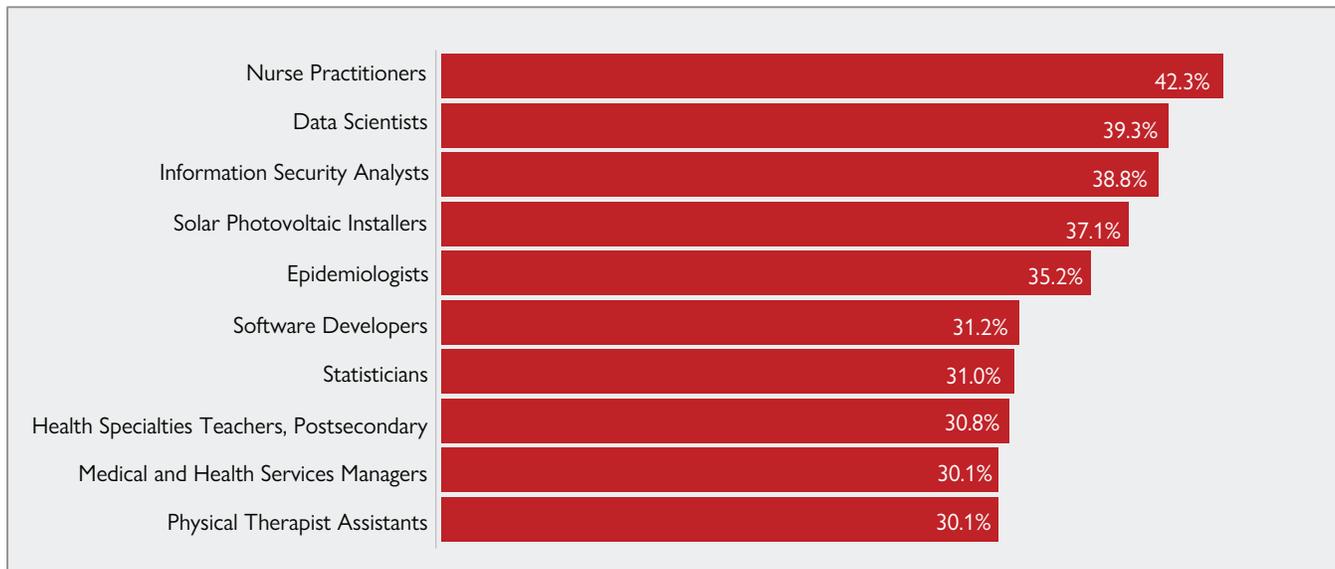
These projections strongly align with EARN Maryland's focus areas, including healthcare, construction, IT, hospitality, social assistance, automotive, and green industries. Key areas of projected growth, such as Ambulatory Health Care Services, Specialty Trade Contractors, and Childcare, suggest specific needs for workforce training in these high-demand fields.

3. Long-Term Occupational Projections

3.1. Top Occupations by Projected Percentage Growth in Employment, 2022-2032

The graph below shows a significant growth in occupations closely aligned with Maryland's EARN (Employment Advancement Right Now) program, which prioritizes workforce development in high-demand industries.

Top Occupations by Projected Percentage Growth in Employment, 2022-2032



This alignment presents strong opportunities for training programs that directly address emerging labor market needs. Key observations include:

3.1.1. Healthcare Occupations:

Positions like Nurse Practitioners (+42.3%), Medical and Health Services Managers (+30.1%), Physical Therapist Assistants (+30.1%), and Health Specialties Teachers (+30.8%) demonstrate significant growth. This reflects the increasing demand for healthcare services, fueled by an aging population and advances in medical technologies. EARN programs focusing on healthcare workforce development will benefit by prioritizing training for these roles to meet the state's rapidly growing demand for skilled healthcare professionals.

3.1.2. Information Technology (IT) and Data Science:

Occupations such as Data Scientists (+39.3%), Information Security Analysts (+38.8%), and Software Developers (+31.2%) show considerable growth. These roles align with the broader expansion in digital technology and cybersecurity, areas that EARN Maryland recognizes as essential for economic development. As industries increasingly rely on data-driven decision-making and cybersecurity measures, the demand for professionals in these fields is likely to remain high. EARN programs that offer skill-building in data science, software development, and cybersecurity will be well-positioned to address this demand.

3.1.3. Renewable Energy and Sustainability:

The demand for Solar Photovoltaic Installers (+37.1%) reflects Maryland's commitment to renewable energy and sustainability goals. This growth signals a significant opportunity for EARN's training initiatives in the green energy sector. Programs that support workforce development in renewable energy installation and maintenance can help fill the talent gap, supporting Maryland's broader goals of sustainable development and environmental stewardship.

Summary

Overall, the projected growth rates for these occupations underscore the importance of targeted workforce development efforts within EARN Maryland's key focus areas. Emphasizing training and skill-building in healthcare, IT, renewable energy, and data analysis will be crucial for addressing the state's future labor demands.

4. Industry-Specific Demand and Earnings Data

4.1. Information Technology (IT):

In IT, Software Developers and Database Architects lead in pay (around \$150K) and demand, driven by digital transformation. Security Analysts (\$138K) are also in high demand due to cybersecurity needs. Entry-level roles like Support Specialists (\$66K) are accessible, while Web Developers (\$97K) maintain steady demand. Key areas for growth: software, data, and security.

Occupational Title	Employment 2023	Average Annual Openings	Hourly Mean Wage	Annual Mean Wage
Software Developers	30,700	3,232	\$72	\$150,740
Computer Systems Analysts	13,800	1,223	\$57	\$118,460
Information Security Analysts	7,890	1,010	\$66	\$138,180
Computer User Support Specialists	10,820	972	\$32	\$66,590
Computer Network Support Specialists	8,670	828	\$49	\$102,600
Software Quality Assurance Analysts and Testers	7,440	810	\$57	\$119,570
Web Developers	2,070	214	\$47	\$97,510
Web and Digital Interface Designers	1,260	155	\$44	\$92,440
Database Administrators	1,790	154	\$57	\$117,750
Database Architects	710	57	\$72	\$150,590

4.2. Healthcare:

This section gives a brief overview of demand and earnings for healthcare occupations based by looking at healthcare support and healthcare practitioners' occupations.

4.2.1. Healthcare Support

- Entry-Level, High Demand: Home Health Aides (31,140 jobs, \$35K) and Nursing Assistants (24,810 jobs, \$41K) have the most openings, though wages are modest.
- Higher-Paid Support: Physical Therapist Assistants (\$69K) and Massage Therapists (\$64K) offer higher earning potential among support roles.

Occupational Title	Employment 2023	Average Annual Openings	Hourly Mean Wage	Annual Mean Wage
Home Health and Personal Care Aides	31,140	5,834	\$17	\$35,140
Nursing Assistants	24,810	3,882	\$20	\$40,770
Medical Assistants	14,440	2,204	\$21	\$44,100
Dental Assistants	5,700	866	\$24	\$50,040
Veterinary Assistants and Laboratory Animal Care-takers	2,550	723	\$20	\$41,860
Healthcare Support Workers, All Other	3,780	549	\$22	\$46,150

Phlebotomists	2,630	369	\$24	\$48,970
Physical Therapist Assistants	1,890	350	\$33	\$68,870
Massage Therapists	1,200	324	\$31	\$64,270
Medical Equipment Preparers	1,390	198	\$24	\$50,480

4.2.2. Healthcare Practitioners

- **High Demand & Earning Roles:** Registered Nurses (49,770 jobs, \$92K), Nurse Practitioners (5,180 jobs, \$128K), and Physician Assistants (3,280 jobs, \$117K) are in high demand, with competitive salaries.
- **Top Earners:** Healthcare Diagnosing Practitioners (\$149K), and Nurse Practitioners (\$128K) lead in pay due to specialized roles and responsibilities.
- **Supportive but Lower Wage:** Clinical Laboratory Technicians (\$61K) and Pharmacy Technicians (\$42K) have steady demand but lower salaries.

Occupational Title	Employment 2023	Average Annual Openings	Hourly Mean Wage	Annual Mean Wage
Registered Nurses	49,770	3,077	\$44	\$92,090
Pharmacy Technicians	8,050	853	\$20	\$42,170
Licensed Practical and Licensed Vocational Nurses	7,700	652	\$32	\$66,460
Clinical Laboratory Technologists and Technicians	6,960	523	\$29	\$60,640
Nurse Practitioners	5,180	502	\$62	\$127,990
Veterinary Technologists and Technicians	2,690	408	\$22	\$45,160
Healthcare Diagnosing or Treating Practitioners, All Other	5,940	368	\$72	\$149,070
Physician Assistants	3,280	282	\$56	\$117,280
Dental Hygienists	3,590	278	\$49	\$101,140

4.3. Construction:

This section provides a concise overview of demand and earnings for selected construction occupations.

- **High Demand & Higher Wages:** First-Line Supervisors of Construction Workers (15,830 jobs, \$80K) and Electricians (12,930 jobs, \$69K) are in demand with competitive pay. Supervisors have the highest earning potential at \$39/hour.
- **Skilled Trades with Good Pay:** Plumbers, Pipefitters, and Steamfitters (10,880 jobs, \$66K) and Construction Inspectors (3,590 jobs, \$71K) earn solid wages due to technical skills required.
- **Moderate Pay, Steady Demand:** Carpenters (9,670 jobs, \$59K), Operating Engineers (6,210 jobs, \$59K), and Roofers (2,660 jobs, \$59K) maintain steady demand with moderate earnings.
- **Lower Demand and Pay:** Painters (\$50K), Cement Masons (\$51K), and Sheet Metal Workers (\$64K) have lower employment and wages.

Occupational Title	Employment 2023	Average Annual Openings	Hourly Mean Wage	Annual Mean Wage
First-Line Supervisors of Construction Trades and Extraction Workers	15,830	1,579	\$39	\$80,260
Electricians	12,930	1,446	\$33	\$69,100
Carpenters	9,670	1,248	\$28	\$58,930
Plumbers, Pipefitters, and Steamfitters	10,880	1,155	\$32	\$65,650
Operating Engineers and Other Construction Equipment Operators	6,210	600	\$28	\$58,660
Construction and Building Inspectors	3,590	511	\$34	\$71,070
Painters, Construction and Maintenance	3,240	479	\$24	\$49,710
Roofers	2,660	267	\$28	\$58,790
Cement Masons and Concrete Finishers	3,240	251	\$25	\$51,500
Sheet Metal Workers	1,840	182	\$31	\$64,310

4.4. Manufacturing:

In manufacturing, Supervisors of Production Workers earn the highest (\$74,650) with strong demand (634 openings), reflecting their key role in overseeing operations. Skilled roles like Inspectors and Welders offer solid pay around \$58K-\$60K, with moderate demand. Assemblers and Machinists have steady demand and provide entry-level wages of \$44K-\$59K. Food Processing Workers have lower pay (\$34,510) but moderate job openings, making it an accessible entry point.

Occupational Title	Employment 2023	Average Annual Openings	Hourly Mean Wage	Annual Mean Wage
Miscellaneous Assemblers and Fabricators	6,980	683	\$22	\$44,870
First-Line Supervisors of Production and Operating Workers	6,150	634	\$36	\$74,650
Inspectors, Testers, Sorters, Samplers, and Weighers	4,390	526	\$28	\$58,030
Welders, Cutters, Solderers, and Brazers	2,910	340	\$29	\$59,780
Food Processing Workers, All Other	2,070	235	\$17	\$34,510

Machinists	1,570	185	\$28	\$59,080
Mixing and Blending Machine Setters, Operators, and Tenders	1,500	175	\$24	\$50,820
Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	1,200	167	\$30	\$62,610
Chemical Equipment Operators and Tenders	1,280	140	\$29	\$60,390
Printing Press Operators	1,430	131	\$23	\$48,860

4.5. Transportation:

The transportation and warehousing industry is projected to grow by 6.62% from 2022 to 2032, indicating rising job opportunities in these roles.

Occupational Title	Employment 2023	Average Annual Openings	Hourly Mean Wage	Annual Mean Wage
Heavy and Tractor-Trailer Truck Drivers	23,850	3,047	\$28	\$57,690
Bus Drivers, School	8,370	1,497	\$24	\$49,470
FirstLine Supervisors of Transportation & Material Moving Workers, Exc Aircraft Cargo Handling Supervisor	11,940	1,367	\$31	\$65,260
Industrial Truck and Tractor Operators	11,000	1,136	\$22	\$45,440
Flight Attendants	N/A	311	N/A	N/A
Subway and Streetcar Operators	470	54	\$33	\$68,040
Crane and Tower Operators	380	42	\$32	\$67,150
Transportation Inspectors	370	41	\$43	\$89,960
Traffic Technicians	150	17	\$27	\$55,880
Aircraft Cargo Handling Supervisors	110	12	\$36	\$74,130
Air Traffic Controllers	110	11	\$52	\$108,160

In this sector, Heavy and Tractor-Trailer Truck Drivers show high demand (3,047 openings) and earn around \$57,690 annually, highlighting their essential role in logistics. First-Line Supervisors of Transportation Workers earn higher wages (\$65,260) with strong demand, underscoring their importance in overseeing operations. Bus Drivers (\$49,470) and Industrial Truck Operators (\$45,440) have steady demand, offering accessible entry points. Specialized roles like Transportation Inspectors (\$89,960) and Air Traffic Controllers (\$108,160) have higher wages but limited openings.

4.6. Green Energy:

The following table shows demand and earning potential for selected occupations in the green energy sector.

Occupational Title	Employment 2023	Average Annual Openings	Hourly Mean Wage	Annual Mean Wage
Solar Photovoltaic Installers	620	91	\$28	\$58,340
Environmental Engineers	540	49	\$51	\$105,230
Conservation Scientists	370	44	\$44	\$91,560
Environmental Engineering Technologists and Technicians	190	20	\$32	\$65,980
Hydrologists	80	7	\$67	\$140,210

In the green energy sector, Solar Photovoltaic Installers have high demand with an average annual wage of \$58,340. Environmental Engineers play crucial roles with high earning potential at \$105,230 annually. Conservation Scientists manage natural resources, earning \$91,560 per year. Environmental Engineering Technologists and Technicians have steady demand with wages around \$65,980 annually. Hydrologists, specializing in water resources, command high salaries of \$140,210 yearly.

4.7. Biotech:

Biotech careers show diverse demand and strong earning potential. Biological Technicians have the highest demand, with 593 openings and an average wage of \$53,760. “Biological Scientists, All Other,” and Microbiologists also have high demand and earn around \$108,000 annually. Biochemists and Biophysicists are highly specialized, with fewer openings but the highest pay at \$117,730. Bioengineers and Biomedical Engineers, essential in medical technology, earn \$111,470 with steady demand. Zoologists and Wildlife Biologists have fewer positions but earn a competitive \$89,270. Overall, these roles offer attractive wages in a growing field.

Occupational Title	Employment 2023	Average Annual Openings	Hourly Mean Wage	Annual Mean Wage
Biological Technicians	3,630	593	\$26	\$53,760
Biological Scientists, All Other	5,940	506	\$52	\$108,360
Microbiologists	1,970	178	\$52	\$107,940
Biochemists and Biophysicists	850	87	\$57	\$117,730
Bioengineers and Biomedical Engineers	470	33	\$54	\$111,470
Zoologists and Wildlife Biologists	340	28	\$43	\$89,270

4.8. Childcare:

The table below shows sample of occupations related to the childcare sector. The data in these occupations reflect varied demand and earning potential across this sector. Some of these occupations (such as teaching assistants) are related but not entirely limited to childcare sector.

Occ Code	Occupational Title	Employment 2023	Average Annual Openings	Hourly Mean Wage	Annual Mean Wage
25-9045	Teaching Assistants, Except Postsecondary	21,290	3,305	N/A	\$41,330
39-9011	Childcare Workers	6,990	1,942	\$17	\$34,410
25-2011	Preschool Teachers, Except Special Education	8,190	990	\$21	\$44,380

39-1022	First-line Supervisors of Personal Service Workers	3,400	632	\$25	\$51,690
21-1021	Child, Family, and School Social Workers	4,030	373	\$35	\$71,870
11-9031	Education and Childcare Administrators, Preschool and Daycare	N/A	120	N/A	N/A

In the childcare sector, Teaching Assistants, Except Postsecondary, have significant demand with 21,290 employed in 2023 and an annual mean wage of \$41,330. Childcare Workers, numbering 6,990, also face high demand but have a more modest annual mean wage of \$34,410. First-line Supervisors and Social Workers earn higher salaries, around \$51,690 and \$71,870 respectively. These roles reflect the varied demand and earning potential in the industry.

4.9. Hospitality:

In the hospitality industry, demand is highest for waitstaff and cooks, driven by high turnover and constant need in restaurants. Waiters and bartenders both earn around \$19 per hour, though they rely heavily on tips to boost income. Overall, positions with supervisory responsibilities or specialized skills, such as chefs, offer higher earning potential and career growth in this industry.

Occupational Title	Employment 2023	Average Annual Openings	Hourly Mean Wage	Annual Mean Wage
Waiters and Waitresses	35,160	7,246	\$19	\$39,430
Cooks, Restaurant	20,660	3,946	\$18	\$37,190
First-Line Supervisors of Food Preparation and Serving Workers	18,580	3,070	\$21	\$44,620
Bartenders	11,490	2,293	\$19	\$40,020
Food Preparation Workers	12,450	2,225	\$16	\$34,250
Hotel, Motel, and Resort Desk Clerks	3,490	525	\$16	\$32,410
Chefs and Head Cooks	2,730	373	\$32	\$66,560

Summary

Data presented in this section offers EARN Maryland a snapshot of workforce demand and earnings in key sectors like IT, healthcare, construction, and green energy. High-demand roles span from skilled IT and biotech positions to healthcare practitioners and essential trades, guiding EARN's training initiatives to meet Maryland's projected employment needs.

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