ANNUAL 2019 REPORT













The Honorable Larry Hogan, Governor The Honorable Delores Kelley, Chair, Senate Finance Committee The Honorable Dereck E. Davis, Chair, House Economic Matters Committee

Re: MSAR 9663

Dear Governor Hogan and Chairs Kelley and Davis:

I am pleased to present you the 2019 annual report for the Employment Advancement Right Now (EARN) Maryland program. Since being appointed to serve as Secretary of the Department in July, I have had the opportunity to witness firsthand the work of the EARN program. Seeing the Strategic Industry Partnerships in action and the lives that this program has impacted firsthand, it is no surprise to me that EARN has received national-recognition for its innovation and successful implementation of sector strategies.

As of October 2019, more than 4,500 unemployed and underemployed individuals have obtained employment as a result of their participation in EARN. Nearly 7,500 incumbent workers have benefitted from training, leading to increased skillsets and improved business outcomes for Maryland employers, including cost savings, increased productivity, and decreased attrition.

While the program is having a profound impact on the state's business community and workforce, it 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 \$18.43 in economic activity is created. The national average for similar programs is about \$3.41.

The Department is proud of the program's progress in 2019, and looks forward to sharing the continued growth and success in the years to come.

Best Regards,

Tiffany P. Robinson

Secretary

Over the last five years, EARN has changed the lives of countless Marylanders, many of whom have barriers to employment. The story below, in the words of an EARN participant, further illustrates the profound impact the program can have.



Eighteen months ago, I was broken. I was hopeless. I was defeated. I was addicted to heroin, and I was homeless. My only focus in life was "how can I make it to tomorrow?" One thing I was though, was tired. I called my mother to ask her to send me money, and she made some excuse about having problems with Western

Union. She wanted to drive it to me. She came all the way from Pennsylvania, about an hour and a half, to meet me. I was in one of the worst areas in Baltimore City. I will never forget this. When she pulled up, she gave me "the look," and told me to get in the car. At that very moment, I hated her. Looking back now, it was the most crucial moment in my life. She saved me from myself. In the year prior, I had overdosed five times. She took me to Pennsylvania for five days and allowed me to get the drugs out of my system. I proceeded to go to Helping Up Mission. This is where my life changed.

At Helping Up Mission, I got clean, I got a clear mind, and I became focused. A few months after being there, I learned about the Jane Addams Resource Corporation. I instantly knew that was what I wanted to do. I am really good at math, I love creating things, and I love anything that requires thinking and problem solving. I knew CNC [Computer Numerical Controls] was an industry where I could find a career.

I remember the first day I went to JARC, I was watching three trainees that were almost finished the program. I watched them writing code. I watched them using the CNC machines to make a really cool part, and I remember the look on their faces when it was finished and the measurements were correct. At that moment, I knew I had made the right decision. My attention to detail fits into this industry perfectly.

My favorite thing about JARC is that it was a work-at-your-own-pace program. Although I did that, I spent a lot of time helping those that came after me. Helping others helped me. It helped me see how other people approached certain problems. It strengthened my own skills. At JARC, I learned how to set goals. I learned about things in soft skills that I still use, things like budgeting, fixing your credit, resume skills, renting your own place, how to fix legal issues, and interview skills that absolutely helped me land the job I have now.

When I was ready to finish the program, I worried that I did not have any experience. Come to find out, going through the program gave me a foot in the door. After job-hunting for just a few days, I landed an interview. When I went to that interview, I was sure of myself. I let them know that I was going to work harder than anyone there. I told them how quick of a learner I was, and if they could just simply show me what to do, I would do it better than anyone. At the end of the interview, the manager shook my hand, and told me that although he had a few more interviews scheduled, the job was mine.

Today, I work for Danko Arlington in the Quality Assurance department. I am the only person working directly under the Quality Assurance manager. I say this because I have been told that I am being groomed to take over his position once he retires. Not only does this give me job security, but it assures me of how much I have to learn and keeps me motivated.

If you would have told me 18 months ago that I would be an integral part of making things that were used in fighter jets, submarines, tanks, trains, and even rockets, I would have called you a liar. But I am, and I love it. I am doing very important work. It motivates me to work hard, to learn everything I can, and do it with integrity. Not only was my probation period ended two months early, but I have already received a \$2 per hour raise.

After one year at Helping Up Mission, I graduated. Two weeks later, I moved into my own place. I set a goal for myself to save \$10,000 within one year of working. I am on pace to surpass that. I have rebuilt my credit score to almost a 700. I have a beautiful girlfriend and we do all sorts of fun things together. I have my family back in my life, and I see them all the time. I am working on getting my license back and getting a vehicle.

If you asked me about my number one goal, it would be to help other people conquer the things that I have and change their lives the way I did. I have set an example for several of my friends who followed me to JARC. I give them advice when it comes to schoolwork, to job hunting, interviewing, what I did, how I have rebuilt my credit and found my own place, and even how I have saved money. Every single thing you do in life can be used as a lesson.

Today, I am happy with the person I see in the mirror. I have purpose. I have direction. I have hope. Every day I strive to become a better person than I was the day before, learn something new, and help someone out. Nothing would be possible without the direction I gained while at JARC. I am extremely grateful that JARC helped me get my life on track, and I want to do everything I can to make JARC proud.

Table of Contents

EARN Success Story	4
Commonly Used Abbreviations	6
Maryland's Nationally-Recognized Workforce Solution	7
Targeted Investments Lead to Continued Growth	8
Cybersecurity/Information Technology	8
Green Jobs	8
Opportunity Zones	8
Continued Collaboration with Sister Agencies	9
EARN's Impact on Maryland	9
Impact on the State's Economy	10
Serving those with Barriers to Employment	10
Benefitting Employers	12
Improved Business Outcomes	13
Systems Change	14
Identification of Statewide Training Needs	14
Transportation and Logistics	15
Healthcare	15
Manufacturing	16
Job Readiness and Essential Skills Training	16
Tracking success, Accountability, and Participants	16
Third Party Evaluation	17
EARNMaryland Strategic Industry Partnerships	18
Transportation/Logistics	18
Biotechnology	20
Hospitality	21
Cyber/Information Technology	22
Healthcare	27
Green	30
Manufacturing	32
Construction	34
Automotive	37
Childcare	38
Natural Resources	38
Utilizing Data	38
Conclustion	39
Appendix A	40
Appendix B	42

COMMONLY USED ABBREVIATIONS

ASE	AUTOMOTIVE SERVICE EXCELLENCE
BEACON	BUSINESS ECONOMIC AND COMMUNITY OUTREACH
	NETWORK
CDL	COMMERCIAL DRIVER'S LICENSE
CEJA	CLEAN ENERGY JOBS ACT
CNA	CERTIFIED NURSING ASSISTANT
СТС	COMMERCIAL TRANSPORTATION CAREERS
DNR	DEPARTMENT OF NATURAL RESOURCES
DHS	DEPARTMENT OF HUMAN SERVICES
DSP	DIRECT SUPPORT PROFESSIONAL
EARN	EMPLOYMENT ADVANCEMENT RIGHT NOW
FSET	FOOD SUPPLEMENT EMPLOYMENT AND TRAINING
FY	FISCALYEAR
GNA	GERIATRIC NURSING ASSISTANT
MTA	MARYLAND TRANSIT ADMINISTRATION
MEA	MARYLAND ENERGY ADMINISTRATION
MVLS	MARYLAND VOLUNTEER LAWYER SERVICE
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
RA	REGISTERED APPRENTICESHIP
ROI	RETURN ON INVESTMENT
SIP	STRATEGIC INDUSTRY PARTNERSHIP

MARYLAND'S NATIONALLY-RECOGNIZED WORKFORCE SOLUTION

Established in 2014, Employment Advancement Right Now (EARN) Maryland is the State's nationally-recognized workforce solution. The program is industry-led, designed with the flexibility to ensure that Maryland's businesses have the talent they need by focusing on industry sector strategies that produce long-term solutions to sustained skills gaps and personnel shortages. Based upon employer-identified training needs, Strategic Industry Partnerships (SIPs) provide education and skills training to unemployed and underemployed Marylanders, including support for individuals with specific barriers to employment. The program also provides career advancement strategies for incumbent workers, leading to a more highly skilled workforce and improved business outcomes for employers.

EARN continues to be recognized as a national leader for its implementation of sector strategies. The program has been proclaimed a best practice by numerous organizations, including the National Skills Coalition and the Urban Institute. In 2018, EARN was named one of the Top 25 programs in Harvard's 2018 Innovations in American Government Award competition, which highlights exemplary models of government innovation. Recognizing the success of the program, other States, such as Montana and Minnesota, have modeled legislation after the EARN statute and have sought out technical assistance from Department staff around how to implement and scale similar programming in their respective states.

The success of EARN is seeded in collaboration among a diverse group of stakeholders including employer and industry partners, non-profit and community-based organizations, and workforce, economic development, and education partners. 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, the development of curriculum, and the design of training programs.

While traditional workforce programs look to training entities or higher education to fill this role, EARN looks first to business to drive this process. Based upon industry demand, employers are challenged to develop curriculum that will effectively meet their 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. Once these needs are identified and curriculum is developed, members of the SIP set

out to implement their Workforce Training Plan (WTP). Because partnerships are comprised of diverse organizations with distinct strengths, each is able to leverage their central expertise, which yields the greatest level of success for implementation. For instance, non-profit and community-based organizations are especially adept at recruitment, screening, and providing case management services for barriered populations, whereas higher education partners are especially nimble in effectively delivering curriculum around technical skills. The symbiotic, complementary composition of EARN SIPs has significantly contributed to the success of this model.

In response to continued employer demand, the program remains focused on two distinct subsets of the workforce. Regardless of industry and region of the state, employers identify a similar challenge around recruiting candidates with the appropriate skillsets for their employment opportunities. This trend seems to be heightened by an exceptionally low unemployment rate. As such, EARN SIPs are providing



entry-level training opportunities that are meant to prepare unemployed and underemployed individuals with the relevant skills to obtain employment in a given industry. As of October 2019, more than 4,500 individuals, or 84 percent of program graduates, have obtained employment. Due to their participation in EARN, employers benefit from a pipeline of candidates with relevant skills to consider for hire, thus decreasing screening, interviewing, and training costs, and reducing the attrition rate for their workforce.

Additionally, employers identify incumbent worker training as a cost-prohibitive, yet indispensable tool that is critical for expansion, retention, and improved business outcomes. An incumbent worker is an individual who is already employed in the target industry, and who seeks to obtain additional training or credentials. As of October 2019, nearly 7,500 incumbent workers have participated in training, earning a new skill, certification, or credential. Not only does this result in a more highly skilled workforce, but employer partners identify added benefits, such as improved productivity and cost savings.

"Due to EARN training, we have increased our efficiencies by 1.5 percent overall and reduced scrap and waste by 0.9 percent. As a result of a more highly skilled team, we have increased profitability - an additional \$1M to our bottom line!"

TARGETED INVESTMENTS LEAD TO CONTINUED GROWTH

Cybersecurity/Information Technology

Under Governor Hogan's leadership, the funding for EARN has more than doubled since 2015. In addition to the \$4 million historically appropriated for the program, in Fiscal Years (FY) 2018 and 2019 Governor Hogan invested an additional \$3 million for training in the fields of Information Technology and Cybersecurity. This funding remained level in FY2020, and has allowed for the number of SIPs targeting this industry to grow by 280 percent.

In addition to awarding a number of new grantees and broadening the program's geographic reach, this investment has further solidified Maryland as a premier place to do business in the Cybersecurity and Information Technology industries. Added funding has significantly increased the number of individuals trained, thus growing the pipeline of highly-skilled professionals available for employment, and has enabled SIPs to serve a larger number of employers. To date, this added investment has led to more than 500 individuals being placed into employment and over 650 incumbent workers have benefitted from training.

Green Jobs

Additionally, since FY18, Governor Hogan has committed \$1 million annually for green jobs training. This funding has been instrumental in ensuring that employers around the State have a workforce with the relevant skills necessary to meet the demand in this growing industry. EARN staff has worked closely with the Maryland Energy Administration (MEA) on this effort, who have provided subject-matter-expertise and participated in grant and program review.

Though this specific funding will sunset at the end of FY20, the Department is working with MEA to implement the Clean Energy Jobs Act (CEJA)¹. Passed during the 2019 Legislative Session, the CEJA will provide \$8 million to the Department of Labor to support clean energy job development utilizing Pre-Apprenticeships and Registered Apprenticeships (RA). The Department is working closely with MEA on planning efforts to ensure a smooth implementation rollout.

Opportunity Zones

In January of 2019, Governor Hogan announced a series of initiatives and legislation to further expand Maryland's Opportunity Zone program. Part of this investment included the establishment of Opportunity Works, which will provide funding to EARN SIPs that benefit jobseekers and employers in and around Maryland's 149 Opportunity Zones. In FY20, \$500,000 has been earmarked and allocated to three SIPs that are currently delivering relevant, in-demand training opportunities to benefit those in Opportunity Zone designated communities.

Chapter 757 of the Acts of 2019

Continued Collaboration with Sister Agencies

As prescribed in the Labor and Employment Article § 11-706(a)(1) of the Maryland Annotated Code, EARN should collaborate with sister agencies to ensure a highly trained and qualified state workforce. Over the last few years, EARN has partnered closely with sister agencies, including the Maryland Transit Administration (MTA) and the Department of Natural Resources (DNR) to meet this call.

As highlighted in the 2018 EARN Annual Report, the MTA has a strong demand for a pipeline of skilled drivers to fill their open positions. EARN grantee Maryland New Directions launched their Commercial Transportation Careers (CTC) Program in 2018. The CTC program includes 90 hours of classroom training coupled with hands-on, behind-the-wheel training, culminating in the acquisition of a Commercial Driver's License (CDL) – B with Passenger Endorsement and Air-Brake Certification. After learning about and visiting the program, MTA Administrator Kevin Quinn praised the high caliber of training. Graduates of the CTC program have since been hired by the MTA, who is benefitting from a stronger pipeline of qualified candidates. Given the success of this collaboration, the two organizations are exploring how to grow their partnership.

DNR continues to utilize EARN funding to fulfill their need for a qualified pipeline of skilled workers for entry-level positions. The Work2Live WELL program, initially funded in 2018, was the first direct investment into the public sector via EARN. To date, nearly 30 individuals have obtained employment as a result of this partnership. DNR also identified a need to upskill their incumbent workforce. To date, close to 40 incumbent workers have participated in leadership training, which will continue to benefit DNR in the years to come.

The Department of Labor also continues to partner closely with the Department of Human Services (DHS) on their implementation of the Food Supplement and Employment Training Program (FSET). 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. FSET 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 andgrowing 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.

To maximize access, Labor and DHS have worked together to provide outreach and education on the opportunities available to leverage different funding sources, including EARN and FSET. As a result, the number of EARN grantees receiving FSET funding has significantly increased over the past year. Currently, 11 EARN grantees are utilizing FSET funding, representing an increase of nearly 50 percent over 2018. New EARN partners to FSET include ByteBack, Goodwill Industries of the Chesapeake, the Maryland Food Bank, NPower, and the National Center on Institutions and Alternatives. In 2020, Labor and DHS will continue to collaborate on ways to grow the synergy between these two programs, which will ultimately increase the number of Marylanders able to access in-demand training opportunities.

Secretary Robinson and USDA Deputy Secretary Stephen Censky congratulate graduates of Humanim's Administrative Assistant program.



EARN'S IMPACT ON MARYLAND

The predominant goal of EARN is to provide a more highly skilled workforce for Maryland employers. As has been highlighted in the preceding pages of this report, this means providing in-demand, relevant skills training to unemployed or underemployed Maryland residents. Additionally, incumbent workers receive training to increase their skillsets, which may lead to increased wages. Overall, the program is increasing the earning potential for Maryland's workforce, which directly and positively impacts the State's economy.



Impact on the State's Economy

Through providing vital training opportunities to Maryland's workforce, EARN has a cascading impact on the State. Many of the individuals trained through EARN are unemployed or underemployed and may be accessing public assistance. As these individuals complete EARN-funded training and obtain full-time, unsubsidized employment, many are able to transition off of public assistance and become taxpayers. Additionally, the program is improving business outcomes for Maryland employers, enhancing the health of these companies and growing profitability. Finally, the Return on Investment (ROI) continues to show that the state funding invested into the program yields a strong economic return.

On an annual basis, the Business, Economic, and Community Outreach Network (BEACON) of Salisbury University performs an economic impact study to calculate the ROI for EARN Maryland. The ROI is utilized to determine the effectiveness and efficiency of the public funding invested into the program. The calculations, which are standardized across a wide variety of geographic and industry sectors, utilize large amounts of data supplied by each grantee. The ROI calculation uses two inputs: the EARN funds invested by the Department in the current year and the dollar value of leveraged resources invested by SIPs. The outputs tracked include changes in participant earnings, the value of retained jobs, and multiplier impacts of new jobs and increased wages (i.e. how additional earnings trickle down to the economy due to increased disposable income). The calculation also takes into account the number of participants placed into jobs, net new jobs created, and net new wages created per \$100,000 investment. The analysis for FY2019 shows that for each dollar the State invests in EARN, an additional \$18.43 is created in economic impact.

Serving those with Barriers to Employment

As of November 2019, Maryland's unemployment rate was 3.6 percent, which is the lowest unemployment rate in over eleven years. At the same time, targeted sectors in the State are experiencing and anticipate continued growth. Thus,

the potential pool of candidates to meet this demand is limited, and many have barriers, which may make it difficult to obtain and retain employment. Some of these barriers include lack of transportation, homelessness, low educational attainment, limited work history, and involvement with the criminal justice system.

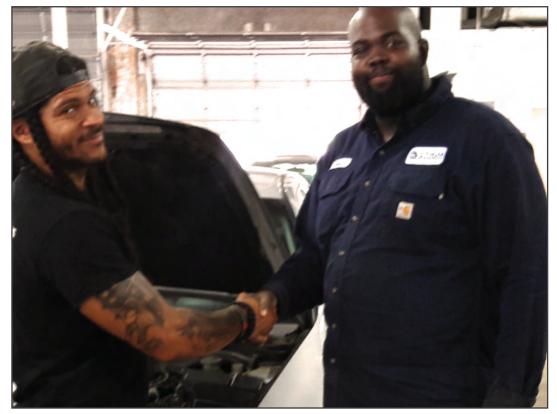
EARN was created in the spirit of collaboration, requiring that SIPs bring together a diverse group of organizations to meet the needs of a given industry and the individuals benefitting from training opportunities. The goal is for each organization to lift up their strengths. As such, many SIPs providing training to unemployed and underemployed individuals include a non-profit or community-based organization, as they are especially adept at removing any barriers their clients are facing. In an effort to provide holistic services, these organizations work with trainees to develop individualized plans that address and remove any barriers that will hinder success during and after the completion of training. Examples of barrier removal services include record expungement, transportation assistance, financial education, providing bridge instruction in math and reading, and stipends for training.

A lack of reliable transportation remains the most pervasive barrier faced by EARN participants. Public transportation can be time-intensive and unreliable. Additionally, some industries, like construction and healthcare, require travel to different work sites, making a car a prerequisite for success. Therefore, transportation is critical to job retention.

Many grantees continue to partner with Vehicles for Change as a solution for this challenge. In addition to the Automotive Technicians for Change Program, the organization has a car award program that provides vehicles to low-income families. Through this program, EARN trainees have been awarded vehicles at a low cost with low interest loans, allowing trainees to build credit, while providing reliable transportation to and from work.

That being said, the barrier of transportation is complicated and often times involves more than just the need for a vehicle. For instance, there are many costs associated with transportation, such as driver's education, insurance, and fees associated with suspended licenses. Several partnerships are employing a flexible approach, working with different funders that are helping to remove these various transportation-related barriers. Given the flexibility of the program, there are instances where EARN funding is able to pay for these transportation-related costs.

Another prevalent barrier for EARN trainees is involvement with the criminal justice system. However, some industries, such as manufacturing, construction and green tend to be more amenable to hiring candidates with a criminal



Ricardo, who completed the Careers in Manufacturing Program, receives a car from Vehicles for Change, ensuring he has reliable transportation to his new job with a local manufacturer.

background. In an effort to increase the employability of trainees with criminal justice involvement, SIPs have partnered with organizations like the Maryland Volunteer Lawyer Service (MVLS), a non-profit legal services provider dedicated to meeting the need for pro bono civil legal services for low income individuals. A best practice realized through this work is bringing organizations like MVLS on-site during training to work individually with clients. It is estimated that well over 500 cases have been expunged across numerous EARN SIPs, leading to increased employability of individuals that have a criminal background.

Additionally, through job readiness training, participants learn how to address "red flags" during the interview process, including criminal backgrounds, and practice these techniques through mock interviews. Finally, partnerships have identified their employer partners who are willing to consider candidates with a criminal background and utilize this information during the job placement process, intentionally matching appropriate candidates with "background friendly" employers. Financial education has become an important tool for SIPs working with barriered populations. Individuals who have struggled with long bouts of unemployment may have limited experience managing finances. Implementing comprehensive financial education training is an important mechanism for encouraging the financial resilience of trainees, especially once they have obtained employment.

For instance, in the last year, Civic Works has developed, implemented, and refined its financial education instructional and coaching curriculum for trainees. Through the program, each participant is able to create a checking account, linked savings account, direct deposit, and an automatic savings transfer. Combined with credit building, the program supports participants in meeting financial goals and strengthening their ability to manage financial disruptions. As a result of participation in financial education training, nearly 90 percent of participants agreed or strongly agreed that they have the skills and knowledge to manage their finances, and nearly 70 percent of participants have a bank account and are able to receive direct deposit.

Over the last five years, EARN has transformed countless lives, providing opportunities to individuals that sorely needed them, that otherwise may not have been available. Below is a small sampling of EARN participants who have overcome barriers to employment and successfully entered the workforce.

From his big smile, calm demeanor, and strong work ethic, one would never guess that Sean, at just 15-years-old, was convicted of murder and gun charges and served 21 years at various Maryland prisons. Young and angry, Sean stated, "I had to learn to be myself and not imitate society's image of who I was supposed to be based on my race and the kind of neighborhood I was from. It was as if I had been looking at myself through a pair of glasses with

lenses that belonged to somebody else." Once Sean began to look at himself through a new lens, he was able to see new opportunities on the horizon. While incarcerated, Sean earned his Maryland High School Diploma and took automotive classes through Labor's Correctional Education programming. While on work release, Sean blazed a path through the Full Circle program. He made a huge impression on the staff, instructors, and other interns at Vehicles for Change. He became an example of what one can achieve if they stayed focused and took all that the program had to offer. Just months after being released from prison, Sean was offered a full-time position at the very organization that believed in him and gave him a second chance. Sean now is the on-the-job training facilitator and an instructor for Vehicles for Change. He is currently studying to become a state inspector. – **Automotive Technicians for Change**

Prior to enrolling in the Remediation and Construction Industry Partnership (RCIP) training, Eli had been incarcerated for three years. Before having a criminal background, he had experienced difficulty finding a full-time, family sustaining job, and was only able to access employment through temp agencies. The challenge only escalated when he returned home from prison. He heard about the RCIP program in the home detention office and decided to apply. During his time in training, he learned a variety of skills and earned five industry-recognized certifications. Furthermore, through Civic Works' community partnerships, he was able to expunge parts of his record. Soon after graduating, Eli was hired by an employer partner earning \$14 an hour. Soon after, he received a promotion to \$15.50 an hour. To his excitement, Eli was recently elevated to the position of Foreman, where he expects to earn over \$18 an hour. "If I'd realized this life was possible, I would have done it sooner." – *Remediation and Construction Industry Partnership*

Before coming to Humanim's Administrative Assistant training program, Sarah was experiencing challenges around food stability, childcare, and housing. Throughout the nine-week training period, Humanim staff was able to connect Sarah with resources that helped her to combat these issues. She excelled in training and received a job offer prior to graduating from the program. Sarah is gainfully employed as an administrative assistant and was recently able to transition to her own apartment. – *Baltimore Regional Healthcare/Higher Education SIP*

Dan was referred to Western Maryland MOVE after being released from prison. He enrolled in training at the Day Reporting Center, where he earned his forklift certification and his CDL B. Dan is currently working with a transportation and logistics employer based in Williamsport, where he earns more than \$20 per hour. – *Western Maryland MOVE*

Micah began his journey while incarcerated at the Charles County Detention Center in June of 2019. He was enrolled in the Successful Transition and Reentry Skills (STARS) program and while there became a participant in the Construction Workforce Partnership for Southern Maryland Pre-Apprenticeship program. Micah attended four of the Pre-Apprenticeship courses delivered at the Detention Center as part of this program, receiving industry certifications and continuing education units for Occupational Safety and Health Administration (OSHA)10, CPR, Excavation Safety, American Traffic Safety Services Association Flagger, and Confined Space Entry. Upon release, Micah was able to connect with the Independent Electrical Contractors (IEC) apprenticeship program, who then worked with him to find employment. He was quickly picked up by a company member of IEC and is now employed full time! – *Construction Workforce Partnership for Southern Maryland*

Mariah was a recent high school graduate and single mother of a one year old when she found the BioTechnical Institute of Maryland. She was determined and motivated throughout classroom training and landed an internship at PathSensors. Upon completion of her internship, Mariah was offered a full-time position earning \$16.50 per hour with full benefits. Since completing training, she is proud to report that she has met all of her personal goals and is well on the path to a long career with financial stability. — *Baltimore BioPrep*

Benefitting Employers

Since the inception of the program, more than 1,000 employer and industry partners have participated in SIPs. EARN was developed to improve the business climate in the State by providing skills training that resulted in a more highly skilled workforce. This was in direct response to industry concerns around skills gaps and personnel shortages. While the program is succeeding in growing the pipeline of qualified workers and providing valuable opportunities to incumbent workers, employers identify additional benefits as a result of their participation in the program.

WHAT EMPLOYERS ARE SAYING ABOUT EARN MARYLAND

"We struggle to obtain training dollars so anytime we can get our staff training through this program we accommodate their schedules and pay for their time to take the training. It absolutely helps with employee satisfaction, as well as helps our organization to have more trained staff members."

"Prior to EARN, our company remained flat in revenue for 8 years. Since we began participating in EARN and reaping the benefits of training, our company has grown 20-40 percent over the past 3 years. We have made the inc 5000 in 2018 and 2019 and doubled our workforce from 15 to 33. The EARN grant creates a culture of learning, training, retaining and recruiting that builds successful businesses."

"This partnership will save our company time and money, along with potentially contributing to our diversity and inclusion goals in 2020. I am confident we will continue to collaborate with [the SIP] to recruit the diverse talent we need to achieve our mission."

"Another best practice would be our Tech at the Gap conference, which provides excellent training for all attendees. The growth of the conference has been great and this year many students from our local high schools and colleges were in attendance, and made comments about how much they enjoyed the experience while meeting people already working in the tech industry. This kind of networking is invaluable not only to the students but also to those in the industry. Since we live in a rural area providing such a venue of networking and professional development is most certainly a best practice for us."

Improved Business Outcomes

Employers identify improved business outcomes, including cost savings and increased revenue, as a result of their participation in EARN. Because the program utilizes an industry-led model, training is tailored to meet the specific needs of employer and industry partners and yields a strong pipeline of qualified applicants with the skills necessary to be successful in these roles. As such, employers participating in EARN programs indicate lowered expenses around the screening and interviewing of job applicants.

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 be successful in their open positions. Finally, employers are able to leverage EARN funding for incumbent worker training opportunities. This generates additional cost savings

as company training dollars can be utilized on other efforts. Conversely, a larger number of incumbent workers may benefit from training opportunities. Studies show that investing in employees for training can increase retention, resulting in lowered costs around hiring processes.

Employers also identify increased revenue as a benefit of their participation in EARN. For example, incumbent worker training is identified as an important tool for growth, but is often cost-prohibitive for small to mid-size companies. A company participating in the Tech Frederick partnership identified EARN as the conduit for a revenue increase of 20-40 percent over the past three years, after remaining flat for the previous eight. Additionally, this employer was able to double their workforce due to the contracts secured based upon a more highly skilled staff.

Systems Change

Employers also identify systems change within their organization because of participation in EARN. For instance, an employer partner with the Susquehanna Transportation and Logistics Partnership has altered hiring practices based upon their work with the SIP. Previously, the employer required candidates to have a certain amount of experience in order to be eligible for hire. However, after witnessing the caliber of students graduating from the program at Cecil College, the employer exclusively hires graduates of the program, waiving the experience requirement for these individuals. The SIP credits this to the industry-led curriculum that incorporates comprehensive, sequential training on advanced techniques and procedures, which is enhanced by the use of a simulator that mimics real-life experiences.

Additionally, companies have identified EARN as an important tool for meeting diversity and inclusion goals within their strategic plans. EARN SIPs traditionally recruit individuals with barriers to employment, providing in-demand training that meets employer demand. This, coupled with intensive wraparound services and barrier removal, makes EARN a prime pipeline for companies seeking to hire individuals that they may not have previously considered.

Finally, EARN programming is helping to transform the culture in certain regions, making them more attractive to potential hires and businesses looking to relocate. For instance, the IT Center for Excellence, led by Allegany College, has brought many important tools for growth to area employers. From providing internship opportunities meant to encourage students to stay in the area post-graduation, to invaluable trainings for incumbent workers, employer partners express great satisfaction with the efforts of the SIP. In 2019, the IT Center for Excellence hosted its fourth annual Tech at the Gap conference. Tech at the Gap is meant to deliver quality networking and professional development opportunities, with the overarching goal of highlighting Western Maryland as a "tech ready" region.

IDENTIFICATION OF STATEWIDE TRAINING NEEDS

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.

Based upon feedback from employer and industry partners, EARN SIPs are providing training to three distinct subsets of the workforce:

Unemployed/Underemployed: Employers continue to identify the need for a pipeline of qualified individuals to fill their open positions. 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: An incumbent worker is an individual who is already employed 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 small and mid-sized companies 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.

Preparatory: Preparatory training serves individuals who are not ready to enter the workforce, but would benefit from training and education. Employer and industry partners identify preparatory training as an important tool for preparing the future workforce for employment opportunities in the coming years.

For example, the Skilled Trades have reported increased difficulty in recruiting millennials and Gen Z for their open positions. The reasons are vast, but mainly stem from misperceptions about the industry and a singular focus on pursuing higher education after high school. As such, some Skilled Trades-focused EARN SIPs are implementing WTPs that include preparatory training for high school students.

In 2019, the Finishing Trades Institute partnered with local school systems, including Prince George's and Anne Arundel Counties to pilot a program that provided basic industry skills and availed students to the career paths available through



A graduate of the Susquehanna Transportation and Logistics Partnership visits training with his new vehicle.

RA opportunities. This exposure encouraged students to think about an industry that they may not have considered previously and it is the hope of industry partners that this will strengthen the pipeline of qualified workers in the future. While the number of SIPs providing preparatory training is small, these opportunities are an important step towards full employment and are having positive impacts on the industries they target.

As is reflective of the state's industry composition, EARN continues to invest in a variety of industries, including Information Technology, Healthcare, Manufacturing, Skilled Trades and Green. The training needs and skills gaps vary based upon industry and region, but there are some commonalities, as described below.

Transportation and Logistics

Employers in the transportation and logistics industry continue to identify the need for skilled drivers to meet the growing industry demand. As such, SIPS focused in this industry continue to provide relevant, cutting-edge training for CDL A and B drivers. However, as the demand for drivers has increased, a new need has emerged. In order to maintain the growing number of fleets in operation, employers identify a need for highly skilled diesel mechanics.

In response to this need, Mid-Maryland MOVE, Western Maryland MOVE, and A Road to Success will all implement

newly developed diesel mechanic training in 2020. For example, based upon industry feedback, Anne Arundel Workforce Development Corporation, who leads A Road to Success, has developed a 200-hour training, which incorporates classroom instruction and hands-on experience. Candidates who complete this comprehensive training will be prepared for entry-level positions as technicians in diesel engine repair and related fields and will be eligible to sit for the Automotive Service Excellence (ASE) Automotive Maintenance and Light Repair (G1) certification exam.

Healthcare

The landscape of the healthcare industry continues to evolve at a rapid pace. As the number of Marylanders accessing care has significantly increased, so too has the need for entry-level frontline workers. However, employers continue to express difficulty recruiting and retaining individuals for positions like Certified Nursing Assistants (CNA) and Geriatric Nursing Assistants (GNA), which are typically physically demanding roles that often come with low pay. The high attrition rate for these positions places employers in a constant cycle of recruitment, screening, on-boarding, and training, which is costly and can negatively impact patient care.

In response to this workforce challenge, many SIPs have developed creative retention strategies for these positions. For example, Ready to Care is offering additional certifications to recently trained CNAs and GNAs in topics such as phlebotomy, pharmacy technician, medical administrative aid, and electrocardiogram technician. The goal for offering these certifications is two-fold: employees are able to command higher wages, which may lead to increased retention, and these individuals are more highly skilled, benefitting the employers who hire them.

"This program has allowed us provide advancement opportunities for our incumbent workers and improved employee retention. Thanks to the EARN MD program and BACH, several of our CNAs have been trained and are now certified Patient Care Technicians within our organization. This investment in our employees helps to affirm our commitment to their professional growth and development in performing exemplary patient care."

Industry partners employing Direct Support Professionals (DSP) experience similar challenges, with an average turnover rate of nearly 50 percent. The Maryland DSP Consortium, led by SEEC, continues to do innovative and collaborative work to alleviate the high attrition rate through the creation of the DSP II credential. Developed utilizing employer feedback, this training and credential is meant to build a career pathway to encourage retention. Over the last 18 months, the partnership has further refined the curriculum and has trained over 100 individuals. The consortium is currently implementing a mentoring training track, which will provide DSP II's the skills to support and guide newer hires, another strategy to decrease the attrition rate.

Manufacturing

Maryland manufacturers continue to struggle with overcoming the stigma of the industry, and express difficulty in filling vital positions. Moreover, it is anticipated that between 30-50 percent of the workforce will retire in the next five years. Given these challenges, SIPs are focused on broadening the pipeline of potential workers for the industry, and are doing so through the engagement of new stakeholders, including higher education and K-12 partners.

In 2019, the Rapid Advanced Manufacturing Partnership continued to offer internship experiences to college students, a demographic that typically does not consider the industry for employment opportunities post-graduation. Exposure to the day-to-day operations of a manufacturing plant helps break down the stigmas associated with the industry, and illustrates the wide array of opportunities available upon graduation. To date, more than 40 students have completed internships with Maryland manufacturers.

SIPs also recognize the importance of engaging K-12 partners to grow the pipeline of skilled workers. The Maryland Advanced Manufacturing and Plastics Partnership, for example, has forged a close working relationship with Baltimore County Public Schools. The SIP is providing professional development opportunities for teachers, administrators, and school counselors with the goal of dispelling the myths of the industry and educating these important stakeholders on the opportunities that working in manufacturing presents. Over the last three years, industry partners have hosted students from Baltimore County for internship opportunities, demonstrating the success of this collaboration.

Job Readiness and Essential Skills Training

Given EARN's focus on providing training and employment opportunities to unemployed and underemployed individuals, job readiness training is a vital component of programming for EARN SIPs. Job readiness training is training for the purpose of assisting and supporting low- and no- skilled workers in overcoming individual barriers to employment and developing the skills required to maintain employment. Job readiness training may include development of professional skills, literacy advancement, transportation, childcare and financial stability services including financial coaching.

Regardless of industry, region or subset of the workforce, employer partners overwhelmingly identify the need to further develop and teach essential skills. In fact, employers identify that essential skills are equally, if not more important, than technical skills, when evaluating a candidate. Examples of essential skills include, but are not limited to, skills related to professionalism, problem solving, timeliness, interpersonal communication, and customer service.

While the implementation of essential skills training may vary, all partnerships have some component of this training throughout their programming. Some SIPs teach essential skills in a classroom setting, whereas others model this through a simulated work environment. The Careers in Manufacturing Program, for instance, embeds essential skills into day-to-day training, which mimics workplace expectations and reinforces high standards for personal accountability.

TRACKING SUCCESS, ACCOUNTABILITY, AND PARTICIPANTS

Labor's EARN staff work closely with each SIP to provide customized support through the duration of the grant. The development of a strong working relationship with each grantee allows staff to better understand the challenges and successes of each partnership, and helps to ensure accountability. Staff work with partnerships to highlight accomplishments of training programs and to implement technical assistance plans if outcomes are not being met. Program staff strive to work collaboratively with each partnership, with the goal of creating an environment of trust and support that allows continuous improvement and innovation.

Additionally, Labor staff work with grantees to develop goals and measures of success for their individual partnerships. Due to the flexible composition of EARN, each partnership is unique in its goals and there are different means to measure success. 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, there are a variety of different means utilized to evaluate SIP success. Quantitatively, EARN partnerships are evaluated based upon the number of unemployed or underemployed participants who complete training and are placed into employment or the number of incumbent workers trained. Program staff review the ROI, as calculated by BEACON, along with indicators such as new employers engaged and leveraged funding. 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.

On a quarterly basis, grantees are required to support the following reports to the department:

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

Programmatic oversight is provided to ensure that the partnership is on track to meet timelines, outcomes, and other deliverables outlined in the Grant Agreement and that data is complete and accurate. Fiscal oversight is provided by at least three staff at the department to confirm expenditures are allowable and reasonable.

Per the Labor and Employment Article § 11-709(b)(4) of the Maryland Annotated Code, EARN Maryland 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 or not 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, 2018 through June 30, 2019 are included as Appendix A to this report.

Given the structure of reporting for grantees, the outcome figures in this report may be under-reported. For instance, the demographic data in Appendix A includes all individuals

who enrolled in EARN-funded training for the period beginning July 1, 2018 and ending June 30, 2019. Entry-level training programs last anywhere from three to six months. Additionally, grantees have up to six months to report outcomes on individuals who complete training. Thus, someone who enrolled in training in April 2019 may not have completed until October 2019. The outcome data on that individual will not be reported until April of 2020.

Third Party Evaluation

The EARN Maryland program continues to partner with BEACON at the Perdue School of Business at Salisbury University to evaluate the effectiveness of the program. The broad areas for evaluation include assessment of the value to trainees, the value to employers, the quality and effectiveness of the partnership and systems change among, and within the industry and partner institution.

To ensure that the program is meeting its goal of improving Maryland's business climate through the implementation of an industry-led model, BEACON disseminated an Employer Satisfaction Survey to employer and industry partners. The goal of this survey is to ascertain the program's progress and effectiveness in serving employers. Employers are asked to rate the competitive advantage EARN participants have over other candidates, the impact participation in the program has had on their business, and whether or not they believe EARN is a worthy investment of their time.

Seventy-five percent of employers surveyed indicated that EARN participants have a significant advantage over their peers, with 25 percent indicating that there is some advantage. Ninety-seven percent of respondents indicated that the investment into EARN is worth their time, and 93 percent feel that EARN has had a positive impact on their business. Employer and industry partners had the opportunity to provide open-ended feedback. A sampling of this feedback is provided below.

- "Time after time, we get the most qualified and ready trained employees walking in the door."
- "The training provided through the EARN program is industry-leading with top notch instructors. Completing the training enables our associates to grow more quickly in their roles, and in some cases prepare them for bigger roles within the organization."
- "Employees having access to Affordable GREAT training - This is HUGE!!!"
- "Those that graduate from the program are current in their skills and were competitively vetted in order to attend the school. They tend to hit the deck running making them a more valuable asset than most new hires for our entry-level welders and fabricators."

- "These classes give our employees skills that make them better at their jobs."
- "Training dollars are often hard to come by and we take advantage of the EARN opportunities whenever possible. In the Healthcare Tech business staying on top of the competition for knowledge is very important."
- "We have never gotten so many well trained, but more importantly, professionally sound employees in my three years of working for a transportation company than since we started with [Partnership]"
- "Worth every penny!"
- "Highly beneficial program."

Overall, the results of this survey further solidify the effectiveness of EARN for employer and industry partners around the State.

The staff at BEACON works closely with staff from each of the SIPs to understand challenges and successes of the individual programs. This is done through individual and sector-based meetings. These interactions frame the report that BEACON submits to the Department each year. This report, which includes all interview, case study, reporting, evaluation and accountability documents and tools, provides an independent evaluation of EARN's impact.

In this report, BEACON highlights the economic impact study completed in 2019. As highlighted earlier in this report, for every dollar the state invests, an additional \$18.43 in economic activity is created. The nationwide average ROI for workforce development programs is \$3.41. This further illustrates the value of the industry-led model and the EARN program's impact on economic and workforce development in Maryland.

EARN MARYLAND STRATEGIC INDUSTRY PARTNERSHIPS

The following section provides a list of the SIPS that were active in 2019, the region in which they are operating, and a programmatic update.

Transportation/Logistics

Susquehanna Transportation and Logistics SIP

Region: Susquehanna

In 2019, the Susquehanna Transportation and Logistics SIP continued to implement in-demand training to benefit one of the largest sectors in the Susquehanna region. In response to employer demand, this partnership is providing CDL A and B training opportunities. Upon completion of training, students have the opportunity to attend a job fair and interview with employer partners, such as Performance Food Group, Burris Logistics, and Schneider National. The partnership continues to place nearly 90 percent of graduates into employment.

In 2019, lead applicant Cecil College earned a National Standard of Excellence, becoming Professional Truck Driver Institute certified. This certification speaks to the rigor and high standards of the program, and indicates to employers that students have the skills necessary to thrive in the transportation and logistics industry. Additionally, insurance companies are more likely to waive the minimum years of experience required for new hires coming from PTDI certified schools, which is an added benefit and cost savings for employers.

Participant Success Story: Marlon is a single father of two. In the past, he had struggled to find a year-around position that would support his family. Marlon excelled in training, despite personal obstacles, including the death of a close family member. He turned his struggles into motivation and graduated with one of the top grade point averages. Upon completion of the program, Marlon immediately secured employment, earning a family-sustaining wage in a career that will allow him to support his family for years to come.

Mid-Maryland MOVE

Region: Montgomery County

Employers in Montgomery County and the surrounding region continue to express a growing need for commercial vehicle drivers. In fact, a single Mid-Maryland MOVE employer partner reports that their company projects adding 100 new drivers

in the coming months. In early 2019, Mid-Maryland MOVE engaged employer partners to ascertain emerging skills gaps and changes in industry demand in order to ensure that employer needs continue to be met through their training efforts.

In July of 2019, Mid-Maryland MOVE was awarded additional EARN funding to provide training based upon the feedback received from their employer partners. With this funding, Montgomery College is providing CDL A and B training to unemployed and underemployed individuals to meet the demand for skilled drivers. Additionally, several employers expressed a need to upskill their current workforce. With specific skills in mind, the partnership developed Mechanic Technician training, which targets incumbent workers. Upon completion of this course, individuals are likely to be promoted, earning higher wages and bridging an important skills gap within the industry.

Participant Success Story: When Theodore entered training at Montgomery College, he was employed part-time as a clerk, making less than a family-sustaining wage. Upon completion of training, he immediately accepted a position with Prince George's County Public Schools as a school bus driver. He is now earning over \$20 per hour with benefits. Of his experience, Theodore said, "I am positive that when my employer asked where I took my training and I told them Montgomery College as an EARN Maryland student, it got me the job!"

"I am positive that when my employer asked where I took my training and I told them Montgomery College as an EARN Maryland student, it got me the job!"

Western Maryland MOVE

Region: Western Maryland

Led by Hagerstown Community College, this partnership continues to provide training to meet the needs of more than 20 transportation and logistics-focused employers in Western Maryland. In 2019, Western Maryland MOVE provided vital training opportunities to unemployed and underemployed individuals in Forklift, CDL A, and CDL B. Additionally, due to an aging workforce and anticipated retirements, employer partners also expressed a need to provide training for frontline supervisors. This training is vital to ensure mid-level workers have the necessary skills to step into leadership positions in the coming years. Over the last year, Western Maryland MOVE has continued to partner with the Washington County Detention Center to provide training opportunities for returning citizens, and is working closely with Labor's Correctional Education team to expand these offerings to individuals at the Maryland Correctional Training Center in Hagerstown. The partnership will continue to implement training in 2020, with an added module for Diesel Technicians.

Participant Success Story: "I just graduated from the HCC Commercial Vehicle Transportation Program. I just got my CDL within the last week. The program will hopefully help me get a great job in an expanding, available job market. The instructors helped me from absolutely no experience, not even able to drive a stick shift vehicle, to being able to pass my CDL Class A driving exam at the MVA. The grant helped me to be able to fill this dream, which I saved up for years to be able to do so. The grant helped me to afford college, and make the financial burden less than what it could have been." —This participant has since obtained employment with a local employer, earning \$16 per hour with benefits.

Maritime Transportation and Logistics Partnership

Region: Baltimore

Led by Maryland New Directions, the Maritime Transportation and Logistics Partnership has continued to meet the demand of its employer partners by providing relevant occupational skills training to unemployed and underemployed Marylanders. In 2019, the partnership continued its two unique training tracks: the Maritime Transportation Distribution and Logistics (MTDL) program and the CTC program. The MTDL program prepares individuals for employment at the Port of Baltimore and includes forklift and material handling certifications. The CTC program, on the other hand, helps jobseekers to become professional bus operators.

This partnership continues to work closely with the MTA to fill their open positions and is exploring potential partnerships with other organizations within the Maryland Department of Transportation. To date, more than 400 individuals have obtained employment, earning an average wage of more than \$16 per hour.

Participant Success Story: Anthony was underemployed and looking for a career when he enrolled in the Maritime Transportation Distribution and Logistics program. Through this opportunity, he earned his Forklift Certification and TWIC Card. He was able to obtain employment with a Baltimore-based employer, earning \$15 per hour with full benefits.

A Road to Success

Region: Anne Arundel County

Recognizing that the need for skilled drivers spans many sectors, including construction, logistics, and passenger transport, A Road to Success has partnered with a wide variety of employers to ensure that their diverse needs are met. Through the Transportation and Logistics Business Collaborative, these employers have the opportunity to identify workforce challenges and occupations with growing demand, and develop curriculum to meet these needs. To date, twenty candidates have enrolled in training, with sixteen successfully completing. Nine have received their CDL, and twelve have obtained employment with an average wage of more than \$19 per hour. The partnership will continue training in 2020 and is working to implement a new diesel mechanic training in response to growing industry demand.

Participant Success Story: Seeking a new career with less physical demands, Kelvin enrolled in the Road to Success program. He had seen his brother succeed and enjoy a career as a professional driver for many years and noted that he too had always been attracted to the profession. He enthusiastically took on the task of getting his permit for CDL A attainment and completed the training program and license testing with relative ease. Upon graduation and passing his licensing test, he was offered a variety of opportunities for employment. In June of 2019, Kelvin accepted employment with one of the top ten trucking companies in Anne Arundel County and is earning \$24 per hour with benefits.

Biotechnology

Baltimore BioTechnology Strategic Industry Partnership

Region: Baltimore

In response to the needs of employer partners such as the University of Maryland School of Pharmacy, PathSensors, Becton Dickinson, and AstraZenica, the Baltimore BioTechnology SIP is growing the pipeline of entry-level workers for the biotech industry. Working in close partnership, Baltimore BioWorks and Baltimore City Community College are providing multi-tiered training that includes a combination of classroom, hands-on training, and on-the-job work experience. In 2019, the partnership provided customized training based upon employer demand, ranging from basic techniques and instrumentation to bio-manufacturing. To date, the partnership has placed over 200 individuals into employment, many of whom have decided to continue their education and are currently enrolled in two- or four-year bioscience programs.

Participant Success Story: John was enrolled in a graduate program focused on education when he realized that was not his passion. He enrolled in EARN-funded training at Baltimore City Community College, which helped him to land an internship utilizing the skills he learned in the laboratory animal science training. Of his experience, John said, "The internship experience was invaluable because it gave me the hands-on experience I needed to land a job offer at Johns Hopkins University as an Animal Facility Assistant."

Baltimore BioPrep

Region: Baltimore

Led by the BioTechnical Institute of Maryland, Baltimore BioPrep provides a combination of technical and essential skills training to prepare individuals for entry-level positions in the biotechnology industry. The program, which is six months in length, consists of two components. The first part, BioSTART, is a 12-week bridge program designed to advance participants' skills and knowledge in basic math, communication, and professional development each presented under the purview of the bio/lab-based industry. Laboratory Associates is the second portion of the training, which provides the academics and practice in critical industry-related and bench skills necessary for success in the field. In 2019, the Baltimore BioPrep continued to place individuals into employment at a high rate, with an average starting wage of nearly \$16.50 per hour.

Participant Success Story: Paris was a recent high school graduate and single mother of a one year old when she found the BioTechnical Institute of Maryland. She was determined and motivated throughout classroom training and landed an internship at PathSensors. Upon completion of her internship, Paris was offered a full-time position with PathSensors earning \$16.50 per hour with full benefits. Since completing BTI, Paris is proud to report that she has met all of her personal goals and is well on the path to a long career with financial stability.

BioTrain

Region: Montgomery

With new leadership taking the helm in early 2019, BioTrain reengaged industry partners to understand current training needs and plan for the year ahead. Based upon those conversations, employers identified a continued need for incumbent training. As such, the partnership has delivered a variety of training topics, including Protein Purification and Drug Development. Additionally, the partnership delivered preparatory training to attract a pipeline of workers in anticipation of the industry's growth. In 2020, the partnership will continue to deliver training to upskill the current workforce, including Bioinformatics, Quality 101, and Business Communication.

Industry Feedback: "BIOTrain was great to work with. I was pleased with the quality of the workshop and I believe that the workshop raised the level of importance of teamwork in our organization. I hope to offer another workshop before the end of the year."

Hospitality

Building Employer-led Alliances for Careers in Hospitality *Region: Eastern Shore*

This partnership, led by Wor-Wic Community College, continues to work with employer partners to meet industry demand of the Lower Eastern Shore's tourism industry. Industry partners, such as the Ocean City Chamber of Commerce and the Ocean City Hotel-Motel-Restaurant Association identified a need to provide customer service training. As such, nearly 400 incumbent workers received this training. With the addition of the Ocean Downs Casino to the region, there was a pressing need to train skilled individuals for employment. BEACHES has implemented Roulette, Blackjack, and Dealer training that is benefitting unemployed, underemployed, and incumbent workers in the region. The partnership is working to develop strategies to increase employee retention, which may be accomplished through added professional development and training opportunities.

Industry Feedback: "The employees love it! They say how interesting and interactive the training is. [After training] as I was walking through the lobby, I could hear a difference in the way the front desk staff were talking to the guests. They were so cheerful and pleasant."

Baltimore Regional Culinary/Hospitality Strategic Industry Partnership Region: Baltimore

Since 2014, the Baltimore Regional Culinary/Hospitality SIP has implemented a successful culinary training to meet the needs of restaurant and culinary industry partners, placing nearly 100 individuals into entry-level employment. In 2019, employer partners identified emerging needs in the hospitality industry and subsequently modified their existing program to meet this demand. This program will incorporate advanced soft skills training, barrier removal services and on-the-job-



training. Participants will have the opportunity to earn portable, industry-recognized certifications, including ServSafe and the National Retail Federation's Customer Service and Retail Certification. This program is expected to begin in early 2020 and it is anticipated that 14 individuals will be trained.

Participant Success Story: Devon, a recent high school graduate, enrolled in the culinary program in late 2018. He has always had a passion for culinary arts, but wanted to learn skills for appropriate food handling. He excelled

Secretary Robinson poses with FoodWorks graduates.

in training and ultimately obtained employment at Johns Hopkins in the Food and Nutrition Department.

FoodWorks Culinary Training Program

Region: Baltimore

In partnership with the Community College of Baltimore County, Goodwill Industries, and a number of regional culinary employers, the Maryland Food Bank is providing vital training opportunities to unemployed and underemployed individuals. FoodWorks is a 12-week intensive program in which students learn basic cooking skills, increase familiarity with commercial kitchen equipment, all while converting fresh produce and other perishable foods into healthy meals for distribution to those in need. Since receiving EARN funding in late 2018, four cohorts have completed training, with 81 percent of graduates obtaining employment with employers such as Woodberry Kitchen, Sagamore Pendry, and Delaware North. The partnership will continue its training with support from EARN in 2020.

Participant Success Story: As Johnny will tell you, he "knows a lot about the Food Bank." As a young child, he benefitted from the Maryland Food Bank's Supper Club Program, which engages children in after-school activities such as tutoring, arts and crafts, and sports, while providing free, nutritious meals to hungry kids. As a young adult, he wanted to further his education and make a better life for himself, but lacked the financial means to go to college. Upon being accepted into the FoodWorks program, Johnny said, "It's pretty exciting. We're getting like 20 months of education in 12 weeks. We really got to study, but it feels good to know I'm actually helping my community as well as learning because that's what I want to do." After completing the FoodWorks program, Johnny obtained employment at Guinness and dreams of owning his own restaurant.

Cyber/Information Technology

IT Center for 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 the partnership. In 2019, Allegany College delivered training to over 100 incumbent workers on a variety of topics, including Security+, Information Technology Infrastructure Library Foundations, Agile Certified Practitioner, and Project Management.

The partnership is also focused on growing the pipeline of entry-level workers. Though Western Maryland has many strong higher education partners, graduates of Cyber and Information Technology programs often leave Western Maryland upon graduation. As such, the partnership is providing invaluable internship opportunities to students at Allegany College. Students are able to gain practical experience utilizing the knowledge they have learned, while forging relationships with local employers. In 2019, three students were placed into internship experiences. Of those, all three were asked to remain with their employer upon completion of their internship. In fact, one student was promoted, doubling her wage.

Industry Feedback: "The Western Maryland IT Center of Excellence has had a significant impact on our IT operations because it allows us to provide relevant training opportunities to our employees that we couldn't provide in the past. The training helps our employees stay current with technology trends and provides a morale and productivity boost because they are not becoming stagnant."

mHealth

Region: Howard County

According to the Bureau of Labor Statistics, careers related to data gathering, data interpretation, data storage and the use of electronic health records are expected to grow by more than 15 percent through 2024 – twice as fast as the overall growth rate estimated for all professions. To meet this demand, the mHealth partnership focused efforts on growing the pipeline of entry-level workers through preparatory training. Because the mHealth industry is fairly new, the partnership felt it was necessary to provide a basic introduction to Health IT Fundamentals, educating individuals on the opportunities available.

Additionally, the partnership has identified incumbent worker training as a vital tool for preparing for the anticipated growth in the industry. In 2019, the partnership trained 40 individuals already employed in Health IT in topics such as Health Analytics and Certified Professional in Healthcare Information and Management Systems.

Tech Frederick



The Western Maryland IT Center of Excellence was presented with the 2019 Innovation Award presented by the Community Colleges of Appalachia. The Innovation Award recognizes programs or activities that have been designed and successfully implemented to improve culture, efficiency, effectiveness, and/or infrastructure.

Region: Western Maryland

The goal of Tech Frederick is to help Frederick become the hub for Information Technology in the region. Tech Frederick closely collaborates with its employer partners to identify in-demand, relevant training opportunities that will make their current workforce stronger. In 2019, the partnership delivered training to incumbent workers in topics like Agile Project Management, Structured Query Language, Office 365, Elastic Search Engineer, and Photoshop. Since the program began in 2015, nearly 300 incumbent workers have received training. Under new leadership, Tech Frederick is ramping up for significant expansion in 2020.

Industry Feedback: "Prior to EARN via TechFrederick, our company remained flat in revenue for 8 years. Since EARN started and we trained our sales people, developers, business analytics, and system admin team, our company has grown 20-40 percent over the past 3 years."

CyberWorks

Region: Anne Arundel County

Led by Anne Arundel Workforce Development Corporation, CyberWorks seeks to meet the needs of its diverse employer partners by providing customized training. Utilizing a model that combines online, virtual-live, and in-person training, CyberWorks aligns curriculum to the functional areas of Cybersecurity as outlined in the NIST NICE framework. In this model, the candidate's knowledge, skills, and abilities are captured through technical hands-on cyber assessments and are then aligned to training modules to develop areas needing improvement. Individuals also receive industry mentorship, on-job-training, and industry-recognized credentials. In the most recent grant cycle, more than 85 percent of individuals who completed the CyberWorks program obtained employment, with an average hourly wage of \$33 per hour.

Participant Success Story: Jane became unemployed in 2015 as a result of a company merger. For the next four years, Jane remained unemployed and was the caretaker of a family member. In early 2019, an employer found Jane's resume in Maryland

Workforce Exchange and decided to interview her for a newly created role. After the interview, it was determined that her contract management skills were limited and that she lacked project management experience. Ms. Emerson met with a career coach who enrolled her in the Cyberworks program. Through her enrollment in Cyberworks, Jane was able to update her skills, and was ultimately offered the position earning more than \$40,000 annually.

More than 85 percent of individuals who completed the CyberWorks program obtained employment, with an average hourly wage of \$33 per hour.

Intrusion and Countermeasures Education and Training

Region: Baltimore City

The Intrusion and Countermeasures Education and Training Partnership is responding to the call of its 31 employer partners to provide a blend of classroom and hands-on training to ensure students have not only the technical knowledge, but also the practical skills necessary to be successful in the industry. Upon earning A+ and Net+ certifications, students receive employer-identified hands-on training at Baltimore Cyber, which includes simulations that mimic real-life cybersecurity threats. To date, more than 100 individuals have been placed into employment, earning an average wage of more than \$17 per hour. In September of 2019, Lieutenant Governor Boyd Rutherford visited Baltimore Cyber to learn more about their efforts to create a pipeline of highly skilled workers for Maryland's cybersecurity employers.



Lieutenant Governor Boyd Rutherford receives a briefing on the work of Baltimore Cyber Range, who leads two EARN partnerships.

Participant Success Story: Despite an internship at the Department of Homeland Security and multiple interview opportunities, John was unemployed for more than a year. He enrolled in the ICET training, where he earned industry-recognized certifications and received hands-on training. Within a month, he was in advanced negotiations with several companies. John ultimately accepted a position as a Cyber Security Analyst earning an annual salary of \$70,000.

Partnership for Tech Talent

Region: Montgomery County and Baltimore City

The Partnership for Tech Talent, led by Per Scholas, continues to deliver technical training to unemployed and underemployed individuals in Montgomery and Prince George's County. Students have the option to enroll in two different tracks, IT Support and Cybersecurity, where they can earn A+, Network+ and Security+ certifications. To date, more than 130 individuals have obtained employment, earning wages that average more than \$22 per hour. In 2019, EARN funding allowed Per Scholas to expand its programming into Baltimore City. Based upon the needs of regional employers, the partnership will offer training around IT Support, IT Security, Network Support, and Cisco Cyber Ops.

Participant Success Story: Before coming to Per Scholas, Jack worked in retail. Unfortunately, he lost his job in October 2018. This prompted him to look for his next opportunity to make a better life for himself. Seeing the success of his family members who graduated from Per Scholas, Jack enrolled in the Network Support class in March 2019. He graduated in July 2019, earning both his A+ and Network+ certifications. He currently works as a Field Technician for earning \$35,360 annually with benefits.

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. The need for qualified workers remains high, especially given the proximity to Aberdeen Proving Ground. Cecil College and Harford Community College provide foundational training that prepares students to test for industry-recognized credentials, such as CompTIA A+, Network+, and Security+. To date, 18 individuals have obtained employment and over 30 certifications have been earned. The remaining students are completing training and preparing for certification exams.

Participant Success Story: Belinda, who was unemployed, visited the Workforce Center and expressed interest in a data analytics position. She enrolled in training sponsored by the Susquehanna IT/Cyber Partnership. She was able to earn all three certifications offered and is currently engaged in negotiations with an employer partner she met at a job fair sponsored by the partnership.

SANS Cyber Workforce Academy

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

Participants in the SANS Cyber Workforce receive advanced technical training and hands-on cyber defense and incident handling skills, and have the opportunity to earn industry-recognized certifications including the Global Information Assurance Certification and the Global Certified Incident Handler. Through targeted recruitment efforts and a close partnership with the Women's Society of Cyberjutsu, this partnership seeks to diversify the cyber industry's workforce by training and placing women into cybersecurity careers. The SANS Cyber Workforce Academy is also targeting veterans. To date, 44 individuals have obtained employment averaging more than \$30 per hour, and nearly 30 are preparing for certification exams and actively seeking employment.

Participant Success Story: Maria was underemployed and desired to start a career in the cybersecurity industry. She enrolled in the SANS Cyber Workforce Academy and was able to earn multiple industry-recognized certifications, which allowed her to transition into a specialized digital forensics role within cybersecurity. She now works as a Junior Forensic Examiner at a subcontractor for the FBI and is earning \$33.65 per hour.

NPower Tech Fundamentals Program *Region: Baltimore*

The NPower Tech Fundamentals Program prepares unemployed and underemployed individuals for promising careers in the IT and Cybersecurity industries. The program offers two tracks: Tech Fundamentals combines 16 weeks of a rigorous classroom-based curriculum with professional skills development followed by a seven-week paid internship for students to gain basic competencies needed for quality employment. The second track, Cybersecurity, consists of 18 weeks of hands-on classroom instruction followed by a 12-week paid internship to prepare students for cybersecurity-related careers. To date, more than 60 individuals have obtained employment with industry partners such as Northrup Grumman, TD Ameritrade, and Under Armour. In 2019, EARN funding allowed NPower to expand its programming to East Baltimore.

Participant Success Story: After graduating from high school, Michael took a minimum wage position at a local fast food restaurant earning \$10 per hour. Although he loved technology, Michael believed that a tech career would not be possible without a college degree and thousands of dollars in student loans. After completing the NPower program and earning certifications in IT Fundamentals and ITIL, he was able to obtain employment as an IT Technician with a

local employer, earning \$15 an hour. He continues to earn additional certifications and is on his way to a thriving career in IT.

Certified Cyber Analyst Operator

Region: Central Maryland

Led by UMBC Training Centers, this partnership is working to address the cyber workforce training needs of the military, the intelligence community, federal civilian agencies, and the commercial sector through a blend of classroom and hands-on technical training. Graduates of this program will have the opportunity to earn a wide array of industry recognized certifications, including A+, Network+, Security+, Certified Ethical Hacker, and CCENT. In late 2018, UMBC Training Centers became a RA sponsor, which will allow graduates of this program to further their career upon completion of EARN-funded training.

Industry Feedback: "I could not be more pleased with having a Certified Cyber Analyst Operator apprentice. He came to us with enough knowledge to jump in and start helping right away. His newly learned skills, coupled with his ability and willingness to learn additional systems and processes quickly, significantly lowered the burden often felt when training a new teammate. He continues to learn, grow, and consistently adds value to the team."

Baltimore Cybersecurity Partnership

Region: Baltimore City

The Baltimore Cyber Security Partnership, led by I'm Still Standing Community Corporation, is providing training to unemployed and underemployed Baltimore City residents to prepare them for careers in cybersecurity. Students are prepared to earn industry-recognized credentials, such as A+, and receive hands-on experience through lab training. Additionally, the partnership teaches interview techniques and provides mock interview opportunities to ensure students are prepared to enter the workforce. To date, 15 individuals have obtained employment, earning an average wage of \$19 per hour.

Participant Success Story: Chris, a high school graduate and father, struggled to find a career to support his family. He enrolled in the Baltimore Cybersecurity Partnership and excelled in training. After earning his A+ certification, Chris was able to obtain employment as a Help Desk Analyst earning \$15 per hour. His employer was so impressed with his performance that he has since received a promotion and is now earning \$23 per hour.

Advancing Careers in IT

Region: Baltimore

Employers participating in this partnership have identified a need for streamlined and practical training within the IT sector for incumbent workers who need to add their technical skills. As such, Advancing Careers in IT will provide training to incumbent workers in topics such as Java, Agile Project Management and Security. This training will allow employees to increase their skillset, allowing for more robust assignments and career advancement. The first IT Security course kicked off in October 2019.

Maryland Cyber Skills Alliance

Region: Statewide

The Maryland Cyber Skills Alliance is seeking to address the growing shortage of skilled cybersecurity professionals by providing training that leads to industry-recognized certifications and maps directly to high demand jobs. CompTIA and Transmosis are the organizations leading this effort and are focused on recruiting unemployed and underemployed individuals. To date, 20 individuals have enrolled in training, with many earning both A+ and Sec+ certifications. Fourteen individuals have obtained employment, with two choosing to continue their studies.

Participant Success Story: Ronald was unemployed and had been applying for jobs in IT for two years before enrolling in training with the Maryland Cyber Skills Alliance. He was able to earn the A+ and Sec+ certifications and obtained employment earning \$25 an hour.

MILVETS Cyber Incubator Partnership

Region: Capital

The MILVETS Cyber Incubator Partnership began in 2018 with the goal of establishing a talent pipeline of cybersecurity professionals to meet the growing demand in Maryland. MILVETS, working in close partnership with UMBC, is providing students with hands-on experience, while preparing them to test for industry-recognized certifications like Security+ and CySA+. To date, MILVETS has trained three cohorts of individuals, many of whom are enrolled in four year programs. As these students graduate, the experience and certifications earned through this program will make them more marketable to employers. In fact, nearly 40 individuals have obtained employment since completing the program.

Code Partners

Region: Capital

The Bureau of Labor Statistics predicts a shortage of 1 million software engineers by the year 2020. Code Partners seeks to alleviate this pending gap by providing preparatory training, with the option of more advanced training. The multi-tiered training includes web development, front and back-end programming, and data analysis. To date, more than 40 individuals have enrolled in training and are earning the necessary skills to be successful in coding positions.

Participant Success Story: "We are happy to announce that a student returned to our program after getting his green card status which took almost 1 year. After completing Code 201, he immediately received a job offer from American University."

"The classes have given them important knowledge and skills that help them be more effective in their roles."

Health IT SIP

Region: Central

The Health IT SIP, led by CCBC, works closely with large healthcare employers, like LifeBridge Health, Frederick Memorial Hospital, and Anne Arundel Medical Center, to provide integral training opportunities to incumbent workers. In 2019, more than 30 incumbent workers receiving training in topics such as Project Management, Privacy and Security, and Value-Based Care. This partnership recently implemented a hybrid-learning model, by which the courses are held both online and in-person. The instructor-led portion of the courses allow for in-depth discussion with colleagues from around the area and sharing of issues and solutions, while having some portion of the class online allows for busy professionals to work on course assignments as their schedule allows.

Industry Feedback: "All of the associates who have gone through the PMP course have either gotten certified and taken full project manager jobs OR continued to advance their careers including many promotions. Project management is an essential skill (and) ESSENTIAL for management growth."

Education Partnership for IT Careers

Region: Prince George's County

Led by ByteBack, the Education Partnership for IT Careers, is providing training and certification to unemployed and underemployed participants. The partnership works closely with industry, including employers like Angarai, Nucore Vision, Sage, and Soft-Con Enterprises, and prepares students for occupations like IT Technician, Medical Data Entry Specialist, Data Analyst and Audit Technician. Certifications in Microsoft Excel and A+ are offered, and students learn basic IT Fundamentals. The average income difference for EARN-funded students who have gained employment is \$19,834 per year, helping to break the cycle of poverty for these individuals.

Participant Success Story: After completing the 3-day bootcamp, John enrolled in CompTIA A+. During class, he built a strong foundation for an IT Career. Unfortunately, he did not pass the course after his first attempt. He retook the class in May of 2018. Thanks to his resilience and Byte Back's supportive instructors and tutors, Michael earned his certification in September of 2018. In March of 2019, Michael secured a helpdesk internship at Rare, an oceanic conservation nonprofit. Upon completion of the internship, he was hired full time, making \$45,000 with benefits.

Advanced Cybersecurity Training Consortium

Region: Statewide

The Advanced Cybersecurity Training Consortium, led by Baltimore Cyber, is a collaboration with all 16 of Maryland's Community Colleges and more than 30 employer and industry partners. This training is meant to increase the employability of students by providing advanced training via hands-on, real-world scenarios. Employers are invited to observe training to see how prospective new hires would operate in a real-life, real-work environment. To date, the partnership has placed more than 100 individuals into employment, with wages averaging over \$16 per hour.

Participant Success Story: "I was very close to receiving my AA degree along with a certificate in Cybersecurity. I felt that I understood the threats that were out there, but I really had little idea how individual organizations address the threats in real time. The ACT program opened a view for me I just did not have. Seeing a virtual secure operations center running real time threats as active scenarios not only allowed me to better understand the problem, it also showed me how we detect, mitigate, and remediate the problem. I was able to use this insight in my interviewing for a job and it was very helpful. I did receive multiple job offers and the ACT program was a big part of the reason for my success."

Cybersecurity Education and Certification Program

Region: Baltimore

The Cybersecurity Education and Certification Program, led by the Community College of Baltimore County, is providing in-demand, relevant training to unemployed, underemployed, and incumbent workers. Students have the opportunity to earn a variety of certifications, including Network+, Security+, and Ethical Hacker. To date, nearly 30 incumbent workers have been trained, and nearly 10 individuals have obtained employment in the field. The partnership will continue to provide training opportunities in 2020.

Healthcare

Baltimore Healthcare Partnership

Region: Baltimore

In 2019, the Baltimore Healthcare Partnership, led by the Baltimore Alliance for Careers in Healthcare, continued to closely partner with the seven major hospitals in Baltimore City and a wide array of community-based organizations to provide training to unemployed, underemployed, and incumbent workers. Based upon employer feedback, the partnership provided training in CNA, GNA, Patient Care Technician, Certified Medicine Aide, and Central Sterile Tech Processor. In addition to occupational training, all participants receive comprehensive essential skills training. To date, more than 600 individuals have been placed into employment.

Participant Success Story: "I started off in housekeeping, but I always knew I wanted to get into nursing. I would clean the residents' rooms and see how the aides and nurses took care of the residents and I said to myself, 'I can see myself doing this!' When I found out about the CNA/GNA course, I knew it was my chance to have a new career. I took the class and passed! It was not an easy process but very worth it. Put your mind to do anything you want to do and don't give up! Thank you for the opportunity to grow!"

Specialized Nursing Bridge Program

Region: Montgomery County

The Specialized Nursing Bridge Program continues to serve as a key retention strategy for Montgomery County hospitals, including Adventist Behavioral Health and Shady Grove Medical Center. Studies have shown that more than 1/3 of nurses leave direct care within their first two years of service. This partnership seeks to counteract that trend by providing training that includes added support, structured learning, and individualized precept time. To date, more than 250 individuals have received training, and employer partners report a downward trend in attrition.

Participant Success Story: "[This program] made a huge difference throughout my six-month orientation. I remember the anxiety I felt when transitioning from student to intensive care unit nurse - lack of experience, working in a new environment, and most importantly, the feeling of being totally responsible to care for a real and critically ill patient, not a mannequin anymore. The support of my experienced preceptor helped me with the transition. I have been really enjoying the monthly meetings with other nurses. Additionally, the program invites different guests that support nurses in many ways. Without these supports, I don't think the transition to patient care would be possible."

Healthcare Mentorship Baltimore

Region: Baltimore Region and Western Maryland

In 2019, Healthcare Mentorship Baltimore continued to provide invaluable training opportunities to Baltimore residents and expanded their reach to Western Maryland. Baltimore programming includes entry-level training for CNA/GNA. Recognizing the importance of providing a career pathway for entry-level healthcare workers, the partnership instituted Patient Care Technician Training. New Pathways, the partnership lead, was acquired by Pressley Ridge, who has a presence in Western Maryland. As such, EARN funding allowed for the expansion of programming to the region. The first cohort is in training and expected to complete in 2020. To date, Healthcare Mentorship Baltimore has placed more than 100 individuals into employment.

Participant Success Story: Prior to enrolling in Healthcare Mentorship Baltimore, Saira worked two jobs to support herself. She realized she wanted to further her education and begin working towards her dream of being a nurse. She completed training and is currently employed with Genesis. Of her experience, she said, "The experience overall has changed me. It gives me so much more compassion and knowledge that I ever had before. I am excited to continue my education and move higher into the nursing field. I just love, love my work at Genesis."

Ready to Care

Region: Eastern Shore

Ready to Care, led by the Eastern Shore Area Health Education Center, continues to provide training to Eastern Shore residents to grow the pipeline of qualified healthcare workers. In close partnership with Cecil College, Wor-Wic Community College, and Chesapeake College, Ready to Care is providing training for CNA/GNA. Nearly 90 percent of individuals who complete training have been placed into employment. Additionally, Ready to Care has instituted credential stacking as a means to upskill entry-level workers. Offerings for this training include Medical Administrative Aid, Dialysis Technician, and Pharmacy Technician.

Participant Success Story: Since earning her Certified Nursing Assistant license through Ready to Care, Renee has been employed at Calvert Manor. She has earned her Certified Medicine Aide certification, and is currently studying to become a Licensed Practical Nurse. "I have personally witnessed Renee working with her residents," her employer said. "I was so impressed by the meticulous and compassionate care she gave them. She is always positive and uplifting, definitely the kind of co-worker you want to work with every day. Her residents are blessed to have Renee caring for them!"

"I have been employed here for three years. In May, I was able to move out and obtain my own place. I have also been accepted to the University of Baltimore and University of Maryland University College (UMUC). I am in the process of narrowing down which one I want to attend starting next Spring."

Baltimore Regional Healthcare/Higher Education SIP

Region: Baltimore

Led by Humanim, the Baltimore Regional Healthcare/Higher Education SIP leverages relationships with large anchor institutions, such as Johns Hopkins Health Systems, Towson University, and Mercy Medical Center, to ensure a strong pipeline of qualified workers to fill vital administrative roles. Through a partnership with the Community College of Baltimore County, students have the opportunity to earn industry-recognized certifications, like Microsoft Office Skills Certificate and the Professional Administrative Certificate. Students also receive intensive essential skills training, along with case management and barrier removal services. To date, 90 percent of graduates have been placed into employment.

Industry Feedback: "Sarah has been doing a fantastic job at her placement at Towson University, working as a Human Resources Assistant. She has been given a raise from \$14.36 an hour to \$16.46 an hour. Due to her financial stability training coupled with consistent employment, she has been able to save up money and has recently bought a 2015 Honda Civic."

Highway to a Healthcare Career

Region: Prince George's County

Residential service agencies in Prince George's County have continually expressed how difficult it is to find qualified employees. This, paired with the fact that the unemployment rate of people with disabilities is disproportionately high, is the impetus for the Highway to a Healthcare Career Partnership. Led by Independence Now, this partnership is working closely with the Maryland State Department of Education's Division of Rehabilitation Services, Employ Prince George's, and Prince George's Community College. Students are prepared to earn their CNA/GNA certifications. To date, two students have completed the program. Both were offered scholarships to continue their education and earn their Patient Care Technician certification.

PharmaTech Connect

Region: Baltimore City

According to the Bureau of Labor Statistics, approximately 47,600 new pharmacy technician positions will be added to the labor force over the next decade. PharmaTech Connect, led by Goodwill Industries of the Chesapeake, is a close collaboration with CVS Health and Baltimore City Community College. The intensive pre-certification training program includes Pharmacy Calculation, CPR training and Pharmacy Theory. Following the classroom training, students begin a five week Pharmacy Technician Clinical, provided by CVSHealth. To date, 16 individuals have completed training, with 10 obtaining employment as pharmacy technicians.

Participant Success Story: Sarah's mother was enrolled in a program at Goodwill Industries when she heard about PharmaTech Connect. Given her interest in science, Sarah jumped at the opportunity to enroll. She excelled in the program and is currently employed at CVS as a pharmacy technician. Of her experience, Sarah said, "the most important thing I learned at Goodwill and through this program was that there are so many opportunities to succeed in life. Everything I was taught in the classroom helped me in real life experience."

Community Health Workers Partnership

Region: Frederick

Community Health Workers play an integral an integral role in healthcare delivery, serving as an intermediary between health and social services and the local community. With Maryland's recent adoption of criteria for Community Health Workers, this partnership will work to strengthen and expand the pipeline of credentialed workers. Over the last year, the partnership has provided vital training opportunities for unemployed, underemployed and incumbent workers. To date, 17 incumbent workers have received training. Additionally, the partnership has provided training to 25 unemployed and underemployed individuals, of which, 21 have obtained employment. Though early on in implementation, the Community Health Workers Partnership has had a profound impact on this emerging industry in Western Maryland.

Participant Success Story: Amelia, age 26, moved to the United States from Honduras in 2017. With limited English proficiency and a young child, Amelia was unemployed. When the financial burden became too great for her husband to bear, Amelia decided to enroll in ESL classes at the Montgomery Literacy Council. As her English improved, her confidence increased. She began to volunteer at the Asian Indian Center of Montgomery County, where she heard about the EARN CHW training. After successfully completing training, she received a job offer!

BSN Workforce Pipeline

Region: Montgomery

The Bureau of Labor Statistics predicts a 26 percent increase in the number of nursing jobs in the coming years. To meet this growing demand, WorkSource Montgomery and the Healthcare Initiative Foundation are partnering with six employers and two higher education partners on an innovative hybrid nursing credential program. In addition to technical healthcare training, students have access to supplemental learning opportunities, including financial literacy and essential skills training. To date, 45 scholarships have been awarded. Due to the length of the program, many students are still enrolled in courses, but of those who have graduated, 19 have become employed in the healthcare industry.

Maryland Direct Support Professional Training Consortium

Region: Montgomery

The Maryland Direct Support Professional Training Consortium is seeking to decrease the turnover rate, which is near 50 percent, for DSPs. The competency based training and certification provided by the partnership leads to increased wages and opportunities for specialization. In its

first year, the partnership provided training to more than 80 individuals, with many earning increased wages or title promotions. In 2019, the partnership received funding to implement a mentorship training, which will further increase retention rates in the industry.

Industry Feedback: "Emily has grown tremendously in her confidence level to step up to a management role and take on new challenges, such as being appointed to Acting House Manager. She has stepped up to the challenge and has been able to effectively lead and manage staff to effect more positive and person-centered outcomes for the persons receiving services."

Green

Clean Energy Training Partnership – Howard Region: Howard County

Led by Power52, in close collaboration with 12 industry partners, the Clean Energy Training Partnership is preparing unemployed and underemployed individuals for careers in the solar industry. Over 11 weeks of training, students receive 320 clock-hours of training, which includes classroom instruction, hands-on lab exercises, job readiness and paid on-the-job training. To date, nearly 50 individuals (83 percent) have obtained employment. In November of 2019, Power52 expanded its programming to Baltimore County, which will expand the reach of this program and serve a larger number of Marylanders.

Participant Success Story: Patrick came to Power52 after being referred by the District Court Re-Entry Project. Despite experiencing challenges throughout training, such as struggling with the TABE test and being in the midst of a divorce, Patrick committed to training and remained

positive. Patrick completed training and obtained employment as a Solar Installer earning \$17 per hour.

Solar Installation Training Partnership

Region: Baltimore City

Based upon feedback from the partnership's nearly 50 employer partners, the Solar Installation Training Partnership is providing in-demand training to unemployed, underemployed and incumbent workers. Participants in the entry-level training receive safety training,



Ray Lewis pictured with graduating cohort from Power52.

"I really don't know how my life would have been if I never would have been given this opportunity. I feel like I will be able to provide for my family and have a successful life."

hands-on practicum and 320 hours of on-the-job training. To date, 96 percent of those who completed training obtained employment earning an average wage of \$16.70 per hour. Employer partners also identified a need to upskill their current workforce in topics such as leadership, project management, energy analysis, and sales skills. To date, 24 incumbent workers have received training.

Participant Success Story: Before Markist came to Civic Works, he had been incarcerated for seven years and was facing major challenges finding employment due to his criminal background. Markist excelled in the training program, applying himself to learning everything he could. He successfully gained the certifications and technical knowledge to fully install a solar system. Upon completion of training, Markist was quickly hired by an industry employer earning \$18 per hour.

Wor-Wic Welding SIP

Region: Eastern Shore

In the coming years, the demand for welding positions on the Eastern Shore is expected to significantly increase. To meet this demand, the Wor-Wic Welding SIP is providing relevant, in-demand training for entry-level positions. Over the 13-week program, students are prepared to test for American Welding Society certifications. To date, more than 75 individuals have obtained employment with employers like Chesapeake Shipbuilding, Delaware Elevator, Crystal Steel and Cambridge International. In 2019, the partnership expanded its programming to include a 14-week metal fabrication training.

Participant Success Story: "Before I took this class, I was unemployed and sitting at home. I was able to do small jobs here and there, but nothing concrete. Since I have been enrolled in the welding training, I have high hopes of getting out of my slump. I really don't know how my life would have been if I never would have been given this opportunity. I feel like I will be able to provide for my family and have a successful life."

Clean Energy Training Partnership – Baltimore

Region: Baltimore City

Led by Living Classrooms Foundation, this partnership implemented its needs based employment training meant to prepare unemployed and underemployed individuals for employment in the renewable energy industry. The comprehensive program blended classroom training, hands-on experience, job coaching and essential skills training. Following training, participants had the opportunity to sit for the North American Board of Certified Energy Professionals®, a highly regarded industry-recognized certification. In 2019, the partnership continued to work with recent graduates on job placement. To date, 58 individuals have completed training, with 48 obtaining employment.

Participant Success Story: Before entering the solar industry, Khalil had been working in the construction and the biotechnology industry for 10 years, but was struggling to make a career. He was ready to make a career change, so when he heard about the solar training being offered through the Living Classrooms Foundation, he thought it could be a good way to combine his knowledge of the construction and bio tech industries. After completing his solar training, Khalil accepted employment with a local employer in April of 2018 earning \$14 per hour. As of November 2019, he is still working with the same employer and is earning an hourly wage of \$19 per hour.

Sustainable Energy Workforce Development Program

Region: Prince George's County

In an effort to meet the growing demand for qualified workers, the Sustainable Energy Workforce Development Partnership is providing comprehensive training to unemployed and underemployed Prince George's County residents. The Industry Advisory Council established by Employ Prince George's has been integral in shaping curriculum and program activity. The Get Into Energy Bootcamp provides basic literacy skills, work readiness and general utility construction trades skills. Participants have the opportunity to earn industry-recognized credentials, including National Center for Construction Education and Research (NCCER) Core, OSHA 10 and CPR/First Aid. To date, 24 individuals have been placed into employment.

Solar Installation Training and Examination Partnership

Region: Western Maryland

The Solar Installation and Training Examination Partnership, led by Hagerstown Community College, is responding to the needs of its five employer partners by providing training to unemployed, underemployed and incumbent workers. To date, nearly 30 incumbent workers have received training, which is meant to prepare individuals to test for the North American Board of Certified Energy Practitioners® certification. The partnership is currently re-examining industry demand and will pivot programming accordingly to meet those needs.

Energy Efficiency Strategic Industry Partnership

Region: Baltimore City

Led by Civic Works, the Energy Efficiency Strategic Industry Partnership is providing training to unemployed, underemployed and incumbent workers. Unemployed and underemployed participants receive relevant technical training and earn certifications including the Department of Energy (DOE) 56-hour Weatherization Installer Fundamentals certification, OSHA 30hour Construction Safety, EPA 8-hour Lead Renovation, Repair, and Painting, and OSHA 4-hour Mold and Asbestos Awareness certification. Incumbent workers receive training in leadership, project management, energy analysis, and sales skills. To date, over 100 participants have been placed into employment and more than 120 incumbent workers have been trained.

Industry Feedback: One of the concrete benefits that Zerodraft has received from its partnership with Civic Works is ready and reliable access to a trained pool of home performance technicians. This has greatly reduced the time- and labor-intensive process of individually identifying, hiring, and training new employees and overall reduced turnover and the associated organizational cost and burden for the business.

Manufacturing

Susquehanna Manufacturing Coalition

Region: Susquehanna

Led by the Susquehanna Workforce Network, the Susquehanna Manufacturing Coalition continues to meet the needs of its 17 employer partners by providing relevant training opportunities to unemployed, underemployed, and incumbent workers. Employers have identified a need to upskill their current workforce. As such, the partnership has provided training in areas such as additive manufacturing, Hydraulic & Electrical System, and Injection Molding. Additionally, challenges continue around finding skilled individuals for entry-level positions. As such, the partnership is providing Product Production Technician training, which gives students foundational skills. To date, nearly 60 individuals have obtained employment, and more than 50 incumbent workers have received training.

Participant Success Story: Ricky, a high school graduate, was unemployed when he enrolled in training through the Susquehanna Manufacturing Coalition. He expressed interest in learning to weld and was able to receive in-demand, relevant training with industry-recognized certifications. As a result, Ricky was able to obtain employment earning \$19 per hour.

Careers in Manufacturing Program

Region: Baltimore City

Based upon feedback from members of their Industry Advisory Council, JARC continues to provide in-demand training for welding and computer numerical control positions to Baltimore City residents. In addition to technical training, the Careers in Manufacturing Program intensive career readiness and essential skills training and comprehensive wraparound services. To date, the partnership has placed over 120 trainees into employment at a starting hourly wage of more than \$16 per hour. JARC remains focused on providing incumbent worker training, another important tool for its 43 employer partners.

Participant Success Story: Born to a single mom in Baltimore City, Jordan found himself living in group homes at an early age. Now at age 29, his biggest priority is providing for his family. He enrolled in the Careers in Manufacturing Program, where, in addition to learning a trade, he received assistance with his resume, help applying for jobs, and was able to prepare for interviews. After overcoming many barriers throughout training, his last challenge was securing wardrobe appropriate for an interview. JARC staff connected Jordan with a local non-profit, Success In Style, who provided him with professional clothing for his interview. He is currently employed with a local manufacturer, earning a sustainable wage.

Manufacturing Bootcamp and Incumbent Worker Training Program

Region: Statewide

Led by the Maryland Manufacturing Extension Partnership, the goal of this project is to help Maryland manufacturers grow their workforce, increase profits and improve processes. In order to accomplish this goal, this partnership has worked with over 100 manufacturers to identify areas of opportunity. Overwhelmingly, employers identify the need to upskill their current workforce. In 2019, Maryland MEP delivered training in topics such as quality management, LEAN, leadership, food safety, and Six Sigma Green Belt. To date, this partnership has provided training to over 800 incumbent workers, and placed over 100 individuals into employment through their Boot Camp program.

Participant Success Story: DeAaron found out about the Manufacturing Bootcamp through a program at DHS. He had recently been released from prison, but was struggling to find employment due to a felony conviction. He enrolled in the Bootcamp and successfully completed the program. Upon completion, he interviewed with Crystal Steele and was able to earn an entry-level position. Since then, he has been promoted to a supervisory role.

PrintSIP

Region: Statewide

Led by the Printing and Graphics Association MidAtlantic, this partnership is working statewide to meet the needs of one of Maryland's largest industries. PrintSIP is implementing training modules around Graphic Communications, Digital Print Production, Offset Press Operations Binding and Finishing and Digital File Preparation and Output. To date, more than 100 incumbent workers have participated in training, earning new certifications and skills that will increase their marketability and improve employer outcomes.

Industry Feedback: "In a recent Introduction to Graphic Communications class there was a Chief Financial Officer (CFO), a new salesperson, and a customer service representative. All three commented how the class opened their eyes to what was going on in their facility. The CFO had never set foot on a plant floor, but the class motivated her to seek out examples of what she was learning in class. This led to conversations with employees that she might never have had contact with except in the parking lot."

Washington County Manufacturing Partnership Region: Western Maryland

The Maryland Manufacturing Extension Partnership continues to engage manufacturers in Western Maryland to meet their workforce needs. Overwhelmingly, employers identify a striking need to upskill their current employees, but

find this cost-prohibitive. As such, this partnership is focusing on training incumbent workers. In 2019, training topics included LEAN, safety, leadership, food safety, and quality. To date, 450 incumbent workers have received training, leading to increased skillsets and improved business outcomes for employer and industry partners.

Advanced Manufacturing and Plastics Partnership Region: Baltimore

The Maryland Advanced Manufacturing and Plastics Partnership, led by Berry Plastics, continues to work with the Community College of Baltimore County to provide incumbent worker training. To date, nearly 400 incumbent workers have received training in a variety of different areas, including safety, leadership, hydraulics, pneumatics, injection molding, electricity and quality. Employers identify an increase in productivity, cost savings and jobs retained, and many participants are earning wage increases as a result of their participation in training.

With an aging workforce, a universal concern in the industry is around the stigmas of manufacturing and the need to attract a younger workforce. To alleviate this challenge, the Maryland Advanced Manufacturing and Plastics Partnership connected with Baltimore County Public Schools to educate school staff, including counselors, teachers and administrators, about the manufacturing industry and the opportunities it presents. In its third year, this day-long professional development has significantly helped to break down the stigma of manufacturing for students.

Industry Feedback: "Due to [EARN] funding support, we have been able, year after year, to provide additional technical training which has allowed for a total of 10 internal promotions, 2 of which are leadership roles, in 2019. Our voluntary attrition rate went from nearly 12 percent to 2.5 percent due to providing a career path within the plant."

Rapid Advanced Manufacturing Skills Partnership Region: Statewide

Like many other Maryland manufacturers, the more than 60 employers who participate in the Rapid Advanced Manufacturing Skills Partnership express concern about the difficulty in recruiting a pipeline of qualified workers to fill the positions of retiring workers. One of the challenges associated with this problem are the stigmas surrounding manufacturing, especially for young people. In order to combat this, the partnership is offering internship opportunities to college students, a demographic the industry has trouble reaching. The goal of the Summer Internship Program is to expose students to the manufacturing industry and the opportunities available.

The partnership is also providing relevant training to incumbent workers around new technologies. In 2019, training topics include Geometric Dimensioning and Tolerancing, LEAN, and Intermediate Welding. To date, the Rapid Advanced Manufacturing Skills Partnership has trained more than 450 incumbent workers.

Participant Success Story: "For my summer internship, I have been given responsibilities such as creating wiring schematics and assembly instructions for a variety of lighting fixtures. This has required me to interact with people on the assembly line and many others in management, giving me a full perspective of what goes in to every fixture. Difficulties in certain projects are common and problem solving is a required skill to be successful. Personally, I love trying to figure out how to best solve a problem or put something together. The manufacturing industry is fast paced and keeps you on your toes, which is why I want to pursue jobs in the manufacturing industry in the future."

"Our voluntary attrition rate went from nearly 12 percent to 2.5 percent due to providing a career path within the plant."

Automated Facilities and Logistics Technician Program

Region: Baltimore

With the rise of advanced technology that enables automation and direct-to-consumer supply chain solutions, the skills needed for a supply chain professional have drastically shifted. Currently, supply chain technicians need to have skills that include technology and mechatronics to ensure continued employability and a steady career path. This partnership will provide training to meet those needs. Portable and transferable certifications, such as Certified Logistics Technician and OSHA 10, will be offered. The first cohort, which began in September of 2019, has eight individuals enrolled.

Construction

Project JumpStart

Region: Baltimore City

Project JumpStart, led by the Job Opportunities Task Force, continues to provide pre-apprenticeship training meant to prepare individuals for careers in plumbing, carpentry, and electrical skills. The program, which is 11 weeks in length, also focuses on job readiness, financial education, and safety training. To date, more than 80 individuals have obtained employment, many of whom transition to employment with RA sponsors, thus continuing on a career path with increased wages and opportunity. In December of 2018, Project JumpStart completed its 50th class.

Participant Success Story: AJ had been living in the United States for approximately two years when he came to Project JumpStart. Despite holding a Master's Degree in Construction that he earned while living in Nigeria, he found it difficult to break into the industry. He heard about Project JumpStart and was willing to do whatever he needed to get his foot in the door. When he began the program, AJ was working part-time to provide for his family. The program staff at JumpStart made it clear that he likely would not be able to obtain employment in project management, as most of the opportunities for JumpStart graduates are entry-level. That did not matter to AJ, as he simply wanted to make the most of whatever opportunity became available. The Placement Director at JumpStart was able to secure AJ an interview with a longstanding employer partner for a project engineer position. After three long interviews, AJ was offered a position earning a salary of \$65,000 per year.

Suburban Maryland Construction Initiative

Region: Central Maryland

Led by the Finishing Trades Institute of Maryland, this partnership continues to utilize EARN funding to meet their workforce needs. Incumbent worker training remains an important tool for increasing the skillsets of current employees. As such, SMCI has provided training to more than 500 incumbent workers over the life of the program, in areas such as architectural coating, confined space, platform and equipment operation.

Like many other skilled trades, the Finishing Trades Institute struggles to recruit young people for their entry-level positions. As such, this partnership piloted a preparatory training with local high schools to expose students to careers in the trades. The

pilot was successful and yielded many lessons learned which will be utilized to develop stronger programming in the future. The Finishing Trades Institute has identified the EARN program as the mechanism that has transformed the way the organization thinks about workforce development.

Industry Feedback: "EARN has transformed the way that the Finishing Trades Institute approaches workforce development. There is no doubt that our members are more highly skilled as a result of our participation in the program, helping our contractors to become stronger and more profitable."

Remediation and Construction Industry Partnership (RCIP)

Region: Baltimore City

Given the feedback from its employer partners, the Remediation and Construction Industry Partnership is providing in demand training to grow the pipeline of qualified workers to be Brownfields Remediation and Stormwater Management Technicians. Participants earn a plethora of certifications, including EPA Asbestos Supervisor; Lead Abatement Worker;



Graduates of the Remediation Construction Industry Partnership

OSHA 40 Hour Hazardous Site Worker Protection and Emergency Response, OSHA Confined Space Operations; OSHA Bloodborne Pathogens; and OSHA Fall Protection. To date, 99 participants have completed training, of which, 91 (92 percent) have obtained employment. In 2019, the RCIP developed a partnership with Baltimore Gas and Electric to connect RCIP graduates with careers in the utility infrastructure industry. In addition, BGE awarded lead applicant Civic Works a grant to expand the RCIP curriculum and develop new partnerships with utility infrastructure employers. This funding will allow the RCIP to scale operations, and enable the partnership to expand its services.

Participant Success Story: Before participating in the Civic Works program, Marcus had been incarcerated for five years. He heard about the program through a Civic Works representative during his time in prison, and enrolled in training 1 week after he was released. During this time in training, Marcus worked hard and persevered through the challenges he encountered, eventually earning seven certifications. The program helped Marcus, who didn't have employment experience, gain confidence before he entered the workforce. "We did more than just lead and asbestos," Marcus said. "We did professional development, life goals, banking. I learned more about life." Soon after graduation, Marcus obtained employment earning \$13 an hour. Looking forward, Marcus aims to continue working on his professional development and grow into a supervisor role. "I turn 27 next week," he reflected. "This is going to be my first birthday home since I turned 19. I am really grateful and happy."

Creating a Pipeline for Green Jobs

Region: Anne Arundel County

Led by Anne Arundel Workforce Development Corporation, Creating a Pipeline of Green Jobs brings together employer partners who seek employees with basic construction skills, essential skills, and some experience and knowledge of the environmental aspects of the industry. In response, this initiative provides training that includes industry-recognized credentials, supportive services, and real work experience through work and learn opportunities. To date, nearly 20 individuals have obtained employment. The partnership also discovered the need to upskill current employees and has partnered with the City of Annapolis to train almost 10 incumbent workers.

Participant Success Story: In less than six months time, Brian went from homelessness to having a full-time job earning \$17 per hour with overtime opportunities and great benefits after enrolling in the Creating a Pipeline for Green Jobs training program. He is looking to relocate to an apartment in the Glen Burnie area so that he can be near his family and in close proximity to work. "I was homeless living in a tent and struggling to get on my feet. Now I have a good job with benefits and a pension using my CDL," Brian said. "I am on my way to rebuilding my life thanks to these programs. I am very thankful for this opportunity as it has changed my life."

Marine Trades Industry Partnership

Region: Statewide

The Marine Trades Industry Partnership continues to work diligently to meet the needs of its more than 70 employer partners. Incumbent worker training remains a high priority for industry partners. To date, more than 200 individuals have received training in a variety of topics, including Yamaha Outboard Repair, Travel Lift and Hydraulic Trailer Operation, and Marine Systems. Additionally, like many of the skilled trades, the marine trades industry is experiencing difficulty recruiting a pipeline of 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. Many interns stay on with employer partners after completion of the internship experience.

Participant Success Story: Ethan began the internship program shortly after graduation in 2015. He fell in love with the marine trades industry and is still employed four years later. Since completing the program, he has earned industry-recognized certifications like the Yamaha Service Skills Certificate. He plans to complete on in-line service engines and advanced electrical diagnostics in the future, with the ultimate goal of becoming a Yamaha Master Technician.

Eastern Shore Construction Alliance

Region: Eastern Shore

The construction industry on the Lower Eastern Shore is poised for growth, but hampered by the lack of a skilled workforce. In response to feedback from its eight employer partners, this program provides a comprehensive, holistic curriculum that addresses the multi- faceted challenges to retaining a highly qualified workforce, including specific skills training in carpentry and job readiness skills. Students also partake in hands on projects, including drywall and cabinet installation. To date, four individuals have obtained employment and two incumbent workers have received training, increasing their skillsets.

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 13-week training program includes theory-oriented, hands-on curriculum that provides students with the skills and industry-recognized certifications necessary to thrive in these careers. The initial cohort completed in early 2019 with 100 percent placement.

Participant Success Story: Cyrus excelled in training and graduated from the HVACR class. However, his criminal background made it difficult to obtain employment. He received intensive coaching from the NCIA staff and obtained employment earning \$16 per hour.

Global Resources for Academic & Career Excellence (GRACE) Partnership

Region: Baltimore City

Trainees will benefit from a trauma-informed integrated service workforce development delivery model that includes construction skills training and intense supportive and wrap-around services. Participants receive safety training, including First Aid/CPR and OSHA 10. Upon completion, trainees are connected with RA opportunities. Students are currently completing training, and to date, two individuals have obtained employment.

Participant Success Story: After spending time in prison, David, a father of three, was eager for a fresh start. He enrolled in the GRACE training program, where he was able to earn several industry-recognized certifications highly sought by employers. Upon completion of the program, he was able to obtain employment with a government electrical construction firm currently working on a multi-year contract.

Susquehanna Heating, Ventilation, Air Conditioning and Refrigeration (HVACR) Partnership Region: Susquehanna

Employers in the Susquehanna region report a critical shortage of HVAC-R installation technicians. In response to the lack of skilled workers, this partnership is providing pre-apprenticeship training to unemployed and underemployed individuals.

In addition to the fundamental concepts regarding HVAC-R installation, repair, and maintenance, individuals receive supplemental math, reading, comprehension, and essential skills training. Led by Cecil College, one cohort of students have completed training and are currently in job search.

Construction Workforce Partnership of Southern Maryland

Region: Southern Maryland

This partnership is providing invaluable training that targets unemployed, underemployed and incumbent workers in the construction industries. To date, 50 unemployed and underemployed individuals have enrolled in pre-apprenticeship training, which allows students to enter a



Labor Deputy Secretary David McGlone presents the Finishing Trades Institute with a National Apprenticeship Week proclamation.

career pathway that includes apprenticeship, craft training, and/or other post-secondary certificates. Five students have obtained employment, while the remaining students are still enrolled in training. The partnership also works to improve the safety of the construction workforce through expanded safety training for incumbent workers and supervisors. Fifty incumbent workers have received training.

Architectural Metal and Glass Initiative

Region: Central Maryland

In 2019, this partnership continued to supply integral incumbent worker training meant to advance the competitiveness of contractors in the glazing industry. To date, nearly 500 incumbent workers have received training in a variety of different skill sets, including equipment operator, total stations and curtain wall installer.

Like many other skilled trades, the Finishing Trades Institute struggles to recruit young people for their entry-level positions. As such, this partnership piloted a preparatory training with local high schools to expose students to careers in the trades. The pilot was successful and yielded many lessons learned which will be utilized to develop stronger programming in the future. The Finishing Trades Institute has identified the EARN program as the mechanism that has transformed the way the organization thinks about workforce development.

Automotive

Automotive Technicians for Change

Region: Baltimore

Led by Vehicles for Change, this program is training returning citizens to be automotive technicians. Automotive Technicians for Change, which lasts for up to six months, operates as a simulated work environment and provides hands-on experience and training, preparing interns to earn ASE certifications. The program offers comprehensive barrier removal and essential skills training, which is vital to participant success upon completion of the program. Since program inception, more than 120 interns have been placed into employment, and the program boasts a one percent recidivism rate. In 2019, Vehicles for Change launched an entry-level training program in the Waverly neighborhood of Baltimore City.

Participant Success Story: From a young age, Marcus has been interested in cars and automotive. Unfortunately, at age 15 he began dealing drugs. At 20, he was sentenced to 30 years in prison for manslaughter. He spent time at five different prisons across the State. During his incarceration, his anger continued to get the best of him. It was not until he became a grandfather that he realized he needed to make a change. While at the Maryland Correctional Training Center, Marcus earned his High School Diploma and enrolled in the automotive occupational training through Labor's Correctional Education program. Upon his release, he enrolled in the Full Circle Automotive and Training Program. He excelled and was eventually offered employment. Most recently, Marcus opened his own automotive shop in South Baltimore. While busy growing his business and being an entrepreneur, Marcus makes it a point to visit Full Circle to tell his inspirational story to other interns. —Automotive Technicians for Change

Childcare

Montgomery Alliance for Early Childhood Education

Region: Montgomery

Employers in the childcare industry report a critical shortage of qualified workers to fill open positions. To address this need, the Montgomery Alliance for Early Childhood Education, led by Montgomery College, is offering courses that lead to Child Development Associate, an industry recognized certification. Job training, English language skills development, basic education and workforce readiness are part of this structured curriculum. Employment prospects for those with a CDA range from positions as education providers at childcare centers, parent resource centers, family support programs, to employment in Head Start and Early Head Start programs. The first cohort began in August with 18 individuals enrolled.

Natural Resources

Work2Live WELL

Region: Baltimore

Led by the Maryland DNR, this partnership is the first EARN SIP managed by a sister agency. Working in partnership with private businesses, nonprofits, universities and others, the Work2Live WELL program is designed to offer exposure, opportunity and training in several emerging fields and sectors. Detailed field training plus classroom sessions, one-on-one mentoring and assistance is followed by opportunities to interview for employment with a private or public employer. Participants will gain important life and technical skills necessary to succeed and thrive in any field. To date, nearly 30 individuals have obtained employment. The partnership is also providing leadership training to incumbent workers.

Participant Success Story: Prior to beginning the program, one trainee was offered a position with a company at a starting rate of \$12 per hour. She was unsure if she wanted to accept employment at that wage, so she decided to pursue the training opportunity offered by the Work2Live WELL program. Upon completion of training, and after updating her resume with the new skills learned in the program, the same employer offered her employment for a different position earning \$14.50 per hour.

UTILIZING DATA

EARN Maryland's WTPs are intended to be data-driven to ensure that industry's most immediate workforce needs are met and that its trainees are well-positioned for meaningful employment. The requirements contained within the Solicitation for Implementation Grant Proposals mirror the enabling statute's contingent funding requirements of evidence of workforce shortages and a demonstrated need for worker training. The Solicitation requires that the WTP developed with EARN funds be both data-driven and experience-driven. This means that the Plan prepared by the Strategic Industry Partnership must assess and address:

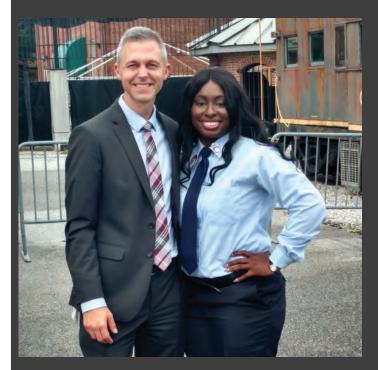
- Data-based evidence of shortages in skilled employment within the target industry over a sustained period of time
 or as projected, based upon planned large-scale programs underway (e.g. large construction or transit projects)
 or large-scale industry changes (e.g. health care) and description of specific high-demand occupations or sets of
 occupations at different skill and salary levels within the identified target industry; and
- Real experiences from target industry employers regarding actual and projected gaps in skills training and job readiness. In their upfront planning process, grantees should focus on ways to obtain input from a broad base of employers in their target industry and region in order to define common workforce needs. They should consider using focus groups, surveys, and other outreach tools.

While a Solicitation for Implementation Grant Proposals was not held in 2019, SIPs continue to utilize data to formulate WTPs. A listing of the data sources that have been used can be found in Appendix B of this report.

CONCLUSION

As is evident throughout the pages of this report, EARN continues to change the lives of countless Marylanders while positively impacting the business climate in the State. The Department of Labor looks forward to continued growth and success in 2020 and beyond.

WHERE ARE THEY NOW?



Brittany, highlighted in the EARN 2018 Annual Report, completed the Commercial Transportation Careers program at Maryland New Directions in March of 2018. She recently celebrated one year of employment with the Maryland Transit Administration and has plans to purchase her first home in 2020.

Raymond completed Project JumpStart in 2014 as a member of one of the inaugural EARN cohorts. Upon graduation from Project JumpStart, he was able to obtain employment and began a Registered Apprenticeship program. Case managers at Project JumpStart helped Raymond to secure reliable transportation through Vehicles for Change. In May of 2019, Raymond graduated from the RA program and is now a journeyman electrician.



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 below covers the time period July 1, 2018 through June 30, 2019.

By Sex

Sex	# of Participants	Percentage of Whole
Male	2,723	61%
Female	1,693	38%
Not specified	19	0%

By Race

Race	# of Participants	Percentage of Whole
White	1,485	33%
Black/African American	2,145	48%
Asian	207	5%
Native American/American Indian	17	0%
Hawaiian/Pacific Islander	9	0%
Hispanic/Latino	266	6%
Two or More Races	84	2%
Other	127	3%
Not Specified	95	2%

By Income

Income Level	# of Participants	Percentage of Whole
Less than \$10,000	1,653	37%
\$10,000 to \$14,999	189	4%
\$15,000 to \$24,999	406	9%
\$25,000 to \$34,999	359	8%
\$35,000 to \$49,999	389	9%
\$50,000 to \$74,999	697	16%
\$75,000 to \$99,999	162	4%
\$100,000 to \$149,999	104	2%
\$150,000 to \$199,999	25	1%
\$200,000 or more	22	0%
Unreported or Incalculable	429	10%

By National Origin

National Origin	# of Participants	Percentage of Whole
American	3,280	74%
North American (excluding USA)	70	2%
Central and Latin America	96	2%
European	120	3%
African	332	7%
Middle Eastern	25	1%
Asian	145	3%
Oceania	5	0%
Two or More Identified	17	0%
Other	33	1%
Not reported	312	7%

By County of Residence

County of Residence	# of Participants	Percentage of Whole
Allegany County	92	2.1%
Anne Arundel County	233	5.3%
Baltimore City	1,354	30.5%
Baltimore County	475	10.7%
Calvert County	13	0.3%
Caroline County	15	0.3%
Carroll County	73	1.6%
Cecil County	69	1.6%
Charles County	51	1.1%
Dorchester County	15	0.3%
Frederick County	198	4.5%
Garrett County	8	0.2%
Harford County	128	2.9%
Howard County	146	3.3%
Kent County	2	0.0%
Montgomery County	448	10.1%
Prince George's County	352	7.9%
Queen Anne's County	21	0.5%
Somerset County	0	0.0%
St. Mary's County	26	0.6%
Talbot County	13	0.3%
Washington County	173	3.9%
Wicomico County	87	2.0%
Worcester County	96	2.2%
Outside of Maryland	204	5%
Not reported	143	3%

By Educational Attainment

Education Level	# of Participants	Percentage of Whole
Some High School or Less	202	5%
High School Diploma/GED/		
Equivalent	1,759	40%
Some College	829	19%
Associate's Degree	288	6%
Bachelor's Degree	770	17%
Advanced Degree (Master's, PhD,		
other)	351	8%
Trade School	61	1%
Other/Undisclosed	175	4%

Credential or Certification – 2,169 Identifiable Skill – 2,869 A new Employment Position – 1,587 A Title Promotion – 315 A Wage Promotion – 1,143

Appendix B

The following is a listing of data sources used by EARN Maryland partnerships in the identification of training and skills needs.

American Society for Quality. (2010). ASQ education division's workforce development brief (vol. 1, no. 1). Retrieved from http://asq.org/edu/2010/07/human-resources/workforce-development-brief-vol-1-no-1.html?shl=100969

Anderson, K. (2016, October). Resolving the Cybersecurity Workforce Shortage. Retrieved from http://c.ymcdn.com/sites/www.issa.org/resource/resmgr/journalpdfs/feature1016.pdf

Baltimore County Government. (2018). Workforce development statistics. Retrieved from https://www.baltimorecountymd.gov/Agencies/economicdev/meet-baltimore-county/stats-andfigures/workforce-statistics.html

Baltimore Metropolitan Council. (2014). Barriers to employment opportunities in the Baltimore region. Retrieved from http://baltometro.org/phdownload/Publications/OpportunityCollaborative

Basu, Anirban. "An Abundance of Opportunity Meets a Need for Better Preparedness." Sage Policy Group Inc., 2016.

Basu, Anirban. "Information Technology-A Susquehanna Region Industry brief." Sage Policy Group Inc., 2017.

Basu, Anirban. "Labor Market Analysis of the Susquehanna Workforce Investment Area." Sage Policy Group Inc., 2012.

Boston Consulting Group - Agenda for 21st Century Talent https://www.bcgperspectives.com/content/articles/lean_manufacturing_us_skills_gap_could_thre aten_manufacturing_renaissance/

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Nursing Assistants and Orderlies, on the Internet at https://www.bls.gov/ooh/healthcare/nursingassistants.htm (visited June 01, 2018)

Community Foundation of the National Capital Area, (2016) Greater Washington Works-IT and Health Careers with Promise, https://thecommunityfoundation.org/wpcontent/uploads/2016/12/Greater-Washington-Works.pdf

CompTIA. Assessing the Skills Gap. May 2017

CompTIA. IT Industry Outlook 2018. January 2018

Department of Economic and Workforce Development. (n.d.). Jobs of the future: Trends in occupational employment 2015-2024. Retrieved from http://www.jacob-france-institute.org/wp

Duwe, G. (2015). The benefits of keeping idle hands busy: An outcome evaluation of a prisoner reentry employment program. Crime and Delinquency, 61(4), 559-586. Doi: 10.1177/001128711

Famiglietti, A., & Daugherty, H.G. (2018). Longitudinal research survey report for reentry employment. St. Mary's College of Maryland Sociology Department,1-17. NOTE: Unpublished source. Independent survey research from St. Mary's College of Maryland

Freudenberg, N., Daniels, J., Crum, M., Perkins, T., & Richie, B.E. (2005). Coming home from jail: The social and health consequences of community reentry for women, male adolescents, and their families and communities. American Journal of Public Health, 95(10), 1725-1736.

Greater Baltimore Committee Coalition for a Second Chance (GBC), Opening Doors to Second Chance, 2016 available at: https://gbc.org/wp-content/uploads/2016/12/GBC-Coalition-for-aSecond-Chance-report.pdf

Grossman, J., Kato, L., Mallon, T., Maguire, S. & Conway, M. (2015). The value of credentials for disadvantaged workers: Findings from the sector employment impact study (SEIS). Retrieved from https://assets.aspeninstitute.org/content/uploads/files/con/Value percent200f percent20Credentials.pdf

Hathaway, Melissa. "Cyber Readiness Index 2.0 a Plan for Cyber Readiness: A Baseline and an Index". Potomac Institute for Policy Studies, 2015.

Health Care for the Homeless Inc. (2011). Employment among Baltimore's homeless population: Hit hard by a struggling economy. Retrieved from https://www.hchmd.org/sites/default/wysiwyg ISACA and RSA Conference. (2016). State of Cybersecurity - Implications for 2016. Retrieved from https://www.isaca.org/cyber/Documents/state-of-cybersecurity_res_eng_0316.pdf

Justice Policy Institute, & Prison Policy Initiative (2015). Introduction: Mapping Baltimore's corrections and community challenges. Retrieved from https://www.prisonpolicy.org/origin.md

Justice Policy Institute, & Prison Policy Initiative. (2015). The right investment. Retrieved from http://www.justicepolicy.org/uploads/justicepolicy/documents/rightinvestment_design_2.23.15_ final.pdf

Laird, E., & Holcomb, P. (2011). Effective case management: Key elements and practices from field. Retrieved from https://www.mathematica-mpr.com/our-publications-and-findings/publications/effective-case-management-key-elements-and-practices-from-the-field

Maryland Alliance for the Poor. (2018). Maryland poverty profile. Retrieved from http://mapadvocacy.org/wp-content/uploads/2018/01/Maryland-Poverty-Profiles_2018_1-152018_T.pdf

Mirabella, L. (2015, October 10). Under Armour's vision for future manufacturing: Make local for local. The Baltimore Sun. Retrieved from http://www.baltimoresun.com/business/bs-bz-underarmour-local-manufacturing-20151010-story.html

National Association of Manufacturers, State Data Reports: http://www.nam.org/Data-andReports/State-Manufacturing-Data/State-Manufacturing-Data/October-2016/ManufacturingFacts--Maryland/

National Coalition for Homeless Veterans. (n.d.). FAQ about homeless veterans. Retrieved from https://www.va.gov/

HOMELESS/ssvf/docs/SSVF_FY2016_Annual_Report_508c.pdf

R Freeman. (2015, February 5). Why have CompTIA qualifications become so important? [Blog]. Retrieved from https://www.itgovernance.co.uk/blog/why-have-comptia-qualifications-becomeso-important/

United States Department of Labor, Bureau of Labor Statistics. Occupational Outlook Handbook. "Solar Photovoltaic Installers." Viewed at https://www.bls.gov/ooh/construction-andextraction/solar-photovoltaic-installers.htm#tab-6 on April 20, 2018

Weiser, Matt. "A good job if you can get it: America's solar workforce is heating up." The Guardian, 2 July 2016.

Workforce Collaborative: An Initiative of the Community Foundation. Greater Washington Works: IT and Health Careers with Promise. Community Foundation, 2016.

Workforce Innovation and Opportunity Act. (2017). Baltimore City's local workforce plan 20172010. Retrieved from http://moed.baltimorecity.gov/site/default/files/Local_Workforce_Plan.pdf