



Apprenticeship**USA**<sup>™</sup>

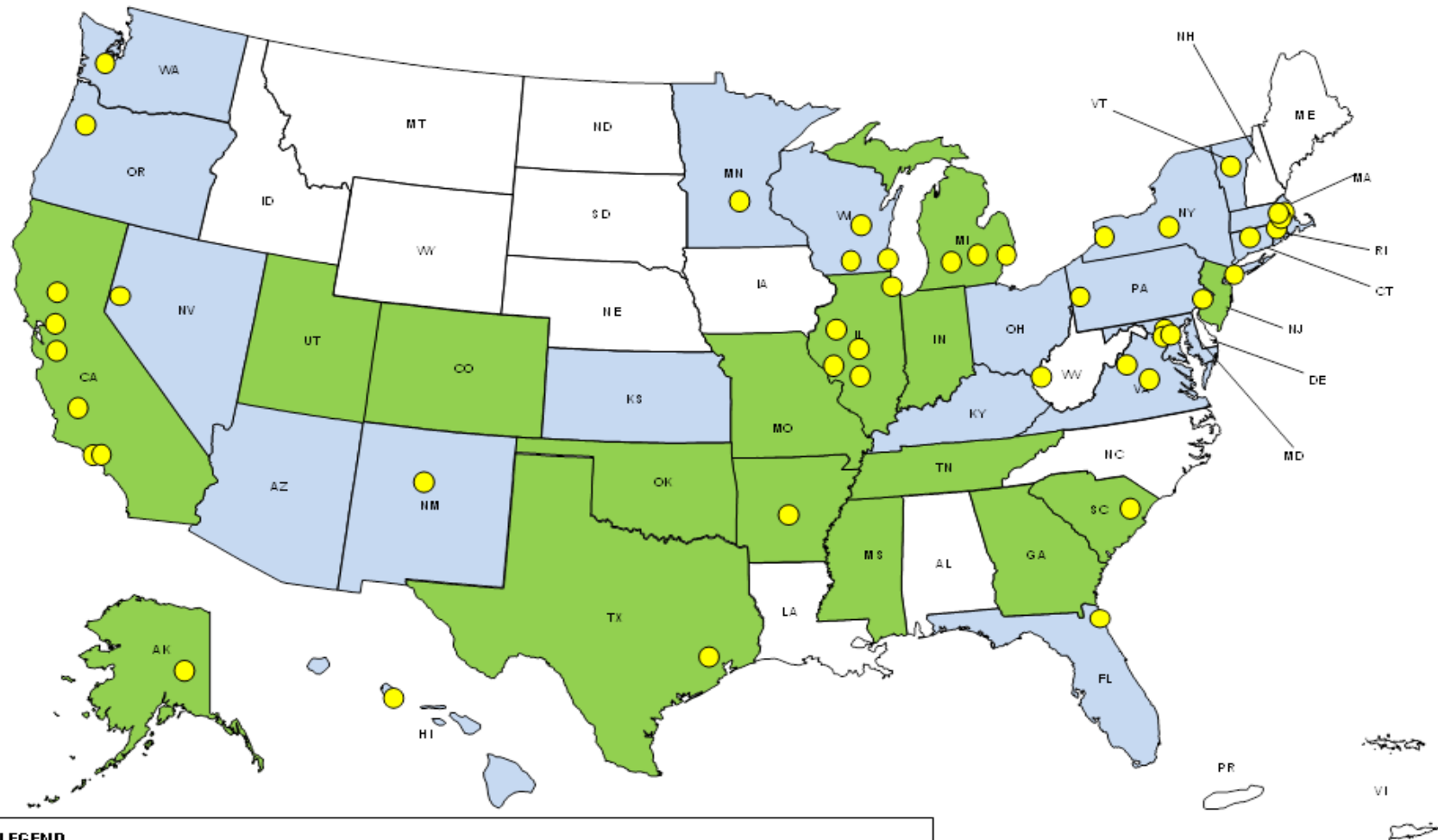
# American Apprenticeship Initiative

Grantee Success Stories



Note: The data in this document reflects activity as recorded by the U.S. Department of Labor Office of Apprenticeship in March, 2017. The stories were compiled by the National Governors Association Center for Best Practices.

### The American Apprenticeship Initiative Grantees



#### **LEGEND**

Federal states in service area

Grantee locations

State Apprenticeship Agencies in service area

## The American Apprenticeship Initiative: An Overview

Education and job training are among the surest pathways to the middle class, and job-driven Registered Apprenticeships, where workers earn and learn at the same time, provide American workers from all backgrounds with the skills and knowledge they need to acquire good-paying jobs that are available today. In fact, 87 percent of apprentices are employed after completing their programs, with an average starting wage of \$60,000. The return on investment for employers is also impressive — studies from around the globe suggest that for every dollar spent on apprenticeship, employers get back an average of \$1.47 in increased productivity, reduced waste and greater front-line innovation.<sup>1</sup> Simply put: apprenticeships help businesses, workers, and grow the economy.

In 2015, building on historic bipartisan support from Congress for “earn and learn” training opportunities, the U.S. Department of Labor launched the American Apprenticeship Initiative (AAI), which awarded \$175 million to 46 public-private partnerships across the country. These partnerships between employers, organized labor, non-profits, local governments, and educational institutions will expand Registered Apprenticeship to new communities and new industries. In total, the 46 AAI grantees will train and hire more than **34,000 new apprentices** in high-growth and high-tech industries including health care, information technology (IT) and advanced manufacturing over the next five years.

After the first year of the AAI investments, the results have been tangible: grantees have created new partnerships between education and industry to provide pathways for workers and talent pipelines for business. Some of the accomplishments of these partnerships include:

- **507** apprenticeship programs have been developed in high-demand fields, including insurance and finance, nursing and pharmacy, behavioral health, and network security administration and software development.
- **6,104** pre-apprentices and apprentices have been served to date.
- **3,633** new apprentices have been registered in apprenticeship programs and are receiving training for in-demand, high-wage jobs.
- **Approximately 68 percent** of these new apprentices are from populations traditionally underrepresented in apprenticeship programs, including women, people of color, veterans, and people with disabilities.

The following pages chronicle the success of 14 AAI grantees across the country in expanding Registered Apprenticeship programs into new industries and diversifying the population of apprentices across the country.

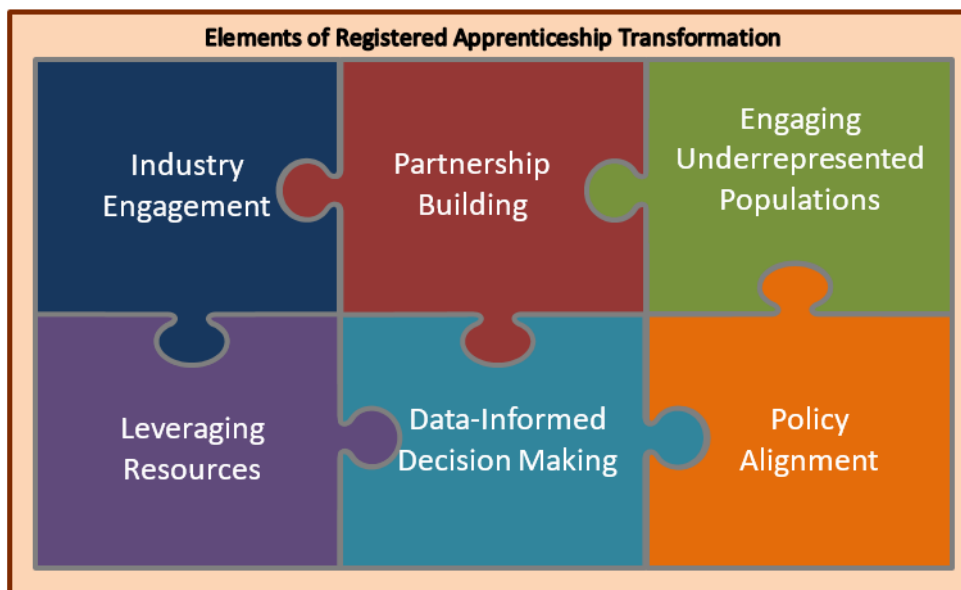
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<sup>1</sup> <http://caf-fca.org/wp-content/uploads/2014/08/It-pays-to-hire-an-apprentice.pdf>

## Built to Last: The AAI Success Factor Framework

To support AAI grantees' efforts to develop sustainable, demand-driven Registered Apprenticeship programs that connect to today's jobs, the National Governors Association Center for Best Practices (NGA Center) identified six elements, or "Success Factors," that will lead to success within the grantee's AAI program and overall transformation of the Registered Apprenticeship system. Based on leading research and former work by the NGA Center, the following six elements are used as a framework to describe grantee success in their AAI Grants in the following grantee profiles.

- **Industry Engagement**  
Grantees should engage employers to prove insights into industry and workforce needs; become partners in design, implementation and investment of resources; and develop longer-term relationships.
- **Partnership Building**  
Grantees should identify and collaborate with a broad range of partners, including schools, colleges, community organizations, and others to achieve success.
- **Engaging Underrepresented Populations**  
Grantees should have a continuum of processes and services that enable them to effectively serve targeted populations traditionally underserved in Registered Apprenticeship Programs
- **Leveraging Resources**  
Grantees should leverage local, state, federal, and private sector resources to increase the impacts of grant funding.
- **Data-informed Decision Making**  
Grantees should use labor market information, industry and occupational trends, assessment data, and other information to guide investment, programmatic, and other key decisions regarding grant planning, implementation, and system capacity.
- **Policy Alignment**  
Grantees should align and connect with policies and initiatives across workforce development, economic development, education, and other systems to improve grant outcomes and create longer-term conditions for success.



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## Alaska Department of Labor and Workforce Development

<b>Industry</b>	<b>Healthcare</b>
<b>Occupations</b>	Surgical Technologist, Central Sterile Processing Technician, Certified Nurse Assistant, Medical Assistant, Medical Office Assistant, Behavioral Health Technician, Community Health Worker, Home Health Aide
<b>Success Factors</b>	Industry Engagement, Partnership Building, Engaging Underrepresented Populations
<b>Target Populations</b>	People of Color (Alaska Native and American Indian Populations)
<b>Registered Apprenticeship Model(s)</b>	Time-Based, Competency-Based, Hybrid
<b>Other Elements</b>	Pre-Apprenticeship, Links to Career and Technical Education (CTE), Multi-Employer Sponsorship
<b>Programs Located In</b>	Alaska



Alaska's healthcare sector is growing rapidly, driven by steady population growth and an aging population. The healthcare industry in the state is projected to increase its workforce by sixteen percent over the next ten years and ultimately employ six percent of all Alaskans. The state has been a leader in launching Registered Apprenticeship programs to help ensure healthcare employers have the skilled workers they need to fill these new job openings. While Registered Apprenticeship programs in the healthcare sector have been rare until recent years, the Alaska Department of Labor and Workforce Development (DOLWD) has had active healthcare apprenticeship programs since the early 2000s. DOLWD is using AAI funding to support its goal of launching Registered Apprenticeship opportunities in every zip code, with a focus on the growing healthcare industry. DOLWD is working toward this goal using the following strategies:

### Industry Engagement

- Streamlining participation through employer-led consortiums:** Alaska DOLWD has been particularly successful in working with the state's largest employers in the healthcare industry. These employers established the Alaska Health Care Apprenticeship Consortium (AHCAC), a 501(c)(3) nonprofit that serves as a multi-employer Registered Apprenticeship sponsor that develops business-informed program standards and facilitates participant registration. AHCAC supports employers and both union and non-union workers statewide in eight occupations, with other occupations being added to meet employer demand. The success of this initial partnership led to the development of three other multi-employer sponsor programs supporting a diverse and growing group of occupations.
- Leveraging other successful models:** Alaska DOLWD is also working with the American Health Information Management Association (AHIMA) Foundation, a USDOL-supported industry intermediary, to accelerate the development of related technical instruction for additional healthcare occupations. AHIMA Foundation shares components of Registered Apprenticeship models that have been successfully implemented in other areas that can be customized to meet the needs of Alaska employers.



## Partnership Building

- **Building career pathways:** Alaska DOLWD partners with diverse education providers to support apprentices from initial career exploration through Registered Apprenticeships and post-secondary degrees. By working with high school career and technical education (CTE) programs that offer industry recognized certifications and work-based learning opportunities, Alaska DOLWD links AAI-funded pre-apprenticeship programs to Registered Apprenticeship opportunities and partners with several universities offering degrees in the healthcare field. These efforts allow apprentices to effectively navigate opportunities in the field and build a talent pipeline for industry employers.
- **Collaborating with other key partners:** Alaska DOLWD partners with several government, non-profit and labor partners to serve businesses and learners in the healthcare sector, including the Alaska Departments of Administration and Health and Human Services and several labor unions. Alaska DOLWD also has a strong partnership with USDOL's Office of Apprenticeship (OA) for the state, which has helped support the state's Registered Apprenticeship expansion efforts. Alaska's OA State Director has helped Alaska DOLWD cross-train job center staff, enabling them to deliver Registered Apprenticeship services through job centers statewide. This service delivery model has proven to be an effective approach for supporting employers and apprentices in their local areas.

## Engaging Underrepresented Populations

- **Leveraging population-focused organizations:** 96% of Alaska DOLWD's 137 Registered Apprentices have been drawn from underrepresented populations, including a high proportion of women and people of color. Alaska's AAI grant has a specific focus on engaging Alaska Native and American Indian populations and has leveraged partnerships with the Alaska Native Tribal Health Consortium and school systems and job centers to engage these populations in Registered Apprenticeship opportunities. The Alaska Area Health Education Center leads these engagement efforts through five regional programs that offer career awareness and statewide pre-apprenticeship programs in allied health and behavioral health careers.

## Building Futures

<b>Industry</b>	<b>Advanced Manufacturing, Information Technology, Healthcare, Construction &amp; Traditional Trades</b>
<b>Occupations</b>	Network Engineer, IT Support Technician, Biomedical Equipment Technician, Data Scientist, Cybersecurity Analyst, CNC Machinist, Tool and Die Maker, Quality Control Systems Manager, Marine Carpenter, Composites Technician, Medical Coder, IT Helpdesk, Community & Home Health Nurse, RN to BSN, Licensed Chemical Dependency Professional, Pharmacy Technician, Retail Store Manager
<b>Success Factors</b>	Industry Engagement, Partnership Building, Engaging Underrepresented Populations
<b>Target Populations</b>	Women, People of Color, Veterans, Youth, Incumbent Workers
<b>Other Elements</b>	Pre-Apprenticeship
<b>Registered Apprenticeship Model</b>	Hybrid
<b>Programs Located In</b>	Rhode Island



Apprenticeship Rhode Island, an initiative of Building Futures, has successfully launched Registered Apprenticeship programs in a broad range of industries. Its business sponsors include: CVS Health and Care New England for healthcare, Claflin and Atrion Networking Corporation for IT, Swissline Precision and the Rhode Island Manufacturers Association for advanced manufacturing and the Rhode Island Marine Trades Association for marine trades. Apprenticeship Rhode Island has leveraged both pre-apprenticeship programs and partnerships with community-based organizations to create a pipeline of diverse individuals

in each sector who are ready to enter these fields. Through its AAI grant, Apprenticeship Rhode Island has designed and registered 11 new Registered Apprenticeship programs and registered 69 apprentices to date, 81 percent of whom are from underrepresented populations. There are currently 55 pre-apprenticeship participants, 76 percent of whom are from underrepresented populations.

### Industry Engagement

- **Providing one-on-one service to employers:** Apprenticeship Rhode Island's employer liaisons and project managers work one-on-one with each employer partner and industry association sponsor on program design, planning and registration to make the process as easy as possible for businesses. This includes helping employers maximize state and federal financial benefits and connecting employers with other employers and higher education institutions that may be useful partners in this work.
- **Developing effective Registered Apprenticeship models:** Apprenticeship Rhode Island works directly with employer partners and industry associations to develop and register their apprenticeship standards. Apprenticeship Rhode Island leverages national Registered Apprenticeship initiatives where possible and shares models from other programs that can be

customized to meet the needs of local employers. For example, Apprenticeship Rhode Island has worked with Atrion Networking Corporation to develop a three-year hybrid Registered Apprenticeship program for network engineers that progresses through a career path incorporating competency-based elements.

### Partnership Building and Engaging Underrepresented Populations

- **Leveraging external pipelines for recruitment:** Apprenticeship Rhode Island works with several community-based organizations (CBOs) to recruit talented and diverse individuals with the skills needed to enter its Registered Apprenticeship programs. For example, Year Up, a national non-profit organization, is placing graduates in three of Apprenticeship Rhode Island's programs. Year Up offers a one-year, intensive training program that provides low-income young adults with a combination of technical and professional skills, college credits and hands-on experience while also providing case management services.

*The following are testimonials about the IT company Claflin's participation in Apprenticeship Rhode Island:*



*"Claflin needs a very specific set of IT skills to support the growing convergence of medical devices and IP technology. Disruptive technologies such as the Internet of Things are transforming our work. These are not skill sets we can find in candidates graduating from Rhode Island colleges and universities. Claflin has taken charge of its talent development pipeline by launching a custom-designed apprenticeship."*

- Michael Oliver, Chief Innovation Officer, Claflin Company



*"After graduating from Year Up's IT program, Claflin's apprenticeship was a package I couldn't turn down because it puts me into a career by being on the job, getting hands-on experience, while also taking engineering classes. Claflin worked with the Community College of Rhode Island to design a special path to a degree that will speed up the process. I like that I am on the road going to different settings, doing equipment maintenance and electrical safety, rather than sitting behind a computer all day. Every day is a learning experience because there is such a variety of equipment out there and new situations to resolve."*

- Fernando Ruiz, Biomedical Equipment Tech Apprentice, Claflin Medical Equipment and Year Up Graduate

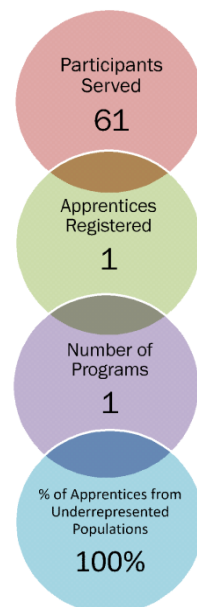


*"When I first learned about the Claflin Apprenticeship I said, 'I need this. I will learn from this. This is a career, and an opportunity for personal growth.' I am very intrigued by data science. I get to learn about IT and how it connects to hospitals. The apprenticeship gives me exposure to different aspects of Claflin's business, like sales and marketing, so I can see how it all comes together"*

- Phencharaud Thach, Data Science Apprentice, Claflin Medical Equipment and Year Up Graduate

## City and County of San Francisco

<b>Industry</b>	<b>Information Technology</b>
<b>Occupations</b>	Web Developer, Computer Programmer, Data Scientist
<b>Success Factors</b>	Industry Engagement, Engaging Underrepresented Populations, Partnership Building
<b>Target Populations</b>	Veterans, Women, People of Color
<b>Registered Apprenticeship Model(s)</b>	Hybrid, Competency-Based
<b>Programs Located In</b>	California



Nestled in the midst of constant innovation and a hub of technology businesses, the Office of Economic and Workforce Development (OEWD) in the City and County of San Francisco is introducing fresh thinking to the challenges faced by business. Driven by a desire to develop fresh IT talent and to build a more inclusive and diverse talent pool, businesses are turning to OEWD and Registered Apprenticeship to solve their pressing workforce needs. In response, OEWD created TechSF

in 2012 to both support local businesses and revitalize downtown San Francisco.

Though OEWD is still in the early stages of its apprenticeship work, TechSF has received national recognition through the U.S. Department of Labor's TechHire<sup>2</sup> initiative for its work to build recruiting networks for individuals in high-poverty communities and develop partnerships with high schools and colleges to create accessible career pathways with employers. TechSF is using its AAI grant to develop more robust, high-quality work-based learning experiences through Registered Apprenticeships. The TechSF program is applying several promising strategies in its work to expand participation in Registered Apprenticeship:

### Industry Engagement

- **Developing industry leadership:** In support of its AAI objectives and broader goals, OEWD has brought together key employer leaders through a new Communication Technology Sector Committee as part of Workforce Investment San Francisco, the city's workforce development board. Of these employers, nearly half are employer sponsors in their AAI grant, including LinkedIn, Zendesk, and Pinterest.

### Engaging Underrepresented Populations

- **Leveraging the state workforce system:** TechSF holds orientations through its local American Job Center to build community interest, which has led to hundreds of applications from individuals in need of employment opportunities. Furthermore, TechSF offers topical skill-building workshops to

<sup>2</sup> Smith, T. (2016, May). SIX EFFECTIVE APPROACHES FOR TECHHIRE INITIATIVES (Issue brief). Retrieved May 1, 2017, from Jobs for the Future website:

[http://www.jff.org/sites/default/files/publications/materials/TechHire\\_052616.pdf](http://www.jff.org/sites/default/files/publications/materials/TechHire_052616.pdf)

better prepare individuals for Registered Apprenticeships and pre-apprenticeships in the tech industry, including:

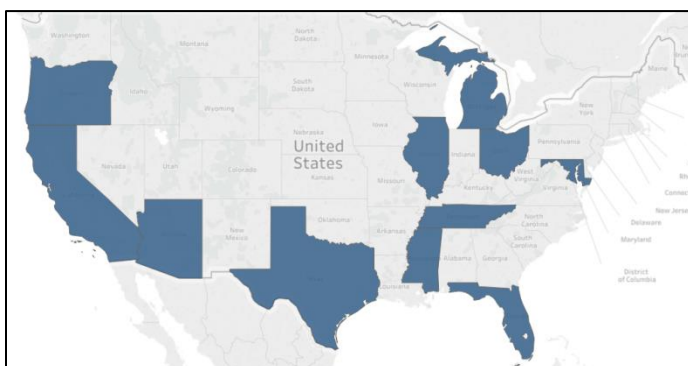
- “Just Show Up: The Art of Being Present”
- “Jump Start Your Career”
- **Preparing prospective candidates for success:** With the help of volunteers from LinkedIn, TechSF provided mock interview opportunities for community members to help prepare them for Registered Apprenticeship programs.
- **Connecting to community through social media:** TechSF is partnering with the Bay Area Video Coalition (BAVC) to develop an advertising campaign to promote the tech sector to a more diverse population, including using social media to reach people where they are.

#### **Partnership Building**

- **Building career pathways:** OEWD is implementing career pathways with the San Francisco Unified School District and the local community college, City College of San Francisco, in support of the AAI grant objectives as well as OEWD’s broader work. The career pathways initiative will expose more students to STEM (science, technology, engineering and math) careers, creating a future pipeline of jobseekers into technology careers and an additional recruitment point for Registered Apprenticeship programs.
- **Leading by example:** Recognizing that the City & County of San Francisco also has a shortage of skilled tech labor, OEWD is now working with several other city agencies to integrate Registered Apprenticeship programs into public sector jobs.

## Electrical Training ALLIANCE

<b>Industries</b>	<b>Construction &amp; Traditional Trades</b>
<b>Occupations</b>	Pre-apprenticeship programs leading to occupations in electrical engineering, civil engineering and networking administration
<b>Success Factors</b>	Engaging Underrepresented Populations
<b>Target Populations</b>	Women, People of Color, Individuals with Disabilities, Low-skilled Populations, Veterans
<b>Registered Apprenticeship Model</b>	N/A (AAI grant efforts focus on pre-apprenticeship)
<b>Other Elements</b>	Pre-Apprenticeship
<b>Programs Located In</b>	Arizona, California, Florida, Maryland, Michigan, Nevada, North Carolina, Ohio, Oregon, Tennessee, Texas



Quality pre-apprenticeship programs can play a valuable role in preparing qualified entry-level workers for Registered Apprenticeship careers while contributing to the development of a diverse and skilled workforce.<sup>3</sup> The Electrical Training ALLIANCE is leveraging its expertise in pre-apprenticeship programs to prepare a diverse pool of electrical engineers, civil engineers and networking administrators for rewarding careers across 11 states. The

ALLIANCE operates pre-apprenticeship programs that lead directly to Registered Apprenticeship programs, responding to a tremendous need to increase representation of underrepresented individuals in the electrical/electronic occupations. As of March 2017, the ALLIANCE has served 353 pre-apprentices and registered 148 apprentices under the grant, 100% of whom are from underrepresented populations. Separate from the pre-apprenticeship program supported through the AAI grant, the ALLIANCE has 102 additional Registered Apprentices in 5-year programs who are all from target populations.

### Engaging Underrepresented Populations

- **Building career readiness:** To ensure that individuals from a variety of backgrounds are ready to start on the job, the ALLIANCE provides a two-pronged approach to preparation. First, the pre-apprenticeship program provides training in basic math and reading comprehension skills. Second, it provides introductory lessons on what to expect in the careers for which students are training, including the type of work they will experience on the job, any further education that may be needed and what a day on the job looks like.
- **Providing on-the-job support:** To enhance this theoretical learning, pre-apprentices are expected to spend a minimum of 80 supervised hours in the workplace. The ALLIANCE provides specialized instruction and one-on-one coaching sessions when participants are struggling.

<sup>3</sup> [https://wdr.doleta.gov/directives/attach/TEN/TEN\\_13-12.pdf](https://wdr.doleta.gov/directives/attach/TEN/TEN_13-12.pdf)

- **Building pathways:** The ALLIANCE's strong connection between its pre-apprenticeship and Registered Apprenticeship programs can be illustrated through a story of one participant. Terrante Belmer was not accepted into the Registered Apprenticeship program through his first application, following a determination that he was underqualified. He was instead offered entry into the pre-apprenticeship program, where he demonstrated a positive attitude and received good reports from his employer, Delgado Electric. He transitioned successfully into the Registered Apprenticeship program and is now maintaining a 91 percent average for his first year of curriculum.

*The following are testimonials from participants in ALLIANCE pre-apprenticeship programs:*

***"It was a great overview before actually starting the job and it set me up for success."***

*-Christine Handley*

***"I had the chance to learn the math I didn't learn in high school."***

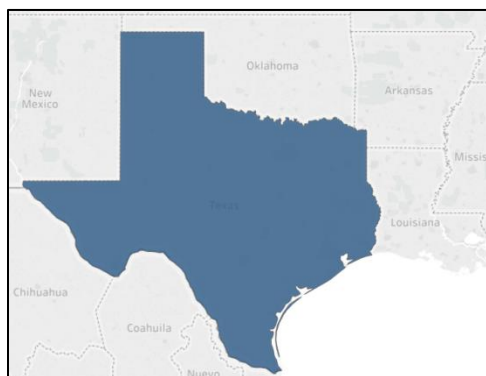
*-Douglas Vargas*



## Houston Community College

<b>Industry</b>	<b>Construction &amp; Traditional Trades, Healthcare, Business &amp; Professional Services</b>
<b>Occupations</b>	Plumber, Pharmacy Technician, Carpenter, Electrician, Millwright, Pipe-fitter, Welder, Mason, Stationary Engineer, Glazier, Pharmacy Technician, Pharmacy Benefits Manager, Computer Systems Analyst, Network & Computer Administrator, Computer Support Specialist
<b>Success Factors</b>	Industry Engagement, Engaging Underrepresented Populations
<b>Target Populations</b>	People of Color
<b>Registered Apprenticeship Model</b>	Hybrid
<b>Programs Located In</b>	Texas

Participants  
Served  
**501**



Building on three decades of experience with Registered Apprenticeship in the traditional trades, Houston Community College (HCC) is establishing Registered Apprenticeship programs in new occupations through partnerships with JPMorgan Chase and CVS Health. By working with employers, employer associations and joint-labor management organizations, HCC provides apprentices with classroom-related instruction that meets the needs of industry. Successful completers of these Registered Apprenticeship programs can receive up to 36 college credits towards their Associate's degree in Applied Science and Construction Management at HCC.

### Industry Engagement

- **Developing industry diversity:** HCC has successfully engaged employers in the healthcare, information technology (IT) and traditional trades sectors, demonstrating its ability to develop Registered Apprenticeship programs across industries. Though HCC provides the Related Technical Instruction, the employer partners truly “direct” the apprenticeship program. Influential employer leaders such as CVS Health and JP Morgan Chase partner with HCC to develop Registered Apprenticeship programs for 21<sup>st</sup> century occupations in IT and healthcare. They also communicate with other branches across the U.S. to expand apprenticeship in other regions.

### Engaging Underrepresented Populations

- **Conducting targeted outreach:** HCC's Office of Institutional Research identifies communities surrounding the college with a higher percentage of underserved populations, and HCC conducts targeted outreach in those communities through job fairs and other strategies. HCC also shares information with 40 high schools in the Houston Independent School District and other surrounding districts to build awareness of its Registered Apprenticeship programs. As a result of these and other efforts, HCC has served approximately 60 young people from underrepresented populations through the Pharmacy Tech program and 133 through the Plumbing program.



- **Building relationships with apprentices:** HCC staff conduct weekly calls with apprentices to discuss their successes and challenges. This regular touch-point allows HCC staff to determine if the apprentice needs additional services or resources and connect them directly with the correct staff. The weekly calls and service referrals increase participant retention and reassure apprentices that HCC staff want them to be successful.

*The following is a testimony from an HCC apprentice placed in a pharmacy technician program at CVS Health:*



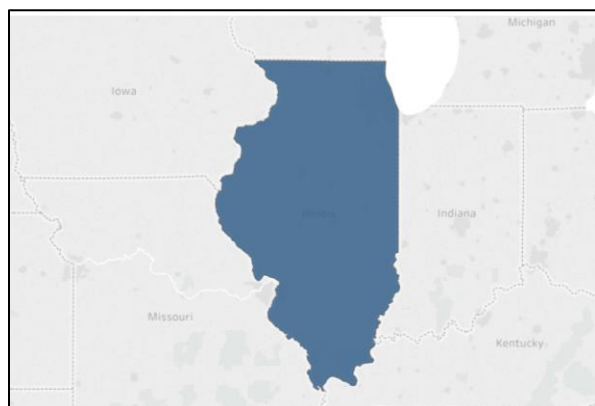
*"I was under employed, working menial low paying jobs. One right after the other. I worked the overnight shift. I made less than 10 dollars an hour. I worked with people who had been there for 8 and 10 years. Some of them worked there for 15 years and they didn't earn much more than I did. There was no upward movement. That was my future.*

*That is no longer my future thanks to the grant funded program. Now, I know that I will graduate as a nationally certified pharmacy technician. It means that I will be able to get into the workforce with a career... and I can provide a good quality of life for my family. I would tell students that if you are serious about making a change in your life, if you want a career and not just another job, the pharm tech program is an excellent opportunity."*

- Danielle Greer, Dallas Community College, CVS Health Pharmacy Technician

## Illinois Manufacturers' Association Education Foundation

<b>Industry</b>	<b>Advanced Manufacturing, Information Technology</b>
<b>Occupations</b>	Industrial Maintenance Technicians, CNC Machine Professionals, Logistics Transfer Agents, Secure Software Developers
<b>Success Factors</b>	Engaging Underrepresented Populations, Data-Informed Decision-Making
<b>Target Populations</b>	Women, People of Color
<b>Registered Apprenticeship Model(s)</b>	Hybrid
<b>Programs Located In</b>	Illinois



The Illinois Manufacturers' Association Education Foundation (IMA Education Foundation) aims to be the premier influencer of education programs to attract and develop Illinois' future manufacturing workforce. The IMA Education Foundation is working with partners through the AAI grant to raise awareness and register participants in advanced manufacturing Registered Apprenticeship programs.



### Engaging Underrepresented Populations

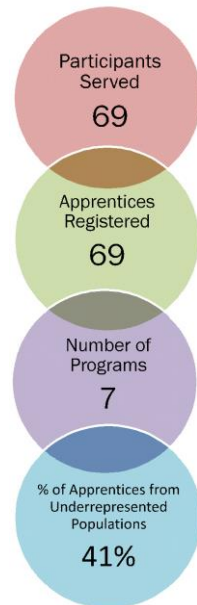
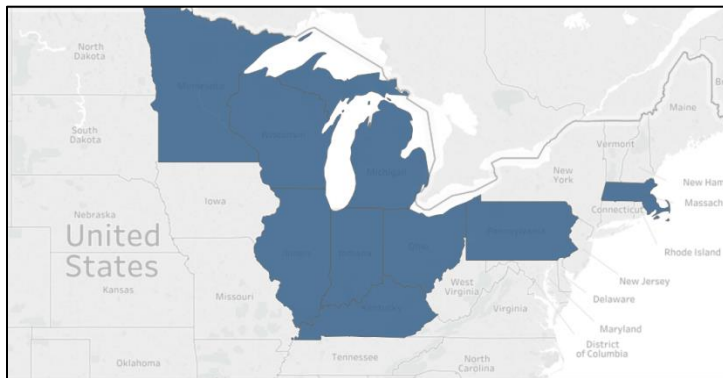
- **Removing barriers for youth:** To reach a larger, more diverse audience, the IMA Education Foundation is using nontraditional strategies to reduce barriers for youth. For example, the IMA Education Foundation reimburses the cost of industry-recognized aptitude tests for youth in IT career pathways, which will enable more youth to access Registered Apprenticeships. The foundation has also developed a new website (<http://www.gpapprentice.org/>) to explain its wage and tuition reimbursement programs to employers and youth.
- **Engaging students of all ages:** The IMA Education Foundation co-sponsored the biennial International Manufacturing Technology Show at McCormick Place in Chicago, with more than 17,000 middle school, high school and community college students in attendance.

### Data-Informed Decision-Making

- **Using real-time data to drive the work:** The IMA Education Foundation relies on updated labor market information as a statistical foundation for all its work, from program development and design to practical implementation. The foundation uses statistics from the Bureaus of Labor Statistics, Economic Analysis and Census to analyze current employment statistics; regional economic accounts; current outputs, orders and inventory; and economic and employment projections.

## Jobs for the Future

<b>Industry</b>	<b>Advanced Manufacturing</b>
<b>Occupations</b>	Industrial Manufacturing Technicians – Production Workers
<b>Success Factors</b>	Engaging Underrepresented Populations, Leveraging Resources
<b>Target Populations</b>	English Language Learners, Women, People of Color, Veterans
<b>Registered Apprenticeship Model(s)</b>	Competency-Based Hybrid
<b>Programs Located In</b>	Indiana, Illinois, Kentucky, Michigan, Minnesota, Ohio, Pennsylvania, Wisconsin



Jobs for the Future (JFF) is coordinating the Next Generation Industrial Manufacturing Technician (Next Gen IMT) Registered Apprenticeship program, using its AAI grant to leverage partner organizations across eight states. Next Gen IMT will serve 1,450 individuals through a competency-based

hybrid manufacturing Registered Apprenticeship program focused on new and incumbent entry-level workers.

### Engaging Underrepresented Populations

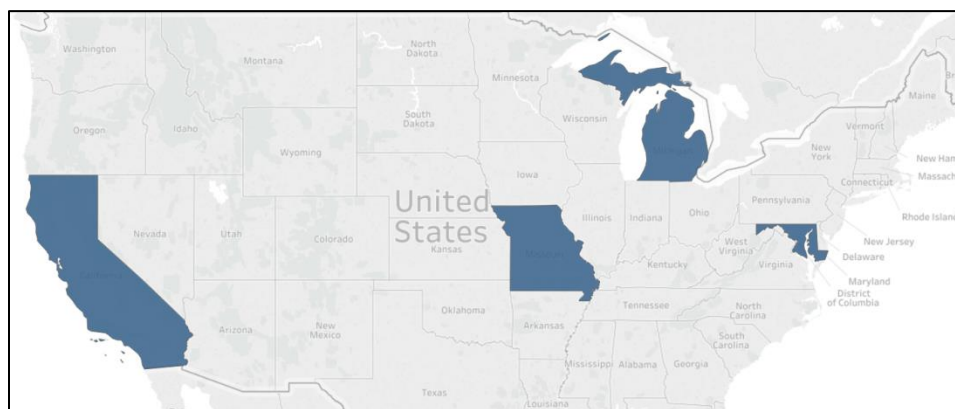
- **Opening doors for veterans and others:** JFF partners with community-based organizations and other community providers to assist veterans, people of color and English language learners to enter the advanced manufacturing sector. For example, JFF works with the U.S. Department of Veterans Affairs' regional veterans' employment coordinators, who provide technical assistance and resources on how veterans can use their GI Bill benefits to pay for related instruction. JFF also partners with the Labor Institute for Training (LIFT), a community outreach organization that works to enhance and expand English language and advanced manufacturing technical skills for residents with limited English proficiency. In Indiana, JFF works with the Indiana Department of Workforce Development, where adult basic education service providers have developed a bridge program to increase Registered Apprenticeship opportunities for Latinos.

### Leveraging Resources

- **Building sustainability:** JFF is also working to secure long-term funding to ensure the success of the Next Gen IMT program after the end of the AAI grant. By March 2017, JFF had leveraged over \$95,000 of supportive resources for program support, strategic engagement and technical assistance. These leveraged resources come from a Manufacturing Extension Program grant, Individual Training Accounts, State Expansion Grants, and Industry Partner contracts. JFF has also identified state-specific tax programs, business expansion and training funds to support its Registered Apprenticeship efforts.

## Managed Career Solutions, Inc.

<b>Industries</b>	<b>Information Technology, Healthcare</b>
<b>Occupations</b>	Computer Programmer/Web Developer, Computer Support Specialist, Cybersecurity Specialist, Health Information Technology Specialist, Information Technology Project Manager, Medical Laboratory Technician
<b>Success Factors</b>	Engaging Underrepresented Populations
<b>Target Populations</b>	Women, Individuals with Disabilities
<b>Registered Apprenticeship Model(s)</b>	Competency-Based
<b>Programs Located In</b>	California, Maryland, Michigan, Missouri



A leader in expanding Registered Apprenticeship to new industries, Managed Career Services, Inc. (MCS) in Los Angeles, California, is focused on connecting youth to new careers in the IT and Healthcare fields. MCS's major project, the OpenTech LA Regional Collaborative Program (OpenTech LA), currently partners with 18 employers to provide eight Registered Apprenticeship programs in fields such as programming, web development, cybersecurity and health information technology. OpenTech LA enrolled 96 apprentices and 219 pre-apprentices as of March 2017, with goals of reaching 300 apprentices and 231 pre-apprentices by the end of the grant.

### Engaging Underrepresented Populations

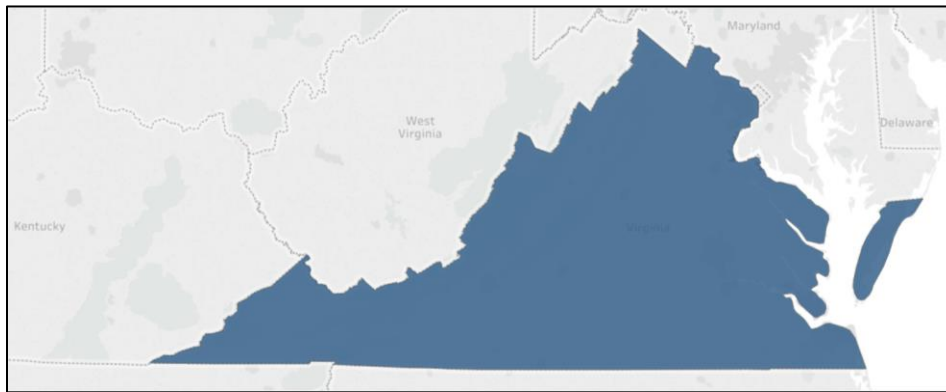
- Building careers for individuals with disabilities:** One transformative partnership of OpenTech LA is the Exceptional Minds Studio, a Los Angeles-based computer animation studio with a three-year training program for young adults with autism. Participants receive customized instruction in visual effects and digital animation, two to three Adobe certifications and work readiness courses to prepare them for lifelong careers. Class sizes are kept small and work hours are shorter to accommodate the participants. The recent work of Exceptional Minds students has been used in major television shows and movies, including *Game of Thrones*, *The Hunger Games* and *Dr. Strange*.

*The following is an example of the impact of the OpenTech LA program:*

OpenTech LA has changed the life trajectories of many participants. One enrollee, Juan, graduated from a Tech Academy high school and was having trouble finding a job when he heard about the OpenTech LA program. OpenTech LA connected Juan with an IT Help Desk job at Elkay Plastics, a manufacturing and distribution company in Commerce, California. This opportunity led to a formal internship with an on-the-job learning program. Through this opportunity Juan's hourly pay increased from \$10.00/hour to \$18.00/hour, and he has earned the respect of the staff at Elkay Plastics. Juan completed his Registered Apprenticeship program in January 2017.

## Shenandoah Valley Workforce Development Board

Industry	Advanced Manufacturing
Occupations	Industrial Manufacturing Technician
Success Factors	Industry Engagement, Partnership Building, Engaging Underrepresented Populations
Target Populations	Women, Low-Skilled Workers, Veterans, Individuals with Disabilities, Underemployed, Unemployed, Dislocated
Registered Apprenticeship Model	Hybrid
Other Elements	Pre-Apprenticeship
Programs Located In	Virginia



As manufacturing evolves into advanced technologies, the Shenandoah Valley Workforce Development Board (SVWDB) in Virginia strives to innovate worker training within the industry. SVWDB has excelled in building strong partnerships through its Valley to Virginia (V2V) Advanced Manufacturing Registered Apprenticeship Initiative. Because of its focus on meeting the needs of business and working with a wide array of partners, SVWDB surpassed all its year-one program goals, including registering over 150 apprentices with 36 employer sponsors, creating seven new Registered Apprenticeship programs and expanding 16 programs with existing employer sponsors.

### Industry Engagement

- **Using technology to meet business needs:** SVWDB goes above and beyond to meet the needs of employers. For example, SVWDB identified an online welding curriculum for industrial refrigeration manufacturer Innovative Refrigeration, which allowed the company to conduct onsite instruction using company trainers and a highly customized curriculum from the National Center for Construction Education and Research.

### Partnership Building

- **Building scale through partnerships:** By leveraging existing relationships with numerous businesses, SVWDB enhanced partnerships with its state apprenticeship agency, the Virginia Manufacturers Association and local community colleges. These partnerships allowed SVWDB to improve its Registered Apprenticeship program options, including developing new competency-based assessments for students and hiring an apprenticeship coach who facilitates program registration for businesses.

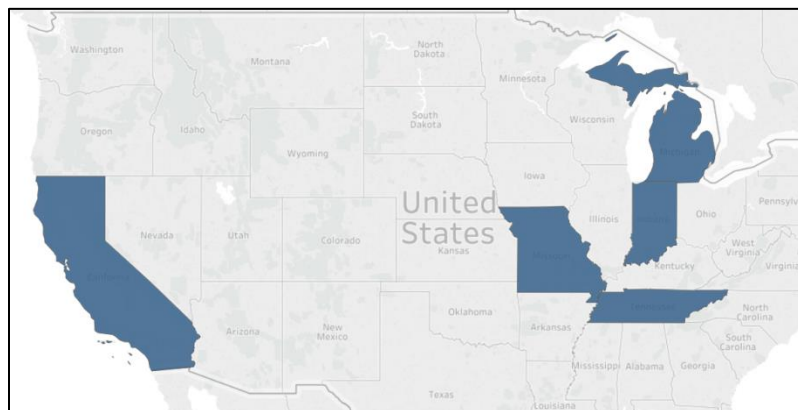
### **Engaging Underrepresented Populations**

- **Serving veterans and individuals with disabilities:** SVWDB's pre-apprenticeship program with Hershey Foods aims to help the company identify transitioning military members for its mechatronics Registered Apprenticeship program. SVWDB also partners with one of Virginia's premier rehabilitation centers on a pre-apprenticeship program for disabled manufacturing trainees.



## UAW-Labor Employment and Training Corporation

<b>Industry</b>	<b>Advanced Manufacturing</b>
<b>Occupations</b>	Electrician, Welder, Tool-and-Die Maker, Plumber/Pipefitter, Millwright, Metal Model Maker, Machine Repair
<b>Success Factors</b>	Industry Engagement, Engaging Underrepresented Populations
<b>Target Populations</b>	People of Color, Veterans, Women, Individuals with Disabilities
<b>Registered Apprenticeship Models</b>	Time-Based, Hybrid
<b>Other Elements</b>	Pre-Apprenticeship
<b>Programs Located In</b>	California, Illinois, Kentucky, Michigan, Ohio, Tennessee, Virginia, Wisconsin



As baby boomer production workers retire in droves, the automotive industry faces the significant challenge of replenishing its workforce. The United Auto Workers Labor Employment and Training Corporation (UAW-LETC) has a long history with the auto industry, and UAW-LETC has used its AAI

grant to build a robust set of Registered Apprenticeship programs for the “Big 3” auto manufacturers and other manufacturing companies across the country. UAW-LETC’s main partner in the grant, the UAW Skilled Trades Department, works with employers to develop programs that meet workforce needs and recruit diverse populations.

### Industry Engagement

- **Replicating success in multiple locations:** UAW-LETC has demonstrated an ability to implement RA programs in diverse regions of the country. UAW-LETC’s programs span eight states, with companies in both urban/suburban areas such as the “Big 3” automakers in Detroit as well as rural communities such as Colfor Manufacturing in Malvern, Ohio and International Automotive Components in Strasburg, Virginia. This diversity demonstrates the applicability of the Registered Apprenticeship model across a variety of communities. UAW-LETC also hopes to partner with community colleges to create more on-ramps to Registered Apprenticeship and to expand into the aerospace industry.

### Engaging Underrepresented Populations

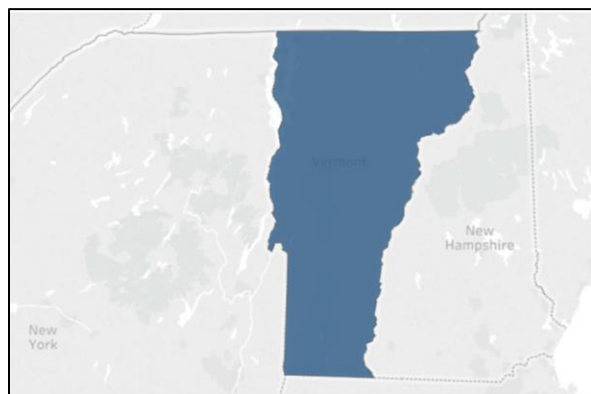
- **Surpassing goals:** In the second year of its AAI grant, UAW-LETC had enrolled 227 apprentices across dozens of plants in eight states. Impressively, 93 percent of these new apprentices are from underrepresented populations, including women, veterans, individuals with disabilities and people of color.



- **Partnering for change in Ford's on-ramp programs:** The UAW Skilled Trades Department worked with Ford Motor Company to reform its Registered Apprenticeship on-ramp program and make it more accommodating to underrepresented populations. Before the changes, applicants were prioritized by testing and seniority. Now, the tests have been changed to classroom instruction and selection that is no longer based on seniority. This change has allowed younger and more diverse workers to become apprentices.

## Vermont Department of Labor

Industry	Healthcare, Advanced Manufacturing, Information Technology
Occupations	Oncology Data Management Specialist, Surgical Technician, Medical Assistant, Software Support Specialist, Pharmacy Technician, Medical Coding, CNC Machine Operator
Success Factors	Industry Engagement, Leveraging Resources
Target Populations	Women
Registered Apprenticeship Model(s)	Time-Based, Hybrid
Programs Located In	Vermont



The Vermont Department of Labor (DOL) and its private sector partner Vermont HITEC have used the AAI grant to expand existing innovative Registered Apprenticeship programs and provide affordable career training opportunities for more Vermonters. Vermont's models include on-site related technical instruction and industry-based credentialing to make sure the apprentice is ready for employment

in the broad field, not just one specific employer. Working in partnership with Vermont DOL and Vermont HITEC, businesses have successfully launched and expanded Registered Apprenticeship programs in information technology, healthcare and advanced manufacturing, providing services to more than 193 individuals by the second year of the AAI grant.

### Industry Engagement

- **Good for Apprentices, Good for Business:** Healthcare providers in Vermont have recognized the need to train for specialist healthcare occupations such as oncology data management specialists, surgical technicians and medical assistants. In response to this challenge, providers have developed new Registered Apprenticeships with the help of Vermont DOL and Vermont HITEC. Registered Apprentices earn \$15.00 an hour as certified medical assistant apprentices or certified medical coding pre-apprentices.

Not only do apprentices benefit, but businesses that partner with Vermont Department of Labor to sponsor Registered Apprenticeship programs, such as Dartmouth-Hitchcock Medical Center (D-H), realize real returns on investment. In the first year of D-H's apprenticeship program, an internal rate of return of 40 percent was realized, which resulted in significant cost savings especially when compared to using highly qualified medical staff for apprentice-level activities.<sup>4</sup> D-H found that this change helped to relieve staff burnout and turnover, while quality of care remained high after the Registered Apprenticeship program kicked off.

- **Building industry diversity:** Along with healthcare occupations, Vermont DOL and Vermont HITEC have engaged IT and manufacturing employers to build a Registered Apprenticeship program for

<sup>4</sup> <http://www.esa.doc.gov/reports/benefits-and-costs-apprenticeships-business-perspective>

software support specialists at Vermont Information Processing, and programs for CNC machine operators at Vermont Precision Tools and Husky. A class of six apprentices finished the software support specialist program in early 2017 and remain employed.

### Leveraging Resources

- **Combining funds to increase impact:** Vermont DOL has leveraged more than \$500,000 in additional state, federal and local funding to support individuals participate in new pre-apprenticeship and Registered Apprenticeship programs. Sources include Workforce Innovation and Opportunity Act (WIOA) adult and youth funds, the Vermont State Training Fund, and National Emergency Grants.
- **Connecting to college credit:** Through Vermont's AAI Grant, 90 percent of healthcare apprentices receive college credits while they work and gain needed workforce certificates.

*The following are testimonials from former apprentices:*



*"I think the program was very challenging, but it definitely prepared me for the many ups and downs of the clinic... I can't wait to start my career and life in nursing and this has really opened my doors for a lot of new opportunities."*

- Danielle Scelza, Dartmouth-Hitchcock Medical Assistant  
Previous Position: Waitress

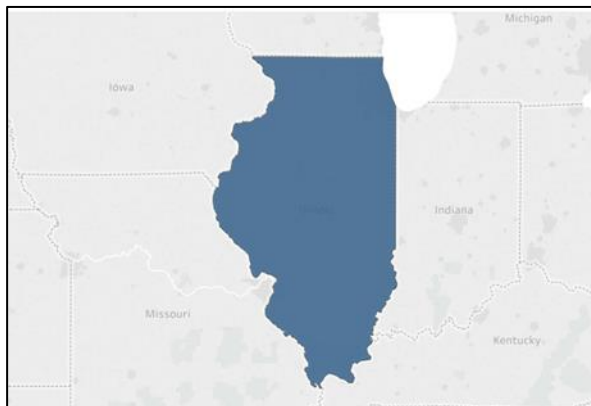


*"Succeeding in the program has given me a great sense of satisfaction. When I was first thinking about job hunting, I was worried that my age might be a stumbling block to getting hired. And technology has changed so much since the last time I was in the workforce, I worried that I might not have the skills for today's job market. I proved to myself that I can succeed, and that if I don't have the skills, I can learn them as well as the younger generation who grew up with cell phones attached to their ears. People my age can still be relevant in a technological age, even when they've spent most of their time as stay-at-home moms."*

- Lori MacLaughlin, nThrive Oncology Data Management Specialist  
Previously Unemployed

## William Rainey Harper College

Industries	Advanced Manufacturing, Business & Professional Services, Information Technology
Occupations	General Insurance, Industrial Maintenance Mechanic, IT Cyber Security
Success Factors	Industry Engagement, Leveraging Resources
Target Populations	Women, Youth, Veterans
Registered Apprenticeship Model(s)	Time-Based
Programs Located In	Illinois



William Rainey Harper College in Palatine, Illinois, illustrates how community colleges are being leveraged to promote Registered Apprenticeship growth and access. Harper College's deep understanding of the local economy and its long-term relationships with businesses have led to early success through their AAI grant.



### Industry Engagement

- **Expanding Registered Apprenticeship to the insurance industry:** Through the Apprenticeship On-Demand program, Harper College partnered with Zurich North America to launch the first Registered Apprenticeship program in the U.S. for general insurance, expanding the Registered Apprenticeship model to white-collar jobs. The initial class of apprentices began in January 2016; 24 apprentices were enrolled at Harper College full time, taking classes two days a week and working at Zurich three days a week at an annual salary of \$28,000. After two years, apprentices graduate with an associate's degree, zero debt and a secure position where they are expected to earn up to \$45,000 a year. Harper College is now working to expand Registered Apprenticeship programs into other industries, including banking and automobile sales.

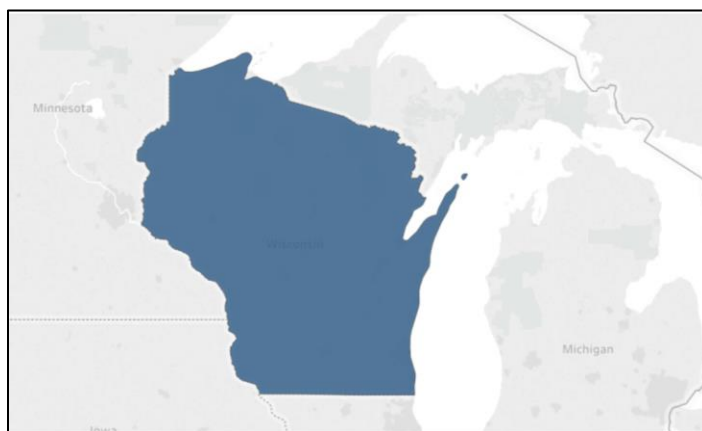
### Leveraging Resources

- **Hosting Registered Apprenticeship programs:** By becoming a Registered Apprenticeship sponsor, Harper College can both write Registered Apprenticeship programs and host the programs to meet the needs of local businesses, which eases the burden on employers and reduces the time to program implementation.
- **Offering a degree:** As a community college, Harper College offers actual associates degrees to apprentices, supporting their long-term career aspirations. For example, participants who complete the General Insurance Registered Apprenticeship earn an AAS Degree in Business Administration with a concentration in Insurance. Participants who complete the Industrial Maintenance Mechanic program earn an AAS degree in Manufacturing Technology. As one of the few community colleges in the country with this capability, it serves as a leader for others interested in growing the number of Registered Apprentices across the country.

*After two years, apprentices graduate with an associate's degree, zero debt, and a secure position where they are expected to earn up to \$45,000 a year.*

## Wisconsin Department of Workforce Development

<b>Industry</b>	<b>Healthcare, Information Technology, Advanced Manufacturing</b>
<b>Occupations</b>	Maintenance Technician, Industrial Manufacturing Technician, Welder/Fabricator, Mechatronics Technician, Computer Systems Analyst, Computer Network Support Specialist, Information Security Analyst, Data Warehousing Specialist, Business Intelligence Analyst, Licensed Practical Nurse, Medical Assistant, Community Healthcare Worker
<b>Success Factors</b>	Industry Engagement, Partnership Building
<b>Target Populations</b>	Women, People of Color
<b>Registered Apprenticeship Models</b>	Time-Based
<b>Programs Located In</b>	Wisconsin



Long regarded as a pioneer in the American Registered Apprenticeship space, Wisconsin's Department of Workforce Development (DWD), through its AAI grant, has played a crucial role in the expansion of existing Registered Apprenticeship efforts and creation of new programs in the healthcare and information technology sectors. Building on an already robust state apprenticeship infrastructure, Wisconsin DWD coordinates with local workforce development boards, the technical college system, state and local apprenticeship

boards and approval committees and other stakeholders to develop, improve, and advance Registered Apprenticeship programs.

### Industry Engagement

- **Expanding into new industries:** Wisconsin DWD's AAI grant has specifically supported the creation of new Registered Apprenticeship programs for community healthcare workers and pharmacy technicians in partnership with CVS Health. Wisconsin DWD is also nearing completion of a mechatronics Registered Apprenticeship program with employers Kimberly Clark, Quad Graphics, and Eaton Corp.

### Partnership Building

- **Cultivating champions:** Wisconsin DWD has launched an Apprenticeship Leadership program to identify Registered Apprenticeship champions in the state; leaders will include high-performing employers and business associations with Registered Apprenticeship programs. Leaders will receive state recognition, shape the discussion of Registered Apprenticeship efforts in the state, learn from peer networks and receive customized technical assistance from apprenticeship staff and consultants. Leaders will be expected to expand their existing programs or add new occupations, actively promote Registered Apprenticeship to other businesses, participate in statewide and sector-wide meetings and share best practices.