STATE APPRENTICESHIP EXPANSION PROMISING PRACTICES

Apprenticeship Pipelines and Diversity

1. State Leadership and Policy
2. Outreach and Business Engagement
3. State Capacity to Develop, Launch, and Manage Programs
4. Pipeline of Apprentices and Increased Diversity
5. Alignment with Career Pathways and Post-secondary Education

Since fall 2016, states have been using State Apprenticeship Expansion grants from the U.S. Department of Labor to build capacity for Registered Apprenticeship, expand apprenticeships into new industry sectors, and increase participation by diverse populations. This series captures promising practices for state-driven efforts to grow Registered Apprenticeship, with five briefs focused on each of the five key elements of effective apprenticeship expansion. This brief explores Element 4 - Pipeline of Apprentices and Increased Diversity.

Visit the Apprenticeship State Expansion Grants Community, ase.workforcegps.org, for the full series of promising practice briefs and other resources on the five elements of apprenticeship expansion.

EXPANDING APPRENTICESHIP THROUGH PIPELINES AND DIVERSITY

As apprenticeship opportunities grow, states are taking steps to ensure that all workers and job seekers have access to and are supported in apprenticeship opportunities. Their approaches include improving access to information about available apprenticeships, increasing access to quality pre-apprenticeship programs, partnering with trusted organizations to reach and support underrepresented populations, and engaging with businesses in outreach and candidate recruitment. The following examples illustrate the different ways states are developing apprenticeship pipelines and increasing participation by diverse populations. Italicized states are profiled in greater detail in this document.
Many states are partnering with trusted organizations that serve underrepresented populations to create pathways to careers through apprenticeship. For example, Montana partnered with tribal colleges to launch apprenticeships in healthcare, creating opportunities for Native Americans to live, learn, and earn in their communities while supporting the rural economy. Texas worked with a veteran-owned company that launched new apprenticeship programs for veterans in the building trades, leveraging partners to minimize costs for apprentices and employers.

States are launching efforts to change perceptions about apprenticeships by offering youth, families, and workers the opportunity to learn about apprenticeship programs and their value. Colorado, for example, launched Apprenticeship Evolution—a website and marketing campaign—to increase awareness that modern apprenticeship programs provide solid pathways to career success in a wide range of industries. Colorado, as well as Michigan, is also using technology to enhance access to apprenticeship opportunities through a user-friendly, searchable database of all apprenticeship opportunities in the State.

To engage businesses in practices that increase diversity, states are facilitating partnerships between employers and organizations that work with underrepresented populations. For example, Maryland launched the Apprenticeship Innovation Fund—competitive grants for businesses and industry intermediaries to encourage pre-apprenticeship and apprenticeship programs in nontraditional sectors and targeting underrepresented populations. Oregon partnered with several community-based organizations that prepare low-income women, particularly women of color, for successful entry into careers in building trades.

States are supporting quality pre-apprenticeship programs that provide on-ramps for individuals to enter and succeed in apprenticeships. Massachusetts, Ohio, Pennsylvania, and other states are setting standards and defining quality pre-apprenticeship to ensure programs incorporate industry-approved training and curricula, access to appropriate support services, and entry into Registered Apprenticeship Programs.

States are also leveraging opportunities across state agencies to create and expand apprenticeship pipelines. For example, Iowa and California are creating apprenticeships within state correctional facilities that provide hope and opportunities for incarcerated individuals and a pipeline of highly skilled and motivated workers for businesses. Ohio partnered with the Department of Transportation to create pre-apprenticeship programs targeting women and people of color, which will help federally funded transportation contractors meet their talent needs and diversity hiring requirements.

This brief describes how states are using State Apprenticeship Expansion grants and leveraging staff, funding, partnerships, and technology to enhance their capacity to launch, manage, and expand Registered Apprenticeship Programs.
MONTANA:
EXPANDING APPRENTICESHIP THROUGH TRIBAL COLLEGE PARTNERSHIPS

Montana’s tribal colleges were established to help Native American tribes address their workforce needs, maintain their culture, and provide post-secondary educational opportunities for tribal members on the reservations. The Montana Registered Apprenticeship Program (MRAP) convened a partnership with five of the colleges, two foundations, and multiple healthcare employers to launch the nation’s first Registered Apprenticeship Program sponsored by a tribal college.

Practice Description

Tribal colleges and universities (TCUs) operate more than 75 campuses in 16 states and serve students from more than 250 federally recognized Indian tribes. In Montana, seven tribal colleges serve approximately 2,400 full-time students. TCUs are chartered by their respective tribal governments and vary widely in enrollment, educational focus, and student population. However, tribal identity is central to every TCU, and they all share the mission of tribal self-determination and service to their respective communities.

To grow and diversify apprenticeship in the State, MRAP recognized the need to proactively engage underrepresented populations and partner with new organizations. The apprenticeship model is well suited to address some of the challenges facing rural Native American communities. Apprenticeship allows students to live, and earn and learn, in their home communities while advancing their careers and supporting the rural economy. Healthcare workers are in especially high demand and difficult to recruit from outside the community. When they are unable to hire locally, some rural healthcare facilities have arranged to send employees to live and train in Billings, the state capital, for up to two years. Commonly, this results in individuals getting hired in Billings and not returning home.

MRAP saw tribal colleges as natural partners to grow apprenticeship in the State and address these challenges facing Native American communities. Several colleges administered some healthcare programs already, but not enough to meet the demand for skilled workers. MRAP provided critical support and technical assistance to convene the colleges, assess their offerings and needs, establish the Registered Apprenticeship Programs, and recruit employers. MRAP has targeted apprenticeship expansion in the healthcare industry broadly and leveraged its established network of partners, such as the Montana Health Network, Montana Hospital Association, and others, for this effort. State Apprenticeship...
Expansion (SAE) grant funds were used to provide startup support to the colleges, including the cost of curriculum development and supportive services for students.

As a result of these efforts, the Tribal College Apprenticeship Project launched in 2018 in partnership with Stone Child College, Aaniiih Nakoda College, Salish Kootenai College, Fort Peck Community College, and Little Big Horn College. The colleges recruit primarily, but not exclusively, from the Native American reservations where they are located. The colleges provide the related technical instruction for the apprenticeships in a variety of healthcare occupations, including case managers, behavioral health specialists, wellness coaches, emergency medical technicians, hazardous materials technicians, certified nurse aides, and licensed addiction counselors. Aaniiih Nakoda College serves as the program sponsor for the certified nurse aide apprenticeship, which includes several other colleges and multiple employers. In some cases, the employers choose to serve as the program sponsors. Little Big Horn College also created an apprenticeship program for accounting based on a specific need in their region.

The project has attracted interest and support from philanthropic foundations. Three of the colleges received grant support for an initial pilot project from United Student Aid Funds, now known as Strada Education Network. To bring the project to scale, the five consortium colleges received more than $130,000 from the Northwest Area Foundation (NWAF). NWAF funding focuses on supporting efforts that produce good jobs, financial capability, and community wealth-building in Native communities. The tribal colleges themselves also bring a valuable source of funding, as they are reimbursed by the federal government for a portion of their costs for Native American beneficiary students.

**Impact and Results**

As of spring 2020, more than 100 apprentices have participated in apprenticeship programs through Montana’s tribal colleges. Aaniiih Nakoda College is the first TCU to be a Registered Apprenticeship Program sponsor, serving as a model for other TCUs across the country. Most importantly, program apprentices and graduates are providing much-needed healthcare services in their Native American communities. The programs continue to open up career opportunities for the Native American population in Montana and supply a pipeline of skilled talent to businesses operating in some of the most remote regions of the country.

**Drivers of Success**

- **Learn about the programs and opportunities available at tribal colleges and universities.** TCUs are a focal point for education and workforce development in their communities. As related instruction providers or potential program sponsors, TCUs are well positioned to engage Native American communities in apprenticeship expansion efforts.

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**Interested in Learning More?**

- Visit Montana’s apprenticeship website at [apprenticeship.mt.gov](http://apprenticeship.mt.gov)
- Contact Jay Reardon, Apprenticeship Director, Montana Department of Labor & Industry at [James.Reardon@mt.gov](mailto:James.Reardon@mt.gov)
Support apprenticeships with braided funding streams. MRAP helped combine a variety of funding sources to create and sustain the Tribal Colleges Apprenticeship Project, including SAE grant funding, foundation grants, and tribal college support. By integrating funds from a variety of sources, the programs are more likely to have long-term sustainability.

Understand the needs of the community. The tribal colleges knew the specific occupations that were most needed in their respective regions. MRAP provided the startup support and guidance to shepherd those programs through the development process.

Campaigns Aim to Change Perceptions and Expand Awareness of Apprenticeship

As part of their apprenticeship expansion strategies, states are looking for ways to change and enhance the perceptions of Registered Apprenticeship. Colorado launched the Apprenticeship Evolution campaign in 2018 to broaden awareness among job seekers and to increase business interest in adopting apprenticeship. The Governor of Colorado and other state leaders developed this campaign to promote the message that modern apprenticeship programs are a valuable solution for the State’s workforce challenges. The Apprenticeship Evolution website is a central focus of the campaign and serves as a roadmap for job seekers, youth, parents, and employers to learn about apprenticeship.

The website provides a central location for information and resources such as case studies, how-to guides, at-a-glance infographics, and success stories that illustrate and explain how apprenticeships work. Apprenticeship Evolution also houses a user-friendly searchable database of all apprenticeship opportunities in the State. To help connect job seekers with apprenticeships, this directory includes detailed information on each Registered Apprenticeship Program in the State, such as the application process, costs, program outcomes, and requirements for enrollment. The directory is searchable by county, occupation, and/or industry.

The outreach campaign also includes brief, informative videos targeted to its key audiences—job seekers, youth, parents, and employers—along with public service announcements that have been broadcast on television and radio. Colorado has utilized social media, including Facebook, Twitter, YouTube, Hulu, and other sites, to get out its message on apprenticeship and drive visitors to the website. The information on the website and media campaign have been carefully scripted with a uniform message: apprenticeship is a viable pathway to career success for individuals and a valuable talent development solution for businesses.

Partners involved in the campaign include the Governor’s Business Experiential Commission; the Colorado Workforce Development Council; the Colorado Departments of Labor and Employment, Education, and Higher Education; and CareerWise Colorado. Local partners were briefed on the campaign and website to promote adoption of the materials. Some of the products developed for Apprenticeship Evolution were funded by Colorado’s State Apprenticeship Expansion grant, while other costs, such as filming, message creation, and marketing, were contributed as in-kind resources from the partner agencies involved.
Apprenticeship Expands Opportunities for Veterans and Workforce Pipelines for Employers

Many states are using Registered Apprenticeship to provide a pipeline of skilled workers for businesses and to expand career opportunities for job seekers. Texas, for example, is committed to increasing veterans’ participation in apprenticeship. With over 1.7 million veterans, the State has the second largest veteran population in the nation. ApprenticeshipTexas has supported Adaptive Construction Solutions (ACS), a Houston-based, veteran-owned and -operated company, with developing and registering apprenticeship programs in 18 occupations, primarily in the skilled trades.

ACS is the largest veteran-focused apprenticeship program in Texas and includes female veterans, veterans with disabilities, and veterans who have been incarcerated. Eighty-five percent of the apprentices ACS serves have barriers to employment, and 68 percent are racial or ethnic minorities. Candidates are recruited through workforce system partners and social media promotions targeted to veterans. ACS screens candidates using pre-employment assessment tests and workplace behavior models, focusing on individuals’ abilities and identifying the best fit between employers and candidates.

ACS has a strong network of partners and leverages resources from federal, state, and local agencies and programs, ensuring that apprentices have the support they need throughout the program.

- Gulf Coast Workforce Solutions, the Houston/Galveston regional workforce investment agency, assists ACS with recruiting apprentices and screening applicants for Workforce Innovation and Opportunity Act (WIOA) program eligibility.

- ACS is on the Texas Eligible Training Providers list, which ensures that eligible apprentices can access WIOA Individual Training Accounts (ITAs) to pay for the first year of their related instruction. ITAs are provided to approximately 90 percent of apprentices; the remaining 10 percent receive scholarships from the program for their related instruction costs.

- The workforce agency funds eligible apprentices’ tools and supplies, provides transportation stipends, and offers ongoing coaching to promote success.

- ACS has become a grantee of the U.S. Department of Labor’s Homeless Veterans’ Reintegration Program, which allows them to assist homeless veterans entering the program with timely housing assistance.

Through its holistic approach to leveraging resources, ACS has also significantly reduced the initial training costs for participating employers. The program stipulates that employers contribute to program costs once the apprentices they employ have demonstrated success, typically in year two. ACS also manages on-the-job wage reimbursements for businesses and processes Work Opportunity Tax Credit applications for the veteran apprentices hired, which further offsets employers’ financial investments.

ACS recognizes that each of its partners has a significant role to play in ensuring the success of its programs. By focusing on businesses’ needs and promoting ongoing communication across all stakeholders, ACS has developed a successful and replicable model that meets the needs of its business customers and apprentices. Now in its third year, ACS has served more than 500 veterans, with a six-month retention rate of 82 percent. Strong business satisfaction with the program is evidenced by continued hiring of qualified veteran apprentices.
The Iowa Department of Corrections (DOC) sponsors 27 Registered Apprenticeship Programs in nine correctional facilities across the State. The programs weave support from an array of partners to provide education, on-the-job training, soft skills, and help transitioning into the community after release—creating hope and opportunities for incarcerated individuals and a pipeline of highly skilled, highly motivated workers for businesses.

**Practice Description**

In 2016, Iowa embraced *Future Ready Iowa*—an initiative to upskill at least 70 percent of Iowans in the workforce by 2025 with the skills needed in today’s jobs through education or training beyond high school. DOC was already working to provide incarcerated individuals with in-demand skills and credentials that would help them find work and support their families after release. They started with one apprenticeship pilot in one facility in 2015. By early 2020, with leadership support from the Governor’s office and other state offices, as well as funding for curriculum development from Iowa’s State Apprenticeship Expansion (SAE) grant, DOC had employed 300 apprentices in 27 occupations.

Apprentices are all employed by DOC, some in facility jobs like housekeeper and peer support specialist, but most through Iowa Prison Industries—a self-funded DOC affiliate employing 900 inmates to provide products and services for the prison system and other government agencies, school districts, and nonprofits. Looking at these jobs in 2015, DOC realized that they already had most of the components of an apprenticeship, but by standardizing the on-the-job learning and adding in an education component, they could create Registered Apprenticeship Programs in many occupations such as fabricator, welder, cook, and plumber.

To be eligible, individuals must be 18 years or older, have a high school diploma or GED, and meet certain classification requirements based on criminal history and behavior. They also must have worked in the occupation of the apprenticeship for 30 to 60 days, which helps to minimize false starts by allowing time for applicants to figure out if they want to work in the field. Community colleges in every facility offer GED classes and tutoring for those who are interested but need help to meet the prerequisites.
DOC apprentices earn wages that start at $0.50–$2 per hour and increase over time with skill gains, with an average of $1.05 per hour after deductions for restitution. DOC apprenticeship programs require 2,000 to 8,000 on-the-job learning hours depending on the occupation. Mentors are DOC employee supervisors or experienced fellow inmates.

Related technical instruction (RTI) is provided onsite, either self-taught through books or online courses or through in-house classes offered by community colleges. Rigorous RTI, DOC believes, is the most challenging component. The goal is to align RTI with employer needs and industry norms as much as possible, but the constraints of prison require flexible thinking to work through safety concerns about having books in inmates’ cells, providing access to tools, doing the work in and around the facilities, and accessing online training while locking down unapproved sites.

In addition to the nationally recognized certificate of completion for apprentices completing Registered Apprenticeship Programs, DOC programs provide interim credentials, such as ServSafe certifications for cooks and food handlers and National Center for Construction Education and Research certifications in the building trades. The average stay in an Iowa correctional facility is just 11–13 months—not long enough to complete an apprenticeship—so providing interim credentials helps give all DOC apprentices (whether they can finish or not) skills, work experience, and credentials they can use to find work (or continue their apprenticeship) upon release.

**Interested in Learning More?**

- Visit Iowa’s apprenticeship website at [www.earnandleariowa.gov](http://www.earnandleariowa.gov)
- Visit DOC’s website at [www.earnandleariowa.gov/sponsors/iowa-department-corrections](http://www.earnandleariowa.gov/sponsors/iowa-department-corrections) for a list of apprenticeship programs
- Contact Dane Sulentic, Apprenticeship Coordinator, Iowa Department of Corrections at dane.sulentic@iowa.gov

**IMPACT AND RESULTS**

As of April 2020, 244 apprentices had successfully completed their apprenticeships with the DOC. About one-third of inmates and apprentices are from minority populations, so this pipeline helps the State meet its expansion and diversity goals. Success stories abound, such as the story of one former prisoner who completed a welding apprenticeship during his seven-year sentence for robbery and now works as a welder, has his own apartment and car, and is pursuing a bachelor’s degree.

**DRIVERS OF SUCCESS**

- **Look for Supportive, Forward-Thinking Leaders.** DOC’s Apprenticeship Coordinator wanted to expand RTI to include online learning, but he knew he would face hurdles. While leaders throughout DOC have embraced apprenticeship, a statewide information technology supervisor became a key ally because he was uniquely positioned to address wardens’ and treatment directors’ concerns about security risks and assure them that access could be restricted to training and nothing more.
✓ **IDENTIFY PARTNERS TO LEVERAGE RESOURCES.** In addition to support from the community colleges and the SAE grant, DOC partners with Iowa Workforce Development, which provides staff in four facilities to assist with critical transition services—résumés, soft skills training, practice interviews, and job searches, including help transitioning to an apprenticeship program after release for those who want to complete their apprenticeship. Human Services helps apprentices learn to talk with employers about their background, and Transportation provides prisoners with state identification cards they need to get jobs.

✓ **ENGAGE EMPLOYERS TO SEE THE PROGRAMS FIRST-HAND AND LEARN FROM PEERS.** DOC stresses the importance of engaging employers to identify and meet their needs and address concerns about hiring ex-offenders. DOC invites employers into prison facilities (in person or via video conference) so they can see the training, meet apprentices, and talk directly with them about what they are looking for in new hires. The Governor’s office lends heavy support as well, organizing business roundtables with DOC so business champions can talk with their peers about their experiences hiring returning citizens.

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**Community-Based Pre-Apprenticeships Build Diverse Pipelines in Skilled Trades**

Many states are partnering with organizations that serve underrepresented populations to create pathways to careers through Registered Apprenticeship. For the Oregon Employment Department (OED), improving outcomes for marginalized communities was a priority from the outset of the State Apprenticeship Expansion (SAE) grant. In pursuit of this objective, the State leveraged a public workforce business coalition and several community-based pre-apprenticeship programs to help individuals in historically underrepresented populations advance their careers.

Around 2016, most of Oregon’s Registered Apprenticeship Programs with the highest paying jobs were in the skilled trades. The trades also contained the largest amount of the State’s pre-apprenticeship training and funding for diversity efforts. Focusing Oregon’s diversity pipeline pursuits on the construction sector made sense, but there were not enough resources available to grow and extend pre-apprenticeship into Registered Apprenticeship. An array of industry, government, and community organizations merged their construction sector workforce and economic development initiatives as a strategy to have greater resources in pursuit of their integrated solutions.

At the time, Worksystems, the Portland region’s public workforce board, was facilitating Construction Apprenticeship Workforce Solutions (CAWS), a membership organization where contractors, developers, and public agencies pay annual dues to be used for workforce diversity efforts. OED leveraged CAWS as the platform to connect Registered Apprenticeship Programs to the construction sector and community training providers that were seeking funding to prepare diverse populations for careers in the skilled trades.
OED selected two community-based organizations as part of its apprenticeship expansion efforts—Constructing Hope and Oregon Tradeswomen. These organizations, whose pre-apprenticeship programs create pathways for minority men, women, and women of color, were already partners in the CAWS work and helping to achieve some of the CAWS diversity and inclusion goals. The SAE grant brought funds in support of that effort.

Oregon’s construction sector is thriving, and the SAE grant has helped forge new relationships for ongoing field-building work that grows apprenticeship. Grant funding was applied to the core operations of Constructing Hope and Oregon Tradeswomen, enhancing their organizational capacity and critical community-building work focused on pre-apprenticeship programs that create opportunities for underrepresented populations and build diverse pipelines into the skilled trades. As one example, the organizations, whose programs are certified by the Oregon Bureau of Labor and Industries’ Apprenticeship and Training Division, worked with the Oregon State Apprenticeship and Training Council and other training providers to arrange technical assistance, quality assurance, and validation for aspiring pre-apprenticeship training agencies.

State Policies Support High-Quality Pre-Apprenticeship Programs

Many states recognize the value of supporting and formally recognizing quality pre-apprenticeship programs as a strategy for developing apprenticeship pipelines and have enacted formal state policies to support this work. Consistent with the Office of Apprenticeship framework on quality pre-apprenticeship programs, these policies reflect that successful pre-apprenticeships incorporate industry-approved training and curricula, integrate hands-on training, lead to industry-recognized credentials, provide robust supportive services, and create pathways into Registered Apprenticeship Programs and other employment opportunities.

Below are examples of states that have established policies and processes that set standards for and recognize pre-apprenticeship programs. These policies establish guidelines for organizations to sponsor pre-apprenticeship programs, the elements of quality programs, the process through which programs can obtain formal recognition from the approving agency in their state, and reporting requirements. Each state supports pre-apprenticeship by recognizing and including examples of pre-apprenticeship programs on a state-sponsored website.

Massachusetts requires that all pre-apprenticeship programs have an organized, written plan and has created a pre-apprentice application package to communicate pre-apprentice standards and regulations. State requirements for pre-apprenticeship programs include a written agreement with a Registered Apprenticeship Program sponsor, a pre-apprenticeship agreement between the program provider and the participant, and recognition of successful completion evidenced by a certificate issued by the program provider.
Ohio has developed a guide titled *How to Implement a Pre-Apprenticeship Program* and a *policy on pre-apprenticeship* to identify and publicly recognize quality pre-apprenticeship training. The policy includes a distinction between youth (under the age of 21 years) and adult pre-apprenticeship and requires the instructional content be developed in collaboration with the Ohio Department of Education (for in-school youth) or the University System of Ohio. Sponsors are also required to include procedures for reporting pre-apprentice enrollment data in the operating plan and are expected to comply with reporting requirements.

Pennsylvania has created a *pre-apprenticeship application package* to provide support and guidance to help pre-apprenticeship program providers address all elements of establishing a pre-apprenticeship, from creating partnerships to curriculum development. Like Massachusetts, the State requires a signed pre-apprenticeship agreement with the participant and a certificate of completion issued by the pre-apprenticeship program provider.

Wisconsin developed the *Certified Pre-Apprenticeship Program Guide* to ensure that pre-apprenticeships in the State have a common definition and consistent program elements. The guide identifies seven program components: training and curriculum based on industry standards and approved by a documented Registered Apprenticeship Program sponsor, strategies for long-term success, access to appropriate support services, greater use of Registered Apprenticeship to increase future opportunities, meaningful hands-on training that does not displace paid employees, access to a driver’s license, and facilitation of entry and/or articulation. For approved programs, Wisconsin conducts an initial onsite review within one year after the first cohort completes the program and subsequent reviews biennially.

Washington established *Washington State Apprenticeship and Training Council (WSATC) Policy 2012-03* to formalize the process of becoming an apprenticeship preparation program. WSATC requires safety training and elements to develop employability skills, physical fitness, and math skills in the training, as well as details of how underrepresented populations are encouraged to enroll. Programs are approved for a period of three years and must reapply for continued recognition. They also must include success measures such as participant demographics, continuous improvement, and a letter of endorsement from a Registered Apprenticeship Program.