



Registered Apprenticeship Reimagined

Lessons Learned from the American Apprenticeship Initiative

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Introduction

Registered apprenticeship has traditionally experienced the most popularity in the skilled trades, and for several years was utilized at low and declining rates across the United States. Interest in expanding the use of registered apprenticeship began to increase as major successes using the model were observed in countries such as Britain and Switzerland, as well as in leading states such as South Carolina.¹ **In 2015, the U.S. Department of Labor made a historic and unprecedented investment in the future of the American workforce. The \$175 million, five-year American Apprenticeship Initiative (AAI) grant program was the largest federal investment made to date in support of expanding registered apprenticeship in the United States, particularly into new sectors and more diverse populations.**

Its goal was to register at least 34,000 new apprentices in high-growth and high-tech industries such as health care, information technology (IT) and advanced manufacturing by 2020, especially from populations traditionally underrepresented in apprenticeship including women and people of color.^{2,3}

Since March 2020, the American economy has been under stress because of the coronavirus disease 2019 (COVID-19) pandemic, which occurred during the final half-year of AAI. In this environment, registered apprenticeship will continue to be an important long-term education and talent development strategy. Millions of workers have been laid off temporarily or permanently, particularly those in industries such as hospitality, retail and tourism were required to close to encourage social distancing.⁴ These industries will need qualified workers if and when their businesses are able to safely reopen. On the other hand, a number of sectors including health care, manufacturing and information technology (IT) have continued to experience significant and evolving workforce needs throughout the crisis. With the nature of work rapidly changing in many sectors, 'hands-on' work experience is

“REGISTERED APPRENTICESHIP” is a structured form of work-based learning. It couples hands-on learning with theoretical training to meet the needs of business while providing wages to apprentices in more than a thousand occupations. All registered apprenticeship programs (RAPs) are overseen by the U.S. Department of Labor Office of Apprenticeship (DOL), which maintains quality control. An apprentice who completes a registered apprenticeship receives a nationally recognized apprenticeship credential. Authorized in the 1937 Fitzgerald Act, the U.S. apprenticeship registration system is more than 80 years old. Refer to Appendix A for additional apprenticeship-related terms and their definitions.

increasingly vital for worker success. A skilled workforce will be foundational to a strong and more equitable economic recovery, and registered apprenticeship provides a proven avenue through which to deliver that much-needed talent.

Registered apprenticeship is a workforce and education strategy that has enjoyed strong bipartisan support at both the federal and state levels. RAPs provide workers from all backgrounds with the skills and knowledge they need to acquire well-paying jobs that are critical to today's labor market. These programs can particularly benefit workers who have limited financial means because workers in RAPs earn and learn at the same time. In total, 94% of apprentices are offered continued employment after completing their programs, with an average starting annual salary of \$70,000.^{5,6}

APPRENTICE TESTIMONIAL

“I was underemployed, working menial low-paying jobs. One right after the other. I worked the overnight shift. I made less than 10 dollars an hour... 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.”

— CVS Health pharmacy technician from Dallas Community College, partner of AAI grantee Houston Community College

Employers also see the benefits of registered apprenticeship, a strategy for identifying and cultivating talent while equipping workers with the skills employers need. Apprentices are likely to be more loyal to the companies that invest in them than the average non-apprentice hire, and employees hired through apprenticeship improve their employer's productivity and profitability.⁷ Studies from the United States and around the globe demonstrate the payoff: For every dollar spent on apprenticeship, employers get back an estimated \$1.47 on average in increased productivity, reduced waste and greater frontline innovation.⁸

AAI grantees successfully grew the RAP model into new industries and extended it to more diverse populations. AAI grantees included a variety of state and local agencies, postsecondary educational institutions, labor unions, industry associations, local workforce boards and nonprofit organizations (NPOs) in partnership with business and other community representatives. Each grantee partnership was awarded between \$2 million and \$5 million to build new programs or expand preexisting programs in high-growth occupations that had not previously taken advantage of the apprenticeship model, with a focus on engaging

underserved populations. Each grantee identified target populations based on the regions and industries in which the grantee operated.

Many of the AAI grantees were pioneers in finding new ways to modernize registered apprenticeship. In many cases, it took grantees years to create programs and develop the robust partnerships that are essential for the program's long-term success. As a result of their efforts, employers such as JPMorgan Chase, CVS Health, Marriott, Dartmouth Hitchcock, Bosch, and city and state government agencies agreed to sponsor or host apprentices. (See Appendix C for a description of each AAI grantee and examples of the sectors and businesses with which they worked.⁹) Apprentices in these structured RAPs are primed for success at the workplace and for further education, if they desire it.

As of June 2020* the 44 AAI grantees initiated 2,019 new programs, registered 24,675 apprentices, of which 14,486 were from underrepresented populations, and served a total of 34,238 participants through their registered apprenticeship programs as well as pre-apprenticeship programs and other related activities.¹⁰ As of June 30, 2020, 4,680 individuals have completed an AAI-supported RAP, a number that is expected to grow as many of the RAPs created and expanded as a result of AAI will continue after grant completion.

The grant results contribute significantly to the ongoing expansion of the registered apprenticeship model, but the underlying goal of AAI extends well beyond these numbers or the grant performance time frame. Through AAI, DOL seeks to better understand how and why some apprenticeship programs flourish. The agency looks to share those promising practices with policymakers, educators, employers and organizations across the country to inform the development of more high-quality RAPs.

The National Governors Association Center for Best Practices (NGA Center) prepared this report to share promising practices and lessons

The NGA Center was contracted as the technical assistance (TA) provider to AAI grantees. The NGA Center provides comprehensive support and assistance to all AAI grantees in partnership with DOL and with additional support from the Siemens Foundation.

The NGA Center's AAI TA program started during the critical ramp-up and early implementation stages in September 2015 and will continue through the end of the grant's period of performance in September 2020. Some grantees have received period of performance extensions for up to a year beyond the end of the grant.

The NGA Center's TA program included both customized support for each grantee and cohort-wide TA activities, including four national meetings, site visits, calls and webinars. The NGA Center led the AAI support program in collaboration with its subcontractor, the Corporation for a Skilled Workforce.

*This report uses data that was reported by grantees to the U.S. Department of Labor Office of Apprenticeship once per quarter through the quarter ending June 30, 2020, as provided to the NGA Center for Best Practices. The NGA Center for Best Practices does not take responsibility for any errors in the reported data provided by grantees.

learned through AAI. The report highlights factors that lead to successful outcomes for RAPs, drawing on what worked well for AAI grantees – including the top tier of highest-performing grantees. Governors and state and federal policymakers are encouraged to reference this report when deciding

which types of organizations, programs or apprenticeship-building activities to support. Likewise, organizations interested in developing quality apprenticeship programs can learn from the experiences of the AAI grantees and the promising practices outlined in this report.

Summary of American Apprenticeship Initiative Grantee Performance

DOL tracked the performance of all AAI grantees during the AAI period of performance to date against performance metrics required by the DOL Office of Apprenticeship (Figures 1, 2 and 3). The grant program began on October 1, 2015, and DOL provided the NGA Center with data collected from grantees once per quarter beginning with data for the quarter ending on December 31, 2016 (See Appendix A for definitions of apprenticeship- and performance-related terms used below and throughout the report).

Figure 1 shows the increase in number of registered apprenticeship programs created over the grant period to date as of June 30, 2020. This total exceeds the targets set by grantees at the outset of the grant period. In many cases, grantees found that they had to create a larger number of programs than expected in order to hit their target total number of apprentices registered. This is reflected by the fact that, on average, grantees had exceeded their target for number of programs created during the grant period by 521% as of June 2020.

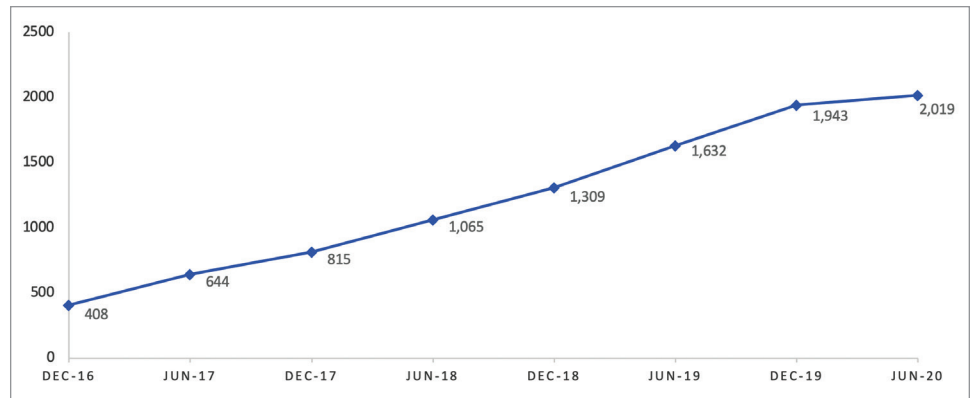


FIGURE 1: Total Apprenticeship Programs Initiated through June 30, 2020¹¹

Figure 2 shows the total number of apprentices registered by all grantees over the grant period to date as of June 30, 2020. Despite the impact of COVID-19 on many registered apprenticeship programs operated by grantees, AAI had registered over 24,600 apprentices as of June 2020.

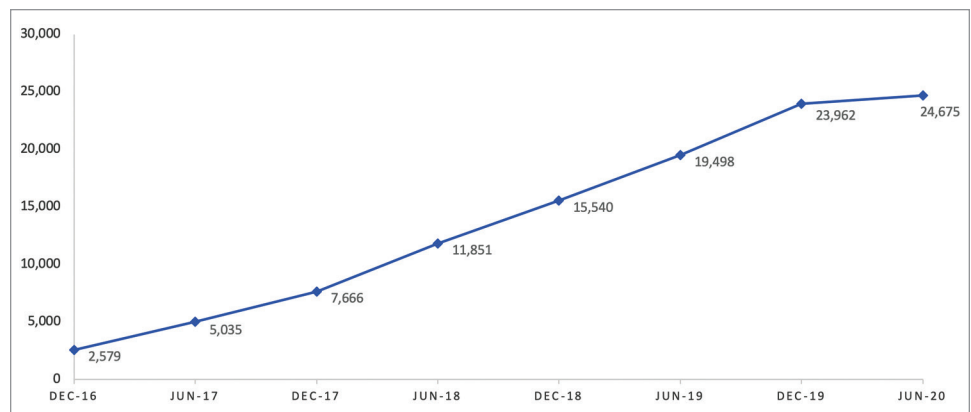


FIGURE 2: Total Apprentices Registered through June 30, 2020¹²

Figure 3 categorizes grantees into three tiers based on their performance against their targets for total number of apprentices registered. The top 13 grantees had met or exceeded 100% of their target total apprentices registered by June 30, 2020. The 17 grantees in the middle tier achieved 65% to 99% of their target. The 14 grantees in the lowest tier achieved 64% or less.¹³ On average, the top 13 grantees also outperformed the other grantees in achieving their targets for number of apprenticeship programs initiated, number of participants served (including those served through pre-apprenticeship programs or other related activities), and number of apprentices from underrepresented populations.

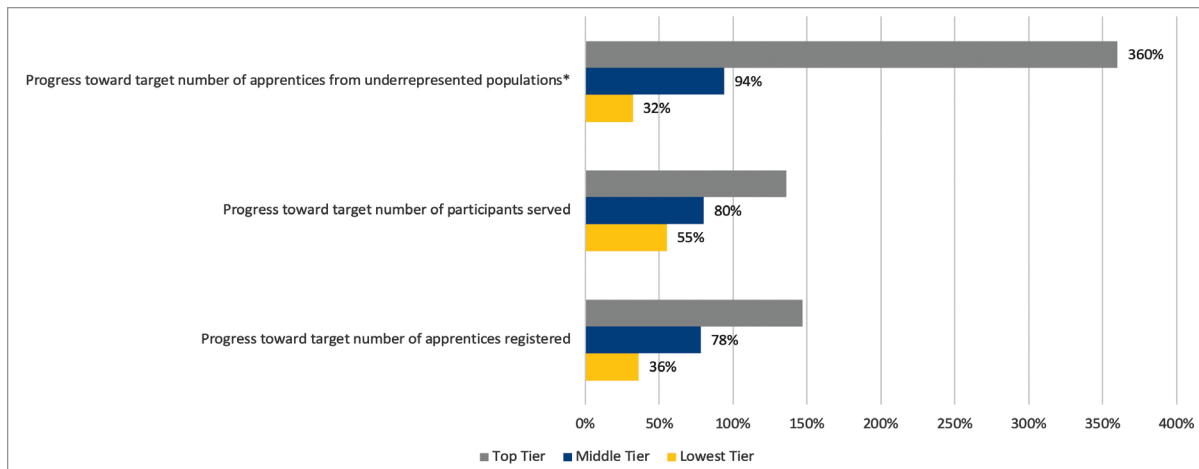


FIGURE 3: Average Outcomes for American Apprenticeship Initiative Grantees as of June 30, 2020¹⁴

*Forty of forty-four grantees set goals for number of registered apprentices from underrepresented populations.

The performance outcomes in Figure 3 differ most in progress toward target number of registered apprentices from underrepresented populations. Forty of the 44 AAI grantees set two targets for registered apprentices from underrepresented populations: one was a target total number of apprentices from underrepresented populations, and the other was a target *proportion* of total apprentices registered that were from underrepresented populations. While both targets varied across grantees based on grantee size, demographics in their service region, and targets they set for total number of apprentices registered, these forty grantees' aimed to have an average of 63% of their registered apprentices be from underrepresented populations. Thirty-one of these 40 exceeded their target proportion of apprentices from underrepresented populations, even if they underperformed against their targets for total apprentices registered. This suggests that most grantees, even those who did not meet their target total apprentices registered, have developed effective strategies for recruiting and retaining members of underrepresented populations in their apprenticeship programs.

Grantees across the three performance tiers received different grant amounts and had varying levels of experience with registered apprenticeship before receiving their grant. Grantees applied for and received AAI funding that corresponded with their target outcomes. Each performance tier includes grantees of varying experience with registered apprenticeship and different levels of funding. Finally, each grantee received the same length of time to achieve their target outcomes and had access to similar TA resources.

Table 1 lists each grantee in the top-performing tier of grantees, with the corresponding number of apprentices registered and progress toward goal. The tiers were divided by grantee progress toward the goal of number of apprentices registered, not the number of apprentices registered.

31 of 40 grantees met or exceeded their targets for proportion of registered apprentices recruited from underrepresented populations.

TABLE 1: 13 Top-Performing Grantees in Order of Grantee Progress Toward Goal of Apprentices Registered as of June 30, 2020¹⁵

Grantee Name	Location of Grantee Lead Entity	Location of Grantee AAI-Supported Programs	Number of Apprentices Registered	Progress Toward Goal
SC Apprenticeship Initiative	South Carolina	South Carolina	2106	211%
Truckee Meadows Community College	Nevada	Nevada	720	211%
Shenandoah Valley Workforce Development Board	Virginia	Virginia	1107	185%
Macomb Community College	Michigan	Michigan	861	169%
Alaska Department of Labor and Workforce Development	Alaska	Alaska	701	156%
Florida State College at Jacksonville	Florida	Florida	1535	154%
AHIMA Foundation	Illinois	41 states: Alaska., Ala., Ark., Ariz., Calif., Colo., Conn., Fla., Ga., Hawai'i, Iowa, Idaho, Ill., Ind., Kan., Ky., La., Mass., Md., Mich., Mo., Miss., Mont., N.C., N.D., Neb., N.H., N.J., Nev., N.Y., Okla., Ore., Pa., Tenn., Texas, Utah, Va., Vt, Wash., Wis., and Wyo.	1442	144%
J. Sargeant Reynolds Community College	Virginia	Virginia	427	129%
Jobs for the Future	Massachusetts	14 states: Calif., Colo., Ind., Ill., Ky., Miss., Minn., Mo., N.Y., N.D., Ohio, Pa., S.C., Wash., and Wis.	1639	113%
Building Futures	Rhode Island	Rhode Island	1134	112%
Workforce Investment Board Herkimer, Madison & Oneida Counties, Inc	New York	New York	393	112%
MN Dept of Employment and Economic Devt	Minnesota	Minnesota	1108	111%
Houston Community College	Texas	Texas	650	105%

Success Factor Framework for Reimagining Registered Apprenticeship

To help governors and other state and federal policymakers expand access to registered apprenticeship as a workforce and education strategy, this report focuses on the successes and lessons learned from grantees and especially from this group of highest-performing grantees. This report includes strategies and examples of best practices that led to measurable results and attainment of grantees' AAI project goals. The NGA Center staff gathered lessons learned from the AAI cohort through one-on-one interviews with grantees, data analysis, facilitated discussions at national meetings, monthly TA activities and a roundtable of high-performing grantees. Through this research, the NGA Center identified the following characteristics of grantees that met or came close to meeting their AAI goals, to develop a **success factor framework for reimagining registered apprenticeship for new industry sectors and populations**:

- ▶ Their projects prioritized **sustainability** from inception, creating partnerships and resource ecosystems that help their programs thrive in the long term.
- ▶ They used **partnerships** to incorporate a variety of perspectives and resources that can support programmatic success.
- ▶ They established **simplified processes** to help employer partners engage in registered apprenticeship.
- ▶ Their program structures provided **flexibility** based on employer feedback, industry demand and apprentice needs.



Success Factor: Sustainability

Successful grantee projects prioritized sustainability from inception, creating partnership and resource ecosystems that helped their programs thrive in the long term.

Successful grantees strategically created programs that could thrive beyond their AAI grant funding. They had a long-term perspective before the period of performance even began. All grantees were asked to include a statement of commitment to sustainability in their initial grant proposals. As many of the programs addressed programmatic challenges early that demanded immediate attention, focus on long-term sustainability often became a lower priority. Successful AAI grantees implemented a strategic but flexible program design that supported several tenets of long-term program success: their own organizational mission; industry leadership in the development and growth of registered apprenticeship; integration of apprenticeship across education, workforce and economic development system partners on local, state

CHECKLIST FOR PRIORITIZING SUSTAINABILITY. DOES THE PROGRAM:

- ✓ Align with organizational mission?
- ✓ Support industry leadership?
- ✓ Work with related systems?
- ✓ Use other funds?
- ✓ Conduct authentic outreach to and support for underserved populations?

and federal levels; additional apprenticeship-related funds; and authentic outreach to and support of underserved populations.

First, as an organization undertakes to create or expand a RAP, it must consider whether that activity fits the organization's mission. The program is more likely to succeed if it



aligns with the organization's mission and builds on its strengths. This process involves understanding the value and benefits of registered apprenticeship, the level and depth of partnership required with employers and other entities, and the intended outcomes for employers and participants. It is also important that the organization identify the strengths it possesses to help the apprenticeship program succeed. Such strengths may include preexisting relationships with regional industry, relationships with potential apprentices, efficient internal processes, and staff capacity and expertise.

Next, the organization must recognize the crucial role that industry plays in not only hosting and mentoring current apprentices but developing and growing the apprenticeship model across occupations and sectors. Organizations interested in the sustainable growth of apprenticeship should work in close consultation with industry leaders.

Grantees used AAI funding to spur industry involvement in apprenticeship. Some grantees created apprenticeship return-on-investment studies, convened industry boards to share the value of apprenticeship, conducted and shared labor market analyses that build the case for apprenticeship and generally researched industries' need for apprenticeship. Several high-performing grantees hired apprenticeship consultants who specialize in industry engagement. The consultants spent time understanding business cycles and hiring practices so that they could have informed conversations with employers about the value of registered apprenticeship as a tool for building a highly skilled workforce. Many grantees also had feedback loops with participating employers to measure their satisfaction with apprenticeship programs.

Organizations that want to create sustainable RAPs must also examine how they can integrate their programs into workforce, education and economic development systems at the local, state and federal levels. Each system has its own pool of beneficial resources and partnerships, participating employers and

apprentices. By connecting to these systems and promoting registered apprenticeship as a critical workforce, education and economic development strategy, the apprenticeship program is less likely to be affected by organizational setbacks. For example, J. Sargeant Reynolds Community College aligned its RAPs with statewide workforce development efforts (see Box 1).

BOX 1: Example of Sustainability Efforts by the J. Sargeant Reynolds Community College

STRATEGIC ALIGNMENT OF PROGRAMS WITH STATE VISION

Virginia had a strong foundation to support workforce development programs as a result of several statewide workforce initiatives led by the Governor and General Assembly. The AAI grantee's Apprentice Virginia: Collaborative Workforce Solutions in Information Technology (ApprenticeVA) project used these initiatives and resources to expand the reach of its grant. In 2014, former Virginia Gov. Terry McAuliffe signed Executive Order 23 and established the New Virginia Economy.^a This initiative sought to overhaul the state's economy by:

- Increasing postsecondary and education credentials through Pathway to 50K, a campaign to reach 50,000 credentials, licensures, apprenticeships and sub-baccalaureate degrees.
- Aligning education to meet industry needs.

The New Virginia Economy was an answer to workforce development and economic development needs in the state. Credential attainment was a metric that signaled the quality of the local workforce and resonated with employers, especially those looking to relocate to Virginia.

In 2016, the Virginia General Assembly passed House Bill 66, which established the New Economy Workforce Grant Program. The bill aimed to create a supply of skilled, credentialed workers for high-demand occupations across Virginia – specifically, those that required less than a bachelor's degree but more than a high school diploma. The first of its kind, the New Economy Workforce Grant Program was implemented as the Virginia FastForward Program (FastForward), a "pay-for-performance model" that provides funding for noncredit workforce training that culminates in an in-demand credential. Programs are designed to meet the needs of local employers, and students are trained for high-demand jobs. When a student completes his or her training, the state will reimburse one-third of the cost of the program (up to \$1,500) to the institution providing the training.^b

ApprenticeVA designed its AAI grant program to align with and use the New Virginia Economy and FastForward initiatives. As a result, ApprenticeVA has been able to operate under budget and stretch its training funds to support more apprentices. The grantee cut its apprenticeship training costs by two-thirds and increased the number of enrolled apprentices and pre-apprentices. ApprenticeVA has also found that its alignment with the New Virginia Economy and FastForward helped spark renewed support and momentum for earning workforce credentials.

^aVirginia Career Works. [n.d.]. Governor McAuliffe unveils major workforce development initiative. <https://workforcecouncil.arlingtonva.us/2014/11/governor-mcauliffe-unveils-major-workforce-development-initiative>

^bDeye, S. (2018, December 17). Virginia's FastForward credentialing program. National Conference of State Legislatures. <http://www.ncsl.org/research/education/virginia-s-fastforward-credentialing-program.aspx>

See Appendix C for background information about this grantee.



Similar to creating a business case for apprenticeship for industry, organizations can encourage system-level integration by identifying and sharing the benefits of apprenticeship with partners in related systems. To do so, they can convene partners and promote policy that supports the growth of registered apprenticeship (see Box 1, Box 2 and Appendix D for strategy guides). A promising practice of systems integration that emerged from AAI is to create a liaison position that reports directly to multiple systems, including a state-level agency or division. For example,

BOX 2: Examples of Sustainability Efforts by the Alaska Department of Labor and Workforce Development (DOLWD)

NEW STATE COORDINATOR INCREASES APPRENTICESHIP VISIBILITY

With support from the AAI grant, Alaska DOLWD designated a full-time position for a state apprenticeship coordinator. This person works closely with the DOL Office of Apprenticeship and is responsible for promoting, developing and servicing new programs. The coordinator also conducts outreach to Alaska Native groups, military bases and the department's Division of Vocational Rehabilitation. The coordinator works closely with Alaska Job Center staff on outreach to new employers in the area.

As a result of this new dedicated position, the value of apprenticeship across all sectors has received increased visibility. Alaska also ensures that employers have access to a single point of contact who can respond to their questions.

STANDARDIZED TRAINING FOR ALASKA JOB CENTER STAFF ENCOURAGES CONSISTENCY IN LONG-TERM CUSTOMER ENGAGEMENT

The AAI grant at Alaska DOLWD benefits from a partnership with the state's 13 Alaska Job Centers, allowing the work to continue beyond the AAI grant period of performance. The Alaska Job Center Business Connection staff are now trained to include a discussion of health care apprenticeship programs in any outreach to medical employers. They are also equipped to:

- Provide consultative sales services to employers.
- Research, develop and service apprenticeship programs.
- Work with employers to develop apprenticeship standards.
- Provide guidance on mentorship reimbursement to support apprenticeship.
- Inform and recruit job seekers, including targeted populations, for health care apprenticeship programs.

Through the partnership, all new Alaska Job Center staff receive standardized introductory staff training through an internal website that will continue beyond the scope of the AAI grant. Providing consistent training to staff enables DOLWD to convey a common message to employers and job seekers about the value of apprenticeship.

See Appendix C for background information about this grantee.

the Alaska Department of Labor and Workforce Development, Macomb Community College, Truckee Meadows Community College and Building Futures Rhode Island created system liaison positions through their AAI grant that have committed funding beyond the project (see Box 2).

In general, most apprenticeship programs cannot rely on only one or two major funding sources to support and sustain their work. For example, a program can use resources efficiently to better fill gaps in its training and supportive services for apprentices. Fortunately, organizations can use many state and federal initiatives to support registered apprenticeships. See Tables 2 and 3 for lists of available apprenticeship-related federal funding sources and grants (see Appendix D-3 for a strategy guide on leveraging resources for initiative success and sustainability).





TABLE 2: Federal Funding Sources that Support Apprenticeship

Issuing Agency	Program Name	Description	Type of Apprenticeship (Registered/ Non-Registered)
U.S. Department of Agriculture ¹⁶	Supplemental Nutrition Assistance Program Employment and Training (SNAP E&T)	States may use SNAP E&T funds to support direct apprenticeship program costs and supportive services for apprentices.	Either
U.S. Department of Education ¹⁷	Pell Grant	Qualified apprentices can receive assistance with all or most of tuition and fees for enrollment in an eligible academic program for their related technical instruction (RTI).	Either
	Work Study	Institutions can use Federal Work Study to pay a portion of the training wages of eligible students who are apprentices in an eligible certificate or degree program; institutions can also use Federal Work Study funds to help identify and support employers in creating RAPs for eligible students.	Either
U.S. Department of Housing and Urban Development (HUD) ¹⁸	HUD-DOL Opportunities for Section 3 Residents and Youthbuild Graduates	This partnership helps connect HUD funding projects to registered apprenticeship.	Registered
U.S. Department of Labor	Workforce Innovation and Opportunity Act (WIOA) ¹⁹	WIOA provides multiple mechanisms to support apprenticeship. For example, RAPs can be listed automatically on a state's eligible training provider list and thus access Title I Adult and Dislocated Worker funds for eligible participants.	Either
	Trade Adjustment Assistance (TAA) ²⁰	TAA reimburses employers for job training, such as apprenticeship, to workers laid off as a result of foreign trade.	Either
U.S. Department of Transportation ²¹	Federal Highway Administration On-the-Job Training and Supportive Services	These funds foster the training and development of a surface transportation-related workforce, including through apprenticeship.	Either
U.S. Department of Veterans Affairs ²²	GI Bill	Veterans may use their GI Bill funds to subsidize wages while in a registered apprenticeship.	Registered



TABLE 3: Current U.S. Department of Labor Apprenticeship-Related Grants

Name of Grant	Description	Program Period of Performance	Amount	Grantees	Type of Apprenticeship Supported (Registered/ Non-Registered)
American Apprenticeship Initiative (AAI) ²³	AAI funds are used to expand apprenticeship, with an emphasis on high-growth industries and underserved populations.	2015-2020	\$175 million	46 organizations	Registered
State Apprenticeship Expansion (SAE) ²⁴	SAE funds are used to expand apprenticeship in states, with an emphasis on high-growth industries and underserved populations. It supports the alignment of apprenticeship with the state's economic-, workforce- and education talent-development systems.	2016-2020	\$50.5 million in 2016 and \$50 million in 2018	States and territories	Registered
Industry Intermediaries to Expand Registered Apprenticeship Programs ²⁵	This grant will expand registered apprenticeship in high growth industries including information technology (IT), cybersecurity, telecommunications and 5G advanced manufacturing, hospitality, healthcare and health IT, transportation and logistics, and energy.	2020-2021	\$22 million	12 industry intermediaries	Registered
Apprenticeship State Expansion (ASE) ²⁶	ASE funds are used to raise awareness of apprenticeship, embed apprenticeship in education and workforce development systems, increase diversity and continue to invest in new partnerships and programs.	2019-2022	\$73 million	States and territories	Registered
Expanding Community College Apprenticeships (ECCA) ²⁷	ECCA provides resources to community colleges to create and operate apprenticeship programs.	2019-2022	\$20 million	8 community college consortia and 56 individual community colleges	Registered
Women in Apprenticeship and Non-Traditional Occupations (WANTO) Technical Assistance Program ²⁸	WANTO grants are designed to help women pursue occupations in non-traditional industries.	2020-2022	\$4.1 million	6 organizations	Either



Name of Grant	Description	Program Period of Performance	Amount	Grantees	Type of Apprenticeship Supported (Registered/ Non-Registered)
Building State Capacity to Expand Apprenticeship through Innovation ²⁹	This grant supports statewide RAP expansion through a two-tiered funding system that provides states with maximum flexibility to address local apprenticeship needs while enhancing the focus on employer engagement, performance, and positive outcomes for apprentices.	2020 -2023	\$81,046,170	States and territories	Registered
Scaling Apprenticeship through Sector-Based Strategies ³⁰	This grant is used to accelerate the expansion of apprenticeships to new industry sectors reliant on H-1B visas. It aims to increase the level of apprenticeship activity among employers within these industries, particularly small and medium-sized businesses.	2019-2023	\$184 million	23 organizations	Either
Apprenticeship: Closing the Skills Gap grant program ³¹	This grant supports large-scale expansion of apprenticeship in advanced manufacturing, health care and IT. It is funded by H-1B funds.	2020-2024	\$100 million	28 public-private partnerships	Either
Youth Apprenticeship Grants Readiness Program ³²	This grant supports the enrollment of in-school or out-of-school youth apprentices (aged 16-24 years) into new or existing RAPs.	2020-2024	\$42.5 million	14 organizations from a variety of backgrounds	Registered
Building State Capacity to Expand Apprenticeship through Innovation ³³	These funds can be used to fund baseline activities that improve states' ability to serve, improve and strategically scale the RAP model and to fund innovations aimed at using RAPs as a tool for developing the economy and building infrastructure.	2020-2024	\$73 million	States and territories	Registered

Finally, organizations can increase program sustainability by designing apprenticeship programs that are intentionally inclusive of all populations, independent of whether the supporting grants specifically require it. Programs that appeal to a diverse applicant pool must strategically reach out to different populations, create and use support programs to ensure that these populations are able to participate and provide follow up after the apprenticeship ends to ensure that the individuals are able to successfully integrate into the industry long term. Successful graduates of RAPs are also likely to encourage their peers to participate in the apprenticeship program in the future, thus supporting the organization's outreach and recruitment strategy.

Grantees that focused on creating sustainable programs will ultimately continue to experience success beyond AAI. They have taken steps to use available resources and partnerships to support their programs and the apprenticeship ecosystem in which their programs operate.



Success Factor: Partnerships

Successful grantees formed partnerships to incorporate a variety of perspectives and resources that can support programmatic success.

It is unlikely that a single entity can take all the steps necessary to build and sustain a successful RAP on its own. Strong partnerships are critical for building high-quality programs through which apprentices are supported in their learning and work experience and can advance their careers. The steps to creating strong partnerships include identifying key partners, sharing information early, articulating roles and expectations, maintaining continuous communication and leveraging partners'

BOX 3: Example of Partnership Management by Florida State College at Jacksonville (FSCJ)

PARTNERSHIP WITH COMMUNITY-BASED ORGANIZATIONS ASSISTS WITH RECRUITMENT OF VETERANS

In 2018, FSCJ began partnering with Assessment Technologies Group (ATG), an organization that could help recruit service members transitioning out of the military and veterans as apprentices. ATG is a local organization development and employee-selection firm with a national contract from the United Service Organizations, Wounded Warrior Project and Onward to Opportunity. ATG provided a knowledge, skills and ability assessment to transitioning military and veterans who were interested in becoming apprentices.

SET EXPECTATIONS WITH PARTNERS AND PROVIDE CONSISTENT COMMUNICATION

Focusing on meeting grant deliverables remained at the forefront for FSCJ, with the understanding that strong relationships with subgrantees were necessary to meet overall grant goals. When subgrantees struggled to meet their goals, FSCJ increased hands-on and virtual assistance to support them. Engaging with grant partners was a continuous process that FSCJ improved on over time. FSCJ held regular strategy phone calls, sent grant communications and issued meeting invitations.

To further assist these partners, FSCJ held subgrantee consortium meetings several times a year to discuss deliverables, goal-setting and alignment, marketing and problem-solving. On the grant management side, FSCJ conducted internal site visits after the DOL monitoring visit, set up an online resource clearinghouse to store all the documents from the AAI national meetings, attended state apprenticeship advisory meetings (which subgrantees are also invited to attend) and provided step-by-step usage guides for the federal performance reporting system. Consistent and reliable outreach and clear communication about grant goals are important for subgrantee engagement and for achieving overall grant goals. In this way, the grantee could track progress and make any needed improvements or adjustments along the way.

See Appendix C for background information about this grantee.

STEPS TO CREATING STRONG PARTNERSHIPS:

1. Identify key partners.
2. Share information early.
3. Articulate roles and expectations.
4. Maintain continuous communication.
5. Take advantage of partners' expertise.

expertise. Strong partnerships result in better outcomes for program and participant success and create a solid foundation on which to grow or modify the apprenticeship program to keep up with changing needs.

The first step in building such a partnership is to identify the ideal partners for a RAP by defining the expertise and resources that would benefit the program. Employers are the first essential partners. Other entities can also serve as partners, connecting potential apprentices to the program and providing additional resources and skills. For example, community-based organizations (CBOs), educational institutions, existing apprenticeship program leaders, industry associations, local and state workforce leaders, registration agencies and labor unions provide additional perspectives and resources as partners, often creating stronger programs for both the employers and the apprentices.

Grantees that successfully engaged underserved populations tended to build partnerships with CBOs. CBOs such as local charities, youth organizations, housing authorities and religious organizations, provide unique benefits to apprenticeship programs. They can conduct outreach and recruitment, provide case management and mentoring, give feedback on program design and implementation and make connections for employers. For example, Florida State College at Jacksonville (FSCJ) partnered with a CBO specifically to help recruit veterans for apprenticeship positions (see Box 3).



Partnerships with educational institutions, such as community colleges, have also proven to be an asset in building quality programs. Registered apprenticeship results in an industry-recognized credential, which in turn signals skills and knowledge to employers and forms the foundation for further education. Educational institutions have the resources and capacity to provide the curriculum and training apprentices need to obtain these credentials and to ensure that the programs provide opportunities to build on obtained credentials later in the apprentice's career. These institutions have the capacity to deliver the RTI components of an apprenticeship program, but it is important for employers to collaborate with these institutions to ensure that RTI aligns with employer needs and skills learned through the on-the-job training components of the program.

Partnering with industry associations, workforce leaders and labor unions helps better incorporate the perspective of these groups in decision-making. These partners also help individual apprenticeship programs integrate participants into the workforce and economic development system and ensure that the skills apprentices learn are relevant to industry need. These partners can also provide access to different resources. For example, the Shenandoah Valley Workforce Development Board partnered with state and local partners to disburse WIOA funds across **Virginia** (see Box 4) in support of registered apprenticeship.

Once they had identified relevant partners, AAI grantees found that it was important to disseminate information early about the program and registered apprenticeship more broadly, including definitions, acronyms, metrics, tracking requirements, goals, benefits and timelines. At this stage, it is also important to divide roles and responsibilities and set expectations among partners. Hosting an orientation so that external partners can review details of the program, share examples of required paperwork and program documentation and answer questions related to apprenticeship programs is a successful starting point. Asking apprentices and employers to share their stories with their peers, whether at in-person meetings or through marketing approaches, such as TV commercials, is also a promising strategy

for communicating the value of apprenticeships.

After these initial conversations, it is critical to check in with partners routinely. Some grantees set up monthly webinars or (when safe) in-person meetings to share updates and answer partners' questions. Others meet biweekly to share updates on program performance metrics. For example, before the pandemic, FSCJ held regular phone calls, convenings and site visits with subgrantee partners throughout the grant's period of performance (see Box 3 and Appendix D).

Through such continuous collaboration, each partner brings its own relationships, expertise and experiences to bear to create high-quality programs and better support apprentices. Productive partnerships may also result in the identification of additional funds that can support apprenticeship programs. For example, some AAI grantees worked with partners at the state level to use state funds and tax incentives that support registered apprenticeship. In summary, partnerships lay the foundation for program sustainability by creating wider buy-in for apprenticeship, offering a variety of resources and incorporating different perspectives.

BOX 4: Example of Leveraging Partners' Expertise — the Shenandoah Valley Workforce Development Board (SVWDB)

CONVENE REGIONAL WORKFORCE PARTNERS AND USE OTHER FUNDING SOURCES

The SVWDB administers WIOA activities for the Shenandoah Valley in northwestern Virginia. The SVWDB partners with a wide range of local and state partners to offer services to the regional workforce and business community and to create and implement workforce development programs for adults, dislocated workers and youth.⁶ The SVWDB is considered the convener of workforce development partners in its region. To connect more closely with employers, it also takes advantage of existing relationships with the Virginia Manufacturers Association, economic development partners, community colleges and local chambers of commerce.

These partnerships helped the SVWDB improve its apprenticeship programs by incorporating new assessments for students and hiring apprenticeship coaches, who acted as intermediaries to apprentices, businesses, educators, and individuals from underrepresented populations. Coaches connected participants interested in apprenticeship to apprenticeship opportunities and provided supportive services, such as uniforms, tools, or tutoring. They also worked with employers looking to use apprenticeships to identify candidates for open positions using an innovative boot camp pre-hiring mode. Coaches supported business development by advising businesses on how to work with state agencies and leverage WIOA funding and other programs.

⁶Virginia Career Works. (n.d.). About us. <https://vcwvalley.com/about>

See Appendix C for background information about this grantee.



Success Factor: Simplified Process

Successful grantees established simplified processes for employer partners to engage in registered apprenticeship.

AAI grantees quickly discovered that having employer partners willing to engage with the registered apprenticeship system was essential for the success of RAPs. This engagement was often difficult to secure, however, because AAI grantees were creating RAPs for occupations that had previously not taken advantage of the registered apprenticeship model. Employers working with these occupations tended to be new to registered apprenticeship and had few peer employers that could provide advice on program setup. As a result, successful AAI grantees developed new and improved processes to make it easier for employers to engage in apprenticeship. Such processes included finding creative ways to educate employers about registered apprenticeship, assisting with registration and compliance of apprenticeship regulation and tracking progress of apprentices. They also worked with state and federal leadership to improve coordination across multiple apprenticeship systems and to streamline tracking across multiple databases, when applicable.

PROCESSES CAN BE DEVELOPED IN SUPPORT OF REGISTERED APPRENTICESHIP TO:

- Educate employers about registered apprenticeship.
- Assist with registration and compliance of apprenticeship regulation.
- Track progress of apprentices.

Many AAI grantees or their subgrantees took on the role of “apprenticeship intermediary” to create simplified processes and coordinate disparate systems. An apprenticeship intermediary is any organization that serves “as a translator between the languages of business, education and regulation to promote the expansion of registered apprenticeship.”³⁴ Apprenticeship intermediaries use a customer service approach to identify the challenges facing employers and create innovative solutions to make it easier to institute apprenticeship programs and strengthen the modern apprenticeship system.

BOX 5: Example of Simplified Processes by the Southeast Michigan Community Alliance (SEMCA)

INTEGRATING A CUSTOMER SERVICE-ORIENTED MINDSET

To enhance customer service support, the SEMCA Workforce Intelligence Network (WIN) partnership simplified the registered apprenticeship process with the Registered Apprenticeship in a Day (RAPiD) workshop events. The goal of RAPiD workshops are to bring all the stakeholders (colleges, workforce agencies, apprenticeship sponsors, DOL and employers) together in one location to assist employers through all steps of the apprenticeship registration process, ending with a DOL signing ceremony.

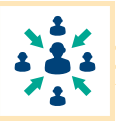
At RAPiD workshops, employer participants receive no-cost professional assistance to explore, design and plan their apprenticeship programs with the support of workforce experts. Employer participants typically correspond with the apprenticeship sponsors, RTI providers and DOL.

Before attending a RAPiD event, employer partners attend an apprenticeship information session, submit an interest form to DOL and complete a mandatory site visit with DOL staff. During the RAPiD session, employers can work on one or more occupations and have a DOL state director sign them at the conclusion of the meeting.

The RAPiD event provides a platform for dialogue where additional information about acceptance qualifications, apprentice supervision, wage progression and other technical issues can be disseminated. The convening also ensures that participants receive immediate feedback from DOL staff. Overall, the RAPiD model accelerates the program-development timeline, connects employers to experts in the apprenticeship arena and streamlines the communication process between program stakeholders.

The RAPiD process is now used by local Michigan workforce agencies in collaboration with the Michigan Office of Apprenticeship (OA). Since COVID-related social distancing in the state began in March 2020, many regions have moved in-person information sessions to virtual sessions. The Michigan OA provides virtual site visits, which are followed by physical site visits as soon as they can be achieved safely. Signing sessions are taking place online, with signatures being processed in secure document-sharing formats. While the process activities have become virtual, the heart of the concept remains intact and a key benefit for apprenticeship stakeholders in Michigan.

See Appendix C for background information about this grantee.



First, registered apprenticeship intermediaries develop processes for informing employers about the registered apprenticeship model and how it can improve their talent recruitment strategy. Often, the source of such a process is discussions about how broader workforce-related services and resources may meet the talent needs employers have expressed. Intermediaries can detail the benefit of registered apprenticeship if they determine that it is an appropriate solution for meeting employers' needs. To complement proactive outreach about registered apprenticeship with employers, intermediaries often create or refer employers to publicly available resources, such as webinars, guidebooks or online resources, that employers can consult at their convenience. They also provide clear expectations about the apprenticeship registration process and related timelines so that employers know what to expect.

Next, intermediaries can facilitate with registration and compliance with apprenticeship regulations. RAPs have specific federal and state regulation guidelines to help ensure the consistency and quality of programs nationally. To prevent these regulations and mechanisms from becoming obstacles to registering new programs, an apprenticeship intermediary can clarify and simplify them and work with their respective state and federal apprenticeship agencies to streamline the process. For example, the Southeast **Michigan** Community Alliance created a recurring event that brings together employers and federal and state apprenticeship advisors to help speed up the registration process (see Box 5).

When an employer chooses to participate in a new RAP, an entity to serve as the program's sponsor must be identified. The apprenticeship sponsor is responsible for the federal (and state-level, if applicable) registration of the program and enrollment of apprentices. The apprenticeship intermediary can serve as the sponsor, connect the employer with another entity that serves as the sponsor, or help the employer become the sponsor. If the employer becomes the sponsor, the apprenticeship

intermediary can help the employer complete the necessary paperwork to create a federal RAP and to register each apprentice. Some of the most successful apprenticeship intermediaries identify a point person for each employer it works with who can help the employer through the sponsorship process.

Finally, an apprenticeship intermediary can make it easier for employers to track the progress of their apprentices after enrollment. The intermediary can create forms that an employer can easily navigate and that feed into their apprenticeship tracking system, as appropriate. The tracking system should be transparent so that employers can always see the current progress of apprentices.

Some aspects of program registration and

BOX 6: Example of Simplified Processes by the South Carolina State Board of Technical and Comprehensive Education

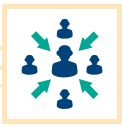
ONBOARDING EMPLOYERS WITH HIGH-LEVEL SUPPORT

The South Carolina State Board of Technical and Comprehensive Education's AAI-funded South Carolina Apprenticeship Initiative (SCAI), operated within the Division of Apprenticeship Carolina™, leverages full-time Apprenticeship Consultants who work directly with employers to develop successful registered apprenticeship programs. Apprenticeship Consultants also interface with both economic and workforce development counterparts at the state and local levels, who are focused on assisting companies looking to expand or move to South Carolina. SCAI also leverages staff from the 16 state technical colleges who identify and refer employers that would benefit from running registered apprenticeship programs. SCAI grant funds subsidized tuition costs for job-related technical instruction for apprentices.

Apprenticeship Consultants, at no cost to the company, assist in the design and development of the registered apprenticeship programs. This customized process ensures that the company is addressing their workforce development needs. Once the program has been developed, the Apprenticeship Consultant works with the U.S. Department of Labor (USDOL) Office of Apprenticeship officials to get the company registered. Apprenticeship Consultants learned that simplifying the registration process encourages companies to enroll apprentices.

In addition to providing initial technical and administrative support, Apprenticeship Carolina™ uses a variety of tools to engage and onboard employers. One example is offering online mentoring training. After USDOL program registration, an Apprenticeship Carolina™ Registered Program Specialist is assigned to the company to assist companies with apprentices' registration, technical support on RAPIDS 2.0, introduction to technical colleges representatives, and a linkage to agencies with potential apprentices. The additional customer support allows the company to have access to on-going subject matter experts while allowing them time to focus on training apprentices.

See Appendix C for background information about this grantee.



reporting systems apprenticeship intermediaries may not be able to change in the short term. Many AAI grantees partnered with state and federal apprenticeship leaders to update and modernize the larger apprenticeship system, which is often a lengthy process that involves multiple actors. For example, representatives at the Workforce Investment Board of Herkimer, Madison and Oneida Counties worked with the **New York** Apprenticeship Council to reduce paperwork for apprenticeship sponsors looking to register a new occupation eligible for apprenticeship in the state.

As a result of efforts by intermediaries to simplify processes to educate employers about apprenticeship and comply with regulation and track apprentices, more employers will engage because they can focus on the quality of their programs rather than on paperwork. The below example from the **South Carolina** State Board for Technical and Comprehensive Education depicts how a grantee has created simplified processes ranging from initial employer outreach all the way through continual program improvement (see Box 6).



Success Factor: Flexibility

Successful grantee program structures provided flexibility based on employer feedback, industry demand and apprentices' needs.

Successful grantees offered enough flexibility in their programs to accommodate the evolving needs of employers and apprentices as well as changes in the labor market. As a result of regular communication with partners, these grantees adjusted program design or services to respond to these needs and to deliver better outcomes for employers and apprentices.

Grantees established clear feedback loops to gather information so that they could adjust their programs or processes as needed. Grantees were able to stay informed of employer demand by administering surveys,

participating in roundtables and local events and partnering with state workforce and education leaders. These activities enabled grantees to communicate with partners; get feedback from industry associations; and collect data and labor market information to inform decisions about starting, expanding and modifying apprenticeship programs. For example, Truckee Meadows Community College (TMCC) referred to labor market information when it faced challenges in advanced manufacturing. The data showed that health care had greater demand, which helped TMCC make a case for switching its focus to this industry (see Box 7).

When grantees had identified specific issues and challenges, they worked with their partners to modify the program design. Some grantees, working with their grant federal project officers, changed occupations and sectors of focus, geographic scope, sponsorship and inclusion of pre-apprenticeship programs and determined whether the program was time based, competency based or a hybrid (see Appendix A for definitions of these terms). For example, JFF conducted a survey, with its regional and local subgrantees serving as apprenticeship intermediaries, to identify common challenges

BOX 7: Example of Adjusting Program Design by Truckee Meadows Community College (TMCC)

USE LABOR MARKET INFORMATION TO DRIVE FOCUS

When TMCC faced initial roadblocks in developing advanced manufacturing RAPs, the college began exploring the possibility of expanding its work into other industry sectors. Labor market data showed large health care growth in the region, which led the college to explore the sector as an opportunity for apprenticeship. As a result, four area hospital systems have become strong partners. Crossing multiple sectors, a variety of employers expressed a need for buyer-purchasers — professionals who know how to prepare purchase orders, solicit bid proposals and review requisitions for goods and services — which led to the development of an apprenticeship program for that occupation. IT is now under exploration, as well.

See Appendix C for background information about this grantee.



PRE-APPRENTICESHIP is a strategy that many grantees used to recruit for registered apprenticeship, especially among underserved populations. Pre-apprenticeship programs associated with RAPs provide connections to jobs; improve retention in registered apprenticeship; help students obtain college credit and complete coursework; and supply better wages and support services to overcome barriers to apprentices completing RAPs. Pre-apprenticeship also benefit employers by connecting them with apprentices who are already trained in communications, employer expectations and workplace processes. By creating pre-apprenticeship programs, grantees recruited more diverse apprentices, saw more apprentices complete programs and retained quality employees.

they faced. Based on the results, JFF expanded the programs' occupations and geographic boundaries to meet employers' needs, which resulted in better outcomes for the grantee and the partner employer (see Box 8).

Other grantees made changes to the services that support their apprentices, such as offering online modules, training or other RTI and altering communication styles based on apprentice feedback. Organizations focused on attracting and retaining individuals from underserved populations often looked for specific apprentice needs and worked with partners to respond to these needs. Examples included providing interpreters and other accessibility support, hosting information sessions, texting with apprentices and assisting

individuals with apprenticeship paperwork. Some grantees provided employers with training to better support individuals from underserved populations.

Flexibility in program design and services offered results in better outcomes because the programs more consistently stay aligned with the current needs of industry, employers have the resources they need to run high-quality programs and apprentices have the support and resources they need to complete programs. This flexibility is possible only as a result of constant communication across apprenticeship partners and a willingness to change quickly when necessary.

BOX 8: Example of a Feedback Loop by JFF

SURVEY EFFORTS AND ADJUSTMENT TO MEET EMPLOYER DEMAND

When JFF noticed that some of its subgrantees serving as apprenticeship intermediaries were struggling to meet their goals, it conducted a study to map their tasks and determine what prohibits them from accomplishing them. Through the study, JFF identified common challenges and processes that each entity used and provided TA on strategies and best practices. For example, subgrantees struggled to be flexible enough to meet employers' needs. At the beginning of the grant, JFF and its partners offered only the industrial manufacturing technician apprenticeship, but some employers preferred to start with more traditional manufacturing occupations. In response to industry demands, JFF successfully modified its AAI grant to expand geographically and offer more advanced manufacturing occupations.

See Appendix C for background information about this grantee.

Conclusion

AAI is an unprecedented investment in registered apprenticeship, a strategy that has proven successful at providing employers with the skilled workforce they need and putting workers from many educational backgrounds on a path toward a successful career. Through AAI, policymakers have a unique insight into how diverse entities, such as colleges, labor unions, state and city agencies, NPOs and workforce development boards, can create flexible RAPs in high-growth and high-tech industries that engage underserved populations.

Policymakers can refer to the key success factors of high-performing AAI grantees described earlier when making decisions about which types of organizations, programs or apprenticeship-building activities to support. As the country recovers from the COVID-19 pandemic and its negative effects on the economy, registered apprenticeship will be a key tool in preparing workers with the skills businesses need. The strides made under AAI have helped pave the way for current efforts to make registered apprenticeship a more effective and viable pathway to fulfilling careers and achieving economic prosperity.



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Appendix A. Definitions

Apprentice: A worker who is at least 16 years of age, except where a higher minimum age standard is otherwise fixed by law, and employed to learn an apprenticeship occupation through an apprenticeship program.³⁵

Apprenticeship: An industry-driven, high-quality career pathway on which employers can develop and prepare their future workforce and individuals can obtain paid work experience; classroom instruction; and a portable, nationally recognized credential.³⁶

Apprenticable occupation: An occupation that has been officially recognized as apprenticeship by the U.S. Department of Labor's Office of Apprenticeship.

Apprenticeship intermediary: Any organization that serves as a translator between the languages of business, education and regulation to promote the expansion of apprenticeship.³⁷

Competency-based apprenticeship program: An approach to an apprenticeship program that involves successful demonstration of acquired skills and knowledge by an apprentice, as verified by the program sponsor, with an on-the-job learning component and related technical instruction.³⁸

Hybrid apprenticeship program: An approach to an apprenticeship program that requires the apprentice to complete a specified minimum number of on-the-job learning hours and related technical instruction hours to demonstrate competency in the defined subject areas.³⁹

NAICS codes: A classification within the North American Industry Classification System. The NAICS system was developed for use by federal statistical agencies for the collection, analysis and publication of statistical data related to the U.S. economy.⁴⁰

National Apprenticeship Office: The U.S. Department of Labor Office of Apprenticeship.

Nationally recognized credential: A portable credential that signifies to employers that apprentices are fully qualified for the job.⁴¹

On-the-job training: Hands-on training from an experienced mentor at the job site. On-the-job training focuses on the skills and knowledge an apprentice must develop during the program to be fully proficient on the job. This training is based on national industry standards, customized to the needs of the employer.⁴²

Participant: An individual who has been determined eligible (in accordance with the American Apprenticeship Initiative [AAI] funding opportunity announcement) and who receives a grant-funded activity. In the case of AAI, this describes access to pre-apprenticeship or registered apprenticeship-related activities, as recorded by the grantee.

Pre-apprenticeship: A program designed to prepare individuals to enter and succeed in a registered apprenticeship program.⁴³

Program sponsor: A single business, consortium of businesses, workforce intermediary, industry association or joint labor-management organization, community college or community-based organization that is responsible for the overall operation of the program.⁴⁴

Registered apprenticeship: A proven model of apprenticeship that has been validated by the U.S. Department of Labor Office of Apprenticeship or a state apprenticeship agency.⁴⁵

Registration agency: The U.S. Department of Labor Office of Apprenticeship or a recognized state apprenticeship agency that is responsible for registering apprenticeship programs and apprentices, providing technical assistance and conducting reviews for apprenticeship program compliance and quality assurance.⁴⁶

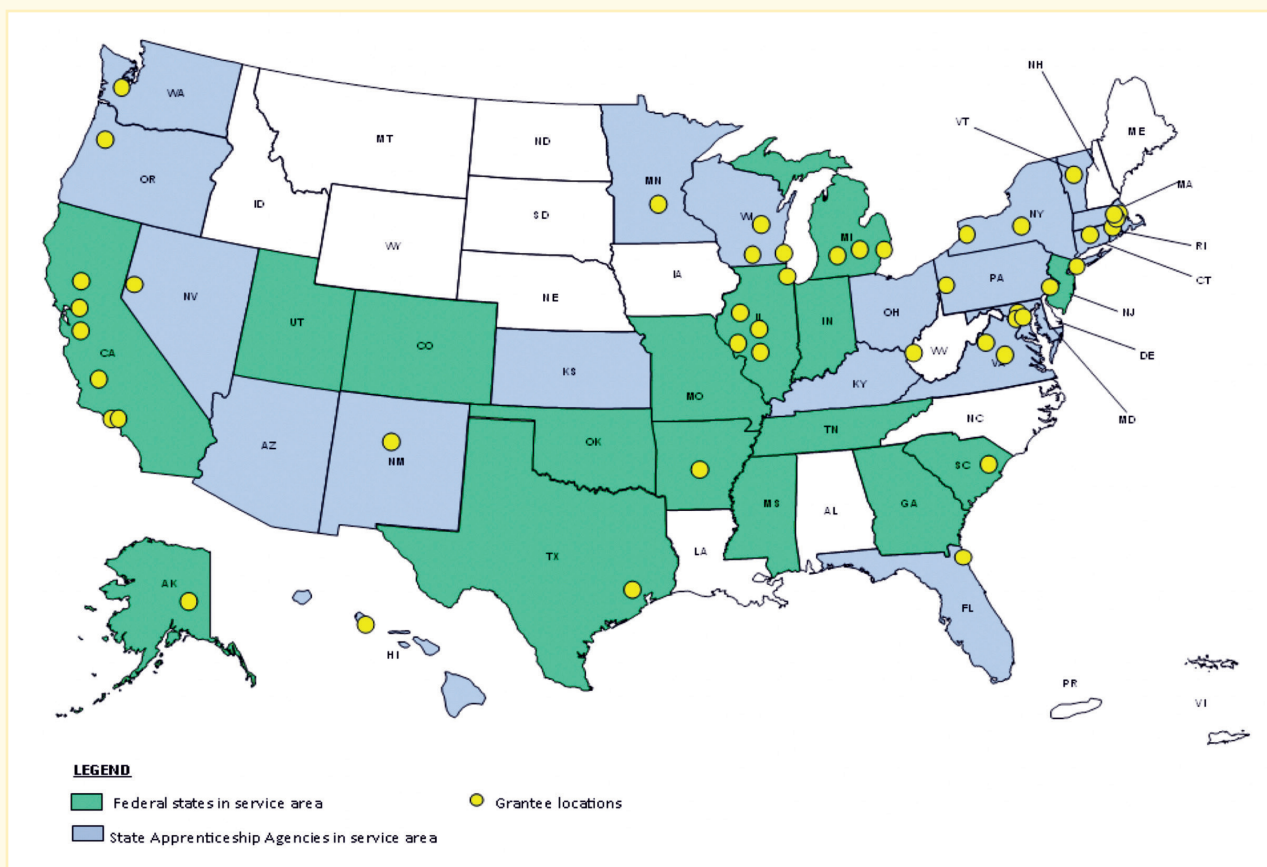
Related technical instruction: The instructional component of an apprentice's training that complements on-the-job training. The instruction delivers the technical and academic competencies that apply to the job. It can be provided by a community college, a technical school or the business.⁴⁷

State Apprenticeship Council: An entity established to assist the state apprenticeship agency. A regulatory State Apprenticeship Council may promulgate apprenticeship law at the direction of the state apprenticeship agency. An advisory State Apprenticeship Council provides advice and guidance to the state apprenticeship agency on the operation of the state's apprenticeship system.

Time-based apprenticeship program: An approach to an apprenticeship program that involves completion of at least 2,000 hours of on-the-job learning.⁴⁸

Underserved populations: Populations that have been historically underrepresented in their respective apprenticeship occupations because of visible or invisible barriers.

Appendix B. Map of American Apprenticeship Initiative Grantee Locations



Appendix C. Narrative Descriptions of All American Apprenticeship Initiative Grantees, in Alphabetical Order

These descriptions were submitted by the grantees during the final year of their American Apprenticeship Initiative (AAI) grant.


Able-Disabled Advocacy

Able-Disabled Advocacy (A-DA), a small, local nonprofit organization (NPO) that specializes in workforce development and employment assistance, created apprenticeships in information technology (IT) and advanced manufacturing in the San Diego, California, region as part of AAI. Major emphasis was placed on developing A-DA’s computer support specialist apprenticeships. A-DA in-house IT training for the Pathways2Paychecks program was strategically aligned to meet the needs of local U.S. Department of Defense employers seeking to hire CompTIA-certified candidates who contract with Naval Information Warfare Systems Command/Department of the Navy,

the largest cybersecurity employer in the San Diego region. A-DA’s project initially focused on the inclusion of people with disabilities, veterans and women; later A-DA partnered with Rise Up Industries to offer computer numerical control (CNC) operator apprenticeship training to felons who have a history of gang affiliation, adding life-changing services that profoundly affect the quality of life of another U.S. Department of Labor Office of Apprenticeship (DOL) target population.

AHIMA Foundation

The AHIMA Foundation’s Managing the Talent Pipeline increases access to health care sector workforce training opportunities in the areas



of health information management (HIM), health informatics and clinical/allied health care occupations; expands workforce training models within the health care industry in high-growth occupations; and creates career pathways, which encompass workforce training and industry-recognized credentials aligned with other postsecondary educational offerings. Apprentices are working in one of seven roles in HIM or one of 11 in the clinical/allied health areas. The related technical instruction (RTI) for the HIM apprentices is based on preparing apprentices for credentialing, although credentialing is not required to complete the program. Underrepresented groups make up most of the apprentices — specifically, women and people of color. Major partners include the Montana Health Network, BlueCross BlueShield of Tennessee, Mercy Hospital, the University of Washington School of Medicine, CNA Training Academy and Vanderbilt University Medical Center. Yale New Haven Health System has served as the evaluator.

Alaska Department of Labor and Workforce Development (DOLWD)

Alaska has been in a deep recession for the past few years because of low oil prices. While the recession has affected infrastructure and construction projects, health care remains its fastest-growing industry, generating 47 of Alaska's top 50 growth occupations. The health care industry in the state is projected to increase its workforce by 16% over the next 10 years and ultimately employ 6% of all Alaskans. To help health care employers develop the skilled workforce they need to fill current and future job openings, the state has invested in registered apprenticeship as a strategy. An AAI grant was awarded to the Department of Labor and Workforce Development (DOLWD), which has coordinated active health care apprenticeship programs since the early 2000s. AAI has enabled DOLWD to launch new health care apprenticeship opportunities across Alaska.

Arkansas Department of Workforce Services (ADWS)

Through AAI, Arkansas's lead agency for workforce development activities, the ADWS, has initiated the coordination of a collaborative registered apprenticeship expansion ecosystem called the Arkansas Apprenticeship Pathways Initiative (AAPI). AAPI partners include local workforce development boards, the community college system, the Office of Skills Development and State office of Apprenticeship, the DOL State Office of Apprenticeship, the Arkansas Center for Data Sciences, Winrock International and the Arkansas Career Technical Institute. The AAPI has focused primarily on the advanced manufacturing, IT, health care and construction sectors, successfully using a series of informational forums around the state under the title "Employers Growing Talent through Apprenticeship," among other outreach strategies. The informational forums pre-COVID were conducted regionally and in partnership with area Chambers of Commerce, employers, the Lieutenant Governor's Office and collective stakeholders. A sampling of employer partners include Lockheed Martin, Simmons Foods, Canfor, Baxter International and DXC Technology.

Building Futures

Apprenticeship Rhode Island, an initiative of Building Futures, has successfully launched apprenticeship programs in a broad range of industries. Its business sponsors include CVS Health and Care New England for health care, Clafin 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.

Central New Mexico Community College (CNM)

CNM is the lead for the statewide New Mexico Information Technology Apprenticeship Program (NMITAP). CNM partners with CNM Ingenuity Inc., an NPO whose mission is to promote the public welfare and prosperity of the people of New Mexico and to foster economic development within the private and public sectors. Notable employers in the NMITAP are the Public Service Company of New Mexico, Unity BOP, Virgin Galactic and Albuquerque Public Schools. Together, they have registered apprenticeships in the occupations of computer user support specialist, network support technician, applications developer, cybersecurity support technician and medical coder.

City and County of San Francisco, California

Nestled amid 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 that business faces. 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 apprenticeship to solve their pressing workforce needs. In response, OEWD created TechSF in 2012 to support local businesses and revitalize downtown San Francisco. TechSF builds recruiting networks for individuals in high-poverty communities and develops 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 apprenticeships.

Connecticut Department of Labor (CTDOL)

The CTDOL Office of Apprenticeship Training (OAT) is the state apprenticeship agency, serving employer sponsors and registered apprenticeship. Under AAI, OAT provides support for the RTI of registered apprentices primarily in advanced manufacturing and health care. These two industries are facing a critical shortage of workers, and the OAT is


focusing on growing their workforce through registered apprenticeships. CTDOL OAT is providing support by collaborating with General Dynamics / Electric Boat, the Marine Draftsmen's Association and the Metal Trades Council labor-management joint apprenticeship partnership as well as to Yale New Haven Hospital (YNHH). The Nurse Residency Apprenticeship Program at YNHH was awarded Accreditation with Distinction by the American Nurses Credentialing Center's Commission on Accreditation. Building on the success of the Nurse Residency Apprenticeship Program at YNHH, the OAT has expanded into the Yale-New Haven Health Services Corp. to implement the national RAP across all their system hospitals in the state.

Economic Development and Industrial Corporation (EDIC)

EDIC houses the Mayor's Office of Workforce Development (OWD) for the city of Boston. AAI enabled OWD to create the Greater Boston American Apprenticeship Initiative (GBAAI) to support pre-apprenticeship programs in two high-growth industry sectors: building trades and hospitality. In subsequent years and in response to employer demand, GBAAI expanded to include pre-apprenticeship programming and establish registered apprenticeships in facilities maintenance and emergency medical services. Across the initiative, the goal has been to expand meaningful employment opportunities to increased numbers of women and people of color. In addition, all programs directly include or provide pathways to higher education and, therefore, career advancement through partnerships with Bunker Hill Community College and the Wentworth Institute of Technology.

Electrical Training Alliance

Quality pre-apprenticeship programs can play a valuable role in preparing qualified entry-level workers for apprenticeship careers while contributing to the development of a diverse and skilled workforce. The Electrical Training Alliance uses its expertise in pre-apprenticeship programs to prepare a diverse pool of electricians, line workers, voice-



data video techs, electrical engineers and networking administrators for rewarding careers across 14 states. Through AAI, the Electrical Training Alliance will add 1,000 registered apprentices through the life of the grant. The Alliance operates pre-apprenticeship programs that lead directly to apprenticeship programs, responding to a tremendous need to increase representation of underrepresented individuals in the electrical/electronics occupations.

Employ Milwaukee

Employ Milwaukee (EM) has coordinated a multistate project to institutionalize, enhance and expand registered apprenticeship in nontraditional industries and with underrepresented populations across the Midwest. This work is coordinated in partnership with Midwest Urban Strategies, a laboratory for workforce development innovation. Through this tactical deployment of resources and strategy, EM has grown and advanced the practice of registered apprenticeship in health care, IT, advanced manufacturing, construction, financial services and early childhood education. The project will serve 300 new registered apprentices by Sept. 30, 2020. The average wage for all served and entering employment (both registered apprenticeship and traditional employment) to date is \$16 per hour.

Executive Office of Labor and Workforce Development (MA EOLWD)

The MA EOLWD MassHire Department of Career Services (MDCS) leads the Massachusetts Apprenticeship Initiative (MAI). The funds support MAI's project to increase the number of registered apprenticeship and pre-apprenticeship opportunities in health care, manufacturing and tech statewide and to provide program access to historically underrepresented populations. MA EOLWD/MDCS works with the MassHire Hampden County Workforce Board, MassHire North Shore Workforce Board (both of which are RAP sponsors), MassHire Central Workforce Board and the Massachusetts Division of Apprenticeship Standards as well as several

employers, including Smith & Wesson, Baystate Health, CRR Corporation Limited, Bostik and Berkshire Manufacturing. MAI specifically conducts outreach to women and people of color for its apprenticeship programs.

Florida State College at Jacksonville

The Florida Apprenticeship Grant Program (FAP) is helping address the state's workforce challenges related to the vast number of retirees and the skills gap that they will leave behind. FAP promotes the expansion of apprenticeship in manufacturing and cross-sector construction and trades occupations, health care and IT, with the goal of serving 1,000 workers — with a target of 20% of those (200) being underrepresented/underserved populations — by September 2020. Part of this expansion includes articulating credits from apprenticeships for apprentices and journeyworkers to pursue an associate's degree and higher-level degrees, thereby helping solve employer issues regarding the availability (readiness) of employees to first-line supervision. The program serves the entire state of Florida and is led by Florida State College at Jacksonville, with consortium members St. Petersburg College and Broward College.

Focus: HOPE

Focus: HOPE has been successful in linking underrepresented pre-apprenticeship participants to apprenticeship opportunities and developing partnerships with other entities to expand apprenticeship opportunities in southeast and central Michigan. Its Pre-Apprenticeship Plus program combines a standard format of industry-recognized credentials and academic training with customized curricula elements designed to meet specific employer needs. This approach has enabled Focus: HOPE to operate cohort programs for specific employers that directly align with their apprenticeship opportunities. Focus: HOPE has also employed a diverse range of partnership-development tactics to expand apprenticeship opportunities, including working with several large employers, community colleges, an industry association and a company that serves as an intermediary

to establish programs the organization would not have been able to build on its own.

Hawaii Department of Labor and Industrial Relations (DLIR)

The DLIR is the state apprenticeship agency recognized by DOL to administer the apprenticeship program for federal purposes in the state of Hawaii. The DLIR was awarded an AAI grant to develop a local workforce pipeline for IT, health care and manufacturing to meet industry needs using the registered apprenticeship model. Major partners/subgrantees of the AAI grant are the city and county of Honolulu and the Pacific Center for Advanced Technology Training/Honolulu Community College. Partner employers/sponsors of apprenticeship programs include the Hawaii Technology Development Corporation, Queen's Health Systems and Honolulu Community College. The AAI grant is implemented statewide — in Honolulu, Maui, Hawaii and Kauai counties — and focuses on the unemployed, incumbent and underrepresented populations.

Homework Hangout Club, Inc.

Homework Hangout Club, Inc. (HHC) is a nonprofit training institute in Decatur, Illinois. For more than 25 years, HHC has maintained services as a base of structured, task-focused, program-designed resources and serves as a quality, engaging agency that provides today's youth, young adults and low-income families with training, opportunity, leadership and discipline, all to aid in the formation of an educational, social and economic partnership through focused coordination of community resources. HHC's AAI program actively engages partners in the construction, building trades and insurance industries to place traditionally underserved populations in registered apprenticeships throughout Central Illinois, employing coordinated training, skill development and outreach.

Houston Community College (HCC)

HCC has more than 30 years of experience with registered apprenticeship in traditional trades through the HCC Apprenticeship Program. The HCC Apprenticeship Program


coordinates a comprehensive apprenticeship for skilled trade and craft workers. It also developed and conduct the program's RTI. Partner employers, employer associations and joint labor-management organizations provide apprentices with on-the-job training that balances the RTI and reflects industry skills needs. With AAI, HCC has established RAPs in newly apprenticable occupations within IT and pharmacy. To help apprentices gain access to leadership roles, such as a lead tech, beyond the program, the pharmacy technician program allows students to transfer up to 12 credit hours toward the HCC pharmacy technician Level Two certificate.

Illinois Manufacturers' Association Education Foundation (IMA Education Foundation)

The IMA Education Foundation is the premier influencer of vocational education policy and programs in Illinois, attracting and developing Illinois' future manufacturing workforce. The IMA Education Foundation is working with the German American Chamber of Commerce of the Midwest and 22 community colleges in Illinois through the AAI grant to raise awareness and register apprenticeships, with a focus on women, people of color, veterans and returning citizens in advanced manufacturing apprenticeship programs in Illinois.

International Brotherhood of Teamsters (IBT)

The IBT was awarded an AAI grant to develop an apprenticeship program to serve the trucking industry. Training provided through the apprenticeship program includes commercial driver's license skills, dock/forklift operations, load securement and hazardous materials transportation. The IBT Apprenticeship Program aims to recruit military personnel who are transitioning to civilian life, incumbent freight workers who are seeking to upgrade their job skills to enable them to operate commercial motor vehicles, and entry-level workers to participate in the apprenticeship program. The apprenticeship program currently provides training in California, Colorado, Georgia, Kansas, Massachusetts, Ohio and Pennsylvania, with plans to expand to several other states in the near future.



International Transportation Learning Center (TLC)

TLC is a national NPO focused on developing a skilled workforce for the transportation industry. With more than 15 years of experience, TLC has developed a national network that has helped the organization be successful in its efforts to expand and scale apprenticeship in the industry. TLC has programs in California, the District of Columbia, Georgia, Washington, Kentucky, Massachusetts, Maryland, Minnesota, Mississippi, New Jersey, New York, Pennsylvania, Ohio, Texas, Utah, Washington and Virginia.

J. Sargeant Reynolds Community College (JSRCC)

The Community College Workforce Alliance, a partnership between J. Sargeant Reynolds Community College and John Tyler Community College manages a complex set of partnerships to promote and expand apprenticeship opportunities in Virginia through the AAI grant. Danville Community College (DCC) and Southside Virginia Community College (SVCC) partner with the Community College Workforce Alliance to lead the Apprentice Virginia: Collaborative Workforce Solutions in IT (ApprenticeVA) project, which is the primary recipient of AAI grant funds. The four colleges utilize their reach and partnerships to expand registered apprenticeships in the advanced manufacturing and IT sectors and transition participants from pre-apprenticeship to apprenticeship. When ApprenticeVA designed its AAI grant plan, IT was an emerging, high-demand field in the region that had not previously adopted the apprenticeship model. Additionally, several companies, including HP, Facebook and Microsoft, opened large data centers in the region and required a skilled workforce to fill their open jobs. Based on these factors, ApprenticeVA saw the IT industry as a prime target for apprenticeship and accordingly focused its AAI grant on both the advanced manufacturing and IT industries.

JFF

JFF is a national nonprofit that drives transformation in the American workforce and education systems. JFF provides consulting and strategy services to promote economic

advancement and college and career readiness. JFF uses its AAI grant to expand registered apprenticeship in states and to bring in more partners to support the work at the local level. JFF partners with the Working for America Institute of the AFL-CIO, the Wisconsin Regional Training Partnership, Michigan Human Resource Development Institute, Labor Institute for Training, Keystone Development Partnership and Chicago Federation of Labor Workforce and Community Initiative to establish and promote the industrial manufacturing technician (IMT) hybrid apprenticeship. JFF and its grant partners are focusing on recruiting and training new and incumbent workers to increase the number of skilled workers in the IMT occupation. They are employing a network model to train IMT apprentices in 16 states: California, Colorado, Idaho, Illinois, Indiana, Kentucky, Michigan, Minnesota, Missouri, New York, North Dakota, Ohio, Pennsylvania, South Carolina, Washington and Wisconsin.

Los Rios Community College District

American River College (ARC) serves as the lead education agency for the Los Rios Community College District, developing new apprenticeship partnerships and instructional programs in collaboration with business and industry, community organizations and government agencies, connecting the college with employers while developing and expanding work experience opportunities to advance the college's mission and California's workforce. ARC has supported apprenticeship programs in a broad range of industries through AAI subawards. Its business partners include the California Manufacturers & Technology Association, Advanced Manufacturing & Transportation Apprenticeships of California, the California Rural Water Association, IBM, the Yellow Circle Learning Platform, Workforce and Economic Development California Labor Federation, the San Luis Obispo County Office of Education, the Sacramento Valley Manufacturing Initiative, the Sacramento Municipal Utility District, Coastline College, College of the Canyons and San Francisco City College.

Macomb Community College

Macomb, the largest community college in Michigan, is a multicampus institution just north of Detroit that serves more than 19,000 degree-credit students. The college's AAI grant supports Michigan Apprenticeship Program Plus, a new program targeting apprenticeship pathways in manufacturing occupations, including a new registered apprenticeship in digital sculpting, a growing occupation in the automobile industry. In partnership with Grand Rapids Community College (Grand Rapids), located on the west side of the state, the program seeks to enroll and serve a total of 510 apprentices in the two largest metropolitan areas in Michigan. North of Detroit, Macomb focuses on the automobile industry, while Grand Rapids has expanded apprenticeship into the health care sector. Macomb and Grand Rapids have used the AAI grant to increase outreach to employers, successfully engaging employers by promoting registered apprenticeship as an adaptable model that will strengthen the high school-to-apprenticeship pipeline and solve many workforce needs.

Managed Career Solutions, Inc. (MCS)

A leader in expanding apprenticeship to new industries, MCS in Los Angeles, California, focuses on connecting youth to new careers in IT and health care. MCS's major project, the OpenTech LA Regional Collaborative Program (OpenTech LA), currently partners with employers to provide apprenticeship programs in fields such as programming, web development, cybersecurity and health IT. OpenTech LA's competency-based programs aim to engage women and individuals with disabilities in RAPs across California, Maryland, Michigan and Missouri.

Marshall University Research Corporation

The Robert C. Byrd Institute at Marshall University launched the Apprenticeship Works program with the support of AAI. Apprenticeship Works teams with manufacturers across the country, currently working in 18 states, to implement and manage customized apprenticeship programs in high-skill, high-demand occupations, such as CNC operations, tool and die making and industrial


maintenance. In collaboration with its national partners, Apprenticeship Works developed the first registered apprenticeships in the new occupations of additive manufacturing and composites technician. Apprenticeship Works also introduces women, veterans and youth to careers in manufacturing through its innovative pre-apprenticeship programs.

Minnesota Department of Employment and Economic Development (DEED)

Minnesota was awarded a five-year, \$5 million American Apprenticeship Initiative grant to expand the use of the registered apprenticeship model in Minnesota. The DLI/DEED partnership proposed a demand-driven model to work with Minnesota employer partners to develop, register and launch apprenticeship programs in 30 high-growth occupations in the agriculture, advance manufacturing, health care, information technology and transportation industry sectors with the goal of serving 1,000 new apprentices. The DLI/DEED partnership has focused and devoted resources to build awareness about the efficacy of registered apprenticeship with employers throughout each WIOA region while building partnerships with community-based organizations to engage underrepresented communities in apprenticeship. To date, this initiative has worked with more than 102 employers and has developed and launched 42 programs that have registered 1,096 apprentices so far. Participant employers have pledged to fill an additional 188 apprentices. Currently, more than 368 apprentices have completed their apprenticeships.

Mission College

Mission College is a two-year public community college in Santa Clara, California, located in the heart of the Silicon Valley. The college serves approximately 7,500 students a year and is known for its certificates and degrees in career and technical education and students transferring to four-year colleges. As the lead recipient, with three partner colleges, Mission College used AAI to create the Silicon Valley High-Tech Apprenticeship Initiative (SVHTAI). The SVHTAI grew beyond registering apprentices in IT for help desk



specialists and data center technician positions and to serve the advanced transportation and advanced manufacturing sectors. The SVHTAI registers apprentices with the California state government, private companies and county and city agencies and will soon be serving defense contractors. This program is bringing a new vision and awareness to companies by using the registered apprenticeship model to fill vacancies. These are livable-wage jobs with career advancement opportunities for both represented and underrepresented populations, women and veterans. Mission College's goal is to reach 310 apprentices by 2021.

NPower Inc.

NPower creates pathways to economic prosperity by launching digital careers for military veterans, spouses of veterans and young adults from underserved communities through its free technology training programs. NPower is located in the United States in California, Maryland, Michigan, Missouri, New Jersey, New York and Texas and in Canada in Toronto, Ontario. NPower currently operates registered technology apprenticeships (IT generalist and cybersecurity) in California, Maryland, Missouri, New Jersey and Texas and plans to expand to Michigan and New York. NPower served more than 800 pre-apprentices and registered more than 100 people in 2019. It has apprenticeship employer relationships with several companies, including Deloitte, JPMorgan Chase, Robert Half Technology, Samsung and World Wide Technology.

Philadelphia Works

Philadelphia Works is the workforce development board for the city of Philadelphia, developing and managing workforce solutions that respond to business needs and increase economic opportunity for all Philadelphians. In partnership with workforce development boards in Bucks, Chester, Delaware and Montgomery counties, the Southeast Pennsylvania Region American Apprenticeship Initiative (SEPA Region AAI) develops and supports RAPs with connected pre-apprenticeship programs through ApprenticeshipPHL in health care — specifically, behavioral health/intellectual disabilities and retail pharmacy services — and

IT for youth aged 16 to 24 years who are out of school and out of work. Other SEPA Region AAI partners include the District 1199C Training and Upgrading Fund, SPIN, Public Health Management Corporation, Bucks County Intermediate Unit, CVS Health, JEVS Human Services, the Philadelphia Youth Network, the Urban Technology Project, Devereux Advanced Behavioral Health, PathStone Corporation, Community College of Philadelphia and Bucks County Community College. Since its formation, ApprenticeshipPHL has launched a website (apprenticeshipphl.org) and begun formally training PA CareerLink (known nationally as American Job Centers) and other staff on the apprenticeship model.

Shenandoah Valley Workforce Development Board (SVWDB)

The SVWDB was established in 2000 to administer Workforce Innovation and Opportunity Act activities for the Shenandoah Valley, a 16-locality region located in northwestern Virginia. The SVWDB partners with a range of local and state partners to help the regional workforce and business community create and implement workforce development programs for adults, dislocated workers and youth. Its services cover apprenticeship programs, labor market information, career development strategies and other business services. While the SVWDB works throughout the Shenandoah Valley region, through AAI, the SVWDB grant team is collaborating with workforce boards, employers and community colleges across the state to expand registered apprenticeship throughout Virginia. The SVWDB identified advanced manufacturing, the largest sector in the Shenandoah Valley region and the sixth largest in the state, as the focus of apprenticeship expansion strategies through AAI.

South Carolina State Board for Technical and Comprehensive Education

Apprenticeship Carolina™ was formed in 2007 by the South Carolina Technical College System to advance registered apprenticeship opportunities with employers in multiple industries statewide. In 2019, Apprenticeship Carolina™ became a full division within the

South Carolina Technical College System. Apprenticeship Carolina™ administers the AAI South Carolina Apprenticeship Initiative (SCAI), which focuses on manufacturing, health and social assistance, construction, public administration, utilities, transportation and warehousing, professional services, and information industries.

South Seattle College

South Seattle College, in partnership with Renton Technical College, the Workforce Development Council of Seattle-King County, Workforce Snohomish, Seattle Central College, the Aerospace Joint Apprenticeship Committee, Clover Park Technical College, the Center of Excellence for Aerospace and Advanced Manufacturing, Workforce Central, Apprenticeship and Nontraditional Employment for Women (ANEW) and Edmonds College, will serve at least 1,000 apprentices, including 300 from underrepresented populations, primarily in Washington in the advanced manufacturing and maritime sectors through the Partnership for Advanced Technology Apprenticeship in Manufacturing and Marine Engineering. It will create three new apprenticeship and 12 expanded apprenticeship programs. It will scale and sustain apprenticeship into the future by focusing on both ends of the apprenticeship pipeline: improving pathways into apprenticeship and expanding and improving the employer base.

Southeast Michigan Community Alliance (SEMCA)

SEMCA is an NPO that administers workforce development programs in Wayne and Monroe counties. The SEMCA collaborates with community organizations and local businesses to achieve its mission of providing innovative leadership to create an inclusive life-long talent and career development system that is responsive to evolving labor market demands. SEMCA is the fiduciary sponsor of the Workforce Intelligence Network for Southeast Michigan (WIN), a data-driven talent network that oversees project management, labor market data analysis, communication activities, partner facilitation and employer


outreach efforts for the AAI grant. WIN is a partnership among nine community colleges and six Michigan Works! Agencies. SEMCA and WIN identified advanced manufacturing as one of their target occupational areas for registered apprenticeship expansion through AAI. They are also focused on expanding registered apprenticeships in nontraditional sectors, such as IT and health care.

State of Oregon Employment Department

The overarching goal of the Oregon Apprenticeship Initiative project is to build a supportive ecosystem for registered apprenticeship in Oregon beyond the construction industry. The Oregon Apprenticeship team includes the Oregon Employment Department, the Bureau of Labor and Industries, the Higher Education Coordinating Commission, the Oregon Department of Education, the Lane Workforce Partnership, Portland Community College, Clackamas Community College, Oregon Tradeswomen and Impact NW. The statewide project is focused on the advanced manufacturing and IT sectors to develop innovative hybrid and competency-based RAPs, encourage the development of registered apprenticeship intermediaries and expand the promotion of registered apprenticeship opportunities to underrepresented populations, including women and people of color.

Technical College System of Georgia

The Technical College System of Georgia is the state office that oversees the Office of Workforce Development — specifically, the apprenticeship program. Being an arm of a state agency, the service area covers all 159 counties in Georgia. Each of the state's 22 technical colleges within the system provide programs that support apprenticeships through credit and noncredit options. The initial AAI award was to selected institutions and centered on skilled trades and high-demand careers. In September 2019, the award was expanded to additional programs (IT, health sciences, precision manufacturing, welding and joining, logistics). Each college has an apprenticeship coordinator who works with the apprenticeship team at the state office, where collaborative



efforts are made to reach out to, educate and support the communities on registered apprenticeship. From these partner and stakeholder meetings, the apprenticeship team works to design a work process that meets employer needs, supplying a well-trained talent pipeline.

Truckee Meadows Community College (TMCC)

TMCC is a two-year public community college in Reno, Nevada, that offers primarily certificate and associate's degrees. TMCC serves more than 25,000 students per year at four campus locations around Reno, a city of 250,000 people. In 2015, TMCC received an AAI grant to fund a new entity called the Northern Nevada College Apprenticeship Consortium. This partnership began with the goal of developing apprenticeship programs in advanced manufacturing that would enhance the skills and career opportunities of 400 workers. Although the initial focus was on the growing advanced manufacturing sector in northern Nevada, the initiative successfully expanded to include apprenticeships in the health care sector as well as creating a "buyer-purchaser" apprenticeship for a position found across a range of sectors.

United Auto Workers (UAW) Labor Employment and Training Corporation

UAW partnered with the Labor Employment and Training Corporation, an NPO based in Cerritos, California, to lead the AAI-supported UAW American Apprenticeship Initiative Program. AAI funds are being used in multiple states to develop new, state-of-the-art registered apprenticeship training opportunities in advanced manufacturing. Apprentice entry wages range from \$32,000 to \$40,000 annually at the beginning of the program and progress to \$70,000 upon completing the apprenticeship program. With the goal of creating apprenticeship opportunities for underserved populations in high-skill occupations in advanced manufacturing, the grant found creative ways to tap into its existing workforce while also bringing in new hires.

United Way of Buffalo and Erie County


The United Way of Buffalo and Erie County, through its AAI of Western New York Program (AAI WNY), helps advanced manufacturing companies in seven counties of western New York start and grow their RAPs. Apprentices are training in 34 manufacturing skilled trades, working in companies that serve the aerospace, automotive, food processing, medical, military, optics and water technology industries. AAI WNY also partners with pre-apprenticeship providers to develop programs that prepare individuals, particularly those from underrepresented populations, for apprenticeships. The AAI WNY team speaks regularly with youth, parents, career counselors and organizations that serve underrepresented populations about the value of registered apprenticeship and the great careers in manufacturing.

Vermont Department of Labor

The Vermont Department of Labor, in partnership with Vermont HITEC, has expanded existing pre-apprenticeship to apprenticeship programs in health care, advanced manufacturing and business services through its AAI grant program, Accelerate Apprenticeship VT. Vermont HITEC is a nonprofit education and training provider. Accelerate Apprenticeship VT's model provides onsite RTI for eight to 10 weeks that results in industry-recognized credentials. Upon completion of the pre-apprenticeship program, a participant starts a one- to two-year apprenticeship program, depending on the occupation. Accelerate Apprenticeship VT is designed to meet participants' individual needs and equip them with a toolbox of skills — with an emphasis on essential skills, such as communication, leadership and adaptability — necessary for workplace success. "Soft skills" are the nontechnical employability skills necessary for navigating the workplace.

Washington State Department of Labor and Industries (L&I)

Washington State L&I is a state agency dedicated to the safety, health and security of Washington's workers. It is responsible for the promotion and regulation of registered



apprenticeship in Washington. L&I has been a strategic leader in Washington State to expand apprenticeship opportunities for individuals and industries. The Department partnered with the Washington Technology Industry Association to create a RAP in the technology industry, serving prominent technology companies in Washington state, such as Amazon and Microsoft. L&I has improved access to RAP opportunities for underserved populations through partnerships with ANEW and the Spokane Workforce Development Council. This work is being achieved through the expansion of Washington State Apprenticeship and Training Council-recognized apprenticeship preparation programs and by providing navigation services to apprenticeship preparation program completers.

West Central Job Partnership (WCJP)

In collaboration with the Mahoning Valley Manufacturers Coalition, WCJP created the Greater OH-Penn Manufacturing Apprenticeship Network to implement this project across an area that encompasses six counties in eastern Ohio and eight counties in western Pennsylvania. To address critical manufacturing skills gaps, the network focused development on three primary competency-based apprenticeship programs: industrial maintenance technician, machinist and welder-fitter occupations. The Apprenticeship Network's goal is to add 300 apprenticeships and 200 pre-apprenticeships in more than 70 unique manufacturing firms regionally. The underrepresented populations that the Apprenticeship Network specifically engages in programs to gain access to apprenticeship pathways are minority populations, military veterans, low-skill workers and unemployed and underemployed people.

William Rainey Harper College

William Rainey Harper College in Palatine, Illinois, is developing RAPs for advanced manufacturing, business and professional services and IT in Illinois. It partnered with Zurich North America to launch the first apprenticeship program in the United States

for general insurance. William Rainey Harper College aims to improve opportunities for women, youth and veterans through its programs.

Wisconsin Department of Workforce Development (Wisconsin DWD)

Long regarded as a pioneer in the American apprenticeship space, Wisconsin DWD, through AAI, plays a crucial role in the expansion of existing apprenticeship efforts and creation of new programs in the health care and IT sectors. Building on an already-robust state apprenticeship infrastructure, Wisconsin DWD coordinates with external stakeholders such as local workforce development boards, the technical college system, industry groups and the Wisconsin Apprenticeship Advisory Council to develop, improve and advance apprenticeship programs through AAI, especially for women and people of color. Wisconsin's AAI grant work has expanded the role of certified pre-apprenticeship training and connected the state's youth apprenticeship programs and RAPs. The work done under this grant is coordinated with other federal apprenticeship grants.

Workforce Development Board of Herkimer, Madison and Oneida Counties (HMO)

HMO is a tri-county workforce board that runs apprenticeship programs in IT, advanced manufacturing and nanotechnology in upstate New York. The program helps train approximately 350 apprentices across Broom, Cayuga, Chemung, Chenango, Cortland, Delaware, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Otsego, Skylar, St. Lawrence, Steuben, Tioga and Tompkins counties. HMO has partnered with several industry partners to develop time-based and competency-based apprenticeships across a variety of occupations, including the first software developer occupational apprenticeship in New York, together with Bank of New York Mellon.

Appendix D. Apprenticeship Strategy Guides

This appendix provides a series of resources prepared by the National Governors Association Center for Best Practices (the NGA Center), the Corporation for a Skilled Workforce and the U.S. Department of Labor for American Apprenticeship Initiative grantees for internal use throughout the five-year period of performance. The NGA Center and its partners are making these resources publicly available to share strategies that several of the highest-performing AAI grantees have used. Note that the strategies offered in these guides are general strategies that should be tailored based on the user's specific situation, programs, populations and grant parameters.

D-1. STRATEGIES FOR ENGAGING UNDERSERVED POPULATIONS

Introduction

By following the strategies outlined in this appendix, registered apprenticeship programs (RAPs) should be positioned to better integrate and serve target populations through apprenticeship programs. These general strategies must be tailored depending on the specific target population. Pursue the following actions holistically to alert specific populations in apprenticeship occupations to the opportunities you have to offer and to support the apprentices through the apprenticeship program and beyond.

Successful Strategies from the Field

For each of the three categories offered below, a few practical tips and examples are provided:

• Participant outreach and recruitment:

- *Partnerships:* Establish trusted partnerships to assist with outreach.
- *Messaging:* Develop a targeted marketing plan based on the target group's needs and interests.
- *Orientation:* Provide a preprogram assessment, with an explanation of the realities of potential job duties and benefits.
- *Pre-apprenticeship program:* Develop or connect to pre-apprenticeship programs that give participants a leg up in starting a RAP.

• Participant support and retention (when the applicant has joined the RAP):

- *Peer support groups:* Create a cohort of apprentices to encourage and support each other through the program.

- *Mentorship:* Provide mentorship from industry professionals so that apprentices can develop professional relationships, see what their potential future career may look like and ask questions they may not want to ask their direct supervisor.
 - *Provide supportive services:* Identify the support that could be provided to make it less burdensome for apprentices to participate in the program.
 - *Take advantage of partnerships:* Establish partnerships by developing memorandums of understanding to assist with the provision of supportive services. Examples include:
 - ✓ Academic tutoring.
 - ✓ Career counseling.
 - ✓ Mental health and drug counseling.
 - ✓ Transportation.
 - ✓ Child care.
 - *Soft skills:* Provide soft skills and leadership training throughout the RAP to complement technical skills.
- ##### • Support beyond the apprenticeship:
- *Follow up:* Maintain contact with former apprentices and provide continued career guidance.
 - *Reunions:* Bring together former apprentices in forums or reunions, where they can learn from each other's career paths, celebrate successes and spread the word about RAPs to potential applicants.
 - *Mentorship:* Pair a former apprentice with a new apprentice, and ensure the continuous support and retention process for underrepresented populations.

D-2. STRATEGIES FOR MANAGING SUBGRANTEES AND PARTNERS

Introduction

Subgrantees (if managing a grant) and other partners are your allies in successfully achieving success in your RAP. This guide provides tips for effectively managing contracts with your subgrantees and partners as well as developing strong relationships with them. Focusing on contract management and relationship management will enable you to achieve your program/grant goals.

Successful Strategies From the Field

For each of the four strategies below, a few practical tips and examples are provided:

- **Reinforce a shared vision and goals:**

Clarify the goals and expectations you have described for your subgrantees in their contract, and communicate those expectations continuously. Make sure that your subgrantees understand the overarching project goals and desired outcomes and how their unique role contributes to project success. Each organization possesses expertise, and the overall grant is strengthened by each organization's involvement and contribution.

Practical tips to consider:

- *Start early:* An effective way to keep everyone on the same page is to involve subgrantees early in the grant process, and then continue to seek their input to and buy-in on grant interim milestones and longer-term goals throughout the grant period.
- *Stay engaged:* Facilitate a trusting and productive relationship with your partners. Hold regularly scheduled calls with your partners to discuss roles; responsibilities; and targeted, practical strategies for success. Use conflict-management strategies and tools to facilitate relationship management.
- *Take a road trip:* Hold regular site visits with subgrantees to remain current on their performance, better understand their successes and challenges and encourage a shared strategy.

- **Let the numbers do the talking:**

Set performance benchmarks for subgrantees that are clearly written, with specific targets and progress that is easy to track over time. Be proactive (and explicit) about acknowledging the indicators regularly, and then advance or adapt the strategy as appropriate.

Practical tips to consider:

- *Break it down:* Break benchmarks down into identifiable targets, and establish a process for reviewing and understanding results. Create tools such as checklists or dashboards to help your partners more easily track their performance; highlight areas of progress and those that may need improvement.
 - *Create a sense of urgency:* Subgrantees often manage multiple grants with competing priorities. Develop the right local message that speaks to their critical role in helping reach your specific targets and goals related to apprenticeship expansion so that more people have opportunities for education and career advancement.
 - *Use the data to acknowledge performance:* Publicly recognize partner accomplishments both formally and informally. For example, have the president of your college education partner send a letter acknowledging the partner's contributions and results to date. Listen to your partners, and review performance numbers to make decisions about budget reallocations and, if necessary, partnership termination.
- **Don't underestimate the administrative details:** It is important to invest time and resources in administrative details because ultimately, it saves time and can prevent larger reporting issues. Treat the administrative details of quality data collection and reporting with priority, and start early.

Practical tips to consider:

- *Education and training:* Provide training for staff and subgrantees on data entry and

reporting so that everyone is on the same page from the beginning. Training more than one staff member on the process helps share the responsibility and prepare for unexpected events, such as staff turnover. Create templates as a guide for staff and subgrantees on program and financial reporting to ensure consistency across reporting.

- *Be specific:* Tie reporting to the workplan and benchmarks. Consider requesting more detail in reports than required, and use this information to plan for initiative sustainability by documenting effective processes and procedures that can be used after the grant.
- *Set deadlines:* Establish deadlines and requirements for regular data input (and stick to it) so that subgrantees can plan and be prepared for reporting.
- *Use technology:* Set up an internal website or database on which subgrantees can access training information, populate it with administrative data and receive corrections and feedback before recording in the relevant federal and/or state apprenticeship database.
- **Spread the word:** Share resources with your subgrantees. Facilitate peer sharing among partners of good strategies and best practices that you discover.

Practical tips to consider:

- *Keep an open door:* Hold monthly or quarterly meetings or phone calls to build trust, openly discuss ideas and encourage feedback loops. Share documents that illustrate best practices, and establish a virtual “home” for all documents related to the project.
- *Collaborate with experts:* Use the collective knowledge and expertise of your apprenticeship and training representative, subgrantees and technical assistance (TA) team to discuss challenges and move out of comfort zones to explore innovative solutions.

- *Create added organizational value:* Document lessons learned and effective processes, practices and procedures gained through frequent and open conversations with subgrantees and experts. Identify where these strategies can be embedded across individual organizations for better outcomes now and after the grant period.

D-3. STRATEGIES FOR USING RESOURCES FOR INITIATIVE SUCCESS AND SUSTAINABILITY

Introduction

Working in a world of competing challenges and priorities, RAP leads must determine the most effective ways to fiscally meet their program’s current goals while ensuring future sustainability. This resource brief describes some early steps that program leads can take to use resources, blending or braiding multiple resources streams to better respond to multiple program needs and realize initiative outcomes.

Most programs cannot rely on one or two major sources of funding to support and sustain innovative programs. By using resources effectively, a program can fill gaps in training and supportive services or save money previously committed to resources now being used. Doing so also sends a strong message to partners and funders that the grantee is a good steward of resources and considerate of efficiency. Using resources effectively requires a deep understanding of your own programming and financial situation as well as an understanding of the funding landscape and the specific needs and interests of the partners involved.

Definitions:

- **Blended funding:** Funds received from multiple funding resources that all stakeholders pool into one “pot.”
- **Braided funding:** Funds from various federal, state and other funding streams that are woven together to support a single initiative or strategy.

Key benefits to organizations:⁴⁹

- Improves coordination and alignment among partners.
- Reduces duplication and realizes efficiencies.
- Expands capacity in resource-constrained environments.
- Provides opportunity for a composite cost sharing of all awards, which can help those that need to meet match requirements.
- Brings additional staff strengths and expertise to customers.
- Improves program impacts and outcomes.
- Supports scalability and sustainability.

Successful strategies from the field:

The following strategies, each with a brief description and practical tips, will enable you to use funds and resources in more flexible, coordinated and sustainable ways to support initiative success.

Fundamental strategies:

- **Know your programming:** Have a strong sense of mission, program design and what your organization does well. Know how to communicate that story effectively, and make sure that new programming is mission driven.
- **Know your partners:** Understand partners' strengths, access to resources and areas where you can meet their needs. Using resources is also about helping others succeed.
- **Know your funding audience:** Understand not just what your audience cares about but also their culture.
- **Map your funding streams:** Know where all your resources are coming from and any accompanying restrictions. Think about funding as investment oriented: How will specific funding contribute to your long-term success?
- **Use resources to attract more resources:** By demonstrating that you can effectively attract money for successful programming, you will inspire other grant makers and possible partners to bet on your future success.
- **Diversify:** Do not rely solely on public funds. Find ways to engage foundation,

education, community-based organization and private sector partners. These funding sources are not mutually exclusive; rather, they are complementary.

- **Ensure long-term partnership buy-in:** All stakeholders involved should be working toward a common initiative vision, with clearly defined goals and outcomes. Each must understand its role as well as the rewards and risks of a blended or braided funding strategy.
- **Know resource available and your policy parameters:** Map existing resources by tapping the expertise of key stakeholders and conducting research. Blending may require changing or relaxing regulations that guide relevant state and federal funding streams by policymakers at the federal, state or local level to permit program flexibility and change the way services are structured and delivered.
- **Establish administrative processes and controls:** Implementing a braided funding approach requires significant attention to administrative issues. Stakeholders must ensure ongoing accountability for assessing services, data collection and reporting requirements and payment arrangements for each collaborating partner.
- **Consider an intermediary:** Both braided and blended funding strategies require collaboration and cooperation across multiple stakeholders. The level of coordination may be more easily achieved with the help of an intermediary. Intermediaries can facilitate a process to assist with articulating a clear group vision, developing and managing stakeholder relationships, conducting a needs assessment, mapping available funding resources, developing a consolidated project plan and budget, adapting administrative and data tracking systems to monitor and evaluate outcomes and performance measures, and establishing TA to build the capacity of stakeholders for initiative sustainability.

D-4. STRATEGIES FOR ENCOURAGING POLICY ALIGNMENT

Introduction

Policy alignment is a collaborative effort among your RAP and its partners, whether they are in industry, government, education or other fields. Policies are a means to institutionalize and sustain your work. The goal of this strategy guide is to assist you with efforts to align apprenticeship programs with broader industry trends and local, state and federal apprenticeship expansion efforts. By following the strategies outlined in this section, you can be better positioned to track relevant policies, educate partners on these policies and modify apprenticeship programs as needed to ensure successful outcomes.

Fundamentals of Policy Alignment

The practice of policy alignment can sound intimidating, especially if you do not see your organization as having the kind of political clout to change or inform federal, state and local policy. Realistically, good policy alignment is something any organization can do, no matter its size or annual budget. Policy alignment is about using one's understanding of workforce, education and economic development policies, legislation, rules and regulations — particularly as they pertain to apprenticeship — to improve grant outcomes and build a foundation for sustainable success. Policy alignment is not policymaking; rather, it is working with existing policy to integrate your programming into a larger effort. Ultimately, policy alignment is about collaborating with other groups to fulfill program goals that respond to shifting federal, state and local contexts.

Successful Strategies From the Field


The following strategies are offered with brief descriptions and practical tips:

- **Track industry trends and local, state and federal policies that affect your program:**

- *Use your partners to learn about trends and policies that affect your industry and the broader workforce system:* Engage industry groups; trade associations; workforce

development boards; and other, similar industry-focused groups as advisers. These entities are excellent sources of information about labor market trends that inform program development. They can also make you aware of pending changes to regulations or policies in an industry or occupation and how those changes could affect your grant program.

- *Make your staff responsible for knowing what is going on in your sector:* When all staff are regularly updated on trends and policies and understand how changes may affect your apprenticeship program, they will be able to more nimbly collaborate to address changes and support the needs of industry.
 - *Use regularly updated resources and tools to stay current on policy changes:* Keep a reference sheet of relevant resources, and ask your staff to subscribe to relevant newsletters that will keep your program current on policy changes.
- **Educate partners on relevant policies, and actively stay in touch with stakeholders that shape those policies:**
 - *Find an existing group of apprenticeship stakeholders:* Identify relevant stakeholders that already come together to discuss industry trends and policies and that encourage discussion of the changing context of apprenticeship on local, state and federal levels. Examples of relevant groups include local and state workforce development boards, community colleges, Governors' staff, legislators, chambers of commerce and economic development groups.
 - *Attend local and state workforce board meetings:* If your organization is having difficulty getting in touch with the right individual or group, attend a local or state board meeting. Most are open to the public. Showcase your organization to potential partners and as a resource on apprenticeship.
 - *Serve as the convener to catalyze relevant discussions:* If preexisting stakeholder groups are not discussing content related to industry trends or apprenticeship policies, consider taking on that convener role yourself.

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- **Modify program structure and content in response to industry trends and policy changes:**
 - *Consider modifying apprenticeship program components when new local, state or federal policies are enacted that affect your work:* Ensure that your programs stay relevant, even when policies and employers' needs change. The services your organization provides may be augmented, and its partners may change, as well.
 - *Use funding sources when applicable:* Be on the lookout for opportunities to use and potentially even blend and braid funds both within your organization and outside it. Be aware of partners that share a similar mission. You may be able to offer additional services to your industry partners and the individuals you serve through the apprenticeship program.

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