Introduction

The Workforce Innovation and Opportunity Act (WIOA) of 2014, which governs the publicly funded workforce development system in the United States, has the dual goals of helping job seekers find employment and helping employers find workers. Registered apprenticeship is a workforce development model that serves both goals. Through a registered apprenticeship, an employer hires an apprentice for a particular occupation. During the apprenticeship, the apprentice becomes competent in that occupation through a structured combination of classroom instruction (“related technical instruction,” or RTI) and on-the-job learning (OJL), the latter provided by a mentor at the employer’s worksite.

As employees, apprentices earn progressively higher wages as they master skill competencies. After successfully completing the apprenticeship, the worker is both employable and employed. Most apprentices remain at the same employer after completing their apprenticeship. Thus, employers can fill a vacancy with an employee they know has the occupational skills the job requires and who has developed those skills in the context of their organization.
A registered apprenticeship program is required to have several specific elements (Box 1). It is registered with either the U.S. Department of Labor’s (DOL) Office of Apprenticeship or a DOL-approved State Apprenticeship Agency.

**Box 1: Elements of Registered Apprenticeship**

Registered apprenticeships provide training in a specific occupation and develop occupational skills that are recognized and transferable across employers. Registered apprenticeships must last at least one year. They must have several elements:

- **Approval** by DOL’s Office of Apprenticeship or a State Apprenticeship Agency, or sometimes both
- **Related technical instruction** (RTI) of at least 144 hours in a physical or virtual classroom
- **On-the-job learning** (OJL) of at least 2,000 hours overseen by a mentor at the employer worksite
- Wage increases over the course of the apprenticeship (**wage structure**), which can be tied to time in the program or to demonstration of skill competency
- An industry-recognized **credential** upon completion of the apprenticeship
- A Standards of Apprenticeship document that formally describes the **work process schedule** (skill standards) and specifies the RTI, OJL, and wage structure for the registered apprenticeship program
- A **sponsor** that oversees the program and maintains the Standards of Apprenticeship and basic data on apprentices; sponsors can be employers, consortia of employers, unions, community colleges, State or local workforce development board, or nonprofits
- A written **apprenticeship agreement** between an apprentice and either the program sponsor or an apprenticeship committee acting as an agent for the sponsor

Source: Gardiner et al. 2021

The DOL American Apprenticeship Initiative (AAI) sought to expand registered apprenticeship to nontraditional occupations (i.e., those outside of construction) and to populations historically underserved by apprenticeship, including women, people of color, and veterans (DOL/ETA 2014). Using H-1B visa program funds, DOL awarded 46 five-year grants in 2015. DOL encouraged grantees to find ways to sustain the programs, including identifying alternative sources of funding to support activities once the AAI grant ended. WIOA Title I Adult and Dislocated Worker funding is one potential source.
State and local workforce agencies receive WIOA Title I funds, which can be used to support workforce development strategies, including registered apprenticeship (DOL/ETA 2017a). A 2017 survey of 145 workforce boards found that two-thirds of those responding (26 percent of the sample) were involved with apprenticeship programs; among the remaining one-third, most wanted to become involved in apprenticeship (Bergman and Kobes 2017). Workforce boards also reported on the survey that because apprenticeship was new to them, they needed assistance around employer engagement, apprentice recruitment, implementing registered apprenticeship, and funding. These results suggest that workforce boards are a potential source for driving expansion of registered apprenticeship in the United States, but that attention needs to be paid to developing their capacity to serve job seekers and employers through apprenticeship.

AAI grantees used or planned to use WIOA funds to support apprenticeship once the grant ended. This brief first summarizes how WIOA Title I funds can support registered apprenticeship. Next, it describes grantees’ reported challenges using Title I funds to support registered apprenticeship. It concludes with reflections on how to increase use of this funding source for registered apprenticeship by local workforce systems.

This brief is part of the DOL-funded evaluation of AAI, and is based on site visits and follow-up clarification calls to six AAI grantees that constituted seven State or local workforce development boards (WDBs) (Box 2). The evaluation team talked primarily with staff in management and leadership positions, although some agencies invited direct-service staff, such as career counselors and business services staff, to join the conversation.

**Box 2: AAI Workforce Development Board Grantees Included in Site Visits**

The following State and local workforce development boards were included in the AAI implementation study site visits and discussed in this brief:

**State Workforce Development Board**
- Wisconsin Department of Workforce Development (WI)

**Local Workforce Development Boards**
- Managed Career Solutions (CA)
- MassHire Hampden County and MassHire North Shore, subgrantees of Massachusetts Executive Office of Labor and Workforce Development (MA)
- Philadelphia Works (PA)
- Shenandoah Valley Workforce Development Board (VA)
- Workforce Development Board of Herkimer, Madison, and Oneida Counties, Inc. (NY)

---

2 Congress appropriates funding for WIOA which goes to DOL. DOL allocates funding to each state based on a formula. State workforce agencies then typically allocate most of the funding to local workforce areas throughout each state, and the use of funding is governed by local workforce development boards.

3 Copson et al (2021) provides details on the grantees visited.
How Does WIOA Title I Funding Support Registered Apprenticeships?

WIOA Title I addresses the employment-related needs of adults, dislocated workers, and youth. Specifically, Title I provides universal access to employment and training programs through a network of American Job Centers (AJCs) administered by State and local workforce development boards. WIOA funding also supports services to employers. Box 3 lists AJC services provided through Title I of WIOA. The statute also establishes priority populations for WIOA adult funds, specifically public assistance recipients, other individuals with low income, and individuals who are basic skills deficient (DOL/ETA 2017b).

Box 3: American Job Center Services

Typically, WIOA-funded staff in an AJC focus on serving either job seekers or employers: career counselors focus on employment services for job seekers, and business services staff focus on services for employers.

Job Seeker Services

- Career counseling, resume-building assistance, interview practice
- Hiring events and job fairs
- Resource rooms with computers, phones, and internet
- Individual Training Accounts (ITAs) to fund classroom training delivered by providers who qualified for the State or local Eligible Training Provider List
- On-the-job training (OJT), which can be customized to a particular employer
- Supportive services, such as financial assistance for childcare, transportation, books, tools, uniforms

Employer Services

- Labor market information
- Customized training designed with employer input to prepare job seekers with the skills employers need
- Identifying and screening candidates for open jobs
- Reimbursements for wages to participants in OJT, including incumbent workers who are training for different or more-advanced jobs with that employer

Source: https://www.careeronestop.org/

---

The WIOA statute identifies registered apprenticeships as an approved activity. They serve WIOA’s dual goals of helping workers train for and obtain higher-quality jobs and helping employers find and retain skilled workers. Registered apprenticeship also can help local WDBs meet their performance goals under WIOA (DOL/ETA 2017a, Attachment III). Specifically:

**Registered apprenticeship is fully aligned with the employer-focused, work-based training that WIOA envisions. Features of Registered Apprenticeship, including its flexibility, opportunities for immediate earnings, and emphasis on partnerships, make it an effective strategy to meet workforce system goals. Additionally, the outcomes obtained by apprenticeships and graduates of Registered Apprenticeship programs can lead to strong WIOA performance results.**

(DOL/ETA 2017a)

Local WDBs can use WIOA Title I funding to support the two key components of registered apprenticeship programs: (1) OJL, by offsetting the employer’s costs of providing the training and additional supervision of a registered apprentice, and (2) RTI, through Individual Training Accounts (ITAs) for apprentices or contracts for apprentice cohort trainings (DOL/ETA 2017a). Training providers supported by WIOA Title I must be on the State’s Eligible Training Provider List (ETPL). Registered apprentice sponsors—that is, entities that oversee apprenticeship programs and their Standards of Apprenticeship—are automatically eligible for the State’s list.5

Any job seeker can apply to an apprenticeship program; however, to receive WIOA Title I–supported training, job seekers must be unemployed (including recently dislocated workers), underemployed, a returning veteran, or an individual facing barriers to employment.6 Those receiving WIOA job seeker services, including ITAs used by apprentices to support related technical instruction, may also receive supportive services such as childcare, transportation, tools, and uniforms to help them persist in their training (DOL/ETA 2017a).

Finally, employers can use registered apprenticeship to improve the skills of their existing employees. Local WDBs can use as much as 20 percent of their Title I funds to support incumbent worker training costs.7 Incumbent worker training also enables workers to remain on the job while learning, an emphasis of WIOA (DOL/ETA 2017a).

---

5 Registered apprenticeship programs are not subject to the same application and performance requirements or to a period of initial or continued eligibility as other providers on the ETPL because they undergo extensive review and vetting to become registered with Office of Apprenticeship or a State Apprenticeship Agency (DOL/ETA 2017a).

6 Any individual has access to basic career services at an AJC in their local community. The priority criteria apply to individuals being served in the Title I Adult or Dislocated Worker programs which require application and eligibility determination.

What are the Experiences and Challenges of AAI Grantees in Using WIOA Title I Funding for Registered Apprenticeships?

AAI grantees could use funds for a variety of activities, including supporting staff to recruit employers and/or apprenticeship participants. Eighty percent of AAI grantees reported they promoted and conducted outreach to employers as part of their apprenticeship development activities (Gardiner et al. 2021). The six workforce agency grantees described in this brief reported they funded staff dedicated to engaging employers.

DOL expected grantees to continue funding apprenticeship activities post AAI with other sources, including WIOA Title I funds. Because workforce agency grantees are familiar with WIOA and the range of services Title I supports, the study team asked six workforce agency grantees visited as part of the implementation study for the AAI Evaluation, if and how they planned to continue apprenticeship activities with WIOA Title I funds. As described below, AAI grantees expressed an interest in continuing to support registered apprenticeships, but identified a number of challenges to using WIOA Title I funds to do so.

- **AJC business services staff do not have the deep understanding of registered apprenticeship necessary to “sell” employers on this workforce development strategy.**

AJC business services staff provide services and collaborate on strategies designed to meet the needs of employers. Possibilities include incumbent worker training programs, on-the-job training programs, and customized training programs. Business services staff also help employers fill vacant positions with candidates who do not need additional training, and they can pre-screen candidates for them. Although the six grantees used AAI funds to support dedicated employer outreach staff during the grant period, they could not sustain the positions post grant.

The six AAI grantees reported that their WIOA-funded AJC business services staff are “generalists”; that is, they know about a range of workforce services and tools available to employers, but do not have the in-depth knowledge of registered apprenticeship programs necessary to promote that strategy to employers. Selling apprenticeship is a multi-step process needing an understanding of the employer’s hiring processes and needs as well as how registered apprenticeship can help address an employer’s “pain points” in filling open positions. Trutko et al. (2022) presents findings from an employer outreach and engagement demonstration that explores the impacts of training staff affiliated with two AAI grantees to market apprenticeships to employers.

---

8 See WIOA 2014, Section 108(b)(4)(B).
• **AJC staff who work with job seekers lack a comprehensive understanding of registered apprenticeship.**

AJC career counselors typically interact with a wide array of job seekers at different stages in their careers and with different interests and needs. As with business services staff, career counselors are typically “generalists” who describe the range of services available to job seekers and help link job seekers to their preferred services. Grantees reported that, like business services staff, career counselors might not sufficiently understand registered apprenticeship to describe or promote it as a training option for job seekers. Moreover, AJCs follow a consumer choice model, meaning staff provide information about the range of services available but do not direct the job seekers. Referring them to registered apprenticeship job opportunities is sometimes viewed as being beyond the scope of a career counselor’s role.

The six AAI grantees also explained that job seekers might not ask about registered apprenticeship on their own because of its historically close association with the building trades (see also Gardiner et al. 2021 and Copson et al. 2021). Job seekers (and career counselors) may be unaware of the range of apprenticeship occupations available, particularly the apprenticeship programs developed through AAI (e.g., apprenticeships in healthcare, information technology (IT), finance, or logistics), or they may be unaware of registered apprenticeship entirely. If not prompted by the job seeker, the career counselor might not offer apprenticeship as a training strategy.

• **Because local WDBs have limited WIOA Title I funding for training services, apprenticeships compete for funds with other, often shorter and less expensive trainings.**

The six AAI grantees reported that their WIOA Title I funding allocations have steadily decreased over time, resulting in difficult choices about what services to prioritize. As required by WIOA, AJCs must serve all those seeking their employment services. Depending on the job seeker, service needs might be career exploration, job search, case management, or training ranging from basic skills to postsecondary credential programs. The grantees noted that local WDBs make tradeoffs in how much to spend on staff to assist job seekers and employers, training for job seekers, and other costs such as overhead. Financially supporting registered apprenticeships—through RTI, OJL, or both—can be a more costly training option, in part because registered apprenticeships must last at least one year, but can be longer depending on the industry. A survey of a subset of AAI apprentices conducted as part of the AAI evaluation found that apprenticeships lasted, on average, about 1.2 years for healthcare and IT apprenticeships, 2.8 years for manufacturing, and 4.2 years for construction-related occupations (Walton, Gardiner and Barnow 2022).
The six AAI grantees reported that in a resource-constrained environment, staff must decide whether to use WIOA Title I funds to support one or both apprenticeship components versus a range of other training options, including short-term certificate programs or on-the-job training, potentially for a larger number of job seekers. AAI grantees reported they prefer funding a broader range of training activities rather than apprenticeships.

• **Grantees reported that funding registered apprenticeship is complicated by the multi-year nature of its training and the paperwork required from employers.**

The AAI grantees interviewed reported that using ITAs to pay for apprentice training that spans fiscal years is complicated because local WIOA funding allocations generally change each year. They indicated that the uncertainty around funding allocations make AJC staff hesitate to make multi-year training commitments.

In addition, local WDBs must obtain specific documentation from employers to process reimbursement payments to offset the costs of providing apprenticeship OJL and mentoring. Grantees reported that the burden of preparing the needed documentation, which requires accurate and timely data from employers, deterred some of them from supporting apprenticeships.

• **AAI grantees reported that their AJCs generally prioritize unemployed and recently dislocated workers, whereas the majority of AAI apprentices were incumbent workers, suggesting many employers prefer to use apprenticeship to train incumbent workers.**

As noted, local WDBs can use up to 20 percent of their WIOA Title I funds to support incumbent worker training costs. According to DOL administrative data reported by grantees, 52 percent of AAI apprentices were incumbent workers (Fumia, Griffith and Copson 2022).

The six AAI grantees reported that employers often prefer to use registered apprenticeship programs to train incumbent workers for higher-level positions and then hire new employees to fill the vacated lower-level positions. Underlying this preference is that employers have experience with and trust in their current workers, whereas new workers’ skills, work ethic, and commitment to the employer are unknowns (Copson et al. 2021). And, although WIOA Title I Adult and Dislocated Worker funds can support incumbent workers, AJCs must prioritize career services and training for job seekers who are recipients of public assistance, individuals who are deficient in basic skills, or those who are low-income (in addition to veterans and eligible spouses), ahead of other jobseekers (DOL/ETA 2020b).
Although AAI grantees reported challenges to using WIOA Title I funds to support registered apprenticeship, their experiences suggest potential strategies to address those challenges.

- **Provide training opportunities for AJC business services staff and career counselors on the fundamentals of registered apprenticeship.**

  That registered apprenticeship programs include several components can make it a difficult “sell” to employers. The AAI evaluation tested one strategy to increase employer participation in registered apprenticeships using a five-phase “consultative sales approach” (Box 4). Two AAI grantees—both local WDBs—participated.9 Their business services staff received extensive training and technical assistance on the approach from the Institute for American Apprenticeships.10

  One grantee successfully implemented the approach. It engaged three employers that collectively established five registered apprenticeship programs, which together registered 137 apprentices (Trutko et al. 2022).

  A similar training for career counselors might help them present the benefits of apprenticeship to job seekers, as well as how to interest and engage them in registered apprenticeship opportunities. The training could also help career counselors identify when a job identified as a prospect for a particular job seeker could be a candidate for a registered apprenticeship. In the absence of a training on the consultative sales approach, or in conjunction with one, AJCs could develop and distribute a desk reference guide for career counselors to help them discuss registered apprenticeship with job seekers, as one AAI grantee did (Copson et al. 2021). A reference guide could also help business services staff discuss apprenticeship with employers.

---

**Box 4: Five Phases of a Consultative Sales Approach to Selling Apprenticeship to Employers**

1. Researching and prospecting of employers to identify their staffing or hiring needs.
2. Preparing to contact and speak with an employer, by writing down questions to ask and beginning to develop a “problem statement” that describes the employer’s challenges.
3. Making an initial sales call, first to learn about skills the employer seeks in a new worker and how the employer currently identifies, onboards, trains, and promotes its workers, then to describe the potential value of apprenticeship.
4. Following up with the employer, to move forward with planning an apprenticeship program.
5. Closing the deal with a written commitment from the employer.

*Source: Trutko et al. 2022*

---

9 The two local WDBs that participated in the AAI demonstration were MassHire Hampden County, a sub-grantee of the Massachusetts Executive Office of Labor and Workforce Development, and Philadelphia Works.

10 The Vermont Healthcare and Information Technology Education Center operates the Institute for American Apprenticeships. Founded in 2000, the Institute develops and organizes apprenticeship programs with employers, particularly those in healthcare, IT, and other occupations outside the building trades. [https://iaahitec.org/](https://iaahitec.org/)
Trainings for business services and career counselor staff could also describe the role of pre-apprenticeship programs in helping potential apprentices hone their basic skills and try out the occupation to determine if it is a good fit for the apprentice. WIOA Title I supports pre-apprenticeship programs.11 These programs prepare individuals to enter and succeed in an apprenticeship program through an approved training curriculum based on industry standards. They can include educational and pre-occupational services (e.g., career and industry awareness workshops, job readiness courses), hands-on training in a simulated lab experience or through volunteer opportunities, and assistance in applying to apprenticeship programs. Pre-apprenticeship programs involve formal partnerships with at least one apprenticeship program sponsor.

One AAI grantee, for example, used grant funds to develop a pre-apprenticeship program to boost completion rates for its apprenticeship.12 The pre-apprenticeship program gave employers the opportunity to observe and assess pre-apprentices before inviting them to participate in an apprenticeship program, and participants the opportunity to determine whether the occupation was a good fit (Copson et al. 2021).

- **Promote the positive returns of apprenticeship to prospective employers and apprentices.**

Potential selling points for registered apprenticeship are the earnings growth for apprentices and the positive return on investment to employers.

The AAI evaluation outcomes study tracked apprentices’ change in earnings between the year prior to starting the apprenticeship and the year after expected completion using Unemployment Insurance wage records for a sample of apprentices. The analysis found that overall, AAI apprentice earnings grew by 49 percent during this time, from $35,408 to $52,876 (Walton, Gardiner and Barnow 2022). Notably, many AAI apprentices were among WIOA priority populations. For example, close to half (48 percent) earned less than $30,000 per year in the year prior to starting their apprenticeship, and 13 percent were veterans.

Some subgroups of apprentices had higher than average earnings growth, including Other Race apprentices (86 percent), women apprentices (65 percent), Hispanic apprentices (50 percent), and new worker (i.e., not incumbent worker) apprentices (126 percent). Veteran apprentices had similar earnings gains to the average. Analyses of AAI participants’ quarterly earnings (using Unemployment Insurance wage records) compared to quarterly earnings for comparable workers not participating in an apprenticeship (using U.S. Census Bureau’s Quarterly Workforce Indicators data) found that although AAI apprentices initially earn less than comparable workers they catch up early in the apprenticeship, and exceed comparable worker earnings during and after the apprenticeship (Katz et al. 2022).

---

11 See WIOA 2014.
12 This grantee is not a workforce development board and was not part of data collection for this brief, but is an AAI grantee and can be read about in Copson et al. 2021 available at https://wdr.doleta.gov/research/details.cfm?q=&id=2696.
The AAI evaluation also included an employer return on investment study. The analyses found the typical employer experiences a 44.3 percent return on their investment in registered apprenticeship if the calculation includes direct benefits (the value of the apprentice’s productivity) and indirect benefits (e.g., reduced turnover and improved company culture) (Kuehn et al. 2022). This could be a strong selling point for employers that are hesitant to invest their own resources in apprentice RTI and/or OJT, thus alleviating State and local WDB concerns that AJCs cannot support both apprenticeship components with WIOA Title I funds.

• Promote how registered apprenticeship can contribute towards AJCs’ achievement of WIOA performance accountability measures.

The WIOA statute lists six primary performance indicators: (1) percentage employed in the second quarter after exit; (2) percentage employed in the fourth quarter after exit; (3) median earnings in the second quarter after exit; (4) percentage earning a credential within one year after exit; (5) percentage achieving measurable skills gains; and (6) effectiveness in serving employers.13

Because they help job seekers get employed, keep jobs, and increase their skills and earnings, registered apprenticeship programs can potentially contribute to performance on those measures. Guidance from DOL to AJCs discusses WIOA performance reporting for registered apprenticeships (DOL/ETA 2020a). Key measures include:

• Employment: Registered apprentices are employed and earning a wage from their first day as an apprentice. Apprentices who exit WIOA but remain in their registered apprenticeship program can count toward indicators one and two, depending on the length of their apprenticeship program relative to their exit from WIOA services.

• Credential attainment: Registered apprentice completers receive a national, industry-recognized credential from DOL’s Office of Apprenticeship or a federally recognized State Apprenticeship Agency. WIOA considers these postsecondary credentials and counts them toward measure four.

• Measurable skills gains: The combination of RTI and OJL aim to lead to progressive increases in skill levels. The Standards of Apprenticeship for a registered apprenticeship program documents the skills gains expected and the timeline. Any gains achieved can count toward the fifth measure discussed above.

Assessing how investments in registered apprenticeship support achievement of performance accountability measures relative to other training investments was beyond the scope of this study. As AJCs plan how to allocate training funds, the relative contribution to performance measures is an additional piece of information to consider.

13 See WIOA 2014, Section 116.
AJCs, through local WDBs, can help grow registered apprenticeship in the United States. As part of their service provision, AJC staff interact with job seekers and employers and AJCs fund training and support services to job seekers. AJCs have the services in place to incorporate registered apprenticeship to a greater degree, and registered apprentices contribute positively to WIOA performance indicators. WIOA specifies registered apprenticeship as a fundable activity aligned with Title I goals. However, AAI grantees report that local WDBs and their AJCs are still relatively new to promoting apprenticeship to employers and job seekers.

Potential strategies to increase registered apprenticeship take-up by employers and job seekers focus on training business services and career counselor staff to sell apprenticeship to employers and job seekers, to share emerging research on the outcomes of apprenticeships for employers and job seekers, and to weigh the contribution of registered apprenticeship to achievement of WIOA performance measures relative to other types of services.
References


About This Brief

Funded by the H-1B visa program, the U.S. Department of Labor's (DOL) American Apprenticeship Initiative (AAI) made awards to 46 grantees across the country to expand registered apprenticeship into new sectors, such as healthcare, and to populations underrepresented in apprenticeships. The grants originally operated from October 2015 to September 2020, and grantees could request an extension of up to one year (through September 2021). In 2016, DOL commissioned an evaluation of the AAI grants to build evidence about the effectiveness of registered apprenticeship for apprentices and employers. This brief discusses how a subset of AAI grantees—State and local workforce development boards—explored the use of Workforce Innovation and Opportunity Act Title I funds to support registered apprenticeship.

Acknowledgements

The authors gratefully acknowledge the efforts of many individuals who assisted in the completion of this brief. We thank leadership and staff from the U.S. Department of Labor’s Employment and Training Administration, including the Offices of Apprenticeship, Policy Development and Research, and Workforce Investment, for their review and comments on report drafts. We are especially grateful to Megan Baird, Sandy Santo DeRobertis, Michelle Ennis (Contracting Officer Representative), Kimberly Hauge, Melika N. Matthews, Karin W. Moll, Gregory Scheib, and Jenn A. Smith. Appreciation is also extended to the Department’s Chief Evaluation Office.

In addition, many individuals at Abt Associates and the Urban Institute contributed to this brief. The evaluation’s Principal Investigators, Robert Lerman (Urban Institute) and Karin Martinson (Abt Associates), commented on drafts. John Marotta (Urban Institute) conducted interviews with grantees and contributed to the analysis. Bry Pollack (Abt Associates) edited the brief, and Maria Claudia De Valdenebro provided graphic design support.