

EVALUATION DESIGN REPORT

# Apprenticeship Building America Implementation Study Design

**Youth Apprenticeship and Pre-apprenticeship Study**

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## **DISCLAIMER**

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# Executive Summary

**The U.S. Department of Labor (DOL) awarded the Apprenticeship Building America (ABA) grants in 2022, investing \$171 million to fund 39 grantees to expand apprenticeship, with an explicit focus on equity and partnerships as well as pre-apprenticeship activities.<sup>1</sup> Funding was awarded in four categories:**

1. State Apprenticeship System Building and Modernization
2. Expansion of Registered Apprenticeship Program (RAP) Opportunities for Youth
3. Ensuring Equitable RAP Pathways through Pre-Apprenticeship Leading to RAP Enrollment and Equity Partnerships
4. Registered Apprenticeship Hubs to help employers design, develop, and deliver RAPs and facilitate the establishment, scaling, and expansion of RAPs<sup>2</sup>

The DOL Chief Evaluation Office (CEO), in collaboration with DOL Employment and Training Administration (ETA), contracted with the Urban Institute and its partners, Mathematica and Social Policy Research Associates, to conduct multiple research studies of the ABA grants. This Implementation Study Design report describes the implementation study of both the ABA category 2 Expansion of RAP Opportunities for Youth ABA grants and the category 3 Ensuring Equitable RAP Pathways through Pre-Apprenticeship Leading to RAP Enrollment and Equity Partnerships grants. The design report begins with background on the ABA grants, with a particular focus on the Category 2 and 3 grants. It describes the key features of a registered apprenticeship and pre-apprenticeship program.

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<sup>1</sup>“U.S. Department of Labor Awards \$50M in Additional Grants to Fund Registered Apprenticeship Hubs to Expand Apprenticeships,” DOL News Release, August 24, 2022.  
<https://www.dol.gov/newsroom/releases/eta/eta20220824>.

<sup>2</sup> Funding levels are available at <https://www.dol.gov/newsroom/releases/eta/eta20220824> for August 24 2022 and <https://www.dol.gov/newsroom/releases/eta/eta20220707-0> for July 7 2022. Grant categories are specified in grant applications obtained from DOL.

# Research Questions

The implementation study answers nine research questions which are based on a conceptual framework developed by the study team, and which reflect the research interests and learning goals of DOL:

1. What are the components of existing models of pre-apprenticeship programs? How do the components of pre-apprenticeship programs funded under this grant program (e.g., technical training, mentorship, support services, program duration and design) differ from other existing pre-apprenticeship programs?
2. How do the goals and intended outcomes of pre-apprenticeship programs vary?
3. What strategies are used to implement pre-apprenticeship programs? Which strategies are reported to be most successful? What are the elements of a quality pre-apprenticeship program as perceived by the grantees?
4. What strategies were perceived to be effective in growing the number of pre-apprenticeship programs, with a focus on pre-apprenticeship opportunities that articulate to RAPs as part of a career pathway? Among those that articulate to RAPs, what are the different articulation strategies and what have been or are perceived to be effective strategies?
5. What types of partners did grantees work with to meet the goals of the grant? What were the roles and responsibilities of these partners and how did they contribute to meeting the goals of the grant? What resources did the grantee provide to partners?
6. What are some promising practices for working with industries/sectors, types of employers (such as large or small businesses), and other key stakeholders from the grantees' perspective? How were regional workforce systems and partnerships developed and maintained? How does this compare with prior apprenticeship studies?
7. What are the completion rates and wages for participants in apprenticeship and pre-apprenticeship programs? How do these completion rates and wages differ by various subgroups, including underrepresented populations?
8. In what ways did grantees expand and/or create new registered apprenticeship and pre-apprenticeship programs for youth?
9. What strategies were perceived by grantees or partners to be effective in increasing the participation of youth (16-24) in RAPs and pre-apprenticeship programs that lead to RAPs?

## Data Collection and Analysis

These research questions incorporate the goals, activities, and outcomes of the grantees, grant partners, and apprenticeship and pre-apprenticeship program participants, requiring a variety of quantitative and qualitative data collection efforts. This report describes the purpose, design, and implementation of these data collection efforts, including a web-based grantee survey; site visits to selected grantees including grant staff interviews, partner interviews, and participant focus groups; a participant survey; program data collected by the ABA grantees and reported to DOL; and grant documents.

This report also describes how the data collected for the implementation study will be analyzed by the research team, using both descriptive and thematic analysis methods and in close coordination with other studies contracted by DOL to understand the ABA grants. It describes which data sources will be used to answer which research question and presents a timeline for the data collection, analysis, and final reporting.



# Apprenticeship Building America Implementation Study Design

The U.S. Department of Labor (DOL) awarded the Apprenticeship Building America (ABA) grants in 2022, investing \$171 million to fund 39 grantees. The ABA grant funding announcement also includes an explicit focus on equity and partnerships as well as pre-apprenticeship activities. The ABA grants advance DOL's efforts "to expand, diversify and modernize registered apprenticeship by increasing the number of programs and apprentices, diversifying the industries that use the "earn-as-you-learn" model for workforce development, and improving the access and performance of the programs in underrepresented and underserved communities." The awards ranged from \$2 million to \$8 million over a five-year grant period.<sup>3</sup>

Funding was awarded in four categories:

1. State Apprenticeship System building and modernization (\$18.6 million)
2. Expansion of Registered Apprenticeship Program (RAP) Opportunities for Youth (\$29.9 million)
3. Ensuring Equitable RAP Pathways through Pre-Apprenticeship Leading to RAP enrollment and Equity Partnerships (\$35 million)
4. Registered Apprenticeship Hubs to help employers design, develop, and deliver RAPs and facilitate the establishment, scaling, and expansion of RAPs (\$88.3 million)<sup>4</sup>

The DOL Chief Evaluation Office (CEO), in collaboration with DOL Employment and Training Administration (ETA), contracted with the Urban Institute and its partners, Mathematica and Social Policy Research Associates, to conduct the Evaluating Registered Apprenticeship Initiative (ERA) study with a **goal of understanding the implementation of these recent investments in apprenticeship**

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<sup>3</sup> "U.S. Department of Labor Awards \$50M in Additional Grants to Fund Registered Apprenticeship Hubs to Expand Apprenticeships," DOL News Release, August 24, 2022.  
<https://www.dol.gov/newsroom/releases/eta/eta20220824>.

<sup>4</sup> Funding levels are available at <https://www.dol.gov/newsroom/releases/eta/eta20220824> for August 24 2022 and <https://www.dol.gov/newsroom/releases/eta/eta20220707-0> for July 7 2022. Grant categories are specified in grant applications obtained from DOL.

sponsored by the Department.<sup>5</sup> Through the study, CEO is interested in building evidence on efforts to expand and diversify registered apprenticeships and to inform policymakers and practitioners on how these grants are helping to solve issues in workforce systems, particularly around barriers to employment for traditionally underrepresented populations.<sup>6</sup> The evaluation will include:

1. An implementation study of the category 1 State Apprenticeship System Building and Modernization ABA grants
2. An implementation study of both the category 2 Expansion of Registered Apprenticeship Program (RAP) Opportunities for Youth ABA grants and the category 3 Ensuring Equitable RAP Pathways through Pre-Apprenticeship Leading to RAP enrollment and Equity Partnerships ABA grants
3. An implementation study of the category 4 Registered Apprenticeship Hubs ABA grants
4. An impact and cost-benefit evaluability assessment of pre- apprenticeship programs that lead to registered apprenticeship programs
5. Coordination across the CEO and others' portfolio of registered apprenticeship studies to facilitate sharing of findings, methods, and learning.

This report presents the design for an implementation study of the ABA Category 2-Expansion of RAP Opportunities for Youth grants (hereafter, referred to as Youth Apprenticeship grants) and Category 3-Ensuring equitable RAP Pathways Through Pre-Apprenticeships Leading to RAP Enrollment and Equity Partnerships grants (hereafter, referred to as Pre-apprenticeship grants).<sup>7</sup> The report first provides background information on apprenticeships, the ABA grants, and the youth and pre-apprenticeship grants. It then discusses the research questions of interest, the conceptual framework for the implementation study, and an overview of the methods. Finally, it presents the data collection, analysis, and reporting plans along with a schedule for the study.

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<sup>5</sup> “Registered Apprenticeship Initiatives Evaluation,” DOL, accessed September 7, 2023, [https://www.dol.gov/agencies/oasp/evaluation/currentstudies/Registered\\_Apprenticeship\\_Initiatives\\_Evaluation](https://www.dol.gov/agencies/oasp/evaluation/currentstudies/Registered_Apprenticeship_Initiatives_Evaluation).

<sup>6</sup> “Notice of Availability of Funds and Funding Opportunity Announcement for Apprenticeship Building America (ABA) Grant Program,” DOL, accessed September 7, 2023, [https://www.dol.gov/sites/dolgov/files/ETA/grants/pdfs/ABA\\_FOA-ETA-22-06.pdf](https://www.dol.gov/sites/dolgov/files/ETA/grants/pdfs/ABA_FOA-ETA-22-06.pdf).

<sup>7</sup> The study team has developed separate implementation design reports for each of the three studies. See Rosenberg, Ochoa, Lewis, Jones, and Sotelo (unpublished) and Briggs and Eyster (unpublished).

# Background

This chapter provides background information relevant to this implementation study. It first provides an overview of the key concepts relevant to understanding apprenticeship and the ABA grants. It then describes the Youth and Pre-apprenticeship grants, that are the focus of this implementation study.

## Key Concepts for Understanding Apprenticeship

**Registered apprenticeship programs (RAPs)** are a model of skill development which combines paid on-the-job learning (OJL) with related instruction (RI) to progressively increase workers' skill levels and wages. A RAP's approach to delivering OJL and RI are detailed in their Apprenticeship Standards, which are reviewed and approved by DOL or a DOL recognized State Apprenticeship Agency (SAA).<sup>8</sup>

RAPs are a business-driven model that provide an effective way for industry to recruit, train, and retain highly skilled workers. RAPs allow workforce partners, educators, unions, and employers to develop and apply industry standards to training programs, thereby increasing the quality of the workforce and worker productivity. RAPs offer job seekers immediate paid employment opportunities and offer advancement along a career path as they complete their training. Graduates of RAPs receive nationally recognized, portable credentials, and their training may be applied toward further post-secondary education.

All RAPs contain the following five key elements:<sup>9</sup>

1. **Direct Industry Involvement.** Employers, labor organizations, or other industry groups must play an active role in developing and expanding RAPs, providing mentoring, and are most critical in delivering the OJL component of the RAP.
2. **Structured OJL.** Companies hire apprentices and provide hands-on training, which includes a structured process to provide apprentices the skills and knowledge they must learn to be fully

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<sup>8</sup> RAPs are authorized through regulations issued under the National Apprenticeship Act of 1937 (29 U.S.C. 50 et seq.). The Office of Apprenticeship (OA), in conjunction with DOL, recognized SAAs, register programs for federal purposes, ensures that RAPs meet applicable federal and state laws and regulations, issues certificates of completion to apprentices, encourages the development of new programs through outreach and technical assistance, protects the safety and welfare of apprentices, and ensures equal employment opportunity for apprentices.

<sup>9</sup>For more information see 29 CFR Part 29 and Part 30. Text adapted from the ABA grantee FOA pages 7 and 8. [https://www.dol.gov/sites/dolgov/files/ETA/grants/pdfs/ABA\\_FOA-ETA-22-06.pdf](https://www.dol.gov/sites/dolgov/files/ETA/grants/pdfs/ABA_FOA-ETA-22-06.pdf)

proficient in the occupation. The term of apprenticeship for an individual apprentice may be measured through the completion of the industry standard for on-the-job learning (at least 2,000 hours) (time-based approach), the attainment of competency (competency-based approach), or a blend of the time-based and competency-based approaches (hybrid approach).

3. **RI.** Registered apprentices receive RI or classroom instruction that complements the OJL and is designed to provide the apprentice with the knowledge of the theoretical and technical subjects related to the occupation. Federal regulations recommend a minimum of 144 hours of RI, annually, for apprentices in RAPs. An approved training provider, such as a community college, technical school or college, an apprenticeship training school, an online provider, the sponsor, or a combination of sources, may provide RI.
4. **Progressive Wage Increase.** Registered Apprentices receive progressive wage increases as their skills and knowledge increase as outlined in the apprenticeship agreement and program standards.
5. **National Industry-Recognized Credential.** Every graduate of a RAP receives a national industry-recognized credential, referred to as a Certificate of Completion, which is issued by DOL or a federally recognized SAA.

A **pre-apprenticeship program**, as defined by the ABA funding opportunity announcement (FOA), is a set of strategies designed to expand access and prepare individuals for entry into a RAP.<sup>10</sup> They are typically designed in collaboration with RAP sponsors; provide meaningful hands-on training that does not displace paid employees; facilitate entry and/or articulation into a registered apprenticeship; promote sustainability through partnerships with other organizations that support the pre-apprentices; and have access to appropriate supportive services that support retention and completion.<sup>11</sup> Pre-apprenticeship programs are not registered training programs, but they work with RAPs to prepare individuals for apprenticeship.

A **youth apprenticeship program**, again as defined in the ABA FOA, provides a RAP opportunity to youth, 16 to 24 years old at the time of enrollment, who are in high school or are out-of-school (opportunity youth).

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<sup>10</sup> "ABA Grantee FOA," DOL, accessed Septer 9, 2023, [https://www.dol.gov/sites/dolgov/files/ETA/grants/pdfs/ABA\\_FOA-ETA-22-06.pdf](https://www.dol.gov/sites/dolgov/files/ETA/grants/pdfs/ABA_FOA-ETA-22-06.pdf)

<sup>11</sup> An articulation agreement between a pre-apprenticeship program and apprenticeship program specifies ways in which a pre-apprentice's pathway is connected to the apprenticeship. For more information, see DOL's webpage on pre-apprenticeship at <https://www.apprenticeship.gov/help/what-pre-apprenticeship>.

Apprenticeship programs often involve numerous partnerships (Gardiner et al., 2021). An employer or group of employers (sometimes in collaboration with a union) and education and training providers may work together to provide the main elements of the RAP. Other organizations may support outreach, training, and support services, including industry-led training organizations, industry intermediaries, unions, non-profit educational organizations, Small Business Development Centers, American Job Centers, YouthBuild programs, community organizations, and other federally funded programs.

**Intermediaries** also play a key role in the registered apprenticeship system. They are organizations that bring their expertise about the apprenticeship system to help employers, educational institutions, the public workforce system, community organizations, and apprentices to connect with each other and to navigate the system (Katz and Elliott 2020). Sattar and colleagues (2020) note that there is no single definition of intermediary, but that they are typically employers, nonprofit organizations, colleges, chambers of commerce or other organizations that convene and connect industry, education, and community-based partners and facilitate collaboration, boosting the capacity and expertise of these partners. There is also no single model for intermediaries. They can be one organization or a group of organizations (e.g., joint labor-management organizations, industry associations, employer associations, and consortium or hubs). Intermediaries may work to expand apprenticeship nationwide, statewide, or regionally.

## Overview of ABA grants

All four categories of the ABA grants must adhere to cross-cutting principles and activities to ensure access to quality RAPs. These principles include equity, job quality, sustainability, evidence-based approaches and new opportunities for innovation, engagement and ease of access.<sup>12</sup>

- **Equity.** Focus on expanding the diversity, equity, inclusion, and accessibility (DEIA) of RAPs into new and traditional industries to improve outcomes for workers from underrepresented populations and underserved communities.
- **Job quality:** Focus on promoting RAPs as a key strategy to move workers into good jobs, which are safe and provide benefits and progressive wage increases, [across all industries, especially in-demand industries.
- **Support for high-quality, sustainable programs:** Focus on ensuring that all RAPs have the features of high-quality apprenticeships, such as resulting in a national industry-recognized

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<sup>12</sup> These principles are listed and defined on page 3 of the ABA grant FOA, found at [https://www.dol.gov/sites/dolgov/files/ETA/grants/pdfs/ABA\\_FOA-ETA-22-06.pdf](https://www.dol.gov/sites/dolgov/files/ETA/grants/pdfs/ABA_FOA-ETA-22-06.pdf).

credential, and that they support a broader workforce development agenda and sustainable apprenticeship system.

- Evidence-based approaches: Incorporate evidence- and research-based approaches to support workforce development initiatives involving RAPs.
- New opportunities for innovation, engagement, and ease of access: Focus on innovative strategies that support the expansion and modernization of RAPs, which may include engaging with new and underrepresented organizations ; developing RAPs in emerging industries; creating access to RAP opportunities for underrepresented populations and underserved communities; creating innovative diversity outreach strategies that are linguistically and culturally competent;; and leveraging technology to deliver services and improve the RAP system.

Historical policy choices and practices put communities of colors at a disadvantage in accessing employment and training opportunities. For example, the Federal Housing Authority's (FHA) red lining policy in the late 60s and 70s limited access to homeownership among Black Americans because predominantly Black neighborhoods were categorized as high risk, so banks restricted mortgages in these neighborhoods (Massey and Denton, 1993). This systemic discrimination in homeownership contributed and continues to contribute to wealth disparities that hamper Black educational attainment. In registered apprenticeship, Black workers were historically denied apprenticeship positions (Marshall and Briggs, 1967). Even though Black workers are much better represented in registered apprenticeship today (Kuehn, 2017), they continue to be concentrated in lower paying occupations (Katz et al., 2022; Kuehn, 2022).

As laid out in the ABA FOA, all 39 ABA grantees must also conduct certain program activities, including:

- Launch and/or expand RAPs, increase RAP opportunities for youth, and/or pre-apprenticeship programs that lead to RAP enrollment
- Industry engagement and support
- Promotion and outreach activities
- Partnership building
- Engagement of underrepresented populations and underserved communities
- Leveraging of resources
- Data-informed decision-making
- Policy and system alignment

DOL also encourages ABA grantees to collaborate with (1) existing DOL-funded RAP investments to promote the expansion of the program and (2) DOL's broader Registered Apprenticeship diversity,

equity, inclusion, and accessibility (DEIA) efforts, such as the Industry Intermediary contracts and the Registered Apprenticeship Technical Assistance Center of Excellence. The goal of collaboration is to leverage and align efforts to maximize the use of resources and minimize the duplication of efforts.

In addition to these cross-cutting principles and activities, each of the ABA grant categories includes its own set of requirements and goals (Table 1). Further details on the Youth and Pre-apprenticeship grants, which are the focus of this study, are discussed in the next section.

**TABLE 1**  
**ABA Grants Overview**

Category	Key goals	Number of awards	Dollar amount awarded (millions)
1: State Apprenticeship System Building and Modernization	<ul style="list-style-type: none"> <li>▪ Grantees in this category will coordinate RAP expansion across sectors, by working with employers, labor organizations, educational institutions, and other partners.</li> <li>▪ Develop and implement strategies to facilitate coordination of collection, sharing, and analysis of data</li> <li>▪ Set equity goals and implement strategies to promote diverse pipeline and population of apprentices</li> </ul>	5	\$18.6
2: Expansion of RAP Opportunities for Youth	<ul style="list-style-type: none"> <li>▪ Develop and implement a youth-centered approach in deploying RAPs.</li> <li>▪ Develop and launch industry-relevant RAPs to increase opportunities for serving youth.</li> <li>▪ Invest in marketing and outreach to youth stakeholders related to RAPs</li> <li>▪ Collaborate with local education and workforce systems to integrate RAP pathways serving youth.</li> </ul>	7	\$29.9
3: Ensuring equitable RAP Pathways Through Pre-Apprenticeships Leading to RAP Enrollment and Equity Partnerships	<ul style="list-style-type: none"> <li>▪ Invest in marketing and outreach to promote diversity, equity, inclusion, and accessibility in RAPs.</li> <li>▪ Provide funding to build talent pipelines and on-ramps to RAPs.</li> <li>▪ Develop equitable pathways to RAPs through pre-apprenticeship.</li> <li>▪ Provide supportive services for pre-apprenticeships.</li> </ul>	12	\$35.0
4: Registered Apprenticeship Hubs	<p>Establish a Registered Apprenticeship Hub by forming:</p> <ul style="list-style-type: none"> <li>▪ A multi-partner network capable of serving as a RAP sponsor; or</li> <li>▪ An intermediary with the primary focus of supporting industry’s needs for creating and expanding RAPs in new and emerging sectors and occupations.</li> </ul>	15	\$88.3
<b>TOTAL</b>		<b>39</b>	<b>\$171.0</b>

**Source:** Apprenticeship Building America Funding Opportunity Announcement and U.S. Department of Labor website ([https://www.apprenticeship.gov/investments-tax-credits-and-tuition-support/apprenticeship-building-america#awardee\\_list](https://www.apprenticeship.gov/investments-tax-credits-and-tuition-support/apprenticeship-building-america#awardee_list)). Total may differ from the sum of individual categories due to rounding.



# Youth Apprenticeship and Pre-Apprenticeship Background

Relatively little research has been conducted on youth apprentices and pre-apprentices specifically, so the implementation studies for the ABA grants provide a valuable opportunity for filling research gaps. This section briefly provides a background on youth apprenticeship and on pre-apprenticeship training programs.

Young people confront many obstacles as they transition from school to work, including high unemployment and underemployment, increasingly stringent hiring requirements for middle-skills jobs, and increasing costs for college (Scott, Shakesprere, and Porter 2020; Adams, Hahn, and Coffey 2021). Registered apprenticeship provides an opportunity for youth to learn occupational skills while earning wages and can help reduce the challenges they face when seeking employment by coordinating employers, training providers, and supportive services for youth who would have difficult navigating these services on their own (Payne and Kuehn, 2023; Kuehn et al., 2023). A substantial share of apprentices are between the ages of 16 and 24 at registration (30 to 40 percent of all apprentices in any given year), although a much smaller share of apprentices are 16 to 18 years old.<sup>13</sup>

Apprenticeships can help alleviate obstacles when they are structured to include partnerships and services that provide supports to apprentices during their time in the program. Partnerships and intermediaries are often used by youth apprenticeship programs to coordinate services or to coordinate partners who otherwise would not have lines of communication with employers. Coordination is always important for apprenticeship programs that rely on the combined contributions of sponsors, employers, and providers of RI. This need for coordination is magnified when working with youth, particularly high school aged youth (Kuehn 2021). Employers and high schools need to work together to develop a flexible schedule so students can complete both high school diploma requirements and required OJL hours for registered apprenticeships. If RI is delivered at a community or technical college, community colleges and high schools may need to work together to provide dual credit opportunities, and parents of students may need additional information on apprenticeships beyond standard outreach material (Kuehn 2021). To better coordinate between all partners, youth apprenticeship programs frequently use either a youth apprenticeship coordinator within the school

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<sup>13</sup> Figures are for registered apprenticeship in states that report data on individual apprentices to the federal government. Authors' calculations from the Registered Apprenticeship Partners Information Database System (RAPIDS), provided by the Office of Apprenticeship.

system or an intermediary (Lerman, Kuehn, and Shakesprere 2019). Intermediaries communicate between all the partners involved in any given youth apprenticeship program and can take on tasks such as student and employer matching, participant and employer recruitment, and managing registration (Parton 2017; ESG and PAYA 2019). The intermediary role is sometimes filled by secondary school systems, community colleges, nonprofit organizations, state agencies, or workforce development councils (Office of Career, Technical, and Adult Education 2021).

Pre-apprenticeship training provides occupational skills training to individuals who are not prepared to start a registered apprenticeship program but who are seeking a pathway to a registered apprenticeship. Pre-apprenticeship programs are not registered, but high-quality programs ensure that participants receive the basic skills training and baseline occupational skills training that they need to successfully begin a registered apprenticeship program. Not all pre-apprenticeship programs include work based learning or paid employment, although high quality pre-apprenticeship training does. Like youth apprenticeships, pre-apprenticeships are often structured to include many supportive partnerships. Pre-apprenticeship may be a strategy for improving access to apprenticeship for marginalized and underserved populations. Although little research has been conducted on this question, recent work by Kelly et al. (2022) indicates that pre-apprenticeship is a successful strategy as a pathway to apprenticeship and for improving the retention of women in the building trades.

No national research study has been conducted on youth registered apprenticeship or pre-apprenticeships that bridge directly to apprenticeship programs. However, an evaluation of the Youth Apprenticeship Readiness Grants (YARG) is currently underway,<sup>14</sup> and several case studies have focused on individual youth apprenticeship programs and systems (Lerman, Kuehn, and Shakesprere 2019; Marotta, Boren, and San Miguel, 2020; Office of Career, Technical, and Adult Education 2021). This implementation study of the ABA Youth Apprenticeship and Pre-apprenticeship grants will, in close coordination with the YARG implementation study, fill important gaps in our understanding of the benefits of youth apprenticeship as well as specific challenges faced by youth apprenticeship programs and strategies to overcome those challenges. Potential challenges that could arise include difficulties integrating youth apprenticeship into the secondary school system, lack of knowledge about apprenticeship among young people and parents, and unequal access to apprenticeship programs in underserved communities.

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<sup>14</sup> For a summary of the YARG evaluation and other related evaluations, see <https://www.dol.gov/agencies/oasp/evaluation/completedstudies/Apprenticeship-Evidence-Building-Portfolio>.

## ABA Youth Apprenticeship and Pre-apprenticeship Grants

DOL invests millions of dollars in apprenticeship training, with seventeen active investments in apprenticeship as of August 2023. Below is a summary of the Youth Apprenticeship and Pre-apprenticeship ABA grants programs.

Table 2 includes the name of each Youth Apprenticeship grantee, target industries, plans for expansion, and grant award amount.<sup>15</sup> Grants range from \$2 million to \$5 million. All grantees are targeting more than one industry. Youth Apprenticeship grantees plan to serve between 80 and 825 participants enrolled in RAPS, and between 200 and 900 participants enrolled in pre-apprenticeships (with one youth grantee not planning to support any pre-apprentices).

**TABLE 2**  
**Youth Apprenticeship Grants (Category 2), Awarded in 2022**

Grantee	Target industry	Planned expansion of apprenticeship	Award (millions)
Dallas College	<ul style="list-style-type: none"> <li>▪ Business</li> <li>▪ Education</li> <li>▪ Information Technology</li> <li>▪ Culinary/Hospitality</li> <li>▪ Healthcare</li> <li>▪ Transportation</li> <li>▪ Advanced Manufacturing</li> <li>▪ Construction</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants served: 1,500</li> <li>▪ Participants enrolled in RAPS: 825</li> <li>▪ Participants who complete RAPS: 545</li> <li>▪ Participants who enroll in a pre-apprenticeship: 700</li> <li>▪ Participants who complete a pre-apprenticeship: 525</li> </ul>	\$5.0
Able-Disabled Advocacy, Inc.	<ul style="list-style-type: none"> <li>▪ Information Technology</li> <li>▪ Construction</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants served: 250</li> <li>▪ Participants enrolled in RAPS: 225</li> <li>▪ Participants who complete RAPS: 200</li> <li>▪ Participants who enroll in a pre-apprenticeship: 250</li> <li>▪ Participants who complete a pre-apprenticeship: 225</li> </ul>	\$3.3
Wilderness Education Study	<ul style="list-style-type: none"> <li>▪ Healthcare</li> <li>▪ Education</li> <li>▪ Information Technology</li> <li>▪ Construction</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants served: 720</li> <li>▪ Participants enrolled in RAPS: 216</li> <li>▪ Participants who complete RAPS: 108</li> <li>▪ Participants who enroll in a pre-apprenticeship: 504</li> <li>▪ Participants who complete a pre-apprenticeship: 432</li> </ul>	\$5.0

<sup>15</sup> “U.S. Department of Labor Awards \$121M in Apprenticeship Building America Grants to Expand, Diversify, Modernize Registered Apprenticeship Programs,” DOL, July 7, 2022, <https://www.dol.gov/newsroom/releases/eta/eta20220707-0>.

“U.S. Department of Labor Awards \$50M in Additional Grants to Fund Registered Apprenticeship Hubs to Expand Apprenticeships,” DOL, August 24, 2022, <https://www.dol.gov/newsroom/releases/eta/eta20220824>.

Grantee	Target industry	Planned expansion of apprenticeship	Award (millions)
<b>SER-Jobs for Progress of the Texas Gulf Coast, Inc.</b>	<ul style="list-style-type: none"> <li>▪ Manufacturing</li> <li>▪ Construction</li> <li>▪ Healthcare</li> <li>▪ Transportation</li> <li>▪ Information Technology</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants served: 400</li> <li>▪ Participants enrolled in RAPS: 100</li> <li>▪ Participants who complete RAPS: 50</li> <li>▪ Participants who enroll in a pre-apprenticeship: 200</li> <li>▪ Participants who complete a pre-apprenticeship: 150</li> </ul>	\$4.6
<b>Project L.I.F.T., Inc.</b>	<ul style="list-style-type: none"> <li>▪ Construction</li> <li>▪ Transportation</li> <li>▪ Solar Installation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants served: 55,380</li> <li>▪ Participants enrolled in RAPS: 80</li> <li>▪ Participants who complete RAPS: 15</li> <li>▪ Participants who enroll in a pre-apprenticeship: 300</li> <li>▪ Participants who complete a pre-apprenticeship: 240</li> </ul>	\$5.0
<b>Jobs for the Future, Inc.</b>	<ul style="list-style-type: none"> <li>▪ Healthcare</li> <li>▪ Information Technology</li> <li>▪ Advanced Manufacturing</li> <li>▪ Infrastructure</li> <li>▪ Transportation/Logistics</li> <li>▪ Construction</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants served: 1,000</li> <li>▪ Participants enrolled in RAPS: 400</li> <li>▪ Participants who complete RAPS: 300</li> <li>▪ Participants who enroll in a pre-apprenticeship: 900</li> <li>▪ Participants who complete a pre-apprenticeship: 675</li> </ul>	\$5.0
<b>Careerwise New York, Inc.</b>	<ul style="list-style-type: none"> <li>▪ Technology</li> <li>▪ Business Operations</li> <li>▪ Financial Services</li> <li>▪ Healthcare</li> <li>▪ Cybersecurity</li> <li>▪ Public Service</li> <li>▪ Hospitality</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants served: 3,200</li> <li>▪ Participants enrolled in RAPS: 400</li> <li>▪ Participants who complete RAPS: 260</li> <li>▪ Participants who enroll in a pre-apprenticeship: N/A</li> <li>▪ Participants who complete a pre-apprenticeship: N/A</li> </ul>	\$2.0

Source: ABA grant applications.

Notes: RAPs = Registered Apprenticeship programs.

Table 3 includes the name of each Pre-apprenticeship grantee, target industries, plans for expansion, and grant award amount.<sup>16</sup> All Pre-apprenticeship grants were for \$3 million except for one which was awarded \$2 million. Seven of the grantees are targeting only one industry, in contrast with the Youth Apprenticeship grants. Four grantees are targeting more than one industry. Pre-apprenticeship grantees plan to serve between 70 and 660 participants enrolled in RAPs, and between 50 and 900 participants enrolled in pre-apprenticeships.

**TABLE 3**  
**Pre-apprenticeship Grants (Category 3), Awarded in 2022**

Grantee	Target industry	Planned expansion of apprenticeship	Award (millions)
<b>Workforce Development Board of Herkimer, Madison, and Oneida</b>	<ul style="list-style-type: none"> <li>▪ Healthcare</li> <li>▪ Social Assistance</li> <li>▪ Childcare</li> <li>▪ Information Technology</li> <li>▪ Cybersecurity</li> <li>▪ Manufacturing</li> <li>▪ Tourism</li> <li>▪ Logistics</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants served: 300</li> <li>▪ Participants enrolled in RAPS: 200</li> <li>▪ Participants who complete RAPS: 125</li> <li>▪ Participants who enroll in a pre-apprenticeship: 300</li> <li>▪ Participants who complete a pre-apprenticeship: 250</li> </ul>	\$3.0
<b>Electrical Training Alliance</b>	<ul style="list-style-type: none"> <li>▪ Construction</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants served: 900</li> <li>▪ Participants enrolled in RAPS: 660</li> <li>▪ Participants who complete RAPS: Not indicated</li> <li>▪ Participants who enroll in a pre-apprenticeship: 900</li> <li>▪ Participants who complete a pre-apprenticeship: 780</li> </ul>	\$3.0
<b>Reset to Success Foundation</b>	<ul style="list-style-type: none"> <li>▪ Healthcare</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants served: 200</li> <li>▪ Participants enrolled in RAPS: 200</li> <li>▪ Participants who complete RAPS: 200</li> <li>▪ Participants who enroll in a pre-apprenticeship: 50</li> <li>▪ Participants who complete a pre-apprenticeship: 50</li> </ul>	\$3.0
<b>National Urban League</b>	<ul style="list-style-type: none"> <li>▪ Clean Energy</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants served: 500</li> <li>▪ Participants enrolled in RAPS: 245</li> <li>▪ Participants who complete RAPS: 172</li> <li>▪ Participants who enroll in a pre-apprenticeship: 500</li> <li>▪ Participants who complete a pre-apprenticeship: 350</li> </ul>	\$3.0
<b>The City of Springfield, Department of Workforce Development (CoSWFD)</b>	<ul style="list-style-type: none"> <li>▪ Public Services</li> <li>▪ Energy</li> <li>▪ Healthcare</li> <li>▪ Education</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants served: 1,275</li> <li>▪ Participants enrolled in RAPS: 500</li> <li>▪ Participants who complete RAPS: 400</li> <li>▪ Participants who enroll in a pre-apprenticeship: 246</li> <li>▪ Participants who complete a pre-apprenticeship: 200</li> </ul>	\$3.0

<sup>16</sup> <https://www.dol.gov/newsroom/releases/eta/eta20220707-0> and <https://www.dol.gov/newsroom/releases/eta/eta20220824>.

Grantee	Target industry	Planned expansion of apprenticeship	Award (millions)
Economic Development and Industrial Corporation of Boston (EDIC), Office of Workforce Development (OWD)	<ul style="list-style-type: none"> <li>▪ Hospitality</li> <li>▪ Construction</li> <li>▪ Healthcare</li> <li>▪ Life Sciences</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants served: 484</li> <li>▪ Participants enrolled in RAPS: 327</li> <li>▪ Participants who complete RAPS: 160</li> <li>▪ Participants who enroll in a pre-apprenticeship: 484</li> <li>▪ Participants who complete a pre-apprenticeship: 410</li> </ul>	\$3.0
Alaska Primary Care Association (APCA)	<ul style="list-style-type: none"> <li>▪ Healthcare</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants served: 560</li> <li>▪ Participants enrolled in RAPS: 280</li> <li>▪ Participants who complete RAPS: Not indicated</li> <li>▪ Participants who enroll in a pre-apprenticeship: 560</li> <li>▪ Participants who complete a pre-apprenticeship: 560</li> </ul>	\$2.0
City of San Antonio	<ul style="list-style-type: none"> <li>▪ Construction</li> <li>▪ Education</li> <li>▪ Information Technology</li> <li>▪ Cybersecurity</li> <li>▪ Manufacturing</li> <li>▪ Public Services</li> <li>▪ Energy</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants served: 11,050</li> <li>▪ Participants enrolled in RAPS: 425</li> <li>▪ Participants who complete RAPS: 340</li> <li>▪ Participants who enroll in a pre-apprenticeship: 680</li> <li>▪ Participants who complete a pre-apprenticeship: 500</li> </ul>	\$3.0
Chicago Women in Trades	<ul style="list-style-type: none"> <li>▪ Construction</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants served: 450</li> <li>▪ Participants enrolled in RAPS: 235</li> <li>▪ Participants who complete RAPS: 50</li> <li>▪ Participants who enroll in a pre-apprenticeship: 360</li> <li>▪ Participants who complete a pre-apprenticeship: 276</li> </ul>	\$3.0
Staten Island Performing Provider System	<ul style="list-style-type: none"> <li>▪ Healthcare</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants served: 500</li> <li>▪ Participants enrolled in RAPS: 400</li> <li>▪ Participants who complete RAPS: 320</li> <li>▪ Participants who enroll in a pre-apprenticeship: 500</li> <li>▪ Participants who complete a pre-apprenticeship: 400</li> </ul>	\$2.0
Mount Hood Community College	<ul style="list-style-type: none"> <li>▪ Construction</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants served: 175</li> <li>▪ Participants enrolled in RAPS: 70</li> <li>▪ Participants who complete RAPS: 10</li> <li>▪ Participants who enroll in a pre-apprenticeship: 105</li> <li>▪ Participants who complete a pre-apprenticeship: 90</li> </ul>	\$3.0

Source: ABA grant applications.

Notes: RAPS = Registered Apprenticeship programs.

# Research Questions, Conceptual Framework, and Methods

This chapter describes our overall approach to the implementation study. It first presents the research questions. The chapter then describes the conceptual framework, which guides the implementation study. It then provides an overview of the methods for the study.

## Research Questions

The primary objective of the implementation study is to document and understand the implementation of components, models, partnerships, and strategies in the Youth and Pre-Apprenticeship ABA grants, and the degree to which they appear promising for businesses, apprentices, and state apprenticeship systems. To that end, the overall research questions are:

1. What are the components of existing models of pre-apprenticeship programs? How do the components of pre-apprenticeship programs funded under this grant program (e.g., technical training, mentorship, support services, program duration and design) differ from other existing pre-apprenticeship programs?
2. How do the goals and intended outcomes of pre-apprenticeship programs vary?
3. What strategies are used to implement pre-apprenticeship programs? Which strategies are reported to be most successful? What are the elements of a quality pre-apprenticeship program as perceived by the grantees?
4. What strategies were perceived to be effective in growing the number of pre-apprenticeship programs, with a focus on pre-apprenticeship opportunities that articulate to RAPs as part of a career pathway? Among those that articulate to RAPs, what are the different articulation strategies and what have been or are perceived to be effective strategies?
5. What types of partners did grantees work with to meet the goals of the grant? What were the roles and responsibilities of these partners and how did they contribute to meeting the goals of the grant? What resources did the grantee provide to partners?
6. What are some promising practices for working with industries/sectors, types of employers (such as large or small businesses), and other key stakeholders from the grantees' perspective?

How were regional workforce systems and partnerships developed and maintained? How does this compare with prior apprenticeship studies?

7. What are the completion rates and wages for participants in apprenticeship and pre-apprenticeship programs? How do these completion rates and wages differ by various subgroups, including underrepresented populations?
8. In what ways did grantees expand and/or create new registered apprenticeship and pre-apprenticeship programs for youth?
9. What strategies were perceived by grantees and partners to be effective in increasing the participation of youth (16-24) in RAPs and pre-apprenticeship programs that lead to RAPs?

## Conceptual Framework

The overall objectives of the study suggest a multi-stage general conceptual framework (Figure 1) that builds off the conceptual framework developed under the Apprenticeship Evidence Building Portfolio.<sup>17</sup> The framework recognizes the varied roles of each of the four categories of ABA grantees (in dark blue in figure 1) in providing both context and resources for apprenticeship programs (State Apprenticeship Systems and Registered Apprenticeship Hubs grants), as well as implementation of apprenticeship programs (Pre-Apprenticeship and Youth Apprenticeship grants). The framework also shows the diversity of programs and partnerships that shape the apprenticeship system. The framework's "models and strategies" for apprenticeship and "outcomes and impact" are similar to these categories for the Evidence Building Portfolio, but the framework has been re-envisioned to embed the ABA grantee categories into their relevant roles in the apprenticeship system.<sup>18</sup> Because different grantees have access to different resources, partnerships, state apprenticeship infrastructure, and have staff with different skill sets and experiences, these and other contextual factors will influence the types of programs that are developed, adopted, or expanded. The study will document and assess all aspects of the context and resources (column 1 of figure 1), implementation of programs and systems (column 2 of figure 1), models and strategies (column 3 of figure 1), to understand the outcomes of the apprenticeship and pre-apprenticeship programs and support an accompanying study of impacts (column 4 of figure 1).

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<sup>17</sup> For a description of this study see <https://www.dol.gov/agencies/oasp/evaluation/completedstudies/Apprenticeship-Evidence-Building-Portfolio>.

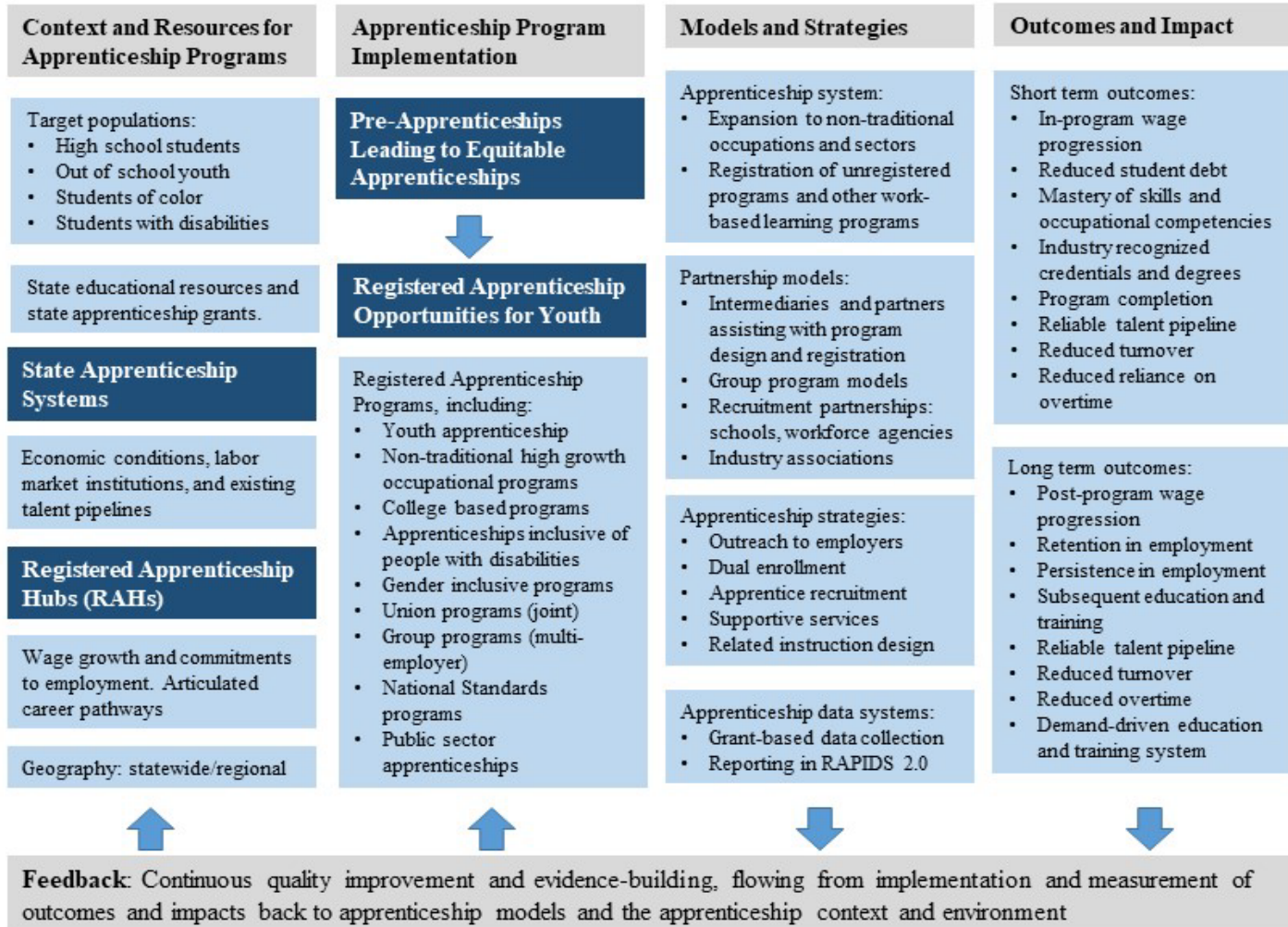
<sup>18</sup> Design report for the Apprenticeship Evidence Building Portfolio is unpublished.



The framework identifies the context that the grantees are operating in and the objectives the grants seek to address— promotion and awareness of youth apprenticeship and pre-apprenticeship, alignment between education, workforce, and employer partners, and the creation and expansion of youth apprenticeship programs. It includes resources that may be used to support grant activities: the ABA grants themselves, as well as other relevant national initiatives or existing state and local apprenticeship systems and partnerships. The framework also specifies the components of the apprenticeship system and partnerships that shape the implementation of youth apprenticeship and pre-apprenticeship programs, and strategies the grantees and partners use to increase awareness and expand youth apprenticeship. Finally, it includes the expected short- and long-term outcomes (based on the performance measures in the grant announcement) for pre-apprentices, apprentices, business and industry, and state and local systems. The categories of information in the framework represent the items included in the data collection instruments. Because this is an implementation study rather than a long-term impact study, the special topic briefs and the final report will primarily cover the short-term outcomes rather than the long-term outcomes, although positive short-term outcomes and experiences may be indicative of a strong foundation for longer-term success for the pre-apprentices and youth apprentices and the programs supported by the ABA grants.

FIGURE 1

Conceptual Framework for Documenting and Assessing the Implementation of the Apprenticeship Building America Grants



Source: Created by authors.

## Methods

To address the range of research questions, the study will rely on formal implementation analysis as it has evolved in the methodological literature and as part of program evaluation. This involves examining how and why policies and programs operate and perform as they do; the factors that influence program structure, organization, and management; and the perceived effects these factors have on outcomes (Holcomb and Nightingale 2003). To address the research questions and examine these factors, the Implementation Study of the ABA Youth and Pre-apprenticeship grants will document and assess the implementation of the grants from multiple perspectives—grantees, partners (including employers), and apprentices and pre-apprentices.

The study team will use an inductive approach through team coding of interview notes and interview data analysis meetings where site visit team members and coders discuss emerging themes to provide multiple perspectives, harmonize team coding, ensure analytical validity, and enrich the analysis. The coding will also be aligned with the detailed research questions discussed earlier. This applied thematic analysis is discussed in more detail in the Analysis and Reporting section, below.

The ABA Youth and Pre-apprenticeship grant implementation study will be conducted in parallel with the ABA State Apprenticeship System and Hubs grant studies,<sup>19</sup> and with the YARG evaluation under the Apprenticeship Evidence-Building Portfolio. Some staff are working across these studies and all staff will be in at least informal communication with each other. In addition, the ABA evaluation includes a funded, contractual, cross-study coordination task to ensure that research findings and data collection are leveraged across studies. The ABA evaluation also includes a quarterly Apprenticeship Research Network meeting to ensure that evaluators are learning about new findings outside the DOL evaluation contracts. The ABA Youth and Pre-apprenticeship implementation study will utilize these connections to analyze data in light of the themes and findings of the other research efforts, as appropriate. For example, if the YARG evaluation identifies a typology of youth apprenticeship program models that is useful for analyzing other grantees, the ABA Youth and Pre-apprenticeship study will consider using the YARG typology or highlighting how ABA grantees differ from YARG grantees.

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<sup>19</sup> For a summary of the YARG evaluation and other related evaluations, see <https://www.dol.gov/agencies/oasp/evaluation/completedstudies/Apprenticeship-Evidence-Building-Portfolio>. For a summary of the Apprenticeship Building America grant evaluation, see [https://www.dol.gov/agencies/oasp/evaluation/currentstudies/Registered\\_Apprenticeship\\_Initiatives\\_Evaluation](https://www.dol.gov/agencies/oasp/evaluation/currentstudies/Registered_Apprenticeship_Initiatives_Evaluation).

Coordinating data analysis across studies in this way will help to build a coherent body of knowledge on youth and pre-apprenticeship that builds on prior learning.

The main sources of data for the implementation study are a web-based grantee survey, interviews with grantees and partners (including employers), a web-based participant survey, focus groups with participants. The data collected will be supplemented with grant documents, such as the grant applications and quarterly progress reports submitted to DOL. The next chapter describes our data sources in detail.

# Data Sources

To answer the research questions, the study team will collect data from leaders and staff representing the ABA Youth and Pre-apprenticeship grantees and their partners (including employers, education and training providers, supportive service providers, and others) as well as apprentices or pre-apprentices enrolled in programs created or expanded through the grants. The team will conduct surveys and site visits (to include interviews and focus groups). They will also use secondary data sources (e.g., grantee reporting) and Workforce Integrated Performance System (WIPS) apprentice data to inform the site visits and interpret findings. This chapter describes the data collection activities and the review of grant documents.

## Web-Based Survey of Grantees

The web-based survey will include all ABA grantees in the Youth and Pre-apprenticeship grant categories. The survey questions will cover a broad range of topics related to how grantees have structured and implemented their apprenticeship initiatives. The survey will take approximately three hours for grantee staff to complete based on the length and detail of the questions. Grantees who have difficulty completing the survey online will have the opportunity to complete it as a phone interview.<sup>20</sup> Since grantee participation in the evaluation is required by their grant agreement, we expect a 100 percent response rate. The study team anticipates fielding the web-based survey to all grantees in the spring of 2024 after receiving Office of Management and Budget (OMB) approval. This section describes our approach to conducting the survey.

## Survey Topics

The survey will be designed to address the research questions but follow a more logical flow for grantees. In addition to correlating with the research questions, the topics of the survey are built from prior surveys in similar evaluations of the Youth Apprenticeship Readiness Grants (cited above), which had a 100 percent response rate for 14 grantees, and the American Apprenticeship Initiative grantee survey, which had a 100 percent response rate for 45 grantees.<sup>21</sup> Face validity of these instruments

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<sup>20</sup> Delivery of the survey in a virtual interview has been preferred by some Youth Apprenticeship Readiness Grant respondents.

<sup>21</sup> For more information on the American Apprenticeship Initiative grant evaluation, see <https://www.apprenticeship.gov/evaluation-american-apprenticeship-initiative-aii>.

were established by pretesting with grantees and review by evaluation and apprenticeship experts, and public review and comment. The survey will include the topics listed below:

- Respondent Contact Information
- Basic Information about Your Grant and Progress to Date in Achieving Grant Goals
- Grant Context
- Expansion Strategies
- Employer Recruitment and Engagement Under the Grant
- Apprentice Target Population, Recruitment, and Intake
- Racial and Gender Equity in Youth Apprenticeship and Pre-Apprenticeship Programs
- Related Education and Instruction
- On-the-Job Training/Work-Based Learning
- Supportive Services
- Partnering Organizations
- Pre-apprenticeship Program Design
- Sustainability Plans and Lessons Learned

The survey questions are mostly multiple choice and closed-ended but there are some open-ended questions to give respondents a chance to provide additional context to their answers. In addition, the questions provide respondents with the option to choose “other” and add a response so the team can capture the full range of activities implemented by grantees.

## Design and Pilot Testing of the Survey Instrument

The study team will use the software program Qualtrics<sup>22</sup> for programming and administering the survey. This survey software offers a user interface that is modern, secure, and easy to navigate for respondents.<sup>23</sup> It allows for easy follow-up emails with respondents to increase the response rate. The software will also facilitate generating tabulations of responses as surveys are completed by grantees and processed.

Prior to full-scale implementation of the survey, the team will pilot test the survey with up to three grantees to ensure that the instrument (and each question) is clearly written and understandable to respondents, offers respondents a complete and understandable listing of response categories for each

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<sup>22</sup> For more information, visit <https://www.qualtrics.com>.

<sup>23</sup> “Security Statement,” Qualtrics, accessed September 7, 2023, <https://www.qualtrics.com/security-statement/>.

closed-ended question, and tests our initial time estimates for completion. Those grantees pilot testing the survey will be asked to comment on the clarity of the questions, suggest additional questions, identify questions for deletion or revision, and rate the ease of use of the web-based application. Following the pilot test, the team will make any needed changes to the instrument, web-based application, or survey procedures. Decisions about survey revision will be made in consultation with the study team, DOL, and – when appropriate – the Technical Working Group. The survey will be administered in English. All grant agreements and documentation are provided by DOL in English, so we assume a grant staff member is available to respond in that language. If a need arises for translation of the survey into another language, the study team will pursue translation.

## Survey Administration

Prior to fielding the survey, the study team will ask a representative of CEO or Office of Apprenticeship to email all grantee agencies to notify them of the survey effort and provide details about the purpose and format of the survey, general instructions on how to access and complete the survey and contact information should the grantee have questions about the survey. The study team will provide sample text for this email to DOL in advance for dissemination to grantees.

On the scheduled date for releasing the survey, the study team will email the grantee contact with a link to the survey and instructions for survey completion. With the web-based application, the study team will be able to track which grantees have started the survey and monitor their progress and follow up with grantees that have not started or completed the survey by a certain date. Respondents will be able to share the survey link with others involved in grant activities if needed to complete it. Additionally, respondents will be able to work on and save responses to specific questions in the survey at any time, so that it is possible for respondents to complete the survey incrementally (i.e., skip parts of the survey and come back later to complete them).

Grantees will have six weeks to respond to the survey. Grantees will submit one survey response per grantee although as noted above, multiple individuals representing the grantee may answer different parts of the survey if survey links are shared. With four weeks remaining in the survey period, the study team will send an electronic reminder of the due date for the survey and an offer of technical support for any states having difficulty completing it. We expect to have a 100-percent response rate as the grantees are required to participate in DOL-sponsored evaluation activities in their grant

agreements. Grantees who have difficulty completing the survey online will have the opportunity to complete it as a phone interview.<sup>24</sup>

The study team will resolve any quality control errors or omissions in survey responses via email or telephone contact with the grantee's survey respondent. Additionally, it will be possible to review responses to open-ended questions across all grantees, and, if necessary, to follow-up with the respondent if the open-ended answer is unclear. Responses will be viewed by key designated personnel and will only be discussed directly with the participant to ensure confidentiality of responses. The study team will follow up with each grantee that has not submitted a survey instrument by the due date to encourage them to complete the survey.

To ensure the integrity of the data, the team regularly checks submitted data through the fielding process, identifying any unexpected results that may require follow up or to ensure skip-logic is working as expected. Since not all survey items force a response, these regular checks also help the team to anticipate levels of item nonresponse. After the survey closes, the team will conduct a pre-analysis to identify outliers, item nonresponse rates, and other data irregularities.

The team will clean and finalize the raw data to prepare for the analysis. The team will clean and code variables to prepare the analysis file and will also prepare documentation and a codebook for the analysis. Finally, the team will tabulate responses to each survey question (i.e., absolute and relative frequency) to look at basic statistics such as mean/median/minimum/maximum and frequencies, depending on the question type.

## Site Visits, Interviews, and Focus Groups with Selected Grantees

The study team will conduct site visits, including interviews with staff and partners of 12 of the total 19 Youth and Pre-apprenticeship grants and focus groups of up to 9 participants in each of the 12 selected grantees. Each interview will provide an opportunity to learn about the implementation of grant activities across an expansive group of grantee and partner staff, allowing for a range of perspectives on how grants are currently structured and operate at the grantee and program levels. Currently, the team's plan is to conduct data collection in fall 2024. The focus groups will provide an opportunity to learn about the experiences of participants, including how they learned about the grant program and their experiences applying for and participating in grant services, pre-apprenticeship training, or

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<sup>24</sup> Delivery of the survey in a virtual interview has been preferred by some Youth Apprenticeship Readiness Grant respondents.



apprenticeship training. The exact timing of data collection will be determined in close collaboration with DOL and the technical working group (TWG) and based on OMB clearance. The TWG is a group of researchers and practitioners selected by the project team and DOL that provides independent methodological and content advice on study design and findings.

## Interview Topics

The interview topics are designed to address the research questions but follow a more logical flow for grantees. Interview topics were determined by identifying information that was required to answer each research question that would be difficult or impossible to obtain from closed-ended survey or program data. The interview questions were reviewed by other team members and by CEO and the Office of Apprenticeship. They draw on prior apprenticeship interview guides, including for the American Apprenticeship Initiative evaluation and the Youth Apprenticeship Readiness Grants evaluation (both described above). The interview topics are listed below:

- Personal background and history with the grant
- Basic grant information and progress to date
- Grant context and early implementation challenges, including prior experience with apprenticeship and apprenticeship infrastructure
- Grant structure, including subgrantees, partner, and staffing
- Employer engagement strategies and experiences
- Pre-apprentice target populations, recruitment, and intake
- Apprentice target populations, recruitment, and intake
- Related instruction for major apprenticeship programs
- On-the-job training for major apprenticeship programs
- Supportive services
- Non-employer partner roles
- Pre-apprenticeship program design and experiences
- Sustainability plans and lessons learned

Based on our experience in prior evaluations and the fact that the grant director is ultimately responsible for grant operations and reporting, the grant director will be able to speak to all or almost all topic areas. It is difficult to anticipate what topics will be relevant for other interviewees to answer until those interviewees are identified and their roles clarified by the grantee. Staff and partners are involved in different grant activities across grants. Once an interviewee is identified the interviewer

may not always know what interview topics will be the most relevant until the interview is under way. The study team is trained before each interview effort by the task lead to facilitate semi-structured interviews in a way that guides respondents to topics where they work and are knowledgeable and skip sections that appear to be less relevant. Study team members also draw on prior evaluation experience, particularly with apprenticeship practitioners.

## Grant Selection

Working closely with DOL, the study team will purposively select the 12 grants for the site visits. The team will select grants to ensure variation in:

- Apprenticeship models used (a balance between youth and pre-apprenticeship grants), and partnerships established. The ABA grants are not proscriptive on the model and partnership used by grantees, so grantees have proposed a variety of apprenticeship models in their grant applications. Since apprenticeship models structure how and what services are delivered, variation in models is identified as a selection criterion.
- Industry and occupational focus of the grant. Job opportunities and use of apprenticeship varies by industry and occupation. Since industry and occupation are important determinants of apprentice wages and employment prospects, variation in industry and occupation is identified as a selection criterion.
- Target age of participants served, ensuring coverage of high school aged pre-apprentices and youth apprentices. Kuehn et al. (2023) have shown that the registered apprenticeship system substantially underserves high school aged youth, so variation in target ages is identified as a selection criterion.
- Target populations to be served (especially those targeting underserved groups). DOL has expressed interest in equitable access to apprenticeship to the study team, so variation in target populations is identified as a selection criterion.
- Geographic area served by the grant. Different regions of the country experience different local economic conditions, labor market regulations, and past experiences with apprenticeship, so variation in geographic area served is identified as a selection criterion.

Variation in these characteristics ensures that site visit data collection describes the full range of grantee experiences rather than focusing on grantee types that are most common. This is known as “saturation” in qualitative research.<sup>25</sup> We will submit a memo to DOL identifying the grants selected for visits, along with a list of alternates, should we need to replace recommended grants. The memo will include the reasoning, criteria, and process used for selection of grantees.

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<sup>25</sup> See Saunders et al. (2018) for a discussion of the ambiguities and difficulties around determining saturation.

## Pre-visit Activities

Implementation study team leaders will design and hold a training session for all team members before data collection begins. The first part of this training will be conducted together with staff from the other two implementation studies to ensure efficiencies and common standards across studies. During this part of the training the implementation team leaders will review the following topics:

- Purposes of the data collection
- How to hold conversations with lead grantee staff to schedule interviews with staff and partners and whether a focus group or small group interview of apprentices is appropriate
- Topics in the discussion guides for grantee staff, partners, and focus groups. Discussion guides provide detailed questions and prompts for each topic area, as well as informed consent scripts.
- Procedures for conducting the interviews virtually and in-person (depending on conditions due to the COVID-19 pandemic)

The second part of the pre-visit training will be conducted separately by each implementation study team. The Youth and Pre-apprenticeship grants study team will review the following topics:

- Specific features and research questions for the youth and pre-Apprenticeship grants
- Specific individuals to be interviewed or included in focus groups
- Procedures for cleaning notes and developing the grantee summary, a document that will summarize the activities of each grantee drawing on information collected across interviews. The grantee summaries are internal documents that help report authors who have participated in all site visits to quickly orient themselves to a grant and its operations.

Although there will be some overlapping elements of the second part of the training across the three studies of ABA implementation, the training sessions will be appropriately organized and adapted for each implementation study to align with the context, approaches, and strategies within each grant category. In the month prior to the visits, the study team will determine with DOL whether data collection will occur in-person or virtually. This will determine whether we plan site visits, where teams interview grantee staff and partners in person over three days, or we hold interviews by videoconference (preferable) or by phone (less preferable) over a limited period of time (two weeks or less, ideally). The study team will tailor the training for the two-person teams so clear guidelines and procedures are in place for the data collection mode used.

Prior to the start of site visit interview data collection, a DOL representative (such as a federal study officer or staff from the Office of Apprenticeship) will send an email notifying each of the twelve selected grantees that they have been selected for site visits as part of the implementation study. (Grantees are required to participate in DOL national evaluations as part of grant requirements.) Once

grantees have been notified, the two-person teams assigned to each grantee will send a follow-up (introductory) email and then call the grantee contact person(s) to identify which grantee and partner administrators/staff will participate in the interviews and to begin the process of scheduling them. The teams will work with both grantee and partner organizations (including at least one employer) directly on scheduling. Since employers are not required to cooperate with the evaluation, the study team will determine with the grantee which employers will be most likely to participate. To gain employer's cooperation we will be flexible in scheduling and offer shorter interviews, if necessary. We will also emphasize the interview as an opportunity to highlight their work and training efforts. The teams will focus on interviews with the grantee staff first to gain the overall picture of the grant activities, and then interview the partners about their specific roles.

As part of the planning process, the two-person teams will identify general types of roles and responsibilities for individuals to be interviewed that are most relevant for each grantee. The mix could vary considerably across grantees and partners based on program size, structure, and types of apprenticeship programs funded. Prior to the start of data collection with each grantee, the two-person teams will review the grant application, quarterly reports, and any other available background about the grant activities (such as grantee websites).

## On-Site Activities

Whatever mode of data collection used (in person or virtual), the two-person teams will conduct one-hour interviews with grantee staff and partners for 12 grantees. The two-person team will have a senior member leading the interviews and a junior member taking notes, asking for clarifications and follow-up, and keeping track of time. For each grantee, the teams will interview at a minimum one (1) grant director, and up to three (3) additional grantee staff and staff at up to 3 partner organizations (with at least one being an employer) for a maximum total of 7 interviews per grantee.

At the start of each interview, the senior team member will provide an introduction of the team and the implementation study using the language in the discussion guide. (Discussion guides provide detailed questions and prompts for each topic area, as well as informed consent scripts). They will then read the informed consent, answer any questions from the respondents, and obtain verbal consent for interviews. The teams will ask respondents if we can record the interview to ensure the accuracy of our notes. The recording software will automatically transcribe the interview. The study team will refer to this transcription in cleaning their notes.

The senior team member will then begin asking questions in the discussion guide. For the interviews, the team will review grantee documents and tailor questions to the design of grant activities and existing knowledge to be as efficient as possible with the respondents' time. The guides include the range of possible questions, and the teams should not expect to ask every question of each respondent. The interviews will be semi-structured, and the respondents may not address topics and questions in the order that is in the guide. The senior team member must be prepared to come back to topics and ensure that all relevant questions are asked. Relevancy is determined based on the answers of the respondent. For example, if a respondent informs the interviewer that they are not involved in program recruitment and intake, the interviewer will skip that section. A similar approach will be used for focus groups of apprentices, who will be recruited with the support of grant staff in accordance with processes approved by the Institutional Review Board. Upon completion of the focus group, the participant will receive a \$25 gift card by email.

We will determine one month prior to data collection whether it will be conducted virtually or in person, in close collaboration with DOL and the ABA grantee. With data collection currently scheduled for the fall of 2024, the study team expects data collection to occur in person based on our current understanding of the COVID-19 pandemic and the relative efficiency of data collection on-site or virtually. Below, we discuss how in-person and virtual data collection would occur.

### **In-Person Site Visits**

Should the teams be able to conduct data collection in-person, the teams will conduct two- to three-day site visits to the grantee and their partners' locations in a single trip. They will work closely with the grantee staff and partners to develop a schedule for the visit to maximize time on site and ensure the teams can interview with the respondents identified in the pre-visit discussions and that travel between locations is feasible. The two-person teams will conduct interviews in a private office or room on-site following established procedures for maintaining strict individual privacy, including signed nondisclosure and confidentiality agreements by research staff and saving anonymized interview notes on secure platforms.

Although virtual interviews could be conducted for all sites, there may be advantages to in-person site visits. One is that teams are able to observe operations in real-time, especially if there are apprentices on-site. When it is feasible, the teams will request to join or observe a virtual classroom or a hands-on session with apprentices. Another advantage is being able to collect documents while on-site. The teams will need to follow up with respondents with a list of documents discussed in the interview to request they be sent electronically. In-person site visits may also provide greater context for data

collection, rapport with grant staff, and opportunities to seek clarification on grant activities. During an organized in-person site visit the study teams may connect with grant staff for logistical purposes outside the formal interview, which allows them to cultivate critical context or clarification that is not possible during a virtual site visit. These potential benefits will be weighed against the potential benefits of virtual site visits in particular cases.

## Virtual Data Collection

In the event we decide to conduct interviews virtually, the two-person teams will use the mode of communication the respondent is most comfortable with—phone or videoconferencing. We have multiple videoconferencing platforms to address respondents’ security restrictions or preferences, including Microsoft Teams, Webex, and Zoom. Each interview will begin with a confidentiality, privacy, and consent statement, informing the respondent that the information they provide will be stored securely and only made available to members of the research team, who keep the information confidential. The teams will be trained on these platforms to ensure settings during the videoconference call meet the respondents’ security needs and preferences. The team will also have a “back-up” platform available, another videoconferencing platform or phone, should technological issues occur, and the team and respondent need to quickly transition to another mode.

During a site visit, the teams would typically have a limited time for data collection – for example, the days on site. With virtual interviews, the need to confine the interviews to consecutive days is unnecessary. However, constraining data collection for one grantee to a limited time period ensures the staff and partners’ perspectives describe program implementation at a similar point in time. For this data collection effort, we will strive for a two-week data collection window for each grantee.

## Post-visit Activities

Following each site visit, site visit teams will clean the detailed interview notes and produce a summary of each site visit that highlights key features of the grant and begins to draw themes to facilitate the analysis. If DOL chooses to conduct an impact and cost study of pre-apprenticeships, the ABA Youth and Pre-apprenticeship implementation study team will share the site summaries produced from the site visit with the impact evaluation team to support the design of the impact and cost study of pre-apprenticeship as well as the interpretation of the findings. The site visit teams will also send thank you notes to all the grantees and partners who participated in interviews.

## Participant Survey

The survey will include participants in the grant programs operated by ABA Youth and Pre-apprenticeship grantees. The participant survey is designed to collect information that will provide the breadth of knowledge needed to systematically understand how participants learn about and experience their apprenticeship programs, as well as participant outcomes. The survey will take approximately 1 hour for participants to complete. The study team anticipates fielding the participant survey in the fall of 2024 after receiving OMB approval. This section describes our approach to conducting the survey.

## Participant Survey Topics

The survey is designed to address the research questions. The topics we will cover include the following:

- Respondent Background
- Program Enrollment
- Apprenticeship and Pre-Apprenticeship Program Characteristics
- Skills and Knowledge Gained During Apprenticeship and Pre-Apprenticeship
- Outcomes
- General Perceptions of the Program, including Strengths and Weaknesses

The survey questions are mostly multiple choice and closed-ended but there are some open-ended questions to give respondents a chance to provide additional context to their answers. In addition, the questions provide respondents with the option to choose “other” and add a response so the team can capture the full range of activities implemented by grantees.

## Design and Pilot Testing of the Participant Survey Instrument

The design and piloting of the participant survey instrument will be similar to the grantee survey. The participant survey design is informed by the participant survey for DOL’s American Apprenticeship Initiative (AAI) evaluation, using identical or similar questions to the AAI evaluation in some cases, and adding new content as appropriate.<sup>26</sup> The study team will use the software program Qualtrics for programming and administering the survey. Prior to full-scale implementation of the participant survey,

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<sup>26</sup> The AAI Participant Survey Instrument is available at [https://www.reginfo.gov/public/do/PRAViewIC?ref\\_nbr=201903-1290-003&icID=235434](https://www.reginfo.gov/public/do/PRAViewIC?ref_nbr=201903-1290-003&icID=235434).

the team will pilot test the survey with up to three grant participants to ensure that the instrument (and each question) is clearly written and understandable to participants, offers participants a complete and understandable listing of response categories for each closed-ended question, and tests our initial time estimates for completion.<sup>27</sup> Following the pilot test, the team will make any needed changes to the instrument, web-based application, or survey procedures. For example, if participants indicated that certain questions were not clear they may be reworded or omitted.

## Participant Survey Administration

Prior to fielding the participant survey, the study team will ask a representative of CEO or Office of Apprenticeship to email the ABA Youth and Pre-apprenticeship grantees to notify them of the survey effort and provide details about the purpose and format of the survey and contact information should the grantee have questions about the survey. The study team will provide sample text for this email to DOL in advance for dissemination to grantees. If contact information for participants is not available in data already provided to DOL, the email will request names and email addresses for all participants.

On the scheduled date for releasing the survey, the study team will email randomly selected participants with a link to the survey and instructions for survey completion. With the web-based application, the study team will be able to track which participants have started the survey and monitor their progress and follow up with participants that have not started or completed the survey by a certain date. Respondents will be able to work on and save responses to specific questions in the survey at any time, so that it is possible for respondents to complete the survey incrementally (i.e., skip parts of the survey and come back later to complete them).

Participants will have six weeks to respond to the survey. Participants will submit one survey response. With four weeks remaining in the survey period, the study team will send an electronic reminder of the due date for the survey and an offer of technical support for any participants having difficulty completing it. Upon completion of the survey the participant will receive a \$25 gift card by email. We expect to have a 33-percent response rate based on the response rate for the AAI participant survey, which was administered online and by phone for individuals who did not respond to the online survey (Walton, Gardiner, and Barnow, 2022).

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<sup>27</sup> Those grantees pilot testing the survey will be asked to comment on the clarity of the questions, suggest additional questions, identify questions for deletion or revision, and rate the ease of use of the web-based application.



As with the Grantee Survey, to ensure the integrity of the data, the team regularly checks submitted data through the fielding process, identifying any unexpected results that may require follow up or to ensure skip-logic is working as expected. Since not all Participant Survey items force a response, these regular checks also help the team to anticipate levels of item nonresponse. After the survey closes, the team will conduct a pre-analysis to identify outliers, item nonresponse rates, and other data irregularities.

The team will clean and finalize the raw data to prepare for the analysis. They will clean and code variables to prepare the analysis file. The team will also prepare documentation and a codebook for the analysis. Finally, they will tabulate responses to each survey question (i.e., absolute and relative frequency) to look at basic statistics such as mean/median/minimum/maximum and frequencies, depending on the question type.

## Program Data on Apprentices from WIPS

To further inform the implementation study and support the data collected through the quarterly progress reports, the study team will request from DOL an extract of the data that Youth and Pre-apprentice grantees enter about their apprentice participants into WIPS. These grantees are required to enter data about individual apprentices according to the participant individual record layout (PIRL). The types of data collected about apprentices include information about (1) their entry into and exit from the services provided by the grant, (2) their demographic background and education and employment history, and (3) the grant-related activities they participated in.

These individual-level data entered into WIPS will allow the team to conduct a deeper analysis than possible with the aggregate data reported in the quarterly progress reports. For example, using the individual-level data, we might examine how the participation of underrepresented populations in apprenticeship programs, such as women or people of color, compared to other populations. This analysis could include whether these underrepresented populations exit apprenticeships before completion at higher rates than other populations. We plan to request the extract of the grantee data in early 2025, so that we can collect as much of the grantee data as possible to inform the report.

## Grant Documents

Grant documents, which include applications, quarterly progress reports, and other documents—will be used to support the implementation study. These documents will inform site visit selection and help

prepare site visit teams for interviews. They will also provide important context to the implementation analysis of the extent to which grant programs are being implemented according to plan. The team has already reviewed the grant applications for the knowledge development task, but it will also use the applications to prepare for the site visits and inform our analysis. The quarterly reports provide valuable information on financial data and grant activities that are not being collected through other data collection activities. As applicable, the team will review documents obtained during site visits.

# Analysis and Reporting

This chapter describes our analysis and reporting efforts to share the findings from the implementation study. To address the research questions, the study team will rely on formal implementation analysis methods for program evaluation. This includes examining how and why youth apprenticeship programs and pre-apprenticeship programs are designed, operate, and perform as they do; the factors that influence program structure, organization, and management; outcomes for pre-apprentices, apprentices, employers, apprenticeship programs, and the apprenticeship system; and the perceived effects that program design and operations have on outcomes.

The study team will use an inductive approach through team coding of interview notes and interview data analysis meetings where site visit team members and coders discuss emerging themes to provide multiple perspectives, harmonize team coding, ensure analytical validity, and enrich the analysis. The coding will also be aligned with the detailed research questions discussed earlier.

## Analysis

Data collection will generate a considerable volume of data—the surveys, employer interviews, site visit data (interview notes and transcripts, which will serve as back-up documentation for notes), follow-up phone interviews, and grant documents—that the study team will analyze to address the research questions for the implementation study. Table 4 summarizes which data sources will be used to answer each of the nine research questions. Grantee perspectives are primarily derived from the Grantee Survey and Grant Staff Interviews, although goals and partnerships can also be identified in Grant Documents. Participant perspectives and outcomes will come from the Participant Survey, Participant Focus Groups, and Program Data. We will undertake two analytical tasks—a descriptive analysis and a thematic analysis.

TABLE 4

## Research Questions and Analysis Data

Research question	Data sources
What are the components of existing models of pre-apprenticeship programs? How do the components of pre-apprenticeship programs funded under this grant program (e.g., technical training, mentorship, support services, program duration and design) differ from other existing pre-apprenticeship programs?	<ul style="list-style-type: none"> <li>▪ Grantee Survey</li> <li>▪ Grant Staff Interviews</li> <li>▪ Partner Interviews</li> <li>▪ Grant Documents</li> </ul>
How do the goals and intended outcomes of pre-apprenticeship programs vary?	<ul style="list-style-type: none"> <li>▪ Grantee Survey</li> <li>▪ Grant Staff Interviews</li> <li>▪ Grant Documents</li> </ul>
What strategies are used to implement pre-apprenticeship programs? Which strategies are reported or appear to be most successful? What are the elements of a quality pre-apprenticeship program as perceived by the grantees?	<ul style="list-style-type: none"> <li>▪ Grantee Survey</li> <li>▪ Grant Staff Interviews</li> <li>▪ Partner Interviews</li> <li>▪ Participant Focus Group</li> <li>▪ Grant Documents</li> </ul>
What strategies were perceived to be have been effective in growing the number of pre-apprenticeship programs, with a focus on pre-apprenticeship opportunities that articulate to RAPs as part of a career pathway? Among those that articulate to RAPs, what are the different articulation strategies and what have been or are perceived to be effective strategies?	<ul style="list-style-type: none"> <li>▪ Grant Staff Interviews</li> <li>▪ Partner Interviews</li> <li>▪ Participant Focus Group</li> </ul>
What types of partners did grantees work with to meet the goals of the grant? What were the roles and responsibilities of these partners and how did they contribute to meeting the goals of the grant? What resources did the grantee provide to partners?	<ul style="list-style-type: none"> <li>▪ Grantee Survey</li> <li>▪ Grant Staff Interviews</li> <li>▪ Partner Interviews</li> <li>▪ Grant Documents</li> </ul>
What are some promising practices for working with industries/sectors, types of employers (such as large or small businesses), and other key stakeholders from the grantees' perspective? How were regional workforce systems and partnerships developed and maintained? How does this compare with prior apprenticeship studies?	<ul style="list-style-type: none"> <li>▪ Grantee Survey</li> <li>▪ Grant Staff Interviews</li> <li>▪ Partner Interviews</li> </ul>
What are the completion rates and wages for participants in apprenticeship and pre-apprenticeship programs? How do these completion rates and wages differ by various subgroups, including underrepresented populations?	<ul style="list-style-type: none"> <li>▪ Grantee Survey</li> <li>▪ Participant Survey</li> <li>▪ Program Data</li> </ul>
In what ways did grantees expand and/or create new registered apprenticeship and pre-apprenticeship programs for youth?	<ul style="list-style-type: none"> <li>▪ Grantee Survey</li> <li>▪ Grant Staff Interviews</li> <li>▪ Partner Interviews</li> </ul>
What strategies have been or were perceived to be effective in increasing the participation of youth (16-24) in RAPs and pre-apprenticeship programs that lead to RAPs?	<ul style="list-style-type: none"> <li>▪ Grant Staff Interviews</li> <li>▪ Partner Interviews</li> <li>▪ Participant Focus Group</li> </ul>

Source: Created by the authors.

## Descriptive Analysis

The descriptive analysis will provide a comprehensive picture of the components, models, partnerships, and strategies implemented by the ABA Youth and Pre-apprenticeship grants. This analysis will address

the main research question: What are the components of existing models of pre-apprenticeship programs? How do the components of pre-apprenticeship programs funded under this grant program differ from other existing pre-apprenticeship programs? The analysis will use data from the web-based survey and site visits. These data will be supplemented by information gleaned from the review/extraction of all grantee applications, and where possible, by other data grantee performance reporting to create an analysis file.

Comparisons of programs funded under the ABA grants to existing apprenticeship and pre-apprenticeship programs will be made based on a review of the literature on those existing programs, including prior DOL evaluations of the AAI, Closing the Skills Gap, Scaling Apprenticeship, and Youth Apprenticeship Readiness Grant programs. In addition, the interviews will collect information on grant context, which includes the grantees' prior experience with apprenticeship and pre-apprenticeship as well as the apprenticeship infrastructure in their service area.

The team will first develop descriptive univariate tabulations of the survey data. They will then produce selected cross-tabulations when sample size allows, especially to look at variation across industries, target populations, and program models. The analysis will align with the detailed research question topics discussed earlier.

The descriptive analysis will present the information collected in the survey in formats that allow readers to quickly grasp the range of programs and activities. The analysis will include tables, charts, and graphs to illustrate key findings, and the team will provide full sets of survey data tables as appendices to the final report. The team will identify meaningful typologies or groupings of components, models, partnerships, and strategies implemented by grantees, occupational groups, industries, and target populations. The descriptive analysis will include non-causal quantitative analyses such as comparison of means between groups and descriptive statistics.

## Thematic Analysis

The team will also conduct a thematic analysis of the employer interviews and site visits to provide an in-depth understanding of the implementation of components, models, partnerships, and strategies and highlight promising approaches to youth apprenticeship and pre-apprenticeship. This analysis will address two main research questions: (1) What are the components of existing models of pre-apprenticeship programs? How do the components of pre-apprenticeship programs funded under this grant program (e.g., technical training, mentorship, support services, program duration and design) differ from other existing pre-apprenticeship programs? and (2) What strategies have been or were

perceived to be effective in increasing the participation of youth (16-24) in RAPs and pre-apprenticeship programs that lead to RAPs? The study team will use the “applied thematic analysis” coding and analysis approach. The team will employ this inductive approach through team coding and analysis meetings where site visit team members and coders discuss emerging themes to provide multiple perspectives, harmonize team coding, ensure analytical validity, and enrich the analysis.<sup>28</sup> They will align the coding with the detailed research question topics discussed earlier.

The team will use analysis techniques to draw out themes and patterns across the grantees and types of respondents to ensure an understanding of the programs and services from all perspectives. We will construct tables to organize qualitative data in a way that these patterns can be observed. The implementation study will highlight examples of innovative components, models, partnerships, and strategies to offer insight into particular phenomena. The team will then use the thematic analysis to describe the typologies more completely and identify grantees that align with these typologies.

As they conduct the thematic analysis, the team will be cognizant of insights and typologies developed in the implementation evaluations of the YARG evaluation, and the Scaling Apprenticeship and Closing the Skills Gap grant programs. Although data from these studies will not be directly used in this study of the ABA Youth and Pre-apprenticeship grants, the study teams in each implementation study will benefit from learning that occurs across grant contexts.

## Reporting

The study team will produce a final report and a summary brief on the implementation study and its findings. These will be delivered in February 2027. The report will include:

- An executive summary that provides the highlights of the implementation study and its findings
- An overview of the grant initiatives and evaluation design
- Findings based on the detailed research question topics
- Discussion of youth apprenticeship and pre-apprenticeship typologies that emerge from the findings
- Conclusions and implications for future initiatives

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<sup>28</sup> The team will determine the appropriate analysis tool for coding the notes, whether it is a qualitative statistical package such as NVivo or use of Microsoft Excel spreadsheets to be able to sort and analyze data in the analysis plan.

The report will be visually appealing and appropriate for technical and non-technical audiences. It will use graphs, charts, and other visuals to present data in a summary fashion. In addition, it will include a summary of findings at the beginning of each chapter and subheadings will be written as findings so key points are evident throughout the report.

The study team will also produce special topic briefs to explore specific questions related to youth apprenticeship and pre-apprenticeship. The study team will work in consultation with DOL to determine possible topics for an additional two to three brief(s) to be published during the study before the final report, on a timeline to be determined.

# Schedule

The anticipated data collection, analysis, and reporting schedule for the implementation study is as follows. This schedule reflects plans and current information at the time of publication of this design report. The project’s final report will document any further changes in timeline:

<b>Activity or Deliverable</b>	<b>Dates</b>
Survey Design and Pilot Testing of Grantee Survey	December 2023–February 2024
Fielding Grantee Survey	March–May 2024
Grantee Survey Analysis	June–September 2024
Site Selection Memo	June 2024
Site Visits	September–November 2024
Site Visit Data Analysis	December 2024–March 2025
Survey Design and Pilot Testing of Participant Survey	December 2024–February 2025
Fielding Participant Survey	March–May 2025
Participant Survey Analysis	June–September 2025
Study-related briefs	TBD
Final Report	February 2027
Final Brief	April 2027



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