URBAN INSTITUTE

Strategic Investments to Advance Apprenticeships in the US

Bhavani Arabandi and Leslee Haisma

March 2025

In the context of a tight labor market with more jobs than workers to fill openings, and as young people increasingly seek alternatives to college because of mounting debt, apprenticeships have become more important than ever.[1] Since 2015, the US government has invested more than $1 billion in modernizing the apprenticeship system and expanding apprenticeships to new populations, geographies, and sectors (Hegewisch 2024). In the past two years, the US Department of Labor (DOL) has leaned into positioning states as vehicles for apprenticeship growth, with more states beginning to invest in registered apprenticeship programs. Despite federal and state funding, postpandemic apprentice growth has not reached prepandemic levels (5–7 percent and 10–12 percent, respectively).[2] Additionally, apprenticeships remain underutilized because varying levels of funding and different priorities at the private, federal, state, and local levels complicate the funding landscape and pose a barrier to greater apprenticeship adoption. To advance apprenticeships in the US, we recommend that states provide sustained and strategic investments, improve cross-agency collaboration, match available funding to needs, and develop a state-level tool to navigate funding.

In registered apprenticeships, participants "earn while they learn," receiving mentorship and a portable certificate upon graduation, while employers gain a pipeline of skilled workers, improved productivity, and reduced turnover, among other benefits.[3] The last decade has seen increased federal investment in registered apprenticeships and an effort to expand apprenticeships to nonconstruction occupations, including those in health care, information technology, and advanced manufacturing. States too have adopted different investment strategies to spur apprenticeship growth, including providing incentives to employers and sponsors, expanding opportunities, and streamlining apprenticeship infrastructure. However, apprenticeship adoption has not matched this investment.

This brief examines the costs of scaling apprenticeships, how states are advancing apprenticeship with strategic investments, and findings from a study of apprenticeship funding in Colorado. We also make recommendations for sustained federal and state funding to scale registered apprenticeships, including the development of a state-level funding tool.

Costs of Scaling Apprenticeships

Program Costs

Administering a registered apprenticeship program (RAP) entails costs related to outreach, marketing, and recruitment; apprentices' wages and benefits; program start-up; on-the-job training; related technical instruction tuition and educational materials; mentors' time; administrative costs related to managing the program, such as recordkeeping, reporting, and compliance; and overhead. Costs can vary depending on industry sector and occupation. Some occupations require specialized training, tools, or equipment (leading to higher costs), and longer programs can also increase costs. One study of 13 businesses found that costs ranged from $25,000 to $250,000 per apprentice, with apprentice compensation over the course of the program and program length being the biggest differentiators in cost (Helper et al. 2016). All 13 businesses believed their apprenticeship programs not only improved their overall performance but also gave them a competitive advantage over other businesses.

An evaluation of the federally funded American Apprenticeship Initiative explored costs from the perspective of the grantee and found that apprenticeship experience mattered in terms of costs incurred. On average, grantees with prior experience spent $4,867 per apprentice, compared with $8,702 per apprentice spent by grantees with no experience (Katz et al. 2022). It should be noted that these figures are a combination of administrative and program delivery costs and do not include wages. For tech apprenticeships, the average cost per apprentice is approximately $4,000 in program administration costs, which does not include training, mentoring, wages, or other expenses such as supplies and materials (Elliott et al. 2022). These federal grant dollars are a strong public investment because they leverage other resources.

While these costs seem high, evidence from federally funded programs shows that hiring apprentices provides net benefits over time, and for every dollar spent on training apprentices, the employer earns a return on investment of $1.44, so long as indirect benefits (e.g., increased productivity, reduced turnover, and gaining a skilled workforce) are included in the calculation (Kuehn et al. 2022).

Apart from ongoing program costs, funding supportive services is key to overcoming employment barriers and retention challenges—though this adds additional costs to RAPs. Overall apprenticeship completion rates are low,[4] and there are gender and racial disparities in wages and completion rates. Only 15 percent of active apprentices are women, and most of them are in low-paying sectors such as health care, education, and the care economy.[5] Similarly, Black and Hispanic apprentices make up 17 percent and 27 percent, respectively, of all active apprentices and face barriers to completion and high-paying jobs.[6] Reasons for noncompletion can include personal or family problems, an apprentice finding a better-paying job, low-quality training and poor performance, lack of transportation (a particular pain point for youth apprentices), discrimination, or program cancellation (Walton, Gardiner, and Barnow 2022; Rege, Curnow, and Campbell 2023). It is important to note, however, that apprentices in federally funded programs—even in nontraditional occupations outside of construction—have high completion rates (Walton, Gardiner, and Barnow 2022).

Expansion Costs

Registered apprenticeship has long been used as a training model for the building trades in the US but is becoming more prominent in nontraditional sectors, such as health care, information technology, advanced manufacturing, and education.

The expansion of RAPs into new sectors, populations, and geographies comes with associated costs, such as the need to invest in industry-specific outreach, population supports, and supportive services. Since 2016, the federal government has made strategic investments to accelerate the expansion of apprenticeships among small- and medium-sized businesses as well as populations, industry sectors, and occupations that have not traditionally employed apprenticeships for building a skilled workforce. These investments include $150 million to scale apprenticeships through sector-based strategies; $100 million in cybersecurity, artificial intelligence, and health care; $47 million to 20 industry intermediaries; $38 million to four intermediaries to advance youth apprenticeship in multiple sectors and occupations; $175 million to 46 grantees as part of the American Apprenticeship Initiative; and more than $300 million in state apprenticeship expansion grants.[7] While these federal investments are important, states are seeking other ways to strategize apprenticeships that benefit employers and workers alike.

Infrastructure Costs

Apart from program and expansion costs, there are associated infrastructure costs, including the role of states in developing partnerships, conducting outreach to employers, assisting with program development, approving and registering standards, engaging in monitoring and compliance, and collecting data. DOL is creating industry-vetted, gold-standard national occupational frameworks[8] as well as a national Registered Apprenticeship Standards Library[9] (both led and produced by the Urban Institute) to jumpstart program design, but states also need to invest in the aforementioned roles.

Recognizing these multiple costs—programmatic, expansion, and infrastructure—states are appropriating their own funds to scale apprenticeships.

State Investments to Advance Registered Apprenticeship

States are increasingly investing in apprenticeships as a talent pipeline and way of growing their workforce. In the past two years, 28 states have pursued various funding, policy, and governance strategies to expand registered apprenticeships, including providing employer incentives, expanding opportunity, growing youth apprenticeship, making apprenticeship more inclusive[10], and streamlining apprenticeship infrastructure.

Incentivizing Sponsors and Employers

A key component of apprenticeship is employer partners. One way of incentivizing employers to adopt apprenticeship is providing funding to employers to offset costs. Several states offer subsidies, tax credits, and tuition support (ranging from $1,000 to $15,000) to make apprenticeships attractive to employers (Spaulding and Petrov 2023). Some states stand out in this regard.

- **California** invested $231 million in apprenticeship in fiscal year 2022–23, with funding streams dedicated to helping employers start and maintain programs. One stream is the Apprenticeship Innovation Funding formula grant, which allocates $135 million over three years to support sponsors with program and training costs. Sponsors can claim up to $3,500 per active apprentice per year, as well as a $1,000 completion bonus per apprentice and $9.98 per training hour per apprentice.[11]
- **Colorado** supports the growth of RAPs in new and emerging sectors by offering businesses up to $126,000 annually in tax credits for up to 10 apprentices.[12] The state also provides $2 million in scaling grants to start new apprenticeship programs or expand them into new geographies or populations in state-recognized high-priority sectors.
- **Illinois** offers up to $3,500 per apprentice and an additional $1,500 if the business or apprentices reside in an underserved area.[13]
- In **South Carolina**, employers can claim tax credits of up to $4,000 per apprentice or $6,000 per youth apprentice, with a $1,000 retention bonus upon completion for three additional years.[14]
- In **Missouri**, employers can receive tax credits of $1,500 per apprentice per year, up to $9,000.
- In **Georgia**, starting in 2025, employers can claim up to $50,000 for hiring up to 10 apprentices, split 50-50 when apprentices start an apprenticeship and when an apprentice is retained for one calendar year.[15]

States are also using incentive programs to bring underrepresented populations into apprenticeship.

- The **California Opportunity Youth Apprenticeship Grant**, established by S.B. 191, focuses on increasing participation in pre-apprenticeship and apprenticeship programs among "opportunity youth" (young people ages 16 to 24 who are not in school or are unemployed).[16]

The first grants were awarded in July 2024 ($31 million) for the 2024–2026 period. For round 2, the grant provides $12,000 per pre-apprentice for supportive services, training, recruitment, and administrative costs, as well as an educational stipend. It also provides $10,000 per apprentice for supportive services and launching and scaling programs.

- In **Washington State**, H.B. 2019 funds the Native American Apprenticeship Assistance Program[17] from an allotment of the state's budget to provide funding to tribes to cover apprentices' tuition costs, equipment, union fees, and supportive services.

Expanding Opportunity

States are making strides to expand apprenticeship to new sectors, populations, and geographies, with several having expanded into sectors outside of construction. Leaders include **South Carolina** (occupations for new apprentices include motor transport operator, K-12 teacher, emergency medical technician, and pharmacy technician, among others), **Oklahoma**, **New York**, **North Carolina**, **West Virginia**, **Kansas**, **Mississippi**, **Maine**, and **Connecticut** (AFA 2024). All these states braid public and private funding to support programs because no single funding source is large enough to cover or sustain a program in the long term.

Thirty states, for instance, have launched educator RAPs (using multiple funding sources) to tackle teacher shortages.[18] One federal grant is Workforce Innovation and Opportunity Act (WIOA) formula funding that can only be spent on participants who are enrolled in WIOA and face at least one barrier to employment. Other sources of federal funding for teacher apprenticeships include Apprenticeship Building America grants and State Apprenticeship Expansion grants to expand apprenticeship to priority sectors. In 2023, 35 of the 45 states and territories that received State Apprenticeship Expansion formula grants included education as a priority sector. Additionally, states have appropriated state funding to support teacher apprenticeships. In **Florida**, the state's department of education set aside $5 million to the state's Grow Your Own Teacher RAP. In **Colorado**, teacher degree apprenticeships launched in 2024 with the state's $85 million Opportunity Now grants, which are funded by the Office of Economic Development and International Trade.[19]

The COVID-19 pandemic exposed the tenuous state of child care in the US and the urgent need for reliable child care arrangements, especially for parents who are employed outside the home.[20] Several states, such as **Texas**, **Alabama**, **Colorado**, **Connecticut**, **Delaware**, **Montana**, and **Wisconsin**, have addressed child care issues through the creation or expansion of child care apprenticeships and invested in these efforts by braiding multiple funding sources, such as the American Rescue Plan Act, Preschool Development Grant, Child Care and Development Fund, and WIOA (Smith, Mercado, and Williams 2023). Some of these funding sources, such as the American Rescue Plan Act, are temporary, and states will need to identify new funding sources if they want to continue these efforts.

Recidivism among justice-involved people is high because they face several barriers to employment, including systemic racism (Nayak and Haisma 2024). Several states are supporting these individuals by helping them develop skills and find employment opportunities with apprenticeships. In **Iowa**, for instance, Iowa Workforce Development collaborates with Iowa's department of corrections and other agencies to help people find work once they leave prison and help employers find the talent they need. Since 2015, the program has grown by more than 700 percent.[21] Similarly, **Washington**, **Colorado**, and **Ohio** braid funding from state workforce development agencies, correctional facilities, unions, and federal grants to train incarcerated women in well-paid trade occupations, creating prison-to-work pathways.[22]

Several states are also launching public sector apprenticeships. In **California**, the Institute For Local Government launched a statewide initiative to pilot RAPs for high-need jobs in local government.[23] Funding comes from the state budget, including $175 million for apprenticeships in nontraditional programs and from private partners, such as the James Irvine Foundation, Eli and Edythe Broad Foundation, and High Road Training partnership.

Streamlining Apprenticeship Infrastructure

States have taken different approaches to developing capacity to administer their apprenticeship systems. For instance, to address shortages of state agency staff who can work with employers to start apprenticeship programs, **Colorado** provides funding to intermediaries to scale apprenticeships.[24] The state recognized 35 organizations working with employers and state agency staff toward this goal, highlighting the value of public-private partnerships.[25] In **South Carolina**, Apprenticeship Carolina is a statewide intermediary that raises awareness and works with employers and other intermediaries, such as the Urban Institute, to build programs and braid funding before registering the program with the federal Office of Apprenticeship.[26] Similarly, Talent Ready Utah is a state intermediary that connects employers and educational partners to grow apprenticeships and work-based learning opportunities in **Utah**.[27] Other states, such as **Iowa**, **Vermont**, and **Virginia**, have established new offices or agencies to streamline workforce development and training programs.[28] In **Kansas**, both an online guide that walks employers through the steps and documents for registering programs and an online process for the state's apprenticeship council to approve programs have resulted in a speedy and efficient process of 15 days from submission to approval.[29]

Despite these efforts by states, funding apprenticeships is challenging for both employers and the state agencies administering funding. The next section presents findings from a study of apprenticeship funding in Colorado to understand pain points and strategies to address these challenges.

Apprenticeship Funding in Colorado

Our research focused on determining the costs and funding needs of apprenticeship programs, available funding streams, and challenges encountered during the funding process. Key stakeholder groups identified for the study include intermediaries, employers and sponsors of registered apprenticeship programs, educators, and state-level agency staff.[30]

Findings from Sponsors, Employers, and Related Instruction Providers

Apprenticeship stakeholders in this group had experience administering programs or were partners (as employers or related instruction providers) to sponsors. They described the cost of administering programs, internal and external sources of funding, supportive services, barriers to accessing funding, and the impact of financing on programs offered. Below is a summary of our findings.

PROGRAM COSTS

Program cost needs in Colorado echo the national needs laid out above. Participants broke down their program costs from most to least expensive. Most sponsors observed that their largest cost is the labor involved in designing, marketing, and operating their apprenticeship programs.

"The most expensive part is the employers. Educating the employers, keeping the employers engaged, and getting them to make that decision to pilot." —Apprenticeship sponsor

Every participant expressed that related instruction—including curriculum development, instructor training and wages, accreditation fees, and alignment of programs from K-12 to postsecondary—is a large area where funding is needed. They also agreed that technical assistance in developing programs and tracking participants, training supplies and materials, and supportive services take time and effort to manage and incur significant costs. Other costs noted were credentials (e.g., exam fees), site rentals for related training, and graduation ceremonies.

While supportive services are not required and we do not know how often they are provided across the system, most participants considered these services vital to apprentices' success in their programs. Supportive services include transportation, housing, child care, academic wraparound services, apprentice assistance programs (such as for mental health and substance abuse), and financial coaching. Sponsors and employers considered these services one of the hardest areas to fund and often partnered with community-based organizations or private funders.

"Forty to fifty percent of Americans can't afford an unexpected $400 expense. So, we want to make sure that [apprentices] have the stability around their financial plan and their financial management so that doesn't get in the way of their career pursuits."
—Apprenticeship sponsor

Although most of the above costs are borne by sponsors, one employer (who was not the sponsor) noted that their largest cost is paying supervisors—who, in this case, also happen to be field experts and mentors to the apprentices—for on-the job-training. Other significant expenses include materials, equipment, and supportive services. Participants also mentioned that securing funding for certain expenses, such as marketing, communications, and wages for apprentices, is challenging.

BARRIERS TO ACCESSING FUNDING

Most participants rely on external funding sources to run their apprenticeship programs, with only one union-based program (also known as joint labor-management programs) sharing that their program could persist without outside funding. This notion of self-sustainment is also supported by research on funding for union programs, which has been sustained over decades (Boren et al. 2022). However, all participants agreed that there are barriers to accessing available funding. One key barrier is navigating the process of finding and applying for funding. Interviewees described the process of finding available funding that the employer or program would qualify for as difficult and requiring a significant amount of time and capacity to complete because "grant guidelines are often restrictive" in terms of sector, population, or geography. This is particularly hard on employers who may not be familiar with grant writing, data collection, and reporting requirements.

In addition to challenges related to accessing funding, participants identified another challenge. Often, for grants with no specific deadline (such as WIOA), funding is exhausted before the end of the year, meaning that even when programs apply and are deemed eligible, they are not guaranteed to receive funding.

Sponsors identified 15 external funding sources for apprenticeship programming, 7 of which were public grants and opportunities and 8 of which were private grants. Beyond external funding sources, two participants discussed their internal programmatic funding through employer fees, citing hourly training contributions in a union-based program, while another program sponsor charged employers 15 percent of the apprentice's first-year salary.

BRAIDING FUNDING

Most participants braided funding—meaning they combined two or more funding sources—to support different parts of their programs. Some had up to 11 different funding sources. Both sponsors and employers agreed that applying for funding continuously and managing the resources (e.g., expenses, data collection, and reporting) strained programs and their effectiveness.

Findings from Agency Representatives

While it is important to learn about the challenges faced by intermediaries, employers, sponsors, and educators in accessing funding, it is equally important to discuss available funding streams and the challenges agencies face in distributing funding to eligible recipients.

AVAILABLE PUBLIC FUNDING STREAMS

Agency staff representatives identified more than 10 active federal and state funding streams available to employers and sponsors of apprenticeship programs. Most staff were familiar with the grants in their agencies but relied on personal relationships with staff at other agencies to be made aware of similar grants. Others stated that agency newsletters and websites are helpful resources for staying informed about funding at other agencies. However, one agency staff member noted that the ability to find funding opportunities is a known gap within the agency that their team is working to address.

All agency representatives noted that the availability and amount of funding relied on administrative priorities at the federal level and the legislature at the state level.

DIFFICULTY LOCATING FUNDING BY RECIPIENTS

Most agency representatives admitted that it is difficult for organizations and individuals to locate funding, from locating opportunities to navigating the application process. They highlighted federal grants as very difficult to access because of the “red tape” involved. However, one representative shared that state funding has also become difficult to access because of the state procurement process. Interviewees felt that these processes serve as a deterrent to applicants.

Representatives also noted that finding open funding opportunities is challenging, as they are scattered across agencies and websites and often not marketed for apprenticeship or training. Participants indicated that the eligibility requirements are a challenge even when opportunities are identified, as they are limited and frequently eliminate most potential applicants.

ACCESS TO FUNDING

Representatives noted the following challenge for funding sources that have a rolling application deadline (such as WIOA funds): even when applicants can locate a funding stream and apply for it, they do not always receive funding because it may have been distributed quickly due to the high demand. Additionally, because apprenticeships are often over multiple years and WIOA funding allotments are annual, it can be complicated to fund an apprentice in one program year when priorities might change in the next year.

Representatives also observed that the majority of applicants who apply will receive funding from sources with specific eligibility criteria (e.g., state funding opportunities such as Opportunity Now and Opportunity Next). However, the money is often underspent because there are fewer applicants for these funding streams. While the agency sent information about opportunities to its listservs, representatives noted that broader marketing and coordination efforts with other agencies were often lacking.

BRAIDING FUNDING

All agency representatives had experience with combining different sources to pay for apprenticeship and workforce program expenses. They noted the importance of braiding funding, especially for apprenticeship programs, because different sources fund different parts of their programming. Often, sponsors need several funding streams to manage a program. The challenge for sponsors, however, is that not all funding streams are funded consistently—some might be one-time grants, such as the Coronavirus Aid, Relief, and Economic Security (CARES) Act or federal grants to states during the pandemic; others, while consistent, might change their eligibility criteria to fund new applicants instead of recent recipients.

Recommendations

Despite considerable investments in apprenticeship at the federal and state levels, the funding landscape is complicated by shifting administrative priorities, difficulty locating funding, complex eligibility criteria, the need to braid funding, and underspent money. For apprenticeships in the US to be considered a talent pipeline for the nation's workforce, we need strategic investments.

- **Sustained and strategic funding:** Given the different costs of apprenticeships (programmatic, expansion, and infrastructure), there is a need for more sustained and strategic investments, rather than one-off grants and contracts, at both the state and federal levels.
- **Improved cross-agency collaboration:** Federal and state governments need to work together to invest in a range of grants to meet programming costs without duplicating efforts. For instance, federal funding can launch programs, and state funding can be used to manage and sustain programs (including a focus on retention and program completion). This not only encourages cross-agency collaboration but also meets the needs of apprenticeship programs in a thoughtful and holistic manner.
- **Match funding to needs:** To tackle underspent funding, agencies need to better match available funds to the programs that need it. This can start with increasing marketing efforts around funding opportunities and providing technical assistance to help applicants navigate eligibility and criteria requirements. The latter saves time for agencies in terms of seeking relevant applicants and filtering out those that do not fit the opportunity.
- **Develop a tool to navigate funding**: A state-level tool that would house public and private apprenticeship or training funding opportunities within one portal would benefit the field immensely. Such a tool could match programs with eligible funding streams (for instance, programs serving young people or justice-involved individuals). The tool could also filter funding opportunities by several criteria, including by industry, agency hosting the opportunity, allowable use of funding, and type of funding (e.g., federal, state, or local; formula or competitive; or one-time or multiyear). The goal of the tool would be to simplify the search for available funding and help reduce the burden on apprenticeship sponsors, employers, training providers, educational institutions, and intermediaries by bringing the pieces together. Eventually, such a tool could alleviate some of the challenges to apprenticeship program implementation and help scale apprenticeships in the US.

Notes

1 Stephanie Ferguson Melhorn, "Understanding America's Labor Shortage," US Chamber of Commerce, February 11, 2025, https://www.uschamber.com/workforce/understanding-americas-labor-shortage; Cole Clayburn, "Alternatives to College: What to Know," *US News and World Report*, December 31, 2024, https://www.usnews.com/education/best-colleges/articles/alternatives-to-a-4-year-college-what-to-know; Melanie Hanson, "Student Loan Debt Statistics," Education Data Initiative, January 15, 2025, https://educationdata.org/student-loan-debt-statistics.

2 "Apprentices by State," ApprenticeshipUSA, accessed February 19, 2025, https://www.apprenticeship.gov/data-and-statistics/apprentices-by-state-dashboard.

3 "Investing in Talent Development: Benefits to Employers of Registered Apprenticeships from the American Apprenticeship Initiative," US Department of Labor, accessed February 19, 2025, https://www.apprenticeship.gov/sites/default/files/aai-infographic-employers-11-11-22.pdf.

4 "US Apprenticeship Overview," US Department of Labor, November 3, 2021, https://www.dol.gov/sites/dolgov/files/OPA/files/20211103-apprenticeship-equity.pdf.

5 "Women in Apprenticeship," ApprenticeshipUSA, accessed February 19, 2025, https://www.apprenticeship.gov/sites/default/files/DOLIndFSWomen_043024-508.pdf; Hegewisch (2024).

6 "US Apprenticeship Overview," US Department of Labor,

7 "FOA-ETA-18-08, Scaling Apprenticeship Through Sector-Based Strategies," Grants.gov, last updated September 11, 2018, https://www.grants.gov/search-results-detail/307212; DOL (2019); Arabandi and Marotta (2024); Walton, Gardiner, and Barnow (2022); "Department of Labor awards $65M to help states increase, expand access to Registered Apprenticeships in high-growth, high-demand industries," US Department of Labor, Employment and Training Administration, news release, July 19, 2023, https://www.dol.gov/newsroom/releases/eta/eta20230719; and DOL (2025).

8 "Design an Apprenticeship Program," National Apprenticeship Resource Hub, Urban Institute, https://apprenticeships.urban.org/design-program.

9 "Registered Apprenticeship Standards Library," National Apprenticeship Resource Hub, Urban Institute, https://apprenticeshipstandards.org/occupation_standards?national_standard_type%5Boccupational_framework%5D=1.

10 Taylor White and Dan Hinderliter, "States Tale Steps to Expand & Improve Apprenticeship," New America, November 19, 2024, https://www.newamerica.org/education-policy/edcentral/states-take-steps-to-expand-improve-apprenticeship/

11 "Apprenticeship Innovation Funding," State of California Department of Industrial Relations, accessed February 20, 2024, https://www.dir.ca.gov/DAS/Grants/Apprenticeship-Innovation-Funding.html

12 "Apprenticeship Colorado Launches Tax Credit to Expand Registered Apprenticeships in New & Emerging Industries," Colorado Department of Labor and Employment, news release, January 15, 2025, https://cdle.colorado.gov/press-releases/press-release-apprenticeship-colorado-launches-tax-credit-to-expand-registered.

13 "State Tax Credits and Tuition Supports," Apprenticeship USA, accessed February 19, 2025, https://www.apprenticeship.gov/investments-tax-credits-and-tuition-support/state-tax-credits-and-tuition-support.

14 "Tax Credits: Forms," South Carolina Department of Revenue, accessed February 19, 2025, https://dor.sc.gov/about/forms.

15 Taylor White and Dan Hinderliter, "States Take Steps to Expand & Improve Apprenticeship," New America, November 19, 2024, https://www.newamerica.org/education-policy/edcentral/states-take-steps-to-expand-improve-apprenticeship/.

[16] "California Opportunity Youth Apprenticeship (COYA) Grant," State of California Department of Industrial Relations, last updated February 2025, https://www.dir.ca.gov/das/Grants/California-Youth-Apprenticeship-Grant.html.

[17] "Native American Apprenticeship Assistance Program (NAAAP)," Washington Student Achievement Council, accessed February 19, 2025, https://wsac.wa.gov/naaap.

[18] Lancy Downs, "Key Funding Sources for Educator Registered Apprenticeship Programs," New America, February 14, 2024, https://www.newamerica.org/education-policy/edcentral/key-funding-sources-for-educator-registered-apprenticeship-programs.

[19] Adam Vitcavage, "Opportunity Now: Paving the Way for Paid Teacher Degree Apprenticeships," CareerWise Colorado, https://www.careerwisecolorado.org/en/opportunity-now-paving-the-way-for-paid-teacher-degree-apprenticeships/.

[20] Casey Eggleston, Yeris H. Mayol Garcia, Mikelyn Meyers, and Yazmin Garcia Trejo, "Most Parents Don't Have Any Formal Child Care Arrangements," *America Counts: Stories*, US Census Bureau, November 29, 2023, https://www.census.gov/library/stories/2023/11/child-care.html.

[21] Sovann Boyd, "The Potential of Prison-Based Apprenticeship Programs," *ApprentiScope* (blog), April 27, 2022, https://blog.apprentiscope.com/posts/the-potential-of-prison-based-apprenticeship-programs.

[22] Charlotte West, "How Training in the Trades Is Helping Women Succeed After Prison," Open Campus, January 14, 2024, https://www.opencampus.org/2024/01/14/how-training-in-the-trades-is-helping-women-succeed-after-prison/

[23] "Public Sector Apprenticeships: ILG's New Workforce Initiative," Institute for Local Government, accessed February 19, 2025, https://www.ca-ilg.org/public-sector-apprenticeship-initiative-2.

[24] "Qualified Apprenticeship Intermediaries," Colorado Department of Labor and Employment, Apprenticeship Colorado, accessed February 19, 2025, https://apprenticeship.colorado.gov/partners/qualified-apprenticeship-intermediaries.

[25] Josh Laney and Denise Miller, "Four Things States are Doing to Advance Apprenticeships," RealClearEducation, November 22, 2024, https://www.realcleareducation.com/articles/2024/11/22/four_things_states_are_doing_to_advance_apprenticeships_1074153.html.

[26] "About Us," Apprenticeship Carolina, https://www.apprenticeshipcarolina.com/about.html; "Small and Medium Business Tech Apprenticeship Project," Urban Institute, https://www.urban.org/projects/small-and-medium-business-tech-apprenticeship-project.

[27] "Talent Ready Utah," Utah System of Higher Education, https://talentready.ushe.edu/.

[28] White and Hinderliter, "States Take Steps to Expand & Improve Apprenticeship."

[29] "Steps to Registered Apprenticeship in Kansas," KansasWorks, accessed February 19, 2025, https://ksapprenticeship.org/registered-apprenticeship-in-ks/; AFA (2024).

[30] The Colorado Department of Labor and Employment created a list of potential employers/sponsors, intermediaries, educators, and agency staff to participate in the study. Data collection was done through focus groups and interviews with 12 participants.

References

AFA (Apprenticeships for America). 2024. *How States are Driving the Expansion of Apprenticeships: State Apprenticeship Policy Scan*. Washington, DC: AFA.

Arabandi, Bhavani, and John Marotta. 2024. "How Intermediaries Can Promote Youth Apprenticeship." Washington, DC: Urban Institute.

Boren, Zach, Andrew Campbell, Bhavani Arabandi, John Marotta, Daniel Kuehn, and Jacqueline Rayfield. 2022. *Union-Based Apprenticeships for Young People: Creating Good Job and Meeting Employers' Needs for Skills*. Washington, DC: Urban Institute.

Boren, Zach, Michael Pruitt, Bhavani Arabandi, and Jacqueline Rayfield. 2021. *Rural Apprenticeships for Young People: Challenges and Strategies for Success*. Washington, DC: Urban Institute.

DOL (US Department of Labor). 2019. "Notice of Availability of Funds and Funding Opportunity Announcement for Apprenticeships: Closing the Skills Gap." FOA-ETA-19-09. Washington, DC: Employment and Training Administration, DOL.

———. 2025. "Notice of Availability of Funds and Funding Opportunity Announcement for State Apprenticeship Expansion Formula, Round 3 (SAEF3)." FOA-ETA-25-31. Washington, DC: Employment and Training Administration, DOL.

Elliott, Diana, John Marotta, Fernando Hernandez-Lepe, and Jacqueline Rayfield. 2022. "What Works in Tech Apprenticeship: Best Practices for Expanding Registered Apprenticeships in the Tech Sector." Washington, DC: Urban Institute.

Helper, Susan, Ryan Noonan, Jessica R. Nicholson, and David Langdon. 2016. *The Benefits and Costs of Apprenticeships: A Business Perspective*. Cleveland, OH: Case Western University and US Department of Commerce.

Hegewisch, Ariane. 2024. *As Apprenticeships Expand, Breaking Down Occupational Segregation Is Key to Women's Economic Success: Gender, Race, and the Wage Gap in Apprenticeship*. Washington, DC: Institute for Women's Policy Research.

Katz, Batia, Daniel Kuhn, Jessica Shakesprere, and Robert I. Lerman. 2022. "What Are the Costs of Generating Apprenticeships? Findings from the American Apprenticeship Initiative Evaluation." Washington, DC: Urban Institute.

Kuehn, Daniel, Siobhan Mills De La Rosa, Robert Lerman, and Kevin Hollenbeck. 2022. *Do Employers Earn Positive Returns to Investments in Apprenticeship? Evidence from Registered Programs under the American Apprenticeship Initiative*. Washington, DC: Urban Institute.

Rege, Gauri (Gee), Christina Curnow, and Chelsi Campbell. 2023. "Improving Apprenticeship Completion Rates." Arlington, VA: American Institutes for Research.

Smith, Linda K., Katherine Mercado, and Tara Williams. 2023. *Apprenticeships: Building a Strong Child Care Workforce Pipeline*. Washington, DC: Bipartisan Policy Center.

Spaulding, Shayne, and Stephanie Petrov. 2023. "State Incentives to Promote and Support Apprenticeship: Takeaways from Eight States." Washington, DC: Urban Institute and Mathematica.

Walton, Douglas, Karen N. Gardiner, and Burt Barnow. 2022. *Expanding Apprenticeship to New Sectors and Populations: The Experiences and Outcomes of Apprentices in the American Apprenticeship Initiative*. Rockville, MD: Abt Associates.

About the Authors

Bhavani Arabandi is a principal research associate in the Work, Education, and Labor Division at the Urban Institute. She is a labor sociologist whose work focuses on enduring inequalities in the labor market, gender, and apprenticeship. Her expertise is in program design and implementation, qualitative research, policy analysis, and technical assistance. Arabandi has an MA in sociology from George Mason University and a PhD in sociology from the University of Virginia.

Leslee Haisma is a training and technical assistance specialist in the Work, Education, and Labor Division, where she focuses on apprenticeships and workforce development. Haisma holds an undergraduate degree in education from Grand Valley State University and a master's degree in urban education from Davenport University.

Acknowledgments

This brief was funded by the Colorado Department of Labor and Education under contract number PO KAPP 202400008422. The contents of this publication do not necessarily reflect the views or policies of the Colorado Department of Labor and Education, nor does mention of trade names, commercial products, or organizations imply endorsement of the same by the Colorado government.

The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings of the insights and recommendations of Urban experts. Further information on the Urban Institute's funding principals is available at urban.org/fundingprinciples.

URBAN INSTITUTE

500 L'Enfant Plaza SW
Washington, DC 20024

www.urban.org

ABOUT THE URBAN INSTITUTE

The nonprofit Urban Institute is a leading research organization dedicated to developing evidence-based insights that improve people's lives and strengthen communities. For 50 years, Urban has been the trusted source for rigorous analysis of complex social and economic issues; strategic advice to policymakers, philanthropists, and practitioners; and new, promising ideas that expand opportunities for all. Our work inspires effective decisions that advance fairness and enhance the well-being of people and places.