



Registered Apprenticeship: A Descriptive Study of States' Systems and Growth

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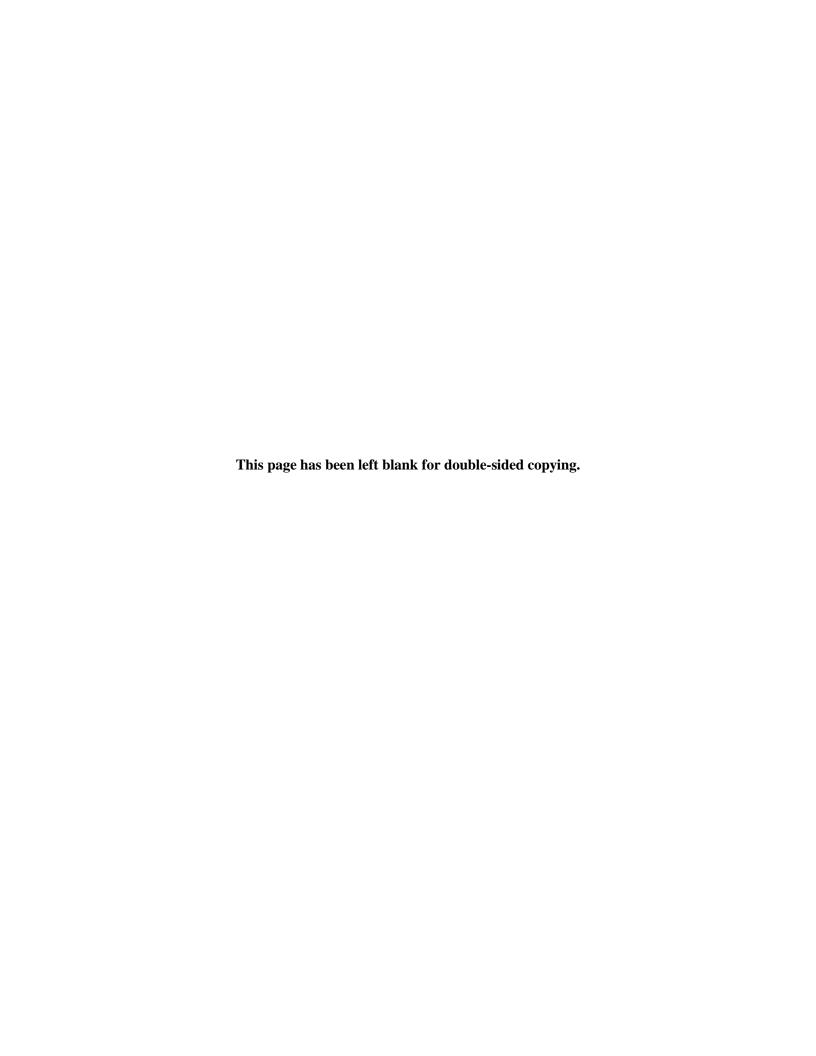
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Abstract

To learn about states' efforts to expand registered apprenticeship, the U.S. Department of Labor contracted with Mathematica and its partners to administer a survey to states to document their efforts to support the expansion of apprenticeship programs and learn of their challenges and needs for technical assistance to further expand apprenticeships. In addition, the survey explored how states are organized to provide registered apprenticeship programs, states' priorities for promoting registered apprenticeships, and states' funding, policies, and available employer incentives. Survey findings indicated that, overall, states have made efforts in recent years to expand their registered apprenticeship systems and programs.

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Acronyms

DOL: U.S. Department of Labor

ETA: Employment and Training Administration within DOL

ETPL: Eligible training provider list

FTE: Full-time equivalent

ITA: Individual training account

OA: Office of Apprenticeship within DOL

OJT: On-the-job training

RA: Registered apprenticeship

RAPIDS: Registered Apprenticeship Partners Information Data System

RSI: Related and supplemental instruction

RTI: Related technical instruction

SAA: State Apprenticeship Agency

SAE: State Apprenticeship Expansion grants

WIOA: Workforce Innovation and Opportunity Act

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Executive Summary

Since 2016, the U.S. Department of Labor (DOL)'s Employment and Training Administration (ETA) has made significant investments to promote and expand registered apprenticeship as a key component of the workforce development system. In that year, ETA awarded small accelerator grants to states, territories, and the District of Columbia to encourage states to expand apprenticeship opportunities. Later that year, ETA awarded another \$51 million in State Apprenticeship Expansion (SAE) grants to 36 states and one territory to support states in continuing this work and developing and implementing comprehensive expansion strategies for apprenticeships (The White House 2016). Thirty-six of these SAE grantees received continuation funding of \$49 million through fall 2020.

As part of an evaluation to learn about registered apprenticeship expansion efforts, ETA commissioned Mathematica and its partners, the Urban Institute and Social Policy Research Associates, to administer a survey to 50 states, the District of Columbia, and six territories (American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, Palau, Puerto Rico, and the U.S. Virgin Islands); the states and territories are referred to collectively as "states" throughout this report. The survey, fielded in January and February 2020, received responses from 53 states for a response rate of 93 percent. Most agencies responding to the survey (42 respondents) were labor and workforce-related departments, such as labor, industry, workforce, jobs, employment, industrial, and economic opportunity offices. A handful were development or commerce departments (6 respondents) and community or technical college systems (5 respondents). Because a respondent from a single state agency completed the survey, the survey did not necessarily collect information about all of a state's registered apprenticeship activities. However, it provided information about states' registered apprenticeship systems and recent expansion efforts. It also provided the opportunity to examine states' efforts by whether or not they received an SAE grant and whether their apprenticeship programs were registered with a state apprenticeship agency (SAA) or with the DOL Office of Apprenticeship (OA).

Survey findings indicated that, overall, states have made efforts in recent years to expand their registered apprenticeship systems. A majority of state respondents (64 percent) reported that their agency had increased the number of staff working on apprenticeships, and more than two in five (43 percent) reported that legislative or regulatory changes to support apprenticeships had been made in the past three years. State respondents also reported that their state had implemented or had introduced incentives offered to employers to sponsor registered apprenticeship programs in the last two years (Figure ES.1). For example, 14 states reported that state funding for related technical instruction only became available in the past two years, increasing the number of states offering this support to 35 of 52 states responding (67 percent).

In addition, states reported changes to their registered apprenticeship systems as a result of implementing provisions in the Workforce Innovation and Opportunity Act (WIOA), such as adding registered apprenticeship programs to their eligible training provider lists (77 percent) and having more WIOA funding available for apprenticeship (47 percent). In addition, most state respondents reported that the growth in registered apprenticeship met or exceeded the states' expectations in both construction occupations (81 percent), which have a long tradition of using apprenticeship training, and non-construction occupations (74 percent).

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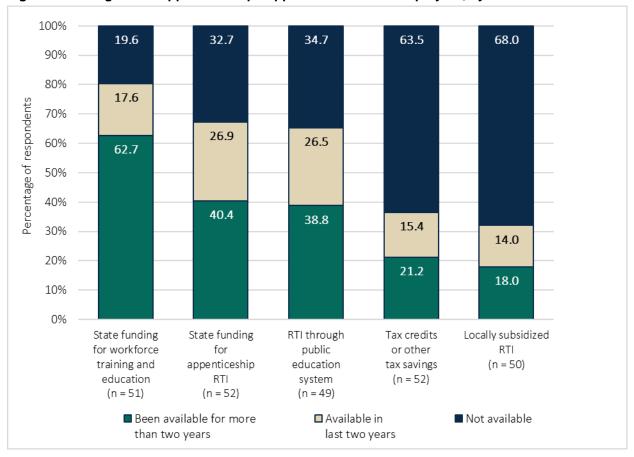


Figure ES.1. Registered apprenticeship supports available to employers, by time became available

Source: State survey of registered apprenticeship, 2020.

Note: The number of respondents that answered each item is indicated in the x-axis label.

RTI = related technical instruction.

Although this descriptive study does not provide evidence of a causal effect of receipt of an SAE grant on registered apprenticeship activities, the survey results suggest that SAE grant states experienced more growth in their registered apprenticeship activities than non-grant states. For example, more SAE grant than non-grant states reported:

- Adding staff to work on apprenticeships in their agency in the past two years (67 and 59 percent, respectively);
- Having more funding available from WIOA individual training accounts and on-the-job training to support registered apprenticeship (64 and 47 percent, respectively); and
- That the growth in registered apprenticeship programs in non-construction occupations met or exceeded their expectations (81 and 59 percent, respectively).

In addition, the survey indicated that states with apprenticeship programs registered by an SAA and states with apprenticeship programs registered by OA had different experiences. For example, more SAA than OA states reported that tax credits and other tax savings were available to employers sponsoring apprenticeships (50 and 23 percent, respectively) and state budget allocations for registered apprenticeship increased in the years since 2016 (63 and 36 percent, respectively).

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Other survey results identified opportunities for further growth. States reported factors that were responsible for growth, including outreach to nontraditional industries and employers' interest in establishing apprenticeships. At the same time, when asked about their major barriers to expanding registered apprenticeship in their state, they indicated that employers' lack of knowledge about apprenticeship and the public's lack of understanding of how to enter the apprenticeship system were major barriers to growth. States also indicated that their major technical assistance needs were in developing marketing strategies (58 percent), identifying funding opportunities (56 percent), and reaching out to underserved populations (54 percent). These major needs were consistently reported across states, that is whether they did or did not receive an SAE grant or whether they were SAA or OA states. These results can help DOL assess states' needs to further expand registered apprenticeship and direct resources to provide guidance, resources, and technical assistance to help the states overcome their challenges.

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A. Introduction

Since 2016, the U.S. Department of Labor (DOL)'s Employment and Training Administration has continued to make significant investments to promote and expand registered apprenticeship as a key component of the workforce development system. In June of that year, ETA awarded small accelerator grants to states, territories, and the District of Columbia to encourage states to expand apprenticeship opportunities (DOL 2016). Later that year, ETA awarded another \$51 million in State Apprenticeship Expansion (SAE) grants to 36 states and Guam to support states in continuing this work and developing and implementing comprehensive expansion strategies for apprenticeships (The White House 2016). Thirty-six of these SAE grantees received continuation funding of \$49 million through fall 2020. Subsequently, in 2019, ETA awarded another \$73 million in Apprenticeship State Expansion grants to increase the number and diversity of apprenticeship opportunities and encourage the integration of registered apprenticeship programs into the public workforce system (DOL 2020).

As part of an evaluation to learn about registered apprenticeship expansion efforts, ETA commissioned Mathematica and its partners, the Urban Institute and Social Policy Research Associates, to administer a nationwide survey to 50 states, the District of Columbia, and six territories (referred to collectively as "states"). The survey's purpose was to document states' efforts to expand apprenticeships and learn of their challenges and needs for technical assistance to further expand apprenticeships. The survey explored how states are organized to provide registered apprenticeship programs, states' priorities for promoting registered apprenticeships, and the prevalence of unregistered apprenticeship programs. In addition, it examined states' funding, policies, and employer incentives and how these have changed in the past two years.

This paper presents the descriptive results of the survey, which provide a snapshot of states' apprenticeship systems and their expansion efforts. The results are presented in four topic areas: (1) responding agencies' responsibilities for their state's registered apprenticeship system, in Section B; (2) states' priorities for apprenticeship, in Section C; (3) states' registered apprenticeship systems, in Section D; and (4) states' expansion efforts, in Section E. The paper concludes with a brief discussion summarizing the survey results. Throughout the paper, we examine differences in the responses of states that applied for and received an SAE grant in 2016 to those states that did not receive a grant. We focus our subgroup analysis on the SAE grants, as grantee states had been actively engaged in expansion activities for three years. Similarly, we examine differences between states where apprenticeship programs register with a state apprenticeship agency (SAA) and states where programs register with the ETA's Office of Apprenticeship (referred to as OA states). Box 1 provides a description of the survey administration and analysis methods and Box 2 briefly defines key terms used throughout the report. Appendix A includes supplemental tables and Appendix B provides the full survey.

¹ States for which OA registers apprenticeships are also referred to as DOL or Federal states. Although most programs in SAA states are registered with the SAA, sponsors in SAA states using National Guidelines for Apprenticeship Standards to operate multi-state apprenticeship programs register their programs with OA, rather than the SAA.

Box 1. Survey administration and analysis

Working with OA, the study team identified the main agency responsible for each state's approach to registered apprenticeship. OA emailed these state agencies to explain the purpose of the data collection and encourage their response. The study team then invited a representative from each state agency to complete the survey via SurveyMonkey on January 8, 2020. The survey remained open until February 24, 2020. During administration, Mathematica emailed or telephoned the identified state agencies (or sample members) up to six times to request their completion of the survey.

Response rate. The survey concluded with a 93 percent response (53 of 57 total responses). Most agencies responsible for apprenticeship (42 respondents) were labor and workforce-related departments, such as labor, industry, workforce, jobs, employment, industrial, and economic opportunity offices. A handful were development or commerce departments (6 respondents) and community or technical college systems (5 respondents). Because a respondent from a single state agency completed the survey, the survey did not necessarily collect information about all of a state's registered apprenticeship activities.

Analysis. We conducted a descriptive analysis of the survey data. For categorical variables, we present the percentage of state respondents providing a particular response. For continuous variables, we provide the mean across respondents. Throughout the analysis, missing responses are not included.

In addition, we analyzed how states' responses varied based on two characteristics:

- Registering entity. We examined differences between states where apprenticeship programs are registered by OA or by a SAA. We achieved similar response rates for these subgroups: 93 percent response rate (27 of 29 states) for states in which OA is responsible for registering program (OA states) and 93 percent response rate (26 of 28 states) for states in which the SAA registers programs (SAA states).
- **SAE grant.** We examined states by whether they received an SAE grant in 2016 or did not. We achieved response rates of 97 percent for SAE grant states (36 of 37 states) and 85 percent for non-grant states (17 of 20 states). Of the 36 SAE grant states reporting, 21 were SAA states and 15 were OA states.

The data presented by these characteristics are purely descriptive. As such, when presenting the subgroup data, we are not reporting causal relationships between, for example, states' receipt of the SAE grant and their expansions efforts because these states might have embarked on this work in the absence of the grant.

Box 2. Brief definitions of select terms

Eligible training provider (ETP) list. A list of providers that have been approved to provide employment-related training services to individuals supported by Federal funding at the state or local levels.

Individual training account (ITA). ITAs operate like vouchers that Workforce Innovation and Opportunity Act customers apply toward the cost of training from approved providers.

On-the-job training (OJT). A subsidized employment opportunity in which an individual receives knowledge and skills related to a job, while working as a regular employee. Satisfactory performance could lead to transitioning to an unsubsidized position.

Registered apprenticeship program. A program that provides for apprenticeship opportunities that has been reviewed and approved by the U.S. Department of Labor's Office of Apprenticeship or a State Apprenticeship Agency.

Registered Apprenticeship Partners Information Data System (RAPIDS).

The data system managed by the U.S. Department of Labor that includes information on registered apprenticeship programs and apprentices.

Related and supplemental instruction (RSI)/ Related technical instruction (RTI). The instruction that apprentices receive as part of their registered apprenticeship program on the technical and academic competencies required for the job.

State Apprenticeship Agency (SAA). State agencies that are tasked with registering apprenticeship programs in their states. They oversee and monitor these programs.

State Apprenticeship Expansion grants (SAE). In 2016, states could apply for an SAE grant for the purpose of building state capacity to expand their registered apprenticeship program.

Unregistered apprenticeship. Apprenticeship programs that do not go through a registration process with either the U.S. Department of Labor's Office of Apprenticeship or a State Apprenticeship Agency.

Workforce Innovation and Opportunity Act (WIOA). The Act, which was signed into law in 2014, superseded the Workforce Investment Act, and is the primary legislation governing the public workforce development system.

B. Responding agencies' responsibilities, staffing, and partners for registered apprenticeship

To understand the involvement of state agencies in apprenticeship, the survey asked a series of questions about the respondent agencies' responsibilities for registered apprenticeship and the number of staff involved. Note that respondents responded for their agencies, and not necessarily for their state as whole. Within a particular state, another agency or entity might have additional responsibilities not represented in the data.

1. Responsibilities for registered apprenticeship

Survey respondents identified their agency's main responsibilities in their state for registered apprenticeship (Table 1; Appendix Table A.1 provides additional data). As expected, respondents in SAA and OA states reported different responsibilities: SAA state respondents reported more responsibility for administration, management, and program development than did OA states. For example, 89 percent of respondents' agencies in SAA states had major responsibility for program compliance and auditing, compared to 41 percent in OA states. Furthermore, 85 percent of respondents' agencies in SAA states reported major responsibility for developing occupational standards, compared to 26 percent of OA states. Similar percentages of respondents in SAA and OA states reported providing technical assistance for coordinating with workforce partners as one of their major responsibilities, whereas more SAA than OA states (92 and 63 percent, respectively) reported providing technical assistance in navigating the registered apprenticeship process and policy as one of their major responsibilities. The responses indicate some differences by SAE grant status. For example, more respondents from SAE grant states than respondents from non-grant states reported that their agency had major responsibility for data analysis (53 and 31 percent, respectively) and developing occupational standards (64 and 35 percent, respectively).

Table 1. Responding agency's main responsibilities for registered apprenticeship (percentages)

		Registration entity		Registration entity		SAE grant status	
Responsibility	All states	SAA	OA	Grantee	Non-grantee		
Coordination with workforce programs/ partners	81.1	80.8	81.5	86.1	70.6		
Help for stakeholders to navigate the registered apprenticeship process and							
policy	77.4	92.3	63.0	75.0	82.4		
Program compliance and auditing	64.2	88.5	40.7	69.4	52.9		
Developing occupational standards	54.7	84.6	25.9	63.9	35.3		
Data analysis	46.2	60.0	33.3	52.8	31.3		
Total responses	53	26	27	36	17		

Source: State survey of registered apprenticeship, 2020.

Note: Respondents were asked to indicate for each of 18 responsibilities whether their agency had main responsibility, some responsibility, or no responsibility. The number of responses per item varies because of nonresponse.

SAA = State Apprenticeship Agency; SAE = State Apprenticeship Expansion; OA = Office of Apprenticeship

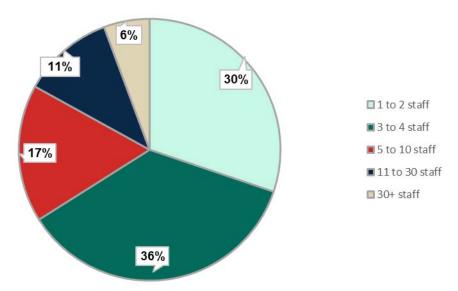
Respondents in SAA states also reported the frequency of their agency's quality reviews of their registered apprenticeship programs. Most of the 26 SAA states reported conducting reviews every two

years or less (15 states). Seven states conducted reviews within three to five years. The remaining states reported other review frequencies. For example, one state reported conducting reviews every two years for programs with five or more apprentices and every three years for programs with fewer than five apprentices.

2. Agency staff working on apprenticeship

The number of staff working on apprenticeship could indicate states' commitment to expanding apprenticeship opportunities. Sixty-six percent of respondents reported one to four full-time equivalent (FTE) staff performing roles associated with registered apprenticeship in their agency (Figure 1). In addition, 64 percent of respondents reported growth in their agency staff over the past two years, with the growth ranging from 1 to 30 additional FTEs (average growth was 3.3 FTEs for states that reported that growth had occurred).

Figure 1. Number of FTE staff performing registered apprenticeship roles in reporting state agencies



Source: State survey of registered apprenticeship, 2020.

Note: N = 53. Respondents reported a minimum of 1 FTE working on the registered apprenticeship system in

their agency to a maximum of 150. The mean was 10 FTEs.

FTE = full-time equivalent.

Furthermore, survey results indicated some differences between states by their registering agency and SAE grant status. Fifty percent of respondents in SAA states and 83 percent in OA states reported that their agency increased the number of FTEs over the past two years; the mean number of FTEs increased by 3 and 3.5, respectively, for states that reported growth. Additionally, 67 percent and 59 percent of respondents of SAE grant and non-grant states, respectively, reported increasing the number of FTEs. For those adding more staff, the mean increase for those states reporting growth was 4 staff (SAE grant states) and 1.6 staff (non-grant states).

3. Agencies' partners for registered apprenticeship

Respondents reported that their agencies work with a broad range of partners that contribute to their state's registered apprenticeship systems. When asked to indicate the partner status of specified entities by whether they were a major, minor, or not a partner, the majority of respondents rated community colleges (76 percent), other state entities including state workforce boards (69 percent), unions (67 percent), and employer associations (64 percent) as major partners (Figure 2). Additional partner types that respondents wrote into the survey included community-based organizations (reported by four respondents) and universities and technical colleges (reported by two respondents).

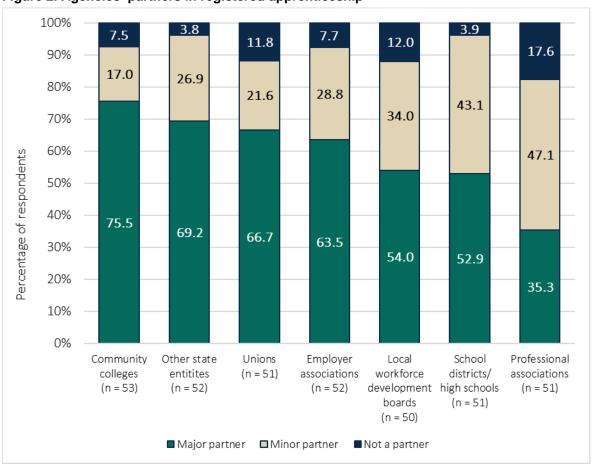


Figure 2. Agencies' partners in registered apprenticeship

Source: State survey of registered apprenticeship, 2020.

Note: The number of respondents that answered each item is indicated in the x-axis label. "Other state entities" includes state workforce boards.

Examining subgroups showed that SAE grant states reported more major partnerships than non-grant states. Respondents of SAE grant states were more likely than respondents of non-grant states to report that all partners, except for other state entities and workforce development boards, were major partners (Table 2). For example, more SAE grant states than non-grant states reported community colleges (81 and 65 percent, respectively) and schools districts (62 percent and 35 percent, respectively) as major partners. Responses also indicated that SAA and OA states work with different partners. For example, SAA states

were more likely than OA states to report that unions (89 and 44 percent, respectively) and employer associations (72 and 56 percent, respectively) were major partners, whereas they were less likely than OA states to report workforce development boards (38 and 69 percent, respectively) as major partners (see Appendix Table A.2).

Table 2. Agency's partners in registered apprenticeship by SAE grant status (percentages)

	SAE grant states			Non-grant states			
	Major partner	Minor partner	Not a partner	Major partner	Minor partner	Not a partner	
Community colleges	80.6	13.9	5.6	64.7	23.5	11.8	
Unions	71.4	17.1	11.4	56.3	31.3	12.5	
Other state entities	68.6	28.6	2.9	70.6	23.5	5.9	
Employer associations	68.6	25.7	5.7	52.9	35.3	11.8	
School districts/high schools	61.8	35.3	2.9	35.3	58.8	5.9	
Local workforce development boards	54.5	33.3	12.1	52.9	35.3	11.8	
Professional associations	40.0	45.7	14.3	25.0	50.0	25.0	
Other intermediaries	40.0	33.3	26.7	25.0	37.5	37.5	

Source: State survey of registered apprenticeship, 2020.

Note: Total number of SAE grant states = 36; total number of non-SAE grant states = 17. The number of

responses per item varies because of nonresponse.

SAE = State Apprenticeship Expansion.

C. Apprenticeship priorities and support

Understanding states' top priorities for apprenticeship can signal where, over the coming years, states will apply their resources to expand apprenticeship. States can also signal their support through proposing or advancing state legislation for apprenticeship.

1. State priorities for apprenticeship

A majority of respondents rated among their state's top three priorities for registered apprenticeships as increasing the number of sponsors (78 percent of states), building apprenticeship in nontraditional industries or occupations (66 percent), and increasing the apprenticeship pipeline (54 percent) (see Appendix Table A.3 for states' top three priorities). The same three priorities had the highest weighted priorities overall and for each subgroup, as noted in Table 3 (the table provides the weighted ranking of the listed priorities, with a weighted ranking closer to 1 indicating a higher overall priority and a weighted ranking closer to 11 indicating a lower overall priority). Other high-ranked priorities were increasing industry- or intermediary-sponsored apprenticeship and increasing the participation of women and of people of color.

Table 3. States' priorities for apprenticeship, weighted ranking

		Registration entity		SAE g	rant status
Priorities	All states	SAA	OA	Grantee	Non-grantee
Increase the number of sponsors for registered apprenticeship	3.1	3.6	2.7	3.1	3.2
Build apprenticeship in nontraditional industries or occupations	3.3	3.2	3.4	3.3	3.4
Increase apprenticeship pipeline	4.1	4.1	4.0	4.0	4.1
Increase the participation of women	6.0	5.3	6.6	5.9	6.3
Increase industry-sponsored or intermediary-sponsored apprenticeship	6.0	6.4	5.7	6.0	6.1
Increase the participation of racial and ethnic minorities	6.3	6.0	6.5	6.1	6.8
Increase the participation of youth	6.5	6.5	6.4	6.6	6.2
Increase retention of apprenticeships	6.5	6.4	6.6	7.0	5.5
Increase the participation of veterans	7.7	7.8	7.5	7.7	7.5
Increase the participation of individuals with disabilities	8.0	8.1	7.9	7.9	8.4
Increase the participation of justice-involved individuals	8.5	8.5	8.5	8.5	8.5
Total responses	49	23	26	34	15

Source: State survey of registered apprenticeship, 2020.

Note: Respondents were asked to rank each item in order of its priority for apprenticeship in their state. The weighted ranking reported in this table indicates how highly ranked each was across all states. A ranking closer to 1 was an overall higher priority, whereas those closer to 11 were a lower priority. Only the 49 respondents that ranked all priorities are included in the weighted priority ranking.

OA = Office of Apprenticeship; SAA = State Apprenticeship Agency; SAE = State Apprenticeship Expansion.

2. State legislation for apprenticeship

In recent years, states have advanced legislation or regulations in support of apprenticeship. Forty-three percent of respondents (23 of 53 states) reported that major regulation or legislative changes related to apprenticeship were enacted in the last three years, and 34 percent (18 of 53 states) reported pending legislation. The legislative changes were most commonly related to efforts to: increase funding or the pipeline for apprenticeship (10 states), change the infrastructure for apprenticeships (6 states), extend tax credits to employers or apprentices (5 states), and implement CFR 29.30 changes (4 states). Examples of legislative or regulatory changes in the three most reported categories appear in Box 3.

² Title 20, CFP Part 30 sets forth policies and procedures regarding equality of opportunity in registered apprenticeship programs.

Box 3. Examples of select state legislation over the past 3 years

Increase in funding or pipelines

- Florida: Enacted in 2019, House Bill 7071 established a grant program, subject to legislative appropriations, to expand existing apprenticeship and pre-apprenticeship programs.
- Oklahoma: Enacted in 2018, Senate Bill 1171 made supporting work-based learning opportunities an official duty of the Governor's Council of Workforce and Economic Development in an effort to improve the state's talent pipeline; also provided state funding for expanding work-based learning.
- Virginia: Enacted in 2020, House Bill 1252 prohibited discrimination against an apprentice or applicant for apprenticeship on the basis of basis of race, color, religion, national origin, sex, sexual orientation, age, genetic information, or disability.

Creation of new offices and committees

- Alabama: Enacted in 2019, Alabama Act 2019-0506 created a new Office of Apprenticeship to expand registered apprenticeship.
- California: Enacted in 2018, Assembly Bill 235 created, within the Division of Apprenticeship Standards, the Interagency Advisory Committee on Apprenticeship that is to provide advice and guidance for all non-traditional apprenticeship industries.
- Utah: Enacted in 2019, House Bill 280 established a Commissioner of Apprenticeship Programs within the Department of Workforce Services.

Tax credits

- Guam: Enacted in 2019, Public Law 35-39 extended the tax credit program for registered apprenticeship employers who pay gross receipt taxes through December 2024.
- Illinois: Enacted in 2019, the Tax Credit Apprenticeship Study Act created an apprenticeship education expense tax credit.
- Montana: Enacted in 2017, House Bill 3-9 provided for an employer tax credit for new apprentices, including an increased amount for veterans.

D. Registered apprenticeship system in the states

In all registered apprenticeship systems, group and individual sponsors manage programs and oversee apprentices progress through the registered apprenticeship program. The registered apprenticeship system in each state relies on a similar set of components, including sponsors to register and oversee apprentices and funding to support registered apprenticeship program development. This section explores the structure of state systems and the extent to which they have increased funding, employer incentives, and implemented Workforce Innovation and Opportunity Act (WIOA)-related changes.

1. Sponsors with most registered apprentices in the state

Forty-five percent of respondents reported that joint labor-management organizations sponsor the most registered apprentices in their state, followed by single businesses at 32 percent (Figure 3). Because nearly all joint labor-management programs are in construction, these percentages shift when we examine occupations outside of construction. States reported that in occupations other than construction single businesses sponsor the most registered apprentices in the state (59 percent). Other sponsors included state offices and workforce intermediaries.³

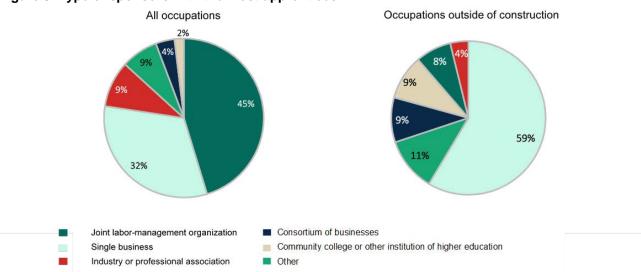


Figure 3. Type of sponsors with the most apprentices

Source: State survey of registered apprenticeship, 2020.

Notes: The first survey question asked which type of organization sponsors "the most registered apprenticeships in the state," and the second asked the same question but for "outside of construction." Percentages might not add up to 100 percent due to rounding. N = 53.

2. Incentives available to employers

The majority of states reported providing incentives or supports to employers who sponsor registered apprenticeship programs (Figure 4). Incentives reported as currently available to employers who sponsor registered apprenticeship programs include state funding for workforce training and education (80 percent), state funding for apprenticeship related technical instruction (RTI) (67 percent), and RTI through the public education system (65 percent).

³ We do not present the data by subgroups because the number of states in several categories is fewer than five.

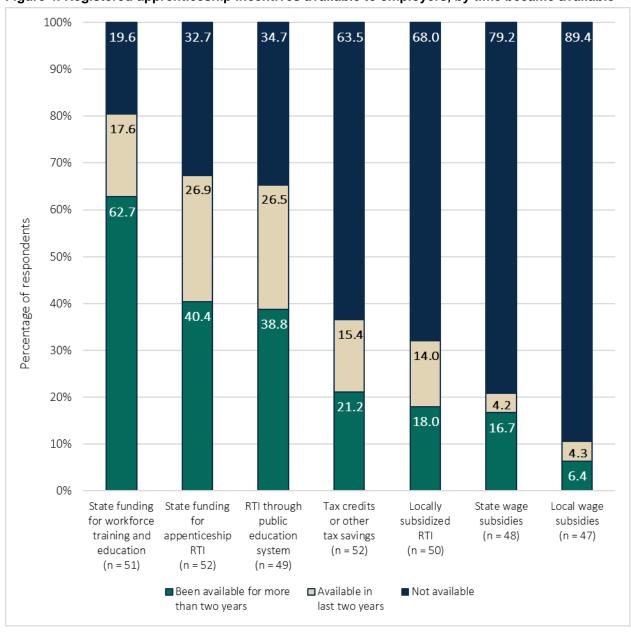


Figure 4. Registered apprenticeship incentives available to employers, by time became available

Source: State survey of registered apprenticeship, 2020.

Note: The number of respondents that answered each item is indicated in the x-axis label.

RTI = related technical instruction.

Many states introduced these incentives in the past two years. As shown in Figure 4, in the past two years, states reported providing additional incentives, with state funding for RTI added in 14 states (27 percent), RTI through public education system in 13 states (27 percent), and state funding for workforce training and education in 9 states (18 percent).

These incentives were more available in SAA states than OA states (see Appendix Table A.4). For example, more SAA states than OA states reported that tax credits or other tax savings (50 and 23

percent, respectively) and local wage subsidies (18 and 4 percent, respectively) were available. SAE grant and non-grant states reported similar availability. For example, 39 percent of SAE grant states and 31 percent of non-grant states reported that tax credits or other tax savings were available.

3. Direct and indirect financial support

Ninety-four percent of states reported the availability of funding from individual training accounts (ITAs) and on-the-job training (OJT) through WIOA (Figure 5). Eighty-four percent reported financial support through state budget allocations. Respondents reported an increase in funding for registered apprenticeship since 2016: 58 percent and 49 percent of states reported an increase in funding from WIOA and state budget allocations, respectively. Five states responded that financial support increased in all four areas displayed in Figure 5.

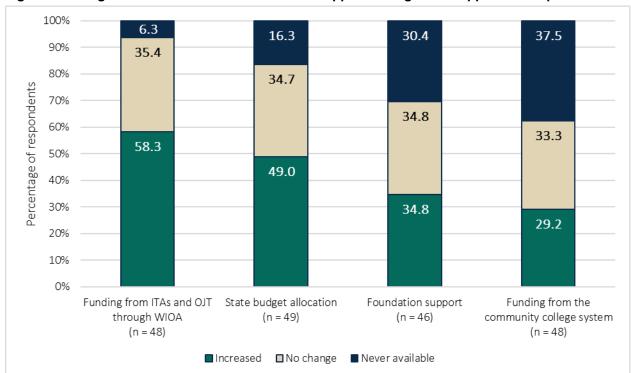


Figure 5. Changes in direct and indirect financial support for registered apprenticeship since 2016

Source: State survey of registered apprenticeship, 2020.

Note:

The number of respondents that answered each item is indicated in the x-axis label. No respondents selected that financial support decreased in these areas. "No change" means that there was no change in direct or indirect financial support for registered apprenticeship from that source in respondent's state since 2016.

ITA = individual training account; OJT = on-the-job training; WIOA = Workforce Innovation and Opportunity Act. Examination of subgroups of states—that is, by whether or not they received an SAE grant and by whether they were OA or SAA states—indicated differences (Table 4). SAA states were more likely than OA states to report an increase in budget allocations (63 percent and 36 percent, respectively). They were less likely to report an increase in funding from ITAs and OJTs (42 percent and 75 percent, respectively); however, similar percentages of SAA states and OA states reported having this funding available (96 and

92 percent, respectively). SAE grant states were more likely than non-grant states to report increased financial support in all areas.

Table 4. Changes in direct and indirect financial support for registered apprenticeship since 2016, by registration entity and SAE grant status (percentages)

	Registration entity		SAE grant status	
	SAA	OA	Grantee	Non- grantee
State budget allocation				
Increased	62.5	36.0	54.5	37.5
No change	37.5	32.0	30.3	43.8
Never available	0.0	32.0	15.2	18.8
Funding from ITAs and OJTs through WIOA				
Increased	41.7	75.0	63.6	46.7
No change	54.2	16.7	36.4	33.3
Never available	4.2	8.3	0.0	20.0
Funding from the community college system				
Increased	20.0	39.1	36.4	13.3
No change	44.0	21.7	33.3	33.3
Never available	36.0	39.1	30.3	53.3
Foundation support				
Increased	33.3	36.4	40.6	21.4
No change	33.3	36.4	31.3	42.9
Never available	33.3	27.3	28.1	35.7
Total responses	25	25	33	16

Source: State survey of registered apprenticeship, 2020.

Note: The number of responses per item varies because of nonresponse.

ITA = individual training account; OJT = on-the-job training; WIOA = Workforce Innovation and Opportunity Act;

OA = Office of Apprenticeship; SAA = State Apprenticeship Agency; SAE = State Apprenticeship Expansion.

4. Changes in registered apprenticeship system resulting from implementation of WIOA

WIOA included requirements that could affect the registered apprenticeship system. As shown in Figure 6, about three-quarters of respondents (77 percent) reported that new registered apprenticeship programs are now on their state's eligible training provider list (ETPL), as a result of WIOA. About half of the respondents (47 percent) also reported that registered apprenticeship is now represented on state workforce investment boards and more WIOA funding is available for apprenticeship. In addition, OA states reported slightly greater increases in the promotion of apprenticeship through WIOA than did SAA states. As shown in Figure 7, WIOA also appeared to affect SAE grant states more than non-grant states. For example, SAE grant states were more likely than non-grant states to report that new programs are on

⁴ See https://www.dol.gov/apprenticeship/docs/WIOA-RA-Fact-Sheet.pdf.

the ETPL (92 and 47 percent, respectively) and that registered apprenticeship is now represented on state boards (58 and 24 percent, respectively).

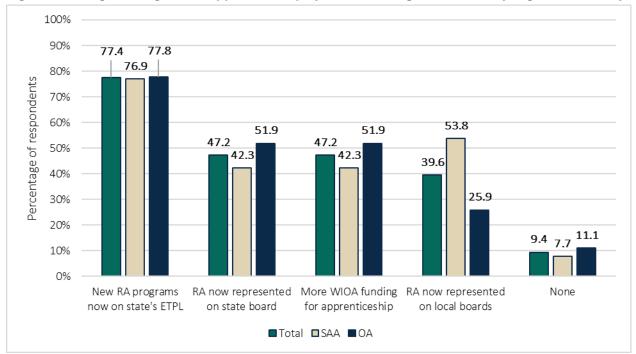


Figure 6. Changes in registered apprenticeship system resulting from WIOA, by registration entity

Source: State survey of registered apprenticeship, 2020.

Note: Total N = 53. N = 26 for SAA states and N = 27 for OA states. Respondents were asked to check all that apply.

ETPL = Eligible Training Provider List; OA = Office of Apprenticeship; RA = registered apprenticeship; SAA = State Apprenticeship Agency; WIOA = Workforce Innovation and Opportunity Act.

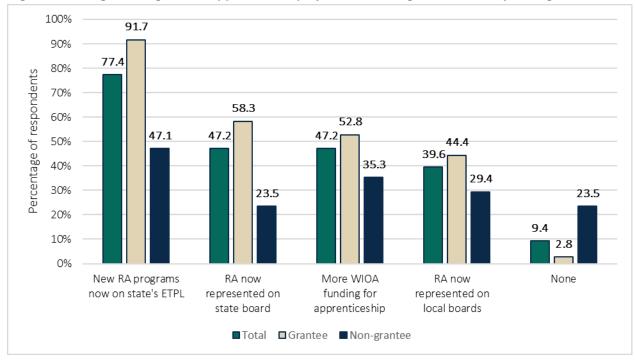


Figure 7. Changes in registered apprenticeship system resulting from WIOA, by SAE grant status

Source: State survey of registered apprenticeship, 2020.

Note: Total N = 53. N = 36 for SAE grant states and N = 17 for non-grant states. Respondents were asked to check all that apply.

ETPL = eligible training provider list; RA = registered apprenticeship; SAE = State Apprenticeship Expansion; WIOA = Workforce Innovation and Opportunity Act.

5. Unregistered apprenticeship programs

Reliable data do not exist on the number of unregistered apprenticeship opportunities in the United States, although research suggests that many employers offer them (Jacoby and Lerman 2019). In response to the survey, 33 percent of respondents (or 17 of 52 states) reported being aware of unregistered apprenticeship programs in their state that met the following key criteria: not registered with either OA or an SAA; had a paid work component, on-the-job training, a classroom training or RTI component; and resulted in attainment of an industry-recognized credential. Of the 11 of 17 states that responded, the number of programs ranged from 1 program to 2,000 programs (mean = 285).⁵ Of the states that offered them, the unregistered apprenticeship programs mostly were in manufacturing (15 percent), construction (13 percent), health care and social assistance (11 percent), and information technology (9 percent). Unregistered apprenticeship programs were more prevalent in OA states (48 percent) than in SAA states (16 percent). About one-third of both SAE grant and non-grant states reported unregistered apprenticeship programs.⁶

⁵ Respondents reporting that their state has or that they are aware of unregistered programs were asked to report "approximately how many unregistered programs meet the criteria."

⁶ States could not use their SAE grants to support unregistered apprenticeship opportunities.

6. Data reporting

Slightly more than half of respondents (55 percent) reported that their state used the Registered Apprenticeship Partners Information Data System (RAPIDS) for their online management system (Figure 8). Of the 13 states (25 percent) reporting using a state-specific system developed exclusively for registered apprenticeship, most were SAA states (12) and SAE grant states (11).

Only 10 respondents (19 percent) reported tracking outcomes. Of those states, four reported that the source of outcomes data was wage records, three from surveys of apprentices, and two from both wage records and surveys of apprentices.

100% 90% Percentage of respondents 80% 70% 54.7 60% 50% 40% 28.3 24.5 30% 20% 10% 3.8 0% **RAPIDS** State or other State-specific None system used by multiple system used exclusively for RA offices/agencies

Figure 8. Types of data management systems the state uses for tracking data on registered apprenticeship programs and apprentices

Source: State survey of registered apprenticeship, 2020.

Note: N = 53. Respondents were asked to check all that apply.

RA = Registered Apprenticeship; RAPIDS = Registered Apprenticeship Partners Information Data System.

E. Registered apprenticeship expansion efforts

Expanding apprenticeships in the United States has been a priority for DOL, as is evident in the investments made over the last several years. Understanding states' perception of their efforts, the factors responsible for growth, the challenges they report, and their need for technical assistance can inform future expansion efforts.

1. Expectations for growth

The majority of respondents (81 percent) reported that growth in registered apprenticeship in construction occupations over the past two years either met or exceeded their state's expectations (Figure 9). Few (10 percent) reported no growth. More SAA states than OA states (92 and 69 percent, respectively) and more

SAE grant than non-grant states (86 and 69 percent, respectively) reported meeting or exceeding expectations (see Appendix Table A.5).

For non-construction occupations, 74 percent of respondents reported that growth exceeded or met expectations and 4 percent reported no growth (see Figure 9). Similar percentages of SAA and OA states (73 and 74 percent, respectively) and more SAE grant than non-grant states (81 and 59 percent, respectively) reported meeting or exceeding expectations (see Appendix Table A.5).

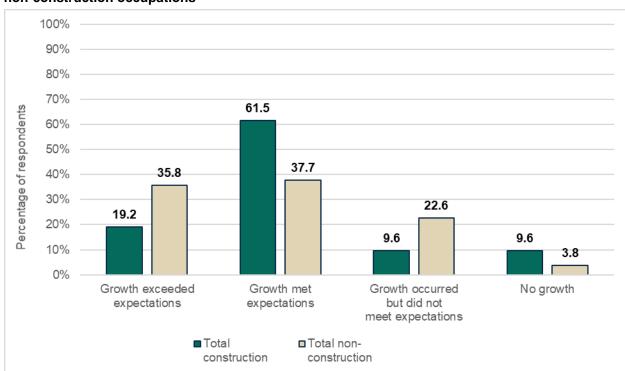


Figure 9. Expectations for growth in registered apprenticeship occupations, by construction and non-construction occupations

Source: State survey of registered apprenticeship, 2020.

Note: N = 52 (construction occupations); N = 53 (non-construction occupations).

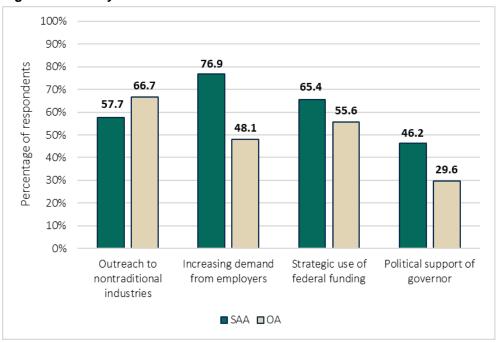
2. Factors responsible for growth

Respondents selected several main factors responsible for growth (Appendix Table A.6). These included outreach to nontraditional industries, or industries that traditionally do not have a registered apprenticeship presence (62 percent); increasing demand from employers, for example, due to employee skills gaps (62 percent); strategic use of federal funding (60 percent); stronger economy increasing demand for workers (51 percent); and strong collaboration with the educational sector (42 percent).

Some differences appear in the factors reported by SAA and OA states and SAE grant and non-grant states (Figures 10 and 11, respectively). Outreach to nontraditional industries was reported as more of a factor in OA than in SAA states (67 and 58 percent, respectively) and more of a factor in SAE grant than non-grant states (67 and 53 percent, respectively). Political support of the governor was less of a factor in

OA than SAA states (30 and 46 percent, respectively), but more of a factor in SAE grant than non-grant states (42 and 29 percent, respectively).

Figure 10. Factors states identified as responsible for growth in registered apprenticeship, by registration entity



Source: State survey of registered apprenticeship, 2020.

Note: Respondents were asked to indicate the "five main factors responsible for growth in registered apprenticeships" in their state. N = 26 for SAA and N = 27 for OA states.

OA = Office of Apprenticeship; SAA = State Apprenticeship Agency.

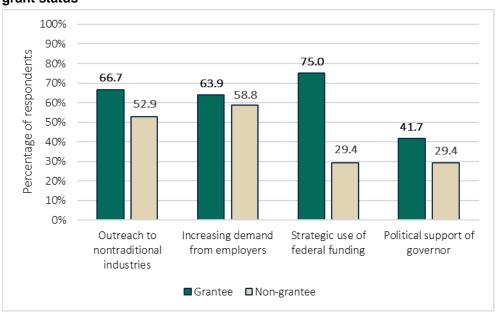


Figure 11. Factors states identified as responsible for growth in registered apprenticeship, by SAE grant status

Source: State survey of registered apprenticeship, 2020.

Note: Respondents were asked to indicate the "five main factors responsible for growth in registered

apprenticeships" in their state. N = 36 for SAE grant and N = 17 for non-SAE grant states.

SAE = State Apprenticeship Expansion.

3. Barriers to expansion

As shown in Figure 12, respondents rated lack of knowledge among employers about apprenticeship as a major barrier to expanding registered apprenticeship in their state. They reported the lack of knowledge among employers, such as the misperception that apprenticeships require union involvement (53 percent), and employer concerns about apprenticeship, such as high costs and potential poaching of trained workers (46 percent), as two of the major barriers to expanding registered apprenticeship. In addition, states reported that a major challenge was the lack of public understanding about how to enter the registered apprenticeship system (53 percent). These were major barriers for both OA and SAA states, although more OA than SAA states reported these as major barriers (see Appendix Table A.7).

SAE grant states were more likely than non-grant states to report recruiting qualified applicants for apprenticeship as a major barrier (40 and 29 percent, respectively) but were less likely to report employer concerns (43 and 53 percent, respectively) and lack of funding or capacity for marketing to employers (36 and 47 percent, respectively) as major barriers. Appendix Table A.7 provides additional data by subgroup on the barriers to expansion.

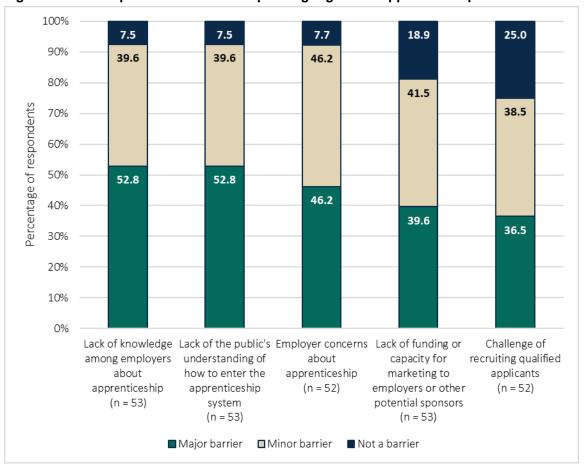


Figure 12. State reports of barriers to expanding registered apprenticeship

Source: State survey of registered apprenticeship, 2020.

Note: Respondents were asked to indicate the "major barriers to expanding registered apprenticeship" from a provided list of seven barriers. The number of respondents that answered each item is indicated in the x-axis label.

4. Areas in which more technical assistance is needed

The largest need for technical assistance that respondents reported was in developing marketing strategies to advance registered apprenticeship; 58 percent of respondents indicated the need for technical assistance in marketing (Figure 13). Other needs included identifying funding opportunities (56 percent), reaching out to underserved populations (54 percent), and expanding to nontraditional industries or occupations (52 percent). Appendix Table A.8 provides additional data by subgroup on the states' technical assistance needs.

More OA states as compared to SAA states reported that they would benefit from technical assistance in four areas (Appendix Table A.8). These areas included guidance on available data to assist with program development and monitoring (56 and 23 percent, respectively), developing occupational standards and frameworks (48 and 15 percent, respectively), understanding federal oversight (37 and 4 percent, respectively), and navigating the registration process (33 and 4 percent, respectively). Non-grant states reported that they would benefit from technical assistance in the same four areas, compared to SAE grant

states. They also reported they would benefit from assistance in developing partnerships for apprenticeships (47 percent).

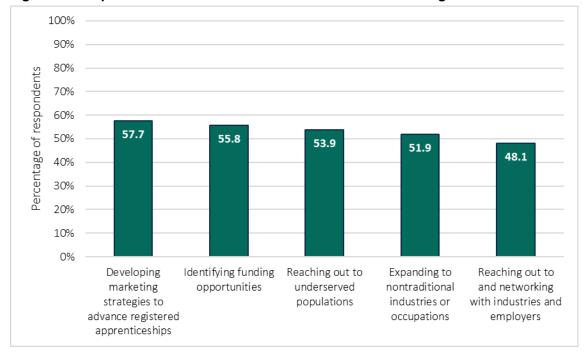


Figure 13. Respondents would benefit from technical assistance or guidance in five main areas

Source: State survey of registered apprenticeship, 2020.

Note: N = 52. Respondents were asked to check all that apply.

F. Conclusions

Respondents to the state survey reported that their state undertook actions in recent years to expand their registered apprenticeship programs. A majority of respondents reported that their agency increased staff working on apprenticeships in their state, and almost half reported recent legislative or regulatory changes to support apprenticeships. Some states reported offers of increased financial support for apprenticeships and incentives for employers. In addition, states reported that the growth in registered apprenticeship programs in non-construction occupations exceeded their expectations.

Additionally, survey responses indicated that, overall, SAE grant states have experienced more growth in their registered apprenticeship activities than did non-grant states. For example, more SAE grant states than non-grant states reported adding staff to work on registered apprenticeship in their agency, increased financial support for apprenticeships in their state, and that the growth in registered apprenticeship met or exceeded their expectations. It should be noted that these states might have found other means to further expand their registered apprenticeship systems in the absence of the grant. In addition, the survey indicated that SAA and OA states faced different challenges in expanding apprenticeships and had different technical assistance needs.

Furthermore, survey responses highlighted opportunities for further growth. States reported factors that were responsible for growth, including outreach to nontraditional industries and employers' interest. At

the same time, they reported facing major challenges due to employers' lack of knowledge about apprenticeships and the public's lack of understanding of the apprenticeship system. These were consistently cited as key challenges across the different subgroups. States also consistently indicated across subgroups that their major technical assistance needs were in developing marketing strategies, identifying funding opportunities, and reaching out to underserved populations. These results of the state survey can help DOL identify states' needs to further expand registered apprenticeship and direct resources to provide the supports and technical assistance to help them overcome these challenges.

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Appendix A:

Supplemental Tables



Table A.1. Responding agency's main responsibilities for registered apprenticeship (percentages)

		Registrat	ion entity	SAE g	rant status
Responsibility	All states	SAA	OA	Grantee	Non-grantee
Administration and management					
Program compliance and auditing	64.2	88.5	40.7	69.4	52.9
Program registration/approval	56.6	84.6	29.6	58.3	52.9
Data analysis	46.2	60.0	33.3	52.8	31.3
Performance reporting	54.7	61.5	48.1	58.3	47.1
Fiscal monitoring	41.5	42.3	40.7	41.7	41.2
Certification of training providers	34.0	46.2	22.2	38.9	23.5
Program development					
Outreach to employers	69.8	76.9	63.0	66.7	76.5
Identifying employer needs	60.4	53.8	66.7	58.3	64.7
Tracking completion	58.5	73.1	44.4	52.8	70.6
Convening employers	56.6	57.7	55.6	55.6	58.8
Designing programs	56.6	69.2	44.4	61.1	47.1
Developing occupational standards	54.7	84.6	25.9	63.9	35.3
Working with training providers (in the workplace, RSI, RTI)	49.1	57.7	40.7	52.8	41.2
Outreach to potential apprentices	35.8	26.9	44.4	36.1	35.3
Tracking skills development/competency attainment	22.6	26.9	18.5	25.0	17.6
Technical assistance	•				
Coordinating with workforce programs/partners	81.1	80.8	81.5	86.1	70.6
Helping stakeholders navigate the registered apprenticeship process and policy	77.4	92.3	63.0	75.0	82.4
Providing training on establishing or managing registered apprenticeship programs	73.6	88.5	59.3	72.2	76.5
Total responses	53	26	27	36	17

Note:

Respondents were asked to rate what type of responsibility their agency has for each item. The answer options were main responsibility, some responsibility, or not at all; percentages of respondents that responded "main responsibility" are shown. The number of responses per item varies because of nonresponse.

RSI = related and supplemental instruction; RTI = related technical instruction; SAA = State Apprenticeship Agency; OA = Office of Apprenticeship; SAE = State Apprenticeship Expansion.

Table A.2. Agencies' partners in registered apprenticeship, by registration entity and SAE grant status (percentages)

		Registration entity						SAE grant status					
		SAA			OA		Grantee			Non-grantee			
Type of partner	Major partner	Minor partner	Not a partner	Major partner	Minor partner	Not a partner	Major partner	Minor partner	Not a partner	Major partner	Minor partner	Not a partner	
Unions	88.5	7.7	3.8	44.0	36.0	20.0	71.4	17.1	11.4	56.3	31.3	12.5	
Employer associations	72.0	28.0	0.0	55.6	29.6	14.8	68.6	25.7	5.7	52.9	35.3	11.8	
Community colleges	69.2	23.1	7.7	81.5	11.1	7.4	80.6	13.9	5.6	64.7	23.5	11.8	
Other state entities	60.0	32.0	8.0	77.8	22.2	0.0	68.6	28.6	2.9	70.6	23.5	5.9	
School districts/high schools	50.0	50.0	0.0	55.6	37.0	7.4	61.8	35.3	2.9	35.3	58.8	5.9	
Local workforce development boards	37.5	45.8	16.7	69.2	23.1	7.7	54.5	33.3	12.1	52.9	35.3	11.8	
Other intermediaries	33.3	38.1	28.6	36.0	32.0	32.0	40.0	33.3	26.7	25.0	37.5	37.5	
Professional associations	30.8	53.8	15.4	40.0	40.0	20.0	40.0	45.7	14.3	25.0	50.0	25.0	

Note: The number of responses per item varies because of nonresponse. For registration type, N = 26 for SAA and N=27 for OA. For SAE grant status, N = 36 for grantee and N = 17 for non-grantee.

SAA = State Apprenticeship Agency; OA = Office of Apprenticeship; SAE = State Apprenticeship Expansion.

Table A.3. Percentage of states reporting their top three priorities for apprenticeship

	Top priority	Second priority	Third priority
Increase number of sponsors for registered apprenticeships	51.0	18.4	8.2
Build apprenticeship in nontraditional industries or occupations (industries or occupations that traditionally do not have a registered apprenticeship presence)	18.0	30.0	18.0
Increase apprentice pipeline (e.g. pre-apprenticeship or youth apprenticeship)	12.0 18.0		24.0
Increasing industry-sponsored or intermediary-sponsored apprenticeship	iceship 5.9		19.6
Increase retention of apprenticeships	8.2	16.3	6.1
Participation of racial and ethnic minorities	2.0	2.0	11.8
Participation of youth	6.0	2.0	4.0
Participation of women	0.0	4.1	6.1
Participation of veterans	1.9	1.9	1.9
Participation of justice-involved individuals	0.0	0.0	2.0
Participation of individuals with disabilities	0.0	1.9	0.0
Total responses	52	51	51

Note: Respondents were asked to rank the following items in terms of their priority for apprenticeship in their

state, with 1 being the highest priority, 2 the next highest priority, and so on.

Table A.4. Registered apprenticeship incentives available to employers, by time available, registration type, and SAE grant status

						Registrat	ion type					SAE gra	nt status		
		All states			SAA OA			Grantee			l	Non-grante)		
	Been available for more than 2 years	Available in past two years	Not available	Been available for more than 2 years	Available in past two years	Not available	Been available for more than 2 years	Available in past two years	Not available	Been available for more than 2 years	Available in past two years	Not available	Been available for more than 2 years	Available in past two years	Not available
Tax credits or other tax savings	21.2	15.4	63.5	30.8	19.2	50.0	11.6	11.5	76.9	22.2	16.7	61.1	18.8	12.5	68.8
State wage subsidies	16.7	4.2	79.2	21.8	4.3	73.9	12.0	4.0	84.0	21.2	3.0	75.8	6.6	6.7	86.7
Local wage subsidies	6.4	4.3	89.4	9.1	9.1	81.8	4.0	0.0	96.0	6.0	6.1	87.9	7.1	0.0	92.9
State funding for workforce training and education	62.7	17.6	19.6	66.7	20.8	12.5	59.3	14.8	25.9	60.0	22.9	17.1	68.8	6.3	25.0
State funding for apprentice- ship RTI	40.4	26.9	32.7	48.0	24.0	28.0	33.4	29.6	37.0	42.9	25.7	31.4	35.3	29.4	35.3
Locally- subsidized RTI	18.0	14.0	68.0	13.1	21.7	65.2	22.2	7.4	70.4	15.2	21.2	63.6	23.5	0.0	76.5
RTI through public education system	38.8	26.5	34.7	37.5	33.3	29.2	40.0	20.0	40.0	43.8	31.3	25.0	29.5	17.6	52.9

Note: The number of responses per item varies because of nonresponse. The total N = 52. For registration type, N = 26 for SAA and N = 27 for OA. For SAE grant status, N = 36 for grantee and N = 17 for non-grantee.

RTI = related technical instruction; SAA = State Apprenticeship Agency; OA = Office of Apprenticeship; SAE = State Apprenticeship Expansion.

Table A.5. Expectations for growth in registered apprenticeship occupations, by construction occupations, non-construction occupations, registration type, and SAE grant status

				Registration type				SAE grant status			
	All s	tates	SAA		0	OA		ntee	Non-g	rantee	
	Construction	Non- construction									
Growth exceeded expectations	19.2	35.8	34.6	46.2	3.8	25.9	25.0	44.4	6.3	17.6	
Growth met expectations	61.5	37.7	57.7	26.9	65.4	48.1	61.1	36.1	62.5	41.2	
Growth occurred, but did not meet expectations	9.6	22.6	3.8	26.9	15.4	18.5	11.1	19.4	6.3	29.4	
No growth	9.6	3.8	3.8	0.0	15.4	7.4	2.8	0.0	25.0	11.8	
Total responses	52	53	26	26	26	27	36	36	16	17	

SAA = State Apprenticeship Agency; OA = Office of Apprenticeship; SAE = State Apprenticeship Expansion.

Table A.6. Percentage of states reporting the factor was responsible for growth in registered apprenticeship, by registration type and SAE grant status

		Registration type		SAE g	rant status
Factors	All states	SAA	OA	Grantee	Non-grantee
Outreach to nontraditional industries	62.3	57.7	66.7	66.7	52.9
Increasing demand from employers	62.3	76.9	48.1	63.9	58.8
Strategic use of federal funding	60.4	65.4	55.6	75.0	29.4
Stronger economy increasing demand for workers	50.9	61.5	40.7	47.2	58.8
Strong collaboration with educational sector	41.5	38.5	44.4	41.7	41.2
Political support of governor	37.7	46.2	29.6	41.7	29.4
Federal support and technical assistance	35.8	19.2	51.9	33.3	41.2
New intermediary or industry association support	28.3	30.8	25.9	33.3	17.6
Financial backing from state budget	24.5	26.9	22.2	22.2	29.4
Political support of state legislature	22.6	23.1	22.2	22.2	23.5
Leadership from business sector	20.8	19.2	22.2	19.4	23.5
Improved process to speed registrations	20.8	23.1	22.2	16.7	29.4
New occupational standards developed	11.3	11.5	11.1	13.9	5.9
High level of standardization across apprenticeships	5.7	3.8	7.4	5.6	5.9
Total responses	53	26	27	36	17

Note: Respondents were asked to select the five main factors responsible for growth in registered apprenticeship in their state.

SAA = State Apprenticeship Agency; OA = Office of Apprenticeship; SAE = State Apprenticeship Expansion.

Table A.7. Percentage of respondents that rated item as a major barrier to expansion, by registration type and SAE grant status

	All	Registra	ation type	SAE g	rant status
Types of barriers	states	SAA	OA	Grantee	Non-grantee
Lack of knowledge among employers about apprenticeship	52.8	46.2	66.7	55.6	47.1
Lack of public understanding of how to enter the apprenticeship system	52.8	46.2	66.7	52.8	52.9
Employer concerns about apprenticeship	46.2	40.0	54.2	42.9	52.9
Lack of funding or capacity for marketing to employers or other potential sponsors	39.6	42.3	41.7	36.1	47.1
Challenge of recruiting qualified applicants	36.5	32.0	41.7	40.0	29.4
Lack of resources to support RTI or wages	33.3	28.0	37.5	28.6	43.8
Lack of guidance or roadmaps for establishing apprenticeships	28.3	15.4	41.7	30.6	23.5
Challenge of collaboration between siloed agencies or divisions	26.4	23.1	29.2	25.0	29.4
Low state staff knowledge/capacity	25.0	20.0	29.2	25.7	23.5
Delays in registering programs with federal or state apprenticeship entities	24.5	11.5	33.3	22.2	29.4
Lack of champions or leaders	24.5	23.1	29.2	27.8	17.6
Limited availability of data on apprenticeship	20.8	15.4	25.0	19.4	23.5
Lack of interest among training providers	19.2	12.0	25.0	14.3	29.4
Lack of communication with the federal Office of Apprenticeship	18.9	3.8	33.3	16.7	23.5
Total responses	53	26	27	36	17

Note: Respondents were asked to rate each barrier to expanding registered apprenticeship in their state as a major, minor, or not a barrier.

RTI = related technical instruction; SAA = State Apprenticeship Agency; OA = Office of Apprenticeship; SAE = State Apprenticeship Expansion.

Table A.8. Areas in which respondents would benefit from technical assistance or guidance, by registration type and SAE grant status (percentages)

	Registration type		ion type	SAE grai	nt status
Technical assistance areas	All states	SAA	OA	Grantee	Non- grantee
Developing marketing strategies to advance registered apprenticeship	56.6	57.7	55.6	52.8	64.7
Identifying funding opportunities	54.7	53.8	55.6	58.3	47.1
Reaching out to underserved populations	52.8	53.8	51.9	47.2	64.7
Expanding to nontraditional industries or occupations	50.9	53.8	48.1	50.0	52.9
Reaching out to and networking with industries and employers	47.2	50	44.4	47.2	47.1
Guidance on available data to assist in program development and monitoring	39.6	23.1	55.6	33.3	52.9
Increasing access to tax credits and other subsidies	37.7	46.2	29.6	38.9	35.3
Developing partnerships for apprenticeship	34.0	34.6	33.3	27.8	47.1
Developing occupational standards and frameworks	32.1	15.4	48.1	25	47.1
Understanding federal oversight of the apprenticeship system	20.8	3.8	37.0	16.7	29.4
Navigating the apprenticeship registration process	18.9	3.8	33.3	5.6	47.1
Expanding number of instructors/trainers for RSI/RTI	18.9	15.4	22.2	19.4	17.6
Total responses	52	26	27	36	17

Note: Respondents were asked to check all that apply.

RSI = related and supplemental instruction; RTI = related technical instruction; SAA = State Apprenticeship Agency; OA = Office of Apprenticeship; SAE = State Apprenticeship Expansion.

Appendix B

State Apprenticeship Expansion Survey





State Apprenticeship Expansion Survey

August 12, 2020

The U.S. Department of Labor (DOL) is conducting a study of State Apprenticeship Expansion efforts and has asked Mathematica and its partners, the Urban Institute and Social Policy Research Associates to assist with the study. As part of the study, we are conducting a national survey of efforts to expand registered apprenticeship and asking states and territories to complete this brief survey about their current and planned efforts. Your participation will help DOL better understand how the registered apprenticeship system is being administered across the country.

The survey has three topic areas covering registered apprenticeships in your state: (1) administration and management, (2) apprenticeship activities, and (3) lessons learned. We know that the apprenticeship structure varies by state and may involve multiple agencies and organizations, but for the purpose of this survey, we are asking about <u>your</u> state agency's experience specifically.

Please note that the focus of this survey is on REGISTERED APPRENTICESHIPS in your state.

Individual responses to this survey will not be attributed to specific individuals or organizations. Responses to this data collection will be used only for research purposes. The reports prepared from the information provided as a part of this survey will be summarized across all respondents, and individual forms will not be available to DOL or anyone outside the study team, except as required by law.

The survey should take approximately 25 minutes to complete. If there are questions you are not able to answer please feel free to draw on the expertise and knowledge of others within your state. If quantitative data is requested, your best estimate is fine. You may also want to refer to program documentation, such as grant applications or yearly reports. If you have any questions as you complete this questionnaire or about the evaluation, please contact <name> at Mathematica at xxx-xxx-xxxx or xxxx@mathematica-mpr.com.

Please complete the survey by Friday, February 7, 2020. Please click the "Next" button below to start the survey.

Section A: Administration and Management

Please complete the following background information on the agency that you work for.

- 1. Please select the name of your state or territory from the drop-down menu.
- 2. What is the name of your agency?

3.	What is the name of your office or division?

4. What are your agency's responsibilities in the state for registered apprenticeship with regard to administration and management?

SELECT ONE ONLY

		Main responsibility	Some responsibility	None at all
a.	Program compliance and auditing	1 O	2 Q	3 O
b.	Fiscal monitoring	1 O	2 O	O ε
c.	Performance reporting	1 O	2 O	ο ε
d.	Data analysis	1 O	2 O	O ε
e.	Program registration/approval	1 O	2 O	O ε
f.	Certification of training providers	1 O	2 O	Oε

5. What are your agency's responsibilities in the state for registered apprenticeship with regard to program development?

SELECT ONE ONLY

		Main responsibility	Some responsibility	None at all
a.	Outreach to employers	1 O	2 Q	з О
b.	Outreach to potential apprentices	1 O	2 O	O ε
c.	Convening of employers Identifying employer needs	1 O	2 Q	3 O
d.	Designing programs	1 O	2 O	O ε
e.	Developing occupational standards	1 O	2 O	O ε
f.	Working with training providers (in the workplace/Related and Supplemental Instruction (RSI)/Related Technical Instruction (RTI))	1 O	2 Q	3 Q
g.	Tracking skills development/competency attainment	1 O	2 Q	3 Q
h.	Tracking completion	1 O	2 O	O ε

6. What are your agency's responsibilities in the state for registered apprenticeship with regard to technical assistance?

SELECT ONE ONLY

	Main responsibility	Some responsibility	None at all
 Helping stakeholders navigate the registered apprenticeship process and policy 	1 Q	2 Q	3 Q
b. Providing training on establishing or managing registered apprenticeship programs	1 Q	2 Q	3 Q
c. Coordinating with workforce programs/partners	1 O	2 O	3 O

7.	Does your agency have any other main responsibilities in the state for registered
	apprenticeship?

0	Yes1
O	No0

Skip Q8 if your answer to Q7 was B.

8. Please describe your agency's other <u>main</u> responsibilities in the state for registered apprenticeship.

9.	What is the total number of full time equivalent staff (FTEs) that perform the roles listed in
	the previous questions in your agency?

•	Number of FTEs has grown in the past 2 years	1
•	Number of FTEs has <u>not changed</u> in the past 2 years	2
O	Number of FTEs has <u>decreased</u> in the past 2 years	3
Skip (Q11 if your answer to Q10 was B or C.	
Vhat is	s the number of FTEs that have been added in the pas	st 2 years?
_		
	ten does your agency conduct a review of the quality	of registered appr
orogran		
orogran f progra	ms?	v often renewals oc
orogran f progra	ms? rams are reviewed upon renewal, please indicate how	v often renewals od
orogran f progra O	ms? rams are reviewed upon renewal, please indicate how Weekly	v often renewals oc 1
orogran f progra O O	ms? rams are reviewed upon renewal, please indicate how Weekly Bi-weekly	v often renewals od 1 2
f program	ms? rams are reviewed upon renewal, please indicate how Weekly Bi-weekly Monthly	v often renewals oc 1 2 3
f program	ms? rams are reviewed upon renewal, please indicate how Weekly Bi-weekly Monthly Quarterly	v often renewals oc 1 2 3 4
f program	ms? rams are reviewed upon renewal, please indicate how Weekly Bi-weekly Monthly Quarterly Yearly	v often renewals oc 1 2 3 4

13. Who are your agency's main partners for registered apprenticeships in the state?
Please consider a partner group to be major if at least one member of the group is a major partner.

SELECT ONE ONLY

		Major partner	Minor partner	Not a partner
a.	Other state entities (including State Workforce Board)	1 O	2 O	3 O
b.	Community colleges	1 O	2 O	O ε
c.	Local Workforce Development Boards	1 O	2 O	O ε
d.	School districts/high schools	1 O	2 O	O ε
e.	Unions	1 O	2 O	O 8
f.	Professional associations	1 O	2 O	O ε
g.	Employer associations	1 O	2 O	O ε
h.	Other intermediaries	1 O	2 O	O ε
i.	Other major partners? (specify)	1 Q	2 Q	3 Q

	Section B: Apprenticeship Ac	ctivities	
14.	Please rank the following in terms of their priority for appren being the highest priority, 2 the next highest priority, and so		our state, with 1
	Increase number of sponsors for registered apprenticesh	ips	1
	Increase retention of apprenticeships		2
	Increase apprentice pipeline (e.g. pre-apprenticeship or y apprenticeship)		3
	Build apprenticeship in non-traditional industries or occup (industries or occupations that traditionally do not have a apprenticeship presence)	registered	4
	Increasing industry-sponsored or intermediary-sponsored apprenticeship		5
	Participation of women		6
	Participation of racial and ethnic minorities		7
	Participation of youth		8
	Participation of justice-involved individuals		9
	Participation of individuals with disabilities		10
	Participation of veterans		11
15.	In the <u>state</u> , what incentives are available now to employers apprenticeships?	who sponsor	registered
		SELECT O	NE ONLY
		Available now	Not available
a.	Tax credits or other tax savings	1 O	2 Q
b.	State wage subsidies	1 O	2 O
C.	Local wage subsidies	1 O	2 O
d.	State funding for workforce training and education	1 O	2 O
e.	State funding for apprenticeship related technical instruction (RTI)	1 O	2 O
f.	Locally-subsidized RTI	1 O	2 O
g.	RTI through public education system	1 O	2 O
h.	Other incentives that are available now? (specify)	1 Q	2 Q

	Tax credits or other tax savings	1
	State wage subsidies	2
	Local wage subsidies	3
	State funding for workforce training and education	4
	State funding for apprenticeship related technical instruction (RTI)	5
	Locally-subsidized RTI	6
	RTI through public education system	7
	Other (specify)	99
	type of sponsor employs the most registered apprentices in the sate is fine.	state? Yo
•	Single business	1
•	Consortium of businesses	2
0	Industry or professional association	3
0	Joint labor-management organization	4
•	Community college or other institution of higher education	5
•	Community-based organization or nonprofit	6
•	Other (specify)	99
	type of sponsor employs the most registered apprentices in the ruction occupations? Your best estimate is fine.	
0	Single business	
0	Consortium of businesses	
0	Industry or professional association	
0	Joint labor-management organization	
O	Community college or other institution of higher education	
•	Community-based organization or nonprofit	
•	Other (specify)	00

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21.	D	o you have or are you aware of any apprenticeship programs that:
	a)	Are not registered with either the U.S. Department of Labor or a State Apprenticeship Agency; AND
	b)	Have the following four elements?
		A paid work component
		An on-the-job training component
		A classroom training or related technical instruction component
		Attainment of an industry-recognized credential
		O Yes
22.		kip to Q24 if your answer to Q21 was B. pproximately how many unregistered programs meet the criteria?
	C	riteria: Programs that
	a)	Are not registered with either the U.S. Department of Labor or a State Apprenticeship Agency; AND
	b)	Have the following four elements?
		O A paid work component1
		O An on-the-job training component2

Please note, since businesses may not refer to these programs as apprenticeships, the programs submitted do not need to have "apprenticeship" in the name. They only need to meet the criteria outlined above.

	Construction	1
	Military (USMAP)	2
	Public Administration	3
	Manufacturing	4
	Transportation	5
	Utilities	6
	Health Care and Social Assistance	7
	Retail Trade	8
	Education	9
	Wholesale Trade	10
	Warehousing	11
	Other Services, except Public Administration	12
	Administrative and Support and Waste Management and Remerservices	
	Agriculture, Forestry, Fishing and Hunting	14
	Information	15
	Accommodation and Food Services	16
	Mining, Quarrying, and Oil and Gas Extraction	17
	Professional, Scientific, and Technical Services	18
	Finance and Insurance	19
	Arts, Entertainment, and Recreation	20
	Real Estate and Rental and Leasing	21
	there been any major changes in your state's apprenticeship ation in the past 3 years?	regulation or related
0	Yes	1
O	No	0
	changes were made in the state to apprenticeship regulation ast 3 years?	or related legislation

Otato	Guivey
	Skip Q26 if your answer to Q25 was B.
26.	Is there other state legislation that has been proposed and has strong support?
	O Yes1
	O No0
	Skip Q27 if your answer to Q26 was B.
	Skip Q27 if your answer to Q20 was B.
27.	Please provide the name or number of the proposed state legislation:

Section C: Lessons Learned

28-30. What have been the major barriers to expanding registered apprenticeship in your state? SELECT ONE ONLY

		Major barrier	Minor barrier	Not a barrier
a.	Delays in registering programs with the federal or state apprenticeship entities	1 Q	2 Q	3 O
b.	Lack of communication with the federal Office of Apprenticeship	1 O	2 O	O 8
c.	Lack of guidance or roadmaps for establishing apprenticeships	1 O	2 Q	O 8
d.	Lack of developed occupational frameworks	1 O	2 O	O ε
e.	Limited availability of data on apprenticeship	1 O	2 O	O 8
f.	Lack of knowledge among employers about apprenticeship (such as, their perception that apprenticeship is not possible without unions)	1 Q	2 Q	O ε
g.	Challenge of collaboration between siloed agencies or divisions	1 O	2 Q	O 8
h.	Lack of industry relationships	1 O	2 O	ο ε
i.	Lack of champions or leaders	1 O	2 Q	3 O
j.	Lack of interest among training providers	1 O	2 O	O ε
k.	Lack of the public's understanding of how to enter the apprenticeship system	1 Q	2 Q	O ε
I.	Challenge of recruiting qualified applicants	1 O	2 O	3 O
m.	Negative reputation for apprenticeship among potential applicants	1 O	2 Q	3 O
n.	Employer concerns about apprenticeship, such as high costs and potential for poaching of trained workers	1 Q	2 Q	Ο ε
0.	Lack of funding and capacity for marketing to employers or other potential sponsors	1 Q	2 Q	O ε
p.	Complications around access to tax credits or subsidies			
q.	Lack of resources to support Related Technical Instruction (RTI) or wages			
r.	Low state staff knowledge/capacity			
j.	Other major barriers? (specify)	1 Q	2 Q	O &

0	Growth exceeded expectations	1
•	Growth met expectations	2
O	Growth occurred, but did not meet expectations	3
0	No growth	4
	owth in registered apprenticeship outside of construction occupat ars met the state's expectations?	ions ove
O	Growth exceeded expectations	1
O	Growth met expectations	2
O	Growth occurred, but did not meet expectations	3
O	No growth	4
If you	selected D for Q31 and Q32, skip Q33.	
What a		
	re the 5 main factors responsible for the growth in registered appr	enticesl
state?	only select or provide <u>up to 5 answers</u> .	enticesI
state?		
state? Please _	only select or provide <u>up to 5 answers</u> .	1
state? Please	only select or provide <u>up to 5 answers</u> . Strategic use of federal funding	1 2
state? Please	only select or provide <u>up to 5 answers</u> . Strategic use of federal funding Federal support and technical assistance	1 2 3
state? Please	only select or provide <u>up to 5 answers</u> . Strategic use of federal funding Federal support and technical assistance Financial backing from state budget	1234
state? Please	only select or provide up to 5 answers. Strategic use of federal funding Federal support and technical assistance Financial backing from state budget Political support of Governor.	1345
state? Please	only select or provide up to 5 answers. Strategic use of federal funding Federal support and technical assistance Financial backing from state budget Political support of Governor Political support of state legislature	13456
state? Please	only select or provide up to 5 answers. Strategic use of federal funding	13456
state? Please	only select or provide up to 5 answers. Strategic use of federal funding	12456
ctate?	only select or provide up to 5 answers. Strategic use of federal funding	12456789
ctate? Please	only select or provide up to 5 answers. Strategic use of federal funding	123456789
ctate?	only select or provide up to 5 answers. Strategic use of federal funding	12345678910
state? Please	only select or provide up to 5 answers. Strategic use of federal funding	124567891011
state? Please	only select or provide up to 5 answers. Strategic use of federal funding	123456789101112

	III WIIG	t areas would you benefit from further technical assistance or guid	ance?
	Mark a	ll that apply	
		Navigating the apprenticeship registration process	1
		Developing occupational standards and frameworks	2
		Expanding the number of instructors/trainers for RSI/RTI	3
		Reaching out to and networking with industries and employers	4
		Developing partnerships for apprenticeship	5
		Increasing access to tax credits and other subsidies	6
		Identifying funding opportunities	7
		Reaching out to underserved populations	8
		Expanding to non-traditional industries or occupations	9
		Developing marketing strategies to advance registered apprenticeship	10
		Understanding federal oversight of the apprenticeship system	11
		Guidance on available data to assist in program development and monitoring	12
		Other (specify)	99
35 .	Please		
	1 icase	erank your technical assistance or guidance selections in order of i	mportan
		Only rank options that you marked in Q34	
		Only rank options that you marked in Q34 Navigating the apprenticeship registration process	1
		Only rank options that you marked in Q34 Navigating the apprenticeship registration process Developing occupational standards and frameworks	1
		Only rank options that you marked in Q34 Navigating the apprenticeship registration process Developing occupational standards and frameworks Expanding the number of instructors/trainers for RSI/RTI	1 2 3
		Only rank options that you marked in Q34 Navigating the apprenticeship registration process Developing occupational standards and frameworks Expanding the number of instructors/trainers for RSI/RTI Reaching out to and networking with industries and employers	1 2 3
		Only rank options that you marked in Q34 Navigating the apprenticeship registration process	1 2 3 4
		Only rank options that you marked in Q34 Navigating the apprenticeship registration process	12345
		Only rank options that you marked in Q34 Navigating the apprenticeship registration process	123456
		Only rank options that you marked in Q34 Navigating the apprenticeship registration process	1234567
		Only rank options that you marked in Q34 Navigating the apprenticeship registration process	123456789
		Only rank options that you marked in Q34 Navigating the apprenticeship registration process	123456789
		Only rank options that you marked in Q34 Navigating the apprenticeship registration process	12345678910
		Only rank options that you marked in Q34 Navigating the apprenticeship registration process	1234567891011

Mark	all that apply	
	A state-specific system used exclusively for registered apprenticeship programs and apprentices	1
	A state or other system used by multiple offices or agencies for tracking information in addition to registered apprenticeship programs and apprentices	2
	Registered Apprenticeship Partners Information Data System (RAPIDS)	3
	None	4
	Other (specify)	99
Doos	the state track data on the outcomes of registered apprentices after	they leave the
progra		they leave the
0	Yes	1
0	No	0
Skip	Q38 if your answer to Q37 was B.	
What	are the sources of outcomes of registered apprentices?	
What a	are the sources of outcomes of registered apprentices?	4
What a	are the sources of outcomes of registered apprentices? all that apply Wage records data	
What a	are the sources of outcomes of registered apprentices? all that apply Wage records data Employer reported data	2
What a	are the sources of outcomes of registered apprentices? all that apply Wage records data Employer reported data Intermediary reported data	2 3
What a	are the sources of outcomes of registered apprentices? all that apply Wage records data Employer reported data Intermediary reported data Survey of apprentices	2 3 4
What a	are the sources of outcomes of registered apprentices? all that apply Wage records data Employer reported data Intermediary reported data	2 3 4
What a	are the sources of outcomes of registered apprentices? all that apply Wage records data Employer reported data Intermediary reported data Survey of apprentices	2 4 99 ips in your stat
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Contact Information

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mation will only be used

Please answer all of the questions on this page.
Who was primarily responsible for completing this form? This infor if we need to contact you about your responses.
Please enter your first and last name.
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Please enter the name of your agency and office/division.
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Division/Office
What is your phone number? Please use the xxx-xxx-xxxx format.
If your phone number has an extension, please enter it below.
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