



2019-2020

APPRENTICESHIP STATE EXPANSION

Investing in a sustainable model for
apprenticeship expansion in Colorado

Workforce Development Programs
Colorado Department of Labor and
Employment

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Executive Summary

The Colorado Department of Labor and Employment (CDLE) is pleased to submit our first Apprenticeship State Expansion (ASE) grant annual report. Our report provides an analysis of Colorado's current apprenticeship industry and occupational landscape, progress to grant goals and outcomes, and updated workplans to indicate key goals and outcomes for the coming year. Since receiving our first State Apprenticeship Expansion Grant in 2016, CDLE and our partners have worked tirelessly to expand Registered Apprenticeship (RA) opportunities for Colorado adults and youth. These efforts resulted in significant increases in apprentice enrollments: new apprentice enrollments increased 15% from 2016 to 2017, and an additional 21% between 2017 to 2018. The ASE grant has and will continue that expansion through innovative strategies and partnerships, and will prove critical during the current period of economic uncertainty.

Colorado recognizes the potential of high-quality pre-apprenticeship and registered apprenticeship as a key recovery strategy during COVID-19. Displaced job seekers looking for a new career to support their families will benefit from the earn-while-you learn model as occupations and industries change. Simultaneously, CDLE recognizes that as businesses begin to hire again during periods of high unemployment with more candidates to choose from, traditionally underserved populations can be left behind. Through intentional partnerships with key state and local agencies and community organizations, CDLE demonstrates its commitment to equitable access to registered apprenticeship, and the credentials and careers that they lead to.

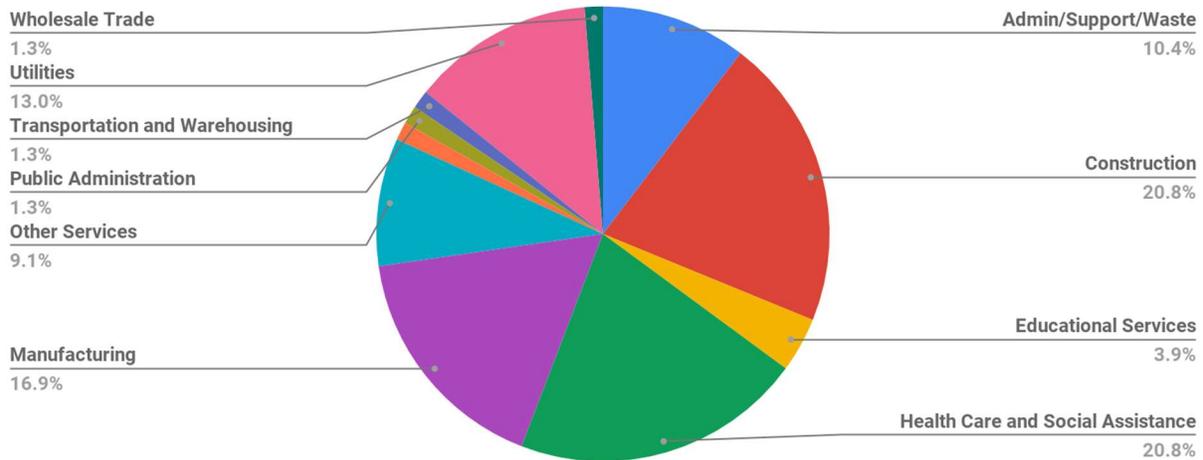
This report highlights the successful development of the new Apprenticeship Grant Hub structure, which will substantially improve the ease of serving apprentices across counties, and increase and improve collaboration between OneStop partners. The Hub Model strategy and the new role of the Consultants will enhance direct client services for training and supportive services and increase the availability of technical assistance throughout the statewide workforce system. We have made significant strides in the establishment of an improved workflow for apprenticeship program development which clarifies the roles of local, state, and federal partners. This workflow, highlighted in the report, will reduce the typical time from initial program development efforts to finalizing registration with Office of Apprenticeship (OA) staff members.

RA Industries and Occupations in Colorado

Colorado has 193 Registered Apprenticeship Program (RAP) sponsors, representing 485 occupations. Key industries are construction, manufacturing, and utilities; and the top five RA occupations are Industrial Maintenance Mechanic, Pipe Fitter, Electrician, Line Maintainer, and Plumber. Colorado anticipates significant growth in RAPs within Information Technology (IT) and healthcare RAPs over the next several years, due to high demand and program development investment.

Colorado’s ASE industry priorities are aligned with 1) high-growth occupations/industries and 2) the Governor’s priority sectors. These industries include: clean energy, healthcare (including behavioral and community health), IT, advanced manufacturing, construction, and early childhood education (ECE). The below chart shows industry breakdowns among recent programs registered.

New Programs Registered 1/1/2016 - 6/12/2020



The below chart describes the most common occupations registered between 1/1/2016 and 6/12/2020. Overall in that timeframe, 72 distinct occupations were registered with new or existing programs, in diverse jobs including Electronics Technician, Personal Care Provider, Scientific Instrument Maker, and Water Treatment Specialist.

TOP OCCUPATIONS REGISTERED 2016-2020	
Occupation Name	Count
Arborist	7
Medical Assistant	5
Electrical Power-Line Installer and Repairer	4
Pipefitter and Steamfitter	3
Plumber	3
Electrician	2

Electronics Engineering Technician	2
Heating and Air Conditioning Mechanic and Installer	2
Industrial Manufacturing Technician	2
Manufacturing Production Technician	2
Medical Records and Health Information Technician	2
Nursing Assistant	2

In addition to state-level priorities, RA expansion grants are also intended to meet the long-term needs of individual employers and regionally specific industry needs. Employers/industry groups outside the state priority sectors may note how the RA model can help them fill a hiring gap, diversify their company, or fill the anticipated void of a retiring workforce.

Spotlight on Colorado’s Apprenticeship Hub Model

Apprenticeship Hub

In the first year of the grant, CDLE utilized leveraged funds to develop a unique model for facilitating grant funds and services to One Stop partners. This “Hub” model was developed to give greater flexibility for Colorado’s local workforce boards to collaborate to meet state-level objectives.

Apprenticeship Hubs are OneStop Centers that coordinate business and career services related to RA expansion across service areas:

- Host one or more Apprenticeship Consultants to develop new RAPs and serve as liaisons between the state agencies and workforce system
- Align strategies with state and local partners to meet industry and equity goals related to grant-specific work plans
- Coordinate business service and career service delivery to meet the needs of RAPs impacted by grant activity; and
- Develop MOUs with partner workforce boards to coordinate service delivery (e.g. recruitment, RI/OJL/SS funding) to meet grant objectives

CDLE coordinated with all ten workforce areas to select the ASE Apprenticeship Hub: Arapahoe Douglas Works! (ADW) workforce center. CDLE and ADW have closely coordinated efforts to establish a framework for the Hub model. The initial roll out of the hub model proved successful, and two other CDLE grants are utilizing a similar model for grant administration.

Prior Model (SAE)	Apprenticeship Hub Model (ASE Pilot)	Outputs	Outcomes
Separate agreements with each participating county with local participant and RAP outcomes	CDLE issues Hub agreement with a collective outcome; Hub establishes MOUs with workforce boards	Counties strategize regionally to meet state goals Counties can move	Allows counties to focus on business service (over

<i>Note: CDLE monitors all workforce areas</i>	<i>Note: CDLE monitors all workforce areas</i>	funds easier (MOUs less restrictive than state agreement)	meeting grant targets)
Employer recruitment, new RAP development, and apprentice recruitment done by business services	Counties work with Hubs to determine how Consultants can best support business services to ensure local, regional, and statewide employer needs are met	Real-time, responsive capacity building Emphasizes strengths of each area	All employer needs are met
CDLE provides TA via webinars/info sessions/receives feedback primarily via ad hoc correspondence or quarterly reports (challenging to maintain statewide consistency in RA program development expertise)	Apprenticeship Consultants host weekly calls, participate in standing business services meetings, and give ongoing training to business services Consultants and CDLE meet weekly to discuss implementation challenges, policies, etc. that hinder service delivery	Meets training needs of each professional, clarifies misconceptions State can focus on policies and procedures impacting systems change	Consistent, accurate information delivered to employers
Employers and potential sponsors sent isolated queries based on closest workforce centers	Centralized process for receiving and supporting employers, including a Hub email	Understand common employer needs and focus on service delivery	20+ employer TA requests in a single quarter during COVID-19

Apprenticeship Consultant Onboarding

As part of the hub development model, CDLE utilized leveraged dollars to fund, oversee, and train the new Apprenticeship Consultants, who offer statewide expertise and support to the apprenticeship ecosystem. Leveraged funds were utilized for the first year of the grant to maximize available grant funds for direct client support. Consultants are funded via the ASE grant for the second and third years of the grant; they play a key role in meeting both program and participant goals under the ASE grant.

Consultants coordinate with county workforce partners to create a seamless system where the entire continuum of business services can be met from generating interest in RAPs to leveraging WIOA and other workforce services to place, screen and support apprentices. The Apprenticeship Specialist and the State Apprenticeship Coordinator, as well as other state staff, conducted extensive training to develop the Consultants' apprenticeship expertise. The Apprenticeship Specialist provides enhanced support, particularly in areas where curriculum development requires state and federal coordination (e.g. collegiate and licensed occupations). The State Apprenticeship Coordinator addresses partners, policy and practice issues that impede curricular development and service delivery related to the ASE work plan (e.g. work flow between state and local entities, ETPL, Division of Vocational Rehabilitation (DVR) alignment).

Progress Towards ASE Grant Goals 2019-2020

System Level Activity 1: Enhance Capacity of State and Local Staff to Conduct Business Outreach

Colorado's urban and rural workforce directors united after implementing the State Apprenticeship Expansion (SAE) grant in the need for focused RA specialists. Our state surveyed best practices nationwide and adapted the Apprenticeship Consultant model from South Carolina to fit the unique context of Colorado. In Colorado, our ASE-funded Apprenticeship Consultants go beyond RAP development to coordinating the full continuum of RA services.

In August 2019, The State Coordinator launched ASE by hosting a two-day training for workforce and community college staff by inviting a guest speaker from South Carolina to present the Consultant framework used in that state and begin to discuss how the model could be adapted for Colorado. Through ongoing follow-up conversations with workforce directors, stakeholders agreed to house the Consultants within the Hub county office.

To onboard the new Apprenticeship Consultants to their new roles, they participated in a series of trainings developed and hosted by the Apprenticeship Specialist and other key state staff. The training provided the Consultants with foundational knowledge RA and other key topics, as well as tool for outreach to employers and sponsors to promote the RA model, develop curriculum, and provide technical assistance (TA) to state agencies and the workforce system.

- The State Apprenticeship Coordinator, Apprenticeship Specialist, Apprenticeship Consultants, and other key staff participate in regularly scheduled RAP Alignment meetings to discuss statewide strategies and ensure alignment of services
- The Specialist and Consultants co-created a presentation about registered apprenticeship to ensure a unified message on RAs across the state
- The Apprenticeship Specialist holds weekly RA TA meetings with the Apprenticeship Consultants to discuss technical RA questions. The weekly meetings allow the Apprenticeship Consultants to ask questions and brainstorm solutions to problems encountered with employers and workforce center staff.

Year One Outcomes Included:

1. Working with Colorado Urban Workforce Alliance (CUWA) and Colorado Rural Workforce Consortia (CRWC) to determine the role of the Apprenticeship Consultants and Apprenticeship Hub, identifying a single workforce center as an Apprenticeship Hub; hiring/onboarding Apprenticeship Consultants to serve the State
2. Creating a continuous improvement loop for Apprenticeship Consultants to communicate local and regional implementation issues with RAP implementation; including Consultant-led development and administration of a training needs assessment
3. Apprenticeship Consultants provided statewide training to approximately 100 Workforce/Business Services staff regarding Registered Apprenticeships
4. Apprenticeship Consultants established regular Registered Apprentice TA & Community of Practice training - invited workforce specialists to listen, share and learn with an average attendance of 3 - 5 individuals
5. Apprenticeship Taskforce, consisting of key local area staff, established to provide guidance to the Apprenticeship Consultants to grow and expand Apprenticeships

6. Additional Trainings provided by the State team included: Rural Apprenticeship Webinar (March 2020) for business services & career services; Workforce Forum (April 2020) for career services and WIOA staff; and Veterans Services Staff Training (June 2020) for veteran's services staff

System Level Activity 2: Outreach and communication activities for engaging industry, jobseekers, parents, educators, underrepresented populations, and other critical stakeholders

In the first year of the grant, staff built on outcomes developed under the SAE grant (November 2016-present) to ensure that federal investments in apprenticeship complement one another. A key element of our work plan was a strategic review of the most effective communications materials under SAE to identify needed gaps in messaging and tools.

Colorado also built a framework for most effective delivery of TA through clarifying roles and responsibilities of the State Apprenticeship Coordinator, Apprenticeship Specialist, Apprenticeship Consultants and leveraging existing forums, work groups, and newsletters to deliver content. WIOA and postsecondary partners were intentionally included in these groups to broaden the perspective of attendees.

The Consultants raised the level of personalized industry support, identifying reasons for employers' lack of previous engagement with the workforce system. The Consultants and Hub built a mechanism for regional support for RAPs across local service areas and identification of policies and practices that frustrated employers. They then worked as a communications bridge to the state (for state/federal policies and guidance) and local areas (for local policies and practices) to identify solutions so bureaucracy didn't hinder service delivery. Similar impact was accomplished via a leveraged partnership which includes: Healthcare Consultants (Colorado Department of Higher Education staff), Apprenticeship Specialist, ASE Grant Coordinator, and WIOA system partners.

Year One Outcomes Include:

- LinkedIn article written by State Apprenticeship Coordinator, shared by CDLE, used as the model for CDLE's future communications (most viewed in CDLE history), promoted by Maher and Maher in the ASE Community of Practice, and by the USDOL Intermediary Jobs for the Future
- LinkedIn article on clean energy apprenticeships highlighting success stories of RAPs; shared by union and non-union trades partners
- Industry podcast promoted statewide by trades, education, workforce partners on clean energy apprenticeships
- Development of Apprenticeship Operations Manual; a guide for workforce professionals on how to develop RAPs, career service guidance, braided funding, and partner to build and recruit for RAPs in Colorado
- Outreach and clarification of how to partner with workforce for unions and trades partners, yielding six participants in RAPs (funded via SAE).
- Identification of and proposed solutions for workforce and education policies and practices impacting the delivery of collegiate healthcare apprenticeships

System Level Activity 3: Partner Engagement

Colorado has prioritized systems integration and sustainability as the foundation for the ASE

investment. The major initiatives outlined in the work plan are reported via the 9130 as leveraged funding, though to meet the stated goals of the ASE grant, intentional systems integration is the foundation of our work.

Beyond OneStop partners, CDLE named three key partners in the ASE work plan. The staffing capacity provided by ASE, as well as agreements for leveraged funding, has allowed us to move the needle significantly towards these goals.

1. Postsecondary (Colorado Community College System, Colorado Department of Higher Education)
2. Division of Vocational Rehabilitation (DVR)
3. Department of Corrections (DOC)

Postsecondary Partners: Collegiate Apprenticeships in Healthcare

- Colorado Community College System (CCCS): is responsible for grant administration and program oversight to community colleges and career and technical education (K12), thereby being a critical partner in the development of both collegiate and youth apprenticeships.
- Colorado Department of Higher Education (CDHE): is responsible for grant administration and policy development related to collegiate apprenticeships in both the two and four-year colleges. CDHE is also responsible for design and authorization of providers on the eligible training provider list (ETPL) and for managing the career seeker tool as MyColoradoJourney.

In July 2019 CDHE and CCCS received \$12 million from the U.S. Department of Labor to fund CO-HELPS (Colorado Healthcare Experiential Pathways to Success).

- CO-HELPS is a H1-B1 grant focused on scaling apprenticeships in healthcare across Colorado and nationwide, enrolling 5,000 apprentices by July 2023.
- Targeted healthcare occupations include; but are not limited to; dental diagnostic laboratory, nursing, health informatics, occupational health, non-pathway occupations, and behavioral health occupations. Additional occupations may be added based on college interest and labor market needs.

As part of this partnership, CDHE and CDLE created the shared Apprenticeship Specialist position offering strategic guidance and providing TA to CDHE, CCCS, and workforce partners on RA development. The State Apprenticeship Coordinator serves on the CO-HELPS leadership committee to clarify RAP policy, facilitate WIOA partnerships/integration, and ensure alignment between workforce and education goals and strategies. Apprenticeship Consultants work with workforce centers and colleges to facilitate co-enrollment between workforce services and collegiate apprenticeships (e.g. recruitment, WIOA support).

Year One Outcomes Include:

- 54 unique instances of TA to workforce and education partners.
- 17 of those TA instances were specific to COHELPS and included topics including: assisting with reviewing and integration of curriculum for related instruction, evaluating coursework and experience for prior learning, and assistance with developing work processes for community college partners.
- 93 apprentices enrolled and six healthcare RAPs with one additional program currently in final registration status with USDOL OA.

SUCCESS STORY Centura Health continues to be a strong leader in Healthcare RAPs in Colorado. Since Centura’s program registration in 2017, the RA has expanded significantly, registering two new occupations and expanding to three new RI providers. The success of this partnership is also a success in systems-building: tight alignment between workforce and education in policy, practice and funding. In the last year, the ASE Grant Coordinator, Apprenticeship Specialist, and Consultants have all demonstrated the role of workforce in supporting collegiate RAPs:

- **Through TA and messaging**, all collegiate RAPs are present on the ETPL, allowing WIOA clients to access these opportunities
- **Through the Hub model**, recruitment efforts support a major statewide employer
- **Through RI/OJL support**, college curriculum is mapped to add new occupations
- **Through ongoing training**, college educators can shift program development to meet employer needs
- **Through utilizing leveraged funds**, fiscal resources are maximized
- **Through data integration**, progress towards success can be evaluated
- **Through connection with workforce partners**, new rural communities are served
- The Statewide Registered Apprenticeship Consultants created a workgroup to bridge rural areas with the Greater Metro Denver Healthcare Partnership (GMDHP).

DVR: Increasing Access for Individuals with Disabilities

ASE collaboration allowed for the identification of systemic barriers to accessing RAPs for individuals with disabilities. Year one emphasized strategic planning through identification of those barriers and options for addressing them in the short and long-term. Staff identified in particular employer messaging around RA, need for RA training in career and business service staff at DVR centers, and data integration between the DVR database and Connecting Colorado.

- **Division of Vocational Rehabilitation (DVR):** To assist persons with disabilities to succeed at work and live independently. DVR offers both business services and case managers, however, most DVR locations are not co-located with workforce centers so tight coordination is required to maximize services.
- **Jobs for Veterans State Grant (JVSG):** Though not named in our initial work plan, our ASE cross-functional team quickly integrated two Disabled Veterans’ Outreach Program (DVOP) Specialists into the program to ensure alignment with veterans’ services.

Year One Outcomes Include:

- First DVR employer registering an apprenticeable occupation to meet needs of individuals with disabilities (**in progress**)
- Establishment of monthly cross-functional planning group to identify needs for alignment between DVR, JVSG, and WFC
- Integration of DVR and JVSG business and career services staff into Apprenticeship TA



Apprenticeship Consultants, CDLE, DVR, and OA are collaborating to develop a new apprenticeable occupation in bicycle mechanic for a DVR partner employer "Project reCycle"

DOC: Developing a Career Path for Justice-Involved Individuals

Colorado was recognized by the Lumina Foundation as a stand-out program for its unique model of embedding postsecondary credentials into RAPs during incarceration. A partnership with DOC has allowed us to further that work by creating a continuum of services that will integrate workforce services both during and after release to reduce recidivism and create a path to opportunity. The State Apprenticeship Coordinator provided TA on the RA model and quality pre-apprenticeships as a pathway to opportunity. DOC, leveraged CDLE staff, and the State Apprenticeship Coordinator reviewed program curriculum for industry relevance and explored adding occupations to meet current needs and apprentice interests. Year one allowed for strategic planning, and the partnership yielded future investment, capacity, and integrated partnerships.

Year One Outcomes Include:

- In-kind TA visit by the National Restaurant Association Education Foundation (NRAEF) to review alignment between current culinary RAPs and industry needs
- Two additional grants awarded impacting DOC/CDLE collaboration: Pathway Home (\$3.4M) and NRAEF Youth Apprenticeship (\$4.9M)

Meeting the Needs of Business and Industry Partners

- **CO Sector Partnership Model:** Sector meetings are partnerships of business leaders, from the same industry and in a shared labor market region, who work with education, workforce development, economic development, and community organizations to address the workforce and other competitiveness needs of their industry. The Apprenticeship Consultants and Apprenticeship Specialist leverage existing sector partnerships to promote RA and offer guidance on whole-industry strategies (e.g. multi-employer and intermediary models).
- **Trades Partners and Unions:** Trades partners have historically independently implementing RAPs but recognize a need to diversify; apprentices are predominantly male and white. Non-union partners are also facing a new pressure to establish

programs under a new state legislation which requires RAPs to secure state contracts. The trades are also looking to shift established programs to meet the needs of a new economy and are exploring occupations in areas such as IT and clean energy. The Apprenticeship Consultants have offered the opportunity to build a statewide strategy to better understand the unique needs of trades partners and work with the Apprenticeship Hub to identify qualified, diverse candidates and develop and expand programs.

- **Government Jobs:** Colorado state agencies have worked to demonstrate their commitment to the RAP model by working with CDLE to establish their own RAPs. Unfortunately, due to COVID-19 state hiring freezes have impacted the growth of some agencies. However, our public health departments are exploring occupations to respond to COVID-19 in the coming year.

Year One Outcomes Include:

- State Apprenticeship Coordinator worked with OA to develop government RAP in Human Resources
- Apprenticeship Consultants coordinated recruitment for trades/unions apprentices with workforce services and funding
- State Coordinator hosted a podcast for industry on expanding trades RAPs

System Level Activity 4: Youth Apprenticeship Development

The State Apprenticeship Coordinator presents regularly at the Business Experiential Learning (BEL) Commission, a Governor-appointed, industry-led work-based leadership committee. The BEL Commission is co-chaired by the Executive Director of CareerWise Colorado, the state's youth apprenticeship model. This year, the Coordinator's presentations focused on RAP benefits and expansion efforts. Follow-up TA with CareerWise staff on RAP development, records maintenance best practices, and employer outreach allowed the intermediary to build capacity to prioritize registration of their apprenticeships. The State Apprenticeship Coordinator also worked with the Colorado Department of Education (CDE) on strategic planning on how to leverage incentives to stimulate adoption of new K12 graduation guidelines to integrate RAPs.

Year One Outcomes Include:

- Registration by CareerWise on June 4, 2020 of a new national registration (occupation: IT Generalist)
- CareerWise applied for and received \$9M Youth Apprenticeship grant to scale RAPs in Colorado and beyond

System Level Activity 5: Apprenticeship Incentives

The ASE Grant Coordinator and Apprenticeship Specialist collaborated with other stakeholders to identify federal and state resources eligible for utilization in funding apprenticeship.

The ASE Grant Coordinator worked closely with the CDHE and CCCS to align efforts to maximize federal resources under CO-HELPS and ASE grant activity. Grant staff identified workflow and procedures to ensure healthcare apprentices had access to federal financial aid and workforce funding. Approximately 70% of healthcare community college apprentices were registered in the workforce system database, Connecting Colorado, and utilizing resources through workforce and community college channels.

Grant staff identified a point of contact to handle Labor Standards questions regarding applicable state legislation, and developing a workflow regarding questions from companies interested in starting a new RAP.

Year One Outcomes Include:

1. Development and release of Registered Apprenticeship Operations Manual to the workforce system in July 2020
2. Contribution to CDLE workforce desk aid: standalone apprenticeship section

System Level Activity 6: Integration of RA into ETPL

The Eligible Training Provider List (ETPL) displays for both individuals and workforce centers which training providers are eligible for WIOA funding. It is important to have a streamlined process to assist training providers register on the ETPL, while ensuring federal policies are met. The Apprenticeship Specialist works with CDHE and CDLE to streamline the ETPL process for RA sponsors and provided support for revising the ETPL Policy Guidance Letter (PGL).

Year One Outcomes Include:

1. New workflow, including email communication between OA, CDLE staff, and new RA sponsors with information on ETPL
2. 19% increase in RA Sponsor participation in ETPL since July 1, 2019
3. Training of business service representatives on their role in signing RA sponsors up for ETPL
4. Technology enhancements
5. Development of RAP workflow and agency recommendation document for enrollment in the ETPL to provide to website developers for updated 2021 contract
6. Update of state policy to align with federal ETPL policy requirement ([WIOA-2015-06 PGL, Change 6](#)) to provide updated guidance about TEGL 08-19 Workforce Innovation and Opportunity Act (WIOA) Title I Training Provider Eligibility and State List of Eligible Training Providers (ETPs) and Programs

System Level Activity 7: Apprenticeship Program and Grant Administration

Year One of the ASE grant administration prioritized grant planning and infrastructure as Colorado was in the process of initial compliance review and waiting for final data guidance. Staffing, TA, and grant reporting were delivered on time to comply with the work plan and position us for implementation year two.

Grant Staffing

The State Apprenticeship Coordinator transitioned from SAE grant funding and activities at the beginning of the award. The Coordinator transitioned another CDLE colleague to the SAE grant and the team collaborated to develop mechanisms for ensuring that the grant outcomes were uniquely counted.

Because the grants have an overlap period, are from the same discretionary stream, and have similar goals, the team immediately recognized that providing clarity for the OneStop Centers on allowability and countable participants and programs would be necessary to ensure integrity of grant implementation.

Year One Outcomes Include:

- Transitioning State Apprenticeship Coordinator
- Hiring and onboarding Apprenticeship Specialist and Apprenticeship Consultants
- Project onboarding for MIS (data) personnel affiliated with grant
- State Apprenticeship Coordinator & SAE Grant Coordinator attended a state grant manager training in January 2020 to fully onboard to state grant policies.
- Contract development for Year two for Apprenticeship Hub (for Consultants)

Data Planning

CDLE does not issue local contracts without policy guidance on data entry and upgraded data fields for which to capture client outcomes. Local areas were informed via TA on what to expect and potential changes with ASE reporting as compared to prior SAE grants. CDLE used the interim guidance and conducted a crosswalk of proposed PIRL fields with existing WIOA reporting system a Connecting Colorado. CDLE subawards Apprenticeship Expansion grants to the county OneStop workforce partners, which also administers WIOA (Title I & III). Colorado utilizes the same database for tracking apprenticeship enrollments and WIOA enrollments, making data integration and implementation much easier for Colorado than many other states. However, minor tweaks to the database are required to report on each field required by the grant reporting. For example, Connecting Colorado does not currently track specific outcomes from pre-apprenticeship program enrollment to the level of detail required by the grant. CDLE is working to modify the database to create additional tracking fields for pre-apprenticeship program outcomes. The final guidance issued in July 2020 will allow Colorado to move forward with the addition of these data fields.

To support alignment for healthcare apprenticeships, Colorado needs to establish processes for capturing participant-level data. Apprentices who attend RAPs affiliated with the colleges are entered into RAPIDS (employer side) and Banner (college side). Each college is locally controlled and has slightly different models of Banner. Banner is designed to map with US Department of Education requirements, not WIOA reporting, which has implications for 1) data definitions, 2) data privacy, 3) data capture, 4) data reporting. Year one included strategic planning to address each of these items. After exploring several options, the cross-agency team decided to develop apprentice privacy waivers and develop college-level mechanisms for entering participants in Connecting Colorado.

Year One Outcomes Include:

- Data ASE grant reporting data mapping to prepare for transition to the PIRL
- Modification of Connecting Colorado to specify RAP enrollment (RAPIDS number) allowing CDLE to leverage the existing state apprenticeship program directory to report on programmatic details, including “Type of Apprenticeship Program Training Approach” and “Type of RTI Provider”
- Workflow and data mapping for integration of collegiate apprentices (to count apprentices funded via both H1B and Apprenticeship Expansion funds)

Technical Assistance

CDLE recognized that the significant shifts in data expectations and per participant funding level would require extensive TA in order to provide clarity for the OneStop partners to effectively implement the grant. Although client dollars were not issued, CDLE worked closely with the Apprenticeship Hub and OneStop partners to forecast upcoming changes:

Year One Outcomes Include:

- State Grant Coordinator, Apprenticeship Specialist, and Apprenticeship Consultants:
 - Monthly grant calls to prepare local areas to transition to ASE model to effectively braid funds and maximize Apprenticeship Hub model
 - Regular meetings with Apprenticeship Hub and Workforce Director update on grant distinctions
 - Workforce Director meeting on strategies to braid ASE funds with other funding
 - Training Apprenticeship Consultants and Apprenticeship Hub on interim data guidance and potential funding for OJL, RI, SS

Subrecipient Contract for Client Funds (OJL, RI, SS)

As CDLE is waiting on approval of the OJL/RI/SS finding in its initial compliance review, CDLE laid the groundwork for issuing funds by preparing drafts of subrecipient award and policy guidance.

Year One Outcomes Include:

- Preparation of documents to issue subrecipient award to Apprenticeship Hub
- Strategic planning to maximize client dollars

Program Level Activities 1 & 2: Develop Curricula and Standards & Support and TA for Sponsors

Increasing statewide capacity to leverage the workforce system to develop RI/OJL with potential RA Sponsors is the most sustainable way to ensure the long-term success of the RA model in a locally-driven context like Colorado. A benefit of this strategy for curricular development is the “product” or RI/OJL is part of a continuum of services that includes ongoing support to the employer and connection to workforce centers and other WIOA/non-WIOA partners. This, therefore, meets two priorities of ASE in a cost-effective manner.

Through prior grants, CDLE learned operational lessons about curricular development that ASE funding has allowed us to address, including: 1) optimizing the roles and responsibilities of each stakeholder/entity in the system; 2) developing curricular development resources for the workforce system; 3) improving the workflow between curricular developers and OA; 4) tracking and “counting” grant curricular development contributions prior to sending to OA. Below is a pictorial representation of the Colorado model. For ASE, RAs are developed through coordination between the Apprenticeship Specialist and Apprenticeship Consultants, and additional leveraged partner staff. Major challenges impacted RI/OJL development or apprentice recruitment are escalated to the Grant Coordinator (e.g. partnership work flow, credentials, licensure, funding alignment).

Developing and Sustaining Apprenticeships In Colorado



Apprenticeship Consultants and Local Business Services staff work in close collaboration to determine which person will take the lead in managing the local business relationship. Each phase of RA development and sustainability is linked to a WIOA business service and should be captured towards workforce contributions within Connecting Colorado and with ASE grant-specific documentation.

The Apprenticeship Consultants and Apprenticeship Specialist work in close collaboration in OJL/RI curriculum development. The Specialist is required to provide advanced curriculum development support, including issues impacting education integration (e.g. college credits in RI); licensure (for licensed occupations). The Specialist works in close collaboration with OA and reviews all RI/OJL prior to sending to OA for final approval.

Colorado anticipates the continued need for state-level strategic work and guidance to mitigate issues with partnership work flow, developing programs with embedded credentials/licensure managed by other state entities, and funding alignment across teams/departments. Key activities in the work plan will include:

- Identify pilot areas for RAP/pre-apprenticeship programming with DOC and nonprofit organizations for increasing opportunities for justice-involved individuals
- Cross-functional apprenticeship team meet regularly to measure progress towards RA goals
- Increase opportunities for justice-involved individuals through developing apprenticeship pathways and employer outreach
- Continue to build on successful youth apprenticeship models, including CareerWise, ProStart, Project Lead the Way, Success Foundation, and K12 YAPs across the state

Year One Outcomes Include:

- Apprenticeship training provided at the Business Services Summit held in August of 2019, attended by approximately 70 county business services staff.
- Workgroups to develop and pilot the Consulting-Specialist-OA model
- Development of a curricular development short form for employers
- State and local staff referred 11 programs to the USDOL Office of Apprenticeship for registration in the first year of the grant
 - Of those, three programs were developed through extensive communication and coordination between state/local staff and the employers (SunTalk Solar, Competitive Edge Martial Arts, Twilio)
 - Two programs will be considered ASE-developed programs upon registration: Competitive Edge and Twilio
 - One program is currently considered an SAE-developed program, and was successfully registered on May 4, 2020
 - Pending approval of Bicycle Mechanic as an apprenticeable occupation, Project reCycle will be the first RAP in the state to be specifically generated through a collaboration between DVR and the Apprenticeship Hub (at OA)

Spotlight on:

Office of Apprenticeship Work Flow - Apprenticeship Development Form

After consultation with the Iowa ASE grantee, CO adapted and developed a workflow to support the registration of new RAPs with the US Department of Labor (USDOL) Office of Apprenticeship (OA) and support the work of the Apprenticeship Consultants and the local workforce center staff.

- The Apprenticeship Development Form is not meant to be a substitution for sponsors working with Apprenticeship Consultants or workforce center staff but rather provide them with a tool to help them through the process and provide more resources for both the Apprenticeship Consultants, the local workforce center staff, as well as the sponsor
- Guide RA sponsors through the process of developing their program
- Developed additional supplementary documents to help explain different parts of the apprenticeship registration process and provide the sponsor with tools to help them develop different parts that are required by the USDOL to register their apprenticeship (on-the-job learning plan, related instruction plan)

Success Story - COVID-19 (Creating Resiliency)

Though the impacts of COVID-19 have devastated our workforce system, cutting funding to state and local governments and redirecting most efforts to unemployment insurance, the infrastructure of the Hub model and dedicated Apprenticeship staff have allowed ASE expansion work to continue in these unprecedented times. Consultants have filled gaps of current sponsor check-ins, responses to new registrations, and fielding recruitment needs.

- Submitted two new RAPs to the Office of Apprenticeship (within 120 days) Edge - Recreation Assistant in innovative industries (IT and martial arts)
- Began process for Apprenticeable Occupation for DVR apprenticeship

Program Level Activity 3: Support and Training for Mentors of Apprentices

Year one included identifying existing resources in the system to support mentor training and potential options for achieving this outcome. A high-quality training partner, Center for Nursing Excellence, was identified as a potential provider of system-wide preceptor training

for healthcare and referred to our CCCS partners for potential investment. Skillful, a nonprofit partner, is exploring options for adapting existing youth mentor collateral for adult mentor audiences.

- Identification of mentor resources in the system

Program Level Activity 4: Recruitment, Screening and Enrollment of Apprentices, including those from under-represented populations

Collaboration with the Governor's Office of New Americans, DOC, and the colleges highlighted how important it is to ensure that employer and sponsor messaging includes reflective practice on screening criteria. If apprenticeships are truly going to open the door for opportunity, seemingly minor requirements such as a high school diploma can screen out a significant talent pool. If there are necessary requirements, state agencies can play an important role in complementing these needs. Year one of the grant involved work with our state and federal partners to clarify regulations and obstacles to access to apprenticeship.

- Identification of need for documentation of education (H.S. diploma) and access to driver's license as significant barriers for refugees and previously incarcerated individuals' ability to participate in RAPs
- Clarification of policies and practices from federal partners and communication to business services
- Promotion of state agency services in tandem with RAP support (e.g. DVR support with assistive technology)

Specific trainings on the benefits of RA and forums for identifying increasing access to RA were hosted for:

- Workforce Forum (all workforce centers)
- Career Services Training
- The Veterans Staff
- Office of Refugee Services
- Division of Vocational Rehabilitation

The Apprenticeship Specialist worked to redesign and educate workforce and education partners on how to adapt current RAPs to better increase diversity. Raising awareness and provide TA about how to build a pre-apprenticeship to apprenticeship pipeline was critical to this effort.

CDLE is working to expand our outreach and communications materials to ensure better access to information for underrepresented populations. Identification of this need came through ASE efforts and Colorado was able to secure an additional grant to enhance current jobseeker materials to contribute to this effort.

Year One Outcomes Include:

- Redesign of an early childhood RAP to include a pre-apprenticeship to increase access for refugees
- Planning, proposal, and grant award for pre-apprenticeship to apprenticeship to post-release opportunities for justice-involved individuals
- Collaboration with DVR to identify counselor needs, integration into RA training, and identification of areas for braided funding
- In collaboration with CDHE, creation of and recruitment to healthcare RAPs, attracting

- new talent pools (84% women compared to 8% female participation overall) in RAPs
- Planning for improvement of statewide RAP directory to integrate better information for RAP access (pre-apprenticeship, GI Bill, and WIOA) and secured funding to support this effort
- Career Services Training - provided statewide training to approximately 50 Career Services staff regarding Registered Apprenticeships
- Established regular Registered Apprentice TA & Community of Practice training - invited workforce specialists to listen, share and learn from the Statewide Consultants with an average attendance of 3 - 5 individuals
- Developed and surveyed workforce system career services personnel utilizing a needs assessment to determine future statewide TA and training
- Apprenticeship Consultants are working to align a continuum of services (coordinated funding, career success workshops) to support apprentice success

Program Level Activity 5: Support Apprentices through OJL and RI

In Year one of ASE the State Coordinator and Apprenticeship Consultants emphasized working with the Apprenticeship Hub, Apprenticeship Task Force, state workforce (OneStop) directors to assess statewide practices on OJL and RI support. As Colorado is waiting on finalized approval of its initial compliance, and one of the findings was related to OJL/RI, our state has delayed the issue of client dollars. The extra time has allowed us to work with the Apprenticeship Hub and Workforce Directors to plan for issue.

Year One Outcomes Include:

- Working with USDOL to approve OJL/RI item in grant
- Convening Apprenticeship Hub and Workforce Directors to strategize how to maximize supportive service dollars to prepare for launch
- Draft local policy guidance, workforce agreement, and data guidance to issue contract upon approval

Program Level Activity 6: Supportive Services

Year one of ASE emphasized the active identification and promotion of supportive services resources for participants. Direct supportive services (ASE client dollars) will be issued effective July 2020 to our workforce partners (aligned with work plan).

Year One Outcomes Include:

- Drafting contract with local workforce partner “Apprenticeship Hub” that 10% of funding can be used for Supportive Services
- Creating an Apprenticeship Desk Aid to support OneStop partners on Colorado resources available to support apprentices
- Convening Apprenticeship Hub and Workforce Directors to strategize how to maximize supportive service dollars to prepare for launch
- Drafting local policy guidance, workforce agreement, and data guidance to issue contract upon approval

Planned Outcomes

Work Plan Update 2020-2021

See Attachment 1

Staff and Partner Meetings

Level set in the virtual environment to determine the best use of standing meetings with grant staff, partners, and subrecipients. Assess necessary outcomes for standing meetings, the requisite attendees, and appropriate agenda items. These standing meetings, described in the work plan, include: Grant Staff and Apprenticeship Hub meetings, State Staff Cross Functional team meetings, and subrecipient TA meetings.

Partnership

State grant staff, alongside the Consultants, will continue partnership engagement activities with key entities including DVR, DOC, CCCS, CDHE, and CWDC. We aim, through these efforts, to expose diverse talent pools to RAP as a career opportunity and increase the participation of underserved populations in RAPs throughout the state.

Grant Management/Administration

Finalize ASE grant guidance and policy for subrecipient OneStop centers and the Apprenticeship Hub. Grant staff will incorporate new July 2020 guidance regarding allowable participants, and finalized reporting/data entry requirements. In the 2020/2021 year, subrecipients will begin expending funds for direct client support, including OJT, RTI, and supportive services. The state monitoring team, the Regional Services Unit, will also begin monitoring participating counties to ensure federal and state compliance. The Grant Coordinator will continue to provide TA to subrecipients on a monthly basis, and as needed.

Program Development & Training

Continue employer outreach and engagement to promote the apprenticeship model, and work with interested businesses and intermediaries to develop and register programs utilizing the established workflow. Update and modify the workflow as necessary to achieve the best outcomes, incorporating feedback from partners (including OA staff).

RA/ETPL integration

Continue outreach to new and existing RAP sponsors to encourage participation in the ETPL. Coordinate efforts with the Colorado Department of Higher Education and state MIS staff to align with federal guidance, requiring fewer fields for RAP sponsors on the ETPL.

Performance Outcome Measures

In the ASE grant's inception, a key strategy to reaching participant grant outcomes was to utilize leveraged funds and partner staff time on the CCCS CO-HELPS grant. CDLE staff are the state experts on apprenticeship, and ASE grant staff provided time-intensive TA regarding apprenticeship program development and expansion. The Apprenticeship Coordinator sits on the Leadership Team for Healthcare CCCS apprenticeships, and the State Coordinator and Apprenticeship Specialist hold regular meetings which provide the opportunity for strategic alignment, TA, and coordination to deliver high-quality college-connected apprenticeships. Through additional conversations with USDOL staff, and with the guidance released in July 2020, CDLE understands that these HELPS grant participants are most appropriately counted as "Other Individuals Impacted by the Grant." ASE grant staff have updated the below outcomes table in accordance with this guidance.

Prior reports indicated the registration of additional programs under the ASE grant. Through additional calls with USDOL, we have confirmed the allowability of program development under the grant. Moving forward, we will follow stated guidelines for allowable program development under the grant, and report on programs and participants accordingly.

A	Employment & Training Apprenticeship Performance Outcomes	Year 1 Outcomes	Remaining	
1	Total participants served <i>Total number of all participants served (receiving a grant-funded service and/or grant-funded education/training) in RA Programs</i>	Year 1: 0 Year 2: 400 Year 3: 400 Total Goal: 800	0	800
	Other Individuals Impacted by the Grant: <i>Registered apprentices who enroll in a RAP developed with grant funds (not reported above)</i>	Goal TBD	TBD	0
	Other Individuals Impacted by the Grant: <i>Registered apprentices impacts by the grant via recruitment events, outreach, leveraged activities, etc.</i>	N/A	93	N/A
2	Total Participants that are hired by an employer and enrolled in RA program <i>Total apprentices newly enrolled in education/training activities should not exceed total apprentices served</i>	Year 1: 0 Year 2: 400 Year 3: 400	Total Goal: 800	0
3	Total Participants who complete an apprenticeship education/training program	Year 1: 0 Year 2: 9 Year 3: 20	Total Goal: 29	0
4	Total Participants who complete an RA program and receive a degree or credential	Year 1: 0 Year 2: 9 Year 3: 20	Total Goal: 29	0
5	Total number of participants identified as unemployed, LTU, dislocated or incarcerated prior to enrollment who complete an RA program and maintain their employment status with a new employer	Year 1: 0 Year 2: 3 Year 3: 6	Total Goal: 9	0
6	Total number of incumbent worker apprentices who complete an apprenticeship education/training program and advance into a new position	Year 1: 0 Year 2: 0 Year 3: 3	Total Goal: 3	0
7	Average hour wage of apprentices at enrollment into RA program	Year 1: N/A Year 2: \$11.60 Year 3: \$12.10	Total Goal: \$11.60	N/A - no program completers
8	Average hourly wage of apprentices at completion of RA program	Year 1: N/A Year 2: \$14.08 Year 3: \$15.08	Total Goal: \$14.08	N/A - no program completers
B	Expanding Apprenticeship Program Outputs		Year 1 Outcomes	Remaining
1	Total number of newly created Registered Apprenticeship programs (RAP) (including any other programs developed as a result of RAP efforts)	Year 1: 1 Year 2: 5 Year 3: 6	Total: 12	1