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# **Colorado Perkins V State Plan**

Strengthening Career and Technical Education for the 21<sup>st</sup> Century Act



March 4, 2024

Dear Chancellor Garcia and Dr. Heath.

I am proud that our team in Colorado is intentional in the way we lead and support Career and Technical Education (CTE) to be learner focused while also strategically aligning to industry's current and future needs. We are unique in that the State Board for Community Colleges and Occupational Education (SBCCOE), through the staff at the Colorado Community College System, are responsible for administering all CTE programs in middle schools, high schools, community colleges and other post-secondary institutions with a two-year mission in Colorado. This approach allows Colorado to leverage and build off of each level of education. We improve the value of our education and workforce system by building momentum in credit for prior learning and work based learning, in particular, Registered Apprenticeship.

As you know, innovation and equity are central to my administration's work and our work ahead. During the last four years, your administration of Perkins funding supported school districts and colleges around the state by focusing on technical assistance to local education communities. This work provided school districts and colleges around the state a way to "see" their data and take action to provide more access to learners of color and learners in historically marginalized communities. Your work demonstrated Colorado CTE's commitment to equity, access, and inclusivity.

This work continues in the 2024-2028 plan, however this submission distinguishes itself from the current plan by providing greater alignment between CTE programs and Colorado's state priorities. I am pleased to see this focus reflected in the Comprehensive Local Needs Assessment process that informed the submission of the Perkins State Plan, elevating local and regional needs in talent development planning. I also value the focus on innovation in specific in-demand industries as a cornerstone of the Perkins State Plan for the next four years. Specifically, the Innovations in CTE sub grant will continue innovating in these in-demand industries across Colorado. Lastly, the strong collaboration and alignment between the Community College System, state agency partners, and my office is evident throughout the plan and will help Colorado build toward a more connected workforce development system. 2 I am grateful for the extensive stakeholder engagement that occurred in the development of the CTE Strategic Plan which led to the changes in this submission of a new Perkins State Plan to administer the "Strengthening Career and Technical Education for the 21<sup>st</sup> Century Act" for the next four years. Please thank the team for all their work to ensure all learners have access to high quality CTE pathways in Colorado. This plan demonstrates a commitment to learners, their communities, and our state. I look forward to hearing more about implementation as the team continues to work across partners and stakeholders.

Sincerely,

Jared Polis Governor of Colorado

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### **Glossary of Terms**

\*Indicates term is based on the same term used in federal law.

- 1. ACE Alternative Cooperative Education
- 2. BEL Commission Business Experiential Learning Commission
- 3. BOCES Board of Cooperative Education Services
- 4. CACTA Colorado Association of Career and Technical Administrators
- 5. CACTE Colorado Association of Career and Technical Educators
- 6. CCCS Colorado Community College System
- 7. CDE Colorado Department of Education
- 8. CDHE Colorado Department of Higher Education
- 9. **CDLE** Colorado Department of Labor and Employment
- 10. CLNA Comprehensive Local Needs Assessment
- 11. **Completer** A student who fully meets the standards outlined in an approved CTE program
- 12. **Concentrator for Postsecondary\*** A student who, within the reporting year, has completed a minimum of 12 credits in the approved CTE program or who has completed the entire approved CTE program if it is 12 credits or fewer.
- 13. **Concentrator for Secondary\*** A student served by an eligible recipient who has completed at least two courses in an approved single CTE program or program of study (With 'course' being defined as equivalent to one full school year of credit in the specific program pathway).
- 14. CSI Charter School Institute
- 15. CTE Career and Technical Education
- 16. **CTE Participant** An individual at either the secondary or postsecondary level who completes at least one CTE course in an approved CTE program or program of study. For secondary, a 'course' is defined as equivalent of one full school year of credit in the specific program pathway.
- 17. CTSO Career Technical Student Organization
- 18. **CWDC** Colorado Workforce Development Council
- 19. DOC Colorado Department of Corrections
- 20. ESEA CDE Office of Elementary and Secondary Education Act
- 21. ESSA Every Student Succeeds Act
- 22. ICAP Individual Career and Academic Plan
- 23. LEA Local Education Agency
- 24. **Low-income student** A student receiving free or reduced cost lunch or related services at the secondary level or a Pell-eligible student at the postsecondary level.
- 25. **Minority student** 'Minority' comprises all nonwhite subgroups of students in Colorado.
- 26. **Non-traditional** the term 'non-traditional' refers to a student participating in an occupation or a CTE program in which individuals or one gender comprise less than 25% of the individuals employed in each such occupation or CTE program or field of work. This term closely mirrors the federal definition of 'non-traditional fields', but refers to the students participating in or learning about those fields.

- 27. **Program approval** This requires completion of an approved program of study that leads to a recognized postsecondary credential, offering a sequence of CTE courses sufficient in size, scope, and quality to comprise a CTE program, offering work-based learning opportunities to students, leadership development such as through a CTE student organization, and the integration of applied academics.
- 28. **Program of Study\*** The term program of study means a coordinated, nonduplicative sequence of academic and technical content at the secondary and postsecondary level that incorporates challenging State academic standards, addresses both academic and technical knowledge and skills, including employability skills; is aligned with the needs of industries in the economy of the state, region, Tribal community, or local area; progresses in specificity; has multiple entry and exit points that incorporate credentialing; and culminates in the attainment of a recognized postsecondary credential.
- 29. **PWR** Postsecondary and Workforce Readiness skills which work collaboratively with the CDE Essential Skills (skills essential for success in professional life).
- 30. **Recognized Postsecondary Credential**\* a credential consisting of an industryrecognized certificate or certification, a certificate of completion of an apprenticeship, a license recognized by the state involved or Federal Government, or an associate or baccalaureate degree. In Colorado, certificates awarded by two-year institutions are also recognized as a recognized postsecondary credential.
- 31. SBCCOE State Board for Community Colleges and Occupational Education
- 32. Size, Scope, and Quality To be of sufficient size, scope, and quality, a CTE program in Colorado must include the following components:

*Sufficient Program Length* – *Each program completer definitions determine the minimum and maximum length of each program.* 

For secondary programs, the minimum completion requirement will be equivalent to two year-long courses (i.e., two Carnegie Units of instruction), an optimum program length will be three years of Carnegie Units, and a program may be longer. A program completer should be ready for entry-level employment or ready for the next level of advanced training as verified by the Technical Advisory Committee. A program concentrator is a student who, within the reporting year, is served by an eligible recipient and has completed at least two courses in an approved single CTE program or program of study, with a course being defined as equivalent to one full school year of credit in the specific program pathway. One course is the equivalent of one Carnegie Unit. Due to the variety of school schedules used across the state, the contact hours for this minimum will be at least120 hours. A course may count toward completion of multiple pathways and be appropriate on multiple program approvals.

**For postsecondary programs**, a postsecondary certificate program (with occupational field of study specified) is an organized program of study intended to prepare students to enter skilled and/or paraprofessional occupations or to upgrade or stabilize their employment. These certificates are intended to "stack" into Associate Degree programs.

An initial certificate in a program area needs to include the skills, knowledge, and competencies required for entry-level employment. Other certificates in the same program need to advance that skill level. In addition, to be of sufficient size and scope, a certificate program must at a minimum, consist of:

*Option #1* - Two CTE courses\*; or *Option #2* - One, five credit hour CTE course\* \*as determined by CCCNS Course approval process

Any certificate or degree of substantial length (i.e., 45 credits or more) must have an appropriate general education component. (Source: Higher Learning Commission). Area Technical Colleges are exempt from this requirement. A concentrator is a student who, within the reporting year, has completed a minimum of 12 credits in the approved CTE program or who has completed the entire approved CTE program if it is 12 credits or fewer.

#### Sequence of courses

Each CTE program approved at the secondary or postsecondary level will be comprised of courses that include integrated academic, technical, and employability (PWR) skills and progress in a sequence toward at least entry level employment or advanced training. Student learning must be assessed throughout a course as well as the program.

#### **Provide Work-Based Learning Experiences**

Another critical component of a CTE program is that it provides appropriate work-based learning. Work-based learning provides hands-on or realistic experiences for secondary learners that relate to the students' CTE Program of Study. Work-based learning at the secondary level is defined by the continuum from CWDC TalentFOUND as a continuum of activities that occur, in part or in whole, in the workplace, providing the learner with hands-on, real-world experience.

Work-based learning options are required for secondary programs. Career exploration experiences are required for middle school programs and work-based learning is strongly encouraged in postsecondary programs. The WBL continuum shares the following information within the career awareness/exploration portion of the continuum:

Learning About Work					
<b>Career awareness and exploration</b> helps individuals build awareness of the variety of careers available and provides experiences that help inform career decisions.					
Career     Counseling	Career     Presentations	<ul><li>Mentoring</li><li>Worksite Tours</li></ul>			
• Career Planning	<ul><li>Industry Speakers</li><li>Informational</li></ul>	• Project-based Learning			
Career Fairs	Interviews				

In addition to the Learning About Work activities listed above, the work-based learning continuum identifies the following components related to career preparation and career training:

Learning Through Work	Learning at Work
<ul> <li>Career preparation supports career readiness and includes extended direct interaction with professionals from industry and the community.</li> <li>Clinical Experiences</li> <li>Credit-for-work Experiences</li> <li>Internships</li> <li>Pre-apprenticeship</li> <li>Industry-sponsored Project</li> <li>Supervised Entrepreneurship Experience</li> </ul>	<ul> <li>Career training occurs at a work site and prepares individuals for employment.</li> <li>Apprenticeship</li> <li>On-the-job training</li> <li>Employee Development</li> </ul>

Access to quality work-based learning is provided to each interested student, especially special populations.

#### Leadership development

CTE programs also include embedded leadership development opportunities for learners, including through participation at the secondary level in CTE Student Organizations (CTSO). At both the secondary and postsecondary levels, this also includes embedded employability skills that help ensure postsecondary and workforce readiness skills.

#### Be Based on a Program of Study

Each approved secondary and postsecondary program will be a portion of a complete program of study for students. A program of study serves as one type of career guidance and development tool to help learners understand the on and off ramps for a particular career pathway. Programs of study include information on recommended course sequencing at the secondary and postsecondary levels, postsecondary or advanced credit options, and applicable industry recognized credentials relating to a particular career path.

#### Industry Partnership

CTE programs should be designed to meet industry need. To help ensure this is the case, an approved program must have active partnerships and engagement with business and industry. One method of demonstrating compliance with this requirement is a functional and active advisory committee for each program that includes business and industry members. Advisory committees should meet a minimum of two times per year to provide feedback and input on the CTE program. Some benefits of active advisory committees are that they provide a mechanism to help ensure CTE programs are teaching current and emerging technical skills using proper equipment and technology, and that CTE staff are aware of trends in industry that should be incorporated into the program.

#### Equal Access and Appropriate Facilities

While equity, access, and inclusion are expected to be embedded in each component of a CTE program of sufficient size, scope, and quality, it is expected that CTE programs will

ensure at a local level that learners are aware of the options and benefits of participating in CTE and that each learner has access to do so. This can only happen if CTE programs occur in spaces that are appropriate to the needs of the program and the number of learners served. This includes ensuring sufficient equipment, instruction, and safety protocols are in place.

#### **Periodic Evaluation**

Periodic self-evaluation is strongly encouraged for all CTE programs. Additionally, all Colorado CTE programs will be reviewed for renewal purposes every four years at a minimum. This evaluation will occur through the program approval process and will use data-driven practices as well as a technical assistance and coaching model to ensure quality CTE programs for our learners and industry partners.

- 33. **Special Populations\*** Individuals with disabilities; individuals from economically disadvantaged families, including low-income youth and adults; individuals preparing for non-traditional fields; single parents, including single pregnant women; out of-workforce individuals; English learners; homeless individuals described in section 725 of the McKinney-Vento Homeless Assistance Act (42 U.S.C. 1143a); youth who are in or have aged out of the foster care system; and youth with a parent who is a member of the armed forces (as such term is defined in section 101(a)(4) of title 10 United States Code); and is on active duty (as such term is defined in section 101(d)(1) of such title). [Note that the state plan uses "English Learner" as stated in the Perkins Act in this document; however, Colorado is in the process of moving to the term Multilingual Learner in public documents and in practice, so that term is used synonymously with the term English Learner in Colorado.]
- 34. State Apprenticeship Agency Apprenticeship Colorado is the State Apprenticeship Agency (SAA) in Colorado that is responsible for oversight and registration of Registered Apprenticeship Programs. The State Apprenticeship Agency is housed in the Office for the Future of Work in the Colorado Department of Labor and Employment.
- 35. **State Board** Unless otherwise stated, refers to SBCCOE the State Board for Community Colleges and Occupational Education
- 36. **Supplanting** To replace or take the place of existing funds. Federal law prohibits recipients of federal funds from replacing state, local or agency funds with federal funds
- 37. WIOA Workforce Innovation and Opportunity Act
- 38. Work-Based Learning (WBL)\* Sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that foster in-depth, firsthand engagement with the tasks required of a given field that are aligned to curriculum and instruction. In Colorado, this is reflected through the 'Leaning Through Work' and 'Learning At Work' portions of the Colorado Work-Based Learning Continuum.
- 39. Youth A student enrolled in an approved secondary CTE program

### **Introduction**

Colorado continues to emphasize the development and continuous improvement of a seamless system of education that ensures ease in student transition from one educational system to another and from one level of instruction to another. In Colorado, Education and the Economy are two of the key issues for the Governor's Office and the Office for Economic Development and International Trade has identified key industry areas of focus (https://oedit.colorado.gov/industries). The Governor Jared Polis' "administration is committed to making sure higher education and workforce development programs are in reach for every student and is committed to saving students money no matter which pathway they choose" (Colorado.gov). As part of that commitment, Colorado has created the Office of the Future of Work to help coordinate efforts involving the future of Colorado's workforce and to identify trends on the rapidly changing nature of work and to serve as the State's apprenticeship agency. Career and Technical Education, offered at the secondary and postsecondary levels, is an important strategy to helping Colorado accomplish these objectives.

The Colorado State Board for Community Colleges and Occupational Education (SBCCOE) administers all Career and Technical Education (CTE) programs for the State of Colorado. Unless otherwise stated, the phrase "state board" in this plan will refer to the SBCCOE. The Colorado Community College System (CCCS), staff for the SBCCOE, since its creation in 1967, has provided leadership in the overall governance of CTE program quality and teacher effectiveness. The board is statutorily charged (C.R.S. 23-60-301 and 23-60-303) with approval of all Colorado CTE programs and disburses federal and state CTE funding to CTE programs at both the secondary and postsecondary level. This unique oversight of both secondary and postsecondary level programs gives Colorado an integrated view of the CTE programs that school districts, technical colleges and community colleges offer to meet workforce demands.

As a result of this dual role, CCCS has historically been proactive in partnership activities between secondary and postsecondary CTE programs, promoting student success and seamless transitions from secondary to postsecondary educational opportunities. As an example of this dual role, CCCS set program renewal standards that promote concurrent enrollment, articulation agreements or demonstrated partnerships between school districts and community colleges/technical colleges. At the postsecondary level, the SBCCOE mandates use of a common course numbering system (CCCNS), requiring system community colleges to have identical course prefixes, titles, descriptions and content. This work allows for easier student transfer from one community college to another. Additionally, professional development has been provided since Perkins IV and will be continued to support secondary and postsecondary partnerships, in particular for the development of Programs of Study.

To develop the Colorado State Plan for implementing the Strengthening Career and Technical Education for the Twenty-First Century Act, a statewide strategic plan for CTE was developed in 2019 and updated in 2023 through engagement with hundreds of stakeholders representing a wide range of interests and regions across our state. The strategic plan forms the basis for the state plan that follows. The Colorado CTE team has solicited feedback from partners and stakeholders throughout the process to ensure high quality, equitable outcomes for learners, skilled employees for Colorado businesses, and mutually beneficial partnerships to help strengthen our communities. Colorado also subscribes to the "Without Limits" shared vision for

CTE developed nationally by Advance CTE in conjunction with stakeholders from across the CTE ecosystem and the principles included in that vision are threaded throughout Colorado's strategic 'plan for CTE and its State Perkins Plan.

### **Narrative Descriptions**

### A. Plan Development and Consultation

1. Describe how the State plan was developed in consultation with the stakeholders and in accordance with the procedures in section 122(c)(2) of Perkins V. See Text Box 1 for the statutory requirements for State plan consultation under section 122(c)(1) of Perkins V.

The CCCS coordinated with business and industry, community, nonprofit and governmental leaders across Colorado individually and as part of its participation in Colorado's House Bill 22-1215, which established a task force responsible for reviewing the current landscape and making recommendations to expand opportunities for high school students to enroll in postsecondary and work-based learning opportunities, including CTE in every region of the State. The 1215 task force was a coordinated effort across the state's Education Leadership Council and State Work Force Development Council and included feedback from a variety of stakeholders and groups. As part of the task force work, stakeholders were invited to participate in panels, human centered design workshops, and surveys.

Additionally, CCCS consulted with stakeholders from across the state during the development of this plan in many formats including face-to-face regional meetings, conference interactive sessions, and public comment. Engaged parties included: representatives from secondary and postsecondary education institutions (including students, faculty, counselors/advisers and administrators), the Colorado Workforce Development Council (CWDC), the Colorado Department of Education (CDE) — in particular, the Office of Adult Basic Education and the Office of Postsecondary and Workforce Readiness and the Division of Student Pathways, Colorado Department of Higher Education (CDHE), the Colorado Charter School Institute, representatives of special populations, business and industry, economic development organizations, the Colorado Association for Career and Technical Education and the Colorado Association for Career and Technical Administrators and other interested parties.

CCCS followed the four-phase process shown on the next page — Discovery, Dialogue, Direction and Deployment — for the design and development of Colorado's CTE Vision, Strategic Plan and State Perkins Plan. CCCS spent several months in the discovery and dialogue phases shown below to ensure that CTE partners and Perkins stakeholders were actively engaged in a meaningful way. During the Direction phase, these same stakeholders were consulted and provided input on the state's CTE vision and strategic plan to create shared ownership and identify needs and opportunities for the Perkins State Plan.



CCCS conducted formal stakeholder engagement sessions across the state, including through the CLNA process in fall 2023 to collect input and feedback on CTE related topics that helped to inform the state plan. The topics included Career Exploration and Career Development; Instructor Recruitment and Retention; Partnerships; Quality CTE Programming; Access, Equity, and Inclusivity; and Work-Based Learning. CCCS also conducted focus groups which consisted of faculty, students, counselors, industry advisory groups and professional organizations such as the Colorado Association of Career and Technical Administrators (CACTA) and The Colorado Association of Career and Technical Educators (CACTE). Student focus groups, including with learners from special populations were conducted as well as human centered design focus groups around program access that included a variety of types of stakeholders in addition to those from special populations. Additional input was gathered during partner meetings and through leadership communication with the CWDC and the Office for the Future of Work, and Colorado Office of Economic Development and International Trade. The CWDC (the CCCS Chancellor is a member of the CWDC, the CTE State Director is also a member of this committee), WIOA Core Programs (WIOA Adult, Dislocated Workers and Youth Programs; Adult Education and Family Literacy Act; Wagner-Peyser Employment Services; Vocational Rehabilitation), labor organizations and sector partnerships.

2. Consistent with section 122(e)(1) of Perkins V, each eligible agency must develop the portion of the State plan relating to the amount and uses of any funds proposed to be reserved for adult career and technical education, postsecondary career and technical education, and secondary career and technical education after consultation with the State agencies identified in section 122(e)(1)(A)-(C) of the Act. If a State agency, other than the eligible agency, finds a portion of the final State plan objectionable, the eligible agency must provide a copy of such objections and a description of its response in the final plan submitted to the Secretary. (Section 122(e)(2) of Perkins V).

CCCS seeks to spur innovation in CTE by identifying projects that could be scaled for statewide implementation and to encourage local CTE efforts to align to state priorities. CCCS is the oversight agency for CTE at all levels. Colorado has a unique governance structure where the State Board for Community Colleges and Occupational Education oversees the programmatic elements of CTE for secondary and postsecondary institutions (including the technical colleges and local district colleges). CCCS consulted with the CDE on the development of the Perkins

State Plan and works with CDE as the K-12 Academic Educational Agency, in particular for K-12 CTE data submissions and alignment between career pathways related activities.

If CDE, or any other state agency, finds a portion of the final state Plan objectionable, it may file an objection with CCCS which will respond to all objections. Below is a timeline for objections and responses:

Date	Action
January 12, 2024	Perkins Multi-year State Plan posted to CCCS website
January 16, 2024 – February 18, 2024	Public hearings of Perkins Multi-year State Plan across Colorado and public comment form open
February 18, 2024	Any objections to the content of the Perkins State Plan filed with CCCS by this date
March 22, 2024	CCCS responses are mailed to objectors and any necessary changes made to the plan after the November State Board for Community Colleges and Occupational Education during which the State Plan will be reviewed.

# 3. Describe opportunities for the public to comment in person and in writing on the State plan. (Section 122(d)(14) of Perkins V).

The Colorado State Board for Community Colleges and Occupational Education conducted public hearings across the State of Colorado as detailed in the chart on the next page. Notifications of the public hearings were provided electronically to local school districts, community colleges, state agency partners, and community and labor organizations as well as publication on the CCCS website. During public meetings, Colorado Community College System staff provided an overview of the State Plan, solicited feedback from attendees, answered questions and built on effective statewide CTE partnerships. In addition to public meetings, the State plan was posted on the CCCS website with an email address that is clearly identified and available on each webpage with State plan documents. This email address goes directly to the CCCS Perkins Manager and allows individuals to provide written comments on the State plan. An electronic comment form was also provided.

#### Locations of Public Hearings on State Perkins Plan

Meeting Dates	Location
January 16, 2024	Parachute - WebEx
January 19, 2024	Virtual (via WebEx)
January 23, 2024	Castle Rock
January 31, 2024	Virtual (via WebEx)

#### B. Program Administration and Implementation

1. State's Vision for Education and Workforce Development.

a. Provide a summary of State-supported workforce development activities (including education and training) in the State, including the degree to which the State's career and technical education programs and programs of study are aligned with and address the education and skill needs of the employers in the State identified by the State workforce development board. (Section 122(d)(1) of Perkins V).

Colorado's workforce development activities are primarily coordinated through the Colorado Department of Labor and Employment (CDLE) and CWDC. CCCS partners with the CWDC as the governing body responsible for oversight of the Workforce Innovation and Opportunity Act (WIOA) funds and programs. CCCS CTE funds a portion of the operating costs of the CWDC as dictated by State Statute.

The proposed 2024-2028 Colorado WIOA State Plan has four overarching goals:

- 1. Increase affordability of career connected education and training.
- 2. Increase the quality of upskilling opportunities, jobs, and career pathways.

3. Increase equity in the talent development network so that each person's success is not predetermined by their zip code, background, ability status, or income bracket.

4. Enhance access to programming by creating more seamless connections between high school, postsecondary education, and the workforce.

CTE is aligned with these goals and identifies opportunities to leverage programs, partnerships and initiatives to engage stakeholders and follow through on identified goals for the education and workforce systems. CTE partners with CDLE, CWDC (WIOA), BEL Commission, CDE, OEDIT and Sector Partnership initiatives to leverage and engage in identified career training and development activities which were developed based on career pathway opportunities and sector strategy initiatives within the state. Colorado has also engaged across state agencies to consider workforce and education activities more broadly than just through the CWDC, resulting in legislation through House Bill 22-1215 requiring a task force to "blur" the boundaries "between key transition points along the learner-to-worker journey to create a "singular, more flexible system." To highlight that broad scope, some of the state workforce development and education and training activities include:

- Coordination with CDLE and CCCS to encourage and provide incentives to support teacher externships.
- Establishment of a State Apprenticeship Agency through the Office of the Future of Work, housed in CDLE.
- <u>Colorado House Bill 22-1215</u>, which resulted in a set of recommendations issued in December 2023 to expand access to in-demand industry credential attainment, advanced credit (i.e., postsecondary), and high-quality work-based learning opportunities throughout the state.
- <u>Colorado House Bill 22-1330</u> created the 1330 Task Force and Higher Education Student Success legislation to provide financial assistance and support services to students who have some postsecondary credits but stopped attending before obtaining a credential and to re-engage learners impacted by the covid 19 pandemic.
- <u>Colorado House Bill 22-1350</u> created the Regional Talent Development Initiative Grant (Opportunity Now) Program to fund talent development initiatives across the state that meet regional labor market needs.
- <u>Colorado Senate Bill 22-192</u> outlined stackable credential pathways work and provided additional funding for learners to complete nondegree credential programs.
- <u>Colorado Senate Bill 22-226</u> and <u>Colorado House Bill 23-1246</u> dedicated state funds to cover learner costs including tuition, fees, and course materials for short term (2 years or less) programs preparing workers for healthcare and other occupations with significant workforce shortages.
- <u>Colorado House Bill 23-1212</u> created a navigator program to promote apprenticeships to high school students and added apprenticeships to the Individualized Career and Academic Plan.
- <u>Colorado Senate Bill 23-065</u> reauthorized legislation incentivizing Colorado school districts to provide learners the opportunity to earn an industry recognized credential and increased the minimum annual allocation.
- <u>Colorado House Bill 22-1349</u> established a Postsecondary Student Success Data System to develop student success measures that measure the progression of students through postsecondary education and the impact of postsecondary pathways on a student's career opportunities and success.
- Additional efforts around data-driven decision making, data literacy and transparency are continuously topics of shared concern, including those to highlight high wage, high skill, in-demand occupations and industry needs in Colorado. These efforts help inform areas of collaboration across economic development, education and workforce. A sample of the effort to highlight and address demand by Colorado Industry can be viewed at: <a href="https://coloradofuturejobs.com/#/graphs">https://coloradofuturejobs.com/#/graphs</a>.

• Continued collaborative work resulting from <u>Colorado House Bill 15-1274</u>: State legislation directing the CWDC to partner with CCCS to increase coordination for the development of career pathways in emerging sectors.

The Business Experiential Learning (BEL) Commission, which is a Governor appointed commission seeks to develop, evaluate, and implement work-based education and training solutions. CCCS partners with the BEL Commission and will coordinate with any other groups designated in Executive Order to focus on workforce or education initiatives pertinent to CTE.

Additionally, to the state-level activities listed above, Colorado is engaged in the implementation and support of a variety of federally sponsored workforce activities that relate to CTE. Some, but not all of those initiatives and efforts are noted below.

- <u>Colorado Senate Bill 23-205</u>, known as Opportunity Next, is a scholarship program that appropriates some federal recovery funds to encourage and support learners to take the next step toward employment in high-priority postsecondary pathways.
- Colorado is working to implement activities related to the <u>CHIPS and Science Act</u>, the <u>Infrastructure Investment and Jobs Act (IIJA)</u>, complete activities associated with pandemic recovery, and additional federal programs as they are authorized.
  - A data dashboard tracking progress with federally funded efforts can be viewed at: <u>https://luminancedata.com/iija/dashboard</u>.

In partnership with education and workforce partners, Colorado CTE serves secondary and postsecondary learners in their preparation for meaningful careers, provides the state's employers with better prepared talent which leads to the development of stronger communities. Advisory committees, industry councils and sector partnerships are valuable partners in the CTE system. Partnering with these entities provides the opportunity to more effectively align CTE programs with the needs of business and industry. Colorado CTE will continue to expand the use of statewide advisories for the various CTE program areas aligned to in-demand occupations and apprenticeship. Initial areas where statewide advisory committees will be established include infrastructure, advanced manufacturing, and healthcare. CCCS will partner with the Statewide Apprenticeship Agency to review competencies and crosswalk those to CTE pathways.

b. Describe the State's strategic vision and set of goals for preparing an educated and skilled workforce (including special populations) and for meeting the skilled workforce needs of employers, including in existing and emerging in-demand industry sectors and occupations as identified by the State, and how the State's career and technical education programs will help to meet these goals. (Section 122(d)(2) of Perkins V).

The administration team for Colorado CTE along with stakeholders in the state developed a compelling statewide vision to position CTE as a driver in the state's education, workforce and economic priorities. **VISION STATEMENT**: Colorado Career & Technical Education (CTE) leverages workforce and education systems so that each learner has quality CTE experiences leading to lifelong career success.

In addition to the workforce, education and training related activities already described in this plan, in the Every Student Succeeds Act (ESSA) State Plan, CDE identified the following goals to support students:

- 1. Start Strong: Every student starts strong with a solid foundation in preschool through third grade;
- 2. Read by Third Grade: Every student reads at grade level by the end of third grade;
- 3. Meet or Exceed Standards: Every student meets or exceeds standards; and
- 4. Graduate Ready: Every student graduates ready for college and careers.

These goals align with those set forth in CDE's strategic plan. CTE programs help support CDE goals three and four specifically, in order to promote student skill attainment, meeting/exceeding standards, and meeting graduation rates. As with CTE and CDHE, CDE shares a goal of postsecondary and workforce readiness for every learner. The Colorado CTE staff member responsible for School Counseling supports CDE's efforts around PWR (Postsecondary and Workforce Readiness) Symposiums around the state and other professional development programs.

Additionally, the CTE Goals help support the state higher education strategic goal to "increase the number of Coloradoans benefiting from valuable career skills, obtained while in high school or via postsecondary education, that – at a minimum – enable additional lifetime earnings greater than the cost of attendance". "Building Skills for an Evolving Economy", Colorado's strategic plan for higher education outlines three strategic pillars that will enable progress toward the larger goal, including:

- 1. Identify and improve pathways with a negative return on investment.
- 2. Enable more learners to succeed in programs and pathways that offer a positive return on investment
- 3. Catalyze increased postsecondary-workforce collaboration, alignment, and cocreation of new pathways that offer a positive return on investment.

Colorado CTE developed five goals to guide work and partnerships that support the state's vision for CTE. The identified CTE goals are inclusive and intended to engage all relevant partners, stakeholders and information pertinent to Colorado's education and workforce systems. The CTE goals were designed with education and workforce partners in mind in order to ensure that CTE students are prepared to meet the needs of business and industry in Colorado. Labor market information and workforce data help to inform program partners and stakeholders about high-skill, high-wage, in-demand industries and occupations. Special populations will be considered through the implementation of each goal and will be provided direct attention and services to assist them in successfully gaining technical and employability skills through CTE.

GOAL	1	<b>Career Advisement &amp; Development</b> – Ensure each Colorado Learner has access to ongoing career advisement and development.
GOAL	2	<b>Instructor Recruitment &amp; Retention</b> – Develop and ensure a viable pipeline of CTE instructors to fill the educator positions at the middle school, secondary, and postsecondary levels.
GOAL	3	Partnerships – Prepare Colorado's future workforce through transformational partnerships.
GOAL	4	<b>Quality Programs</b> – Elevate the quality of CTE programs to support each learner's skill development and meet industry needs.
GOAL	5	<b>Work-Based Learning</b> – Ensure access to meaningful work-based learning opportunities for each CTE learner.
	EQUITY & ACCESS	
		Create opportunities for each learner to access quality CTE programs and distribution of CTE programs throughout the state.
ELEMENTS		INCLUSIVITY
		Provide each learner with the opportunity to participate in a CTE program and decrease the gaps of CTE participation for target populations, non-traditional occupations, and geographic areas.

## Goal 1: Career Advisement & Development: Ensure each Colorado learner has access to ongoing career development and advisement.

Each Colorado learner deserves the opportunity to explore career options and receive guidance in planning for their future careers. Career development and advisement is a systemic process that starts with a broad understanding of what work is and what is required to be successful in a career. Their understanding narrows as students move through middle school, secondary and postsecondary education. Career development and advisement requires a systems approach that brings together school counselors, CTE instructors, business partners and community members. Colorado CTE will not lose sight of the importance of elevating learner voice in this process as learners should feel empowered. This is in alignment with CTE Without Limits, Principle 1: "each learner engages in a cohesive, flexible and responsive career preparation ecosystem". A systems approach provides for the alignment of activities and interventions that build throughout a learner's education experience. Colorado CTE will utilize the Career Development Framework crafted under the leadership of the CWDC and other state level partners to inform this goal.

#### Strategies for Career Advisement & Development:

- Colorado CTE will continue to use the "CTE Specialist" credential as a way to incentivize school districts to be inclusive of School Counselors in CTE program design and implementation.
- Colorado CTE will leverage CTSO Fall Leadership Conferences to provide professional development for educators to connect career development and PWR skills into their lesson planning and program design.
- Colorado CTE will deploy tools and resources to advance middle school CTE programs and align to high school CTE programs.
- Colorado CTE supports all CTE educators to align efforts and have meaningful career conversations with learners.
- Colorado CTE will continue to support a "CTE learner leader work group" for learner voice feedback on career development strategies, CTE program design, and overall communications.

- Colorado CTE, in collaboration with other state agency partners, will provide local CTE programs current and relevant workforce data to guide learners to careers that provide a quality standard of living and future opportunities.
- Colorado CTE will utilize additional data visualization of employment data and CTE data to showcase to learners and families that the CTE program aligns to placement data and outcomes for learners.

# Goal 2: Instructor Recruitment & Retention – Develop and ensure a viable pipeline of CTE instructors to fill the educator positions at the middle school, secondary and postsecondary levels.

CTE can help meet the talent development needs of Colorado's workforce and economic priorities with a viable pipeline of CTE teachers/faculty to fill the instructor positions at the middle school, secondary and postsecondary levels. Targeted professional development programs provide on-going support for instructors from a technical skill perspective. These efforts will continue and will expand to include stress management, financial planning, time management and other areas of personal effectiveness and management. Colorado CTE commits to working with local programs in building recruitment strategies and talent pipeline programs that attract diverse CTE instructors, administrators and leaders who are demographically representative of the learners they teach and have strong industry expertise and continue building their capacity through culturally responsive professional development.

In the ESSA State Plan, CDE details efforts made from the state level to help LEAs impact instructor recruitment and retention. One such effort is the exploration of opportunities to redesign the process for how education preparation programs are approved. A new model involves shifting from an outcome-based system to having an increased focus on program effectiveness and aligning educator endorsements with the Colorado Academic Standards (CAS). CTE partners with the Office of Education Effectiveness for CTE credentialing and works with Colorado State University, in particular, for CTE Teacher Preparation Programs.

Educator shortages in critical areas continue to be a priority for the legislature, workforce, and education systems in Colorado. CCCS and Colorado CTE are partnering CDE and CWDC as well as with postsecondary institutions to create innovative solutions including Bachelor of Applied Science and apprenticeship programs to develop new pathways to the profession.

The CWDC identified 'education' as a career pathway of focus. During this process, CTE and CCCS staff members participated in a statewide Sector Partnership to identify barriers for education recruitment and retention. CWDC, CDE, and CDHE are partnering with <u>www.teach.org</u> for the promotion of education pathways and dissemination of career pathway information to prospective educators. CTE and CCCS, while not funding partners, are supportive in disseminating this work and message.

#### Strategies for Instructor Recruitment & Retention:

• Colorado CTE will continue to innovate our "Education and Training" pathways (including Early Childhood Education certificates, Teacher Cadet programs, and The

Teacher Recruitment Education and Preparation (TREP) Colorado Senate Bill 21-185) to expand access for all CTE learner populations across Colorado.

- Colorado CTE will continue to innovate and support ways to increase military veteran engagement as CTE educators.
- Colorado CTE will work with other state agency partners to communicate the ways for CTE educators to explore teaching Concurrent Enrollment.
- Colorado CTE will collaborate with teacher preparation institutions and alternative licensure or credentialing programs to ensure teachers are prepared to provide instruction aligned to Colorado CTE program standards, curriculum course standards, and CTSO advisement.
- Colorado CTE will collaborate with the divisions of CACTE to provide meaningful professional development at the CACTE CareerTech Summit annually.

## **Goal 3: Partnerships: Prepare Colorado's future workforce through transformational partnerships.**

Partnerships between CTE and industries, agencies and organizations are critical in order to align with industry needs and the skills required for success in Colorado. Colorado CTE will be the partner of choice for business, community-based organizations, and other intermediaries for talent development. Colorado CTE will work with partners with the aspiration that "each learner can access CTE without borders." Partnerships also provide opportunities to leverage resources and minimize duplication of efforts to reach and engage learners and other stakeholders in the CTE system. Partnerships will be both formal (Memorandums of Understanding, Memorandums of Agreement, etc.) and informal (relationships, peer engagement, etc.) to create an effective and productive ecosystem for the growth and success of the CTE system. In order to effectively align systems, partners recognize and acknowledge the value and expertise that each industry, agency and organization possesses and can contribute. Systems alignment will result from partners agreeing on shared priorities and action items that benefit their individual agency as well as the CTE system. CTE engages and partners with several non-state agency entities to promote initiatives that align to the CTE mission and vision, such as the "Homegrown Talent Initiative" through Colorado Succeeds and the Colorado Education Initiative and "Business Ethics" work with the Daniels Fund. Districts and colleges offering CTE programs across Colorado also partner individually and sometimes collectively with entities including non-profits, philanthropy, businesses, trade organizations, unions, community partners, and other non-state agency entities to advance CTE programming and opportunities for learners. For example, many districts and colleges work with organizations like the Attainment Network on a regional basis to make datadriven decisions to expand access to industry aligned CTE programming in in-demand areas. Additionally, partnerships that expand access to learning and employment opportunities in Colorado's diverse portfolio of industry areas and initiatives such as the Quantum Western Collaborative are continually developed and expanded.

Qualified instructors and appropriate laboratory spaces are essential to High Quality Career and Technical Education. Colorado CTE encourages districts and colleges to work with local employers to address instructor and laboratory space shortages. An example of a best practice partnership is Careers in Construction Colorado, an initiative in the Colorado Springs area with the local districts and the Housing and Builders Association and Associated General Contractors. Colorado CTE will continue to elevate best practices in this area at the annual CACTA

(Colorado Association of Career and Technical Administrators) Conference and through other venues.

#### **Strategies for Partnerships**:

- Colorado CTE will participate in an overall state advisory committee in alignment with other state agency partners, the Governor's Office, and business and industry partners to provide critical feedback to the overall talent development system for key industries identified by the Office of Economic Development and International Trade (OEDIT).
- Colorado CTE will utilize partnerships to develop processes for sharing resources like equipment, work-based learning openings, and professional development.
- Employers will be engaged through partnership with CTSO including through judging opportunities to increase employer connections to learners and advisors.
- Colorado CTE will establish events and incentives to recognize partners who are contributing to CTE program development including CTSO development and work-based learning development throughout the state.
- Colorado CTE will conduct technical assistance and report on concurrent enrollment data to support further matriculation between secondary CTE programs to postsecondary CTE programs.

# Goal 4: Quality Programs: Elevate the quality of CTE programs to support each learner's skill development and meet industry needs.

Quality CTE programs are a vital component of the education, workforce and economic system in Colorado and are essential in preparing the workforce needed for Colorado's growing economy. Every approved CTE program of study and career pathway should have wellarticulated on- and off-ramps; be anchored by credentials of value; include opportunities for work-based learning; and align with high-skill, high-wage or in-demand career. Components of a quality CTE program include quality instruction that:

- Aligns to workforce needs and economic priorities.
- Aligns with secondary/postsecondary program of study.
- Integrates with career and technical student organizations.
- Provides career development and advisement.
- Provides equity and access to CTE programs.
- Integrates work-based learning.
- Reviews and reflects on program data to make informed decisions.

Colorado CTE provides quality education programs that emphasize core academic content, PWR (Essential) skills, technical skills and a seamless transition to postsecondary education or employment. CTE standards are cross-walked to the Colorado Academic Standards and will be realigned by 2026 including a rollout of professional development for CTE instructors in coordination with CDE. Colorado CTE is engaging teacher content teams to continuously design and refresh ideal Programs of Study including a sequence of courses to match definitions in this Act.

#### **Strategies for Quality Programs:**

- Colorado CTE showcases to administrators and other educators, including state agency partners, the alignment between CTE metrics and PWR accountability measures and other accountability measures reported by school districts.
- Professional development and supports are provided for administrators in secondary education who have not be trained as CTE Directors or CTE educators to align supports for classroom CTE educators as well as showcase the alignment for school and district performance frameworks.
- Equity audits using the Opportunity Gap Analysis Tool will be conducted to assess how CTE is serving learners of color and other marginalized and special populations, such as learners with disabilities and learners from low-income communities.
- Colorado CTE will continue to support the design of broader policy infrastructure, embedding credentials of value within the credit for prior learning system, facilitating opportunities for collaboration and statewide articulation, and elevating existing opportunities for learners.
- CTE marketing efforts, communication strategies, and partnerships are aligned to better support CTE program implementation and success.
- CCCS aligns program approval criteria for state funds and federal Perkins funds.
- CTE programs provide learners with technical training aligned to industry and academic standards.
- Innovative approaches to the delivery of CTE programs and WBL opportunities in underserved locations are funded annually through Innovations in CTE competitive grants funded with Perkins Reserve funds and featured as promising practices to scale or replicate at CTE events like the state CTE association's annual educator conference.

## **Goal 5: Work-Based Learning: Ensure access to meaningful work-based learning opportunities for each CTE learner.**

Work-based Learning is an opportunity to bridge classroom learning with the world of work. WBL experiences and programs should help meet the workforce needs of business and industry while providing opportunities for learners to gain real and relevant experiences within an industry or occupation. Colorado CTE will utilize the Work Based Learning Continuum and <u>Work Based Learning Quality Expectations</u> created through partnership with CWDC, CDE, CDHE, the State Apprenticeship Agency and CDLE to set guidance for definitions and terminology for WBL in Colorado and to encourage commonality (Appendix A). The WBL Continuum identifies three categories for WBL activities:

- Learning about Work focuses on career awareness and exploration.
- Learning through Work supports career preparation and career readiness.
- Learning at Work provides career training at a work site.

These three categories represent the full spectrum of WBL opportunities available through Colorado's education and workforce systems. WBL experiences intentionally connect classroom instruction with student exploration of and exposure to workplace skills, duties and tasks. Colorado CTE will coordinate with other WBL partners and programs to identify appropriate and beneficial opportunities for each partner to maximize their roles within the three categories from the WBL continuum.

#### **Strategies for Work-Based Learning:**

- Local CTE programs will expand their reporting on WBL to show how programs provide learners access to work-based learning across the WBL continuum.
- Colorado CTE, in conjunction with the State Apprenticeship Agency, will establish curriculum alignment between CTE and the competencies of Registered Apprenticeships, where appropriate. These entities will collaborate on this work through state advisory committees.
- Colorado CTE will support a Work Based Learning "Community of Practice" to provide resources and technical assistance to educators and other professionals who place learners in WBL experiences.
- In partnership with the State Apprenticeship Agency as well as other associations, Colorado CTE will support industry partners providing work-based learning or mentorships with supports to build their cultural competency as they interact with a diverse group of learners.
- CTE programs intentionally connect classroom instruction and activities with workplace skills, duties and responsibilities.
- The state or local areas determine the key stakeholders required to engage business and industry in order to increase the number of WBL experiences.

Because WBL experiences serve as a vital bridge between education and employment, Colorado has retained WBL as its quality program indicator for Perkins V.

c. Describe the State's strategy for any joint planning, alignment, coordination, and leveraging of funds between the State's career and technical education programs and programs of study with the State's workforce development system, to achieve the strategic vision and goals described in section 122(d)(2) of Perkins V, including the core programs defined in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102) and the elements related to system alignment under section 102(b)(2)(B) of such Act (29 U.S.C. 3112(b)(2)(B)); and for programs carried out under this title with other Federal programs, which may include programs funded under the Elementary and Secondary Education Act of 1965 and the Higher Education Act of 1965. (Section 122(d)(3) of Perkins V).

The strategic planning process for CTE was a collaborative one with partners and stakeholders from a wide variety of experiences being involved to ensure CTE is well positioned to accomplish its goals. The process included stakeholder engagement sessions, surveys, and regional meetings conducted throughout the state. Attendees or stakeholders engaged included secondary, postsecondary and adult education; CTE instructors; school administrators; instructional support professionals; school counselors; parents; students; WIOA Core Programs; Workforce Development Boards; business and industry; agencies serving special populations; and also learners representing a broad range of stakeholder groups. In learner focused sessions, Colorado CTE sought to be as inclusive in representation as possible without asking learners to

self-identify as a member of any particular groups so as to create a welcoming environment open to each individual.

As a WIOA required partner, CTE is actively engaged in workforce development planning, coordination and alignment activities across the state. Under Colorado state statute, required partners including Perkins, must contribute to the cost to operate the CWDC. The CWDC is jointly funded by the Departments of Labor and Employment, Human Services, Education, Local Affairs and the Community Colleges. Interagency agreements are in place to clearly define the financial obligations of CCCS. CCCS is also actively engaged with the CWDC and the BEL Commission with CCCS representatives participating and presenting at board meetings, committee meetings and ad hoc meetings. The CWDC convenes a stakeholder group, the WIOA partners team, at least quarterly to discuss progress, updates and collaborations on WIOA, Perkins and other partner programs. As part of the WIOA partners team, CDE's Office of Adult Education oversees services to learners who have left the education system without graduating from high school. Many two-year colleges and some school districts across Colorado have been selected as providers for adult education programs, providing services which include supports to help learners transition into CTE programs upon attainment of their GED. It is anticipated that Adult Education completers are likely to continue with their postsecondary education in CTE programs available at postsecondary institutions.

ESSA in Colorado is operated through the CDE Federal Programs and Supports Unit whose mission is to "ensure that the Federal programs we administer provide all Colorado students significant opportunities to receive a fair, equitable and high-quality education and close educational achievement gaps." CCCS and CDE share common efforts when it comes to engaging with the State's Workforce Board (CWDC) and other partners to prepare learners to successfully transition to postsecondary and/or employment opportunities. Both agencies along with other partners, including industry associations and business collations such as Colorado Succeeds and the Colorado Business Roundtable, engage business and industry for WBL opportunities; participate in and expand sector partnership efforts championed by business and industry to increase opportunities for industry recognized credentials. The shared interests and overlapping goals between CTE and ESSA ensure responsibility for secondary student success is shared between the two federally funded programs. Additionally, CCCS, CDHE and CDE share the goal of recognized postsecondary workforce readiness and access to accelerated, high-quality, low-cost credential attainment for learners.

# d. Describe how the eligible agency will use State leadership funds made available under section 112(a)(2) of the Act for purposes under section 124 of the Act. (Section 122(d)(7) of Perkins V).

Colorado CTE utilized the statewide strategic planning process as a state-level needs assessment process. As CCCS implements the resulting strategic plan, CCCS will use state leadership funds for the following activities that align with its CTE strategic plan:

• Support activities that prepare students for non-traditional fields in current and emerging professions as well as for programs for special populations that expose students to high-skill, high-wage, or in-demand occupations

- Provide resources to State institutions, such as State correctional institutions, to provide CTE programming to learners through CTE programs approved by the processes outlined in this plan
- For the recruitment and retention of special populations learners to CTE programming, such as through targeted messaging or recruitment campaigns
- Develop and refresh models for statewide programs of study for CTE content areas
- Approve locally developed programs of study
- Establish statewide articulation, concurrent enrollment, or credit for prior learning agreements which are aligned to approved programs of study
- Staff time to support for state partnerships related to sector partnerships or statewide advisories and focused on Work-based Learning activities
- Provide high-quality comprehensive professional development activities focused on opportunities for growth and engagement with staff, educators and stakeholders (Professional development opportunities will include a combination of technical skill development to ensure instructors are preparing students for careers of the future, application of academic skills in context of the program of study and integration of the PWR Skills.)
- Provide technical assistance, professional development and program review support for eligible recipients to eliminate inequities in student access to high-quality programs and to ensure effective instructors and personnel
- CCCS may elect to use leadership funds to award incentive grants to eligible recipients for exemplary performance or if they choose to use funds allowable under Local Uses of Funds section of the Act, particularly for innovative ideas or to support equitable access for learners.
- Provide support for CCCS staff time and leadership related to the consultation and coordination with business and industry organizations, CWDC, CDE and CDHE on the adoption and integration of approved and recognized secondary and postsecondary credentials
- CCCS will coordinate with local and state adult education partners to support CTE programs for adult and out-of-school youth
- Create, evaluate and support competency-based curricula
- If the need arises, state leadership funds will be used to support the development, implementation and expansion of programs of study or career pathways in areas that are part of a declared state of emergency
- Improve advisement and counseling for CTE programs in a way that does not supplant other funds for this purpose
- Support for the integration of employability and PWR skills to help learners navigate the education and workforce systems, including through collaborative work with CDE on standards development, resource kits, and professional development for local recipients
- Support for programs and activities administered through Colorado Technology Student Association (TSA) related to STEM fields (including Computer Science) for students who are members of underrepresented groups
- Provide a CCCS staff person for federal CTSOs and to provide training and development for advisers and students across the state

- Coordinate with state-level partners and provide resources for local programs to establish and expand work-based learning opportunities including information and insights for instructors and staff to foster increased awareness of WBL opportunities throughout the education and workforce system
- Integrate and align programs of study and career pathways based on sector partnerships in the state and industry identified needs (The comprehensive needs assessments and state economic priorities will help to inform discussions around the programs of study and career pathways.)
- Support for CTE programs and programs of study aligned with high-skill, high-wage or in-demand industries or occupations identified by the Office of Economic Development and International Trade, Office of the Future of Work, State Apprenticeship Agency, CWDC and local workforce development boards. (The comprehensive needs assessment, labor market information and other workforce data will help to inform and identify the areas of focus for the identified programs of study)
- Make all CTE content and forms widely available while using Colorado's CTE program approval system, known as the CTE Gateway
- Develop valid and reliable assessments and enhance data systems to collect and analyze data related to secondary and postsecondary academic and employment outcomes (Partnerships with other education and workforce programs can be leveraged to identify additional employment data points.)
- Support for accelerated learning programs as approved through the CTE program approval system and CCCS staff and in conjunction with recommendations implemented as a result of the Colorado House Bill 22-1215 task force report
- Support for career academies and other innovative CTE delivery methods to implement postsecondary education and workforce-ready curriculum as approved through the CTE program approval system and CCCS staff (PWR skills are a key element for this activity. The identification and strengthening of PWR Skills require systems alignment and coordination between the secondary, postsecondary and workforce programs in the state.)
- State leadership funds will also be used to administer middle school programs. This includes providing an online program approval process for evaluating and approving middle school programs. The distinction will be made that activities for middle school learners can be funded even though middle school programs are not eligible for Perkins funds in the local application
- State leadership funds will be used to coordinate CTE programming and alignment between certificates and two-year degree programs with Bachelor of Applied Science (BAS); however, as with middle school programs, BAS programs are not eligible for Perkins funds in the local application

This is a comprehensive and complete list of activities related to CTE in Colorado and are the areas of focus and items to be addressed using State leadership funds.

#### 2. Implementing Career and Technical Education Programs and Programs of Study.

a. Describe the career and technical education programs or programs of study that will be supported, developed, or improved at the State level, including descriptions of the programs of study to be developed at the State level and made available for adoption by eligible recipients. (Section 122(d)(4)(A) of Perkins V).

Colorado's Career Clusters are organized in six CTE industry sectors:

- Agricultural, Natural Resources and Energy;
- Engineering, Technology, and Media Arts;
- Skilled Trades and Technical Sciences;
- Health Science, Criminal Justice and Public Safety
- Hospitality, Human Services and Education; and
- Business, Marketing, Entrepreneurship, Finance, and Public Administration.

CCCS has organized Colorado's existing CTE programs within a Career Clusters framework with 22 Clusters and 95 Pathways (Appendix B). Specialized CTE Pathways include Alternative Cooperative Education (ACE), Family and Consumer Sciences Secondary CORE and World of Work.

CTE programs may be approved in the middle grades to provide broad exploration of an industry sector or to a variety of pathways within a sector. Colorado will redesign its middle school CTE programming model and course sequencing in 2024 for implementation in 2025. This process will include guidance updates, training and showcase demonstrations of successful models as part of the implementation in 2026 and 2027. Middle school programs will more closely align and matriculate to high school CTE opportunities available for learners in a given geographic area. Middle school programs offer important opportunities for career exploration and development, earlier exposure to a wider array of occupations and meaningful technical instruction. They do not, however, generally result in work-based learning involving sustained interaction with industry at that level, which is why they are an optional, but recommended offering to introduce CTE to learners at the beginning of the program of study.

The Colorado CTE Programs of Study incorporate secondary education and postsecondary education elements including coherent and rigorous content aligned and integrated with challenging academic standards and relevant career and technical content in a coordinated, non-duplicative progression of courses that align secondary education with postsecondary education. The Programs of Study are designed to prepare students to succeed in high-skill, high-wage or in-demand occupations and in related postsecondary education.

As a local control state, Colorado will not develop required state level Programs of Study, but will instead develop a model Program of Study for each sector. The Program of Study models will be developed by each CCCS Program Director for their content area and will include input from local CTE stakeholders. Collaboration among the state content teams, CACTA, CACTE and staff work groups allow for substantive input and guidance on the continued development and implementation of model Programs of Study. Model Programs of Study for each content

area within the career cluster were completed by June 2020 and are reviewed on a rotating basis at least every four years. These Program of Study models can be adopted by local grant recipients, allowing them the flexibility to develop the Programs of Study as their own and to expand them in innovative ways as well, taking into consideration local needs, assets and resources before seeking approval for their local Program of Study through CCCS. Colorado is a large state with varied economies across its regions and vast distances between educational institutions. For this reason, it is critical that Programs of Study are localized to allow students and parents to identify the educational and career opportunities in their region.

To support local program efforts, Colorado created the Colorado Career Clusters model, Program of Study model and state level course naming conventions and state course descriptions. These tools provide local administrators and instructors the opportunity to develop localized Programs of Study based on high-quality models. Each of the model Programs of Study have identified related postsecondary programs in which secondary CTE students can enroll for concurrent enrollment. Colleges will be encouraged to recognize prior learning through work experience or relevant industry recognized credentials for adult learners engaged in approved Programs of Study. All types of articulated credit will be identified on the CTE Programs of Study. Each new CTE program must have a Program of Study in order to be approved by CCCS. As part of the program of Study with their relevant secondary and postsecondary partners as a part of the submission process of a CTE program. The CTE Gateway was implemented beginning in spring 2020 and houses the Program of Study applications, approvals and public reports for specific education institutions from middle school through postsecondary, including state institutions.

b. Describe the process and criteria to be used for approving locally developed programs of study or career pathways, including how such programs address State workforce development and education needs and the criteria to assess the extent to which the local application under section 134 will— I. promote continuous improvement in academic achievement and technical skill attainment; II. expand access to career and technical education for special populations; and III. support the inclusion of employability skills in programs of study and career pathways. (Section 122(d)(4)(B) of Perkins V).

Tools provided by Colorado CTE assist with the implementation of the Programs of Study at a local level. The locally developed Programs of Study, based on the model templates developed in 2017, became an integral part of the CTE program approval process reviewed by CTE Program Directors. The model template developed in 2017 was created with support and recommendations incorporated from OCTAE including from Colorado's program review in 2015. Colorado transitioned in 2020 to incorporating Programs of Study into its web-based program approval application system, the CTE Gateway. Currently, new CTE programs must meet a set of standards for an initial four-year approval period. One of the requirements for approval of a new program as well as for renewal of an established program is that the institution offering the program document the economic or workforce demand for the program to help ensure positive employment opportunities for learners. Each CTE program is further required to have an advisory board that includes business and industry representatives. This helps ensure CTE programs address state workforce development, education and training needs.

Established programs must meet additional standards for program renewal approval that documents the program quality. At the secondary level, standards for CTE program approvals assure compliance with the Programs of Study criteria that include a coordinated, nonduplicative progression of courses that align secondary education with postsecondary education. Additionally, all secondary level CTE programs are strongly encouraged to provide at least one method by which students are given the opportunity to articulate to advanced level work. Such methods include articulation agreements and dual/concurrent enrollment. Postsecondary level CTE programs are encouraged to provide their students with the opportunity to articulate to advanced level work where practical as well. Colorado has made strides in supporting learner access by developing prior learning assessments and competency-based demonstrations that permit entry into a Program of Study at various points rather than a single point of entry. State legislation also allows community colleges to develop and provide Bachelor of Applied Sciences (BAS) degrees in career pathways t not currently included in four-year college or university level studies. As with middle level CTE programs, BAS programs will be permitted to fund qualifying activities for their learners with Perkins funds, but may not use Perkins dollars for their program development or equipment.

Through the Colorado House Bills 16-1289, 18-1266 and Senate Bill 23-065, which was mentioned earlier in this plan, Colorado has legislation incentivizing Colorado school districts to provide learners the opportunity to earn an industry recognized credential. Opportunities to earn industry recognized credentials, whether offered as part of the program or those that the CTE program prepares a student for, are noted within the Program of Study as well. This state program includes review and maintenance of a credential list that aligns with in-demand jobs in Colorado. Since state funds offset the cost of the credential attainment, Perkins funds will not be used for industry certification costs. Local recipients, however, may use funds to help incorporate opportunities related to certification into their CTE programming, such as through training of instructors or alignment of curriculum to industry needs.

Approved programs must include basic and advanced academic standards, specific technical standards and general employability standards including leadership standards. These standards have been supported by years of coordinated, extensive work of CCCS staff in developing CTE program crosswalks, aligning standards of the occupation to the CTE courses and the integration of leadership skills and concepts through CTSO involvement. CTSO activities integrated in the classroom enhance the academic curriculum and employability skills of communications, teamwork, leadership, goal setting and technology use. These standards align to Colorado P-12 Academic Standards (Common Core State Standards) and to the Postsecondary and Workforce Readiness (Essential Skills) indicators. The diagram below depicts the required elements of a CTE program in Colorado.



The CDE ESSA State Plan outlines strategies to provide well-rounded and supportive education to students to "ensure that all children have a significant opportunity to meet challenging state academic standards and career and technical standards, as applicable and attain, at a minimum, a regular high school diploma." Within the ESSA State Plan, CDE identified key areas to support students from preschool through 12<sup>th</sup> grade: Supports for Early Childhood Education; Supports for District-to-district Transfers and Transitions; Supports for High School, Postsecondary Education and Careers; Supports for Exceptional Students (including students who are gifted and students with a disability).

District-to-district transfers and transitions have a direct impact on CTE learners, instructors and schools because students who are highly mobile are more likely to fall behind academically and are at greater risk of dropping out of school. The tools and resources CDE provide for schools and district staff to support learners through school transfers and transitions are an asset to CTE program staff. Similarly, the materials and resources provided by CDE to assist educators in helping learners transition from middle school to high school are another set of resources that support CTE programs and instructors as they serve learners in their schools and programs. CDE's Offices of Postsecondary Readiness and Dropout Prevention and Student Engagement offer competitive district and school level grants to support activities that provide middle school student visits to high school and professional development opportunities for school counselors and staff to provide academic counseling which can assist them in having meaningful career conversations with students.

For special populations, equity and access involve delivering individualized possibilities for each learner to experience quality CTE programming in order to promote dissemination of and access to CTE programs throughout the state. Local programs can foster inclusivity by emulating and

adapting practices that serve each learner with meaningful participation in CTE programs to address gaps in participation for special populations, pathways in nontraditional occupations and access to programs despite geographic areas. During the Program approval process, Programs of Study are required to demonstrate that access to the program application level which may reviewed to determine if Programs of Study are serving special populations. This information may be reviewed by the CCCS Program Director for the content area. CCCS Program Directors also have access to opportunity gap analysis dashboards, including by CIP or program level data for each district and college that can be utilized for this purpose as well. Relevant and quality data will provide insight and direction on previous and current program efforts to successfully serve special populations. Data can inform and point to historical trends and future opportunities and be used to identify areas of focus, both geographically and programmatically, for local programs of study. Program or Perkins local applications can be denied if elements within the Program of Study, including budget and outcomes, do not align with state efforts to address equity and performance gaps.

Colorado invests in Comprehensive Guidance for PWR/essential skills that are aligned and integrated into the Colorado Academic Standards. PWR/essential skills are integral to student and program success and are necessary for each student navigating the education and workforce systems because they create a foundation for the student to build upon regardless of their chosen path forward. CDE provides resources to support transition from secondary education (high school) and from adult basic education programs to postsecondary education and careers. The Dropout Prevention and Student Re-Engagement Framework focuses on strategies surrounding data analysis (attendance, course completion, dropout, graduation, etc.) in order to develop early-warning systems and interventions for students identified as at risk of dropping out or not on timeline to graduate. The Colorado Re-engagement efforts and distributing information about best practices and procedures throughout the state.

Local programs will identify and strengthen opportunities for PWR skills within their programs of study. This will require systems alignment and coordination between the secondary, postsecondary and workforce programs at the local levels. CCCS will provide technical assistance to local programs that are not fully incorporating PWR skills into their programs of study. Colorado CTE believes this will assist with CDHE's strategic goal that all learners benefit from valuable career skills, obtained while in high school or via postsecondary education, which is shared by CDE's strategic plan.

As part of CCCS' program review process, CTE programs are approved from one to four years. Programs approved "conditionally" or for periods of less than four years receive coaching on specific aspects of the program that may still be in early stages of development (i.e., creation of WBL opportunities, new instructors to CTE, or implementation of CTSO) or may have weak supporting documentation or continued deficiencies that need addressed. The Colorado CTE Program Directors provide ongoing technical assistance, resources, and professional development opportunities, including on a one-on-one basis that entities can take advantage of to improve programs. At the end of the program approval period, entities submit program renewals which include additional documentation such as the program quality framework reflection and planning document, advisory committee documentation, and programs of work at a minimum. This provides CCCS Program Directors and education institutions an opportunity to perform a deeper dive into the program approval and program of study components as well as the data and assurances submitted by the individual CTE program. The renewal process (for each entity) and more frequent review and reflection for programs that were conditionally approved encourages accountability locally to ensure subsequent program approval by CCCS. Desktop monitoring processes can be implemented on an as needed basis as well.

The comprehensive needs assessment process required by Perkins V also provides an opportunity for CTE programs to regionally assess the quality of their existing CTE programs, alignment to labor market information, review data on subgroup performance, equity and access, and more. Colorado is requiring the needs assessment process be completed regionally, in part to better identify gaps in access to CTE programming, with the goal of identifying areas where collaborative projects or targeted assistance can be delivered to better serve workforce development and education priorities across the state.

Separately from the components required within an approved CTE program or program of study, the local application for career and technical education programs is used to detail how Perkins funds will be used to promote continuous improvement including in academic achievement and technical skill attainment, how access to CTE will be expanded for special populations and the extent to which PWR and essential skills are included in CTE programs. Questions providing narrative as well as assurances and the provision of a local budget detailing specific actions to be funded are included in the local application. As required in the law, all spending must relate to priorities identified in the comprehensive needs assessment process. The local application (Appendix C) is completed electronically in the CTE Gateway in a template developed for Perkins V with input from representatives of consortia, small, medium and large secondary recipients, postsecondary grant recipients and CCCS Program Directors. Local recipients are provided with a self-review checklist to complete prior to submission of the local application. CCCS reviews applications against a standard checklist and the results of the regional comprehensive needs assessment processes prior to granting approval of the application.

#### c. Describe how the eligible agency will—

i. make information on approved programs of study and career pathways (including career exploration, work-based learning opportunities, early college high schools, and dual or concurrent enrollment program opportunities) and guidance and advisement resources, available to students (and parents, as appropriate), representatives of secondary and postsecondary education, and special populations, and to the extent practicable, provide that information and those resources in a language students, parents, and educators can understand;

Colorado has a state law that requires all local education providers at the secondary level to provide information about concurrent enrollment opportunities available to students as well as allowing them to access information about those opportunities. Additionally, Colorado Senate Bill 19-176 established a requirement for ongoing maintenance of a state level website to provide information about concurrent enrollment, for which CCCS collaborated with CDE in the development of the site. Assurances will be included in the Perkins applications for local grant recipients regarding sharing and making information available to the public for their Programs of

Study. Additionally, the new CTE web-based system, the CTE Gateway, which was implemented in June 2020 includes a new program approval process which will include an assurance from each institution seeking approval of a CTE program that Program of Study information will be available in non-English languages identified as a need by local districts and institutions. The CTE Gateway includes a list of approximately one hundred packaged reports about CTE programs, programs of study, CTE contact information, state funding, Perkins related reports; and performance information by program, CIP, institution, and more are available. From these packaged reports, local entities and CCCS can also add additional information or data points to communicate about CTE internally and with the public.

A variety of public information is available on the Colorado CTE website.

<u>www.coloradostateplan.com</u>. This website is scheduled to be redesigned and made more user friendly and accessible during 2024 and training for stakeholders on the new website will be provided once it is complete. Currently, the Colorado CTE website includes information related to CTE Approved Programs and programs of study, school codes, Classification of Instructional Programs (CIP) code lists, career pathways listings, Perkins performance for grant recipients, concurrent enrollment, and a variety of fact sheets about CTE. The Colorado CTE website includes a robust set of information about career planning and resources, work-based learning, and connections to other state agency and partners in this work. Career cluster maps are available in a variety of languages and are distributed by CCCS to local entities upon request for posting in classrooms as well. At the local level, school districts and colleges frequently make information about their offerings available to the public in a variety of languages and formats.

#### ii. facilitate collaboration among eligible recipients in the development and coordination of career and technical education programs and programs of study and career pathways that include multiple entry and exit points;

CCCS has a concurrent enrollment coordinator who is responsible for facilitating secondary and postsecondary alignment opportunities for students. Visually, this can be seen in the Program of Study templates completed by each Colorado CTE program. In addition, CCCS supports and participates in state organization convenings, such as the Colorado Association for Career and Technical Education (CACTE), the state's professional association for CTE. These types of convenings provide the opportunity for secondary and postsecondary partners to collaborate, coordinate and align CTE programs. CCCS provides technical assistance through regional meetings and professional development opportunities on topics impacting both secondary and postsecondary CTE programs and partners. Currently, both secondary and postsecondary partners sign off on Program of Study for the other entity when requests for program approval are submitted. This helps to ensure awareness and alignment between secondary and postsecondary partners. The new web-based CTE Gateway system provides an automated process, but there continues to be a sign off via signature or other electronic verification of postsecondary review and agreement with the submitted Programs of Study. Secondary and postsecondary partners collectively participate in the CLNA on a regional basis, which ensures shared goals and coordination with opportunities to update on a regular basis. CCCS coordinates with CDE and the CWDC on updates to Colorado's industry recognized credentials listing, and additionally with the State Apprenticeship Agency on apprentice and other work-based learning activities that provide learners with additional entry and exit points within a program of study. As detailed earlier in this state plan, CCCS also participated in the Colorado House Bill 22-1215

task force, which had a primary focus over the past two years in identifying ways to streamline, align, fund, communicate, and support educational opportunities for learners that "blur" the lines of traditional education – specifically providing multiple, easy to access entry and exit points related to learners' education goals. These activities will ensure ongoing alignment across secondary and postsecondary CTE programs and will ensure more students have access to and information about credentials of value at all levels.

Part of the 1215 task force recommendations include the development and execution of a comprehensive communications strategy to raise awareness and interest, including in CTE programs and career navigational supports available in Colorado. Regardless of any policy changes that may result from these recommendations, Colorado CTE is actively engaged in a community of practice through Advance CTE in 2023 and 2024 related to CTE recruitment and messaging, especially with identified special populations and demographic groups. The results of the 23-24 community of practice will include toolkits, customizable resources that can be utilized by local recipients and CTE programs for recruitment and messaging about CTE and career advisement opportunities that can be implemented in 2024 onward.

#### iii. use State, regional, or local labor market data to determine alignment of eligible recipients' programs of study to the needs of the State, regional, or local economy, including in-demand industry sectors and occupations identified by the State board, and to align career and technical education with such needs, as appropriate;

Current labor market information about occupations, training requirements and wages is crucial in order to make important decisions about career goals. The Colorado CDLE collects and disseminates information about employment levels and trends, wages and earnings, estimates of labor availability, industrial and occupational projections, business staffing patterns, career planning information and labor force demographics. The data are used to describe a local area's economic picture which impacts social, fiscal, technological and economic policies, employer hiring and other business decisions, allocation of funds by policy makers, individual career choices and educational programs. To provide current, valid and reliable labor market and workforce data and career information, the following resources are available across the state at no charge to the school, agency or individual user: Burning Glass, LMI Gateway, My Colorado Journey, TalentFOUND and the "Colorado Talent Pipeline Report." Representatives of local workforce areas have also partnered together to form the Workforce Intelligence Data Experts (WIDE) Group; this group can access Burning Glass data and deliver customized reports for partners and businesses. The CWDC, local workforce development boards, Industry Advisory groups and sector partnerships are great sources of additional labor market data. CCCS is providing regional labor market data within the Comprehensive Local Needs Assessment. The labor market data shows top regional and statewide occupations for each economic development region and include the following information: Standard Occupational Classification (SOC) code; Occupation Group; number of 2023 Jobs; number of 2028 Jobs; percent change in 2023-2028 Jobs; Annual Openings; 2028 Location Quotient; Median Hourly Earnings; and Median Annual Earnings. Programs of Study will be developed based on the needs identified in the Comprehensive Needs Assessment and must consider labor market needs and demands as part of the needs assessment process. CCCS Program Directors for the various content areas review the local application for Programs of Study prior to approving CTE program applications to determine if labor market data was used during the development of the Program of Study.

Colorado's Career Development Incentive Program, which incentivizes secondary school districts to offer students the opportunity to earn industry recognized credentials is also a program that is tied to labor market information. The list of recognized credentials is updated annually and will be based on the results of the "Colorado Talent Pipeline Report"; because the list is periodically updated, CCCS CTE staff have input into the list of recognized credentials eligible for incentive funding. Colorado CTE works in conjunction with the shared position between CDE and CWDC to support local districts applying for the Career Development Success Program.

Industry-recognized credentials are also included as an assurance in the Program Approval process for Career and Technical Education (CTE). Colorado CTE has included the aligned industry-recognized credentials as part of our overall scope and sequence documents for local secondary CTE programs. Colorado CTE will work towards encouraging data reporting by student level so that Colorado CTE can consider utilizing this a part of the federal accountability structure moving forward in the next iteration of our Perkins V State Plan.

### iv. ensure equal access to approved career and technical education programs of study and activities assisted under this Act for special populations;

Through the comprehensive needs assessment process, districts, consortia, colleges and the Department of Corrections (DOC) will consider data and discuss the current gaps in providing access to CTE programs and programs of study regionally across each of the 14 economic development regions in Colorado. The resulting local applications should reflect new and continued mechanisms for ensuring equal access to CTE programs for special populations. Additionally, as outlined in this plan under Fiscal Responsibility (section C, 1-2) and Accountability for Results (section D, 5), CCCS may place conditions on grant awards or require implementation of local action plans if review of data does not show significant progress toward the goal of ensuring equity and access within CTE.

One of the CCCS Program Directors takes the lead on providing training and professional development on issues of equity, access and inclusivity; however, all CCCS CTE staff are equipped to support CTE programs around Colorado with reviews of their data, identification of causes of disparities and development of appropriate action plans. Review of data and other qualitative indicators of performance is a part of the CTE program approval and renewal process. Training on topics related to access, equity, and inclusion is provided by the Colorado CTE team as well as in conjunction with the state CACTE association to support local entities in their efforts as well.

Alternative Cooperative Education (ACE) Career & Technical Education (CTE) is a multioccupational pathway that facilitates individualized, developmentally appropriate programming for CTE students inclusive of students identified as Special Populations. This programming occurs primarily at the secondary level; however, postsecondary institutions are beginning to pilot ACE programming to better serve every learner. ACE CTE programming is developed through collaboration with educators, business representatives and community stakeholders. The collaboration creates locally responsive, relevant work-based and school-based learning experiences. ACE works in conjunction with other CTE content areas to provide technical skill attainment as well as a comprehensive program which includes school-based, community-based and student leadership opportunities. ACE CTE provides individualized, focused and intentional programming through the following program elements:

- Academic Foundations: Integrates intentional curriculum within State CTE and Academic standards aligned with current practices and expectations
- Business and Industry: Collaborates with business and industry to enhance student employability with a stronger understanding of employer expectations in order to develop professional and technical skills of students
- Capstones: Promotes a meaningful course sequence to meet graduation requirement
- Career Development using the Individual Career and Academic Plan (ICAP): Provides a multi-year process that intentionally guides students in the exploration of career, academic and postsecondary opportunities
- Independent Living: Develops social and emotional skills that enhance students understanding of how to productively live on one's own with a sense of personal and civic responsibility. The Division of Vocational Rehabilitation also provides supports in conjunction with CTE and WIOA programs in this area.
- Postsecondary and Workforce Readiness (PWR) Develops knowledge, skills and competencies to promote employability, postsecondary and lifelong learning.
- Work-Based Learning (WBL) Facilitates opportunities within the community, in school, volunteering, internships, apprenticeships and/or supported employment to emphasize the development of professional as well as industry specific technical skills.

ACE CTE provides student leadership opportunities through Successful Career Students of Colorado (SC)2, the ACE programs CTSO. Through (SC)2, students develop a number of skills including self-knowledge and human relations; career awareness — employability and entrepreneurship; community service and leadership (including financial leadership); and transition planning toward independent living. Resources developed by teachers in the ACE area are shared with other ACE teachers at an annual conference and presentations and promising practices are routinely shared on the <u>www.coloradostateplan.com</u> website to help support ACE and other CTE teachers better serve special populations across CTE.

# v. coordinate with the State board to support the local development of career pathways and articulate processes by which career pathways will be developed by local workforce development boards, as appropriate;

Per state legislation, CCCS employs a full-time staff person who is responsible for coordinating with the CWDC to identify and develop statewide pathways. CCCS coordinates with the CWDC to provide tools and resources related to the development of career pathways. In addition to a guide on Building Industry-Driven Career Pathway Systems in Colorado, the CWDC identifies current and upcoming career pathway initiatives in the state. This information is available to education and workforce partners across the state, including CTE programs and local workforce development boards.

vi. support effective and meaningful collaboration between secondary schools, postsecondary institutions, and employers to provide students with experience in, and

### understanding of, all aspects of an industry, which may include work-based learning such as internships, mentorships, simulated work environments, and other hands-on or inquiry-based learning activities; and

There is tremendous energy about Work-Based Learning as a talent pipeline development strategy in Colorado, and WBL has always been an integral component of quality CTE programs. All CTE programs are required to demonstrate that career advisement and WBL opportunities are available for learners. Within CTE, there are many examples of WBL happening within Colorado, the majority of which are occurring in the 'Learning About Work' category of the WBL continuum, which includes activities such as career counseling, career fairs, industry speakers and worksite tours. Career development and advisement is integral in the Learning About Work portion of the continuum because it provides the initial exposure and a deeper understanding to students about specific industries and careers. The WBL activities where educators have primary scope for organizing are shorter duration and can occur virtually or at a school occur most frequently. In the Learning Through Work category, activities range from clinicals and school-based enterprises to internships. Learning at Work occurs through apprenticeships and formalized employer placements.

CCCS and the CWDC currently provide work-based learning resources and toolkits for local education, business and workforce development staff. CCCS also partners with the State Apprenticeship Agency on WBL efforts in a coordinated way. Additionally, the Colorado CTE team has implemented a WBL community of practice to support local recipients. The multifaceted aspect of WBL programs requires clearly defined and readily available resources for students, employer work sites and educational institutions. Colorado is in the process of developing a web-based tool named "My Colorado Journey" for career counseling, work-based learning opportunities and information about education and training opportunities. This resource will provide job seekers, learners, parents and others access to skill and interest assessments, career exploration and information about education and training opportunities at whatever point the user is at in their education or employment journey. As it is implemented, this tool will be one more mechanism to make information available. The success of the WBL efforts requires the involvement and engagement of system partners. Alignment is intended to coordinate efforts, minimize duplication and allow partners and stakeholders to continue to meet their individual WBL program requirements. Other non-state agency partners, such as Colorado Succeeds, also support CTE educators in the implementation of WBL. CCCS is also involved in the Business Experiential Learning (BEL) Commission which seeks to engage businesses in educating and training students and workers; create electronic access for students and workers to document their skill attainment; and to create a portal of information to connect students, job seekers, schools, employers and service agencies with experiential learning, training opportunities and careers. Colorado also has the Career Development Incentive Program which provides financial incentives for school districts and charter schools that encourage secondary students to complete qualified industry credential programs, internships, residencies, pre-apprenticeship or apprenticeship programs, or qualified Advanced Placement (AP) courses.

The Innovations in CTE grant, started in 2021 using Perkins reserve funds as described later in this state plan, is a competitive grant focused on driving innovative ideas aligned with the Colorado CTE Strategic Plan, which includes goals related to partnership, quality programs, and work-based learning. This grant process has funded multiple projects related to each of these

areas since its inception and several have been replicated by other grant recipients using their basic grant funds, which speaks to the quality of the projects and the value of the competitive process for encouraging bold thinking and new uses of Perkins funds to improve CTE program quality and WBL. Grant recipients have thought creatively about the multiple WBL categories on the Colorado WBL continuum and through the innovation grant have started school-based enterprises in partnership with their local rural communities, hired WBL coordinators to expand placement opportunities within the community, and expanded WBL opportunities in an interdisciplinary way that incorporates each CTE program area within a school. Some specific examples of school-based enterprises that were started include: food trucks, sawmill and lumber operations, community (not just school) stores, florist and event planning businesses and more. Recipients of Innovations in CTE grants present annually at our state CTE association conference and sometimes in other lunch and learn type sessions so that other districts and colleges can learn from promising practices as well as the challenges recipients faced. This grant process will continue in the next four-year period as well and will continue to support innovative ideas related to WBL.

## vii. improve outcomes and reduce performance gaps for CTE concentrators, including those who are members of special populations. (Section 122(d)(4)(C) of Perkins V).

CCCS employs a dedicated Program Director who is responsible for providing training and oneon-one technical assistance around issues of student equity and inclusion. Beyond this position, all CCCS Program Directors and team members have the ability and skill set to review and discuss data related to outcomes and performance with local recipients.

Colorado also engages in professional development in the areas of data literacy, data-driven decision making, CTE program review, Brave Dialogues, Inclusive Goal Setting, and Opportunity Gap Analysis. Beginning in 2022, Colorado piloted the Opportunity Gap Analysis process and implemented it statewide in 2023, including incorporating it into the CLNA. This work has proven valuable in improving outcomes and reducing performance gaps for local recipients. Data are disaggregated in the CTE Gateway in Perkins performance reports and improvement plans (discussed later in this state plan) as well as in the Opportunity Gap Analysis dashboards provided to each district, college, and consortium grouping (in addition to their individual dashboards). These tools and trainings support local conversations about outcomes for learners and the development of actionable plans that may become a part of the local entity's Perkins local application or Innovations in CTE grant proposal.

ACE CTE students receive standards-based and individualized academic instruction, including technical skill attainment, work-based learning opportunities, PWR skills, Social Emotional Learning (SEL) and transition skills. The ACE CTE pathway provides three different and meaningful program implementation options based on each students' needs.

• ACE Core is a foundation course sequence/pathway. This pathway provides career ready practices and Essential Skills and Knowledge (ESKs); a foundation course each learner takes with some learners continuing in the course for longer periods of time; PWR, career development and computer and financial literacy; structured training plans; and WBL opportunities, as appropriate.

- ACE Cluster-based provides a collaborative learning and teaching environment between CTE instructors and ACE. This portion of ACE requires ACE Core as a prerequisite; coenrollment in ACE and other CTE content course sequences that are developmentally appropriate (i.e., taking existing CTE courses); ACE instructors act as coaches to promote academic success and provide learning supports; collaborative instruction with CTE content instructor and ACE CTE instructor; purposeful co-enrollment in CTE content course(s) based on student interest and availability; WBL opportunities as appropriate; school-based enterprises; and utilizing structured training plans for students.
- ACE Specialized denotes a focus on WBL with a collaborative learning and teaching environment between CTE instructors and ACE instructors where the learner is most likely out of the school building for a significant portion of time and is engaged in cooperative learning. This portion of ACE requires ACE Core or ACE Cluster-based as a prerequisite; collaborative instruction with CTE content instructor and ACE CTE instructor; school-based enterprises; ACE instructor as coach and collaborator; WBL continuum; purposeful placement based on student interest and availability; career pathway support; and utilizing structured training plans for students.

The ACE model provides inclusive support to students, resulting in improved attendance and student engagement; application of core academic skills; improved graduation rate; decreased dropout rate; ability to identify and pursue Individual Career and Academic Plan (ICAP) and PWR goals; and employment and postsecondary placement.

# **d.** Describe how the eligible agency, if it chooses to do so, will include the opportunity for secondary school students to participate in dual or concurrent enrollment programs, early college high school, or competency-based education. (Section 122(d)(4)(D) of Perkins V).

Colorado has numerous opportunities for students to participate in earning postsecondary credit. Concurrent opportunities are a requirement of the CTE program approval process. Additionally, CCCS has a position that is dedicated to serve as a liaison between secondary and postsecondary institutions for concurrent enrollment efforts. An increasing number of early colleges and P-TECH schools or programs have appeared on the landscape as options for students as well. The state has taken steps to implement policies to award credit for both competency-based education as well as credit for prior learning assessment. At the secondary level, CDE's graduation guidelines encourage the development of policies supportive of competency-based education, including through student demonstrations of competence via portfolio or other work products. Postsecondary credit options are an area of interest and focus for multiple partners across Colorado and are sought after by secondary students and parents. CCCS will ensure that dual or concurrent enrollment opportunities are available as part of the CTE system; however, the use of Perkins funds for these activities will be minimal because districts already have the opportunity to be reimbursed a significant portion of these expenses through state legislated dollars. Funding the activities through Perkins funds would supplant state funds.

# e. Describe how the eligible agency will involve parents, academic and career and technical education teachers, administrators, faculty, career guidance and academic counselors, local business (including small businesses), labor organizations, and representatives of Indian

# Tribes and Tribal organizations, as appropriate, in the planning, development, implementation, and evaluation of its career and technical education programs. (Section 122(d)(12) of Perkins V).

Separately from the comprehensive local needs assessment process that includes each of these stakeholder groups who will help inform needs, gaps and feedback on current CTE programming at the local and regional level, Colorado has several other mechanisms for meaningful involvement. In Colorado, all approved programs must have a technical advisory committee that functions at the state, regional or local level to assist education providers in planning, conducting and evaluating their program curricula and operations. CCCS developed the Colorado CTE Advisory Committee Handbook to help educators and business and industry representatives strengthen career and technical education programs within a career pathways system through advisory committees. Each advisory committee is made up of individuals with experience and expertise in the occupational field(s) that the program serves who advise educators on the design, development, implementation, evaluation, maintenance and revision of CTE programs within a career pathway. An advisory committee is required for every approved CTE program in Colorado. Advisory committees allow the community to be linked to the educational system via business, industry and labor representatives that add expertise and resources to the CTE program; promote communication among education, business and industry regarding employment needs of the community; strengthen programs by providing student competency lists and reviewing curriculum; and ensure that each career pathway academic ladder matches the corresponding industry career ladder and promote career pathways within the community. The planning, development, implementation and evaluation of a CTE program is handled at the local level. CCCS encourages the active involvement of parents, academic and CTE teachers, administrators, faculty, career guidance and academic counselors, local business (including small business) and labor organizations in the planning, development and implementation of CTE programs. The Local Advisory Committee is typically the forum through which stakeholders are included in local CTE program planning, development, implementation and evaluation. CCCS provides subrecipients with a significant amount of guidance and assistance in the planning, development, implementation and evaluation of local CTE programs. CCCS State Board policy SP 9-47 defines the Program Review and Evaluation procedure for the state system community college programs which includes stakeholder engagement as part of the evaluation criteria.

Guidance and assistance are provided by state CTE staff and are informed by a sophisticated network of actively involved stakeholders. CCCS staff share information about their advisory committee's programs of work to help align continuous strategic planning based on data gathering and analysis. At the state level, both the Local Plan and the Program Approval/Renewal process provide an opportunity for evaluation of CTE Programs. External stakeholders are co-learners working with staff to provide insights and build the collective knowledge for program evaluation; however external stakeholders do not directly evaluate the CTE programs.

## f. Include a copy of the local application template that the eligible agency will require eligible recipients to submit pursuant to section 134(b) of Perkins V.

A copy of the current Perkins local application template is included in Appendix C of this plan. Perkins local applications will be submitted in an online portal called the CTE Gateway, so

the template provided includes the questions and some information as to how the site functions. The online portal used for Perkins local applications and grant management was constructed in 2020 and launched in July 2020. Eventually this same site will also be used to coordinate innovation grants awarded with Perkins Reserve funds, which is discussed in the Fiscal Responsibility section of this document.

## g. Include a copy of the local needs assessment template that the eligible agency will require eligible recipients to submit pursuant to section 134(c) of Perkins V.

A copy of the Comprehensive Local Needs Assessment is included in Appendix D of this plan. CCCS has structured the local needs assessments to occur on regional levels that match the state's 14 economic development regions. This will increase alignment opportunities between education and workforce programs and provides a more realistic picture of the labor market and economic drivers to which local programs are trying to respond. Districts participating in Perkins as part of a consortium are assigned to a common economic development region if there is any overlap so that the consortium retains its ability to work collectively toward common goals. The needs assessment is designed as an opportunity to take an in-depth look at the entire local and regional CTE system in Colorado and identify areas where targeted improvements can lead to increased opportunities for student success. The comprehensive needs assessment presents an unprecedented opportunity to implement the goals of the new Colorado CTE Strategic Plan; create CTE programs and opportunities to ensure access and success for each learner that lead to high wage, high skill or in-demand occupations; ensure CTE programs of study are aligned to and validated by local workforce needs and economic priorities; set strategic short- and longterm goals and priorities to ensure coordinated program review and improvement processes; and regularly engage in conversation with stakeholders around the quality and impact of CTE programs and systems. The comprehensive needs assessment is a requirement for local entities seeking Perkins funds for any use, including programs of study and CTSOs.

## h. Provide the definition for "size, scope, and quality" that the eligible agency will use to make funds available to eligible recipients pursuant to section 135(B) of Perkins V.

To be of sufficient size, scope and quality, a CTE program in Colorado must include the following components:

**Sufficient Program Length** – Each program's completer definitions determine the minimum and maximum length of each program.

• For secondary programs, the minimum completion requirement will be equivalent to two yearlong courses (i.e., two Carnegie Units of instruction), an optimum program length will be three years of Carnegie Units, and a program may be longer. A program completer should be ready for entry-level employment or ready for the next level of advanced training as verified by the Technical Advisory Committee. A program concentrator is a student who, within the reporting year, is served by an eligible recipient and has completed at least two courses in an approved single CTE program or program of study (with a course being defined as equivalent to one full school year of credit in the specific program pathway). One course is the equivalent of one Carnegie Unit. Due to the variety of school schedules used across the state, the contact hours for this minimum will

be at least120 hours. A course may count toward completion of multiple pathways and be appropriate on multiple program approvals.

• For postsecondary programs, a postsecondary CTE certificate program (with occupational field of study specified) is an organized program of study intended to prepare students to enter skilled and/or paraprofessional occupations or to upgrade or stabilize their employment. These certificates are intended to "stack" into Associate Degree programs.

An initial certificate in a program area needs to include the skills, knowledge, and competencies required for entry-level employment. Other certificates in the same program need to advance that skill level. In addition, to be of sufficient size and scope, a certificate program must at a minimum, consist of:

- **Option #1:** Two CTE courses\*; or
- **Option #2:** One, five credit hour CTE course\*

\*as determined by CCCNS Course approval process

Any certificate or degree of substantial length (i.e., 45 credits or more) must have an appropriate general education component (per the Higher Learning Commission). Area Technical Colleges are exempt from this requirement. A concentrator is a student who, within the reporting year, has completed a minimum of 12 credits in the approved CTE program or who has completed the entire approved CTE program if it is 12 credits or fewer.

### Sequence of courses

Each CTE program approved at the secondary or postsecondary level will be comprised of courses that include integrated academic, technical and employability (PWR) skills and progress in a sequence toward at least entry level employment or advanced training. Student learning must be assessed throughout a course as well as the program.

### **Provide Work-Based Learning Experiences**

Another critical component of a CTE program is that it provides appropriate work-based learning. Work-based learning provides hands-on or realistic experiences for secondary learners that relate to the students' CTE Program of Study. Work-based learning at the secondary level is defined by the continuum from CWDC TalentFOUND as a continuum of activities that occur, in part or in whole, in the workplace, providing the learner with hands-on, real-world experience.

Work-based learning options are required for secondary programs. Career exploration experiences are required for middle school programs and work-based learning is strongly encouraged in postsecondary programs. The WBL continuum shares the following information within the career awareness/exploration portion of the continuum:

Learning About Work						
<b>Career awareness and exploration</b> helps individuals build awareness of the variety of careers available and provides experiences that help inform career decisions.						
<ul> <li>Career Counseling</li> <li>Career Planning</li> <li>Career Fairs</li> </ul>	<ul><li>Career Presentations</li><li>Industry Speakers</li><li>Informational Interviews</li></ul>	<ul><li>Mentoring</li><li>Worksite Tours</li><li>Project-based Learning</li></ul>				

In addition to the Learning About Work activities listed above, the work-based learning continuum identifies the following components related to career preparation and career training:

Learning Through Work	Learning at Work
<b>Career preparation</b> supports career readiness and includes extended direct interaction with professionals from industry and the community.	<b>Career training</b> occurs at a work site and prepares individuals for employment.
<ul> <li>Clinical Experiences</li> <li>Credit-for-work Experiences</li> <li>Internships</li> <li>Pre-apprenticeship</li> <li>Industry-sponsored Project</li> <li>Supervised Entrepreneurship Experience</li> </ul>	<ul> <li>Apprenticeship</li> <li>On-the-Job Training</li> <li>Employee Development</li> </ul>

Access to quality work-based learning is provided to each interested student, especially special populations.

## Leadership Development

CTE programs also include embedded leadership development opportunities for learners, including through participation at the secondary level in CTE Student Organizations (CTSO). At both the secondary and postsecondary levels, this also includes embedded employability skills that help ensure postsecondary and workforce readiness skills.

### Be Based on a Program of Study

Each approved secondary and postsecondary program will be a portion of a complete program of study for students. A program of study serves as one type of career guidance and development tool to help learners understand the on and off ramps for a particular career pathway. Programs of study include information on recommended course sequencing at the secondary and postsecondary levels, postsecondary or advanced credit options, and applicable industry recognized credentials relating to a particular career path.

### **Industry Partnership**

CTE programs should be designed to meet industry need. To help ensure this is the case, an approved program must have active partnerships and engagement with business and industry. One method of demonstrating compliance with this requirement is a functional and active advisory committee for each program that includes business and industry members. Advisory committees should meet a minimum of two times per year to provide feedback and input on the

CTE program. Some benefits of active advisory committees are that they provide a mechanism to help ensure CTE programs are teaching current and emerging technical skills using proper equipment and technology, and that CTE staff are aware of trends in industry that should be incorporated into the program.

## **Equal Access and Appropriate Facilities**

While equity, access, and inclusion are expected to be embedded in each component of a CTE program of sufficient size, scope and quality, it is expected that CTE programs will ensure at a local level that learners are aware of the options and benefits of participating in CTE and that each learner has access to do so. This can only happen if CTE programs occur in spaces that are appropriate to the needs of the program and the number of learners served. This includes ensuring sufficient equipment, instruction and safety protocols are in place.

### **Periodic Evaluation**

Periodic self-evaluation is strongly encouraged for all CTE programs. As part of the CTE program approval process, CTE programs are required to use the ACTE high quality program framework as a point of reflection and submit to CCCS a copy of the local reflection form identifying strengths, areas for improvement and an action plan for making progress over the approval period. Additionally, all Colorado CTE programs will be reviewed for renewal purposes every four years at a minimum. Programs approved "conditionally" or for periods of less than four years receive coaching on specific aspects of the program that may still be in early stages of development (i.e., creation of WBL opportunities, new instructors to CTE, or implementation of CTSO) or may have weak supporting documentation or continued deficiencies that need addressed. At the end of the program approval period, all entities submit program renewals which include additional documentation such as the program quality framework reflection and planning document, advisory committee documentation, and programs of work at a minimum. This provides CCCS Program Directors and education institutions an opportunity to perform a deeper dive into the program approval and program of study components as well as the data and assurances submitted by the individual CTE program. The renewal process (for each entity) and more frequent review and reflection for programs that were conditionally approved encourages accountability locally to ensure subsequent program approval by CCCS. This evaluation will occur through the program approval process and will use datadriven practices as well as a technical assistance and coaching model to ensure quality CTE programs for our learners and industry partners.

## 3. *Meeting the Needs of Special Populations.*

a. Describe its program strategies for special populations, including a description of how individuals who are members of special populations— i. will be provided with equal access to activities assisted under this Act; ii. will not be discriminated against on the basis of status as a member of a special population; iii. will be provided with programs designed to enable individuals who are members of special populations to meet or exceed State determined levels of performance described in section 113, and prepare special populations for further learning and for high-skill, high-wage, or in-demand industry sectors or occupations; iv. will be provided with appropriate accommodations; and v. will be provided instruction and workbased learning opportunities in integrated settings that support competitive, integrated employment. (Section 122(d)(9) of Perkins V).

CCCS has several recurring and on-going efforts to meet the needs of Special Populations. The Colorado CTE Program Director for Special Populations, Counseling & Equity participates as a State Team Partner with the National Technical Assistance Center on Transition (NTACT) State Plan in collaboration with the CDE Office of Exceptional Student Services and CDLE Division of Vocational Rehabilitation. NTACT assists stakeholders in implementing evidence-based and promising practices that promote positive post-school outcomes for all students with disabilities. The NTACT State Team meets monthly and includes CDLE, CWDC, CDE Office of Exceptional Student Services Unit, CDE Office of Postsecondary and Workforce Readiness, CDHE and CTE. CDLE hosts Think Big, an annual conference for young adults and young adult service providers in Colorado. Attendees come from the state, county, local areas and communities across Colorado, and all play a role in helping young adults identify and overcome barriers, set education and career goals, and transition to adulthood and independence. Topics at the conference include WIOA, Career Pathways, Special Populations, Work-based Learning, Work Readiness and Coaching Practices, National Youth Engagement Models, Trauma Informed Care, Social Enterprise Models and Mental Health & Self Care. CTE presents breakout sessions at the Think Big conference in partnership with Special Education, ACE, Division of Vocational Rehabilitation (DVR), School to Work Alliance Program (SWAP) and Work-based Learning initiatives.

In the state's ESSA Plan, CDE describes efforts and considerations made for all learners including specific subgroups of students, many of which are also considered Special Populations in the State Perkins Plan: low-income students; lowest-achieving students; English learners; students who are gifted and talented; students with disabilities; students in foster care; migratory students; homeless students; neglected, delinquent and at-risk students identified under Title I, Part D of ESSA, including students in juvenile justice facilities; immigrant students; students in LEAs eligible for grants under the Rural and Low-Income School program under section 5221 of the ESSA; and American Indian and Alaska Native Students.

The CDE's Exceptional Student Services Unit (ESSU) Office of Special Education seeks to prepare students to be fully engaged in college or employment after high school. Technical assistance for educators and leaders is a key component of CDE's efforts to accomplish this. Included in this technical assistance is CDE's work around ensuring the implementation of Colorado's Graduation Guidelines supports positive outcomes for each learner. Some efforts around technical assistance to improve outcomes for every student, including members of special populations, include professional learning opportunities; universal professional development for instructors who work with students to support instruction for Tiers I, II and III; and disability specific resources. Additional services and supports have been provided in recent years as part of covid recovery efforts.

Additionally, compliance checks are incorporated into CCCS systems and processes; however, minimum compliance is not considered sufficient to successfully serve every student who comes to our grant recipients' doors. Equity, access and inclusion will be foundational to Colorado's approach to developing strategies and promising practices that will be reviewed and shared as appropriate. Additionally, Colorado CTE staff continue to be provided training to equip instructors, counselors, student organization advisers and others to have meaningful career conversations with every student in our state. Colorado CTE staff have been trained in facilitating Brave Dialogues conversations and training with local recipients as well, to support

equity, access, and inclusion efforts more broadly and to continue the conversation throughout the state.

Through the comprehensive needs assessment process, Colorado requires that a variety of data be reviewed including where gaps may exist. As part of the needs assessment process, local partners and stakeholders will be required to work collaboratively to identify and analyze gaps, such as those related to special populations, and to identify solutions for addressing gaps and leveraging opportunities. It is expected that, in addition to the needs assessments occurring locally, grant recipients will continue the dialogue with their partners and respond to questions in the local grant application indicating how funding may be used to help address some of the gaps identified.

CCCS will supplement the local application descriptions with three more systems that monitor equitable access.

- 1. Annually, beginning in 2022, local recipients are provided with Opportunity Gap Analysis dashboards that compare CTE enrollment to the local entity's overall learner population, including by program area and by disaggregated special population and demographic information. Professional development, technical assistance, and oneon-one coaching are available to local entities to utilize the data, do root cause analysis, and develop and implement action plans that may include inclusive goal setting.
- 2. Each CCCS approved career and technical education program must be renewed for approval a minimum of once every four years. The four-year program renewal review may include analysis of student enrollment demographics including enrollment data of students with disabilities, gender and minorities.
- 3. CCCS has an Internal Audit division which conducts the Methods of Administration monitoring of local recipients' utilizing the federal Guidelines for Eliminating Discrimination and Denial of Services on the Basis of Race, Color National Origin, Sex and Handicap in Vocational Education Programs 34 CFR, Part 100, Appendix B (Guidelines), as required by Methods of Administration (MOA) with the United States Department of Education, Office for Civil Rights for compliance monitoring throughout Perkins V. The review criteria have substantial emphasis on ensuring that sub-recipients take appropriate steps to ensure that individuals with protected status, including individuals with disabilities, will be provided with equal access to activities and services.

School districts ensure appropriate accommodations through the provision of Section 504 or individual education plans for eligible students. At the postsecondary level, student services have a coordinator who works with students to determine eligibility and appropriate accommodations as well. Employees such as CTE teachers, paraprofessionals, counselors and advisers are expected to be provided appropriate accommodations as stipulated by local, state and federal policies as well.

The ACE CTE program discussed in the Implementing Career and Technical Education Programs and Programs of Study portion of this plan (plan sections B, 2, c, iv and vii) is another strategy for focusing on and serving Special Populations in Colorado's CTE system. ACE CTE students will demonstrate competency in PWR skills that lead to technical skill attainment in any chosen occupation with a focus on high-skill, high wage or in-demand occupations that promote self-sufficiency. WBL is at the foundation of the ACE program design, coursework and post-school outcome for ACE CTE students. As seen in the 12 required courses found with ACE CTE, WBL is reflected as follows:

• ACE IN-SCHOOL WORK-BASED LEARNING (As a pre-requisite, students should have already taken or be simultaneously enrolled in the ACE Career Development (CD I-III) course sequence)

As developmentally appropriate, this course (or series of courses) is designed for students to develop basic employment skills by participating in an in-school work/school-based enterprise experience. A training plan and evaluation (to be filled out by the supervisor/employer) will be developed listing job specific technical skills the student will learn during the experience. Hours worked will be documented. Students will demonstrate levels of self-awareness, career exploration, postsecondary option knowledge and employability skills. ACE teachers serves as a coach and mentor checking in with the supervisor/employer regularly.

• WE-II – ACE COMMUNITY WORK-BASED LEARNING (As a pre-requisite, students should have already taken or be simultaneously enrolled in the ACE Career Development (CD I-III) course sequence)

As developmentally appropriate, this course (or series of courses) is designed for students to enhance employment skills by participating in a community-based work experience (paid or unpaid). A training plan and evaluation (to be filled out by the supervisor/employer) will be developed listing job specific technical skills the student will learn during the experience. Hours worked will be documented. Students will demonstrate levels of self-awareness, career exploration, academic planning based on postsecondary aspirations and realistic options, employability skills and environmental expectations. ACE teachers serves as a coach and mentor checking in with the supervisor/employer regularly.

• **WE-III** – ACE INTENTIONAL WORK-BASED LEARNING (As a pre-requisite, students should have already taken or be simultaneously enrolled in the ACE Career Development (CD I-III) course sequence)

As developmentally appropriate, this course (or series of courses) is designed for students to refine career specific skills and knowledge by participating in an intentional work experience within the field listed in their career plan. These experiences may include internships, apprenticeships, competitive employment, etc. A training plan and evaluation (to be filled out by the supervisor/employer) will be developed listing job specific technical skills the student will learn during the experience. Hours worked will be documented. Students will demonstrate levels of self-awareness, career exploration, intentional academic planning based upon postsecondary aspirations, realistic options and the environmental expectations of the workplace, as well as personal financial literacy.

ACE teachers serves as a coach and mentor checking in with the supervisor/employer regularly.

In order to qualify as an ACE CTE instructor, the ACE Endorsement requires a certain number of semester hours focused on WBL. The recent WBL Coursework delivered for the WBL credential is aligned to the content required for this endorsement. The majority of ACE CTE instructors will receive this content, and some will simultaneously obtain a WBL credential due to the nature of their role, responsibility and professional objectives. There is a direct connection between WBL and ACE CTE in the state of Colorado as one would see in all CTE Content areas.

### 4. **Preparing Teachers and Faculty.**

a. Describe how the eligible agency will support the recruitment and preparation of teachers, including special education teachers, faculty, school principals, administrators, specialized instructional support personnel, and paraprofessionals to provide career and technical education instruction, leadership, and support, including professional development that provides the knowledge and skills needed to work with and improve instruction for special populations. (Section 122(d)(6) of Perkins V).

Colorado, like most states continues to face instructor shortages. CCCS will utilize state leadership funds to coordinate with teacher preparation programs and innovative alternative options such as teacher preparation apprenticeship programs on CTE related recruitment. CCCS partners with professional organization such as CACTE, the primary CTE professional organization in Colorado, to identify recruitment and preparation needs for instructors and to provide professional development opportunities to address these issues. CCCS provides support for a special populations conference, paying for the conference space to ensure programs and instructors have access to meaningful professional development to support them in their work with and instruction for special populations. CCCS and local areas share responsibility for instructor talent development, including resources and opportunities for professional development and technical assistance. Colorado is a local control state and cannot mandate professional development plans for local grant recipients or individual instructors. However, CCCS can provide professional development opportunities and invite locals to attend. Most CCCS Program Directors provide teacher orientation on an annual basis for new instructors or have a mentoring component to support new instructors within their content areas. CCCS also collaborates with teacher preparation institutions and alternative licensure programs to ensure teachers are prepared to provide instruction aligned to Colorado CTE program standards, curriculum course standards and CTSO advisement. Additionally, CCCS partners with the State Apprenticeship Agency, postsecondary institutions, and others to develop new teacher pipeline options, including Bachelor of Applied Science in Teaching or apprenticeship programs.

In the ESSA State Plan, CDE identifies "root causes" related to instructor recruitment and retention issues. The Root Causes and Mediating Causes, as identified by the ESSA State Plan, are:

Higher turnover rates					
Root Causes	Mediating Causes				
1. Colorado's educator pipeline is not providing an adequate supply of candidates in specific areas.	1. Inexperienced teachers often lack the skills needed to meet the needs of struggling learners.				
2. School leaders have not been consistently prepared with the necessary skills to serve as instructional leaders.	2. School leaders experience difficulty in retaining the best teachers in the current educational environment.				
3. Teachers have inconsistent access to induction programs that include coaching and mentoring, strategies for working with struggling learners and instructing on the Colorado Academic Standards.	3. Teachers feel unsupported, unprepared, and frustrated in their current positions.				

One opportunity to mitigate the identified root causes, is through the use of the Self-Assessment for Healthy Human Capital Systems Tool. As stated in the ESSA State Plan, "This tool enables LEAs to self-assess their local systems in the following five strategic areas: 1) Optimizing new educator supply; 2) Boosting the effectiveness of all educators; 3) Retaining and leveraging the most effective educators; 4) Prioritizing effective educators for high-need students; and 5) Improving or exiting persistently less effective educators."

## C. Fiscal Responsibility

a. Describe the criteria and process for how the eligible agency will approve eligible recipients for funds under this Act, including how— a. each eligible recipient will promote academic achievement; b. each eligible recipient will promote skill attainment, including skill attainment that leads to a recognized postsecondary credential; and c. each eligible recipient will ensure the local needs assessment under section 134 takes into consideration local economic and education needs, including, where appropriate, in-demand industry sectors and occupations. (Section 122(d)(5) of Perkins V).

In Colorado, eligible recipients are identified according to Sections 2, 3, 131 and 132 of the Strengthening Career and Technical Education Students for the Twenty-First Century Act. Section 2 stipulates that the purpose of the law is to "develop more fully the academic knowledge and technical and employability skills of secondary education students and postsecondary education students who elect to enroll in career and technical education programs and programs of study". Each eligible recipient that has a CTE program and program of study approved by the State Board for Community Colleges and Occupational Education or that does not offer CTE programs itself, but has a legal contract for CTE programming with an eligible recipient may be approved to receive funds under this Act.

To have an approved CTE program or program of study in Colorado requires that the local educational agency has successfully completed the program approval process. Program approval requires completion of an approved program of study that leads to a recognized postsecondary credential, offering a sequence of CTE courses sufficient in size, scope and quality to comprise a CTE program, offering work-based learning opportunities to students, leadership development such as through a CTE student organization and the integration of applied academics. CCCS Program Directors review the program approval applications to determine if the promotion of academic achievement will occur within the proposed program of study. The program approval process also has elements of quality embedded such as the extent to which advisory committees comprised of business and industry representatives are included in program oversight.

Annually, CCCS will send an 'intent to participate' request to all potential eligible recipients in Colorado. Entities responding by the deadline in the affirmative will be reviewed to determine their eligibility. All eligible entities will be included in the formula for the year and will also meet initial eligibility criteria to participate in the competitive process for supplemental reserve dollars targeted to specific priorities aligned with the state CTE strategic plan.

In Colorado, eligible recipients may receive basic grant funds after the approval of their annual Perkins local application. Each application must address how the recipient will:

- Promote academic achievement. This information will be detailed on the local application and will include information related to the comprehensive local needs assessment and at the secondary level, will include CTSO learning opportunities and graduation requirements.
- Promote skill attainment, including skills leading to a recognized postsecondary credential. Program applications must include information related to the program of

study's expectations around work-based learning efforts, industry approved certifications and credentials and advanced degree options.

• Ensure the comprehensive needs assessment considers local economic and education needs, including high-skill, high-wage or in-demand industry sectors and occupations. CCCS created a local needs assessment template that eligible recipients are required to submit in order to receive CTE program approval or other funds for CTE Programs of Study, courses or CTSO activities. The needs assessment requires each eligible recipient to demonstrate consideration of workforce needs and economic trends, including high-skill, high-wage or in-demand industry sectors and occupations.

The needs assessment will be conducted at a regional level, based on Colorado's 14 economic development regions. The law refers to this assessment as the comprehensive local needs assessment (CLNA). This reference (CLNA) applies to the regional approach Colorado is implementing. Each district, college and state corrections institutions in Colorado desiring to operate an approved CTE program is required to actively participate in the comprehensive needs assessment process. At the local level, colleges, districts and consortia will still have local items to prepare and bring to the larger regional process. There are multiple benefits to a regional approach to the comprehensive needs assessment: the advantage of working with shared stakeholder groups including secondary and postsecondary faculty and administration, representatives of special populations, state or local workforce boards, parents and students, business and industry, Tribal organizations and government agencies representing a common region; increases the focus on collaboration, including secondary/postsecondary alignment, program quality and alignment to labor market needs; identifies similar needs and data to meet the needs within the economic region; and is a more efficient use of resources in preparing for and completing the comprehensive needs assessment.

Districts and colleges generally fell within the identified economic development regions. Where districts or Perkins consortia membership bridged a boundary, districts were assigned to the region of the fiscal agent or to a single economic development region. Where postsecondary institution service areas crossed multiple economic development regions, colleges generally were assigned to participate in each applicable region. The Charter School Institute serves as the local education agency for public charter schools in Colorado and has charter schools in multiple economic development regions. In consultation with the Charter School Institute, CCCS determined that the Charter School Institute would be assigned as an education partner to the economic development region in which it had the most approved CTE programs, which means the assigned region may fluctuate from one to the next CLNA period. In any region where the Charter School Institute has public charter schools, those schools will be included in the regional needs assessment process as stakeholders. Colorado's Department of Corrections will similarly participate as an educational partner in region seven where its CTE program approvals are housed, and will participate as a stakeholder in other needs assessment conversations around Colorado, as resources permit. Should the Colorado Division of Youth Services elect to participate in CTE and the grant in the future, it will participate as an education partner in region three and as a stakeholder in communities in other regions around Colorado where it chooses.

CCCS provides a standard comprehensive needs assessment template to be used across Colorado and trained facilitation teams upon request. CCCS will also provide current and accurate economic and workforce data (i.e., anticipated growth in high wage, high skill, in-demand

occupations) statewide and by region. The final product of Colorado's regional approach will be the completion of the needs assessment results. The needs assessment results will identify the significant priorities Perkins eligible recipients will use for the use of Perkins funds in the local application. Alignment with needs assessment results and the State's strategic CTE plan will also be critical for successful competitive applications for reserve fund awards. Templates used for the CLNA in 2023 are included as Appendices; however, modifications will be made for future CLNAs in order to improve the CLNA experience and process.

Pooling of funds between secondary and postsecondary entities in order to expand CTE opportunities for learners is allowable and encouraged. Perkins funds that are pooled will lose their individual identity as secondary or postsecondary funds and may be used for approved CTE programs and programs of study that benefit all partners involved in the pooling of funds. While pooled funds lose their individual identity, they will maintain their identity as federal Perkins funds and are subject to Perkins V usage, tracking and reporting requirements. To pool funds between two or more eligible recipients, the districts and/or institutions involved must have a formal agreement in place. The formal agreement can be, but is not required to be, a Memorandum of Understanding. The agreement is to be signed by both parties and will detail the district or institution acting as the fiscal agent for the pooled funds, as well as the responsibilities and expectations of each entity involved in the pooling of funds. Any party seeking to pool Perkins funds must be a Local Education Agency (LEA) and have an approved CTE program or program of study. The intent to pool funds will be included in the local Perkins application for each LEA involved in the partnership. If approved, the identified portion of funds for each LEA will be included in the budget for the identified fiscal agent unless it is not possible to do so, in which case, CCCS will ensure a mechanism is in place to track each grant recipient's contribution toward the shared project.

In Perkins V, reserve funds will be distributed primarily through a competitive process, which will be documented, reviewed and updated annually. This competitive process will be for innovation grants and will be called the Innovations in CTE grant. Reserve funds earmarked for Innovation Grant dollars should be part of a larger effort for transformational change aimed addressing strategic priorities for CTE in Colorado. This grant initiative provides an opportunity for current Perkins grant recipients to apply for additional dollars awarded through a competitive process to implement innovative strategies—particularly those that are data-driven, evidence-based, and linked to outcomes of the regional needs assessment process to expand and transform the quality of CTE programming in Colorado. This initiative will help distribute federal CTE dollars broadly across Colorado to deserving applicants who may not otherwise have had the resources to implement significant innovations in CTE with just the funds generated through the Perkins formula grant.

A work group of multiple stakeholders provided feedback into the initial competitive process and application as well as the method of evaluation of applications. A weighted factor incentivizing projects in rural areas and a separate is included in the application evaluation to further ensure a broad distribution of resources. Additionally, successful proposals will be expected to demonstrate partnership, align with Colorado's Strategic Plan for CTE including the foundational elements of equity, access, and inclusivity; and there is a desire to distribute awards across the state geographically and address equity gaps. If there is an opportunity to further align to priorities from the Governor's Office, evaluation of proposals will consider that as well. As

an example of this in practice, Colorado had a proposal to expand technical instruction in a secondary and postsecondary Program of Study for vehicle maintenance focused on electric cars. This aligned directly to the Governor's priorities on clean energy and expanding use of electric vehicles, so that project was funded with the requirement that its program expansion work align with other established partnerships and work in that area.

Projects approved through the competitive proposal process will be published on the CTE website <u>www.coloradostateplan.com</u> and grantees awarded funds through this process will be required to present their projects and results annually such as at our State CTE Association's annual conference to other CTE educators and administrators. Over time, best practices will be identified along with opportunities to appropriately scale successful strategies across the state.

To be eligible for a Perkins reserve fund innovation grant, applicants will need to demonstrate how they meet the following eligibility criteria:

- Each applicant (and partner education institution in the application) must be participating in the regular, formula-based Perkins grant program for the fiscal year of the application.
- Each education institution (i.e., district, consortium, or college) must meet at least one of the following criteria as outlined in the Perkins Act:
  - Qualify as a rural recipient (secondary district designations align with the Colorado Department of Education's rural list);
  - Have a high percentage of CTE participants compared to the overall student population (This is defined as having at least 15% participation in CTE in the last academic year);
  - Have a high number of CTE participants (defined as 1,000 or more CTE participants in the last academic year); or
  - Be submitting an application in order to directly address an area with an identified deficiency or gap in performance as described in Section 113(b)(3)(C)(ii) in the Perkins Act.

1. Describe how funds received by the eligible agency through the allotment made under section 111 of the Act will be distributed— a. among career and technical education at the secondary level, or career and technical education at the postsecondary and adult level, or both, including how such distribution will most effectively provide students with the skills needed to succeed in the workplace; and b. Among any consortia that may be formed among secondary schools and eligible institutions, and how funds will be distributed among the members of the consortia, including the rationale for such distribution and how it will most effectively provide students with the skills needed to succeed in the skills needed to succeed in the workplace. (Section 122(d)(8) of Perkins V).

In Colorado, funds received are distributed according to the following allotments and calculations. These distribution methods are expected to provide students with the skills needed to succeed in the workplace by ensuring resources are distributed broadly across the state and that supplemental resources targeting specific needs can be funded through reserve funds.

State Administration: 5%

• Activities related to developing the State Plan; reviewing local applications; monitoring and evaluating program effectiveness; compliance oversight; providing technical assistance; and supporting/developing the state data systems related to Perkins

State Leadership Activities: 10%

- A minimum of 0.1% of leadership funds used for recruitment of special populations
- \$60,000 used for preparation for nontraditional career fields
- \$60,000 used in state correctional institutions

Local Education Agencies (LEAs): 85%

- 85% of the LEA designated funds used for non-reserved purposes
  - 60% to eligible and participating postsecondary institutions
  - o 40% to eligible and participating secondary school districts
- 15% of the LEA designated funds used for reserved purposes
  - One-third of reserve funds will be distributed to secondary and postsecondary recipients that are considered 'rural'. CDE annually updates a listing of districts considered rural and any district meeting any of the rural thresholds will be considered rural. Additionally, postsecondary institutions whose primary campus is located in a district considered rural will also be defined as rural.
    - Within the one-third of funds for rural distribution, 60% will be distributed to secondary districts.
    - 40% of the one-third will be distributed to postsecondary institutions (there are significantly fewer postsecondary institutions considered rural than secondary districts, so this ensures more equity in the amounts).
  - Distribution of the remaining two-thirds of reserved funds will be competitive in order to spur scalable or replicable innovation projects that enhance the provision of CTE students with skills needed to succeed in the workplace at secondary and postsecondary levels (Colorado CTE believes this will assist with Strategic Goal 4: Invest in Affordability and Innovation in the CDHE Master Plan.) These funds will not be differentiated by secondary or postsecondary as it is expected that applications will generally include a collaboration between secondary and postsecondary. For reporting purposes, Colorado will categorize a competitive grant awarded through reserve funds as 'secondary' or 'postsecondary' based on whether the fiscal agent designated in the grant proposal is secondary or postsecondary. For proposals that demonstrate strong linkages to preparation of students for nontraditional fields, innovation grant awards funded by reserve dollars may be supplemented by a portion of our state leadership dollars dedicated to supporting preparation of students in nontraditional fields; however, Colorado will be able to differentiate the amount of leadership dollars awarded from the reserve dollars awarded through the competitive

innovation grant process. Competitive funds will not be reimbursed for activities outside of the scope of the selected proposals.

- For all eligible recipients, reserve funds must be used on the local uses of funds activities under Section 135 of Perkins and according to our state-level guidance such as that included in this state plan, the Administrators' Handbook, and grant agreement.
- CCCS reserves the option to use reserve or carryover funds unspent from the prior fiscal year for competitive proposals rather than redistribution to rural recipients.
- LEAs and IHEs that receive funds must have a CCCS approved CTE program or contract with an eligible recipient.
- Colorado has no postsecondary recipients that receive less than \$50,000 as stipulated in section 132(c), so consortium membership is not currently required at the postsecondary level.
- Secondary districts that receive less than \$15,000 in basic grant funds as stipulated in section 131(c) are required to enter into a consortium agreement with other local educational agencies.
  - In a consortium agreement where the combined allocation of basic grant funds is less than \$15,000, expanding the consortium is encouraged, but will not be required.
    - For competitive awards from reserve funds, any LEA that has participated in the comprehensive local needs assessment process and is interested in applying may do so, regardless of their participation within a consortium. Additionally, consortia of LEAs or LEAs in conjunction with IHEs for competitive awards are not required to match membership of consortia used for basic fund local applications.
  - Requests for exemption from consortia membership will be limited and the requirement will only be waived in instances where the requesting LEA can demonstrate through documentation that a consortium agreement could not be reached or would not result in a successful consortium arrangement, in addition to meeting at least one of the below criteria:
    - The LEA is located in a rural, sparsely populated area; or
    - Distances to participate in a consortium are excessive due to remote location or unique geographical distances.
- Consortia receive the total of each member district's allocation of basic funds.
  - Consortia members are informed of the total allocation estimate (not the formula amount per member district).
  - Annual applications and budgets are submitted to CCCS for approval per consortium, rather than per member district.
  - Projects funded are developed by membership consensus and are mutually beneficial to all members. CCCS reserves the right to add grant conditions or require implementation of action plans if it determines projects are not mutually beneficial to all members.

The Colorado Community College System will continue with its historical split of 60% of the Non-Reserved Local funds for postsecondary education and 40% for secondary education for the following reasons:

- All postsecondary area technical colleges (ATC) are included in the postsecondary percentage split.
- Average per pupil funding for secondary students is significantly higher than the College Opportunity Fund (COF) stipend per Student Full-time Equivalent (SFTE) for postsecondary students.
- Through the Colorado Technical Act state appropriations, secondary recipients receive approximately \$25 million to help offset the high cost of secondary CTE programs.

# 3. Provide the specific dollar allocations made available by the eligible agency for career and technical education programs and programs of study under section 131(a)-(e) of the Act and describe how these allocations are distributed to local educational agencies, areas career and technical education schools and educational service agencies within the State. (Section 131(g) of Perkins V).

The allocation for secondary CTE programs and programs of study is \$6,178,480. The secondary school district's allocations are calculated based on Section 131 and Section 112(c) of the Act.

In Colorado, LEAs are defined as the secondary school district or BOCES as authorized by the CDE. Allocations are distributed to LEAs/Consortia following the approval of annual Perkins local applications which include a budget. CCCS does not determine how much of the LEA allocation is distributed to each CTE program or program of study unless conditions are applied to a particular grant award or an improvement plan is being implemented. The LEA/Consortia determine the amount awarded to each CTE Program or program of study including awards to district authorized charter schools and Designated Career Technical Schools (DCTS). The DCTSs are secondary centers that house multiple secondary CTE programs (usually higher cost, lab-intensive programs) for the entire district. Any student in the school district can participate in these programs, and these schools often contract with neighboring districts to provide access to additional students as well. The district may also have other approved CTE programs located in the district's local application and budget as submitted to and approved by the state annually. Distribution of Perkins funds occur through reimbursement to the LEA/Consortia.

# 4. Provide the specific dollar allocations made available by the eligible agency for career and technical education programs and programs of study under section 132(a) of the Act and describe how these allocations are distributed to eligible institutions and consortia of eligible institutions within the State.

The allocation for postsecondary CTE programs and programs of study is \$9,267,720. The postsecondary allocations are calculated based on Section 132 and Section 112(c) of the act.

In Colorado, postsecondary agencies eligible for Perkins funds include all Colorado public community colleges and three postsecondary area technical colleges (ATCs). Perkins funds are for approved CTE programs that award certificates or associate degrees. An ATC is a

postsecondary area vocational school authorized by State legislation. ATCs and Technical Colleges award postsecondary certificates but they do not award postsecondary degrees. CCCS has implemented a statewide articulation agreement that allows ATC graduates to transfer completed certificates of 45 credits or less to a community college and then complete an AAS degree in Applied Technology by completing an additional 15-18 credits of general education courses through the community college. Allocations are distributed to eligible postsecondary institutions following the approval of annual Perkins local applications, which includes a budget. Distribution of Perkins funds occur through reimbursement to the institutions.

### 5. Describe how the eligible agency will adjust the data used to make the allocations to reflect any changes in school district boundaries that may have occurred since the population and/or enrollment data was collected, and include local education agencies without geographical boundaries, such as charter schools and secondary schools funded by the Bureau of Indian Education. (Section 131(a)(3) of Perkins V).

When a school district changes boundaries, splits or merges, CCCS revises formula populations as soon as the new population information is available. CCCS partners with CDE to obtain any population data changes if school district boundaries change. In Colorado, Charter School Institute (CSI) is a division of CDE that authorizes non-district charter schools in the state. Since these charter schools are not part of a school district and are not limited to a normal school district boundary, the formula calculation is adjusted to ensure distribution of Perkins funds to these eligible charter schools through the Charter School Institute (CSI). CSI operates as the LEA for its charter schools. Once the number of students living within district boundaries and attending a CSI school are calculated, CCCS uses the calculation to adjust the poverty population rate for each district. The district's poverty rate is applied to the number of students living within district boundaries and attending a CSI school to calculate youth in poverty numbers for CSI schools from across district boundaries. CSI schools have fields in the funding formula, like all school districts, for the poverty, population and unduplicated CTE enrollment figures. This methodology is consistent with what was approved by the U.S. Department of Education's Office of Career, Technical and Adult Education under previous versions of Perkins and Colorado's 2020 State Perkins V Plan. Colorado does not have any districts operated by the Bureau of Indian Affairs.

6. If the eligible agency will submit an application for a waiver to the secondary allocation formula described in section 131(a)— a. include a proposal for such an alternative formula; and b. describe how the waiver demonstrates that a proposed alternative formula more effectively targets funds on the basis of poverty (as defined by the Office of Management and Budget and revised annually in accordance with section 673(2) of the Community Services Block Grant Act (42 U.S.C. 9902(2)) to local educational agencies with the State. (Section 131(b) of Perkins V). Also indicate if this is a waiver request for which you received approval under the prior Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV).

Colorado will not be submitting a waiver to the secondary allocation formula.

Colorado will continue to distribute the secondary funds as follows:

Non-reserve funds for secondary recipients (40% of 85% of the Total Local Funds Allocation) are distributed per the following formula:

- 70% is allocated to eligible secondary school districts in proportion to the number of individuals aged 5 through 17, inclusive, who reside in the school district and are from families below the poverty level for the preceding fiscal year as determined on the basis of the most recent satisfactory data used per the ESEA of 1965, compared to the total number of such individuals who reside in the school districts served by all school districts in the state for such preceding fiscal year.
- 30% is allocated to eligible secondary school districts in proportion to the number of individuals aged 5 through 17, inclusive, who reside in the school district for the preceding fiscal year compared to the total number of such individuals who reside in the school districts served by all school districts in the state for such preceding fiscal year, as determined on the basis of the most recent satisfactory data provided to the Secretary by the Bureau of the Census for the purpose of determining eligibility under title I of the ESEA of 1965.

7. If the eligible agency will submit an application for a waiver to the postsecondary allocation formula described in section 132(a)— a. include a proposal for such an alternative formula; and b. describe how the formula does not result in a distribution of funds to the eligible institutions or consortia with the State that have the highest numbers of economically disadvantaged individuals and that an alternative formula will result in such a distribution. (Section 132(b) of Perkins V). Also indicate if this is a waiver request for which you received approval under the prior Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV).

The State Board for Community Colleges and Occupational Education (SBCCOE) petitions to maintain its current waiver to the postsecondary allocation formula. The waiver requests to distribute non-reserved funds for postsecondary recipients (60% of 85% of the total local funds allocation) per the following formula:

- 90% of the non-reserved postsecondary fund share shall be allocated on the number of individuals who are Federal Pell Grant Recipients enrolled in such institutions in the preceding fiscal year.
- 10% of the non-reserved postsecondary fund share shall be allocated on the number of non-Pell grant recipients enrolled in such institutions in the preceding fiscal year who receive financial assistance from the Colorado Department of Human Services.

The proposal is designed to better serve low-income students when an ATC or other postsecondary institution has a significant population of economically disadvantaged (ED) students not participating in federal financial aid programs and provides more equitable distribution of funds to eligible postsecondary agencies with high numbers of ED students. It will also more accurately capture the total population of ED students across the state and mirrors previous approved waivers under the State's 2020 Perkins State Plan as well as those submitted in Perkins III and IV.

8. Provide the State's fiscal effort per student, or aggregate expenditures for the State, that will establish the baseline for the Secretary's annual determination on whether the State has maintained its fiscal effort, and indicate whether the baseline is a continuing level or new level. If the baseline is new, please provide the fiscal effort per student, or aggregate expenditures for the State, for the preceding fiscal year. (Section 211(b)(1)(D) of Perkins V).

For the fiscal year ending June 30, 20123, Colorado's aggregate CTE expenditures were \$30,514,944. This baseline is a continuing level.

## D. Accountability for Results

 Identify and include at least one (1) of the following indicators of career and technical education program quality— A. the percentage of CTE concentrators graduating from high school having attained a recognized postsecondary credential; B. the percentage of CTE concentrators graduating high school having attained postsecondary credits in relevant career and technical education programs and programs of study earned through a dual or concurrent enrollment program or another credit transfer agreement; and/or C. the percentage of CTE concentrators graduating from high school having participated in work-based learning. (Section 113(b)(2)(A)(iv)(I) of Perkins V). Include any other measure of student success in career and technical education that is statewide, valid, and reliable, and comparable across the State. (Section 113(b)(2)(A)(iv)(II) of Perkins V). Provide the eligible agency's measurement definition with a numerator and denominator for each of the quality indicator(s) the eligible agency selects to use.

As an indicator of career and technical education program quality, Colorado will use the percentage of CTE concentrators graduating from high school having participated in work-based learning. This program quality indicator was selected based on feedback received through the strategic planning and Perkins planning processes and will be continued in this state plan.

The definition for the (5S3) Program Quality – Participated in Work-Based Learning measure is:

A. **Numerator**: Number of CTE **concentrators** graduating from high school during the current academic year having participated in work-based learning\* in any year as part of the CTE program.

B. **Denominator**: Number of CTE **concentrators** graduating from high school during the current academic year.

\*WBL includes: Apprenticeship, On-the-Job Training, Clinical Experience, Credit for Work Experience, Internship, Pre-Apprenticeship, Industry-Sponsored Project, School-Based Enterprise Managed by Students.

2. Provide on the form, for each year covered by the State plan beginning in FY 2020, State determined levels of performance for each of the secondary and postsecondary core indicators, with the levels of performance being the same for all CTE concentrators in the State. (Section 113(b)(3)(A)(i)(I) of Perkins V).

In Colorado, the state levels of performance will also act as the local levels of performance. CCCS does not intend to negotiate individual levels of performance with local grant recipients. Definitions for secondary and postsecondary performance metrics are in Appendices E and F.

For this state plan period from 2024-2028, Colorado has updated its performance targets as shown in the table below. The baseline was established by averaging program year performance data for 2022 and 2023. Targets for reporting years covered by this state plan were set to ensure meaningful progress. At a minimum, performance for each indicator is expected to increase by at least one quarter of a percentage point annually (often higher) in all instances where the baseline was less than 95%. In instances where the baseline was 95% or higher, targets generally increased by one-tenth of a percentage point unless the baseline was already 99% or higher. Maintaining current performance is considered equivalent to progress in those instances and the target was left as the baseline percentage for the entirety of the state plan period.

		Reporting Year			
Metric	Baseline	FFY 2024	FFY 2025	FFY 2026	FFY 2027
SECONDARY					
1S1 - Four-Year Graduation Rate	97.75%	97.75%	97.85%	97.95%	98.05%
2S1 - Academic Proficiency in Reading/Language Arts	60.56%	61.00%	61.50%	62.00%	62.50%
2S2 - Academic Proficiency in Mathematics	36.95%	37.00%	37.50%	38.00%	38.50%
2S3 - Academic Proficiency in Science *	20.00%	20.00%	20.50%	21.00%	21.50%
3S1 - Post-Program Placement	94.75%	94.75%	94.85%	94.95%	95.05%
4S1 - Non-Traditional Concentration	21.14%	21.25%	21.50%	22.00%	22.50%
5S3 - Program Quality - Work-based Learning	27.88%	28.00%	28.50%	29.00%	29.50%
POSTSECONDARY					
1P1 - Postsecondary Retention and Placement	98.99%	99.00%	99.00%	99.00%	99.00%
2P1 - Earned Recognized Postsecondary Credential	100.00%	100.00%	100.00%	100.00%	100.00%
3P1 - Non-Traditional Program Concentration	13.98%	14.50%	14.75%	15.00%	15.25%

### State Levels of Performance and Targets by Reporting Year

\*Colorado did not have science assessment data (2S3) to use for Perkins reporting in previous program years, thus was not able to calculate a two-year average. As such, the baseline for Perkins V initially established for the state plan was utilized as the starting point.

3. Describe the procedure the eligible agency adopted for determining State determined levels of performance described in section 113 of the Act, which at a minimum shall include— a. a description of the process for public comment under section 113(b)(3)(B) of Perkins V as

part of the development of the State determined levels of performance under that section; b. an explanation for the State determined levels of performance; and c. a description of how the state determined levels of performance set by the eligible agency align with the levels, goals and objectives other Federal and State laws, (Section 122(d)(10) of Perkins V). d. As part of the procedures for determining State determined levels of performance, describe the process that will be used to establish a baseline for those levels.

Colorado met with other states as part of OCTAE's technical assistance in the fall of 2023 to discuss states' approaches and anticipated targets as well as definitions of meaningful progress. CCCS reviewed performance over the past state plan period and conducted a survey of CTE stakeholders including CTE teachers, administrators, data professionals at the secondary and postsecondary levels and state staff to determine whether any changes to approach or definitions were needed. While Colorado has completed one state plan cycle for Perkins V, the pandemic and various other factors including changes in nontraditional designations at the national level, updates to state assessments and more has resulted in a variety of challenges in identifying meaningful, continuous progress for performance targets for 2024-2028. Where possible, we calculated the average of the past two years for each indicator to set the new baseline and help guide where to set performance targets. Where applicable, Colorado's ESSA plan was reviewed to ensure that secondary metrics are aligned with our SEA's goals related to graduation rates and assessment. Colorado CTE also informally consulted with other states to ensure that all of our targets were sufficiently rigorous. The public will be able to comment on the State determined levels of performance and other elements of the state plan during the following meeting dates and locations.

Meeting Dates	Location
January 16, 2024	Parachute - WebEx
January 19, 2024	Virtual - WebEx
January 23, 2024	Castle Rock
January 31, 2024	Virtual - WebEx

4. Provide a written response to the comments provided during the public comment period described in section 113(b)(3)(B) of the Act. (Section 113(b)(3)(B)(iii) of Perkins V). As part of the written response, include a description of any changes made to the State determined performance levels as a result of stakeholder feedback.

Responses to public comments will be provided in Appendix G of this State Plan. Public comments will be accepted until February 18, 2024, as is posted on <a href="https://www.coloradostateplan.com">www.coloradostateplan.com</a>.

5. Describe how the eligible agency will address disparities or gaps in performance as described in section 113(b)(3)(C)(ii)(II) of Perkins V in each of the plan years, and if no meaningful progress has been achieved prior to the third program year, a description of

## the additional actions the eligible agency will take to eliminate these disparities or gaps. (Section 122(d)(11) of Perkins V).

Using data as one tool to help inform the decision-making process is an expectation of Colorado CTE programs, including student performance data in the CTE program development and evaluation processes, comprehensive local needs assessment, and Perkins local application. Annually, LEAs and IHEs provide CTE enrollment information for each student enrolled in a CTE course as well as placement outcomes for concentrators (under Perkins V). Through the data provided from local institutions as well as matches performed across multiple state agencies, CCCS prepares performance reports for each CTE program and grant recipient across Colorado. Unsuppressed data counts are available to each local entity's CTE Director by institution and by CIP. Program level reports are also available for most of the performance indicators, which is helpful if an entity offers multiple programs across multiple high schools. The data sets are also disaggregated by gender, ethnicity, and each special population subgroup for each of the performance indicators. This level of disaggregation will continue under Perkins V and provide grant recipients useful information to address local level or regional level disparities and gaps. It is expected that over time, trend data can also be used to see progress or continued gaps.

Outside of the CTE Gateway system, opportunity gap analysis dashboards are also provided to the CTE directors of districts, consortia, and IHEs annually. These workbooks include disaggregated data (in some instances there is suppression of very small counts to protect privacy) by special population, gender, and ethnicity for both CTE and a comparison population for secondary. This data set helps local entities consider overall access to CTE programming and how equitable it is across demographic characteristics as well as by CIP or program area. This data set is more comprehensive than just looking at Perkins performance indicators although it does include some CTE specific Perkins performance data that can be included in the analysis as well. The dashboards include numbers, percentage comparisons, as well as some visual aids like graphs to help the user digest the information. Local entities are expected to review the opportunity gap analysis data sets annually and consider where root cause analysis, inclusive goal setting, and action plans to address gap areas will be appropriate. These data are part of the performance information expected to be considered through the needs assessment process. Since Colorado has so many districts (approximately 115 annually) that participate in Perkins as consortia, opportunity gap analysis dashboards are provided to CTE directors of each district and also compiled on a consortium basis to provide a more regional picture to fiscal agents.

As mentioned elsewhere in this plan, Colorado CTE personnel are trained to provide coaching, support, customized training, professional development, and technical assistance around understanding and using CTE data. Some of the areas the team has provided support in the past, and will continue to offer in the future include: supports around ensuring data reporting requirements are met and quality, accurate data are provided; understanding and manipulating CTE data reports; presenting CTE data to stakeholders, including advisory boards and administrators; root cause analysis; and development of action plans to support continuous improvement. CCCS staff will continue to monitor performance and track deficiencies to offer both statewide general support as well as targeted interventions each year. CTE data are also used in methods of administration monitoring processes, both for selection and targeted reviews that may include a review of gaps and action plans, data quality, other focused reviews or more

comprehensive reviews of all CTE related civil rights requirements. If an eligible recipient has gaps or deficiencies in performance where there are two years of data and if no meaningful progress has been achieved prior to the third program year, CCCS will require that a percentage of local Perkins funds be used to implement an improvement plan which may be developed based on consultation with a state staff team visit. The state will review local performance and which recipients are on an improvement plan and provide support as needed to the local eligible agency and will review program progress and data to identify disparities or gaps in performance. If issues around either of these factors are identified, the LEA or institution of higher education will need to provide an action plan to CCCS as part of its next local grant application. CCCS will review the action plan and the parties will come to a final agreement on the action plan. Twenty percent of grant funds in the coming fiscal year must be spent on enacting the action plan submitted to CCCS. The action plan will be reviewed annually and will remain in place until the disparity or gaps in performance have been resolved. If improvement plans remain over multiple years, CCCS may take additional action to direct the types of activities that will be approved within both the improvement plan as well as the resulting project in the grant budget for the year. Action plans should reflect needs identified in the regional needs assessment process that are consistent with the requirements of the Perkins Act. If the denominator for a Special Population or subgroup is greater than 30 students and the gap in percentage of performance is greater than 30%, it will be considered to be a disparity and progress will need to be achieved to remedy the disparity regardless of whether there is an overall deficiency in performance. In instances of multiple areas of deficiency or disparity, CCCS will help the local eligible agency to prioritize areas of performance improvement and the approved action plan will serve as the guiding document.

## **Appendix**

- A. Colorado's Work-Based Learning Continuum
- B. Colorado's Career Cluster Model
- C. Colorado Perkins Local Application
- D. Comprehensive Local Needs Assessment (CLNA)
  - 1. CLNA Handbook
  - 2. CLNA Worksheets
  - 3. CLNA Resource Guide
- E. 2023-2024 Secondary Performance Metric Definitions (Perkins FY 2024-2025)
- F. 2023-2024 Postsecondary Perkins Performance Metric Definitions (Perkins FY 2024-2025)
- G. Responses to Public Comments

## **COLORADO'S WORK-BASED LEARNING CONTINUUM**

Work-based learning is a continuum of activities that occur, in part or in whole, in the workplace, providing the learner with hands-on, real world experience.

### LEARNING ABOUT WORK **LEARNING THROUGH WORK LEARNING AT WORK** Career awareness and exploration Career preparation supports career Career training occurs at a work site and readiness and includes extended direct helps individuals build awareness prepares individuals for employment. of the variety of careers available interaction with professionals from industry and provides experiences that help and the community. inform career decisions. • Clinical Experiences Apprenticeship • Career Counseling • On-the-job Training • Credit-for-work Experiences • Career Planning • Internships Employee Development Career Fairs • Career Presentations • Pre-apprenticeship • Industry Speakers Industry-sponsored Project • Supervised Entrepreneurship Informational Interviews Experience Mentoring • Worksite Tours

• Project-based Learning

## **Education Coordinated**

**Business Led** 

## **OUTCOMES:**

Skilled Talent for Business + Meaningful Careers for Students & Job Seekers





## Appendix B - Colorado's Career Cluster Model

## **Agriculture, Food & Natural Resources**

- Animal Science
- Agribusiness Systems
- Food Products & Processing Systems
- Natural Resource & Environmental Systems
- Plant Science
- Power, Structural & Technical Systems

## **Business Management**

- Business Analytics
- Business Leadership
- Business Information Technology
- Customer Service
- Human Resource Management
- Operations Management
- Project Management

## Marketing

- Digital Marketing
- Event Marketing
- International Marketing
- Marketing Communications
- Marketing Research
- Strategic Marketing
- Professional Sales

## Entrepreneurship

## Finance

- Accounting
- Corporate Finance
- Insurance
- Securities & Investments
- Tax Services

## **Government & Public Administration**

- Foreign Service
- Governance
- Legal services
- Planning
- Public Management &
- Administration
- Regulation

DEC

Revenue & Taxation



🐴 FBLA

- Consumer Services
- Counseling & Mental Health Services
- Early Childhood Development
- Family & Community Services
- Personal Care Services
- Social Work
- Human Development & Family Studies

## **Education & Training**

- Administration & Administrative Support
- Professional Support Services
- Teaching & Training
  - +FACS Core & World of Work (WOW)

<u>Communicator</u>: Media Literacy, Digital Literacy, Data Literacy, Interpersonal Communications

<u>Problem Solver</u>: Critical Thinking & Analysis, Collaboration & Teamwork, Creativity & Innovation, Adaptability & Flexibility

<u>Community Member</u>: Civic Engagement, Global & Cultural Awareness, Social Awareness

Empowered Individual: Self-Awareness, Self-Management, Perseverance & Resilience, Self-Advocacy & Initiative, Career Awareness



**Fashion Design/Interior** Design

> American Sign Language (ASL)

• Lodging

**Hospitality & Food Production** 

- Recreation, Amusements & Attractions
- Restaurants, Food & Beverage Services
- Travel & Tourism

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**Outdoor Recreational Leadership** 

**Colorado Career Cluster Model** updated March 2023



## **Engineering & Technology**

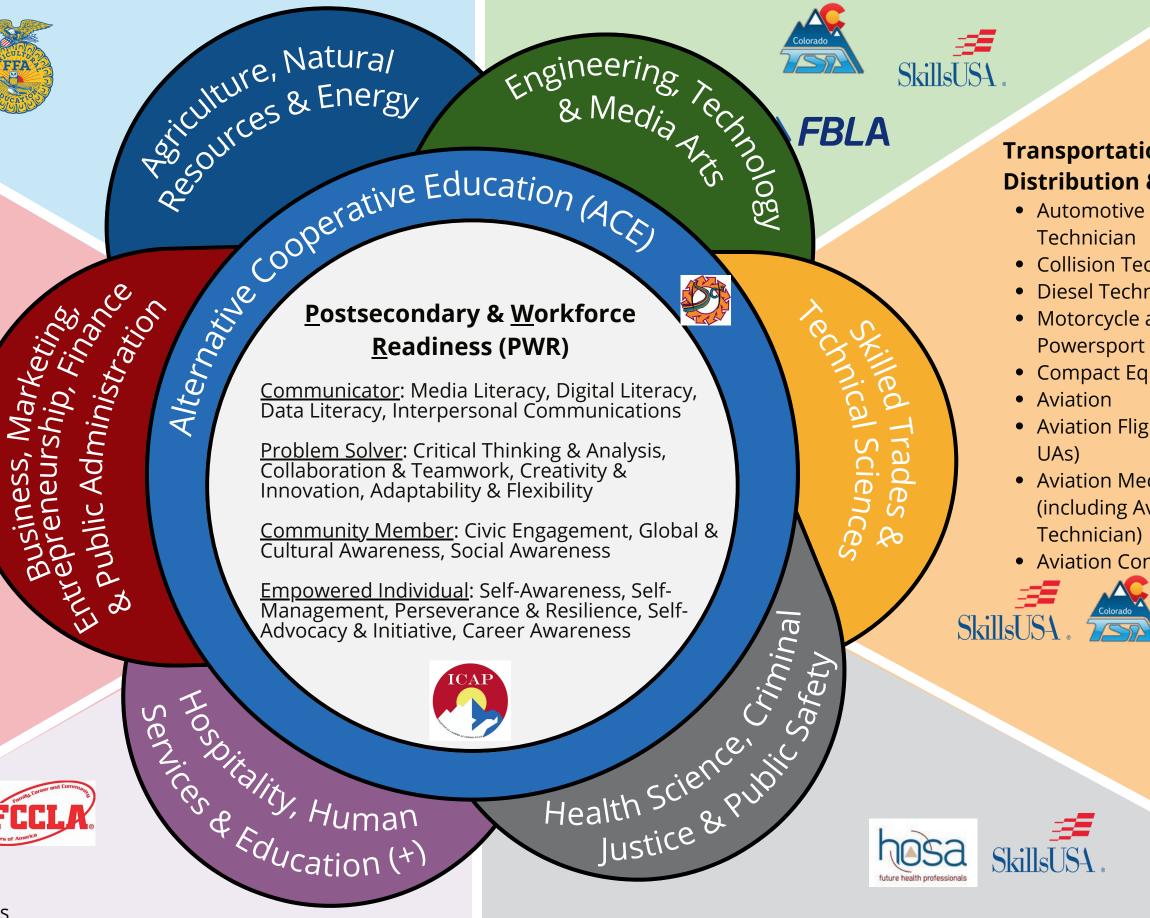
Engineering & Technology

## Information Technology

- Coding
- Network Systems & Security
- Web Design

## **Media Arts**

- Design & Multimedia Arts
- Digital Media & Communications
- Technical Theatre/Theatre Design and Technology



## **Criminal Justice & Public Safety**

- Emergency Management Services
- Law Enforcement Services
- Fire Science
- Security & Protective Services

# Transportation,

# **Distribution & Logistics**

- Automotive Service Technician
- Collision Technology
- Diesel Technology
- Motorcycle and
- Compact Equipment
- Aviation Flight (including
- Aviation Mechanics (including Avionic Technician)
- Aviation Control Systems

## Manufacturing

- Manufacturing Production
- Furniture Manufacturing
- Industrial Manufacturing
- Manufacturing, Graphic & Industrial Design
- Mechatronics
- Welding

## Drafting & Design

- Drafting & Design
- Architecture and Construction/Pre-Construction
- Manufacturing Design

## **Architecture & Construction**

- General Construction
- Electrical
- Heating, Ventilation, and Air Conditioning
- Plumbing
- Masonry
- Woodworking
- Property Maintenance
- **Drafing & Design**
- Drafting & Design
- Architecture and Construction/I Construction
- Manufacturing Design

## **Barbering & Cosmetology**

- (Human Services)
- Cosmetology
- Hairstyling
- Esthetics
- Nail Technology
- Barbering

## **Health Science**

- General Health Science
- Behavioral Health
- Pharmacy Technician
- Emergency Medical Technician
- Medical/Clinical Assistant
- Nurse Assistant/Aide
- Occupational/Physical Therapy
- Dental Assistant Pathway

### Sections of the new application:

- Four-year Local Application Strategic Goals
- Annual Reflection on Progress Toward Four-Year Strategic Goals
- Improvement Plan (if applicable)
- Two-year Action Plan
- Annual Project Overview
- General Assurances Information
- Signature Page (Summary, Authorization, Signature)

### Four-Year Local Application – Strategic Goals

## Perkins local applications and needs assessment processes align with Colorado's Strategic Plan for CTE. The applicable goals are listed below as a reference.

GOAL	1	Career Advisement & Development – Ensure each Colorado Learner has access to ongoing career advisement and development.		
GOAL	2 Instructor Recruitment & Retention – Develop and ensure a viable pipeline of CTE instructors to fill the educator positions at the middle school, secondary, and postsecondary levels.			
GOAL	3	Partnerships – Prepare Colorado's future workforce through transformational partnerships.		
GOAL	4	Quality Programs – Elevate the quality of CTE programs to support each learner's skill development and meet industry needs.		
GOAL	5 Work-Based Learning – Ensure access to meaningful work-based learning opportunities for each CTE learner.			
		EQUITY & ACCESS		
FOUNDATIONAL ELEMENTS		Create opportunities for each learner to access quality CTE programs and distribution of CTE programs		
		throughout the state.		
		INCLUSIVITY		
		Provide each learner with the opportunity to participate in a CTE program and decrease the gaps of CTE participation for target populations, non-traditional occupations, and geographic areas.		

The Perkins law requires that the application include a summary of results from the most recent regional needs assessment process,

- 1. Identify and elaborate on which key strategies from the regional needs assessment will be the primary focus for your institution's Perkins funded projects for this four year period?
- 2. Broadly describe how Perkins funds will be used to help move these priorities forward.
- 3. Briefly describe how these CTE strategies and priorities for the next four years support or align the broader strategic goals or priorities of your institution/or region.
- 4. How will your institution make learners, including those represented in special populations, aware of available CTE offerings AND how each course fits into a CTE Program of Study?

**Commented [CV(2]:** Within the grant application site, the key strategy identified for each element of the needs assessment will be portrayed, which will serve to provide a "description of the results of the comprehensive needs assessment conducted under subsection (c)" as required by §134(b)(1). If an applicant or reviewer needed more information as to the needs assessment process, they should refer to the Comprehensive Needs Assessment Handbook that provides an overview of that process that all eligible recipients conducted regionally. Additionally, questions 1-3 in this section of the application provide further detail and clarity on the results of the needs assessment and how they will be implemented in a local context.

Commented [CV(3]: §134(b)(2)(C)

**Commented [CV(1]:** Local application is for 4 years (§134(a))

### **Career Advisement and Development**

The intent of Goal 1 is to ensure each Colorado learner has access to ongoing career advisement and development, including through training educators as career coaches. Perkins V requires communication about CTE offerings as well as the provision of "career exploration and career development, information on employment, and career guidance and academic counseling", including in partnership with local workforce. (Goal 1)

- 5. With whom does your institution partner to ensure learners have access to career exploration and career development opportunities as well as career guidance and academic counseling both before and during participation in CTE programs? Ensure strategies noted relate to the results of the needs assessment process.
- 6. Describe how this collaboration benefits learners, including their access to up-to-date information about high wage, high skill, and in-demand occupations.

### **Quality Programs**

The intent of Goal 4 is to elevate the quality of CTE programs to support each learner's skill development and meet industry needs. Perkins V broadly provides support for quality CTE programs and programs of study and requires alignment with results of the comprehensive regional needs assessment. (Goal 4)

- Describe how your institution, over the next four-year period, will continue to ensure that
   academic, technical and employability skills (PWR or essential skills) in CTE will be strengthened
   and aligned to appropriate standards. Note that CTSO plays a role in leadership development as
   well.
- (Secondary only question) How are opportunities to participate in a CTE program reflected in your district or consortium's graduation guidelines? For example, is capstone an option for students or a minimum number of CTE courses?
- 9. How will your institution ensure students will be provided an opportunity to gain postsecondary CTE credit in high school (i.e. concurrent enrollment)? Identify at least two strategies for expanding opportunities to students, including who your institution might collaborate on those strategies with to achieve success.

### Instructor Recruitment and Retention

The intent of Goal 2 is to develop and ensure a viable pipeline of CTE instructors at all levels. Perkins V requires recipients to "support the recruitment, preparation, retention and training" of CTE educators. (Goal 2)

 How will your institution collaborate with the Colorado Community College System and other secondary, postsecondary, or industry partners to support recruitment, preparation, retention, training, and professional development of CTE staff? For example, this would include instructors, administrators, paraprofessionals, specialized instructional support, and advisors. **Commented [CV(4]:** These questions serve to provide a description of how the grant recipient, in conjunction with partners (including workforce related partners) provide career exploration and development coursework, activities and services as well as career information and an organized system of career guidance and counseling to students. §134(b)(3)(A-C)

Question 8 below also relates to \$134(b)(3)(C) because every school in Colorado is required to have adopted graduation requirements and they are generally based on our SEA's recommended 'graduation guidelines'. Colorado also has a state statute that requires students to have an individual career and academic plan (ICAP), so if CTE is reflected in a local recipient's graduation guidelines, students would be receiving counseling/advising that should include those options in the development of their ICAP and some specifics as to how should be naturally reflected in responses to this question.

**Commented [CV(5]:** §134(b)(4). Additionally, coaching and monitoring of the integration of academic, technical, and professional skills is included in the aforementioned program approval process on an individual program basis rather than broadly for the entire grant recipient. Colorado academic and technical standards are embedded within the standards in the state-developed course options that locals may include in a CTE program submitted for state approval.

**Commented [CV(6]:** §134(b)(7). Additionally, all CTE programs approved in Colorado are a part of a program of study, which is also included in our online program approval system and shows specific linkages and opportunities within a specific CTE program to concurrent enrollment, industry certifications, articulated credit, credit for prior learning, and credit for work experience, as applicable.

Commented [CV(7]: §134(b)(8)

### Partnerships

The intent of Goal 3 is to increase and strengthen partnerships with industry associations, advisory committees and sector partnerships; and increase instructor participation in externships. Perkins V requires "continued consultation" with broad groups of stakeholders within education, industry, and the community. (Goal 3)

11. In addition to facilitating advisory board meetings for your CTE programs, describe how your institution engages stakeholders on an ongoing basis to strengthen your CTE programs. For example, to what extent do you coordinate with secondary/postsecondary partners to update programs of study; engage with employers and other partners regarding work-based learning; coordinate and leverage other partners and sources for funding to support CTE priorities, etc.?

### Work-Based Learning

## The intent of Goal 5 is to increase the number of secondary students' participation in and access to work-based learning.

- 12. Explain how your institution will support the expansion of work-based learning opportunities for learners over the four-year period. (Goal 5) Consider the results of the regional needs assessment priorities in your response. Work-based learning is defined as the 'Learning Through Work' and 'Learning At Work' columns on our statewide framework. Identify any special supports that will be implemented or are currently in place to ensure special populations have access to work-based learning opportunities described above. (Goal 5.2)
- 13. Describe how CTE programs intentionally connect classroom instructions with workplace skills, duties, and responsibilities (Goal 5.3)
- 14. Describe how you have identified key stakeholders required to engage business and industry in order to increase the number of WBL experiences. (Goal 5.7)

### Equity and Access and Inclusivity

This is foundational to all Colorado CTE goals and Perkins requires recipients to "address disparities or gaps in performance".

- 1. To ensure equity and access to career pathways beyond the CTE program, programs should look not only at enrollment demographics, but also at the success of students across demographics within the program. Describe how your institution evaluates (or will evaluate) CTE programs to ensure that equal access is provided to each learner, including those identified as a member of a special population. For example, describe how nondiscriminatory practices are ensured, the frequency of review of admissions criteria, review of student success data based on student demographics and barriers to success for these populations caused by institutional or program policies or practices, etc.
- 2. What actions are taken as a result of the evaluation?
- 3. Outline your institution's (or consortium's) process for reviewing disparities and gaps in performance in CTE programs, including within program-specific areas as well as reviewing

Commented [CV(8]: §134(d) & (e)

**Commented [CV(9]:** §134(b)(6). Additionally, in each individual CTE program's program approval in Colorado's online system, CTE programs identify the types of work-based learning opportunities that are available to students and upload examples of work plans, industry projects, and similar documents. Only approved CTE programs or those developed and submitted for approval in the year of Perkins application are considered eligible to have Perkins funds expended on them.

Commented [CV(10]: §134(b)(6)

Commented [CV(11]: §134(b)(5)(A, C, D)

**Commented [CV(12]:** §134(b)(5)(A,C,D). Responses to these questions should really flesh out how a local recipient is thinking holistically about equity and access and should specifically list some activities, including those that may be systemic across the entity and not just one-time funded Perkins activities, that will help prepare special populations and provide equal access as required by these sub-points in the law as well. subgroup performance. Include in the response an explanation of the institution's process for developing an action plan to improve disparities and close gaps based on evidence learned.

### Annual Reflection on Progress Toward Four-Year Strategic Goals

- To what extent did our institution make progress toward our four-year strategic goals and the priorities outlined in our two-year action plan?
- 2. In terms of meeting one of Colorado's CTE goals, what was the biggest success Perkins funds helped achieve last year?
- 3. What project or program needs specific focus to achieve stated goals for the upcoming grant award year? For example, was any project unfinished or unsuccessful, but is still a priority?
- 4. Are we making satisfactory progress toward achieving CTE student performance targets and Colorado's CTE goals? Why or why not? *Performance information will be included in this consideration as we implement Perkins V (and report on it).*

### **Improvement Plan**

For each Perkins performance indicator, disaggregated data with subgroups will be reviewed by local grant recipients. For each indicator, any subgroup with a deficiency (meaning that does not meet 90% of the state target) will appear in red in the Perkins web portal. There will be a text box for each indicator for the grant recipient to complete the following. Applicants will only complete this information in the event of a deficiency or gap in performance from the most recent data set.

Describe the strategies that will be used to address this deficiency or gap in performance. If some progress has been made in performance since the data set available, please provide that information and include it in this reflection.

If the gap/deficiency has persisted for more than two years, a corrective action plan will need to be provided and a minimum of 20% of the grant recipient's award allocation will be used to implement the corrective action plan.

### **Two-year Action Plan**

- 1. Is the institution on track to meet at least 90% of each performance indicator, including for each subgroup? If not, which subgroups and programs are areas of concern?
  - a. What actions will be included in the Perkins two-year action plan to ensure sufficient performance?
- 2. What new CTE programs, which include programs of study, if any, will be funded by the Perkins grant or developed during the two-year period covered by the current regional needs

### Commented [CV(13]: §113(b)(4)(B) and §113(b)(4)(A)(ii)

The online application tool includes a table with performance levels for the grant recipient, including state/local targets for each indicator and actual performance, including disaggregated by subgroup. An example of the current type of table available to grant recipients for them to provide narrative analysis is:

### Commented [CV(14]: §134(b)(9)

**Commented [CV(15]:** §134(b)(9) – This section results in "a description of the additional actions such recipient will take to eliminate those disparities or gaps."

**Commented [CV(16]:** §113(b)(4)(A)(i)(ii) includes a reference to 'continually make meaningful progress" and since the state has set performance targets for core indicators of performance that increase regularly, this question will help locals reflect on their progress and whether they are continuing to improve, including within subgroups, which in turn, should help them reflect on equity practices for the questions in the application that prome in that area. By putting this in the Two-year Action Plan section of the application, it will be considered more

**Commented [CV(17]:** All CTE programs in Colorado are approved through a separate process than the Perkins Local Application. CTE programming is linked to industry demand in the approval process and through the CLNA, all CTE programs currently offered are reviewed to determine if significant gaps in offerings exist and if there are CTE programs that are not being offered that should be (§134(c)). This question in the local application allows the local recipient to provide information on CTE offerings/activities that will be funded as well as providing insight as to how the needs assessment process informed assessment? Please indicate if this new program development is in response to any gaps identified as part of the regional needs assessment process.

- 3. What activities are planned in this two-year period to prepare CTE students for careers in occupations considered non-traditional for their gender? It may be helpful to specify if activities will be funded by Perkins or the institution.
- 4. Briefly describe your institution's internal process for developing its Perkins local application. (Note that the signature portion of the local application requires the grant recipient to have multiple types of positions sign off on the application indicating that they have served on the institution planning team for the Perkins application and are knowledgeable of the application.)
- 5. (Consortium question only) How are the projects in the local application determined to be beneficial to all members of the consortium?

### **Annual Project Overview**

### **Projects Overview**

This section notes planned annual projects and spending. In the Perkins online portal where this is submitted, there would be a project summary and budget information. Additionally, there will be some 'general' types of spending that will be included on this front section, such as indirect and direct administrative costs, etc.

- Is the grant recipient budgeting indirect costs (Y/N)? Enter amount (basic/reserve).
- Is the grant recipient budgeting direct administrative costs to the grant? System will cap total for these budget items at 5% of total grant award and additional detail as to admin expenses will be requested.
- Is the grant recipient reserving funds to support the needs assessment process (Y/N)? (Additional detail will be requested if 'yes')
- Is the grant recipient doing a project that involves fund pooling?(Y/N) Description of project in a text box

needs assessment strategy project relates to	education entities participating in project	Total Perkins \$ amount budgeted for project
		(across all partners)
	Also detail as to the	
	schools/CTE programs	
	included in project	

Commented [CV(18]: §134(b)(5)(B)

**Commented [CV(19]:** §134(d) & (e) – This question helps identify an internal grant recipient's internal processes which assists the state with monitoring activities, but also helps describe consultation with a diverse body of stakeholders in the application development process. Many of those representatives are required to 'sign off' on the application as well (see signature section of application at the end). Consultation also takes place outside of the local application through needs assessment, local program advisory committee meetings, sector partnerships and more.

Commented [CV(20]: §131(f)(2)

Commented [CV(23]: §135(c)

Commented [CV(21]: §135(d)

Commented [CV(22]: §135(b)(6)

ltem	Budgeted Amount	Spending category (drop down)	CTE program(s)	Extra Explanation (as necessary)

### Individual funded projects:

\*\*\*The details of what this will look like in the system are still being determined, but the following information will be requested in some fashion.\*\*\*

Project: (Comes from needs assessment/strategic CTE Plan element) For example: Work Based Learning element (Note this is just a completely made up example. Bolded components are the 'questions' that a local applicant would be responding to)

**Strategy of focus:** (Comes from the regional needs assessment) For example: Ensure CTE programs that don't have work-based learning opportunities outside the classroom have access to school based enterprise opportunities within the school or institution.

**Project Description:** (*This would be a narrative box to outline how institution plans to address the strategy/goal.*) **The project description must include:** Reason project is a priority, explanation of planned activities, desired outcomes, links to performance and special populations where appropriate, and how it relates to institution's overall goals (CTE or otherwise).

(For example) In this project, district will do a local level analysis across the district to determine which CTE programs currently offer WBL eligible opportunities for secondary students and the extent to which students are participating. For programs where WBL partnerships are not sufficient to ensure x% of students have access, the district will develop an action plan for implementing school based enterprise, including: equipping instructors, coordinating with advisory committees, developing curriculum to support student operation of the enterprise and assess performance, etc. Initial programs where school based enterprise activities will be enhanced and/or started during the next two years include: East, North, and Uptown high school Construction technology programs. Info about how expanding school based enterprise not only provides students with access to WBL, but provides an opportunity for the CTE program to generate program income to offset costs of the program such as for lumber, etc. If there is anything about how implementing school based enterprise connects to increasing opportunities for the underrepresented gender or other special populations (i.e. the school's ability to offer WBL opportunities at times that work for students with special needs (i.e. English language learners, economically disadvantaged, etc.) that would go here.

**Commented [CV(24]:** The intent of the Annual Project Plan is to provide an opportunity to regularly reflect on the overall goals and activities outlined in the 4-year and 4-year sections of the application in conjunction with the comprehensive regional needs assessment, which will be revised during the life of the local application (needs assessment required each 2 years versus application every 4 years). This is where spending will be linked to the results of the needs assessment process directly (§135(a)) and will provide more specific descriptions of the activities funded for the particular year.

Item	Budgeted Amount	Spending category	Extra Explanation (if needed, such as a more complete list of supplies being purchased, etc.)	CTE program( <mark>s)</mark>	Com suppo qualit review throu appro applio
Point of sale system (all text in the table is for example only)	\$600	Other		Construction technology at East, West, Uptown	That i and o law.
Training for teacher on setting up school based enterprise	\$450	Travel (In- state)			

Commented [CV(25]: §135(b) requires that funds upport CTE programs that are of sufficient size, scope, and uality.... Size, scope, and quality are components of the eview of CTE programs submitted to Colorado for approval hrough our online program approval tool. If a program is approved in Colorado, it will be available in the local application system to select to spend Perkins funds on it. That is one control we have in place to ensure that locals and our state are meeting this requirement in the Perkins aw.

\*Additional projects can be added, as determined appropriate.

#### **General Assurances Information**

The assurances below outline basic expectations of the eligible entity and checking the box for each assurance constitutes an initial commitment by the entity at the time of submission of the local application to meet the requirements set forth. Signatures by the Perkins contact, CTE Director, and appropriate fiscal personnel signify as such on the next screen. The award packet documentation required during the grant period is a reiteration of these and additional compliance related requirements resulting from the acceptance of these federal grant funds.

Programmatic Assurances

Project hudget table

- We will administer each program covered by this application in accordance with all applicable statutes, regulations, program plans and applications.
- We assure that we provide reasonable opportunities for the participation of teachers, parents, and other interested agencies, organization and individuals in the planning for and operation of this plan.
- 3. We assure that we have adopted effective procedures for acquiring and disseminating to teachers and administrators participating in these programs significant information from educational research, demonstrations, and similar projects, and for adopting, where appropriate, promising educational practices developed through such projects.
- 4. We assure that none of the funds expended under this plan will be used to acquire equipment (including computer software) in any instance in which such acquisition results in a direct financial benefit to any organization representing the interests of the purchasing entity or its employees or any affiliate of such an organization.
- 5. We assure that we will provide a career and technical education program or career and technical education programs that are of such size, scope and quality to bring about improvement in the quality of career and technical education.
- 6. Perkins grant funds will not be spent on activities or costs that cannot be directly linked to the regional needs assessment process required by Perkins V.

**Commented [CV(26]:** Generally speaking, the assurances section helps local recipients to comply with some components of the Perkins Act, but also with Uniform Grant Guidance and EDGAR as well as other state-level requirements.

Commented [CV(27]: §122(d)(13)(A) & 34CFR §76.700 &

2 CFR §200.331(a)(3)

Commented [CV(28]: §134(d) & (e)

Commented [CV(30]: §135(b)

Commented [CV(31]: (§135(a))

**Commented [CV(29]:** §122(d)(13)(B) & & 2 CFR §200.331(a)(3)

7.	We understand that Perkins Federal funds cannot be used for expenses related to	
	competitive events, to fund middle school programs, or Bachelors of applied science	
_	programs.	

8. We understand and assure that we will make information on approved CTE programs, programs of study and career pathways (including career exploration, work-based learning opportunities, early college high schools, and dual or concurrent enrollment program opportunities) and guidance and advisement resources, available to students (and parents, as appropriate), representatives of secondary and postsecondary education, and special populations, and to the extent practicable, provide that information and those resources in a language students, parents, and educators can understand. This includes in the language(s) of any identified communities of non-English speakers in our service area.

#### **Financial Assurances**

9.	We assure that the control of funds provided to the eligible entity under this application,	 Commented [CV(33]: §131 & 132
	and title to property acquired with these funds, will be in a public agency and that a public	
	agency will administer these funds and property.	
10.	We assure that we will use fiscal control and fund accounting procedures that will ensure	 Commented [CV(34]: 34CFR §76.702
	proper disbursement of, and account for, Federal funds paid to the agency under this plan.	

#### Crosscutting Assurances

- 11. We understand that Perkins Federal funds are a grant, not an entitlement, representing an agreement with the State, aligned to our approved local plan, and that grant oversight and management is necessary.
- 12. We understand that Perkins Federal funds must supplement, not supplant non-federal funds.
   13. We assure that we will make reports to CCCS, as is reasonably necessary, to enable this agency to perform its duties. This includes:

   a. All communications/completion of processes as necessary to assure funds are only
   Commented [CV(36]: §211(a)
   Commented [CV(37]: 34CFR §76.720 & §76.722
  - All communications/completion of processes as necessary to assure funds are only applied toward CCCS approved career and technical education programs;
  - All communications/completion of processes as necessary to assure compliance with the standards of program approvals including employment of a credentialed teacher;
  - Annual Perkins local application with all required sections completed submitted by deadline;
  - d. Grant Recipient Agreement letter and related documents, including a copy of our latest Single Audit Report, as applicable.
  - e. Signed vouchers and required supporting source documents when requesting reimbursements per deadlines and limits;
  - f. Out-of-state travel request details prior to departure of travelers;
  - g. Budget revision requests if above directed threshold amounts;
  - h. Pre-approval for all equipment purchases (Units costing \$5,000 or more, per one unit.)
     All career and technical education enrollment and follow-up data reporting (VE-135
  - enrollment and VE-135 follow-up) and that the data is valid and reliable.
  - j. Year-end Perkins local plan analysis report by deadline.

Commented [CV(32]: §122(d)(4)(C)(i) - Colorado

provides local recipients technical assistance on this statewide requirement and also requires an assurance

Commented [CV(35]: 34CFR §76.770

Commented [CV(39]: 34CFR §76.730

Commented [CV(40]: 34CFR §76.708

Commented [CV(42]: 34CFR §76.730

2 CFR §200.331(a)(3)

indicating that they understand their local responsibilities. &

- k. Year-end Perkins final voucher by deadline.
- 14. We assure that we will keep records that fully disclose the amount and disposition of these funds, and such other records as will facilitate an effective financial or programmatic audit and that these records will be accessible for seven years.
- 15. We assure that the Secretary of the United States Department of Education, the Comptroller General of the United States, or any of their duly authorized representatives, shall have access, for the purpose of audit examination, to these records.
- We understand and agree that grant conditions may be placed on our award in the event that sufficient performance is not maintained.

#### Signature Page (Summary, Authorization, Signature)

The grant application will require signature by:

- Perkins contact
- **CTE Director** if different from Perkins Contact, who is responsible for ensuring programmatic assurances are met and priorities of the application are implemented
- Fiscal agency person with authority to enter into official, binding agreements on behalf of the institution (i.e. Controller, Business Officer/CFO)
- Advocate for special populations who served on institution planning team for Perkins application and is knowledgeable of the application
- Counselor or Advisor who served on institution planning team for Perkins application and is knowledgeable of the application
- Controller/business manager responsible for validation of financial accuracy in reporting
- WIOA representative who is knowledgeable of how postsecondary institution is leveraging Perkins funds to help serve CTE and workforce needs. This person shall not be a college employee. (postsecondary only)
- **Consortium** Member from a district who served on institution planning team for Perkins application and is knowledgeable of the application (Consortia only)
- Other (optional)

Commented [CV(45]: §122(d)(13)(A) & 34CFR §76.731

Commented [CV(46]: 2 CFR §200.331(c-h)



Appendix D1 - Comprehensive Local Needs Assessment (CLNA) CLNA Handbook

# Regional Needs Assessment Handbook (revised 2021)



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# Introduction

This handbook has been prepared to guide the Colorado CTE needs assessment process. The purpose for this process is grounded in the new vision for Colorado CTE.

# "Colorado Career & Technical Education (CTE) leverages workforce and education systems so that each learner has quality CTE experiences leading to lifelong career success."

The belief stated in this vision is the foundation of the needs assessment process. All Colorado learners deserve a quality CTE experience that leads to lifelong career success. Throughout this process, the emphasis must remain on how to create and sustain a CTE system that focuses on the success of each learner.

The needs assessment process is also required by Perkins V (The Strengthening Career and Technical Education (CTE) for the 21<sup>st</sup> Century Act). The law obligates applicants to conduct a local needs assessment and update it at least every two years.

Supplemental information for the needs assessment process are found in the *Colorado Needs Assessment Resource Guide*. The *Guide* also includes a glossary of the terms and a description of what the law says and what the law means to understand the requirements of Perkins V. Specifically, the law states: "To be eligible to receive financial assistance under this part, an eligible recipient shall— (A) conduct a comprehensive local needs assessment related to career and technical education and include the results of the needs assessment in the local application submitted under subsection (a); and (B) not less than once every 2 years, update such comprehensive local needs assessment." (Section 134(c))

The regional needs assessment process has the potential to be a major driver of quality and equity in CTE. It is an opportunity to take an in-depth look at the entire CTE system in Colorado and identify areas where targeted improvements can lead to increased opportunities for student success. It also provides an opportunity to engage diverse stakeholders committed to the growth and improvement of Colorado CTE.

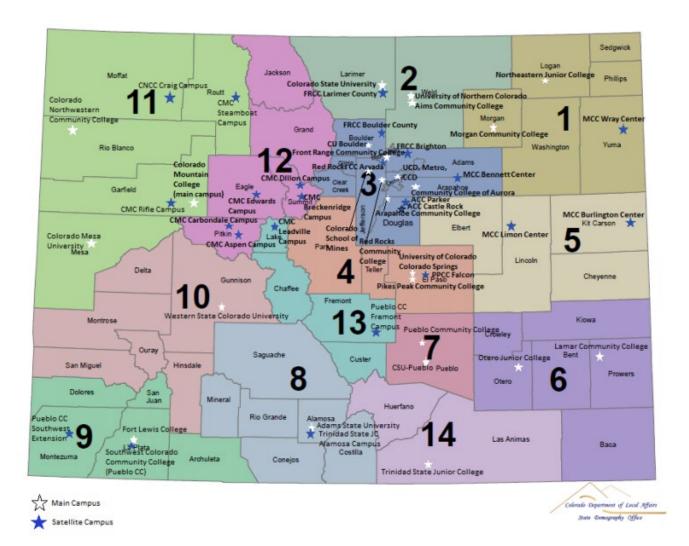
The needs assessment presents an unprecedented opportunity to:

- Implement the goals of the new Colorado CTE Strategic Plan;
- Create CTE programs and opportunities to ensure access and success for each learner that lead to high wage, high skill, and in-demand occupations;
- Ensure CTE programs of study are aligned to and validated by local workforce needs and economic priorities;

- Set strategic short- and long-term goals and priorities to ensure coordinated program review and improvement processes; and
- Regularly engage in conversation with stakeholders around the quality and impact of CTE programs and systems.

# **Regional Approach to the Needs Assessment**

Colorado will conduct this needs assessment on a regional level based on economic development regions.



The above map identifies the Colorado Economic Development Regions for the needs assessment. Where it makes sense, regions could certainly combine to create a larger region (i.e. Regions 1 & 5 might collaborate).

Each district and/or college in Colorado desiring to operate an approved CTE program is **required** to actively participate in the needs assessment process. At the local level, colleges, districts, and consortia will have local data and information to gather and bring to the larger regional process.

# The Benefits of a Regional Approach to the Needs Assessment

- The advantage of working with shared stakeholder groups including secondary and postsecondary faculty and administration, representatives of special populations, state or local workforce boards, parents and students, business and industry, Tribal organizations and government agencies representing a common region.
- Increases the focus on collaboration, including secondary/postsecondary alignment, program quality and alignment to labor market needs.
- Identifies similar needs and data to meet the needs within the economic region.
- A more efficient use of resources in preparing for and completing the comprehensive needs assessment.
- Focusing local, regional, and state-wide efforts on the implementation of the Colorado CTE Strategic Plan.

# **Resources from CCCS for Needs Assessments**

- CCCS will provide a standard template to be used across Colorado.
- The opportunity for facilitation teams upon request.
- Current and accurate economic and workforce data (i.e. anticipated growth in high wage, high skill, in-demand occupations) by region.
- The ability to request customized assistance to complete the assessment.

The Colorado comprehensive needs assessment is aligned to the goals and foundational elements of the Colorado CTE Strategic Plan. The Executive Summary of the Colorado CTE Strategic Plan is found in the *Colorado Needs Assessment Resource Guide*.

The needs assessment has seven required elements. Many of these elements are interwoven and insights gained in one part may be helpful in tackling another part.

# **Final Regional Needs Assessment Results**

The final product of Colorado's regional approach will be the completion of all parts of the Needs Assessment Results Document. This document will identify the significant priorities to improve the quality of Colorado CTE and for the use of Perkins funds in the local application

**This handbook** has been created with significant assistance from our national partners at Advance CTE and the Association for Career and Technical Education (ACTE). The content has been borrowed liberally from their guidance documents as well as the Nebraska CTE Comprehensive Local Needs Assessment and Louisiana Perkins V: Comprehensive Local Needs Assessment Guidebook.

# The Regional Needs Assessment Process:

Identify Convener

Local Partners Complete Needs Assessment Worksheets Engage Stakeholders and Conduct Regional Meeting of Local Partners

Develop the Needs Assessment Results Document

Local Education Partners use Results

#### **1. Identify Convener**

- Convener is selected to facilitate the needs assessment process at the regional level.
- Convener identifies representatives of local education partners (Perkins recipients school districts, consortia, and colleges)
- Convener provides guidance to local education partners on completing the local needs assessment worksheets. Convener works with local education partners to identify and engage regional stakeholders.

# 1A. (New for 2021) For Interim Needs Assessment, Determine Extent of Needs Assessment Update Needed

- Region determines whether a full needs assessment is necessary or if the current strategies can be reviewed and revised on a limited basis.
- If a limited update is selected, local education partners complete supplement worksheets using local data and information with engagement from local stakeholders in preparation for regional meeting of local partners (step 3). For full needs assessment update, proceed to step 2.

# 2. Local Education Partners Complete Local Needs Assessment Worksheets

- Local education partners complete needs assessment worksheets using local data and information.
- Convener monitors and assists local education partners in completing the local needs assessment worksheets.

# 3. Engage Stakeholders and Conduct Regional Meeting of Local Partners

- Convener hosts meeting of local education partners and regional stakeholders to complete regional needs assessment worksheets.
- Required stakeholders provide data and information for regional level needs assessment.

• Convener works with local education partners and stakeholders to summarize findings or cooperates with education partner(s) to summarize data and information.

# 4. Develop the Needs Assessment Results Document

- Findings summary is developed into the final regional Needs Assessment Results Document.
- All local education partners must sign off on the Needs Assessment Results Document.
- All parts of the Needs Assessment Results Document is submitted to CCCS along with regional worksheets.

# 5. Local Education Partners use Results

- Local education partners use results to guide improvement of CTE programs and programs of study.
- Local education partners use results to guide the development of their local Perkins application.

# **Step 1 - Identify Convener**

The regional approach will require considerable cooperation from each local district, consortia, and college. Each economic development region will need a convener (i.e. college, Board of Cooperative Education Services, district) who is willing to coordinate all education partner districts, consortia, and colleges in the region in the needs assessment process.

The convener may or may not be the preparer of the needs assessment results document on behalf of the region. If the convener is not going to prepare the results, the convener must identify an entity to complete the needs assessment results. CCCS is able to work with regions to identify a convener and/or entity to complete the needs assessment results as necessary.

Perkins funds may be used (subject to local policies and priorities) as long as it is in the Perkins plan. For example, to cover a substitute for key district/college personnel or travel to any regional meetings. Local grant funds could also be used to help provide a stipend for a regional needs assessment coordinator for this specific instance (i.e. since the duties are new and outside of anyone's current role.) For questions about funding possibilities, please contact the CCCS Perkins Plan Manager.

# **Convener Responsibilities:**

The convener will act as the facilitator of the needs assessment process. Specific responsibilities include:

- Identify an individual from each education partner to represent their respective district, consortia, or college.
- Distribute relevant communications and updates as needed.
- Coordinate all meetings at the regional level.
- Create a timeline to ensure that all deadlines are met.
- Work with representatives from the education partners to gather the needed data and information related to their institution and complete the local needs assessment worksheets.
- Work with education partners to identify required stakeholders to engage in the regional needs assessment process.
- Invite required stakeholders to participate in the regional needs assessment process.
- Complete the regional needs assessment worksheets.
- Summarize the data and information from the local and regional needs assessment worksheets.
- Prepare the final needs assessment results document or supervise the individual or entity who will complete the final document.

# **Step 2 – Local Education Partners Complete Local Needs Assessment Worksheets**

The convener must communicate with local education partners on completing the local needs assessment worksheets. The education partners must complete the local needs assessment worksheets and analyze the needed data and information prior to the regional meeting.

The worksheets found in the *Needs Assessment Local and Regional Worksheets* must be used to record the discussion and analysis based on the questions for each element. A worksheet is provided for each element of the needs assessment.

There are two parts to each worksheet:

- **1. Questions to Consider** This section contains questions to guide the discussion. Space is provided to collect information and notes for later use.
  - **Current State** –Use this section to describe the present state based on the review of data and other information. Document significant strengths and challenges as the CTE program is currently operating.
  - **Desired State** Use this section to identify what the ideal state would be if all the challenges were addressed and the current strengths continue or increase. Be as specific as possible to address the question presented. It may be appropriate to write the desired state as goal statements. Provide enough detail to substantiate the goal.
  - **Evidence** Source of the data or information to substantiate the statements in the current or desired state.
- 2. **Rating –** This section is to be completed at the end of the examination of the data and information and the discussion of the questions. This will help gauge the extent to which the particular element of the needs assessment is in place.
  - There is a section to record the strategies to address the challenges and strengths. Please list these strategies in priority order.

# **Needs Assessment Elements**

There are seven required elements of the needs assessment process. The elements are aligned to the Colorado CTE Strategic Plan goals and foundational elements. The goals and/or foundational elements are highlighted in each of the following element descriptors.

Element 1 Career Advisement & Development Goal 1: Career Advisement & Development	Element 2 Local Workforce Alignment Goal 3: Parnerships Goal 4: Quality Programs	Element 3 Size, Scope, & Quality & Implementing CTE POS Goal 4: Quality Programs
Element 4 Student Performance Data Goal 4: Quality Programs Foundational Element: Equity, Access & Inclusion	Element 5 Improving Access & Equity Foundational Element: Equity, Access & Inclusion	Element 6 Recruitment, Retention, and Training of Faculty and Staff Goal 2: Instructor Recruitment & Retntion
	Element 7 Work-Based Learning	

Goal 5: Work-based Learning

On the following pages, each element is described as it should be evaluated with the needs assessment worksheets on the local level. In addition, the following resources are provided:

- Suggested areas to review and materials needed
- Suggested stakeholders to engage
- Suggested strategies for consultation
- Worksheet questions to answer for this element

# Element 1 Career Advisement & Development

Each Colorado learner deserves the opportunity to explore career options and receive guidance in planning for their future careers. Career advisement and development should be a systemic process that starts with a broad understanding of what work is and what is required to be successful in a career. It should narrow as learners move through middle school, secondary, and postsecondary education.

This element provides the opportunity for evaluation of the total career advisement and development system in place. A systemic approach allows for programs, partners, and initiatives to develop and maintain an informed system for all learners. This element aligns to the Colorado CTE Strategic Plan:

**Goal 1: Career Advisement & Development –** Ensure each Colorado learner has access to ongoing career advisement and development.

#### Suggested Areas to Review and Materials Needed

- Access to current and projected future labor market needs and education requirements for these careers.
- Follow up data on both CTE and non-CTE students with emphasis on career success including special populations.
- Data on usage of career advisement materials and activities by all populations.
- School counseling/career advisement activities for each special population.
- Data on impact of work-based learning experiences on career development.
- Data on learner development of Postsecondary and Workforce Readiness (PWR) skills.
- Findings from surveys/focus groups with students, parents, and/or community representatives of special populations.
- Focus groups with postsecondary institutions, military, unions, apprenticeship programs and others involved in career development.
- Survey of secondary and postsecondary counselors and career advisement professionals to determine strategies that work, activities and materials needed, and ways to strengthen career advisement and development.

Suggested Stakeholders to Consult	Suggested Strategies for Consultation		
<ul> <li>Secondary and postsecondary teachers/faculty</li> <li>Administrators, teachers, and faculty</li> <li>School counselors and advisement professionals</li> <li>Representatives of special populations</li> <li>Local data staff</li> <li>Also</li> <li>Employers, business and industry representatives willing to assist in career advisement</li> <li>Career coaches</li> <li>Parents</li> <li>Students</li> </ul>	<ul> <li>Workgroup to examine data including educators, school counselors/advisement professionals, and representatives of special populations</li> <li>Focus groups, interviews, study circles and surveys with: <ul> <li>Students and former students</li> <li>Parents</li> <li>CTSO advisors</li> <li>Representatives of special populations</li> <li>Business, industry, and community partners</li> <li>School counselors</li> <li>Secondary and postsecondary career advisement professionals</li> </ul> </li> </ul>		
Worksheet Questions to Answer for this Element			
1 To what extent are CTE instructors and oth	er faculty trained to be career coaches or have		

- 1. To what extent are CTE instructors and other faculty trained to be career coaches or have meaningful conversations with learners about their skill sets and career choices? For example, are they confident and competent?
- 2. To what extent are all opportunities presented to learners to consider 2- and 4-year postsecondary education, technical colleges, apprenticeships, military, and direct employment?
- 3. To what extent are CTE instructors collaborating with counseling/career advisement professionals?

A sample of the worksheet for this element is found on the next page. It can be accessed on-line at <u>http://coloradostateplan.com/administrator/perkins/perkins-forms-and-files/</u>.

Discuss each of the following questions in notes in the space provided.	stions in light of	light of the data collected and notes from interviews, focus groups, or other methodologies. Capture	us groups, or other methodologies. Capture
1. To what extent are CTE instructors and other faculty trained to career choices? For example, are they confident and competent?	s and other facult ey confident and (	<ol> <li>To what extent are CTE instructors and other faculty trained to be career coaches or have meaningful conversations with learners about their skill sets and career choices? For example, are they confident and competent?</li> </ol>	iversations with learners about their skill sets and
Current State		Desired State	Evidence
2. To what extent are all opportunit and direct employment?	ties presented to	2. To what extent are all opportunities presented to learners to consider 2- and 4-year postsecondary education, technical colleges, apprenticeships, military, and direct employment?	cation, technical colleges, apprenticeships, military,
Current State		Desired State	Evidence
3.To what extent are CTE instructors	s collaborating wi	3.To what extent are CTE instructors collaborating with counseling/career advisement professionals?	
Current State		Desired State	Evidence
			3
Element 1: Career Advisement & S	strategies for	Strategies for Element 1 in Priority Order	
ment	1		
<ol> <li>Significant gaps and/or</li> <li>Multiple gaps oviet</li> </ol>			
7 Some core oviet and for up do			
z Julie gaps exist allu/ul we up not have a concrete plan to			
address them			
3 Very few gaps exist, and we			
have processes in place to			
4 No gaps exist			
Rating (circle one)			
1 2 3 4			

# **Element 2 Evaluation of Workforce Alignment**

Quality CTE programs are aligned to the needs of the future workforce. This element of the needs assessment examines CTE program alignment with local, state, regional, or Tribal in-demand industry sectors identified by the state or local workforce development

board or local workforce needs and economic priorities.

Current labor market information about occupations, training requirements, and wages is crucial in order to make important decisions about career goals. Labor market information can help provide reasonable expectations of job openings and wages when entering work. This element aligns to the Colorado CTE Strategic Plan:

**Goal 3: Partnerships -** *Prepare Colorado's future workforce through transformational partnerships* 

**Goal 4: Quality Programs -** Elevate the quality of CTE programs to support each learner's skill development and meet industry needs.

It is important to examine multiple sources of data. Great sources of information are:

- LMI data sheets provided in the Local and Regional Needs Assessment Worksheets or Colorado LMI Gateway
- Discussion with local business and industry on workforce needs
- Economic development plans for businesses the region is trying to attract or expand
- Local Workforce Boards
- Information from local Chambers of Commerce
- Information from active sector partnerships

Suggested Areas to Review and Materials Needed		
<ul> <li>State and local labor market inform employment.</li> </ul>	nation (LMI) including current and projected	
<ul> <li>Follow-up data on program completers to determine entry and success in their career areas.</li> </ul>		
Suggested Stakeholders to Consult	Suggested Strategies for Consultation	
<ul> <li>Administrators, teachers, and faculty</li> <li>School counselors and advisement professionals</li> <li>Former students</li> </ul>	<ul> <li>Workgroup to examine data including educators, school counselors/advisement personnel, and workforce development staff</li> </ul>	
	<ul> <li>Engagement of advisory council for input into workforce alignment</li> </ul>	
	• Focus groups, interviews, study circle, surveys with:	

<ul> <li>Representatives of special populations</li> <li>Local data staff</li> <li>Students and former students</li> <li>Local data staff</li> </ul>			
Worksheet Questions to Answer for this Element			
1. To what extent are we offering programs of study that are preparing learners for current and future workforce and economic needs?			

2. Evaluate the processes in place for reviewing workforce and economic data to determine effectiveness and impact of program offerings on a regular basis.

# Element 3 Evaluation of Program Quality including Size, Scope & Quality and Progress toward Implementing CTE Programs of Study

Providing a quality CTE experience should be the goal of every Colorado CTE program. This element of this needs assessment examines CTE program quality by describing how local CTE programs are sufficient in size, scope, and quality to meet the needs of all students and progress toward implementing quality programs of study.

Additional resources for program quality evaluation are found in *Colorado Needs* Assessment Resource Guide.

# **Definition of a Programs of Study**

A Program of Study is a coordinated, nonduplicative sequence of academic and This element aligns to the Colorado CTE Strategic Plan:

**Goal 4: Quality Programs -** *Elevate the quality of CTE programs to support each learner's skill development and meet industry needs.* 

technical content at the secondary and postsecondary level that:

- Incorporates challenging State academic standards;
- Addresses both academic and technical knowledge and skills, including employability (career readiness) skills;
- Progresses in specificity (beginning with all aspects of an industry or career cluster and leading to more occupation-specific instruction);
- Has multiple entry and exit points that incorporates credentialing; and
- Culminates in the attainment of a recognized postsecondary credential

# Proposed Definition of Size, Scope and Quality

Colorado's definitions of size, scope and quality are important to ensure funds are used to drive quality, equitable, and impactful programs. Colorado's proposed definitions are:

**Sufficient Program Length** – Each program Completer definitions determine the minimum and maximum length of each program.

**For secondary programs**, the minimum completion requirement will be equivalent to two year-long courses (i.e. two Carnegie Units of instruction), an optimum program length will be three years of Carnegie Units, and a program may be longer. A program completer should be ready for entry-level employment or ready for the next level of advanced training as verified by the Technical Advisory Committee. A program concentrator will be equivalent to two courses, with a course being defined as equivalent to one full school year of credit in the specific program pathway (for one Carnegie Unit). Due to the variety of school schedules used across the state, the contact hours for this minimum will be at least120 hours.

A course may count toward completion of multiple pathways and be appropriate on multiple program approvals.

**For postsecondary programs**, a postsecondary certificate program (with occupational field of study specified) is an organized program of study intended to prepare students to enter skilled and/or paraprofessional occupations or to upgrade or stabilize their employment. This program is not intended for transfer to baccalaureate degree programs but may transfer to Associate Degree Programs.

An initial certificate in a program area needs to include the skills, knowledge and competencies required for entry-level employment. Other certificates in the same program need to advance that skill level.

In addition, to be of sufficient size and scope, a certificate program must at a minimum, consist of:

Option #1 - Two CTE courses\*; or

**Option #2** - One, five credit hour CTE course\* \*as determined by CCCNS Course approval process

Any certificate of substantial length i.e. 45 or more credits must have an appropriate general education component. (Source: Higher Learning Commission) Area Technical Colleges are exempt from this requirement. A concentrator is a student who has completed a minimum of 12 credits in the CTE program or who has completed the entire CTE program if it is 12 or fewer credits.

# Sequence of courses

Each CTE program approved at the secondary or postsecondary level will be comprised of courses that include integrated academic, technical and employability (PWR) skills

and progress in a sequence toward at least entry level employment or advanced training.

# **Provide Work-Based Learning Experiences**

Another critical component of a CTE program is that it provides appropriate work-based learning. Work-based learning provides hands-on or realistic experiences for secondary learners that relate to the students' CTE Program of Study.

Work-based learning options are required for secondary programs. Career exploration experiences are required for middle school programs and work-based learning is strongly encouraged in postsecondary programs.

Work-based learning at the secondary level are defined by the continuum from Colorado Workforce Development Council Talent Found (Appendix as Work-based learning is a continuum of activities that occur, in part or in whole in the workplace providing the learner with hands-on real-world experiences.

# Leadership development

CTE programs also include embedded leadership development opportunities for learners, including through participation at the secondary level in CTE Student Organizations (CTSO). At both the secondary and postsecondary levels, this also includes embedded employability skills that help ensure postsecondary and workforce readiness skills.

# **Industry Partnership**

CTE programs should be designed to meet industry need. To help ensure this is the case, an approved program must have active partnerships and engagement with business and industry. One method of demonstrating compliance with this requirement is a functioning and active advisory committee for each program comprised of at least 51% business and industry members. Advisory committees should meet a minimum of two times per year to provide feedback and input in the CTE program. Some benefits of active advisory committees is that they provide a mechanism to help ensure CTE programs are teaching current and emerging technical skills using proper equipment and technology, and that CTE staff are aware of trends in industry that should be incorporated into the program.

# **Equal Access and Appropriate Facilities**

While equity, access, and inclusion are expected to be embedded in each component of a CTE program of sufficient size, scope, and quality, it is expected that CTE programs will ensure at a local level that learners are aware of the options and benefits of participating in CTE and that each learner has access to do so. This can only happen if CTE programs occur in spaces that are appropriate to the needs of the program and the number of learners served. This includes ensuring sufficient equipment, instruction, and safety protocols are in place.

# **Periodic Evaluation**

Periodic self-evaluation is strongly encouraged for all CTE programs. Additionally, all Colorado CTE programs will be reviewed for renewal purposes every four years at a minimum. This evaluation will occur through the program approval process and will use data-driven practices as well as a technical assistance and coaching model to ensure quality CTE programs for our learners and industry partners.

# Completing the evaluation of program quality including size, scope & quality and progress toward implementing CTE programs of study

Analyzing program quality including size, scope & quality and progress toward Implementing CTE programs of study will be addressed by reviewing the data from each education partner at the local level using the local needs assessment worksheets. The following information will help the education partner complete the worksheets.

Suggested Areas to Review	and Mate	erials Needed	
<ul> <li>Suggested Areas to Review</li> <li>Size (capacity focus)</li> <li>Total number of programs/programs of study and number of courses within each</li> <li>CTE participant and concentrator enrollment for the past three years, aggregate and disaggregated</li> <li>Capacity of each program for the past three years</li> <li>Number of students applying for the program in the last three years, if applicable</li> <li>Number of students on waiting lists if applicable</li> </ul>	<ul> <li>Scope (ct)</li> <li>Docur Prograseque postsa aligne</li> <li>Credit CTE p</li> <li>Data o and tr to pos CTE p</li> <li>Data o and tr to pos CTE p</li> <li>Data o and tr to pos</li> <li>Data o attain disage demo crede</li> <li>Curric showi of pro workf</li> </ul>	<ul> <li>Programs of Study course sequences from secondary to postsecondary including aligned curriculum</li> <li>Credit transfer agreements for CTE programs.</li> <li>Data on student retention and transition from secondary to postsecondary within the CTE program of study</li> <li>Description of dual/concurrent enrollment courses and data on student participation and success</li> <li>Data on student credential attainment in each program disaggregated by student demographic and value of credential</li> <li>Curriculum standards showing depth and breadth of program and alignment to workforce and economic needs</li> <li>Detaintentation of study</li> <li>Career and Student Ou (CTSO) act alignment</li> <li>Data colled mechanism</li> <li>Program ir assessmen</li> <li>Placement employme or military</li> </ul>	
	• Oppo learni	rtunities for expanded ng within and across rograms of study	
Suggested Stakeholders to	Consult	Suggested Strategies for	or Consultation
<ul> <li>Administrators, teachers, and faculty</li> <li>Representatives of special populations</li> <li>Parents and students</li> <li>School counselors and advisory professionals</li> <li>Local data staff</li> </ul>		<ul> <li>populations, and emp</li> <li>Focus groups, intervie</li> <li>Parents and stud</li> <li>Employers</li> </ul>	ucators, school visory professionals, special bloyers ew, or survey of:

#### Worksheet Questions to Answer for this Element

- 1. How do programs maintain conversations with secondary, postsecondary, and business/industry representatives so that a robust and up-to-date skill set is developed in each program?
- 2. Which programs have current industry standard equipment, appropriate classroom and laboratory space, and quality instructional materials?
- 3. Which programs of study incorporate relevant academic, technical, and workforce, postsecondary readiness (PWR) skills at every learner level? (Including concurrent enrollment opportunities)

# **Element 4 Evaluation of Student Performance Data**

Quality CTE is quality education that contributes to both the technical and academic preparation of all learners. Perkins V requires the needs assessment to include an evaluation of student performance including special populations and each subgroup identified in the law. The needs assessment must contain an evaluation of CTE concentrators' performance on the core performance indicators. This element aligns to the following goals and foundational elements of the Colorado CTE Strategic Plan:

**Goal 4: Quality Programs -** *Elevate the quality of CTE programs to support each learner's skill development and meet industry needs.* 

**Foundational Element: Equity & Access -** Create opportunities for each learner to access quality CTE programs and distribution of CTE programs throughout the state.

**Foundational Element: Inclusivity** - *Provide each learner with the opportunity to participate in a CTE program and decrease the gaps of CTE participation for target populations, non-traditional occupations, and geographic areas.* 

This element will be addressed by reviewing the data from each education partner at the local level using the local needs assessment worksheets. The following information will help the education partner complete the worksheets.

#### Suggested Areas to Review and Materials Needed

- Review Perkins performance data for the past three years disaggregated by CTE program area and subgroups including:
  - o Gender
  - Race and ethnicity
  - Migrant status
  - o Individuals with disabilities
  - Individuals from economically disadvantaged families including low-income youth and adults
  - Individuals preparing for nontraditional fields
  - Single parents including single pregnant women
  - Out of work individuals
  - English learners
  - Homeless individuals
  - $\circ$   $\;$  Youth who are in or who have aged out of the foster care system
  - o Youth with a parent who is on active duty military
- Strategies utilized to address performance gaps for specific subgroups along with outcomes for the strategies attempted.

Suggested Stakeholders to Consult	Available Resources
<ul> <li>Administrators</li> <li>Secondary teachers</li> <li>Postsecondary faculty</li> <li>Academic and career advising professionals</li> <li>Tribal organizations and representatives</li> <li>Corrections education staff</li> <li>Representatives of special populations</li> <li>Local data staff</li> </ul>	<ul> <li><u>https://cte.cccs.edu/perkins/</u> (logging in to Perkins site provides unsuppressed data)</li> <li><u>https://ctep.cccs.edu/energizer/re</u> ports/report_list.jsp (logging into program approval provides unsuppressed data).</li> <li>General K12 data <u>https://www.cde.state.co.us/scho</u> olview</li> <li>General postsecondary data <u>https://highered.colorado.gov/Da</u> ta/Search.aspx</li> </ul>
Suggested Strategies for Consultation	

- Establish a work group that includes educators, counseling professionals, data stewards, and representatives of special populations to examine data and identify gaps or areas of concern.
- Assemble educator groups by CTE career field or cluster to examine data in their specific area, review board policies, processes for developing student schedules, and graduation guidelines for systemic barriers to CTE enrollment by special populations.

#### Worksheet Questions to Answer for this Element

1. Where do the biggest gaps in Perkins performance indicators exist between subgroups of students and program areas?

# Element 5 Progress Toward Improving Equity and Access

Equity, access, and inclusivity are foundational to meeting the needs of all students in quality CTE. This element requires education partners to assess progress toward providing equitable access to all CTE programs. There should also be an examination of any barriers (real or perceived) that may prevent members of any special populations from entering and thriving in CTE programs. Additional materials on equity and access are found in the *Regional Needs Assessment Resource Guide*.

The term "special populations" means-

- Individuals with disabilities;
- Individuals from economically disadvantaged families, including low income youth and adults;
- Individuals preparing for non-traditional fields;
- Single parents, including single pregnant women;
- Out-of-work-individuals;
- English learners;
- Homeless individuals described in section 725 of the McKinney-Vento Act;
- Youth who are in, or have aged out of, the foster care system;
- Youth with a parent who is:
  - A member of the armed services
  - Is on active duty status

#### Suggested Areas to Review and Materials Needed

- School counseling and recruitment activities
- Program promotional materials
- Processes for communicating and providing accommodations, modifications, and supportive services for all students, including special populations
- Procedures for workplace experiences for special population students
- Information on accelerated credit and credentials available for special populations
- Data on CTE and CTSO participation and performance by each career area and each special population
- Findings from the root causes and strategies analysis from the student performance element (Element 1)
- Findings from surveys/focus groups with students, parents, and/or community representatives of special populations

This element aligns to the Colorado CTE Strategic Plan:

**Foundational Element: Equity** & Access - Create opportunities for each learner to access quality CTE programs and distribution of CTE programs throughout the state.

#### **Foundational Element: Inclusivity** - *Provide each learner with the opportunity to participate in a CTE program and*

decrease the gaps of CTE

Suggested Stakeholders to Consult	Suggested Strategies for Consultation
<ul> <li>Secondary and postsecondary teachers/faculty and administrators</li> <li>School counselors and advisement professionals</li> <li>Representatives of special populations</li> <li>Local data staff</li> </ul>	<ul> <li>Workgroup to examine data including educators, school counselors/advisement professionals, and representatives of special populations</li> <li>Focus groups, interviews, study circles and surveys with:         <ul> <li>Students and former students</li> <li>Parents</li> <li>CTSO advisors</li> <li>Representatives of special populations</li> </ul> </li> </ul>
Worksheet Questions to Answer for t	his Element

- 1. Which students identified as special population groups are under-represented or overrepresented in CTE programs overall? In which program area?
- 2. What barriers currently exist that prevent each special population group from participating in your programs?
- 3. How can cultural elements such as racial, ethnic, socio-economic, or geographic elements be considered and addressed when seeking out and working with learners and their families?
- 4. Are there new programs that need to be developed to ensure access in our region?

# **Element 6** Recruitment, Retention, and Training of CTE Educators

This element of the needs assessment assesses the educator workforce in your programs. This is not just about teachers, instructors, and faculty, but also includes specialized instructional support personnel, paraprofessionals, and school counselors and advisement professionals.

An important part of this assessment asks education partners to look at the diversity of these professionals and how closely they match the diversity of the education system in your local or regional community. It also looks at efforts to "grow your own" by This element aligns to the Colorado CTE Strategic Plan:

**Goal 2: Instructor Recruitment & Retention -** *Develop and ensure a viable pipeline of CTE instructors to fill the educator position at the middle school, secondary, and postsecondary levels.* 

conducting activities to encourage students to pursue careers as CTE educators.

#### Suggested Areas to Review and Materials Needed

- Data on faculty, staff, administrator, and school counselor preparation credentials, salaries, benefits, and demographics
- Student demographic data
- Description of recruitment process
- Description of retention efforts
- Description of professional development, mentoring and externships opportunities
- Data on educator participation in professional development, mentoring, and externships
- Survey or focus group results conducted with educators regarding needs and preferences
- Trend data on CTE educator hiring and retention in terms of CTE areas and demographics (at least past 5-10 years)
- Trend data on educator and staff retention in terms of CTE areas and demographics (at least 5-10 years)

Suggested Stakeholders to Consult	Suggested Strategies for Consultation
<ul> <li>All stakeholders required by law, particularly:</li> <li>Secondary and postsecondary teachers/faculty</li> <li>Human Resource department members</li> <li>Administrators, teachers, and faculty</li> <li>School counselors and advisement professionals</li> <li>Representatives of special populations</li> <li>Local data staff</li> </ul>	<ul> <li>Workgroup to examine data including educators, school counselors/advisement professionals, and human resources staff</li> <li>Focus groups, interviews, study circles and surveys with:         <ul> <li>Veteran teachers and Human Resources staff Developing teachers</li> <li>Individuals charged with selecting, designing, and implementing professional development</li> </ul> </li> </ul>

#### **Worksheet Questions to Answer for this Element**

- 1. What processes are in place to recruit new CTE educators? For example, what is the process to develop or recruit CTE instructors from existing staff/students?
- 2. What strategies from the Colorado CTE Strategic Plan are you using to retain CTE educators?
- 3. What strategies are in place to utilize instructors/educators across the region? For example, to what extent do districts share instructors to create a full-time position, where applicable?

# Element 7 Work-Based Learning

This element focused on the status of providing meaningful work-based learning experiences for all students. Work-based learning is an educational strategy that provides students a setting where they can enhance their learning, explore career options, and demonstrate their academic, technical, and career readiness skills in authentic work settings.

Work-based learning experiences are not extra-curricular but rather expanded learning opportunities central to the student's personal and professional development. These experiences must be integrated into the curricular offerings and assessed accordingly.

This element aligns to the Colorado CTE Strategic Plan:

**Goal 5: Work-based Learning** – Ensure access to meaningful work-based

The Work-Based Learning Continuum is found *Regional Needs Assessment Resource Guide*.

#### Suggested Areas to Review and Materials Needed

- Data on work-based learning programs and student participation
- Data on satisfaction of work-based learning students and employers of work-based learning students
- Work-based learning promotional materials
- Partnerships with Vocational Rehabilitation and Special Education to provide work-based learning
- Instruction PWR skills for all students to be prepared for work-based learning experiences
- Materials for engaging employers and appropriately supervise work-based learning students
- Processes for recruiting, communicating and providing accommodations, modifications, and supportive services for special populations
- Data on work-based learning participation and performance by each career area and each special population
- Findings from surveys/focus groups with students, parents, and employers providing work-based learning experiences

Suggested Stakeholders to Consult	Suggested Strategies for Consultation
<ul> <li>Secondary and postsecondary teachers/faculty</li> <li>Administrators, teachers, and faculty</li> <li>School counselors and advisement professionals</li> <li>Representatives of special populations</li> </ul> Also: <ul> <li>Local data staff</li> <li>Employers</li> <li>Chambers of Commerce</li> <li>Industry Councils</li> <li>Students and Parents</li> </ul>	<ul> <li>Workgroup to examine work-based learning data including educators, school counselors/advisement professionals, and representatives of special populations</li> <li>Focus groups, interviews, study circles with:         <ul> <li>Students and former students</li> <li>Parents Employers participating in work-based learning</li> <li>Representatives of special populations</li> <li>Vocational Rehabilitation and Special Education providers</li> <li>Chambers of Commerce</li> <li>Business, industry, and community partners</li> </ul> </li> </ul>

#### **Worksheet Questions to Answer for this Element**

- 1. How successful are current work-based learning experiences in enhancing technical and professional, workforce readiness (PWR) skills for all learners?
- 2. What strategies are used to recruit and retain employers to participate in work-based learning programs? What should be added?
- 3. How are you evaluating employer satisfaction with the learners they supervise and the quality of the work-based learning experiences?
- 4. How are school/campus-based enterprises used as a vehicle to provide work-based learning experiences?
- 5. To what extent are work-based learning experiences intentionally connected to classroom instruction and activities and the student's career plan?

# **Step 3 – Conduct Regional Meeting of Local Partners and Stakeholders**

The Convener is responsible for organizing the regional meeting to complete the needs assessment process. Each local education partner must bring the completed local needs assessment worksheets with the prioritized strategies for each element.

During the regional meeting, the strategies will be discussed and aggregated on the regional level. A final report will be produced based on the discussions at the regional meeting.

#### **Meeting Facilitation**

CCCS will provide facilitation for the regional meeting.

#### Who should attend?

Each local education partner must be represented. The representatives must bring the completed local education worksheets (one for each participant from the local partner). The meeting will also engage regionally shared stakeholders such as workforce partners as required by Perkins V.

#### **Perkins V Required Stakeholders**

The strength of the needs assessment process is enhanced with input from a diverse representation of stakeholders. The regional approach allows stakeholders to become engaged at the regional level rather than at each education partner level.

Perkins V requires stakeholders to be engaged in the needs assessment process. Remember that individuals may represent more than one stakeholder group. For example, parents may also be representatives of business or special populations.

Engaging stakeholders may be accomplished in a variety of ways. The *Regional Needs Assessment Resource Guide* contains a helpful resource with this process. In addition to large group input Required Stakeholders (Sec 134(d) of Perkins V)

- Representatives of CTE programs in a local or educational service agency, including:
   teachers
  - career guidance and academic counselors
  - principals and other school leaders
  - administrators
  - specialized instructional support personnel and paraprofessionals
- Representatives of CTE programs at the postsecondary educational institutions, including faculty and administrators
- Representatives of state board or local workforce development boards, regional economic development organizations, and local or regional business and industry
- Parents and students
- Representatives of special populations
- Representatives of regional or local agencies serving out-of-school youth, homeless children and youth, and at-risk youth
- Representatives of Indian Tribes and Tribal Organizations in the State, where applicable
- Any other stakeholder required by the state, region, or local agencies

sessions, this Guide describes different tools to use.

#### **Proposed Agenda**

- Welcome and Introductions
- Review of the Colorado CTE Strategic Plan
- Discussion of local strategies for each element
- Create summary of regional strategies to address identified needs of the element
- Table groups share strategies from local worksheets and prioritize for regional level
- Finalization of strategies for each needs assessment element
- Agreement reached on strategies for Regional Needs Assessment Results Document
- Discussion of next steps to ensure the project is completed in the required timeframe

# Summarize Findings at Reginal Level

Each local education partner will bring their completed local needs assessment worksheets. The worksheets will have the prioritized strategies for each element of the needs assessment. During the regional meeting, local education partners and required stakeholders will work together to summarize the strategies for each element and establish the priority strategies for the region.

The process of aggregating the strategies from the local level must involve meaningful discussions. A suggested approach is as follows:

- Have participants sit at round tables.
- Begin with the entire group working on Element 1.
- Have each local partner share the information on their worksheet for Element 1.
- On a flip chart, capture the prioritized strategies from each of the local education partner worksheets for Element 1.
- Have the table group vote to put the strategies in priority order.
- Conduct a gallery walk to have all participants review the flip charts. Have participants vote on the strategies they believe are most impactful.
- Capture the strategies with the highest votes.
- Repeat the process with the other elements. It may be advantageous to have different tables work on different elements at the same time.
- At the end of work on all elements, post the results and have a gallery walk, then proceed to a discussion about adopting the final strategies for the region.

# Suggested resources needed for regional meeting:

Name TentsMarkersFlip ChartsSticky NotesPens/PaperProjectorScreenDots for voting Round tables for discussionBand width for multiple computer use

# **Other Materials**

- Demographic capture card to identify stakeholders present at the regional meeting and how they were engaged.
- Individual note cards for capturing thoughts during the table conversations.

# **Facilitation Suggestions**

Using multiple facilitation techniques will assist in getting to the strongest possible finished product. Here are some techniques that may be helpful.

• Decide whether individuals from the same local education partner should sit at the same table or not.

- Have capture cards at the table for writing down ideas or thoughts. This is particularly useful for individuals who are not comfortable or confident enough to speak publicly.
- Use the Pair-Share technique. Have participants talk to the person next to them and have each share their thoughts and ideas. Then move to a group discussion at the table followed by a share out from each table.
- Try the Gallery Walk. After capturing ideas on flip charts posted on the wall, have the group walk around the room and review each chart. Either manage the walk by allowing a certain amount of time at each chart or let the group move at their pleasure.
- Use dots for voting. After having numerous ideas posted on flip charts around the room, have everyone vote for their top three or five. Clarify the rules to make clear if individual can cast more than one vote (one dot) for a single idea.
- Move people around during the day. Don't let the same individuals sit at the same table all day. This can be done by rearranging the name tents during a break or simply having everyone find a new table.
- Use the thumb to vote. When asking for a vote, have participants use their thumbs to cast a thumbs up, thumbs sideways or thumbs down to vote.
- Use a quiet signal. When you need to get the attention of the group, use a unique sound into the microphone. Other techniques are putting one hand up in the air, clapping, or tap your neighbor.
- Manage time by using a projector countdown, announcing time frames, or posting how much time is left by 5-minute increments at the front of the room.
- Managing difficult participants:
  - o Late Comer
    - Start on time to respect the individuals who did arrive on time.
    - Reward arriving on time with a door prize that only those who were on time are eligible to win.
    - Avoid making negative comments. When individuals arrive late, simply keep on moving with the program. Don't call attention to them.
    - Shut the door when the break is over. Keeping the door open is an invitation to wander in at their convenience.
  - The Preoccupied
    - Ask participants to put their phones on vibrate to avoid distracting the group.
    - Make break time precise for cell phone use.
    - Use team competitions to engage participants.
    - Use pairs or small group discussions to engage participants.
  - The Introvert
    - Use small group projects and discussions.

- Use written responses where possible.
- Provide incentives. Give chances to win a door prize based on ideas presented.
- Allow participants to be comfortable, don't intimidate participants into speaking. Give them the opportunity, but don't force.
- The Domineering
  - Use small group work when possible.
  - Rotate group leadership to take the person out of the lead role.
  - Use physical proximity.
  - Rotate group members.
  - Directly question other participants.
  - Make and break eye contact.
  - Deny acknowledgement.
  - Private discussion with the participant.

#### **Step 4 - Develop the Needs Assessment Results Document**

The final product of this needs assessment process will be the Needs Assessment Results Document. This may be completed by the Convener after the regional meeting to summarize the prioritized strategies and the discussions. All three parts of the Needs Assessment Results Document must be completed.

The Needs Assessment Results will provide meaningful input and direction for the improvement of Colorado's CTE system. It also provides the priorities to be addressed in the local application for Perkins funds.

The worksheets from the education partners must be submitted to the convener to assist with the development of the final results document. The regional worksheets and the Needs Assessment Results Document along with the Needs Assessment Required Stakeholder Verification worksheet and Education Partner Signature Page must be submitted to CCCS. The convener must ensure all education partners have signed off on the final document prior to submission.

#### **Step 5 – Local Education Partners use Regional Needs Assessment Results Document to Improve the Quality of CTE and to Prepare Perkins Application**

The Needs Assessment Results Document must be signed off on by all local education partners. Specifically, this signature should be from each entity's primary Perkins contact. This document should be used to establish an action plan by each local education partner to work toward the improvement of CTE. It will be the guiding document for the preparation of the local application for Perkins funds.

Appendix D2 - Comprehensive Local Needs Assessment (CLNA) CLNA Worksheets

# Needs Assessment Local and Regional Worksheets

# Introduction

The following worksheets are to be used in conjunction with the Colorado Needs Assessment Handbook. The worksheets help identify potential partners and focus discussion of the analysis of data and other evidence collected for each element.

These worksheets will be available electronically at <u>http://coloradostateplan.com/administrator/perkins/perkins-forms-and-files/</u>.

#### Worksheets include:

**Potential Partner Worksheet –** used to identify individuals who may represent the required stakeholders to engage in the comprehensive needs assessment process.

**Local Needs Assessment Worksheets** – A worksheet is provided for each of the elements to summarize the findings of the assessment process. These worksheets should be completed by each local partner and either provided to the convener in advance or brought to the regional meeting.

**Regional Needs Assessment Worksheets** – A worksheet is provided for each of the elements to summarize the findings of the assessment process. These worksheets **will be completed at the regional meeting**. The Regional Needs Assessment Worksheets must be submitted to CCCS as documentation of the comprehensive needs assessment process.

**Needs Assessment Results Document –** This document summarizes the priorities established as a result of the comprehensive needs assessment process. This should be **completed at the regional level.** This worksheet must be submitted as documentation of the comprehensive needs assessment process.

**Needs Assessment Results Document Signature Page** – This page must be signed by each local education partner and the convener of the regional needs assessment process.

**Required Stakeholder Documentation** – This form must be completed to verify that all of the require stakeholders were engaged in the needs assessment process.

**Supplement for Interim Needs Assessment Worksheets**– For **interim needs assessments**, this worksheet must be **completed as 'pre-work'** for each local education partner and a copy that **will be completed as part of the regional convening** for the update to the needs assessment process will be completed for submission to CCCS.



#### **Potential Stakeholder Worksheet**

Use this template to identify potential stakeholders to assist in the needs assessment process.

Role	Name	Organization	Email/Contact Info
Secondary CTE Faculty			
Secondary Career Counselors and Academic Counselors			
Secondary Administrators			
Secondary Instructional Support, Paraprofessionals			
Postsecondary CTE Faculty			
Postsecondary Administrators			

Role	Name	Organization	Email/Contact Info
Postsecondary Career Counseling and Advising Professionals			
Representatives of Special Populations Gender, race, ethnicity, migrant status, disability, economically disadvantaged, nontraditional, single parent, pregnant women, out of work individuals, English learners, homeless, foster care, active duty military parents, *corrections			
Local Workforce Development Board Member			
Regional Economic Development Member			
Local Business & Industry Representative			

Role	Name	Organization	Email/Contact Info
Parents and Students			
Representatives of Indian Tribes and Tribal Organizations			
Youth/Adult Corrections Education Representative			
Other Relevant Stakeholders			

# Worksheets for local education partners to complete <u>prior</u> to the regional meeting.

# Local Needs Assessment Required Stakeholder Verification

This form must be completed to verify the engagement of each of the required stakeholders. Please indicate the stakeholder engaged, the organization or company represented, and how the stakeholder was engaged in the Evidence of Engagement column. Evidence could be completing a survey, attending a meeting, focus group, etc.

Require Stakeholder	Name of Stakeholder	Organization/Company Representing	Evidence of Engagement
1. Representatives of career and technical education programs in a local educational agency or educational service agency, including teachers, career guidance and academic counselors, principals and other school leaders, administrators, and specialized instructional support personnel and paraprofessionals			
2. Representatives of career and technical education programs at postsecondary educational institutions, including faculty and administrators;			
3. Representatives of the State board or local workforce development boards and a range of local or regional businesses or industries;			

Require Stakeholder	Name of Stakeholder	Organization/Company Representing	Evidence of Engagement
4. Parents and students			
5. Representatives of special			
populations including individuals			
with disabilities; individuals from			
economically disadvantaged			
families, including low-income			
youth and adults; individuals preparing for non-traditional fields;			
single parents, including single			
pregnant women; out-of-workforce			
individuals; English learners;			
homeless individuals: youth who			
are in, or have aged out of, the			
foster care system; youth with a			
parent who is a member of the			
armed forces (as such term is			
defined in section 101(a)(4) of title			
10, United States Code); and is on			
active duty (as such term is defined			
in section 101(d)(1) of such title.			
6. Representatives of regional or			
local agencies serving out-of-school			
youth, homeless children and youth,			
and at-risk youth (as defined in			

Require Stakeholder	Name of Stakeholder	Organization/Company Representing	Evidence of Engagement
section 1432 of the Elementary and Secondary Education Act of 1965)			
7. Representatives of Indian Tribes and Tribal organizations in the State, where applicable			
8. Any other stakeholders that the eligible agency may require the eligible recipient to consult			

#### Local Needs Assessment Element 1 Worksheet: Career Advisement & Development

1. To what extent are CTE instructors and oth	er faculty trained to be career coaches or have	meaningful conversations with learners			
about their skill sets and career choices? For example, are they confident and competent?					
Current State	Desired State Evidence				
2. To what extent are all opportunities preser	nted to learners to consider 2- and 4-year posts	secondary education, technical colleges,			
apprenticeships, military, and direct employm	nent?				
Current State Desired State Evidence					
3. To what extent are CTE instructors collabor	rating with counseling/career advisement profe	essionals?			
3. To what extent are CTE instructors collabor Current State	rating with counseling/career advisement profe <b>Desired State</b>	essionals? Evidence			

Element 1: Career Advisement	Strategies for Element 1 in Priority Order
& Development	
Ratings:	
1 Significant gaps and/or	
multiple gaps exist	
2 Some gaps exist and/or we	
do not have a concrete plan	
to address them	
3 Very few gaps exist, and we	
have processes in place to	
close the remaining gaps	
4 No gaps exist	
Rating (circle one)	
1 2 3 4	

#### Local Needs Assessment Element 2 Worksheet: Evaluation of Workforce Alignment

1. To what extent are we offering programs of study that are preparing learners for current and future workforce and economic needs?				
Current State	Desired State Evidence			
2. Evaluate the processes in place for reviewir	ng workforce and economic data to determine	effectiveness and impact of program		
offerings on a regular basis.				
Current State	Desired State	Evidence		

	ment 2: Workforce gnment	Strat	egies for Element 2	egies for Element 2 in Priority Order
ati	tings:			
	Significant gaps and/or			
	multiple gaps exist Some gaps exist and/or we			
	do not have a concrete plan			
	to address them			
	Very few gaps exist, and we have processes in place to			
	close the remaining gaps			
	No gaps exist			
Rat	ting (circle one)			
	1 2 3 4			

# Local Needs Assessment Element 3 Worksheet: Evaluation of Program Quality including Size, Scope & Quality and Progress toward Implementing CTE Programs of Study

Discuss each of the following questions in light of the data collected and notes from interviews, focus groups, or other methodologies. Capture notes in the space provided. Colorado's definition of Size, Scope and Quality can be found in the Needs Assessment Handbook.

1. How do programs maintain conversations	with secondary, postsecondary, and business/i	ndustry representatives so that a robust and			
up-to-date skill set is developed in each prog	gram?				
Current State Desired State Evidence					
2. Which programs have current industry star materials?	2. Which programs have current industry standard equipment, appropriate classroom and laboratory space, and quality instructional materials?				
Current State Desired State Evidence					
3. Which programs of study incorporate relev	/ant academic, technical, and postsecondary, w	orkforce readiness (PWR) skills at every			
learner level? (Including concurrent enrollme	nt opportunities)				
Current State	Desired State	Evidence			

Element 3: Program Quality	Strategies for Element 3 in Priority Order
Ratings:	······································
1 Significant gaps and/or	
multiple gaps exist	
2 Some gaps exist and/or we	
do not have a concrete plan	
to address them	
3 Very few gaps exist, and we	
have processes in place to	
close the remaining gaps	
4 No gaps exist	
Rating (circle one)	
1 2 3 4	

#### Local Needs Assessment Element 4 Worksheet: Evaluation of Student Performance

1. Where do the biggest gaps in Perkins performance indicators exist between subgroups of students and programs areas?		
Current State	Desired State	Evidence

Element 4: Student	Strategies for Element 4 in Priority Order
Performance	
Ratings:	
1 Significant gaps and/or	
multiple gaps exist	
2 Some gaps exist and/or we	
do not have a concrete plan	
to address them	
3 Very few gaps exist, and we	
have processes in place to	
close the remaining gaps	
4 No gaps exist	
Rating (circle one)	
1 2 3 4	

#### Local Needs Assessment Element 5 Worksheet: Improving Equity and Access

	as special popula	ation groups are under-represented or over-re	presented in CTE programs overall? In which
program areas?			
Current State	e	Desired State	Evidence
2. What barriers currently exi	ist that prevent e	ach special population group from participatir	ng in your programs?
Current State	9	Desired State	Evidence
			s be considered and addressed when seeking
out and working with learner			
Current State	9	Desired State	Evidence
4. Are there new programs the	hat need to be de	eveloped to ensure access in our region?	
Current State	9	Desired State	Evidence
<ul> <li>Element 5: Equity &amp; Access</li> <li>Ratings: <ol> <li>Significant gaps and/or multiple gaps exist</li> <li>Some gaps exist and/or we do not have a concrete plan to address them</li> <li>Very few gaps exist, and we have processes in place to close the remaining gaps</li> <li>No gaps exist</li> </ol> </li> <li>Rating (circle one)</li> </ul>	Strategies foi	Element 5 in Priority Order	

#### Local Needs Assessment Element 6 Worksheet: Recruitment, Retention and Training of CTE Educators

1. What processes are in place to recruit new CTE educators? For example, what is the process to develop or recruit CTE instructors from					
	existing staff/students?				
Current State	Desired State	Evidence			
2. What strategies from the Colorado CTE Str	ategic Plan are you using to retain CTE educat	ors?			
Current State	Desired State	Evidence			
3. What strategies are in place to utilize instru	ctors/educators across the region? For exampl	e, to what extent do districts share instructors			
to create full-time positions, where applicable	e?				
Current State	Desired State	Evidence			

Element 6: Recruitment,	Strategies for Element 6 in Priority Order
Retention & Training	
Ratings:	
1 Significant gaps and/or	
multiple gaps exist	
2 Some gaps exist and/or we	
do not have a concrete plan	
to address them	
3 Very few gaps exist, and we	
have processes in place to	
close the remaining gaps	
4 No gaps exist	
Rating (circle one)	
1 2 3 4	

#### Local Needs Assessment Element 7 Worksheet: Work-based Learning

Current State	Desired State	Evidence
2. What strategies are used to recruit and re	tain employers to participate in work-based lea	rning programs? What should be added?
Current State	Desired State	Evidence
3. How are you evaluating employer satisfact	tion with the learners they supervise and the qu	ality of the work-based learning experiences
Current State	Desired State	Evidence
4. How are school/campus-based enterprise	I sused as a vehicle to provide work-based learr	l ing experiences?
Current State	Desired State	Evidence
5. To what extent are work-based learning e career plan?	experiences intentionally connected to classroo	m instruction and activities and the student

Element 7: Work-based	Strategies for Element 7 in Priority Order
Learning	
Ratings:	
1 Significant gaps and/or	
multiple gaps exist	
2 Some gaps exist and/or we	
do not have a concrete plan	
to address them	
3 Very few gaps exist, and we	
have processes in place to	
close the remaining gaps	
4 No gaps exist	
Rating (circle one)	
1 2 3 4	



Do not complete the orange worksheets prior to the regional meeting. These worksheets will be completed at the regional meeting.

# **Potential Stakeholder Worksheet for Regional Level**

Use this template to identify potential stakeholders to assist in the needs assessment process.

Role	Name	Organization	Email/Contact Info
Secondary CTE Faculty			
Secondary Career Counselors and Academic Counselors			
Secondary Administrators			
Secondary Instructional Support, Paraprofessionals			
Postsecondary CTE Faculty			
Postsecondary Administrators			

Role	Name	Organization	Email/Contact Info
Postsecondary Career Counseling and Advising Professionals			
Representatives of Special Populations Gender, race, ethnicity, migrant status, disability, economically disadvantaged, nontraditional, single parent, pregnant women, out of work individuals, English learners, homeless, foster care, active duty military parents, *corrections			
Local Workforce Development Board Member			
Regional Economic Development Member			
Local Business & Industry Representative			

Role	Name	Organization	Email/Contact Info
Parents and Students			
Representatives of Indian Tribes and Tribal Organizations			
Youth/Adult Corrections Education Representative			
Other Relevant Stakeholders			

# **Regional Needs Assessment Element 1 Worksheet:** Career Advisement & Development

Strategic Plan Goal: Ensure each Colorado learner has access to ongoing career advisement & development.

Strategies from Local Worksheets (carry forward from local homework)
1. Where are the biggest gaps in performance for the strategies listed?
2. List in priority order, the strategies to be addressed on the regional level. (These results will be carried forward to the final results document.)
3. What are the potential common assets to accomplish this goal?
4. What are the potential common barriers to accomplish the goal?
5. What shared stakeholders are needed for this goal to succeed?

#### **Regional Needs Assessment Element 2 Worksheet:** Evaluation of Workforce Alignment

Strategic Plan Goal: Elevate the quality of CTE programs to support each learner's skill development and meet industry needs.

Strategies from Local Worksheets (carry forward from local homework)
1. Where are the biggest gaps in performance for the strategies listed?
2. List in priority order, the strategies to be addressed on the regional level. (These results will be carried forward to the final results document.)
3. What are the potential common assets to accomplish this goal?
4. What are the potential common barriers to accomplish the goal?
E. What charad stakeholders are pooled for this goal to succood?
5. What shared stakeholders are needed for this goal to succeed?

# Regional Needs Assessment Element 3 Worksheet:

# Program Quality including Size, Scope & Quality and Progress toward Implementing CTE Programs of Study

Strategic Plan Goal: Elevate the quality of CTE programs to support each learner's skill development and meet industry needs.

Strategies from Local Worksheets	s (carry forward from local homework)
Strategies nom Local Worksheets	
1. Where are the biggest gaps in	performance for the strategies listed?
2. List in priority order, the strated	jies to be addressed on the regional level. (These results will be carried forward to the final results document.)
,,,,,	
3. What are the potential commo	n assets to accomplish this goal?
4. What are the potential commo	n barriers to accomplish the goal?
•	
F M/h + 4 - h + m + 1 - 4 - h + h + h + h + m + m + m	
5. What shared stakeholders are r	needed for this goal to succeed?

#### **Regional Needs Assessment Element 4 Worksheet:** Evaluation of Student Performance

Strategic Plan Goal: Elevate the quality of CTE programs to support each learner's skill development and meet industry needs.

Strategies from Local Worksheets	
I. What are the potential common assets to accomplish this goal?	
2. What are the potential common barriers to accomplish the goal?	
What are the potential common barriers to accomplish the goal:	
3. What shared stakeholders are needed for this goal to succeed?	
4. Where are the biggest gaps in performance for the strategies listed?	
5. List in priority order, the strategies to be addressed on the regional level.	

#### **Regional Needs Assessment Element 5 Worksheet:** Improving Equity and Access

**Strategic Plan Foundational Elements**: Create opportunities for each learner to access quality CTE programs and distribution of CTE programs throughout the state. Provide each learner with the opportunity to participate in a CTE program and decrease the gaps of CTE participation for target populations, non-traditional occupations and geographic areas.

Strategies from Local Worksheets (carry forward from local homework)
1. Where are the biggest gaps in performance for the strategies listed?
2. List in priority order, the strategies to be addressed on the regional level. (These results will be carried forward to the final results document.)
3. What are the potential common assets to accomplish this goal?
4. What are the potential common barriers to accomplish the goal?
5. What shared stakeholders are needed for this goal to succeed?

#### **Regional Needs Assessment Element 6 Worksheet:** Recruitment, Retention and Training of CTE Educators

**Strategic Plan Goal**: Develop and ensure a viable pipeline of CTE instructors to fill the educator position at the middle school, secondary, and postsecondary levels.

Strategies from Local Worksheets (carry forward from local homework)
1. Where are the biggest gaps in performance for the strategies listed?
2. List in priority order, the strategies to be addressed on the regional level. (These results will be carried forward to the final results document.)
3. What are the potential common assets to accomplish this goal?
4. What are the potential common barriers to accomplish the goal?
5 What shaved stakeholders are needed for this goal to susseed?
5. What shared stakeholders are needed for this goal to succeed?

# **Regional Needs Assessment Element 7 Worksheet: Work-based Learning**

Strategic Plan Goal: Ensure access to meaningful work-based learning opportunities for each CTE learner

Strategies from Local Worksheets (carry forward from local homework)
1. Where are the biggest gaps in performance for the strategies listed?
2. List in priority order, the strategies to be addressed on the regional level. (These results will be carried forward to the final results document.)
3. What are the potential common assets to accomplish this goal?
4. What are the potential common barriers to accomplish the goal?
5. What shared stakeholders are needed for this goal to succeed?

Needs Assessment Results Document to be completed as a result of the regional meeting. All three parts to this Document must be completed. The final page must be signed off by all local education partners in the region.

#### **Needs Assessment Results Document -Part 1**

Identify the priority strategies to be addressed based on the consolidation of local strategies at the regional level.

Each strategy must be categorized as Tier1, Tier 2 or Tier 3 in priority. This information should be pulled from #2 of each element of the regional worksheets. No more than three prioritized strategies per element may be carried forward to this worksheet.

Element	Strategies Listed in Priority Order	Tier Rating (per strategy)
1: Career Advisement & Development		
Element	Strategies Listed in Priority Order	
2: Local Workforce Alignment		
Element	Strategies Listed in Priority Order	
3: Size, Scope & Quality and Progress Towards Implementing CTE Programs of Study		
Element	Strategies Listed in Priority Order	
4: Student Performance		
Element	Strategies Listed in Priority Order	
5: Progress Toward Improving Equity		
Element	Strategies Listed in Priority Order	
6: Recruitment, Retention and Training of Faculty and Staff		
Element	Strategies Listed in Priority Order	

7: Work-Based Learning	

#### **Needs Assessment Results Document -Part 2**

Use this form to identify the Tier 1 strategies to be addressed on the regional level. List in priority order. These will help identify the priorities around which the local application should be developed.

Strategies to be Addressed on Regional Level, Listed in Priority Order	Element Addressed

# **Needs Assessment Results Document Signature Page – Part 3**

We, the undersigned, agree and accept the priority strategies for our region as documented in the Needs Assessment Results Document.

Institution (Name)	CTE Coordinator (First/Last)	Signature (Actual Signature)	Date

# **Needs Assessment Required Stakeholder Verification**

This form must be completed to verify the engagement of each of the required stakeholders. Pleas indicate how the stakeholder was engaged in the Evidence of Engagement column. This could be completing a survey, attending the regional meeting, focus group, etc.

Require Stakeholder	Name of Stakeholder	Organization/Company Representing	Evidence of Engagement
1. Representatives of career and technical education programs in a local educational agency or educational service agency, including teachers, career guidance and academic counselors, principals and other school leaders, administrators, and specialized instructional support personnel and paraprofessionals			
2. Representatives of career and technical education programs at postsecondary educational institutions, including faculty and administrators;			
3. Representatives of the State board or local workforce development boards and a range of local or regional businesses or industries;			

Require Stakeholder	Name of Stakeholder	Organization/Company Representing	Evidence of Engagement
4. Parents and students			
5. Representatives of special			
populations including individuals			
with disabilities; individuals from			
economically disadvantaged			
families, including low-income			
youth and adults; individuals			
preparing for non-traditional fields;			
single parents, including single			
pregnant women; out-of-workforce			
individuals; English learners;			
homeless individuals: youth who			
are in, or have aged out of, the			
foster care system; youth with a			
parent who is a member of the			
armed forces (as such term is			
defined in section 101(a)(4) of title			
10, United States Code); and is on			
active duty (as such term is defined in a string $101(d)(1)$ of such title			
in section 101(d)(1) of such title.			
6. Representatives of regional or			
local agencies serving out-of-school			
youth, homeless children and youth,			
and at-risk youth (as defined in			

Require Stakeholder	Name of Stakeholder	Organization/Company Representing	Evidence of Engagement
section 1432 of the Elementary and Secondary Education Act of 1965)			
7. Representatives of Indian Tribes and Tribal organizations in the State, where applicable			
8. Any other stakeholders that the eligible agency may require the eligible recipient to consult			

Supplement Document to be completed in preparation for the interim regional meeting. This must be completed by each local education partner and by the region as a "Part 4" of the purple section that will be submitted to CCCS.

### **Regional Needs Assessment Supplement to Inform Updates: Considerations on the Region's Needs** Assessment Results from 2021

**Goal**: Consider whether (and which) updates may be needed to the comprehensive regional needs assessment.

Strategies from 2019 Regional Needs A	Assessment
1. How does our spending in our Perki	ins grant(s) align with the priorities identified by our 2019 regional needs assessment?
2. Where are the biggest gaps in perfo	rmance for the needs identified?
2. where are the biggest gaps in perio	
3. Expand on any infrastructure or CO	WID related factors that need to be considered in our regional planning for the next two years as w
continue to implement our four-year s	trategic plans?
4. What are the potential common asso	ets to improve alignment for the next two years?
5. What are the potential common bar	riers to accomplish the goal? What is the data NOT telling us? What other information do we need?
6. How have we relied on stakeholder	feedback to inform this process? Which stakeholders have we engaged meaningfully in this work?
7. What shared stakeholders are neede	ed for this goal to succeed?



Appendix - D3 Comprehensive Local Needs Assessment (CLNA) CLNA Resource Guide

# Regional Needs Assessment Resource Guide (revised 2023)



## **Table of Contents**

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# **Glossary of Terms**

Convener	The Perkins eligible recipient to facilitate the needs assessment process on the regional level.
Core Performance Indicator	The required performance indicators as defined in the Perkins Act that measure student performance on a variety of indicators.
CTSO	Career and Technical Student Organization – A student organization aligned to a CTE program for the purpose of proving application of instruction and personal development. Colorado supports the following CTSOs: DECA, FBLA/PBL, FCCLA, FFA, HOSA, SkillsUSA, TSA, and (SC)2.
Education Partner	A term used to describe the Perkins eligible recipients involved in the regional needs assessment. The education partners may consist of colleges, Board of Cooperative Education Services, and or school districts identified in the economic region completing the needs assessment.
Labor Market Information	The term is broadly used to describe information on current and future labor market needs. Several sources of labor market information are available.
McKinney-Vento Act	The McKinney–Vento Homeless Assistance Act of 1987 (Pub. L. 100-77, July 22, 1987, 101 Stat. 482, 42 U.S.C. § 11301 et seq.) is a federal law that provides federal money for homeless shelter programs. It was the first significant federal legislative response to homelessness, and was passed by the 100th Congress and signed into law by President Ronald Reagan on July 22, 1987. The McKinney Act originally had fifteen programs providing a spectrum of services to homeless people, including the Continuum of Care Programs: the Supportive Housing Program, the Shelter Plus Care Program, and the Single Room Occupancy Program, as well as the Emergency Shelter Grant Program.
Program of Study	<ul> <li>A Program of Study is a coordinated, non-duplicative sequence of academic and technical content at the secondary and postsecondary level that:</li> <li>Incorporates challenging State academic standards;</li> <li>Addresses both academic and technical knowledge and skills, including employability (career readiness) skills;</li> </ul>

	<ul> <li>Progresses in specificity (beginning with all aspects of an industry or career cluster and leading to more occupation-specific instruction);</li> <li>Has multiple entry and exit points that incorporates credentialing; and</li> <li>Culminates in the attainment of a recognized postsecondary credential.</li> </ul>
Special Population Subgroup	The groupings of students as defined in the Perkins Act for analysis of student performance on the performance indicators as required by the Act.
Stakeholder	An individual or organization that through extensive collaboration among state- and local-level secondary, postsecondary, business, and other partners can impact the development and implementation of high-quality CTE programs that prepare students to gain employment in high-skill, high- wage, and high-demand occupations that meet state and local workforce needs.
Vocational Rehabilitation	Vocational rehabilitation, at its core, is a set of services provided to individuals who suffer from mental or physical disorders, but who still have the ability and desire to learn and function productively. These services include education, job training and skills that will be needed to get and keep a job. Vocational rehabilitation services are sometimes offered to those who have undergone an injury, or who have endured a mental disorder to try and retrain them for work again. Vocational Rehabilitation is administered through WIOA.
WIOA	The Workforce Innovation and Opportunity Act (WIOA) was signed into law by President Obama as Public Law 113-128. WIOA is the first legislative reform of the public workforce system in more than 15 years since the Workforce Investment Act (WIA). WIOA includes "core" programs such as: (1) Adult, Dislocated and Youth formula programs administered by the US Department of Labor; (2) the Adult Education and Literacy program administered by the Department of Education (ED); (3) Wagner Peyser Employment Service administered by USDOL; and (4) programs under the Rehabilitation Act that provide services to individuals with disabilities administered by ED.

Work-based Learning	Work-based learning is a continuum of activities that occur, in part or in whole, in the workplace, providing the learner with hands-on, real world experience.
Workforce Board	WILA requires a state and local workforce board to oversee the administration of WIOA and assist with workforce initiatives in each state and region.

# What Does the Law Say?

# What Does the Law Mean?

#### Size, Scope & Quality

#### What does the law say?

The comprehensive local needs assessment will include a description of how CTE programs offered by the local eligible recipient are sufficient in size, scope, and quality to meet the needs of all students served by the eligible recipient.

#### What does the law mean?

The provision maintains the size, scope and quality requirements in Perkins IV, but instead requires that this description be addressed through the needs assessment (which is part of the local application in Perkins V) instead of in the local plan in Perkins IV. The state has the responsibility to establish the definition of these

#### Labor Market Alignment

#### What does the law say?

The comprehensive local needs assessment will include a description of how CTE programs offered by the eligible recipient are aligned to State, regional, Tribal, or local in-demand industry sectors or occupations identified by the State workforce development board or local workforce development board, including career pathways, where appropriate. The CLNA may also identify programs designed to meet local education or economic needs not identified by State boards or

#### What does the law mean?

The law requires an analysis of how CTE programs are meeting workforce needs and provides eligible recipients with multiple ways to demonstrate labor market demand, from a combination of state and local sources.

#### **Student Performance Data**

#### What does the law say?

The comprehensive local needs assessment will include an evaluation of the performance of the students served by the local eligible recipient with respect to State determined and local performance levels, including an evaluation of performance for special populations and each subgroup.

#### What does the law mean?

The comprehensive local needs assessment must contain an evaluation of CTE concentrators' performance on the core performance indicators. While eligible recipients already are required to do this as part of their local plans under Perkins IV, the evaluation now must at a minimum include a performance analysis of the subgroups (as defined in ESSA) and the expanded list of special

### Progress towards Implementing CTE Programs/Programs of Study

What does the law say?	What does the law mean?
The comprehensive local needs assessment will	This evaluation should be both a backward and
include an evaluation of progress toward the	forward-looking review of the programs and programs
implementation of CTE programs and programs of	of study offered. In addition to meeting the size, scope
study.	and quality, this requirement addresses current and
	future plans to support the implementation of
	programs and programs of study.

# Recruitment, Retention and Training of Faculty and Staff

What does the law say?	What does the law mean?
The comprehensive local needs assessment will include a description of how the eligible recipient will improve recruitment, retention, and training of CTE teachers, faculty, specialized instructional support personnel, paraprofessionals, and career guidance and academic counselors, including	Eligible recipients must evaluate their current and future recruitment, retention and professional development needs. This may require root cause analyses of teacher or other professional shortages.

Progress Towards Improving Access & Equity	
<ul> <li>What does the law say?</li> <li>The comprehensive local needs assessment shall include a description of:</li> <li>Progress toward implementation of equal access to high-quality CTE courses and programs of study, for all students including strategies to overcome barriers that result in lower rates of access to, or performance gaps in, the courses and programs for special populations;</li> <li>How they are providing programs that are designed to enable special populations to meet the local levels of performance; and</li> <li>How they are providing activities to prepare special populations for high- skill, high-wage, or in-demand industry sectors or occupations in competitive, integrated settings that will</li> </ul>	What does the law mean? This requirement is focused on supports for special populations. The law challenges states to assist locals in directing resources or supports to close performance gaps and remove barriers. There may be different supports necessary to address different barriers and different populations.

# 2019-2024 **cte strategic plan executive summary**

#### Vision for Colorado CTE

Colorado Career & Technical Education (CTE) leverages workforce and education systems so that each learner has quality CTE experiences leading to lifelong career success.

CTE Stakeholders across the state helped develop a statewide vision to position CTE as a driver in the state's education, workforce, and economic priorities.

#### Goals

GOAL	1	<b>Career Advisement &amp; Development</b> – Ensure each Colorado Learner has access to ongoing career advisement and development.
GOAL	2	<b>Instructor Recruitment &amp; Retention</b> – Develop and ensure a viable pipeline of CTE instructors to fill the educator positions at the middle school, secondary, and postsecondary levels.
GOAL	3	Partnerships – Prepare Colorado's future workforce through transformational partnerships.
GOAL	4	<b>Quality Programs</b> – Elevate the quality of CTE programs to support each learner's skill development and meet industry needs.
GOAL	5	Work-Based Learning – Ensure access to meaningful work-based learning opportunities for each CTE learner.
		EQUITY & ACCESS
		Create opportunities for each learner to access quality CTE programs and distribution of CTE programs
FOUNDATION	IAL	throughout the state.
ELEMENTS	3	INCLUSIVITY
		Provide each learner with the opportunity to participate in a CTE program and decrease the gaps of CTE participation for target populations, non-traditional occupations, and geographic areas.

#### Purpose

Colorado's Strategic Plan for Career & Technical Education (CTE) will ultimately serve secondary and postsecondary learners in their preparation for meaningful careers, provide the state's employers with better prepared talent, and lend to the development of stronger communities. The CTE Strategic Plan will effectively guide the state's efforts over the next five years and will:

- Highlight opportunities to engage stakeholders.
- Establish clear and consistent goals for the education and workforce systems.
- Provide the platform to communicate Colorado's CTE vision publicly.

Colorado works with many partners and stakeholders involved in career education and workforce development initiatives. This creates an opportunity to enhance CTE programs and advance education, economic, and workforce systems by leveraging their experience and expertise. Advisory committees and sector partnerships are valuable partners in the CTE system. Partnering with these entities provides the opportunity to more effectively align CTE programs with the needs of business and industry.

#### FACTS & FIGURES FOR THE 2017/2018 ACADEMIC YEAR

#### **6TH-12TH GRADE**

37% **High School Students enrolled** in at least one CTE Class

106,720 High School CTE Students

Middle School CTE Students

2018 HIGH SCHOOL GRADUATION

29,741

**Colorado CTE Students** 89% **High School Graduation Rate** 

81% **Colorado High School** Graduation Rate

31,500+ **CTE Students Participating in** Leadership Development in a **CTE Student Organization** 

#### POSTSECONDARY

34,535 CTE Student Enrollment

21,615

Degrees Awarded in the 2017/2018 Academic Year

49,935 Postsecondary Students Th Completed Six CTE Credits **Postsecondary Students That** 

> **Employed Graduates Working** in an Occupation Related to

#### What is your role in CTE?

An action plan can help you identify opportunities to work with CTE learners, instructors, and partners. As you develop an action plan at the local or state level, consider and document how you can:

- 1. Engage diverse stakeholders.
- 2. Establish priorities and goals for your local education and workforce system.
- 3. Evaluate the success of your CTE programs.
- 4. Focus on shared priorities, relevant and quality data, talent development, Postsecondary & Work Readiness (PWR) skills, and policy review and development.
- 5. Identify barriers to success including misalignment and policy and procedural related barriers.
- 6. Target state and federal CTE funding to support quality CTE programs in your area.

TO GET INVOLVED, contact Colorado CTE at the Colorado Community College System.

Address: 9101 East Lowry Boulevard Denver, Colorado 80230

Phone: (303) 620-4000

Email: cte@cccs.edu

Website: www.coloradostateplan.com

#### **Perkins Act Reference and Resource Documents**

**Perkins V Guidance:** 

#### A Guide for State Leaders: Maximizing Perkins V's Comprehensive Local Needs Assessment & Local Application to Drive Quality and Equity in CTE (Word and PDF)

This guide from Advance CTE provides a summary, analysis and guidance for each major component of the comprehensive local needs assessment and the decisions states can be making now to support a robust CLNA process that aligns with the state's overall vision for CTE.

#### A Guide for Local Leaders: Maximizing Perkins V's Comprehensive Local Needs Assessment & Local Application to Drive Equality in CTE (PDF)

This guide from ACTE provides an overview and guidance for the comprehensive local needs assessment so that local leaders can utilize it as a tool for program improvement.

#### Policy Benchmark Tool: CTE Program of Study Approval (LINK)

This guide from Advance CTE provides a tool for policy evaluation. An effective process for setting priorities is modeled in this guide.

#### **Other Resources:**

The needs assessment in Perkins V was modeled after the one for Title IV-A (Student Support and Academic Enrichment Grants) in ESSA (with some changes) so these resources that might serve as useful reference points:

- Using Needs Assessments for School and District Improvement: A Tactical Guide Council of Chief State School Officers. December 5, 2018 (LINK)
- Worksheets From: Using Needs Assessment for School and District Improvement Council of Chief State School Officers. Julie Corbett and Sam Redding. 2017. (LINK)

#### **Needs Assessment Guidebook**

State Support Network. Cary Cuiccio and Mary Husby-Slater. May 2018 (LINK)

#### **Program Quality Evaluation Tools**

#### **ACTE's Quality CTE Program of Study Framework**

ACTE's evidence-based framework assessing across 12 elements to capture the program scope, delivery, implementation and quality. It also touches on program staffing and equity. (LINK) <u>https://www.acteonline.org/wp-</u> content/uploads/2019/01/HighQualityCTEFramework2018.pdf

#### Rubric for Linked Learning Pathway Quality Review and Continuous Improvement

Guide to planning and implementing high quality linked learning pathways (LINK)

https://connectedstudios.org/files/certification/LLPQRC\_ProcessGuide\_Abbrev\_FINAL.pd f

#### Design Specification for Implementing the College and Career Pathways System Framework

American Institutes for Research facilitator's guide for continuous improvement in designing a career pathway system. (LINK)

#### **Resources for Achieving Access and Equity**

Perkins Collaborative Resource Network

https://cte.ed.gov/initiatives/advancing-equity-in-cte

Association for Career and Technical Education

https://www.acteonline.org/professional-development/high-quality-cte-tools/access-and-equity/

Advance CTE

https://careertech.org/topic/access-equity

JFF - Jobs For the Future

https://www.jff.org/points-of-view/10-equity-questions-ask-about-career-and-technical-education/

Center for American Progress

https://www.americanprogress.org/issues/education-k-12/news/2019/08/28/473876/advancing-racialequity-career-technical-education-enrollment/

### Work-Based Learning Continuum

# **COLORADO'S WORK-BASED LEARNING CONTINUUM**

Work-based learning is a continuum of activities that occur, in part or in whole, in the workplace, providing the learner with hands-on, real world experience.

LEARNING ABOUT WORK	LEARNING THROUGH WORK	LEARNING AT WORK
Career awareness and exploration helps individuals build awareness of the variety of careers available and provides experiences that help inform career decisions.	Career preparation supports career readiness and includes extended direct interaction with professionals from industry and the community.	Career training occurs at a work site and prepares individuals for employment.
<ul> <li>Career Counseling</li> <li>Career Planning</li> <li>Career Fairs</li> <li>Career Presentations</li> <li>Industry Speakers</li> <li>Informational Interviews</li> <li>Mentoring</li> <li>Worksite Tours</li> <li>Project-based Learning</li> </ul>	<ul> <li>Clinical Experiences</li> <li>Credit-for-work Experiences</li> <li>Internships</li> <li>Pre-apprenticeship</li> <li>Industry-sponsored Project</li> <li>Supervised Entrepreneurship Experience</li> </ul>	<ul> <li>Apprenticeship</li> <li>On-the-job Training</li> <li>Employee Development</li> </ul>
Education Coordinated		Business Led

# **OUTCOMES:**

Skilled Talent for Business + Meaningful Careers for Students & Job Seekers



## **Tools for Obtaining Public Input**

The following table<sup>1</sup> lists some basic in-person tools for obtaining public input:

ΤοοΙ	# of Participants	Best Suited For
Interviews	Individual or Small Group	Learning about individual perspectives on issues
Focus Groups	Small groups (15 or fewer)	Exploring attitudes and opinions in depth
Study Circles	Small (5–20)	Information sharing and focused dialogue
<u>Public</u> <u>Meetings/Hearings</u>	Large groups	Presenting information to and receiving comment or feedback from the public
Public Workshops	Multiple small groups (8-15 in each small group)	Exchanging information and/or problem-solving in small groups
<u>Appreciative Inquiry</u> <u>Process</u>	Varies, but usually involves "whole system"	Envisioning shared future, not making decisions
World Cafes	Very adaptable, involving multiple simultaneous conversations (4-8 in each small group)	Fostering open discussion of a topic and identifying areas of common ground
<u>Charrettes</u>	Small to medium	Generating comprehensive plans or alternatives
<u>Electronic</u> Democracy	Unlimited	Enabling the direct participation of geographically dispersed public at their convenience
<u>Computer-Assisted</u> <u>Process</u>	Large	Receiving real-time quantitative feedback to ideas or proposals

<sup>1</sup> Table excerpt taken from <u>https://www.epa.gov/international-cooperation/public-participation-guide-tools-generate-and-obtain-public-input</u>

The following pages contain workforce data provided by EMSI as an example of labor market information. There is also a listing of Workforce and Economic Personnel to consult.

There are other sources of information to use to document high skill, high wage and in-demand occupations identified in the *Needs Assessment Handbook*.



Colorado Workforce Development Council





# Colorado Workforce Intelligence and Data Expert Group EMSI Super User Membership List

Individuals highlighted in green are Chair / Leads in various Initiatives through Colorado Workforce Development Council (CWDCJ/Colorado Department of Labor & Employment - Workforce Programs (CDLE-WP) and should be considered primary contacts for additional Emsi or data needs. Please contact your local data expert with your workforce intelligence needs, and they will determine the best way to move forward with your question or request. They may provide the information directly, refer your request to another Emsi account holder in their organization, or escalate the request to be examined and addressed by the data expert team. In the event that your local data expert is not available, please feel free to contact a member of the data expert team below. They will attempt to assist with the project, or will escalate the request to the data expert team.

# Colorado Workforce Regions / Sub-Region Contact List:

COLORADO WORKTORCE REGIONS / SUD-REGION CONTACT LIST:			
Adams County Workforce & Business Center	Arapahoe / Douglas Works!	Workforce Boulder County	Denver Office of Economic Development -Workforce Services
Greg McBoat - Business Information Analyst	Patrick Holwell - Workforce Economist	Barbara Larsen - Business Services Support Analyst	Todd Nielsen - Manager, Data & Quality Analytics
11860 N Pecos Street, 1st Floor	6974 S Lima Street	515 Coffman Street	101 W Colfax Avenue, 8th Floor
Westminster, CO 80234	Centennial, CO 80112	Longmont, CO 80501	Denver, CO 80202
Desk: 720-523-2468	Desk: 303-636-1251	Desk: 720-864-6665	Desk: 720-913-1509 Mobile: 303-808-9763
GMcBoat@AdCoGov.org	pholwell@arapahoegov.com	blarsen@bouldercounty.org	todd.nielsen@denvergov.org
Jefferson County Workforce & Business Center	Larimer County Economic & Workforce Development	Mesa County Workforce Center	Pikes Peak Workforce Center
Michelle Foley - Program Manager	Adam Crowe - Economic Development Manager	Victor Carreras - Employment Specialist/Authorized Job Profiler	Crystal Volmar - Business Specialst
3500 Illinois Street, Suite 1600	200 W Oak Street, 5th Floor	512 29 1/2 Road	1675 W Garden of the Gods Road
Golden, CO 80401	Fort Collins, CO 80521	Grand Junction, CO 81504	Colorado Springs, CO 80907
Desk: 303-271-4745	Desk: 970-498-6641	Desk: 970-256-2445	Desk: 719-667-3883
mfoley@jeffco.us	acrowe@larimer.org	victor.carreras@mesacounty.us	crystalvolmar@elpasoco.com
Colorado Rural Consortium - Broomfield Region	Colorado Rural Consortium - Northwest / Rural Resort Regions	Colorado Rural Consortium - Western / Southwestern Regions	Employment Services of Weld County
Chris Dewhurst - Workforce Division Manager	Mark Hoblitzell - Business Services Coordinator	Amanda Waltrip - Regional Program Assistant	Amber Duchaine - Business Service Rep
100 Spader Way	10069 Edwards Access Road	504 N 1st Street	315 N 11th Ave, Building B
Broomfield, CO 88020	Edwards, CO 81632	Montrose, CO 81401	Greeley, CO 80632
Desk: 303-464-5854	Desk: 970-880-4092	Desk: 970-249-7783 x15	Desk: 970-400-6717
cdewhurst@broomfield.org	mark.hobitzell@state.co.us	amanda.waltrip@state.co.us	aduchaine@weldgov.com
Colorado Rural Consortium - Eastern Region	Executive Sponsor		
Dawn Robards - Regional Director	Judy Emery - Director - Colorado Urban Workforce Alliance		
426 Ensign St.	6974 S Lima Street		
Fort Morgan, CO 80701	Centennial, CO 80112		
Desk: 970-867-9401	Phone: 720-785-3672		
dawn.robards@state.co.us	jemery@arapahoegov.org		

#### Labor Market Information Statewide Top Occupations

The following workforce data is an example of labor market information. Other workforce or economic data can be utilized to identify high wage, high skill, and in-demand occupations.
--

Standard Occupational Classification Code (SOC)	orce data is an example of labor market in Occupation Group Description	2023 Jobs	2028 Jobs	2023 - 2028 % Change	Avg. Annual Openings	Employment Concentration	Median Hourly Earnings	Median Annual Earnings	Example Occupations
13-1000	Business Operations Specialists	199,984	214,579	7%	21,843	1.38	\$38.31	\$79,679.08	1) Business Operations Specialists; 2) Market Research Analysts and Marketing Specialists; 3) Project Management Specialists
43-4000	Information and Record Clerks	121,071	124,946	3%	17,376	1.07	\$19.44	\$40,443.69	1) Customer Service Representatives; 2) Receptionists and Information Clerks; 3) Information and Record Clerks, Other
47-2000	Construction Trades Workers	129,413	134,920	4%	14,165	1.14	\$23.98	\$49,883.76	1) Construction Laborers; 2) Electricians; 3) Carpenters
15-1200	Computer Occupations	138,745	155,896	12%	13,633	1.39	\$51.84	\$107,834.60	1) Software Developers; 2) Computer User Support Specialists; 3) Computer Systems Analysts
35-2000	Cooks and Food Preparation Workers	68,438	77,395	13%	13,199	0.94	\$17.17	\$35,707.63	1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria
31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	71,280	79,611	12%	13,071	0.65	\$16.75	\$34,837.33	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
11-9000	Other Management Occupations	88,704	96,237	8%	9,276	0.98	\$45.99	\$95,657.20	1) Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health Services Managers
29-1000	Healthcare Diagnosing or Treating Practitioners	120,103	130,521	9%	8,527	0.96	\$45.04	\$93,683.12	1) Registered Nurses; 2) Dental Hygienists; 3) Nurse Practitioners
13-2000	Financial Specialists	80,881	86,562	7%	8,061	1.21	\$39.04	\$81,207.43	1) Accountants and Auditors; 2) Personal Financial Advisors; 3) Financial and Investment Analysts
25-2000	Preschool, Elementary, Middle, Secondary, and Special Education Teachers	82,835	89,020	7%	7,911	1.00	\$27.72	\$57,667.89	1) Elementary School Teachers; 2) Secondary School Teachers; 3) Middle School Teachers
39-9000	Other Personal Care and Service Workers	38,439	40,359	5%	7,490	0.98	\$16.74	\$34,817.80	1) Childcare Workers; 2) Exercise Trainers and Group Fitness Instructors; 3) Recreation Workers
43-3000	Financial Clerks	54,737	55,630	2%	6,896	0.93	\$22.16	\$46,102.76	1) Bookkeeping, Accounting, and Auditing Clerks; 2) Billing and Posting Clerks; 3) Tellers
49-9000	Other Installation, Maintenance, and Repair Occupations	57,773	62,352	8%	6,730	0.85	\$24.70	\$51,369.33	1) Heating, Air Conditioning, and Refrigeration Mechanics and Installers; 2) Industrial Machinery Mechanics; 3) Electrical Power- Line Installers and Repairers
21-1000	Counselors, Social Workers, and Other Community and Social Service Specialists	53,558	59,128	10%	6,409	1.12	\$25.22	\$52,450.03	1) Substance Abuse, Behavioral Disorder, and Mental Health Counselors; 2) Child, Family, and School Social Workers; 3) Educational, Guidance, and Career Counselors and Advisors
31-9000	Other Healthcare Support Occupations	37,206	40,622	9%	6,323	1.01	\$20.82	\$43,297.90	1) Medical Assistants; 2) Dental Assistants; 3) Veterinary Assistants and Laboratory Animal Caretakers

#### Regional Labor Market Information Top Occupations Economic Development Region 1 – Golden Plains Region (Counties: Logan, Morgan, Phillips, Sedgwick, Washington, Yuma)

	Standard Occupational Classification Code (SOC)	an example of labor market information. Other wor Occupation Group Description	2023 Jobs		2023 - 2028 % Change	Avg. Annual Openings	Employment Concentration	Median Hourly Earnings	Median Annual Earnings	Example Occupations
នា	45-2000	Agricultural Workers	2,036	2,065	1%	342	10.23	\$14.95	\$31,103.49	1) Farmworkers and Laborers, Crop, Nursery, and Greenhouse; 2) Farmworkers, Farm, Ranch, and Aquacultural Animals; 3) Agricultural Equipment Operators
Openings	41-2000	Retail Sales Workers	1,792	1,920	7%	334	1.18	\$14.67	\$30,506.58	1) Retail Salespersons; 2) Cashiers; 3) Counter and Renta Clerks
by Largest	53-7000	Material Moving Workers	1,447	1,564	8%	247	0.90	\$16.28	\$33,863.86	<ol> <li>Stockers and Order Fillers; 2) Laborers and Freight,</li> <li>Stock and Material Movers; 3) Industrial Truck and Tract</li> <li>Operators</li> </ol>
Groups	11-9000	Other Management Occupations**	2,297	2,329	1%	244	2.52	\$21.41	\$44,536.39	1) Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health Services Managers
Occupation	35-3000	Food and Beverage Serving Workers	1,042	1,069	3%	230	0.81	\$14.13	\$29,395.75	1) Fast Food and Counter Workers; 2) Waiters and Waitresses; 3) Bartenders
Occup	51-3000	Food Processing Workers	1,255	1,206	(4%)	176	7.44	\$22.26	\$46,310.50	1) Bakers; 2) Food Batchmakers; 3) Meat, Poultry, and Fis Cutters and Trimmers
Regional	53-3000	Motor Vehicle Operators	1,214	1,287	6%	169	1.25	\$20.71	\$43,068.74	1) Heavy and Tractor-Trailer Truck Drivers; 2) Light Truck Drivers; 3) Driver/Sales Workers
2	31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides**	935	996	6%	165	0.85	\$16.31	\$33,922.76	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
droups by	11-9000	Other Management Occupations	2,297	2,329	1%	244	2.52	\$21.41	\$44,536.39	1) Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health Services Managers
upation Gr	31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	935	996	6%	165	0.85	\$16.31	\$33,922.76	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
50 K	47-2000	Construction Trades Workers	1,066	1,125	6%	121	0.93	\$21.55	\$44,819.19	1) Construction Laborers; 2) Electricians; 3) Carpenters
Dening	43-4000	Information and Record Clerks	815	847	4%	121	0.72	\$17.84		<ol> <li>Customer Service Representatives; 2) Receptionists an Information Clerks; 3) Information and Record Clerks, Other</li> </ol>
Largest (	35-2000	Cooks and Food Preparation Workers	675	706	5%	116	0.93	\$15.00	\$31,192.68	1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria
Shown	25-2000	Preschool, Elementary, Middle, Secondary, and Special Education Teachers	1,171	1,112	(5%)	100	1.40	\$21.19	\$44,076.19	1) Elementary School Teachers; 2) Secondary School Teachers; 3) Middle School Teachers
gional Data	13-1000	Business Operations Specialists	790	846	7%	87	0.54	\$30.90	\$64,278.63	1) Business Operations Specialists; 2) Market Research Analysts and Marketing Specialists; 3) Project Management Specialists
Reg	29-1000	Healthcare Diagnosing or Treating Practitioners	1,001	1,139	14%	87	0.80	\$41.35	\$86,011.76	1) Registered Nurses; 2) Dental Hygienists; 3) Nurse Practitioners

The following workforce data is an example of labor market information. Other workforce or economic data can be utilized to identify high wage, high skill, and in-demand occupations.

\*\* Indicates regional occupations that are also statewide areas of focus

#### Regional Labor Market Information Top Occupations Economic Development Region 2 – Northern Colorado Region (Counties: Larimer, Weld)

	Standard Occupational Classification Code (SOC)	Occupation Group Description	2023 Jobs	2028 Jobs	2023 - 2028 % Change	Avg. Annual Openings	Employment Concentration	Median Hourly Earnings	Median Annual Earnings	Example Occupations
	35-3000	Food and Beverage Serving Workers	15,768	17,298	10%	3,702	1.21	\$14.30	529 735 45	od and Counter Workers; 2) Waiters and es; 3) Bartenders
ings	41-2000	Retail Sales Workers	16,844	17,428	3%	2,823	1.09	\$14.83	\$30,837.62 1) Retail S Clerks	Galespersons; 2) Cashiers; 3) Counter and Rental
by Largest Openings	53-7000	Material Moving Workers	11,881	12,636	6%	2,014	0.73	\$18.61		rs and Order Fillers; 2) Laborers and Freight, Material Movers; 3) Industrial Truck and Tractor s
벁	47-2000	Construction Trades Workers**	16,268	17,012	5%	1,795	1.40	\$23.57	\$49,016.21 1) Constru	uction Laborers; 2) Electricians; 3) Carpenters
roups by L	13-1000	Business Operations Specialists**	16,132	17,216	7%	1,742	1.09	\$35.11	\$73,019.60 Analysts a Managem	ss Operations Specialists; 2) Market Research and Marketing Specialists; 3) Project ent Specialists
Regional Occupation Groups	43-4000	Information and Record Clerks**	11,205	11,609	4%	1,604	0.97	\$18.52	\$38,524.55 Informati Other	er Service Representatives; 2) Receptionists and on Clerks; 3) Information and Record Clerks,
	53-3000	Motor Vehicle Operators	9,736	10,542	8%	1,382	0.98	\$23.13	S48 112 78	and Tractor-Trailer Truck Drivers; 2) Light Truck ) Driver/Sales Workers
egiona	35-2000	Cooks and Food Preparation Workers**	7,056	8,013	14%	1,367	0.95	\$16.54	534 400 201	Restaurant; 2) Food Preparation Workers; 3) stitution and Cafeteria
æ	31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides**	6,587	7,542	14%	1,250	0.59	\$16.27		Health and Personal Care Aides; 2) Nursing s; 3) Psychiatric Aides
	47 2000	Construction Trades Workers	16.269	17.012	5%	1 705	1.40	602 F7	\$40,015,21,1) Constru	ustion Laborary 2) Electricians: 2) Carporters
Groups by	47-2000 13-1000	Construction Trades Workers Business Operations Specialists	16,268 16,132	17,012		1,795 1,742	1.40	\$23.57 \$35.11	1) Busine \$73,019.60 Analysts a	uction Laborers; 2) Electricians; 3) Carpenters ss Operations Specialists; 2) Market Research and Marketing Specialists; 3) Project eent Specialists
Occupation Groups 5	43-4000	Information and Record Clerks	11,205	11,609	4%	1,604	0.97	\$18.52		ner Service Representatives; 2) Receptionists and on Clerks; 3) Information and Record Clerks,
	35-2000	Cooks and Food Preparation Workers	7,056	8,013	14%	1,367	0.95	\$16.54	534.400.201	Restaurant; 2) Food Preparation Workers; 3) stitution and Cafeteria
for Sta argest	31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	6,587	7,542	14%	1,250	0.59	\$16.27		Health and Personal Care Aides; 2) Nursing s; 3) Psychiatric Aides
Regional Data Shown L	11-9000	Other Management Occupations	11,281	12,153	8%	1,191	1.21	\$40.25	\$83,720.37 Other Agr Services M	-
onal D	29-1000	Healthcare Diagnosing or Treating Practitioners	12,245	14,171	16%	1,046	0.96	\$43.03	\$89,499.47 Practition	red Nurses; 2) Dental Hygienists; 3) Nurse hers
Regi	25-2000	Preschool, Elementary, Middle, Secondary, and Special Education Teachers	8,691	9,430	8%	830	1.02	\$25.01	552 022 811	tary School Teachers; 2) Secondary School 3) Middle School Teachers

The following workforce data is an example of labor market information. Other workforce or economic data can be utilized to identify high wage, high skill, and in-demand occupations.

\*\* Indicates regional occupations that are also statewide areas of focus

#### Regional Labor Market Information Top Occupations

#### Economic Development Region 3 – Denver Region

# (Counties: Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, Jefferson) The following workforce data is an example of labor market information. Other workforce or economic data can be utilized to identify high wage, high skill, and in-demand occupations.

Standard Occupational Classification Code (SOC)	an example of labor market information. Other wor Occupation Group Description		2028 Jobs	2023 - 2028 % Change	Avg. Annual Openings	Employment Concentration	Median Hourly Earnings	Median Annual Earnings	Example Occupations
35-3000	Food and Beverage Serving Workers	86,357	93,587	8%	19,796	1.11	\$15.47	\$32,173.89	1) Fast Food and Counter Workers; 2) Waiters and Waitresses; 3) Bartenders
13-1000	Business Operations Specialists**	139,310	149,427	7%	15,190	1.58	\$39.52	\$82,193.87	1) Business Operations Specialists; 2) Market Research Analysts and Marketing Specialists; 3) Project Management Specialists
41-2000	Retail Sales Workers	86,071	86,851	1%	13,842	0.94	\$16.07	\$33,434.07	1) Retail Salespersons; 2) Cashiers; 3) Counter and Rent Clerks
53-7000	Material Moving Workers	72,015	76,767	7%	12,223	0.74	\$18.39	\$38,241.89	<ol> <li>Stockers and Order Fillers; 2) Laborers and Freight,</li> <li>Stock and Material Movers; 3) Industrial Truck and Trac</li> <li>Operators</li> </ol>
43-4000	Information and Record Clerks**	75,644	78,045	3%	10,751	1.10	\$20.53	\$42,692.58	<ol> <li>Customer Service Representatives; 2) Receptionists a Information Clerks; 3) Information and Record Clerks, Other</li> </ol>
15-1200	Computer Occupations**	103,305	116,395	13%	10,211	1.71	\$53.01	\$110,267.67	1) Software Developers; 2) Computer User Support Specialists; 3) Computer Systems Analysts
47-2000	Construction Trades Workers**	71,184	74,264	4%	7,770	1.03	\$24.69	\$51,350.46	1) Construction Laborers; 2) Electricians; 3) Carpenters
35-2000	Cooks and Food Preparation Workers**	39,395	44,581	13%	7,614	0.89	\$17.45	\$36,300.80	1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria
31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides**	40,853	45,221	11%	7,360	0.61	\$17.18	\$35,741.50	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
53-3000	Motor Vehicle Operators	47,032	50,046	6%	6,510	0.80	\$22.92	\$47,677.93	<ol> <li>Heavy and Tractor-Trailer Truck Drivers; 2) Light True Drivers; 3) Driver/Sales Workers</li> </ol>
13-1000	Business Operations Specialists	139,310	149,427	7%	15,190	1.58	\$39.52		<ol> <li>Business Operations Specialists; 2) Market Research Analysts and Marketing Specialists; 3) Project Management Specialists</li> </ol>
43-4000	Information and Record Clerks	75,644	78,045	3%	10,751	1.10	\$20.53	\$42,692.58	<ol> <li>Customer Service Representatives; 2) Receptionists a Information Clerks; 3) Information and Record Clerks, Other</li> </ol>
15-1200	Computer Occupations	103,305	116,395	13%	10,211	1.71	\$53.01	\$110,267.67	1) Software Developers; 2) Computer User Support Specialists; 3) Computer Systems Analysts
47-2000	Construction Trades Workers	71,184	74,264	4%	7,770	1.03	\$24.69	\$51,350.46	1) Construction Laborers; 2) Electricians; 3) Carpenters
35-2000	Cooks and Food Preparation Workers	39,395	44,581	13%	7,614	0.89	\$17.45	\$36,300.80	1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria
31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	40,853	45,221	11%	7,360	0.61	\$17.18	\$35,741.50	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
13-2000	Financial Specialists	58,391	62,367	7%	5,766	1.44	\$40.11	\$83,428.42	1) Accountants and Auditors; 2) Personal Financial Advisors; 3) Financial and Investment Analysts
11-9000	Other Management Occupations	50,050	54,666	9%	5,176	0.91	\$51.82		1) Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health Services Managers
29-1000	Healthcare Diagnosing or Treating Practitioners	71,551	76,038	6%	4,725	0.94	\$45.62	\$94,880.86	1) Registered Nurses; 2) Dental Hygienists; 3) Nurse Practitioners
29-1000									

\*\* Indicates regional occupations that are also statewide areas of focus

#### Regional Labor Market Information Top Occupations Economic Development Region 4 – Pikes Peak Region (Counties: El Paso, Park, Teller)

	Standard Occupational Classification Code (SOC)	an example of labor market information. Other wor Occupation Group Description		2028 Jobs	2023 - 2028 % Change	Avg. Annual Openings	Employment Concentration	Median Hourly Earnings	Median Annual Earnings	Example Occupations
	35-3000	Food and Beverage Serving Workers	18,769	20,557	10%	4,413	1.19	\$14.15	\$29,432.01	1) Fast Food and Counter Workers; 2) Waiters and Waitresses; 3) Bartenders
<u>8</u>	41-2000	Retail Sales Workers	18,323	18,564	1%	2,992	0.98	\$14.62	\$30,408.81	1) Retail Salespersons; 2) Cashiers; 3) Counter and Renta Clerks
i i i	55-9000	Military-only Occupations	22,470	23,947	7%	2,952	9.34	\$15.26	\$31,748.21	Military
rgest Ope	53-7000	Material Moving Workers	14,455	15,913	10%	2,678	0.73	\$16.43	\$34,166.18	<ol> <li>Stockers and Order Fillers; 2) Laborers and Freight,</li> <li>Stock and Material Movers; 3) Industrial Truck and Trac</li> <li>Operators</li> </ol>
ups by Lai	13-1000	Business Operations Specialists**	23,851	25,124	5%	2,502	1.33	\$36.78	\$76,503.57	1) Business Operations Specialists; 2) Market Research Analysts and Marketing Specialists; 3) Project Management Specialists
ation Gro	43-4000	Information and Record Clerks**	14,697	14,840	1%	2,059	1.05	\$18.33	\$38,133.11	<ol> <li>Customer Service Representatives; 2) Receptionists an Information Clerks; 3) Information and Record Clerks, Other</li> </ol>
Regional Occupation Groups by Largest Openings	31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides**	10,249	12,119	18%	2,043	0.76	\$16.34	\$33,984.26	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
Regio	15-1200	Computer Occupations**	18,445	20,144	9%	1,673	1.50	\$50.33	\$104,688.20	1) Software Developers; 2) Computer User Support Specialists; 3) Computer Systems Analysts
	47-2000	Construction Trades Workers**	13,967	14,604	5%	1,520	0.99	\$23.41	\$48,697.95	1) Construction Laborers; 2) Electricians; 3) Carpenters
	35-2000	Cooks and Food Preparation Workers**	7,251	8,363	15%	1,437	0.81	\$16.45	\$34,213.95	1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria
			-			1				
Largest	13-1000	Business Operations Specialists	23,851	25,124	5%	2,502	1.33	\$36.78	\$76,503.57	1) Business Operations Specialists; 2) Market Research Analysts and Marketing Specialists; 3) Project Management Specialists
Å	43-4000	Information and Record Clerks	14,697	14,840	1%	2,059	1.05	\$18.33	\$38,133.11	<ol> <li>Customer Service Representatives; 2) Receptionists ar Information Clerks; 3) Information and Record Clerks, Other</li> </ol>
upation Groups	31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides**	10,249	12,119	18%	2,043	0.76	\$16.34	\$33,984.26	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
စိန္မ	15-1200	Computer Occupations	18,445	20,144	9%	1,673	1.50	\$50.33	\$104,688.20	1) Software Developers; 2) Computer User Support Specialists; 3) Computer Systems Analysts
vide enin	47-2000	Construction Trades Workers	13,967	14,604	5%	1,520	0.99	\$23.41	\$48,697.95	1) Construction Laborers; 2) Electricians; 3) Carpenters
· Statev Op	35-2000	Cooks and Food Preparation Workers	7,251	8,363	15%	1,437	0.81	\$16.45	\$34,213.95	1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria
wn for	29-1000	Healthcare Diagnosing or Treating Practitioners	15,869	17,577	11%	1,179	1.03	\$43.34	\$90,152.96	1) Registered Nurses; 2) Dental Hygienists; 3) Nurse Practitioners
Data Shown	25-2000	Preschool, Elementary, Middle, Secondary, and Special Education Teachers	12,035	12,963	8%	1,132	1.17	\$23.72	\$49,344.28	1) Elementary School Teachers; 2) Secondary School Teachers; 3) Middle School Teachers
Regional D	31-9000	Other Healthcare Support Occupations	6,103	6,643	9%	1,027	1.35	\$19.81	\$41,206.65	1) Medical Assistants; 2) Dental Assistants; 3) Veterinar Assistants and Laboratory Animal Caretakers
Reg	11-9000	Other Management Occupations	9,337	10,244	10%	967	0.83	\$47.09	\$97,949.49	1) Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health Services Managers

The following workforce data is an example of labor market information. Other workforce or economic data can be utilized to identify high wage, high skill, and in-demand occupations.

\*\* Indicates regional occupations that are also statewide areas of focus

#### Regional Labor Market Information Top Occupations Economic Development Region 5 – Central Plains Region (Counties: Cheyenne, Elbert, Kit Carson, Lincoln)

	Standard Occupational Classification Code (SOC)	Occupation Group Description		2028 Jobs	2023 - 2028 % Change	Avg. Annual Openings	Employment Concentration	Median Hourly Earnings	Median Annual Earnings	Example Occupations
8	41-2000	Retail Sales Workers	692	747	8%	132	1.14	\$14.00	\$29,126.64	1) Retail Salespersons; 2) Cashiers; 3) Counter and Rental Clerks
	47-2000	Construction Trades Workers**	931	1,022	10%	115	2.04	\$21.74	\$45,215.74	1) Construction Laborers; 2) Electricians; 3) Carpenters
st Openings	35-3000	Food and Beverage Serving Workers	452	485	7%	106	0.88	\$13.82	\$28,751.56	1) Fast Food and Counter Workers; 2) Waiters and Waitresses; 3) Bartenders
ups by Largest	45-2000	Agricultural Workers	491	538	10%	92	6.17	\$14.71	\$30,596.28	1) Farmworkers and Laborers, Crop, Nursery, and Greenhouse; 2) Farmworkers, Farm, Ranch, and Aquacultural Animals; 3) Agricultural Equipment Operators
ation Groups	53-7000	Material Moving Workers	449	528	18%	89	0.70	\$16.24	\$33,780.45	1) Stockers and Order Fillers; 2) Laborers and Freight, Stock and Material Movers; 3) Industrial Truck and Tractor Operators
nal Occupation	11-9000	Other Management Occupations**	732	793	8%	83	2.01	\$26.25		<ol> <li>Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health Services Managers</li> </ol>
Regional	31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides**	255	331	30%	59	0.58	\$15.68	\$32,614.09	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
ργ	47-2000	Construction Trades Workers	931	1,022	10%	115	2.04	\$21.74	\$45,215.74	1) Construction Laborers; 2) Electricians; 3) Carpenters
pation Groups t	11-9000	Other Management Occupations	732	793	8%	83	2.01	\$26.25	\$54,609.07	1) Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health Services Managers
Occupation 25	31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	255	331	30%	59	0.58	\$15.68	\$32,614.09	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
tewide Opening	43-4000	Information and Record Clerks	377	405	8%	59	0.83	\$17.35	\$36,080.48	<ol> <li>Customer Service Representatives; 2) Receptionists and Information Clerks; 3) Information and Record Clerks, Other</li> </ol>
	13-1000	Business Operations Specialists	476	537	13%	58	0.82	\$33.04		1) Business Operations Specialists; 2) Market Research Analysts and Marketing Specialists; 3) Project Management Specialists
ata Shc	25-2000	Preschool, Elementary, Middle, Secondary, and Special Education Teachers	570	541	(5%)	44	1.71	\$21.51	\$44,730.42	1) Elementary School Teachers; 2) Secondary School Teachers; 3) Middle School Teachers
gional Data Shown L	35-2000	Cooks and Food Preparation Workers	241	253	5%	41	0.83	\$15.34	\$31,904.56	1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria
Regi	43-3000	Financial Clerks	271	284	5%	36	1.15	\$19.51	540 588 30	1) Bookkeeping, Accounting, and Auditing Clerks; 2) Billing and Posting Clerks; 3) Tellers

The following workforce data is an example of labor market information. Other workforce or economic data can be utilized to identify high wage, high skill, and in-demand occupations.

\*\* Indicates regional occupations that are also statewide areas of focus

#### Regional Labor Market Information Top Occupations Economic Development Region 6 – Southeast Colorado Region (Counties: Baca, Bent, Crowley, Kiowa, Otero, Prowers)

The following workforce data is an example of labor market information. Other workforce or economic data can be utilized to identify high wage, high sk	skill, and in-demand occupations.
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	Standard Occupational Classification Code (SOC)	Occupation Group Description	2023 Jobs	2028 Jobs	2023 - 2028 % Change	Avg. Annual Openings	Employment Concentration	Median Hourly Earnings	Median Annual Earnings	Example Occupations
ings	41-2000	Retail Sales Workers	974	1,023	5%	181	1.19	\$13.40	\$27,869.67	1) Retail Salespersons; 2) Cashiers; 3) Counter and Rental Clerks
Largest Openings	45-2000	Agricultural Workers	840	913	9%	158	7.83	\$13.89	578 896 83	1) Farmworkers and Laborers, Crop, Nursery, and Greenhouse; 2) Farmworkers, Farm, Ranch, and Aquacultural Animals; 3) Agricultural Equipment Operators
Å	35-3000	Food and Beverage Serving Workers	587	622	6%	134	0.85	\$12.80	\$26,613.84	1) Fast Food and Counter Workers; 2) Waiters and Waitresses; 3) Bartenders
tion Groups	11-9000	Other Management Occupations**	1,062	1,119	5%	124	2.16	\$22.64	\$47,080.83	1) Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health Services Managers
al Occupation	53-7000	Material Moving Workers	555	624	13%	104	0.64	\$15.06		<ol> <li>Stockers and Order Fillers; 2) Laborers and Freight,</li> <li>Stock and Material Movers; 3) Industrial Truck and Tracto</li> <li>Operators</li> </ol>
Regional	31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides**	605	633	5%	103	1.02	\$16.13	+	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
				1						
Aa sal	11-9000	Other Management Occupations	1,062	1,119	5%	124	2.16	\$22.64	\$47,080.83	1) Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health Services Managers
upation Groups	31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	605	633	5%	103	1.02	\$16.13	\$33,555.13	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
Š 🔬 🛛	43-4000	Information and Record Clerks	512	544	6%	77	0.84	\$16.95	\$35,263.84	1) Customer Service Representatives; 2) Receptionists and Information Clerks; 3) Information and Record Clerks, Other
argest Openin	35-2000	Cooks and Food Preparation Workers	377	391	4%	65	0.96	\$14.49	\$30,149.34	1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria
/n Tor 3 Large	25-2000	Preschool, Elementary, Middle, Secondary, and Special Education Teachers	786	701	(11%)	65	1.75	\$20.52	\$42,677.57	1) Elementary School Teachers; 2) Secondary School Teachers; 3) Middle School Teachers
kegional Lata Snow	21-1000	Counselors, Social Workers, and Other Community and Social Service Specialists	480	527	10%	59	1.85	\$21.72	\$45,168.36	1) Substance Abuse, Behavioral Disorder, and Mental Health Counselors; 2) Child, Family, and School Social Workers; 3) Educational, Guidance, and Career Counselor and Advisors
2	47-2000	Construction Trades Workers	489	517	6%	57	0.79	\$19.84	\$41,272.43	1) Construction Laborers; 2) Electricians; 3) Carpenters
1	29-1000	Healthcare Diagnosing or Treating Practitioners	671	768	14%	57	0.99	\$39.04	\$81,197.54	1) Registered Nurses; 2) Dental Hygienists; 3) Nurse Practitioners

\*\* Indicates regional occupations that are also statewide areas of focus

#### Regional Labor Market Information Top Occupations Economic Development Region 7 – Pueblo Region (County: Pueblo)

Standard Occupational Classification Code (SOC)	Occupation Group Description	2023 Jobs		2023 - 2028 % Change	Avg. Annual Openings	Employment Concentration	Median Hourly Earnings	Median Annual Earnings	Example Occupations
35-3000	Food and Beverage Serving Workers	3,585	3,797	6%	802	1.29	\$13.80	\$28,695.83	1) Fast Food and Counter Workers; 2) Waiters and Waitresses; 3) Bartenders
41-2000	Retail Sales Workers	4,367	4,429	1%	722	1.33	\$14.13	\$29,382.10	1) Retail Salespersons; 2) Cashiers; 3) Counter and Rent Clerks
53-7000	Material Moving Workers	3,770	4,135	10%	679	1.08	\$17.69	\$36,802.41	1) Stockers and Order Fillers; 2) Laborers and Freight, Stock and Material Movers; 3) Industrial Truck and Trac Operators
31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides**	3,093	3,246	5%	517	1.29	\$15.33	\$31,892.41	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
47-2000	Construction Trades Workers**	3,318	3,502	6%	379	1.34	\$22.23	\$46,235.03	1) Construction Laborers; 2) Electricians; 3) Carpenters
43-4000	Information and Record Clerks**	2,603	2,501	(4%)	343	1.05	\$16.83	\$35,002.87	<ol> <li>Customer Service Representatives; 2) Receptionists a Information Clerks; 3) Information and Record Clerks,</li> </ol>
53-3000	Motor Vehicle Operators	1,936	2,165	12%	297	0.91	\$19.15	\$39,833.84	1) Heavy and Tractor-Trailer Truck Drivers; 2) Light True Drivers; 3) Driver/Sales Workers
35-2000	Cooks and Food Preparation Workers**	1,634	1,781	9%	296	1.03	\$15.76	\$32,789.71	1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria
13-1000	Business Operations Specialists**	2,520	2,662	6%	264	0.80	\$32.35	\$67,287.85	1) Business Operations Specialists; 2) Market Research Analysts and Marketing Specialists; 3) Project Management Specialists
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31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	3,093	3,246	5%	517	1.29	\$15.33	\$31,892.41	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
47-2000	Construction Trades Workers	3,318	3,502	6%	379	1.34	\$22.23	\$46,235.03	1) Construction Laborers; 2) Electricians; 3) Carpenters
43-4000	Information and Record Clerks	2,603	2,501	(4%)	343	1.05	\$16.83	\$35,002.87	<ol> <li>Customer Service Representatives; 2) Receptionists a Information Clerks; 3) Information and Record Clerks, Other</li> </ol>
35-2000	Cooks and Food Preparation Workers	1,634	1,781	9%	296	1.03	\$15.76	\$32,789.71	1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria
13-1000	Business Operations Specialists	2,520	2,662	6%	264	0.80	\$32.35	\$67,287.85	<ol> <li>Business Operations Specialists; 2) Market Research Analysts and Marketing Specialists; 3) Project Management Specialists</li> </ol>
11-9000	Other Management Occupations	2,012	2,241	11%	229	1.01	\$37.96	\$78,959.69	1) Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health Services Managers
11-9000 21-1000	Other Management Occupations Counselors, Social Workers, and Other Community and Social Service Specialists	2,012	2,241 1,940	11% 6%	229 199	1.01	\$37.96 \$23.42	\$78,959.69 \$48,721.05	Other Agricultural Managers; 3) Medical and Health Services Managers 1) Substance Abuse, Behavioral Disorder, and Mental Health Counselors; 2) Child, Family, and School Social
L	Counselors, Social Workers, and Other		-						Other Agricultural Managers; 3) Medical and Health Services Managers 1) Substance Abuse, Behavioral Disorder, and Mental Health Counselors; 2) Child, Family, and School Social Workers; 3) Educational, Guidance, and Career Counse

The following workforce data is an example of labor market information. Other workforce or economic data can be utilized to identify high wage, high skill, and in-demand occupations.

\*\* Indicates regional occupations that are also statewide areas of focus

#### Regional Labor Market Information Top Occupations Economic Development Region 8 – San Luis Valley Region (Counties: Alamosa, Conejos, Costilla, Mineral, Rio Grande, Saguache)

The following workforce data is an example of labor market information. Other workforce or economic data can be utilized to identify high wage, high skill, and in-demand occupations.

	Standard Occupational Classification Code (SOC)	Occupation Group Description	2023 Jobs	2028 Jobs	2023 - 2028 % Change	Avg. Annual Openings	Employment Concentration	Median Hourly Earnings	Median Annual Earnings	Example Occupations
	41-2000	Retail Sales Workers	1,049	1,090	4%	186	1.09	\$15.20	\$31,620.32	1) Retail Salespersons; 2) Cashiers; 3) Counter and Rental Clerks
an Bu	35-3000	Food and Beverage Serving Workers	720	785	9%	168	0.88	\$14.82	\$30,833.70	1) Fast Food and Counter Workers; 2) Waiters and Waitresses; 3) Bartenders
est Openings	45-2000	Agricultural Workers	999	937	(6%)	160	7.90	\$14.27	\$29,688.96	1) Farmworkers and Laborers, Crop, Nursery, and Greenhouse; 2) Farmworkers, Farm, Ranch, and Aquacultural Animals; 3) Agricultural Equipment
ps by Largest	31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides**	679	776	14%	131	0.97	\$15.56	\$32,359.25	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
Regional Occupation Groups	53-7000	Material Moving Workers	712	769	8%	125	0.70	\$15.94	\$33,147.31	<ol> <li>Stockers and Order Fillers; 2) Laborers and Freight,</li> <li>Stock and Material Movers; 3) Industrial Truck and Tract</li> <li>Operators</li> </ol>
al Occupa	43-4000	Information and Record Clerks**	705	773	10%	116	0.98	\$17.42	\$36,228.43	<ol> <li>Customer Service Representatives; 2) Receptionists and Information Clerks; 3) Information and Record Clerks, Other</li> </ol>
Region	11-9000	Other Management Occupations**	1,106	1,056	(5%)	113	1.91	\$25.62	\$53,298.86	1) Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health Services Managers
	35-2000	Cooks and Food Preparation Workers**	530	601	13%	103	1.15	\$15.70	\$32,652.71	1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria
Groups by	31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	679	776	14%	131	0.97	\$15.56	\$32,359.25	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
pation Gro	43-4000	Information and Record Clerks	705	773	10%	116	0.98	\$17.42	\$36,228.43	<ol> <li>Customer Service Representatives; 2) Receptionists and Information Clerks; 3) Information and Record Clerks, Other</li> </ol>
Docu 8	11-9000	Other Management Occupations	1,106	1,056	(5%)	113	1.91	\$25.62	\$53,298.86	<ol> <li>Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health Services Managers</li> </ol>
tatewide st Openin	35-2000	Cooks and Food Preparation Workers	530	601	13%	103	1.15	\$15.70	\$32,652.71	1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria
for Stat	47-2000	Construction Trades Workers	767	818	7%	91	1.06	\$21.32	\$44,347.49	1) Construction Laborers; 2) Electricians; 3) Carpenters
Data Shown fi La	13-1000	Business Operations Specialists	658	755	15%	84	0.71	\$30.31	\$63,045.04	1) Business Operations Specialists; 2) Market Research Analysts and Marketing Specialists; 3) Project Management Specialists
	25-2000	Preschool, Elementary, Middle, Secondary, and Special Education Teachers	782	808	3%	68	1.48	\$21.86	\$45,464.15	1) Elementary School Teachers; 2) Secondary School Teachers; 3) Middle School Teachers
Regional	21-1000	Counselors, Social Workers, and Other Community and Social Service Specialists	542	585	8%	63	1.77	\$22.52	\$46,831.60	Health Counselors; 2) Child, Family, and School Social Workers; 3) Educational, Guidance, and Career Counselor and Advisors

\*\* Indicates regional occupations that are also statewide areas of focus

#### Regional Labor Market Information Top Occupations Economic Development Region 9 – Southwest Region (Counties: Archuleta, Dolores, La Plata, Montezuma, San Juan)

The following workforce data is an example of labor market information. Other workforce or economic data can be utilized to identify high wage, high si	skill, and in-demand occupations.
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	Standard Occupational Classification Code (SOC)	Occupation Group Description	2023 Jobs	2028 Jobs	2023 - 2028 % Change	Avg. Annual Openings	Employment Concentration	Median Hourly Earnings	Median Annual Earnings	Example Occupations
	35-3000	Food and Beverage Serving Workers	2,450	2,674	9%	565	1.29	\$13.93	\$28,980.97	1) Fast Food and Counter Workers; 2) Waiters and Waitresses; 3) Bartenders
ings	41-2000	Retail Sales Workers	3,151	3,309	5%	548	1.41	\$14.61	\$30,393.14	1) Retail Salespersons; 2) Cashiers; 3) Counter and Rental Clerks
est Openings	53-7000	Material Moving Workers	1,439	1,651	15%	279	0.60	\$16.81	\$34,956.96	<ol> <li>Stockers and Order Fillers; 2) Laborers and Freight,</li> <li>Stock and Material Movers; 3) Industrial Truck and Tractor</li> <li>Operators</li> </ol>
by Largest	35-2000	Cooks and Food Preparation Workers**	1,390	1,566	13%	265	1.29	\$16.03	\$33,340.96	1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria
	47-2000	Construction Trades Workers**	2,521	2,522	0%	262	1.49	\$22.48	\$46,755.58	1) Construction Laborers; 2) Electricians; 3) Carpenters
ion Group	43-4000	Information and Record Clerks**	1,728	1,807	5%	260	1.03	\$17.99	\$37,429.05	<ol> <li>Customer Service Representatives; 2) Receptionists and Information Clerks; 3) Information and Record Clerks, Other</li> </ol>
ccupat	37-2000	Building Cleaning and Pest Control Workers	1,507	1,594	6%	241	1.29	\$15.34	\$31,906.00	1) Janitors and Cleaners; 2) Maids and Housekeeping Cleaners; 3) Pest Control Workers
Regional Occupation Groups	31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides**	1,180	1,308	11%	215	0.73	\$15.90	\$33,081.07	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
	13-1000	Business Operations Specialists**	1,750	1,931	10%	205	0.81	\$31.87	\$66,290.49	1) Business Operations Specialists; 2) Market Research Analysts and Marketing Specialists; 3) Project Management Specialists
0	35-2000	Cooks and Food Preparation Workers	1,390	1,566	13%	265	1.29	\$16.03	\$33,340.96	1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria
Î	47-2000	Construction Trades Workers	2,521	2,522	0%	262	1.49	\$22.48	\$46,755.58	1) Construction Laborers; 2) Electricians; 3) Carpenters
	43-4000	Information and Record Clerks	1,728	1,807	5%	260	1.03	\$17.99	\$37,429.05	1) Customer Service Representatives; 2) Receptionists and Information Clerks; 3) Information and Record Clerks, Other
	31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	1,180	1,308	11%	215	0.73	\$15.90	\$33,081.07	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
Openings	13-1000	Business Operations Specialists	1,750	1,931	10%	205	0.81	\$31.87	\$66,290.49	1) Business Operations Specialists; 2) Market Research Analysts and Marketing Specialists; 3) Project Management Specialists
Openin	39-9000	Other Personal Care and Service Workers	739	759	3%	143	1.27	\$15.89	\$33,051.09	1) Childcare Workers; 2) Exercise Trainers and Group Fitness Instructors; 3) Recreation Workers
	11-9000	Other Management Occupations	1,332	1,431	7%	137	0.99	\$34.68	\$72,141.90	1) Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health Services Managers
	29-1000	Healthcare Diagnosing or Treating Practitioners	1,842	2,015	9%	132	0.99	\$43.18	\$89,821.71	1) Registered Nurses; 2) Dental Hygienists; 3) Nurse Practitioners
0	43-3000	Financial Clerks	1,047	1,051	0%	130	1.20	\$19.80	\$41,186.94	1) Bookkeeping, Accounting, and Auditing Clerks; 2) Billin and Posting Clerks; 3) Tellers

\*\* Indicates regional occupations that are also statewide areas of focus

#### Regional Labor Market Information Top Occupations

Economic Development Region 10 – Central Western Slope Region

# (Counties: Delta, Gunnison, Hinsdale, Montrose, Ouray, San Miguel) The following workforce data is an example of labor market information. Other workforce or economic data can be utilized to identify high wage, high skill, and in-demand occupations.

Standard Occupational Classification Code (SOC)	Occupation Group Description	2023 Jobs	2028 Jobs	2023 - 2028 % Change	Avg. Annual Openings	Employment Concentration	Median Hourly Earnings	Median Annual Earnings	Example Occupations
35-3000	Food and Beverage Serving Workers	2,561	2,777	8%	583	1.32	\$14.63	\$30,436.04	1) Fast Food and Counter Workers; 2) Waiters and Waitresses; 3) Bartenders
41-2000	Retail Sales Workers	3,129	3,269	4%	542	1.36	\$14.90	\$30,994.80	1) Retail Salespersons; 2) Cashiers; 3) Counter and Ren Clerks
47-2000	Construction Trades Workers**	3,152	3,342	6%	363	1.82	\$22.83	\$47,489.67	1) Construction Laborers; 2) Electricians; 3) Carpenter
35-2000	Cooks and Food Preparation Workers**	1,483	1,648	11%	278	1.34	\$16.21	\$33,725.37	1) Cooks, Restaurant; 2) Food Preparation Workers; 3 Cooks, Institution and Cafeteria
53-7000	Material Moving Workers	1,415	1,590	12%	265	0.58	\$16.63	\$34,587.17	<ol> <li>Stockers and Order Fillers; 2) Laborers and Freight, Stock and Material Movers; 3) Industrial Truck and Tr Operators</li> </ol>
43-4000	Information and Record Clerks**	1,650	1,780	8%	263	0.96	\$17.59	\$36,596.83	<ol> <li>Customer Service Representatives; 2) Receptionists Information Clerks; 3) Information and Record Clerks, Other</li> </ol>
37-2000	Building Cleaning and Pest Control Workers	1,504	1,603	7%	243	1.25	\$15.86	\$32,985.17	1) Janitors and Cleaners; 2) Maids and Housekeeping Cleaners; 3) Pest Control Workers
31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides**	1,311	1,321	1%	217	0.79	\$15.89	\$33,052.28	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
53-3000	Motor Vehicle Operators	1,361	1,512	11%	208	0.92	\$20.21	\$42,029.05	1) Heavy and Tractor-Trailer Truck Drivers; 2) Light Tr Drivers; 3) Driver/Sales Workers
13-1000	Business Operations Specialists**	1,602	1,789	1,789 12%	192	0.73	\$30.98	\$64,437.02	1) Business Operations Specialists; 2) Market Researd Analysts and Marketing Specialists; 3) Project
									Management Specialists
47-2000	Construction Trades Workers	3 152	3 342	6%	363	1.82	\$22.83	\$47 489 67	
47-2000 35-2000	Construction Trades Workers Cooks and Food Preparation Workers	3,152		6% 11%	363 278	1.82	\$22.83 \$16.21	\$47,489.67 \$33,725.37	1) Construction Laborers; 2) Electricians; 3) Carpente
			1,648						1) Construction Laborers; 2) Electricians; 3) Carpente 1) Cooks, Restaurant; 2) Food Preparation Workers; 3 Cooks, Institution and Cafeteria 1) Customer Service Representatives; 2) Receptionists
35-2000	Cooks and Food Preparation Workers	1,483	1,648	11%	278	1.34	\$16.21	\$33,725.37 \$36,596.83	<ol> <li>Construction Laborers; 2) Electricians; 3) Carpenter</li> <li>Cooks, Restaurant; 2) Food Preparation Workers; 3</li> <li>Cooks, Institution and Cafeteria</li> <li>Customer Service Representatives; 2) Receptionists</li> <li>Information Clerks; 3) Information and Record Clerks;</li> </ol>
35-2000 43-4000	Cooks and Food Preparation Workers Information and Record Clerks Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric	1,483	1,648 1,780 1,321	11%	278 263	1.34 0.96	\$16.21 \$17.59	\$33,725.37 \$36,596.83 \$33,052.28	<ol> <li>Construction Laborers; 2) Electricians; 3) Carpente</li> <li>Cooks, Restaurant; 2) Food Preparation Workers; 3</li> <li>Cooks, Institution and Cafeteria</li> <li>Customer Service Representatives; 2) Receptionists</li> <li>Information Clerks; 3) Information and Record Clerks</li> <li>Other</li> <li>Home Health and Personal Care Aides; 2) Nursing</li> <li>Assistants; 3) Psychiatric Aides</li> </ol>
35-2000 43-4000 31-1100	Cooks and Food Preparation Workers Information and Record Clerks Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	1,483 1,650 1,311	1,648 1,780 1,321 1,789	11% 8% 1%	278 263 217	1.34 0.96 0.79	\$16.21 \$17.59 \$15.89	\$33,725.37 \$36,596.83 \$33,052.28 \$64,437.02	<ol> <li>Construction Laborers; 2) Electricians; 3) Carpente</li> <li>Cooks, Restaurant; 2) Food Preparation Workers; 3</li> <li>Cooks, Institution and Cafeteria</li> <li>Customer Service Representatives; 2) Receptionists</li> <li>Information Clerks; 3) Information and Record Clerks</li> <li>Other</li> <li>Home Health and Personal Care Aides; 2) Nursing</li> <li>Assistants; 3) Psychiatric Aides</li> <li>Business Operations Specialists; 2) Market Resear</li> <li>Analysts and Marketing Specialists; 3) Project</li> </ol>
35-2000 43-4000 31-1100 13-1000	Cooks and Food Preparation Workers Information and Record Clerks Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides Business Operations Specialists	1,483 1,650 1,311 1,602	1,648 1,780 1,321 1,789 1,803	11% 8% 1% 12%	278 263 217 192	1.34 0.96 0.79 0.73	\$16.21 \$17.59 \$15.89 \$30.98	\$33,725.37 \$36,596.83 \$33,052.28 \$64,437.02	1) Construction Laborers; 2) Electricians; 3) Carpenter     1) Cooks, Restaurant; 2) Food Preparation Workers; 3     Cooks, Institution and Cafeteria     1) Customer Service Representatives; 2) Receptionists     Information Clerks; 3) Information and Record Clerks     Other     1) Home Health and Personal Care Aides; 2) Nursing     Assistants; 3) Psychiatric Aides     1) Business Operations Specialists; 2) Market Researd     Analysts and Marketing Specialists; 3) Project     Management Specialists     1) Construction Managers; 2) Farmers, Ranchers, and     Other Agricultural Managers; 3) Medical and Health     Services Managers
35-2000 43-4000 31-1100 13-1000 11-9000	Cooks and Food Preparation Workers Information and Record Clerks Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides Business Operations Specialists Other Management Occupations	1,483 1,650 1,311 1,602 1,713	1,648 1,780 1,321 1,789 1,803 1,975	11% 8% 1% 12% 5%	278 263 217 192 183	1.34 0.96 0.79 0.73 1.24	\$16.21 \$17.59 \$15.89 \$30.98 \$31.33	\$33,725.37 \$36,596.83 \$33,052.28 \$64,437.02 \$65,167.43 \$85,091.54	1) Construction Laborers; 2) Electricians; 3) Carpente     1) Cooks, Restaurant; 2) Food Preparation Workers; 3     Cooks, Institution and Cafeteria     1) Customer Service Representatives; 2) Receptionists     Information Clerks; 3) Information and Record Clerks     Other     1) Home Health and Personal Care Aides; 2) Nursing     Assistants; 3) Psychiatric Aides     1) Business Operations Specialists; 2) Market Resear     Analysts and Marketing Specialists; 3) Project     Management Specialists     1) Construction Managers; 2) Farmers, Ranchers, and     Other Agricultural Managers; 3) Medical and Health     Services Managers     1) Registered Nurses; 2) Dental Hygienists; 3) Nurse     Practitioners     1) Heating, Air Conditioning, and Refrigeration Mecha     and Installers; 2) Industrial Machinery Mechanics; 3     Electrical Power-Line Installers and Repairers
35-2000 43-4000 31-1100 13-1000 11-9000 29-1000	Cooks and Food Preparation Workers Information and Record Clerks Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides Business Operations Specialists Other Management Occupations Healthcare Diagnosing or Treating Practitioners Other Installation, Maintenance, and Repair	1,483 1,650 1,311 1,602 1,713 1,684	1,648 1,780 1,321 1,789 1,803 1,975 1,331	11% 8% 1% 12% 5%	278 263 217 192 183 152	1.34 0.96 0.79 0.73 1.24 0.88	\$16.21 \$17.59 \$15.89 \$30.98 \$31.33 \$40.91	\$33,725.37 \$36,596.83 \$33,052.28 \$64,437.02 \$65,167.43 \$85,091.54	<ol> <li>Construction Laborers; 2) Electricians; 3) Carpente</li> <li>Cooks, Restaurant; 2) Food Preparation Workers; 3</li> <li>Cooks, Institution and Cafeteria</li> <li>Customer Service Representatives; 2) Receptionists</li> <li>Information Clerks; 3) Information and Record Clerks</li> <li>Other</li> <li>Home Health and Personal Care Aides; 2) Nursing</li> <li>Assistants; 3) Psychiatric Aides</li> <li>Business Operations Specialists; 2) Market Resear</li> <li>Analysts and Marketing Specialists; 3) Project</li> <li>Management Specialists</li> <li>Construction Managers; 2) Farmers, Ranchers, and</li> <li>Other Agricultural Managers; 3) Medical and Health</li> <li>Services Managers</li> <li>Registered Nurses; 2) Dental Hygienists; 3) Nurse</li> <li>Practitioners</li> <li>Heating, Air Conditioning, and Refrigeration Mecha</li> <li>and Installers; 2) Industrial Machinery Mechanics; 3</li> </ol>

\*\* Indicates regional occupations that are also statewide areas of focus

#### Regional Labor Market Information Top Occupations

Economic Development Region 11 – Northwest Colorado Region

(Counties: Garfield, Mesa, Moffat, Rio Blanco, Routt) The following workforce data is an example of labor market information. Other workforce or economic data can be utilized to identify high wage, high skill, and in-demand occupations.

Standard Occupational Classification Code (SOC)	an example of labor market information. Other wo	2023 Jobs		2023 - 2028 % Change	Avg. Annual Openings	Employment Concentration	Median Hourly Earnings	Median Annual Earnings	Example Occupations
35-3000	Food and Beverage Serving Workers	6,543	<mark>6</mark> ,987	7%	1,466	1.29	\$13.67	\$28,440.33	1) Fast Food and Counter Workers; 2) Waiters and Waitresses; 3) Bartenders
41-2000	Retail Sales Workers	7,757	7,949	2%	1,280	1.29	\$14.32	\$29,776.28	1) Retail Salespersons; 2) Cashiers; 3) Counter and Ren Clerks
47-2000	Construction Trades Workers**	7,991	8,257	3%	864	1.76	\$22.42	\$46,638.03	1) Construction Laborers; 2) Electricians; 3) Carpenter
53-7000	Material Moving Workers	3,840	4,178	9%	678	0.60	\$17.07	\$35,505.66	1) Stockers and Order Fillers; 2) Laborers and Freight, Stock and Material Movers; 3) Industrial Truck and Tr Operators
43-4000	Information and Record Clerks**	4,570	4,712	3%	658	1.01	\$18.02	\$37,481.72	<ol> <li>Customer Service Representatives; 2) Receptionists Information Clerks; 3) Information and Record Clerks, Other</li> </ol>
35-2000	Cooks and Food Preparation Workers**	3,200	3,528	10%	593	1.10	\$16.11	\$33,512.54	1) Cooks, Restaurant; 2) Food Preparation Workers; 3 Cooks, Institution and Cafeteria
37-2000	Building Cleaning and Pest Control Workers	3,386	3,613	7%	543	1.08	\$15.53	\$32,300.28	Cleaners; 3) Pest Control Workers
53-3000	Motor Vehicle Operators	3,864	4,081	6%	534	1.00	\$21.11	\$43,909.17	1) Heavy and Tractor-Trailer Truck Drivers; 2) Light Tr Drivers; 3) Driver/Sales Workers
13-1000	Business Operations Specialists**	4,777	5,168	8%	532	0.83	\$31.34	\$65,194.58	1) Business Operations Specialists; 2) Market Resear Analysts and Marketing Specialists; 3) Project Management Specialists
31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides**	3,072	3,301	7%	530	0.70	\$15.69	\$32,628.13	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
47-2000	Construction Trades Workers	7,991	8,257	3%	864	1.76	\$22.42	\$46,638.03	1) Construction Laborers; 2) Electricians; 3) Carpenter
43-4000	Information and Record Clerks	4,570	4,712	3%	658	1.01	\$18.02	\$37,481.72	<ol> <li>Customer Service Representatives; 2) Receptionists Information Clerks; 3) Information and Record Clerks Other</li> </ol>
35-2000	Cooks and Food Preparation Workers	3,200	3,528	10%	593	1.10	\$16.11	\$33,512.54	1) Cooks, Restaurant; 2) Food Preparation Workers; 3 Cooks, Institution and Cafeteria
13-1000	Business Operations Specialists	4,777	5,168	8%	532	0.83	\$31.34	\$65,194.58	<ol> <li>Business Operations Specialists; 2) Market Resear Analysts and Marketing Specialists; 3) Project Management Specialists</li> </ol>
31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	3,072	3,301	7%	530	0.70	\$15.69	\$32,628.13	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
								\$93,484,84	1) Registered Nurses; 2) Dental Hygienists; 3) Nurse
29-1000	Healthcare Diagnosing or Treating Practitioners	6,243	6,936	11%	468	1.25	\$44.94	Ş55,464.64	Practitioners
29-1000 11-9000	Healthcare Diagnosing or Treating Practitioners Other Management Occupations	6,243 3,742	6,936 3,981	11% 6%		1.25	\$44.94 \$38.19		Practitioners 1) Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health Services Managers
			,		386			\$79,436.88	Practitioners 1) Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health
11-9000	Other Management Occupations Other Installation, Maintenance, and Repair	3,742	3,981	6%	386	1.03	\$38.19	\$79,436.88	Practitioners 1) Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health Services Managers 1) Heating, Air Conditioning, and Refrigeration Mecha and Installers; 2) Industrial Machinery Mechanics; 3

\*\* Indicates regional occupations that are also statewide areas of focus

#### Regional Labor Market Information Top Occupations Economic Development Region 12 – Rocky Mountain Resort Region (Counties: Eagle, Grand, Jackson, Pitkin, Summit)

	Standard Occupational Classification Code (SOC)	Occupation Group Description	2023 Jobs		2023 - 2028 % Change	Avg. Annual Openings	gn wage, nign skill, a Employment Concentration	Median Hourly Earnings	Median Annual Earnings	Example Occupations
	35-3000	Food and Beverage Serving Workers	6,740	7,359	9%	1,518	1.86	\$14.97	\$31,133.90	1) Fast Food and Counter Workers; 2) Waiters and Waitresses; 3) Bartenders
Openings	41-2000	Retail Sales Workers	5,927	6,036	2%	959	1.39	\$15.99	\$33,269.47	1) Retail Salespersons; 2) Cashiers; 3) Counter and Rental Clerks
	37-2000	Building Cleaning and Pest Control Workers	5,391	5,649	5%	842	2.41	<b>\$17.33</b>	\$36,049.52	1) Janitors and Cleaners; 2) Maids and Housekeeping Cleaners; 3) Pest Control Workers
by Largest	35-2000	Cooks and Food Preparation Workers**	3,965	4,544	15%	779	1.92	\$17.79	\$36,998.64	1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria
Groups by	43-4000	Information and Record Clerks**	3,675	3,846	5%	586	1.14	\$19.03	\$39,588.75	1) Customer Service Representatives; 2) Receptionists and Information Clerks; 3) Information and Record Clerks, Other
.5	47-2000	Construction Trades Workers**	5,349	5,378	1%	551	1.66	\$24.88	\$51,747.65	1) Construction Laborers; 2) Electricians; 3) Carpenters
Regional Occupation Groups	35-9000	Other Food Preparation and Serving Related Workers	1,634	1,859	14%	392	2.09	\$14.93	\$31,046.43	<ol> <li>Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop; 2)Dining Room and Cafeteria Attendants and Bartender Helpers; 3) Dishwashers</li> </ol>
Regiona	13-1000	Business Operations Specialists**	3,259	3,562	9%	375	0.79	\$32.37	\$67,331.19	1) Business Operations Specialists; 2) Market Research Analysts and Marketing Specialists; 3) Project Management Specialists
	39-9000	Other Personal Care and Service Workers**	1,946	1,984	2%	372	1.74	\$18.14		1) Childcare Workers; 2) Exercise Trainers and Group Fitness Instructors; 3) Recreation Workers
Largest	35-2000	Cooks and Food Preparation Workers	3,965	4,544	15%	779	1.92	\$17.79	\$36,998.64	1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria
Groups by La	43-4000	Information and Record Clerks	3,675	3,846	5%	586	1.14	\$19.03		<ol> <li>Customer Service Representatives; 2) Receptionists an Information Clerks; 3) Information and Record Clerks, Other</li> </ol>
5	47-2000	Construction Trades Workers	5,349	5,378	1%	551	1.66	\$24.88	\$51,747.65	1) Construction Laborers; 2) Electricians; 3) Carpenters
xupation	13-1000	Business Operations Specialists	3,259	3,562	9%	375	0.79	\$32.37		1) Business Operations Specialists; 2) Market Research Analysts and Marketing Specialists; 3) Project Management Specialists
vide O enings	39-9000	Other Personal Care and Service Workers	1,946	1,984	2%	372	1.74	\$18.14	\$37,721.70	1) Childcare Workers; 2) Exercise Trainers and Group Fitness Instructors; 3) Recreation Workers
for Statev Op	49-9000	Other Installation, Maintenance, and Repair Occupations	2,806	2,981	6%	316	1.46	\$23.20	\$48,258.49	<ol> <li>Heating, Air Conditioning, and Refrigeration Mechanic and Installers;</li> <li>Industrial Machinery Mechanics;</li> <li>Electrical Power-Line Installers and Repairers</li> </ol>
Data Shown	11-9000	Other Management Occupations	2,571	2,763	7%	275	1.00	\$39.11	\$81,359.12	1) Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health Services Managers
E .	43-3000	Financial Clerks	1,755	1,772	1%	222	1.05	\$22.58	\$46,964.70	<ol> <li>Bookkeeping, Accounting, and Auditing Clerks; 2) Billir and Posting Clerks; 3) Tellers</li> </ol>
Regio	29-1000	Healthcare Diagnosing or Treating Practitioners	2,279	2,701	19%	211	0.64	\$47.36	\$98,500.45	1) Registered Nurses; 2) Dental Hygienists; 3) Nurse Practitioners

The following workforce data is an example of labor market information. Other workforce or economic data can be utilized to identify high wage, high skill, and in-demand occupations.

\*\* Indicates regional occupations that are also statewide areas of focus

#### Regional Labor Market Information Top Occupations Economic Development Region 13 – Upper Arkansas Region (Counties: Chaffee, Custer, Fremont, Lake)

	Standard Occupational Classification Code (SOC)	Occupation Group Description	2023 Jobs	2028 Jobs	2023 - 2028 % Change	Avg. Annual Openings	Employment Concentration	Median Hourly Earnings	Median Annual Earnings	Example Occupations
:	35-3000	Food and Beverage Serving Workers	1,603	1,783	11%	379	1.33	\$14.69	\$30,547.42	1) Fast Food and Counter Workers; 2) Waiters and Waitresses; 3) Bartenders
chemilies of	41-2000	Retail Sales Workers	1,879	1,993	6%	338	1.31	\$14.38	\$29,918.38	1) Retail Salespersons; 2) Cashiers; 3) Counter and Rental Clerks
	47-2000	Construction Trades Workers**	1,724	1,821	6%	195	1.60	\$22.64	\$47,095.17	1) Construction Laborers; 2) Electricians; 3) Carpenters
	35-2000	Cooks and Food Preparation Workers**	872	998	15%	171	1.27	\$15.79	\$32,838.20	1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria
	43-4000	Information and Record Clerks**	1,080	1,170	8%	171	1.01	\$17.66	\$36,737.08	<ol> <li>Customer Service Representatives; 2) Receptionists and Information Clerks; 3) Information and Record Clerks, Other</li> </ol>
	53-7000	Material Moving Workers	797	943	18%	162	0.52	\$16.05	\$33,392.15	<ol> <li>Stockers and Order Fillers; 2) Laborers and Freight,</li> <li>Stock and Material Movers; 3) Industrial Truck and Tractor</li> <li>Operators</li> </ol>
	53-3000	Motor Vehicle Operators	895	1,019	14%	141	0.97	\$21.20	\$44,088.12	1) Heavy and Tractor-Trailer Truck Drivers; 2) Light Truck Drivers; 3) Driver/Sales Workers
	13-1000	Business Operations Specialists**	1,126	1,236	10%	130	0.82	\$31.61	\$65,742.31	1) Business Operations Specialists; 2) Market Research Analysts and Marketing Specialists; 3) Project Management Specialists
	31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides**	721	797	11%	129	0.69	\$14.96	\$31,109.42	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
	47-2000	Construction Trades Workers	1,724	1,821	6%	195	1.60	\$22.64	\$47,095,17	1) Construction Laborers; 2) Electricians; 3) Carpenters
	35-2000	Cooks and Food Preparation Workers	872			171	1.27	\$15.79	\$32,838.20	1) Cooks Restaurant: 2) Food Prenaration Workers: 3)
	43-4000	Information and Record Clerks	1,080	1,170	8%	171	1.01	\$17.66	\$36,737.08	1) Customer Service Representatives; 2) Receptionists and Information Clerks; 3) Information and Record Clerks, Other
	13-1000	Business Operations Specialists	1,126	1,236	10%	130	0.82	\$31.61	\$65,742.31	1) Business Operations Specialists; 2) Market Research Analysts and Marketing Specialists; 3) Project Management Specialists
enings	31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	721	797	11%	129	0.69	\$14.96	\$31,109.42	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
do	29-1000	Healthcare Diagnosing or Treating Practitioners	1,151	1,348	17%	103	0.97	\$40.92	\$85,103.36	1) Registered Nurses; 2) Dental Hygienists; 3) Nurse Practitioners
	11-9000	Other Management Occupations	841	924	10%	92	0.98	\$34.71	\$72,189.92	1) Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health Services Managers
	25-2000	Preschool, Elementary, Middle, Secondary, and Special Education Teachers	987	1,030	4%	86	1.25	\$21.83	\$45,412.39	1) Elementary School Teachers; 2) Secondary School Teachers; 3) Middle School Teachers
	49-9000	Other Installation, Maintenance, and Repair Occupations	650	727	12%	82	1.01	\$20.62	\$42,879.40	<ol> <li>Heating, Air Conditioning, and Refrigeration Mechanics and Installers;</li> <li>Industrial Machinery Mechanics;</li> <li>Electrical Power-Line Installers and Repairers</li> </ol>

The following workforce data is an example of labor market information. Other workforce or economic data can be utilized to identify high wage, high skill, and in-demand occupations.

\*\* Indicates regional occupations that are also statewide areas of focus

#### Regional Labor Market Information Top Occupations Economic Development Region 14 – Raton Basin Region (Counties: Huerfano, Las Animas)

Standard Occupational Classification Code (SOC)	Occupation Group Description	2023 Jobs	2028 Jobs	2023 - 2028 % Change	Avg. Annual Openings	Employment Concentration	Median Hourly Earnings	Median Annual Earnings	Example Occupations
41-2000	Retail Sales Workers	612	678	11%	121	1.70	\$14.34	\$29,829.64	1) Retail Salespersons; 2) Cashiers; 3) Counter and Rental Clerks
31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides**	416	464	12%	78	1.59	\$15.11	\$31,422.10	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
35-3000	Food and Beverage Serving Workers	329	335	2%	71	1.08	\$15.25	\$31,713.81	1) Fast Food and Counter Workers; 2) Waiters and Waitresses; 3) Bartenders
53-7000	Material Moving Workers	251	271	8%	46	0.66	\$15.83	\$32,920.04	1) Stockers and Order Fillers; 2) Laborers and Freight, Stock and Material Movers; 3) Industrial Truck and Tracto Operators
37-2000	Building Cleaning and Pest Control Workers	263	269	2%	43	1.40	\$15.42	\$32,082.94	1) Janitors and Cleaners; 2) Maids and Housekeeping Cleaners; 3) Pest Control Workers
43-4000	Information and Record Clerks**	259	269	4%	40	0.96	\$16.86	\$35,063.69	1) Customer Service Representatives; 2) Receptionists and Information Clerks; 3) Information and Record Clerks,
47-2000	Construction Trades Workers**	292	311	6%	34	1.07	\$20.65	\$42,944.06	1) Construction Laborers; 2) Electricians; 3) Carpenters
35-2000	Cooks and Food Preparation Workers**	200	205	3%	33	1.15	\$16.17	\$33,638.44	1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria
29-1000	Healthcare Diagnosing or Treating Practitioners**	416	464	11%	32	1.39	\$36.64	\$76,211.57	1) Registered Nurses; 2) Dental Hygienists; 3) Nurse Practitioners
31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric	416							
	Aides	410	464	12%	78	1.59	\$15.11	\$31,422.10	1) Home Health and Personal Care Aides; 2) Nursing Assistants; 3) Psychiatric Aides
43-4000		259		4%	78 40	1.59	\$15.11 \$16.86		Assistants; 3) Psychiatric Aides
43-4000	Aides		269					\$35,063.69	Assistants; 3) Psychiatric Aides 1) Customer Service Representatives; 2) Receptionists and Information Clerks; 3) Information and Record Clerks, Other
_	Aides	259	269	4%	40	0.96	\$16.86	\$35,063.69	Assistants; 3) Psychiatric Aides 1) Customer Service Representatives; 2) Receptionists and Information Clerks; 3) Information and Record Clerks,
47-2000	Aides Information and Record Clerks Construction Trades Workers	259	269 311 205	4%	40	0.96	\$16.86 \$20.65	\$35,063.69 \$42,944.06	Assistants; 3) Psychiatric Aides 1) Customer Service Representatives; 2) Receptionists and Information Clerks; 3) Information and Record Clerks, Other 1) Construction Laborers; 2) Electricians; 3) Carpenters 1) Cooks, Restaurant; 2) Food Preparation Workers; 3)
47-2000 35-2000	Aides Information and Record Clerks Construction Trades Workers Cooks and Food Preparation Workers	259 292 200	269 311 205 464	4% 6% 3%	40	0.96 1.07 1.15	\$16.86 \$20.65 \$16.17	\$35,063.69 \$42,944.06 \$33,638.44 \$76,211.57	Assistants; 3) Psychiatric Aides 1) Customer Service Representatives; 2) Receptionists and Information Clerks; 3) Information and Record Clerks, Other 1) Construction Laborers; 2) Electricians; 3) Carpenters 1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria 1) Registered Nurses; 2) Dental Hygienists; 3) Nurse
47-2000 35-2000 29-1000	Aides Information and Record Clerks Construction Trades Workers Cooks and Food Preparation Workers Healthcare Diagnosing or Treating Practitioners	259 292 200 416	269 311 205 464 264	4% 6% 3% 11%	40 34 33 32	0.96 1.07 1.15 1.39	\$16.86 \$20.65 \$16.17 \$36.64	\$35,063.69 \$42,944.06 \$33,638.44 \$76,211.57 \$69,248.51	Assistants; 3) Psychiatric Aides 1) Customer Service Representatives; 2) Receptionists and Information Clerks; 3) Information and Record Clerks, Other 1) Construction Laborers; 2) Electricians; 3) Carpenters 1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria 1) Registered Nurses; 2) Dental Hygienists; 3) Nurse Practitioners 1) Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health
47-2000 35-2000 29-1000 11-9000	Aides Information and Record Clerks Construction Trades Workers Cooks and Food Preparation Workers Healthcare Diagnosing or Treating Practitioners Other Management Occupations	259 292 200 416 245	269 311 205 464 264 233	4% 6% 3% 11% 8%	40 34 33 32 26	0.96 1.07 1.15 1.39 1.13	\$16.86 \$20.65 \$16.17 \$36.64 \$33.29	\$35,063.69 \$42,944.06 \$33,638.44 \$76,211.57 \$69,248.51 \$60,662.57	Assistants; 3) Psychiatric Aides 1) Customer Service Representatives; 2) Receptionists and Information Clerks; 3) Information and Record Clerks, Other 1) Construction Laborers; 2) Electricians; 3) Carpenters 1) Cooks, Restaurant; 2) Food Preparation Workers; 3) Cooks, Institution and Cafeteria 1) Registered Nurses; 2) Dental Hygienists; 3) Nurse Practitioners 1) Construction Managers; 2) Farmers, Ranchers, and Other Agricultural Managers; 3) Medical and Health Services Managers 1) Business Operations Specialists; 2) Market Research Analysts and Marketing Specialists; 3) Project

The following workforce data is an example of labor market information. Other workforce or economic data can be utilized to identify high wage, high skill, and in-demand occupations.

\*\* Indicates regional occupations that are also statewide areas of focus

# 2023-2024 <u>Secondary</u> Performance Metric Definitions (Perkins Fiscal Year 2024-2025)

#### Enrollment data used will be from academic year 2023-2024 Placement data used will be from academic year 2022-2023

#### **Secondary Student Definitions:**

**Participants** – A secondary student who has earned credit for one (1) or more courses within any CTE program where course is defined as one Carnegie Unit of credit.

**Concentrators** – A secondary student who has earned credit for two (2) or more Carnegie Units within a CTE program as defined in the program approval documentation. (Typically, one Carnegie Unit is the equivalent of one year-long course.)

**Completers** – A secondary student who has earned credit for the required minimum courses within a CTE program as defined in the program approval documentation.

METRIC	METRIC DEFINITION
(1S1) Four-Year Graduation Rate	<ul> <li>Numerator: Number of CTE concentrators and CTE completers who, in their 4<sup>th</sup> high school year, have met locally defined requirements for a high school diploma in the reporting year, and were included in the State's computation of its four-year adjusted graduation rate pursuant to Section 8101(25) of the Every Student Succeeds Act (ESSA).</li> <li>Denominator: Number of CTE concentrators and CTE completers who, in their 4<sup>th</sup> high school year in the reporting year, were included in the State's computation of its four-year adjusted graduation rate pursuant to Section 8101(25) of the Every Student Succeeds Act (ESSA).</li> </ul>
<sup>(2S1)</sup> Academic Proficiency In Reading/Language Arts	Numerator: Number of CTE concentrators and CTE completers in their 4th or greater high school year who have met the ESSA-proficient level on the Statewide high school Reading/Language Arts assessment (11 <sup>th</sup> grade SAT) and who, in the reporting year, have met locally defined requirements for a high school diploma. Denominator: Number of CTE concentrators and CTE completers in their 4th or greater high school year who took the assessment in Reading/Language Arts (11 <sup>th</sup> grade SAT) and who, in the reporting the school year who took the assessment in Reading/Language Arts (11 <sup>th</sup> grade SAT) and who, in the reporting year, have met locally defined requirements for a high school diploma.
(2S2) Academic Proficiency in Mathematics	<ul> <li>Numerator: Number of CTE concentrators and CTE completers in their 4th or greater high school year who have met the ESSA-proficient level on the Statewide high school Mathematics assessment (11<sup>th</sup> grade SAT) and who, in the reporting year, have met locally defined requirements for a high school diploma.</li> <li>Denominator: Number of CTE concentrators and CTE completers in their 4th or greater high school year who took the assessment in Mathematics (11<sup>th</sup> grade SAT) and who, in the reporting year, have met locally defined requirements for a high school year who took the assessment in Mathematics (11<sup>th</sup> grade SAT) and who, in the reporting year, have met locally defined requirements for a high school diploma.</li> </ul>

(2S3) Academic Proficiency in Science	<ul> <li>Numerator: Number of CTE concentrators and CTE completers in their 4th or greater high school year who have met the ESSA-proficient level on the Statewide high school Science assessment (11<sup>th</sup> grade CMAS) and who, in the reporting year, have met locally defined requirements for a high school diploma.</li> <li>Denominator: Number of CTE concentrators and CTE completers in their 4th or greater high school year who took the assessment in Science (11<sup>th</sup> grade CMAS) and who, in the reporting year, have met locally defined requirements for a high school year who took the assessment in Science (11<sup>th</sup> grade CMAS) and who, in the reporting year, have met locally defined requirements for a high school diploma.</li> </ul>
<sup>(3S1)</sup> Post-Program Placement	<ul> <li>Numerator: Number of previous year CTE concentrators and CTE completers who graduated high school and are placed in employment, postsecondary education, apprenticeship or advanced training, military service, AmeriCorps or Peace Corps two quarters after the end of the academic reporting year (i.e., CTE concentrators are assessed between October 1, and December 31 following high school graduation).</li> <li>Denominator: Number of previous year CTE concentrators and CTE completers placement respondents who completed high school that academic year (excluding respondents 'unemployed and not actively seeking employment').</li> </ul>
(4S1) Non-Traditional Concentration	<b>Numerator:</b> Number of CTE <b>concentrators</b> from underrepresented gender groups enrolled in non-traditional programs during the reporting year. <b>Denominator:</b> Number of CTE <b>concentrators</b> enrolled in non-traditional programs during the reporting year.
(5S3) Program Quality - Participated in Work- Based Learning	Numerator: Number of CTE concentrators graduating from high school during the current academic year having participated in work-based learning* in any year as part of the CTE program. Denominator: Number of CTE concentrators graduating from high school during the current academic year. *WBL includes: Apprenticeship On-the-job training Clinical experience Credit-for-work experience Internship Pre-apprenticeship Industry-sponsored project School-based enterprise managed by students (supervised entrepreneurship experience)

# 2023-2024 <u>Postsecondary</u> Perkins Performance Metric Definitions (Perkins Fiscal Year 2024-2025)

#### Enrollment data used will be from academic year 2023-2024 Placement data used will be from academic year 2022-2023

#### **Postsecondary Student Definitions:**

Participants – A postsecondary student who has completed at least one (1) CTE course in a CTE program (defined by CIP code) within the reporting year.

**Concentrators** – A postsecondary student who, within the reporting year, has:

• earned at least twelve (12) CTE credits within a single CTE program (defined by CIP code), or

• completed such a program if the program is twelve (12) or fewer credits.

Completers – A postsecondary student who has completed the required minimum credits within a CTE program and has received a certificate or degree.

Metric	Metric Definition
(1P1) Postsecondary Retention and Placement	<b>Numerator:</b> Number of previous year CTE <b>completers</b> who were placed in employment, continuing education, apprenticeship or advanced training, military service, AmeriCorps or Peace Corps programs two quarters after the end of the academic reporting year (i.e., for students who completed a CTE program in AY22-23, what were they doing between October 1, 2023 and December 31, 2023). <b>Denominator:</b> Number of respondent CTE <b>completers</b> from the previous reporting year.
<sup>(2P1)</sup> Earned Recognized Postsecondary Credential	Numerator: Number of CTE concentrators or CTE completers who received a recognized postsecondary credential* during participation in or within one year of program completion. Denominator: Number of CTE concentrators or CTE completers who completed an approved CTE program during the previous reporting year. *Recognized postsecondary credential to include an industry-recognized certificate/certification including certificates earned for completion of CTE program at a community or technical college, a certificate of completion of an apprenticeship, an occupational licensure, an associate degree, or a bachelor's degree.
(3P1) Non-Traditional Program Concentration	Numerator: Number of CTE concentrators from underrepresented gender groups enrolled in non-traditional programs during the reporting year. Denominator: Number of CTE concentrators enrolled in non-traditional programs during the reporting year.

#### Appendix G - Responses to Public Comments

Comments received during the public comment period for both the state plan and the performance indicator targets are grouped below by topic area along with CCCS' responses.

#### **General Comments**

Overall, comments were positive and enthusiastic about CTE, the State Perkins Plan, and the work Colorado is engaged in for learners. Relatively few formal comments were submitted although participants in open forums were overall appreciative of the revisions outlined. At the end of this appendix is a document provided by Watershed Advisors as part of the comment period noting where they saw alignment within the key themes in Colorado's state plan with other CTE, education, and workforce related priorities and plans.

**Comment:** "I would like to commend the CCCS CTE Perkins team for the work that was done across the state through the CLNA process. Our region felt heard and understood through that process. Additionally I would like to thank you for the inclusion of WBL target and measures. Lastly, as a rural organization, we appreciate the acknowledgement of the additional layer of challenges that this creates and reflecting that in the funding formula."

**Response:** Thank you for your recognition and for playing a leadership role in ensuring access to quality CTE in rural parts of Colorado!

Comment: From a state agency partner: "You've done a great job of connecting the dots!"

Response: Thank you.

**Comment:** Some comments were provided related to the language used throughout the plan. For example, a request to clarify that "apprenticeship" means "registered apprenticeship" throughout.

Another comment noted that Colorado state agencies are moving to the term Multilingual Learner instead of English Learner. The action is intended to specifically support an assetbased approach to 1) avoid labeling students in terms of the language they have yet to acquire; 2) acknowledge students' first languages and cultures as strengths; and 3) reiterate the importance of literacy and proficiency in multiple languages.

**Response**: Where appropriate, changes to terminology or references that were outdated (i.e. to statutory revisions in Colorado) were made. Regarding the example above about apprenticeship, since the Perkins law does not specify registered versus pre-apprenticeships or youth apprenticeships that may not be registered with the state or U.S. Department of Labor, the language was left as "apprenticeship" and specific references made where appropriate. Since English Learner is the language used in the Perkins law, that is the terminology used when special populations are referenced and this note as to new asset-based language is included in the glossary of terms in this document.

**Comment:** "Given the work currently underway to align CTE and registered apprenticeship as well as the proposed federal regulations to establish CTE apprenticeships, we recommend introducing the definition of the State Apprenticeship Agency in the glossary or plan to raise awareness among the CTE community."

**Response**: Thank you for the feedback. The definition was added to the glossary at the beginning of the document.

#### Performance Indicators and Targets

**Comment:** "These target seem achievable."

**Response:** Thank you.

**Comment from a secondary entity**: "Appreciate the adjustment made to non-traditional concentration baseline and expected growth."

Response: Thank you.

**Comment from a postsecondary entity**: "While continued growth is an admirable goal, these percentages for non-traditional concentrators are starting a current or higher levels that are a challenge, with less hope of achievement as the state moves forward. This has been an issue that all institutions struggle with on a regular basis and then are also further challenged by making the improvement plan a separate line and 30% of the entire budget. If the 30% could be identified in the annual spending as a check box for the improvement plan, that would at least make identifying the areas of improvement easier. Thank you!"

**Response**: Thank you for the feedback. The Perkins law requires all states and entities to "continually make meaningful progress toward improving the performance of all CTE concentrators, including subgroups of students..." (Section 113(B)(4)(A)(i)(II))

Postsecondary targets for indicator 3P1 (Non-traditional Program Concentration) start in the first program year of this state plan at 14.5% and increase only one quarter of a percentage point annually for the duration of the state plan. This is nearly seven percentage points lower than the targets set for secondary and the baseline was determined, in part, through a review of the averages of Colorado's actual performance over the past two years and discussion with other states related to their anticipated targets as well. It also represents a lower starting point for this four-year period than was included in Colorado's 2021-2024 State Perkins Plan. For grant recipients that have an improvement plan, whether due to an overall performance deficiency or related to a gap in performance, this State Perkins Plan already includes a decrease in required spending on improvement plan activities from thirty percent to twenty percent of the grant award. Performance targets, overall performance, and disaggregated data by gender, race/ethnicity, and special population will continue to be provided to grant recipients to support their analysis and improvement planning processes. The data set also highlights in a different color the subgroups or overall performance that needs improvement.

#### **CTE Strategic Plan Goals**

**Comment about Work-Based Learning**: Multiple rural districts commented that in trying to expand work-based learning, there are challenges such as liability insurance. "Some partners do not want to add to their insurance due to cost. A state sponsored/subsidized option would be great. Another obstacle has been the legal work status of some students. As students explore WBL, their citizenship status has stopped their participation. A clear delineation of how to accommodate students without legal work status would also be great. Third, our district has required a background check for potential WBL partners. A subsidized and streamlined portal through the state would be fantastic."

**Response**: Thank you for this feedback, which the Colorado CTE team will share with the Colorado Department of Labor and Employment. We encourage local districts and colleges to include operations teams as well as instructional teams in these conversations locally as well. For example, background check requirements and vendors may be a local decision, and a state portal may not be appropriate. As part of the implementation of work-based learning in CTE programs, the Colorado CTE team will continue to partner with state and local partners in this work, including through professional development, resource toolkits, and communities of practice.

#### **CTE Program Quality & Implementation**

**Comment:** "While I agree that it is paramount to be innovative and progressive in our programs and extremely important to stay current and forward thinking in the content taught within the curriculum, it becomes really hard to create whole new programs when there is little time to complete the units we are currently teaching. Much of the current funding stream has been allocated to models of innovation and that is great. Those new programs and innovative curriculum pathways require large amounts of funding. The hard part is that if I am going to create a new area within my curriculum in order to receive funding for being innovative, what am going to cut? There are only so many days in the school year so that means only so many units to be taught. To cut something out in order to put something new in means I am leaving a hole in the backbone of the secondary students' "training" that they are receiving in my program. I would like to see funding and less emphasis on teaching something entirely different. While I doubt that was the intent of the change to the funding allocation, that is currently the way the funding stream seem to be allocated."

**Response**: Thank you for the feedback. The funding allocation for Perkins at the federal and state levels were not changed in this Perkins State Plan. At the local level, choices around priority and use of the funds may have been set in ways that are different than in the past, which is at the discretion of the grant recipient. The results of the regional needs assessment process also informs grant spending and priority of projects. Colorado CTE will continue to support local recipients and consortia with their grant planning as needed.

#### **Fiscal Responsibility**

No additional comments specific to this section of the state plan were received.

#### Appendix G

Draft Colorado Perkins V State Plan: Watershed Analysis January 2024

#### Goal Alignment Color

#### coding

- Access, affordability, and equity
- Quality of programs
- Industry engagement and stakeholder collaboration

Office	Source	Stated Goals/Vision
Office of Governor Jared Polis	Colorado.gov (p. 9 in Perkins draft)	Perkins plan states: "The Governor Jared Polis' 'administration is committed to making sure higher education and workforce development programs are <mark>in reach for every student</mark> and is committed to saving students money no matter which pathway they choose."
Advance CTE	"Without Limits" shared vision for CTE (p. 9 in draft)	<ul> <li>Perkins plan states: "Colorado also subscribes to the 'Without Limits' shared vision for CTE developed nationally by Advance CTE".</li> <li>"Without Limits" includes a five-part vision of foundational commitments: <ul> <li>All dimensions of equity, including educational, racial, socioeconomic, gender and geographic, and meeting the unique needs of each individual learner;</li> <li>Quality programs, instructors, instruction, work-based learning and credentials that are responsive to the needs of industry;</li> <li>Meaningful public-private partnerships, with industry partners deeply invested and involved in the design, delivery and success of the CTE system;</li> <li>Actionable, transparent and trustworthy data; and</li> <li>Continuous improvement and collaboration by leaders at all levels within our system.</li> </ul> </li> </ul>
CDLE & CWDC	Draft 2024-2027 WIOA State Plan (p. 13 in draft)	<ol> <li>Increase affordability of career connected education and training.</li> <li>Increase the quality of upskilling opportunities, jobs, and career pathways.</li> <li>Increase equity in the talent development network so that each person's success is not predetermined by their zip code, background, ability status, or income bracket.</li> <li>Enhance access to programming by creating more seamless connections between high school,</li> </ol>





		postsecondary education, and the workforce.
Colorado CTE	Vision Statement (p. 15 in draft)	"Colorado Career & Technical Education (CTE) leverages workforce and education systems so that <mark>each learner</mark> has <mark>quality CTE experiences leading to lifelong career success</mark> ."
CDE	ESSA Plan (p. 16 in draft)	<ol> <li>Start Strong: Every student starts strong with a solid foundation in preschool through third grade;</li> <li>Read by Third Grade: Every student reads at grade level by the end of third grade;</li> <li>Meet or Exceed Standards: Every student meets or exceeds standards; and</li> <li>Graduate Ready: Every student graduates ready for college and careers.</li> </ol>
CDHE	Strategic pillars (p. 16 in draft)	<ol> <li>Identify and improve pathways with a negative return on investment.</li> <li>Enable more learners to succeed in programs and pathways that offer a positive return on investment.</li> <li>Catalyze increased postsecondary-workforce collaboration, alignment, and cocreation of new pathways that offer a positive return on investment.</li> </ol>
Colorado CTE	Perkins Plan (p. 17 in draft)	<ol> <li>Career Advisement &amp; Development - Ensure each Colorado learner has access to ongoing career advisement and development.</li> <li>Instructor Recruitment &amp; Retention - Develop and ensure a viable pipeline of CTE instructors to fill the educator positions at the middle school, secondary, and postsecondary levels.</li> <li>Partnerships - Prepare Colorado's future workforce through transformational partnerships.</li> <li>Quality programs - elevate the quality of CTE programs to support each learner's skill development and meet industry needs.</li> <li>Work-based learning - Ensure access to meaningful work-based learning opportunities for each CTE learner</li> </ol>